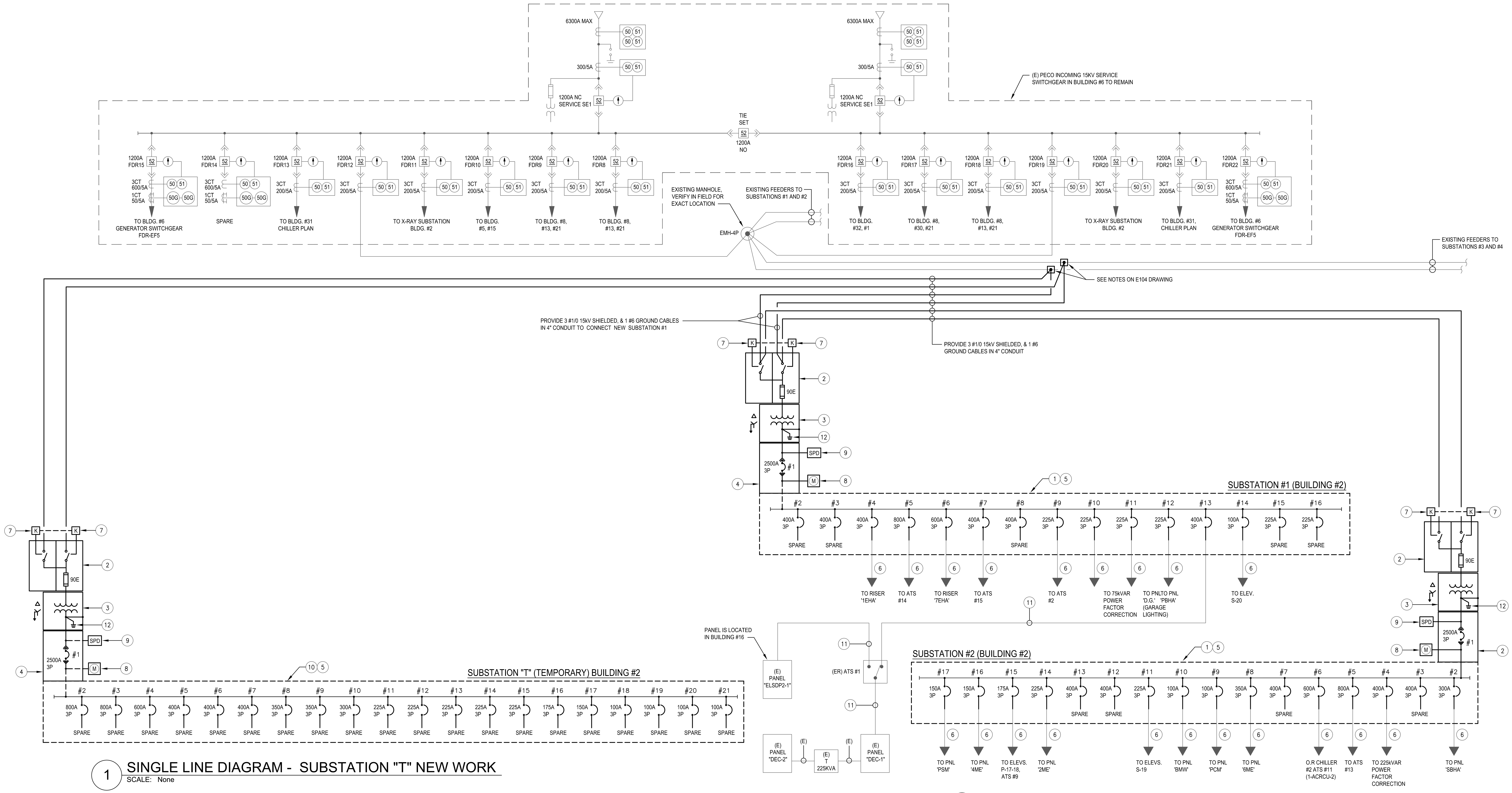
IF THIS SHEET IS NOT 30" X 42" FULL SIZE, USE GRAPHIC SCALES



1 SINGLE LINE DIAGRAM - SUBSTATION "T" NEW WORK
SCALE: None

2 SINGLE LINE DIAGRAM - SUBSTATIONS #1 AND #2 - NEW WORK
SCALE: None

GENERAL NOTES

1. REFER TO THE ELECTRICAL COVER SHEET FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
2. REFER TO DRAWING E-108 FOR PANEL SCHEDULES.
3. FOR PHASING AND INSTALLATION NOTES REFER TO DRAWING E-101.

KEYED NOTES - NEW WORK PLAN

(1) PROVIDE SUBSTATIONS #1, #2 AND "T" (TEMPORARY) PER SPECIFICATIONS AND CONTRACT DOCUMENT. COORDINATE AND VERIFY IN FIELD FOR ALL DIMENSIONS AND CLEARANCES INDICATED ON DRAWING E-103.

(2) PROVIDE 15kV, DUPLEX LOAD-INTERRUPTER FUSIBLE SWITCH. COORDINATE IN FIELD FOR EXACT LOCATION PRIOR TO INSTALLATION.

(3) PROVIDE 1500KVA TRANSFORMER, 13.2kV DELTA PRIMARY, 480Y/277V, 3PH, 4W SECONDARY FOR SUBSTATIONS #1, #2 AND "T" (TEMPORARY). COORDINATE IN FIELD FOR EXACT LOCATION PRIOR TO INSTALLATION.

(4) PROVIDE A MAIN CIRCUIT BREAKERS FOR SUBSTATION #1, #2 AND "T" (TEMPORARY). COORDINATE IN FIELD FOR EXACT LOCATION PRIOR TO INSTALLATION.

(5) ALL CONNECTIONS SHALL COMPLY WITH THE MANUFACTURER REQUIREMENT.

(6) RECONNECT EXISTING ELECTRICAL EQUIPMENT TO NEW SUBSTATION #2 EXTEND FEEDERS AND CONDUITS AS REQUIRED. NEW FEEDERS AND CONDUITS SHALL MATCH EXISTING.

(7) PROVIDE KEY INTERLOCKS TO PREVENT BOTH 15kV LOAD-INTERRUPTER SWITCHES FROM BEING CLOSED AT THE SAME TIME.

(8) PROVIDE DIGITAL METER PER SWITCHBOARD SPECIFICATION.

(9) PROVIDE 400kA, 480V, 3-PHASE, 4 WIRE, TYPE 2 SURGE PROTECTOR DEVICE.

(10) PROVIDE TEMPORARY SUBSTATIONS "T" PER CONTRACT DOCUMENT FOR TRANSFERRING LOADS FROM EXISTING TO NEW SUBSTATIONS. COORDINATE AND VERIFY IN FIELD FOR ALL DIMENSIONS AND CLEARANCES INDICATED ON DRAWING E-103.

(11) REUSED EXISTING FEEDERS AND CONDUITS TO CONNECT RELOCATION ELECTRICAL EQUIPMENT. EXTEND FEEDERS AND CONDUIT AS REQUIRED.

(12) PROVIDE 1 #3/0 AWG COPPER GROUNDING ELECTRODE CONDUCTOR IN 1" CONDUIT, CONNECT TO (E) BUILDING SERVICE GROUNDING SYSTEM.

DESIGN CHANGE APPROVED	
BID DOCUMENTS	October-21-2024
DESCRIPTION	DATE

CONSULTANT FIRM:

SEAL:

ARCHITECTS/ENGINEERS:
A DESIGN GROUP, LLC
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SEAL: COMMONWEALTH OF VIRGINIA — REGISTERED PROFESSIONAL ENGINEER — AMBRISH K RASTOGI

Name / Title
Name / Title
Name / Title
Name / Title

Drawing Title: SINGLE LINE RISERS - SUBSTATIONS #1, #2 AND "T" - NEW WORK
Chief Engineer Approval
Name, Title: Prevention Coordinator

Project Title: SUBSTATION UPGRADE BUILDING 2 - PHASE 1
Location: CORPORAL MICHAEL J. CRESCENZ VA MEDICAL CENTER
Date: 10-21-2024 | Checked: AR | Drawn: MK

Project Number: 642-22-104
Building Number: 2
Drawing Number: E-107
Dwg. 21 of 25

Office of Facility Management Service
Department of Veterans Affairs

VA FORM 08-6231

IF THIS SHEET IS NOT 30" X 42" FULL SIZE, USE GRAPHIC SCALES

(N) SUBSTATION #1 BUILDING 2 (feeds from PECO 15KV service switchgear circuit #12 and #19 in BLDG. #6)

SWITCHBOARD DESIGNATION AND CHARACTERISTICS	MODULE NO.	LOAD DESCRIPTION	LOAD DATA: CONNECTED PHASE KVA A	B	C	DEMAND KVA	CIRCUIT BREAKER CHARACTERISTICS: FRAME RATING	SENSOR RATING (S)	PLUG RATING (X)	BREAKER KAIC	CIRCUIT BREAKER SETTINGS: LONG TIME CURRENT SETTING (C)	LONG TIME DELAY SECONDS	SHORT TIME PICK UP MULTIPLE OF (C)	SHORT TIME DELAY SECONDS	INSTANTANEOUS PICK UP MULTIPLE OF (X)	GROUND FAULT SETTING MULTIPLE OF SENSOR	GROUND FAULT DELAY SECONDS	REMARKS
SWBD #1 480Y/277V 3PH, 4W 2500 AMPERES 50kAIC FREE STANDING	1	MAIN					2500		2500									
	2	SPARE	EXISTING	EXISTING	EXISTING		400		400									
	3	SPARE	EXISTING	EXISTING	EXISTING		400		400									
	4	(E) RISER -1EHA	EXISTING	EXISTING	EXISTING		400		400									
	5	(E) ATS-14	EXISTING	EXISTING	EXISTING		800		800									
	6	(E) RISER -7EHA	EXISTING	EXISTING	EXISTING		800		600									
	7	(E) ATS-15 (EQUIPMENT ROOM B3A138E)	EXISTING	EXISTING	EXISTING		400		400									
	8	SPARE					400		400									
	9	(E) ATS-2					225		225									
	10	75kVAR POWER FACTOR CORRECTION	-	-	-		225		225									
	11	(E) PANEL "D.G." (GARAGE LIGHTING)	EXISTING	EXISTING	EXISTING		225		225									
	12	(E) PANEL "PBHA"	EXISTING	EXISTING	EXISTING		225		225									
	13	(E) ATS-1 FEEDS TO B2A104	EXISTING	EXISTING	EXISTING		400		400									
	14	ELEVATOR S-20	EXISTING	EXISTING	EXISTING		225		100									
	15	SPARE					225		225									
	16	SPARE					225		225									
	CONNECTED KVA PER PHASE/DEMAND KVA		0	0	0	0												

SUMMARY		
CONNECTED KVA - ALL PHASES	0	KVA
CONNECTED AMPERES @ 480 VOLTS	0	AMPERES
DEMAND AMPERES	0	AMPERES
DEMAND AMPERES @ 125%	0	AMPERES
FEEDER SIZE	4W####	AMPERES

SCHEDULE EXPLANATORY NOTES

(S) = CIRCUIT BREAKER SENSOR AMP RATING
(X) = RATING PLUG AMPS
(C) = PICKUP-MULTIPLE OF RATING PLUG AMPS (X)
DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T IN DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T OUT DELAY = TIME DELAY AT LOWER LIMIT OF BAND

(N) SUBSTATION #2 BUILDING 2 (feeds from PECO 15KV service switchgear circuit #12 and #19 in BLDG. #6)

SWITCHBOARD DESIGNATION AND CHARACTERISTICS	MODULE NO.	LOAD DESCRIPTION	LOAD DATA: CONNECTED PHASE KVA A	B	C	DEMAND KVA	CIRCUIT BREAKER CHARACTERISTICS: FRAME RATING	SENSOR RATING (S)	PLUG RATING (X)	BREAKER KAIC	CIRCUIT BREAKER SETTINGS: LONG TIME CURRENT SETTING (C)	LONG TIME DELAY SECONDS	SHORT TIME PICK UP MULTIPLE OF (C)	SHORT TIME DELAY SECONDS	INSTANTANEOUS PICK UP MULTIPLE OF (X)	GROUND FAULT SETTING MULTIPLE OF SENSOR	GROUND FAULT DELAY SECONDS	REMARKS
SWBD #2 480Y/277V 3PH, 4W 2500 AMPERES 50kAIC FREE STANDING	1	MAIN					2500		2500									
	2	(E) PANEL "SBHA" FEEDS TO (B3A102)	EXISTING	EXISTING	EXISTING		400		300									
	3	SPARE	-	-	-		400		400									
	4	(N) 225kVAR AUTOMATIC POWER F.C.U.	EXISTING	EXISTING	EXISTING		400		400									
	5	(E) ATS #13	EXISTING	EXISTING	EXISTING		800		800									
	6	(E) O.R. CHILLER #2 (ATS #11)	EXISTING	EXISTING	EXISTING		800		600									
	7	SPARE	EXISTING	EXISTING	EXISTING		400		400									
	8	(E) PANEL "6ME"	EXISTING	EXISTING	EXISTING		400		350									
	9	(E) PANEL "PCM" FEEDS TO (B2A105A)	EXISTING	EXISTING	EXISTING		225		100									
	10	(E) PANEL "BMW" FEEDS TO (B1B100)	EXISTING	EXISTING	EXISTING		225		100									
	11	(E) ELEVATOR S-19	EXISTING	EXISTING	EXISTING		225		225									
	12	SPARE	-	-	-		400		400									
	13	SPARE	-	-	-		400		400									
	14	(E) PANEL "2ME" FEEDS TO (2A103)	EXISTING	EXISTING	EXISTING		225		225									
	15	(E) ELEVATORS P-17-18 (ATS #9)	EXISTING	EXISTING	EXISTING		225		175									
	16	(E) PANEL "4ME" FEEDS TO (4A101)	EXISTING	EXISTING	EXISTING		225		150									
	17	(E) PANEL "PSM"	EXISTING	EXISTING	EXISTING		225		150									
	CONNECTED KVA PER PHASE/DEMAND KVA		0	0	0	0												

SUMMARY		
CONNECTED KVA - ALL PHASES	0	KVA
CONNECTED AMPERES @ 480 VOLTS	0	AMPERES
DEMAND AMPERES	0	AMPERES
DEMAND AMPERES @ 125%	0	AMPERES
FEEDER SIZE	4W####	AMPERES

SCHEDULE EXPLANATORY NOTES

(S) = CIRCUIT BREAKER SENSOR AMP RATING
(X) = RATING PLUG AMPS
(C) = PICKUP-MULTIPLE OF RATING PLUG AMPS (X)
DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T IN DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T OUT DELAY = TIME DELAY AT LOWER LIMIT OF BAND

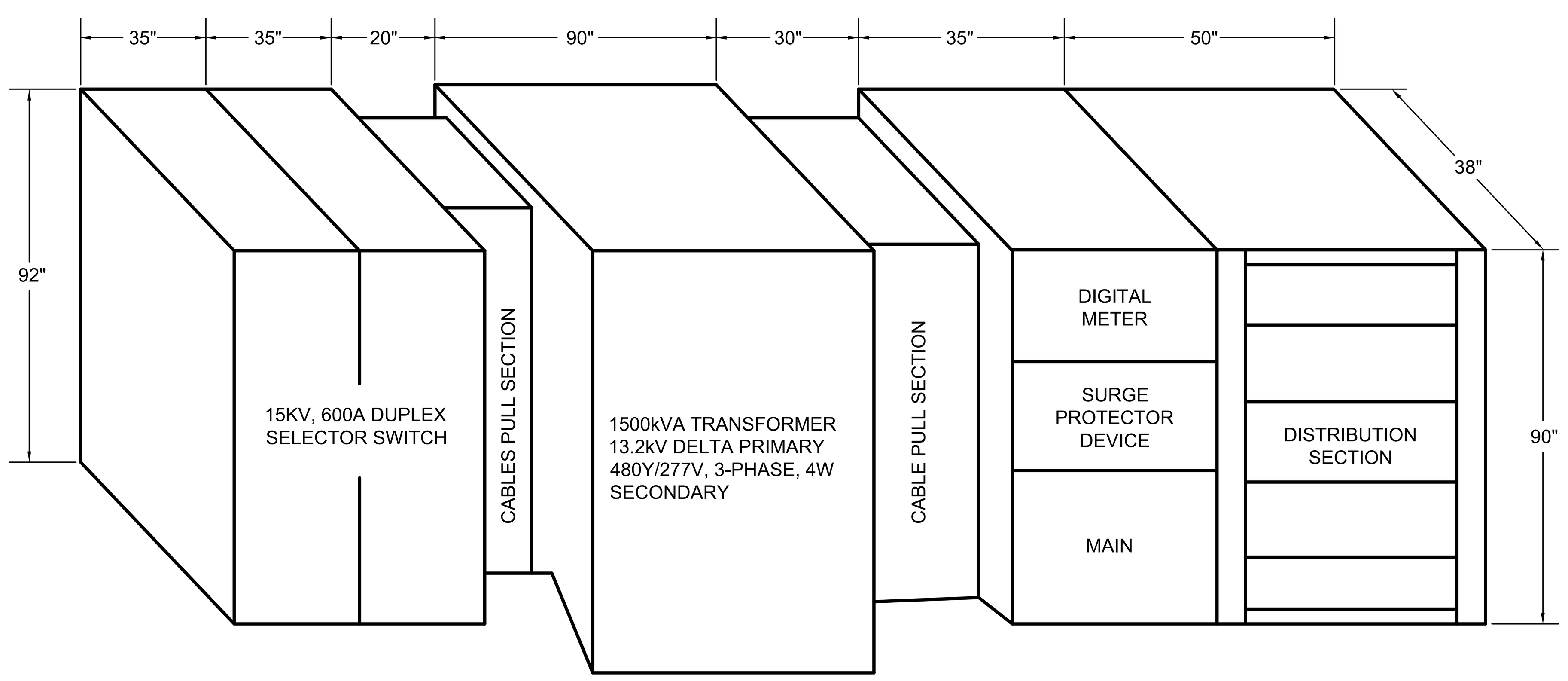
(N) SUBSTATION T BUILDING 2 (feeds from main distribution switchgear circuit #12 in BLDG. #19)

SWITCHBOARD DESIGNATION AND CHARACTERISTICS	MODULE NO.	LOAD DESCRIPTION	LOAD DATA: CONNECTED PHASE KVA A	B	C	DEMAND KVA	CIRCUIT BREAKER CHARACTERISTICS: FRAME RATING	SENSOR RATING (S)	PLUG RATING (X)	BREAKER KAIC	CIRCUIT BREAKER SETTINGS: LONG TIME CURRENT SETTING (C)	LONG TIME DELAY SECONDS	SHORT TIME PICK UP MULTIPLE OF (C)	SHORT TIME DELAY SECONDS	INSTANTANEOUS PICK UP MULTIPLE OF (X)	GROUND FAULT SETTING MULTIPLE OF SENSOR	GROUND FAULT DELAY SECONDS	REMARKS
SWBD T 480Y/277V 3PH, 4W 2500 AMPERES 50kAIC FREE STANDING	1	MAIN					2500		2500									
	2	SPARE					800		800									
	3	SPARE					800		800									
	4	SPARE					400		400									
	5	SPARE					400		400									
	6	SPARE					400		400									
	7	SPARE					400		400									
	8	SPARE					225		225									
	9	SPARE					225		225									
	10	SPARE					225		225									
	11	SPARE					225		225									
	12	SPARE					225		225									
	13	SPARE					225		175									
	14	SPARE					225		150									
	15	SPARE					225		100									
	16	SPARE					225		100									
	17	SPARE					225		100									
	18	SPARE					225		100									
	CONNECTED KVA PER PHASE/DEMAND KVA		0	0	0	0												

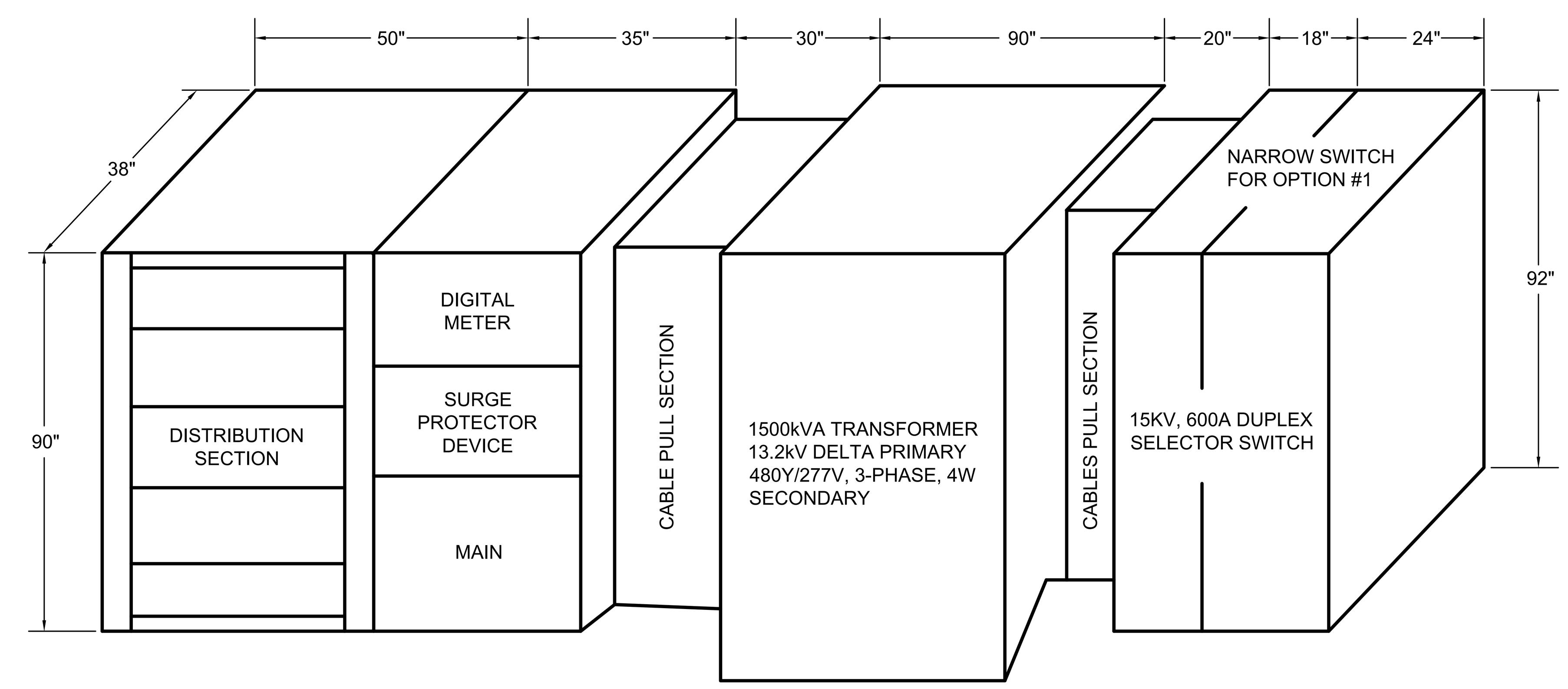
SUMMARY		
CONNECTED KVA - ALL PHASES	0	KVA
CONNECTED AMPERES @ 480 VOLTS	0	AMPERES
DEMAND AMPERES	0	AMPERES
DEMAND AMPERES @ 125%	0	AMPERES
FEEDER SIZE	4W####	AMPERES

SCHEDULE EXPLANATORY NOTES

(S) = CIRCUIT BREAKER SENSOR AMP RATING
(X) = RATING PLUG AMPS
(C) = PICKUP-MULTIPLE OF RATING PLUG AMPS (X)
DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T IN DELAY = TIME DELAY AT 600% OF CURRENT SETTING
I^2T OUT DELAY = TIME DELAY AT LOWER LIMIT OF BAND



1 SUBSTATIONS #1 AND #2 ELEVATION
SCALE: None



2 SUBSTATIONS TEMPORARY ELEVATION
SCALE: None

DESIGN CHANGE APPROVED

DESCRIPTION	DATE
BID DOCUMENTS	October-21-2024

CONSULTANT FIRM:

SEAL:

ARCHITECTS/ENGINEERS:

A DESIGN GROUP, LLC
ART - ARCHITECTURE - ENGINEERING
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SEAL: AMBRISH K RASTOGI, REGISTERED PROFESSIONAL ENGINEER

Name / Title
Name / Title
Name / Title
Name / Title

Drawing Title: SCHEDULES AND EQUIPMENT ELEVATIONS

Chief Engineer Approval

Name, Title: Prevention Coordinator

Project Title: SUBSTATION UPGRADE BUILDING 2 - PHASE 1

Location: CORPORAL MICHAEL J. CRESCENZ VA MEDICAL CENTER

Date: 10-21-2024 | Checked: AR | Drawn: MK

Project Number: 642-22-104

Building Number: 2

Drawing Number: E-108

Dwg. 22 of 25

Office of Facility Management Service

Department of Veterans Affairs

VA FORM 08-6231

IF THIS SHEET IS NOT 30" X 42" FULL SIZE, USE GRAPHIC SCALES

GENERAL NOTES:

1. THE INTENT OF THESE DRAWINGS IS TO PROVIDE A COMPLETE AND PROPERLY FUNCTIONING SPRINKLER SYSTEM. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO ACHIEVE SUCH REQUIREMENTS. CONTRACTOR IS OBLIGATED TO EXAMINE PLANS. ANY OBSERVED FAULTS OR AMBIGUITY IN THIS PLAN SET SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF AS-BUILT DRAWINGS AND TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.
2. ALL WORK ON THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS. ALL EQUIPMENT SHALL BE UL LISTED.
3. THESE DRAWINGS ARE SCHEMATIC AND INTENDED TO DEPICT THE GENERAL LOCATION OF SPRINKLER SYSTEM COMPONENTS.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS AND ARRANGE FOR INSPECTIONS BY VA MEDICAL CENTER
5. SPRINKLER CONTRACTOR SHALL THOROUGHLY CLEAN THE WORK AREA DAILY OR AS REQUESTED BY THE GENERAL CONTRACTOR. CONTRACTOR SHALL ALSO REMOVE ALL TRASH AND DEBRIS AFTER THE COMPLETION OF THE WORK.
6. THE SPRINKLER WORK SHALL BE PERFORMED IN A WORKMANLIKE FASHION. WORK SHALL BE REPLACED IF, IN THE OPINION OF THE OWNER'S REPRESENTATIVE, IT IS NOT INSTALLED IN A PROPER MANNER.
7. ALL EQUIPMENT AND THE SYSTEM SHALL BE PROVIDED IN CONFORMANCE WITH NFPA 13, AND MANUFACTURER'S RECOMMENDATIONS, CURRENT CODES AND UFC REQUIREMENTS.
8. HANGARS AND SUPPORTS, SHALL BE PER NFPA 13 REQUIREMENTS FOR INSTALLATION AND SPACING.
9. SUBMITTALS
   - A. SUBMIT A LIST OF ANY PRODUCT SUBSTITUTIONS.
   - B. SUBMIT SHOP DRAWINGS, PRODUCT DATA OF ALL EQUIPMENT, AND HYDRAULIC CALCULATIONS (IF NECESSARY) PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL MAKE ALL REQUIRED REVISIONS BASED ON REVIEW COMMENTS.
   - C. IMMEDIATELY UPON PROJECT COMPLETION, PREPARE AND SUBMIT AS-BUILT DRAWINGS IN THE FORM OF MARKED-UP CONSTRUCTION DOCUMENTS DETAILING THE AS-BUILT CONDITIONS AND ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS.
   - D. A MINIMUM OF TWO WEEKS TIME WILL BE REQUIRED FOR A REVIEW OF EACH SUBMITTAL BY THE ARCHITECT AND ENGINEER. INVOLVED SUBMITTALS SUCH AS CONTROLS MAY REQUIRE ADDITIONAL TIME TO REVIEW. CONTRACTOR IS RESPONSIBLE FOR ALLOCATING SUFFICIENT TIME IN THE CONSTRUCTION SCHEDULE TO OBTAIN FINAL APPROVAL OF SUBMITTALS, INCLUDING TIME FOR SUBSEQUENT REVIEWS OF SUBMITTALS NOT INITIALLY APPROVED. ANY CLAIMS FOR DELAYS RELATED TO SUBMITTAL REVIEW WILL NOT BE ACCEPTED.
10. PROJECT CLOSEOUT:
    - A. FURNISH "AS-BUILT" DRAWINGS.
    - B. PROVIDE INSTRUCTION TO OWNER AND DESIGNATED PERSONNEL, DEMONSTRATING TYPICAL MAINTENANCE AND REPAIR PROCEDURES.
    - C. PROVIDE OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT.
    - D. PROVIDE WARRANTY CERTIFICATES FOR ALL EQUIPMENT.
    - E. PROVIDE REQUIRED SPARE PARTS.
    - F. PROVIDE SYSTEM DEMONSTRATION.

FIRE PROTECTION LEGEND

ABBREVIATIONS

AD	AREA DRAIN
AP	ACCESS PANEL
BFP	BACKFLOW PREVENTER
CLG	CEILING
CO.	CLEANOUT
DFU	DRAINAGE FIXTURE UNITS
CW	COLD WATER
DN	DOWN
FD	FLOOR DRAIN
FLR.	FLOOR
FIXT.	FIXTURE
GPF	GALLONS PER FLUSH
GPM	GALLONS PER MINUTE
IPC	INTERNATIONAL PLUMBING CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
SP	STANDPIPE

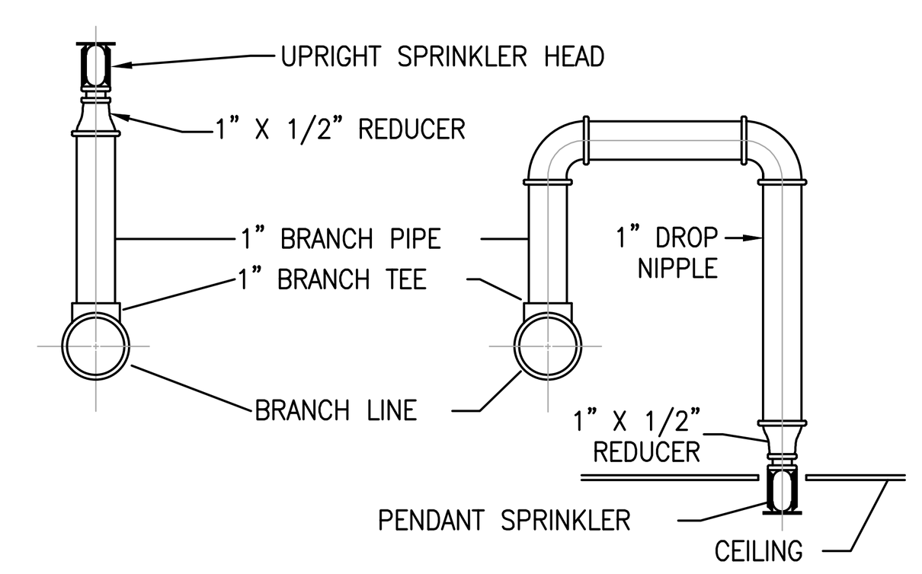
SYMBOLS

- CONTROL VALVE WITH TAMPER SWITCH
- PIPE UP
- PIPE DOWN
- M FIRE ALARM MONITOR MODULE
- W WATERFLOW SWITCH
- STANDPIPE WITH HOSE OUTLET
- REMOVE AND DISPOSE OF EXISTING SPRINKLER
- NEW SPRINKLER (SUGGESTED LOCATION, INFORMATION ONLY)
- SP EXISTING WORK
- # PHOTO REFERENCE OF EXISTING CONDITIONS ARROW POINTS IN DIRECTION OF PHOTO
- DISCONNECTION POINT
- POINT OF CONNECTION NEW TO EXISTING
- HATCHED SYMBOLS INDICATE EXISTING TO BE REMOVED
- RISER
- CHECK VALVE
- DRAIN VALVE
- OS&Y VALVE
- SPRINKLER HEAD
- BACKFLOW PREVENTER
- FLOW SWITCH
- S VALVE WITH SUPERVISORY SWITCH
- EXISTING SYSTEM/PIPING

NOTE: ALL ABBREVIATIONS AND SYMBOLS MAY NOT BE USED

FIRE PROTECTION SYSTEM NOTES:

1. THE TERM "PROVIDE" SHALL MEAN THE CONTRACTOR SHALL FURNISH, INSTALL, AND CONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM.
2. CONTRACTOR SHALL PROVIDE A COMPLETE WET PIPE AUTOMATIC SPRINKLER SYSTEM THROUGHOUT THE BUILDING, INCLUDING WATER FLOW ALARM SWITCHES, VALVE SUPERVISORY SWITCHES, CHECK VALVES, CONTROL VALVES, PIPING, HANGERS, SPRINKLERS, AND ALL ASSOCIATED EQUIPMENT. ALL WORK AND INSTALLATION SHALL CONFORM WITH THE APPLICABLE PROVISIONS OF THE VA FIRE PROTECTION DESIGN MANUAL, AND LATEST EDITIONS OF ASME A17.1 AND NFPA 13.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE CONCERNING THE WORK BEFORE PROCEEDING WITH EITHER FABRICATION OR INSTALLATION OF NEW WORK.
4. ANY INFORMATION CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S (COR) ATTENTION. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR BY THE COR.
5. SPRINKLER SYSTEMS SHALL CONSIST OF WET PIPE TYPE WITHIN AREA OF SCOPE OF WORK.
6. ALL PIPING MODIFICATIONS SHALL MATCH THE PREVIOUSLY PIPE SIZES.
7. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONDUCTING ANY WORK.
8. ALL WALL AND FLOOR PENETRATIONS SHALL BE CORE-DRILLED. PROVIDE PIPE SLEEVES FOR WALL AND FLOOR PENETRATIONS AS INDICATED IN THE SPECIFICATIONS. ALL PENETRATIONS IN WALLS, CEILINGS AND FLOORS SHALL BE SEALED TO THE FULL THICKNESS OF THE PENETRATION WITH APPROVED FIRE STOPPING MATERIAL OF EQUAL OR GREATER FIRE RESISTANCE.
9. THE EXISTING SYSTEMS SHALL REMAIN IN SERVICE UNTIL NEW WORK IS TESTED AND ACCEPTED. INTERRUPTION OF PROTECTION FOR THE PURPOSES OF MAKING TAPS OF EXISTING PIPING OR MAKING INTERCONNECTIONS BETWEEN NEW AND EXISTING WORK SHALL BE COORDINATED IN ADVANCE WITH COR.
10. THE SPRINKLER HEADS INSTALLED BELOW 8'-0" ABOVE FINISHED FLOOR SHALL BE PROVIDED WITH A SPRINKLER HEAD GUARD.
11. THE SPRINKLER PIPING INSTALLED IN FINISHED AREAS SHALL BE CONCEALED.
12. ALL CEILINGS, WALLS, FLOORS AND FINISHES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND PAINTED TO MATCH EXISTING CONDITIONS.
13. ALL DAMAGE TO WALLS, CEILINGS, FLOORS, AND STRUCTURAL MEMBERS FROM PENETRATIONS, INSTALLATIONS OR OTHER ACTIONS OF THE CONTRACTORS SHALL BE PATCHED, REPAIRED, AND PAINTED WITH NEW MATERIALS BY THE CONTRACTOR TO MATCH ADJACENT WORK, WHETHER SPECIFICALLY NOTED OR NOT.
14. THE CONTRACT DRAWINGS FOR SPRINKLER WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT. CONTRACTOR SHOULD VISIT THE SITE TO DETERMINE EXACT QUANTITIES AND SCOPE OF WORK.
15. PRIOR TO THE INSTALLATION OF THE SPRINKLER SYSTEM, THE SPRINKLER CONTRACTOR SHALL COORDINATE PIPING, VALVES, SPRINKLERS HEAD, ETC. WITH NEW AND EXISTING DUCT WORK, PIPING, CABLE TRAY, LIGHTING FIXTURES, STRUCTURAL MEMBERS AND OTHER TRADES.
16. ANY NEW FIRE PROTECTION CONTROL VALVES SHALL BE EQUIPPED WITH APPROVED VALVE SUPERVISORY SWITCHES.
17. SPRINKLERS INSTALLED IN PROXIMITY TO DUCTS OR OTHER OBSTRUCTIONS SHALL BE LOCATED TO MINIMIZE OBSTRUCTION TO DISCHARGE IN ACCORDANCE WITH NFPA 13.
18. ALL SPRINKLER PIPING SHALL BE INSTALLED SO THAT ALL PORTIONS OF THE SYSTEM CAN BE DRAINED BACK THROUGH THE DRAIN VALVE. ANY REQUIRED AUXILIARY DRAIN VALVES REQUIRED ABOVE CEILINGS SHALL HAVE A SIGN AT THE CEILING LEVEL INDICATING SUCH DRAIN.
19. CONTRACTOR SHALL CONCEAL ALL SPRINKLER PIPING IN AREAS PROVIDED WITH SUSPENDED CEILINGS, EXCEPT FOR PIPING IN THE MECHANICAL ROOM, ELECTRICAL ROOM, TELECOMMUNICATIONS ROOM, ETC.
20. ALL SPRINKLERS SHALL BE STANDARD RESPONSE TYPE. ALL SPRINKLERS WITHIN THE AREA OF WORK SHALL BE REPLACED WITH NEW SPRINKLERS. RELOCATION OF ANY EXISTING SPRINKLER IS PROHIBITED.
21. SPRINKLER CONTRACTOR SHALL PREPARE SHOP DRAWINGS FOR THE COR'S AND ENGINEER'S REVIEW. AFTER THE REVISION OF SPRINKLER DRAWINGS IN COMPLIANCE WITH C.O'S COMMENTS, SUBMIT AN APPROVED STAMPED COPY OF SPRINKLER PLAN BEARING THE APPROVAL OF THE VA FIRE MARSHALL.
22. SPRINKLERS:
    - A. IN AREA WITHOUT FINISHED CEILINGS, EXPOSED SPRINKLERS SHALL BE QUICK RESPONSE BRASS FINISH UPRIGHT TYPE.
    - B. IN AREAS WITH FINISHED CEILINGS, SPRINKLERS SHALL BE THE QUICK RESPONSE SEMI-RECESSED TYPE, CHROME PLATED WITH 2-PIECE CHROME ESCUTCHEON.
23. THE EXISTING SPRINKLER SYSTEM SHALL REMAIN IN SERVICE DURING DEMOLITION. WHEN THE SYSTEM IS TAKEN OUT OF SERVICE FOR A WORK SHIFT, A FIRE WATCH SHALL BE PERFORMED. THE FIRE WATCH INSTRUCTIONS CAN BE OBTAINED FROM THE VA MEDICAL CENTER COR. THE OCCUPIED PORTION OF THE FLOOR SHALL REMAIN IN SERVICE.



UPRIGHT — RECESSED PENDANT

SPRINKLER CONNECTIONS DETAIL

SCALE: NOT TO SCALE

DESIGN CHANGE APPROVED	
BID DOCUMENTS	October-21-2024
DESCRIPTION	DATE

CONSULTANT FIRM:

SEAL:

ARCHITECTS/ENGINEERS:

A DESIGN GROUP, LLC
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SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL AMBRISH K RASTOGI ENGINEER # PE-051867-E

Name / Title
Name / Title
Name / Title
Name / Title

Drawing Title: FIRE PROTECTION COVER SHEET
Chief Engineer Approval
Name, Title: Prevention Coordinator

Project Title: SUBSTATION UPGRADE BUILDING 2 - PHASE 1
Location: CORPORAL MICHAEL J. CRESCENZ VA MEDICAL CENTER

Date	Checked	Drawn
10-21-2024	AR	AM

Project Number: 642-22-104
Building Number: 2
Drawing Number: FP-001
Dwg. 23 of 25

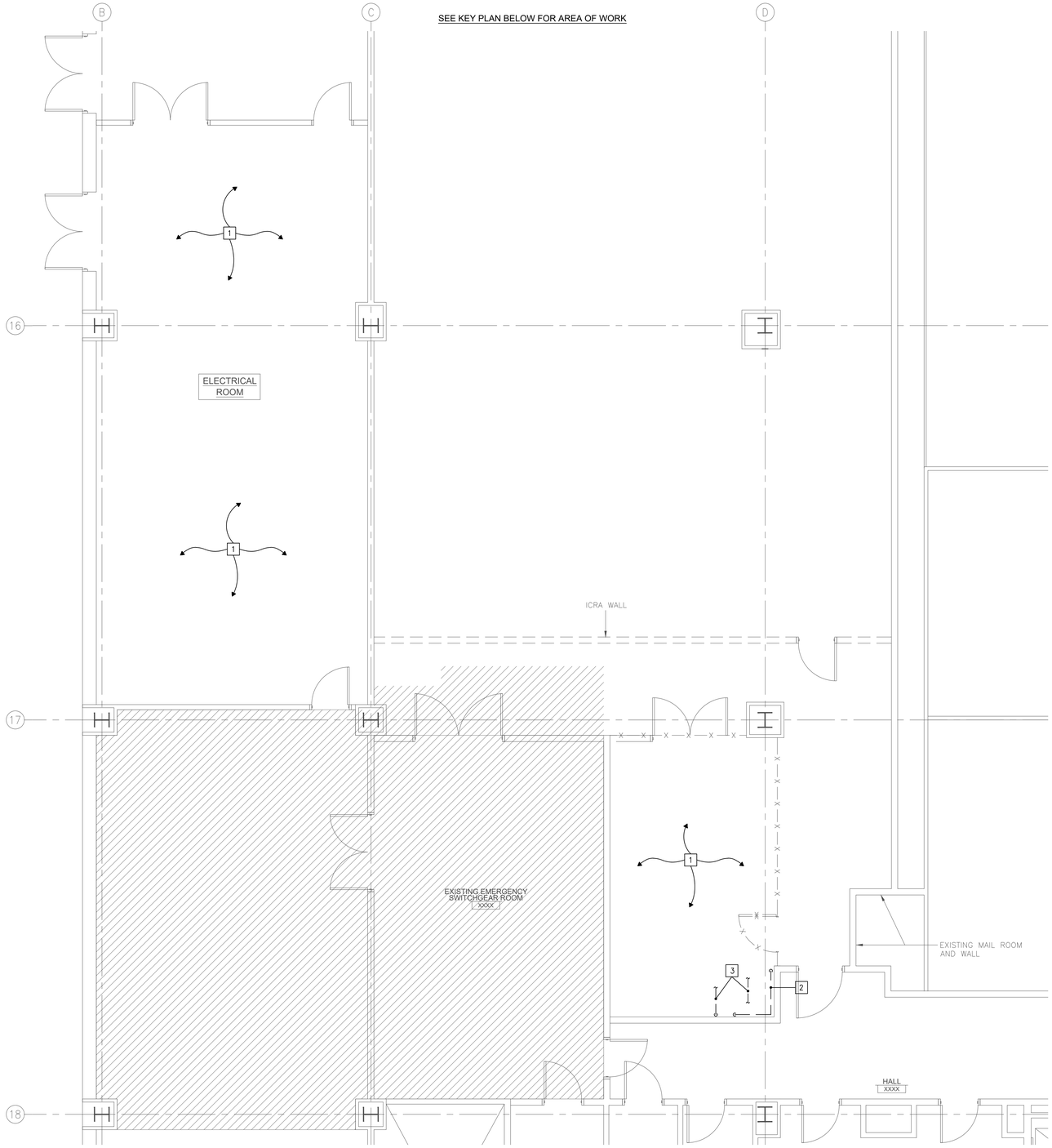
Office of Facility Management Service
Department of Veterans Affairs

VA FORM 08-6231

IF THIS SHEET IS NOT 30" X 42"
FULL SIZE, USE GRAPHIC SCALES

one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

SEE KEY PLAN BELOW FOR AREA OF WORK



1 PARTIAL GROUND FLOOR - ELECTRICAL ROOM - DEMOLITION WORK - FIRE PROTECTION

1/4" = 1'-0"

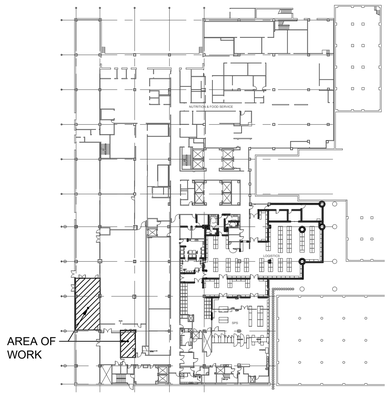
scale: 1/4"= 1'-0"

GENERAL NOTES - DEMOLITION WORK

1. UNDER NO CIRCUMSTANCE SHALL THE WORK PERFORMED UNDER THIS CONTRACT ADVERSELY AFFECT ADJACENT AREAS, NOT PART OF THIS CONTRACT.
2. ALL SERVICE OUTAGES SHALL BE COORDINATED WITH THE OWNER. REQUESTS FOR SERVICE OUTAGES SHALL BE MADE A MINIMUM OF 14 DAYS PRIOR TO ANTICIPATED DATE. THE SPRINKLER SYSTEM SHALL BE PUT BACK INTO SERVICE AT THE END OF EACH OUTAGE. A FIRE WATCH SHALL BE PERFORMED DURING THE SYSTEM OUTAGE.
3. IF SUSPECTED ASBESTOS-CONTAINING MATERIALS ARE ENCOUNTERED IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL CEASE WORK WITH THE SUSPECT MATERIAL AND AWAIT DIRECTION FROM THE OWNER.
4. ALL DEMOLISHED EQUIPMENT AND RUBBISH SHALL BE CLEARED, TRANSPORTED AND DISPOSED OF IN A LAWFUL AND RESPONSIBLE MANNER.
5. THE CONTRACTOR SHALL REMOVE ANY AND ALL OBSOLETE, UNUSED OR UNNECESSARY ITEMS AS CALLED OUT ON DRAWINGS OR HEREIN SPECIFIED. ANY SUCH ITEMS INTENDED FOR SUCH REMOVAL SHALL BE COMPLETELY VERIFIED AND APPROVED BY THE ARCHITECT.
6. CONTRACTOR SHALL COORDINATE WITH ALL TRADES. CONTRACTOR SHALL DEMOLISH EXISTING LAYOUT AS NECESSARY TO ALLOW INSTALLATION OF OTHER MECHANICAL EQUIPMENT, CEILINGS, WALLS, ETC. DEMOLISH EXISTING SPRINKLER HEADS.

KEYED NOTES-DEMOLITION WORK

1. MODIFY EXISTING SPRINKLER SYSTEM AS REQUIRED (TYPICAL).
2. REMOVE EXISTING ABANDONED $\frac{3}{4}$" CW COPPER PIPING AND CAP PIPING AT FLOOR LEVEL. VERIFY IN FIELD.
3. THE CONTRACTOR SHALL COORDINATE EXISTING DRAIN AND SPRINKLER PIPING WITH NEW WORK.



KEY PLAN-GROUND FLOOR
NO SCALE

DESIGN CHANGE APPROVED	CONSULTANT FIRM:	SEAL:	ARCHITECTS/ENGINEERS:	SEAL:
BID DOCUMENTS October-21-2024 DESCRIPTION DATE			A DESIGN GROUP, LLC ART - ARCHITECTURE - ENGINEERING 2787 HILL ROAD VIENNA, VA 22181 FRANK V. STURGEON, AIA AMBRISH RASTOGI, PE 703.938.5226 FRANK@ADG10.COM	COMMONWEALTH OF VIRGINIA REGISTERED PROFESSIONAL AMBRISH K RASTOGI ENGINEER

Name Title	Drawing Title ELECTRICAL ROOM-DEMOLITION WORK -FIRE PROTECTION	Project Title SUBSTATION UPGRADE BUILDING 2 - PHASE 1	Project Number 642-22-104	Office of Facility Management Service
Name Title			Building Number 2	
Name Title	Chief Engineer Approval	Location CORPORAL MICHAEL J. CRESCENZ VA MEDICAL CENTER	Drawing Number FPD-101	
Name Title	Name, Title Prevention Coordinator	Date 10-21-2024 / Checked AR / Drawn AM	Dwg. 24 of 25	Department of Veterans Affairs

VA FORM 08-6231

IF THIS SHEET IS NOT 30" X 42"
FULL SIZE, USE GRAPHIC SCALES

one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

SEE KEY PLAN BELOW FOR AREA OF WORK

MECHANICAL EQUIPMENT
B2A105

EXISTING ELECTRICAL

WARE HOUSE
XXXX

ICRA WALL

EXISTING EMERGENCY SWITCHGEAR ROOM
XXXX

HALL
XXXX

NEW TEMPORARY SUBSTATION ROOM

EXISTING MAIL I AND WALL

GENERAL NOTES - NEW WORK

1. PROVIDE COORDINATION DRAWINGS AFTER THE DEMOLITION WORK. PROVIDE ALL SYSTEMS IN COORDINATION WITH THE SITE CONDITIONS AS PART OF THIS CONTRACT. MAINTAIN CONTINUITY OF EXISTING SYSTEMS WHICH IS NOT PART OF SCOPE OF WORK.
2. ALL EXISTING, NEW WALL PENETRATIONS WILL BE COMPLETELY SEALED WITH APPROVED U/L LISTED FIRE STOPPING MATERIALS. CONTRACTOR SHALL PROVIDE FIRE STOPPING SUBMITTALS FOR APPROVAL.
3. THIS PROJECT SHALL HAVE WET PIPE SPRINKLER SYSTEMS DESIGNED IN ACCORDANCE WITH NFPA 13, IBC'S REQUIREMENTS, VA DESIGN GUIDE LINES. MODIFY EXISTING SPRINKLER SYSTEM TO MAINTAIN FULL SPRINKLER COVERAGE IN THE SCOPE OF WORK AREA.
4. SPRINKLER CONTRACTOR SHALL PREPARE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR THE VA FIRE MARSHALL AND COR REVIEW. AFTER THE REVISION OF SPRINKLER DRAWINGS IN COMPLIANCE WITH VA FIRE MARSHALL COMMENTS, SUBMIT AN APPROVED STAMPED COPY OF SPRINKLER PLAN BEARING THE APPROVAL OF THE VA FIRE MARSHALL.

KEYED NOTES - NEW WORK

(1) MODIFY EXISTING SPRINKLER SYSTEM AS REQUIRED TO PROVIDE FULL SPRINKLER COVERAGE IN THIS AREA (TYPICAL).

NOTE

THE SPRINKLER SYSTEM FOR NEW STORAGE ROOM SHALL BE IN COMPLIANCE WITH ORDINARY HAZARD GROUP 2.

AREA OF WORK

KEY PLAN-GROUND FLOOR
NO SCALE

1 PARTIAL GROUND FLOOR - ELECTRICAL ROOM - NEW WORK - FIRE PROTECTION
1/4" = 1'-0"

scale: $\frac{1}{4}$" = 1'-0"

DESIGN CHANGE APPROVED BID DOCUMENTS October-21-2024 DESCRIPTION DATE	CONSULTANT FIRM:	SEAL:	ARCHITECTS/ENGINEERS: A DESIGN GROUP, LLC ART - ARCHITECTURE - ENGINEERING 2767 HILL ROAD VIENNA, VA 22181 FRANK V. STURGEON, AIA AMBRISH RASTOGI, PE 703.938.5226 FRANK@ADG10.COM	SEAL:	Name Title Name Title Name Title Name Title	Drawing Title ELECTRICAL ROOM-NEW WORK -FIRE PROTECTION Chief Engineer Approval Name, Title Prevention Coordinator	Project Title SUBSTATION UPGRADE BUILDING 2 - PHASE 1 Location CORPORAL MICHAEL J. CRESCENZ VA MEDICAL CENTER Date 10-21-2024 Checked AR Drawn AM	Project Number 642-22-104 Building Number 2 Drawing Number FP-101 Dwg. 25 of 25	Office of Facility Management Service Department of Veterans Affairs

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