ELECTRICAL GENERAL NOTES

MOUNTING HEIGHTS FOR ELECTRICAL DEVICES

DEVICE	MOUNTING HEIGHTS
LIGHT SWITCHES, WALL MOUNTED OCCUPANCY SENSORS	48" TO CENTERLINE OF BOX. EXCEPTION: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20"-25"D.
DISCONNECT SWITCHES, MOTOR STARTERS, MOTOR PUSH BUTTON STATIONS	60" TO CENTERLINE.
WALL MOUNTED EXIT SIGNS	90" TO CENTERLINE OF SIGN OR CENTERED IN WALL AREA BETWEEN TOP OF DOOR AND CEILING.
CEILING MOUNTED EXIT SIGNS	80" TO BOTTOM FIXTURE.
RECEPTACLES	16" TO BOTTOM OF BOX. EXCEPTION: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20"-25"D.
SPECIAL OUTLETS OR RECEPTACLES	16" TO BOTTOM OF BOX OR AS NOTED ON DRAWINGS. EXCEPTION: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20"-25"D.
PLUGMOLD OR WIREMOLD	AS NOTED ON DRAWINGS. EXCEPTION: 44" MAXIMUM TO TOP ABOVE COUNTERS WHICH ARE 20"-25"D.
CLOCK OUTLETS	12" CEILING TO CENTERLINE OR 7'-0" TO CENTERLINE IF CEILING IS OVER 8'-0".
DATA/COMMUNICATION OR TELEPHONE OUTLETS	16" TO BOTTOM OF BOX.
TELEPHONE OUTLETS - WALL TYPE	54" TO DIAL CENTER (NON-ACCESSIBLE). 48" TO HIGHEST OPERABLE PART (ACCESSIBLE).
TEMPERATURE/HUMIDITY SENSORS	60" TO CENTER LINE OF BOX.
FIRE ALARM MANUAL PULL STATIONS	48" TO CENTERLINE OF BOX - NOT MORE THAN 5'-0" FROM EXIT.
FIRE ALARM AUDIBLE ONLY DEVICE	NOT LESS THAN 90" TO TOP OR 6" BELOW CEILING, WHICH EVER IS HIGHER.
FIRE ALARM VISUAL ONLY DEVICE OR A COMBINATION AUDIBLE AND VISUAL DEVICE	80" TO BOTTOM OF DEVICE OR NOT MORE THAN 96" TO TOP.
WALL MOUNTED REMOTE INDICATOR LIGHT	80" TO CENTERLINE OF DEVICE OR 6" BELOW CEILING, WHICHEVER IS LOWER.
AREA OF REFUGE TELEPHONE	SAME AS TELEPHONE - ACCESSIBLE.
CALL FOR AID SWITCH WITH PULL CHAIN TO FLOOR	48" TO CENTERLINE OF BOX MINIMUM (TOILETS). 66" TO CENTERLINE OF BOX MAXIMUM (SHOWERS - LOCATED OUT OF SPRAY AREA).
CARD READER	48" TO HIGHEST OPERABLE PART (SIDE OR FORWARD ACCESS).
INTERCOM STATION	54" TO HIGHEST OPERABLE PART (SIDE ACCESS). 48" HIGHEST OPERABLE PART (FORWARD ACCESS).
SOUND SYSTEM VOLUME CONTROL	54" TO HIGHEST OPERABLE PART (SIDE ACCESS). 48" HIGHEST OPERABLE PART (FORWARD ACCESS).
MICROPHONE OUTLETS	16" TO BOTTOM OF BOX.
THERMOSTATS	54" TO HIGHEST OPERABLE PART (SIDE ACCESS). 48" HIGHEST OPERABLE PART (FORWARD ACCESS).

NOTES:

1. ALL DIMENSIONS ARE CONSIDERED FROM FINISHED FLOOR AND, UNLESS NOTED OTHERWISE, SHALL NOT VARY. RAISED FLOORS SHALL BE CONSIDERED FINISHED FLOOR.
2. ALL DIMENSIONS SHALL BE COORDINATED WITH ARCHITECTURAL DETAILS AND MAY BE ADJUSTED TO CONFORM WITH ARCHITECTURAL REQUIREMENTS AS LONG AS NO CODE RESTRICTION IS VIOLATED.
3. OUTLETS INSTALLED LOWER THAN 15" AFF (FORWARD REACH) AND 9" AFF (SIDE REACH) ARE IN VIOLATION OF ADA.

SPECIAL NOTES:

1. EXIT SIGNS SHALL NOT BE INSTALLED IN A MANNER THAT THE SIGN WILL BLOCK FIRE ALARM VISUAL DEVICES.
2. FOR LIGHTING FIXTURES MOUNTING HEIGHTS SEE SCHEDULE AND DRAWINGS.

WIRE SIZING TABLE

FOR 120V-20A BRANCH CIRCUITS ONLY (UNLESS NOTED OTHERWISE)

IF DISTANCE (A+B) IN FEET IS: (SEE DIAGRAM AT RIGHT)	USE COPPER WIRE IN METALLIC CONDUIT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT AND SIZE CONDUIT ACCORDINGLY.
0' TO 100'	#12 AWG (MIN.)
100' TO 175'	#10 AWG
175' TO 300'	#8 AWG
300' TO 450'	#6 AWG (MAX.)

PANELBOARD; FIRST ON CIRCUIT; LAST ON CIRCUIT; 1/2 WIRE LENGTH FROM FIRST TO LAST RECEPTACLE OR LIGHTING FIXTURE ON CIRCUIT.

FOR 277V-20A BRANCH CIRCUITS ONLY (UNLESS NOTED OTHERWISE)

IF DISTANCE (A+B) IN FEET IS: (SEE DIAGRAM AT RIGHT)	USE COPPER WIRE IN METALLIC CONDUIT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT AND SIZE CONDUIT ACCORDINGLY.
0' TO 250'	#12 AWG (MIN.)
250' TO 400'	#10 AWG
400' TO 700'	#8 AWG
700' TO 1000'	#6 AWG (MAX.)

PANELBOARD; FIRST ON CIRCUIT; LAST ON CIRCUIT; 1/2 WIRE LENGTH FROM FIRST TO LAST LIGHTING FIXTURE ON CIRCUIT.

NOTES:

1. TABLES ARE BASED ON EVENLY DISTRIBUTED LOAD ALLOWING A 3% VOLTAGE DROP AT LAST OUTLET.
2. 480V MOTOR BRANCH CIRCUIT CONDUCTORS SHALL BE #12 AWG IN 3/4" C UNLESS OTHERWISE NOTED.
3. SIZE OF CONDUCTORS ARE BASED UPON EACH MOTOR BEING FED WITH SEPARATE CONDUIT. IF CONDUCTORS FOR TWO MOTORS (MAX.) ARE TO BE COMBINED IN ONE CONDUIT, INCREASE THE SIZE OF CONDUCTORS AND CONDUITS PER NATIONAL ELECTRICAL CODE (NEC), TO COMPENSATE FOR CONDUCTOR DE-RATING.
4. PROVIDE DEDICATED NEUTRAL FOR EACH CIRCUIT.

1. SEE ALL PROJECT GENERAL NOTES AND OTHER REQUIREMENTS THE LIFE SAFETY AND INFECTION CONTROL REQUIREMENTS LOCATED WITHIN GENERAL DRAWINGS SECTION. COMPLY WITH ALL REQUIREMENT AS IF THEY ARE A DIRECT PART OF THIS SECTION AND AS IF THEY WERE DIRECTLY INCLUDED AND PROVIDED BELOW.

2. EQUIVALENCY SUBSTITUTIONS::

   THE "BASIS OF DESIGN (BOD) COMPLIANCE PROTOCOLS" ARE TO BE FOLLOWED FOR ALL MATERIALS, EQUIPMENT, ASSEMBLIES AND SYSTEMS SPECIFIED AND DETAILED THROUGHOUT ALL DRAWINGS AND SPECIFICATION SECTION, WHETHER THE BOD DESIGNATE IS SPECIFICALLY REFERENCED THEREIN OR NOT. SEE THE GENERAL DRAWINGS SECTION FOR THE SPECIFIC BOD COMPLIANCE REQUIREMENTS AND PROTOCOLS TO BE FOLLOWED.

3. CODES:

   THE WORK SHALL COMPLY WITH ALL APPLICABLE, MUNICIPAL, STATE, NATIONAL CODES, AND ALL VA APPLICABLE DESIGN MANUALS STANDARDS REQUIREMENTS. WHERE THE CONSTRUCTION DOCUMENTS INDICATE MORE RESTRICTIVE REQUIREMENTS THE CONSTRUCTION DOCUMENTS SHALL GOVERN. HOWEVER, THE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION.

   ALL WORK, MATERIAL, AND EQUIPMENT SHALL COMPLY WITH ALL REQUIREMENTS OF THE LATEST EDITIONS AND INTERIM AMENDMENTS OF THE NATIONAL ELECTRICAL CODE (N.E.C.), NATIONAL ELECTRICAL SAFETY CODE, OSHA, AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES. ALL ELECTRICAL EQUIPMENT PROVIDED UNDER THIS CONTRACT SHALL BE NEW (EXCEPT WHERE OTHERWISE NOTED) AND SHALL BEAR THE MARK OF NATIONALLY RECOGNIZED TESTING LABORATORY, WHEN APPLICABLE. ALL EQUIPMENT OF THE SAME TYPE AND CAPACITY SHALL BE BY THE SAME MANUFACTURER.

4. DRAWINGS AND SPECIFICATIONS:

   THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND COMPLYING WITH BOTH THE DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THE DRAWINGS, NOTES, SPECIFICATIONS, OR CODES, THE REFERENCE WHICH PROVIDES THE MORE COMPLETE OR HIGHER STANDARD SHALL PREVAIL UNLESS OTHERWISE CLARIFIED BY VA/COR.

   CONTRACTOR SHALL REVIEW ENTIRE SET OF CONTRACT DOCUMENTS: INCLUDING BUT NOT NECESSARILY LIMITED TO ALL ARCHITECTURAL, ALL STRUCTURAL, ALL MECHANICAL, ALL ELECTRICAL, ALL PLUMBING, AND ENTIRE PROJECT MANUAL. CONTRACTOR SHALL ACKNOWLEDGE AND INCLUDE IN THE SCOPE OF WORK (CONTRACT) ALL CONDITIONS PERTINENT TO THE COMPLETION OF THE ELECTRICAL WORK. CONTRACTOR SHALL FULLY COORDINATE ELECTRICAL WORK WITH THE INSTALLATION OF WORK BY ALL OTHER TRADES AND MAKE NECESSARY FIELD ADJUSTMENTS AS REQUIRED TO ACCOMMODATE THE ELECTRICAL INSTALLATION. ALL OF THE ABOVE SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL COST TO THE VA.

5. INTERPRETATION OF THE DOCUMENTS:

   CAREFULLY COMPARE THE DRAWINGS AND SPECIFICATIONS, CHECKING MEASUREMENTS AND CONDITIONS UNDER WHICH THIS INSTALLATION IS TO BE MADE. FOR CLARIFICATION BETWEEN VARIOUS DRAWINGS, BETWEEN DRAWINGS OR SPECIFICATION, OR BETWEEN SECTIONS OF THE SPECIFICATION, THE MATTER SHALL BE REFERRED TO THE VA/COR FOR CLARIFICATION AND APPROVAL BEFORE ANY WORK IS EXECUTED. THE CONTRACTOR SHALL STATE IN THEIR PROPOSAL ANY EXCEPTIONS NECESSARY TO MAKE THIS A COMPLETE, READY TO USE INSTALLATION.

   ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, IN A NEAT AND WORKABLE MANNER CONSISTENT WITH RECOGNIZED GOOD PRACTICE, AND SHALL BE SUBJECT TO THE APPROVAL OF THE VA/COR.

   ANY CHANGES TO THE CONTRACT REQUIREMENTS MUST BE APPROVED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP UP-TO-DATE AS-BUILT DRAWINGS, ON-SITE, AVAILABLE FOR INSPECTION AT ANY TIME OF THE EXACT NATURE OF WORK, INCLUDING ALLOWABLE DEVIATIONS FROM THE CONTRACT DRAWINGS, FOR THE PURPOSE OF RECORD DOCUMENTS.

6. ELECTRICAL DRAWINGS

   THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL DOORS, WALLS, FURNITURE, EQUIPMENT, ETC. THE LOCATION OF RACEWAY SYSTEM COMPONENTS IS SCHEMATIC THE EXACT LOCATION OF RACEWAY SYSTEM COMPONENTS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR SHALL CONFIRM THE DIMENSIONS OF THE ACTUAL EQUIPMENT TO BE SUPPLIED FOR THIS PROJECT, VERIFY CLEARANCES AND ROUGH-INS, AND OBTAIN ALL APPROVALS PRIOR TO STARTING WORK.

7. SITE EXAMINATION

   BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL VISIT THE SITE, EXAMINE THE PREMISES, AND MAKE A SURVEY OF THE EXISTING CONDITIONS. THIS VISIT SHALL ONLY BE ALLOWED AS PER THE VA SCHEDULED WALK THROUGH AND IN KEEING WITH THE GOVERNMENT / VA ALLOWED TIME CONSTRAINTS ON SITE AND ACCESS.

   CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK, AND FULLY INFORM THEM SELF AS TO ALL CONDITIONS AND MATTERS THAT CAN, IN ANY WAY, AFFECT THE WORK OR THE COST THEREOF. SHOULD THIS CONTRACTOR FIND DISCREPANCIES IN, OR OMISSIONS FROM, THE DRAWINGS,SPECIFICATIONS OR OTHER DOCUMENTS OR BE IN DOUBT AS TO THEIR MEANING, NOTIFY THE VA/CONTRACTING OFFICER AT ONCE, IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND NEW WORK, OR BETWEEN ELECTRICAL WORK AND THE WORK OF OTHER TRADES. OBTAIN CLARIFICATION(S) PRIOR TO SUBMITTING ANY BID. LACK OF SUCH NOTIFICATION SHALL BE CONSTRUED TO INDICATE NO DISCREPANCIES OR CONFLICTS EXIST.

8. COORDINATION WITH OTHER TRADES:

   THE ELECTRICAL CONTRACTOR SHALL OBTAIN A COMPLETE SET OF GENERAL, ARCHITECTURAL AND ENGINEERING DOCUMENTS AND COORDINATE WITH MECHANICAL, PLUMBING, ARCHITECTURAL, AND OTHER TRADES FOR EXACT DIMENSIONS, CLEARANCES, ROUGH-IN LOCATIONS, AND OTHER ADDITIONAL SCOPES OF WORK THAT MAY NOT BE SHOWN ON THE ELECTRICAL PLANS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL 120 VOLT (AND HIGHER) AC POWER TO OTHER TRADES EQUIPMENT AND HARDWARE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, CONTROLS, FIRE AND SECURITY SYSTEMS, MOTORIZED DOORS, DAMPERS, LIFTS, AND OTHER SYSTEMS. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE ELECTRICAL PLANS, THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL SAFETY DISCONNECT SWITCHES TO MECHANICAL EQUIPMENT UNLESS OTHERWISE NOTED.

   THE CONTRACTOR SHALL CHECK ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL TRADES WORK FOR POSSIBLE INTERFERENCE CAUSED BY CONDITIONS IN THE FIELD, BEFORE THE BID IS MADE.

9. THE ELECTRICAL CONTRACTOR IS: RESPONSIBLE FOR SCHEDULING DELIVERY, RECEIVING, UNLOADING, UNCRATING, STORING SETTING IN PLACE, AND PROTECTING FROM DAMAGE, VANDALISM, THEFT OR WEATHER DURING CONSTRUCTION FOR ALL NEW EQUIPMENT FURNISHED BY THE ELECTRICAL CONTRACTOR.

   CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS AND TAXES APPLICABLE TO THIS DIVISION IF NECESSARY. (FEDERAL GOVERNMENT IS NOT SUBJECT TO LOCAL PERMITS OR FEE FOR THE PROJECT).

10. FIRE STOPPING:

    ALL PENETRATIONS IN WALL, FLOOR OR CEILINGS SHALL BE SUITABLY CLOSED UP AND SEALED WITH AN INTUMESCENT FIRE STOPPING COMPOUND LISTED IN THE MOST RECENT FACTORY MUTUAL RESEARCH CORPORATION (FMRC) APPROVAL GUIDE. WHEN NEW CABLES/CONDUITS PENETRATE EXISTING FIRE RATED WALL, PENETRATIONS SHALL BE SEALED TO MATCH EXISTING RATING TO ENSURE IT RETAIN EXISTING CONDITIONS. THE BOD FOR FIRE STOPPING PRODUCTS SHALL BE AS MANUFACTURED BY THE 3M CO.

11. PAINTING:

    ALL NEWLY INSTALLED EXPOSED PIPING SHALL BE PAINTED TO MATCH THE ADJACENT WALL OR CEILING SURFACE UNLESS THE REQUIRED COLOR CODING IS SPECIFIED.

12. VA FURNISHED EQUIPMENT:

    EQUIPMENT THAT WILL BE FURNISHED BY THE VA WILL BE INDICATED ON A SCHEDULE OR BE INCLUDED IN SPECIFIC NOTES OR SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE VA/COR FOR DELIVERY SCHEDULES. THE CONTRACTOR IS TO ASSUME THAT ON SITE STORAGE MAY NOT BE AVAILABLE WHEN COORDINATING DELIVERY OF EQUIPMENT, THE CONTRACTOR, IN COORDINATION WITH THE VA/COR, WILL INSPECT THE DELIVERY FOR ACCURACY AND SHIPMENT DAMAGE AND ACCEPTING THE EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO STORE, PROTECT, AND ULTIMATELY INSTALL THE EQUIPMENT.

13. ELECTRICAL SERVICE DISRUPTIONS:

    ANY WORK INVOLVING A TASK WHICH EXPOSES ACTIVE BUS SHALL BE PERFORMED AFTER HOURS (11:00PM TO 5:00AM). THIS RESTRICTION INCLUDES REMOVING THE COVER FROM ANY PANEL BOARD, SWITCHBOARD, M.C.C, ETC., ALL WORK WHICH EXPOSES ACTIVE BUS REQUIRES A WRITTEN NOTIFICATION TO THE VA/COR WHICH WILL OUTLINE THE METHOD OF PROCEDURE FOR THE WORK. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 WEEKS NOTICE TO THE VA/COR BEFORE WORKING ON ANY ENERGIZED ELECTRICAL SYSTEM. ALL POWER DISRUPTION SHALL OCCUR AT TIMES AND OF DURATIONS ACCEPTABLE TO THE VA/COR.

14. EQUIPMENT:

    ALL MATERIALS AND EQUIPMENT USED IN THIS INSTALLATION SHALL BE NEW, AND HAVE THE APPROPRIATE UL LISTING AND LABEL.

    THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, TOOLS, EQUIPMENT SERVICES, AND ACCESSORIES FOR COMPLETE INSTALLATION OF ALL ELECTRICAL WORK AS NOTED. ITEMS OMITTED FROM EITHER THE SPECIFICATIONS OR THE DRAWINGS, BUT SHOWN OR DESCRIBED IN ONE OR THE OTHER, AND ITEMS NECESSARY TO MAKE THE ELECTRICAL SYSTEM COMPLETE AND WORKABLE SHALL FORM A PART OF THE WORK.

15. MISCELLANEOUS SUPPORTING MEMBERS:

    ALL ANGLES CHANNELS, AND OTHER MISCELLANEOUS STEEL, BOLTS, RODS, ETC. REQUIRED TO SUPPORT LIGHT FIXTURE, CONDUIT, RACEWAY, LADDER TRAY, OR OTHER ELECTRICAL EQUIPMENT OR DEVICES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

    ANY MENTION OF A SPECIFIC VOLTAGE ON THE ELECTRICAL DRAWINGS SHALL NOT RELIEVE THE ELECTRICAL CONTRACTOR OF THE RESPONSIBILITY TO VERIFY THE VOLTAGE PRIOR TO PURCHASING OR ROUGH-IN WORK.

16. DISTRIBUTION PANELS AND PANELS BOARDS:

    ALL DISTRIBUTION PANELS AND PANEL BOARDS SHALL BE PROVIDED WITH TYPEWRITTEN DIRECTORIES. SEE PANEL SCHEDULES ON THE DRAWINGS AND SPECIFICATION FOR COMPLETE IDENTIFICATION AND LABELING REQUIREMENTS. ALL DISTRIBUTION PANELS AND PANEL BOARDS SHALL BE LABELED ON THE PANEL CABINET WITH THE PANEL NAME AND THE POWER SOURCE FEEDING THE PANEL AS PER THE ELECTRICAL ONE LINE. ALL PANELS AND PANEL BOARDS SHALL BE PROVIDED WITH HINGED DOOR WITH LOCK AND KEY.

17. SAFETY:

    CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO ENSURE THE SAFETY OF THE VA'S EMPLOYEES, BUILDING EMPLOYEES AND GUESTS,AS WELL AS THEIR OWN FORCES, BY ADEQUATELY PROVIDING APPROPRIATE PPE AND PROTECTING ANY EXPOSED LIVE CONDUCTORS, OR DEVICES THROUGHOUT THE COURSE OF THIS WORK.

18. EQUIPMENT CONNECTIONS:

    PROVIDE FINAL CONNECTIONS FOR ALL EQUIPMENT FURNISHED UNDER OTHER DIVISIONS AND FOR ALL VA FURNISHED EQUIPMENT. PROVIDE A FLEXIBLE LIQUID TIGHT CONNECTION TO ALL VIBRATION PRODUCING EQUIPMENT.

19. TEMPORARY LIGHTING, POWER, FIRE, AND SAFETY:

    PROVIDE TEMPORARY LIGHTING AND POWER AS REQUIRED IN AREAS UNDERGOING WORK DURING CONSTRUCTION. FURNISH AND INSTALL ONE OSHA APPROVED PIGTAIL SOCKET WITH 150-WATT LAMP FOR EVERY 500 SQUARE FEET OF FLOOR SPACE AND A MINIMUM 1 PER ROOM. THE TEMPORARY LIGHTING SHALL BE LEFT IN PLACE UNTIL PERMANENT LIGHTING IS COMPLETELY OPERATIONAL.

    FURNISH AND INSTALL POWER OUTLETS TO A TOTAL OF ONE FOR EVERY 2000 SQUARE FEET OR PART THEREOF OF FLOOR AREA. THESE SHALL BE 15 AMP, SINGLE PHASE RECEPTACLES FOR EITHER 110 OR 220 VOLTS AS DIRECTED BY THE GENERAL/PRIME CONTRACTOR. COORDINATE FOR ADDITIONAL TEMPORARY POWER REQUIREMENTS WITH OTHERC TRADES AND PROVIDE AN ADEQUATE INSTALLATION.

    COMPLY WITH NFPA 241 FOR SAFEGUARDING DURING CONSTRUCTION AND ALTERATION OPERATIONS. IN ADDITION, ANY OPENINGS IN FIRE RATED SEPARATIONS BETWEEN OCCUPIED AND UNOCCUPIED (OR OPERATIONAL AND NON-OPERATIONAL) AREAS SHALL BE SEALED AT THE END OF EACH WORK DAY WITH AN APPROPRIATE FIRE RATED ENCLOSURE OR SEALANT. DO NOT COMPROMISE EXISTING SECURITY OR FIRE ALARM SYSTEMS SERVING THE OCCUPIED OR OPERATIONAL AREAS.

    DURING CONSTRUCTION THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN ELECTRICAL UTILITIES OF THE BUILDING WITHOUT INTERRUPTION. SHOULD IT BE NECESSARY TO INTERRUPT ANY ELECTRICAL SERVICE OR UTILITY, THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM THE VA/COR FOR SUCH INTERRUPTION AT LEAST 6 WEEKS IN ADVANCE. ANY INTERRUPTION SHALL BE MADE WITH THE MINIMUM AMOUNT OF INCONVENIENCE TO THE VA AND ANY SHUT-DOWN TIME SHALL HAVE TO BE ON A PREMIUM TIME/AFTER HOURS BASIS AND SUCH TIME TO BE INCLUDED IN THE CONTRACTOR'S BID.

    CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY LIGHTING AND POWER FOR ALL TRADES DURING CONSTRUCTION AND REMOVE IT AT COMPLETION OF WORK.

    CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH THE AP PLICABLE PROVISIONS OF ALL CITY, STATE, AND FEDERAL SAFETY LAWS (OSHA), AND AS RECOMMENDED IN THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" AS ISSUED BY THE ASSOCIATION OF GENERAL CONTRACTORS OF AMERICA, INC., 20TH AND E. STREETS, N.W. WASHINGTON, D.C.

20. POWER COORDINATION:

    THE CONTRACTOR SHALL PERFORM ALL COORDINATION AND SCHEDULING OF LOCAL POWER OUTAGES REQUIRED WITH THE VA/COR. ALL NEEDED POWER OUTAGES TO BE SCHEDULED WITH THE VA/COR SIX WEEKS IN ADVANCE.

21. CABLING:

    BRANCH CIRCUITS TO RECEPTACLES, LIGHTING AND MISC. SMALL LOADS (15 OR 20 AMP CIRCUITS), UNLESS SPECIFICALLY NOTED OTHERWISE, SHALL BE 2 - # 12, 1 - #12 GRD., 3/4" C. A SEPARATE NEUTRAL SHALL BE RUN FOR EACH CIRCUIT. SEE WIRE SIZING TABLE ON THIS SHEET.

    ALL WIRE SIZE #12 AWG AND LARGER SHALL BE STRANDED AND SOLID FOR #14 AND SMALLER. EACH BRANCH CIRCUIT HOMERUN SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT HOMERUN SHALL HAVE A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR. ALL CONDUCTORS SHALL BE COPPER TYPE THWN / XHHW.

    CABLE COLOR FOR VARIOUS SYSTEM SHALL BE AS FOLLOW. NURSE CALL SYSTEM - NEON GREEN CLINICAL WIRELESS (CIT) - DARK GREEN SECURITY CAMERA - PURPLE GET WELL NETWORK - BROWN GENERAL DATA (COMPUTERS) - BLUE PHONE (VOIP) - WHITE GUEST WI-FI - PINK FIRE SYSTEM - RED

22. CABLING SIZES:

    BRANCH CIRCUIT CABLE SIZING SHALL BE ADJUSTED BASED ON THE VALUES INDICATED IN THE WIRE SIZING TABLE PER THIS SHEET.

23. SPECIAL LUG REQUIREMENTS:

    ANY CABLE WHICH TERMINATES DIRECTLY ON TO A BUS BAR SHALL BE 2 BOLT LONG BARREL TYPE WITH INSPECTION HOLES PRODUCED WITH NON FLASHING TYPE DYES WITH THE BOD AS MANUFACTURED BY THOMAS AND BETTS, OR EQUIVALENT MINIMUM 10 TONS OF COMPRESSION, HEX CRIMP. THE USE OF HEAT SHRINK TUBING IS EXPLICITLY FORBIDDEN.

24. RACEWAYS:

    ALL WIRE SHALL BE INSTALLED IN THIN WALL (E.M.T.) CONDUIT UNLESS OTHERWISE NOTED. MINIMUM SIZE SHALL BE 3/4" EXCEPT FOR DROPS FOR DEVICES, SWITCH LEGS, TEMPERATURE CONTROL CONDUITS, WHERE INDICATED OR AS CALLED FOR ON DRAWINGS. ALL THINWALL FITTINGS SHALL BE OF THE STEEL COMPRESSION GLAND TYPE.

    ALL UNDERFLOOR, UNDERGROUND OR EXPOSED-TO-WEATHER CONDUIT SHALL BE HEAVYWALL GALVANIZED RIGID STEEL.(G.R.S.), MINIMUM 3/4". ALL BURIED CONDUITS AND 2" AND ABOVE EXPOSED-TO-WEATHER CONDUIT SHALL BE PVC COATED HEAVYWALL GALVANIZED RIGID STEEL (G.R.S).

    ALL CONDUIT FASTENERS, STRAPS, SUPPORTS ETC. MUST BE "BOLT-ON" GALVANIZED STEEL ON EXPOSED CONSTRUCTION AND IN WET AREAS. SNAP-ON BLACK METAL "CADDY" CLIPS IN METAL PARTITION WALLS AND ABOVE SUSPENDED CEILINGS WILL BE PERMITTED. ALL FASTENERS, STRAPS, CLIPS, ETC. SHALL BE UL LISTED FOR THEIR USE.

    SUPPORT CONDUIT WITH P1000 UNISTRUT AND 3/8" THREADED ROD 8'-0" O.C. MAX.

    PROVIDE MYERS HUBS FOR ALL CONDUIT TO ENCLOSURE CONNECTIONS.

    ALL CONDUIT RACEWAYS SHALL BE CONCEALED IN OR WITHIN: WALLS, CEILING CAVITY, ROOF CONSTRUCTION (WHERE APPROVED), SLAB, GRADE, ETC. UNLESS OTHERWISE NOTED. ANY RACEWAY THAT IS TO BE ROUTED EXPOSED SHALL BE APPROVED BY THE VA/COR AND SUCCESSFULLY REVIEWED BY THE ARCHITECT/ENGR. PRIOR TO INSTALLATION. ALL CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO WALLS AND STRUCTURAL MEMBERS WITH 90° BENDS WHERE REQUIRED AND SHALL BE RACKED. PULL AND JUNCTION BOXES SHALL BE HELD TO A MINIMUM. CONTRACTOR SHALL INSTALL ALL WORK IN NEAT & INDUSTRY RECOGNIZED MANNER OF BEST PRACTICES.

    GROUND ALL CONDUITS, MOTORS, AND EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ALL PROVISIONS WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. VA SPECIFICATION SECTION 26 05 26 "GROUNDING AND BONDING ELECTRICAL SYSTEM".

    CONTRACTOR SHALL PROVIDE BOXES, JUNCTION BOXES, SPLICE BOXES AND FITTINGS WHERE NECESSARY OR REQUIRED BY THE NEC.

    ALL ELECTRICAL CONDUITS TO A MINIMUM OF 3/4". MULTI-GANG BACKBOXES FOR DIFFERENT VOLTAGES AND TYPES OF EMERGENCY AND NORMAL BRANCH WIRING DEVICES SHALL HAVE DIVIDERS BETWEEN DEVICES.

    PROVIDE JUNCTION BOX AND CONDUIT COLOR FOR VARIOUS SYSTEMS AS PER FOLLOWING COLOR SCHEME.

POWER:	
120/208 VOLT (NORMAL POWER):	SILVER
120/208 VOLT (LIFE SAFETY/CRITICAL):	ORANGE
277/480 VOLT (NORMAL & EMERGENCY):	YELLOW
LIGHTING:	WHITE
GENERAL DATA/VOICE:	BLUE
FIRE ALARM:	RED
NURSE CALL/GET WELL NETWORK:	GREEN
T-STAT:	BLUE
SECURITY (CARD READER/VIDEO:	PURPLE
FIBER OPTIC:	ORANGE

    WHERE CORE DRILLING AND CUTTING OF FLOORS OR WALLS IS REQUIRED, X-RAY THE AREAS PRIOR TO DRILLING. AVOID INTERFERENCE WITH EXISTING CONCEALED ELECTRICAL, PLUMBING INSTALLATIONS, AND REINFORCING STEEL. REFINISH DAMAGED AND CUT SURFACES TO MATCH ADJACENT FINISHES.

    CONTRACTOR SHALL FIREPROOF ALL CONDUIT OPENINGS BETWEEN FLOORS AND ANY INTERSPACE FIRE SEPARATION BLOCK WALLS WITH A VA/COR APPROVED U.L. LISTED FIRE RETARDANT MATERIAL, AS SUCCESSFULLY REVIEWED BY THE ARCHITECT/ENGINEER.

25. LIGHTING:

    ALL FINAL LOCATIONS AND ARRANGEMENTS OF LIGHTING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN. COORDINATE LIGHT LOCATION WITH CABLE TRAY AND CEILING MOUNTED MECHANICAL EQUIPMENTS AND ENSURE THAT SERVICE CLEARANCE AND ACCESS IS NOT RESTRICTED.

26. RECEPTACLES

    CONTRACTOR SHALL VERIFY ALL OUTLET MOUNTING ARRANGEMENTS, HEIGHTS AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. ANY MENTION OF A SPECIFIC MOUNTING ARRANGEMENT, HEIGHT OR LOCATION SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY THE SPECIFIC REQUIREMENT WITH THE EQUIPMENT FURNISHED OR THE OTHER TRADES INVOLVED IN THE SAME AREA. NO ADDITIONS TO THE CONTRACT SUM WILL BE PERMITTED FOR OUTLETS IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK ETC. THE VA RESERVES THE RIGHT TO RELOCATE ANY DEVICE 10'-0" PRIOR TO ROUGH-IN WITHOUT ANY ADDITIONAL CHARGES BY THE CONTRACTOR.

    OUTLET BOXES MOUNTED BACK-TO-BACK IN THE SAME WALL ARE PROHIBITED. A MINIMUM 24" CENTER-TO-CENTER LATERAL SPACING SHALL BE MAINTAINED BETWEEN BOXES. ALL THE EMERGENCY POWER OUTLETS SHALL BE HOSPITAL GRADE RED IN COLOR.

27. AS BUILT/RECORD DOCUMENTS:

    ELECTRICAL CONTRACTOR SHALL FURNISH CONTRACT AS-BUILT RECORD DOCUMENTS TO THE VA/COR AND ARCHITECT/ENGINEER BEFORE FINAL PAYMENT WILL BE ISSUED. THE CONTRACT RECORD DOCUMENTS SHALL DIAGRAMMATICALLY INDICATE THE ACTUAL INSTALLED CONDITIONS THAT DEVIATE FROM ORIGINAL DESIGN DRAWINGS.

28. GUARANTEE:

    ALL EQUIPMENT FURNISHED AND WORK PERFORMED UNDER THE CONTRACT DOCUMENTS SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP FOR A PERIOD AS PER VA SPECIFICATION, UNLESS OTHERWISE NOTED. ANY FAILURE OF EQUIPMENT OR WORK DUE TO DEFECTS IN MATERIALS OR WORKMANSHIP SHALL BE CORRECTED BY THE CONTRACTOR AT NO COST TO THE VA.

29. FINAL INSPECTION:

    ALL THE ITEMS AND WORK SHALL BE TESTED FOR SAFE AND PROPER OPERATIONS.

    UPON COMPLETION OF THE WORK, THE ELECTRICAL CONTRACTOR SHALL REVIEW AND CHECK THE ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES, REMOVE SURPLUS MATERIALS AND RUBBISH FROM THE GOVERNMENT / VA'S PROPERTY, LEAVING THE WORK IN NEAT AND CLEAN ORDER AND IN COMPLETE WORKING CONDITION. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY CARTON, DEBRIS, ETC. FOR EQUIPMENT INSTALLED BY THIS CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY THE GOVERNMENT / VA. THE ABOVE SHALL ALSO APPLY TO ALL EQUIPMENT FURNISHED BY OTHERS AND UNPACKED OR REMOVED FROM CARTON, BY THE CONTRACTOR.

30. NPANEL AND TRANSFORMERS REPLACEMENT NOTES:

    THIS PROJECT INVOLVES A LARGE QUANTITY OF PANELS AND TRANSFORMERS THAT WILL BE REMOVED, REPLACED, OR INSTALLED NEW. MOST PANEL WORK SUPPORTS RELOCATING KITCHEN EQUIPMENT, BUT SOME PANEL WORK IS UNRELATED TO THE KITCHEN, AND MUST BE REPLACED FOR OTHER REASONS. CONTRACTOR SHOULD 1ST REVIEW THE "ELECTRICAL EQUIPMENT SCHEDULE" ON DRAWING E601 TO UNDERSTAND WHICH PANELS WILL BE REMOVED AND NOT REPLACED, WHICH PANELS WILL BE REPLACED, AND WHICH PANELS ARE NEW. THIS WILL MAKE IT EASIER TO UNDERSTAND THE WORK ON THE DEMOLITION DRAWINGS, AND FOR NEW WORK DRAWINGS.

    ADDITIONALLY, THE CONTRACTOR SHOULD REVIEW THE "SINGLE LINE" DRAWINGS SERIES ED500-XXX FOR DEMOLITION, AND SERIES E500-XXX FOR NEW WORK TO DETERMINE THE ELECTRICAL IMPACT TO THE VA FACILITY WHEN PERFORMING THIS WORK. CONTRACTOR TO SCHEDULE AND COORDINATE ALL OUTAGES WITH THE VA COR.

31. BREAKER REPLACEMENTS AND DEVICE SETTING SCHEDULE:

    CERTAIN BREAKERS NOT RELATED TO THE KITCHEN MOVE NEED TO BE REPLACED OR RE-SET. THESE COMPONENTS ARE SHOWN THE "CIRCUIT BREAKER REPLACEMENT SCHEDULE" AND ON THE "PROTECTIVE DEVICE SETTING SCHEDULE" ON DRAWING E601. CONTRACTOR TO SCHEDULE AND COORDINATE ALL OUTAGES WITH THE VA COR.

32. 480V BREAKER SETTINGS:

    THE 480V BREAKER SETTINGS WORK MAY INVOLVE EXTENSIVE ELECTRICAL OUTAGES. CONTRACTOR TO PLAN AND COORDINATE THIS WORK WITH THE VA COR, FAR IN ADVANCE FOR THE VA TO SCHEDULE THIS WORK. MAIN FEEDER BREAKERS ON SWITCHBOARD-A, SWITCHBOARD-B, ATS's, AND EMERGENCY BUSS NEED TO BE RESET. THESE SETTINGS ARE SHOWN ON SCHEDULE "LOW VOLTAGE 480V BREAKERS" ON DRAWING E602. SOME SETTINGS REQUIRE INCREASING THE LOAD CAPACITY OF THE BREAKERS. CONTRACTOR IS REQUIRED TO INSPECT THE EXISTING "CURRENT TRANSFORMERS", AND VERIFY THAT THEY ARE PROPERLY SIZED, OR INSTALL THE PROPER CURRENT TRANSFORMERS TO SUPPORT THE NEW BREAKER LOAD CAPACITY AND SETTINGS.

33. FIRE DETECTION AND FIRE ALARM:

    1. FIRE DETECTION AND FIRE ALARM WILL REMAIN IN OPERATION IN LOCATIONS OUTSIDE OF THE PROJECT.
    2. FIRE DETECTION AND FIRE ALARM COMPONENTS THAT ARE REMOVED WILL BE TURNED OVER TO VA COR.
    3. CONTRACTOR TO NOTIFY VA COR WHICH POINTS ARE REMOVED SO THAT VA CAN MODIFY THEIR FIRE ALARM SOFTWARE.
    4. FOLLOW VA PROCEDURES WHEN "TAKING DOWN" THE FIRE PROTECTION SYSTEM FOR WORK, AND THEN WHEN RETURNING TO SERVICE.

34. REPRESENTATION OF CONDUIT AND WIRING ON DRAWINGS

    BRANCH WIRING AND CONDUITS FOR KITCHEN EQUIPMENT IS DEPICTED ON DRAWINGS FS611, 612 AND 613. CONTRACTOR IS RESPONSIBLE FOR SELECTING OPTIMUM ROUTINGS THAT MEET NEC CODE REQUIREMENTS TO POWER THIS EQUIPMENT.
    FEEDER WIRING AND CONDUIT TO PANELS AND TRANSFORMERS IS SHOWN ON DRAWING SERIES EPXXX. THIS IS SHOWN AS "TYPICAL" WIRING. CONTRACTOR IS RESPONSIBLE FOR OPTIMUM ROUTINGS THAT MEET ALL NEC CODE REQUIREMENTS.

VA CONTRACT NO: 36C24519C0171

Revisions:	Date:
100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - GENERAL NOTES

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date	Checked	Drawn
07/23/21	WG	BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E001

ELECTRICAL SYMBOLS - DIAGRAM

- DELTA CONNECTION
- MOTOR, SINGLE-PHASE
- MOTOR, THREE-PHASE
- TRANSFORMER
- WYE CONNECTION
- EARTH GROUND
- JUNCTION BOX
- PB — PULL BOX
- NORMALLY CLOSED RELAY CONTACT
- NORMALLY OPEN RELAY CONTACT
- FUSE WITH RATING
- MOLDED CASE CIRCUIT BREAKER
- LOW-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
- SWITCH AND FUSE UNIT
- FUSED DRAWOUT POTENTIAL TRANSFORMER
- XX — PANELBOARD
- X — CABLE AND CONDUIT TAG SEE SCHEDULE
- X Y — EQUIPMENT TAG SEE EQUIPMENT SCHEDULE
- EV — ELECTRIC VEHICLE CHARGING STATION

ELECTRICAL SYMBOLS - POWER PLAN

- MOTOR, SINGLE-PHASE
- MOTOR, THREE-PHASE
- T — TRANSFORMER, PLAN
- WYE CONNECTION
- EARTH GROUND
- J — POWER JUNCTION BOX
- J S — JUNCTION BOX WITH DISCONNECT SWITCH AND FLEXIBLE CONDUIT CONNECTION
- A/V — DOUBLE GANG DEEP AUDIO/VISUAL JUNCTION BOX
- C C — LADDER CABLE TRAY
- HOMERUN TO PANELBOARDS. SLASHED LINES INDICATE NUMBER OF #12 AWG WIRES IN 3/4"C UNLESS OTHERWISE NOTED. LONG SLASH INDICATES NEUTRAL. LONG SLASH WITH DOT INDICATES EQUIPMENT GROUND. SHORT LINES INDICATE PHASES.
- PB — PULL BOX
- W W — WIREWAY
- REGULAR POWER
- S S S — LIFE SAFETY POWER
- C C C — CRITICAL POWER
- PANELBOARD CABINET, FLUSH MOUNTED
- PANELBOARD CABINET, SURFACE MOUNTED
- RECEPTACLE, DUPLEX
- RECEPTACLE, DUPLEX ON EMERGENCY POWER
- GFCI — RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER MOUNTED AT 44"
- RECEPTACLE, QUADRAPLEX
- CEILING MOUNTED RECEPTACLE
- FLOOR RECEPTACLE, DUPLEX
- SPECIAL PURPOSE RECEPTACLE ON EMERGENCY POWER
- SPECIAL PURPOSE RECEPTACLE, 60A, 208V FOR BED BUG MACHINE AND 30A, 208 FOR IT ROOM RACK POWER
- ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" AFF OR AS INDICATED.
- PP — MOTION SENSOR (AUTO OPENING DOOR)
- DISCONNECT SWITCH, FUSED
- STARTER, COMBINATION WITH DISCONNECT SWITCH
- DISCONNECT SWITCH, UNFUSED
- COMBINATION STARTER
- STARTER OR MOTOR CONTROLLER
- VFD — VARIABLE FREQUENCY DRIVE
- TC — TIME CLOCK
- CONDUIT DOWN
- CONDUIT UP
- CONDUIT TERMINATED 6" AFF IN STANDARD BOX FOR EXTENSION TO EQUIPMENT AS DIRECTED.
- CONDUIT TERMINATED W/COUPLING (FLUSH W/FINISHED FLOOR) FOR EXTENSION TO EQUIPMENT AS DIRECTED.
- P P P — ELECTRIC POWER DUCT
- DO — DOOR OPENER
- TA — TEMPERATURE ALARM
- POWER SUPPLY FOR VAV's
- LED POWER RELAY PACK 300W

ELECTRICAL SYMBOLS - LIGHTING PLAN

- $ — "S" SEE SPECIFIC SWITCH ON LIGHTING SCHEME DRAWING
  SWITCH
  0 = WALL SWITCH OCCUPANCY SENSOR WITH ON/OFF, RAISE/LOWER
  1 = ON/OFF, RAISE/LOWER WALL POD
  2 = 2-POLE ON/OFF, RAISE/LOWER WALL POD
  3 = TEACHER STATION-4 SCENE CONTROL WITH MASTER ON/OFF AND RAISE /LOWER
  4 = ON/OFF WALL POD
- OS — OCCUPANCY SENSOR CEILING MOUNTED
- PC — SWITCH, EXTERIOR PHOTO CELL FOR CONTROL OF EXTERIOR LIGHTING
- L PS — SWITCH, LAMP HOLDER POLE
- QSM — QS SENSOR MODULE (WIRES)
- WBX — PHASE ADAPTIVE POWER MODULE
- BCI — 0-10V INTERFACE FOR 3-WIRE CONTROL
- LIGHT FIXTURE RECESSED ROUND CEILING MOUNTED DOWNLIGHT
- LIGHT FIXTURE RECESSED SQUARE CEILING MOUNTED DOWNLIGHT
- LIGHT FIXTURE, RECESSED LED, 2'x4'
- LIGHT FIXTURE, RECESSED LED 1'x4'
- LIGHT FIXTURE, RECESSED LED, 2'x2'
- S — LIGHT FIXTURE, SURFACE MOUNTED LED, 2'x4' LETTER INDICATES TYPE.
- S — LIGHT FIXTURE, SURFACE MOUNTED LED, 1'x4' LETTER INDICATES TYPE.
- S — LIGHT FIXTURE, SURFACE MOUNTED LED
- LIGHT FIXTURE, LED EMERGENCY
- LIGHT FIXTURE, LED EMERGENCY
- LIGHT TRACK WITH HEADS AS SHOWN
- S — LIGHT FIXTURE, STRIP/INDUSTRIAL LED; LETTER INDICATES TYPE.
- LIGHT FIXTURE, WALL MOUNTED
- LIGHTING, UNDERCABINET LIGHT/COVE LIGHT
- NIGHT LIGHTING
- EMERGENCY BATTERY BACK-UP EGRESS LIGHT
- DOUBLE FACED CEILING MOUNTED EXIT SIGN. ARROW INDICATES DIRECTION
- DOUBLE FACED WALL MOUNTED EXIT SIGN. ARROW INDICATES DIRECTION
- SINGLE FACED CEILING MOUNTED EXIT SIGN. ARROW INDICATES DIRECTION
- SINGLE FACED WALL MOUNTED EXIT SIGN.

ELECTRICAL SYMBOLS - COMM. / DATA PLAN

- 3-GANG COMPARTMENT BOX IN FLOOR FOR TELEPHONE, DATA & RECEPTACLE.
- FOUR PORT TELEPHONE DATA OUTLET - MOUNTED 18" AFF UNLESS OTHERWISE NOTED. CABLE AND JACK COLOR AS FOLLOW
  VOICE - WHITE, GREEN - VOIP,
  BLUE - DATA, BLUE - DATA
- COMBINATION VOIP OUTLET
- W — TELEPHONE OUTLET - WALL MOUNTED POTS
- CEILING MOUNTED DATA
- WAP — WIRELESS ACCESS POINT
- TV — TV CABLE (TV COAXIAL OUTLET)
- CBD — CALL BELL
- CBP — CALL BELL PUSH BUTTON
- ST — SHUNT TRIP
- SECURITY CAMERA

FIRE ALARM SYMBOLS

- P — ALARM, FIRE, MANUAL PULL STATION
- WALL MOUNTED STROBE
- STROBE
- STROBE CEILING MOUNTED
- ALARM, LIGHT/STROBE, ONE ASSEMBLY (WALL MOUNTED)
- CEILING MOUNTED SPEAKER
- CEILING MOUNTED SPEAKER/STROBE
- CEILING MOUNTED STROBE
- WALL MOUNTED STROBE
- DSD — DUCT SMOKE DETECTOR
- SD — SMOKE DETECTOR
- H D — HEAT DETECTOR
- FA — FIRE ALARM LINE = FA
- DH — ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET
- TS — TAMPER SWITCH
- FS — FLOW SWITCH
- PS — PRESSURE SWITCH
- S — DUAL COIL SPEAKER FOR PA AND FIRE ALARM.
- FACP — FIRE ALARM CONTROL PANEL
- MM — MONITOR MODULE
- CM — CONTROL MODULE
- FIRE FIGHTERS TELEPHONE JACK
- P — PULL STATION MANUAL

ELECTRONIC SAFETY AND SECURITY SYMBOLS

- CR — WALL MOUNTED CARD READER
- ACP — ACCESS CONTROL PANEL
- KP — KEYPAD LOCK
- AIP — AIPHONE
- MID — MOTION INTRUSION DETECTOR
- WALL MOUNTED SECURITY CAMERA
- C — CEILING MOUNTED 360 DEGREE FISH EYE CAMERA
- CCP — CAMERA CONTROL PANEL
- P A — SECURITY / DURESS-ALARM BUTTON MOUNTED 3" ABOVE COUNTER TOP / COUNTER TOP BACK SPLSH.
- CLOSER — SURFACE CLOSER

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE
1P	SINGLE POLE
2/C	TWO-CONDUCTOR
3/C	THREE-CONDUCTOR
3PH	THREE-PHASE
4/C	FOUR-CONDUCTOR
4W	FOUR-WIRE
A/C UNIT	AIR CONDITIONING UNIT
A/E	ARCHITECT/ENGINEER
AAP	ALARM ANNUNCIATOR PANEL
AC	ALTERNATING CURRENT OR ARMORED CAB
ACC	ACCESSIBLE
ADDL	ADDITIONAL
ADJ	ADJACENT, ADJOINING
ADO	AUTOMATIC DOOR OPENER
AF	AMPERE FRAME OR AMP FUSE
AFC	ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AH	AMPERE HOUR
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
AIP	AIPHONE
ALT	ALTERNATE
AMB OR A	AMBIENT
AMP	AMPERE
ARCH	ARCHITECT
ASC	AMPS SHORT CIRCUIT
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AV	AUDIO VISUAL
BAT	BATTERY
BC	BARE COPPER
BD	BOARD
BFF	BELOW FINISH FLOOR
BIL	BASIC INSULATION LEVEL
BLDG	BUILDING
BOD	BASIS OF DESIGN
BPIP	BOILER PLANT INSTRUMENTATION PANEL
BRKR	BREAKER
BYP	BY PASS
C	CONDUIT
CAB	CABINET
CALC	CALCULATE
CAP	CAPACITY
CAT	CATALOG
CATV	COMMUNITY ANTENNA TELEVISION
CCR	CONTROL CONTRACTOR
CCTV	CLOSED CIRCUIT TELEVISION
CB	CODE BLUE
CBD	CALL BEL DEVICE
CBP	CALL BELL PUSH BUTTON
cd	CANDELA
CD	CONSTRUCTION DOCUMENTS
CF	CONTRACTOR FURNISHED
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED
CFE	CONTRACTOR FURNISHED EQUIPMENT
CHW	CHILLED WATER
CHWP	CHILLED WATER PUMP
CKT	CIRCUIT
CKT BRKR	CIRCUIT BREAKER
CLC	COMMUNITY LIVING CENTER
CLF	CURRENT LIMITING FUSE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CONTRACTING OFFICER
COAX	COAX CABLE
COMM	COMMUNICATION
COMPT	COMPARTMENT
CONC	CONCRETE
CONT	CONTINUE
CONTR	CONTRACTOR
COR	CONTRACTING OFFICERS REPRESENTATIVE
COORD	COORDINATE
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CU	COPPER
CU FT	CUBIC FEET
CUR	CURRENT
DB	DECIBEL OR DIRECT BURIAL
DC	DIRECT CURRENT
DCP	DIMMER CONTROL PANEL
DEG C	DEGREES CELSIUS
DEG F	DEGREES FAHRENHEIT
DEMO	DEMOLITION
DIAG	DIAGRAM
DISC	DISCONNECT
DISTR	DISTRIBUTION
DISTR PNL	DISTRIBUTION PANEL
DMR SW	DIMMER SWITCH
DN	DOWN
DO	DOOR OPENER
DPDT	DOUBLE POLE, DOUBLE THROW
DPST	DOUBLE POLE, SINGLE THROW
DRSW	DOOR SWITCH
DS	DISCONNECT SWITCH
DWG	DRAWING
EC	EMPTY CONDUIT
EG	EQUIPMENT GROUND
EL	ELEVATION
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATOR
EMCP	EMRGNCY MONITORING CONTROL PANEL
EMER	EMERGENCY
EMI	ELECTROMAGNETIC INTERFERENCE
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EPO	EMERGENCY POWER OFF
EPRF	EXPLOSION PROOF
ESMT	EASEMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXIST	EXISTING
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FABL	FIRE ALARM BELL
FABX	FIRE ALARM BOX
FACP	FIRE ALARM CONTROL PANEL
FARA	FIRE ALARM REMOTE ANNUCIATOR
FC	FOOTCANDLE
FI	FILM ILLUMINATOR
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE METALLIC CONDUIT
FLT	FLOODLIGHT
FLUOR	FLUORESCENT
FLUOR FIX	FLUORESCENT FIXTURE
FOUTT	TELEPHONE FLOOR OUTLET
FP	FIRE PROTECTION
FT	FEET OR FOOT
FU SW	FUSED SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
G OR GND	GROUND OR GENERATOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GTB	GROUND TERMINAL BOX
GWN	GETWELLNETWORK
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
HZ	HERTZ
IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
IR	INFRARED
IWH	INSTANTANEOUS WATER HEATER
J-BOX	JUNCTION BOX
kV	KILOVOLT
kVA	KILOVOLT AMPERE
kVAH	KILOVOLT AMPERE PER HOUR
kVAR	KILOVOLT AMPERE REACTIVE
kW	KILOWATT
kWH	KILOWATT HOUR
kWHM	KILOWATT HOUR METER
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET (FOOT)
LM	LUMEN
LP	LIGHT POLE
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPS
LTCP	LOCAL TEMPERATURE CONTROL PANEL
LT	LIGHT
LTG	LIGHTING
LTG PNL	LIGHTING PANEL
LTNG	LIGHTNING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MC	METAL-CLAD
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MG	MOTOR GENERATOR
MH	MANHOLE
MID	MOTION INTRUSION DETECTOR
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MLO	MAIN LUGS ONLY
MT	MOUNT
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
MVA	MEGAVOLT-AMPERE
MW	MEGAWATT MICROWAVE
NA	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT OR N	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSO.
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NS	NO SCALE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OL	OVERLOAD
P	POLE
PA	PUBLIC ADDRESS
PB	PANELBOARD, PULL BOX, PUSHBUTTON
PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
PCB	POLYCHLORINATED BIPHENYL
PEC	PHOTOELECTRIC CELL
PED	PEDESTAL
PEND	PENDANT
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
POD	POWER OPERATED DAMPER
PT	POTENTIAL TRANSFORMER
PTRV	POWER TYPE ROOF VENTILATION
PVC	POLYVINYL CHLORIDE (PLASTIC)
PWR	POWER
PS-V	POWER SUPPLY FOR DUAL DUCT TERMINAL UNIT & PHOENIX VALVE
RCP	REFLECTED CEILING PLAN
REC	RECESSED
RECPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMS	ROOT MEAN SQUARE
REQD	REQUIRED
SCC	SHORT CIRCUIT CAPACITY
SES	SERVICE ENTRANCE SECTION
SD	SMOKE DETECTOR
SF	SQUARE FOOT (FEET)
SHT	SHEET
SI	INTERNATIONAL SYSTEM OF UNITS
SOW	SCOPE OF WORK
SPEC	SPECIFICATION
SPST	SINGLE POLE, SINGLE THROW
SURF	SURFACE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TA	TEMPERATURE ALARM
TC	TIME CLOCK
TEL	TELEPHONE
TP	TWISTED PAIR
TPS	TWISTED PAIR SHIELDED
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP	TYPICAL
UFD	UNDERFLOOR DUCT
UGND	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTIL	UTILITY
V	VOLT
VA	VOLT AMPERE
VAR	VOLT AMPERE REACTIVE
VFD	VARIABLE FREQUENCY DRIVE
VOLT	VOLTAGE
W	WATT
WH	WATER HEATER
WP	WEATHERPROOF
XFER	TRANSFER
XFMR	TRANSFORMER

GENERAL NOTES

1. THIS IS A STANDARD LEGEND DRAWING. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS DRAWING AND NOT ON THE PLANS.

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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Revisions:	Date:

CONSULTANT

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SYMBOLS AND ABBREVIATIONS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E002

VA FORM 08-6231

GENERAL NOTES

A. REVIEW THIS DRAWING IN CONJUNCTION WITH SHEETS GI401 & GI403 AND CORRESPONDING ARCHITECTURAL, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL AND FOODSERVICE DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THIS INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED CONSTRUCTION PLANNING, SEQUENCING, MEANS, METHODS, PROCEDURES, COORDINATION AND PERFORMANCE OF THE WORK.

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			PHASE AND NOTES
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	
					DPA-EQ			PHASE 3 - NEW DPA-EQ FEED FROM ATS-3
				NEW				
							TR DPA-EQ, NOTE 1	PHASE 3
							SHUNT TRIP PNL	PHASE 3
							#94 CONDENSING UNITS 75, 80, 84, 88, 88, 93, 98, 107	PHASE 3
							# 12 SCRAPPER COLLECTOR	PHASE 3
							#89 CONDENSING UNITS 75, 80, 93	PHASE 3
				NEW	DPA-EQ3 SEC1			PHASE 1
							#11 POWER SOAK SINK	PHASE 3
							#17 WORKTABLE W SINK	PHASE 3
							#41 FLOOR MIXER	PHASE 3
							#50 ROLL IN BLAST FREEZER COND	PHASE 3
							#62 WORKTABLE FEEDS #19	PHASE 3
							#88B VEGETABLE COOLER EVAP	PHASE 3
							GD139 REFRIGERATOR U7600	PHASE 1
							DPA-EQ3 SEC2	PHASE 3
							#20 WORKTABLE W SINK	PHASE 3
							#62 WORKTABLE FEEDS #53	PHASE 3
							#37 48" GRIDDLE W STAND	PHASE 3
							#51 ROLL IN BLAST FREEZER COND	PHASE 3
							#88A VEGETABLE COOLER EVAP	PHASE 3
							#93A WALK IN MEAT PULL EVAP	PHASE 3
							G139 REFRIG U7601	PHASE 1
				NEW	DPA-EQ3 SEC2			PHASE 3
							#50 ROLL IN BLAST FREEZER EVAP	PHASE 3
							#61 MEAT GRINDER	PHASE 3
							#59 WORK TABLE W SINK	PHASE 3
							#72 BLAST CHILL / SHOCK FREEZER	PHASE 3
							#76B, #76C, #81, #81A, #81B, #81C AIR CURTAINS	PHASE 3
							#80 MEAT FREEZER DEFROST	PHASE 3
							#85 GLASS DOOR SHELVING UNITS	PHASE 3
							#99 COMPOST FREEZER EVAP / DEFROST	PHASE 3
							#51 ROLL IN BLAST FREEZER EVAP	PHASE 3
							#55 WORK TABLE	PHASE 3
							#61 BLXER	PHASE 3
							#63 WORKTABLE	PHASE 3
							#75, #84, #88 LIGHTS	PHASE 3
							#80, #93, LIGHTS,	PHASE 3
							#80 MEAT FREEZER EVAP	PHASE 3
							#84A PRODUCEE/BREAD FREEZER DEFROST	PHASE 3
							75A & 75B EVAPORATORS	PHASE 3
GA-139A				EXISTING	LP-SEB			
							VFD EF-CU89 CONDENSERS 89,94	PHASE 3
							Office Lights 108/111/112/119	PHASE 3
							Office Lights 115/118/137/137f/137P/MedAdmin	PHASE 3
				EXISTING	ELS-SEB			
							SEWAGE EJECTOR PUMP SEP-1	PHASE 2
							SEWAGE EJECTOR PUMP SEP-2	PHASE 2
GB-102A	LP-NCB			REUSE	LP-NCB			PHASE 1
			LIGHTS 100-100A				LIGHTS 100-100A	
			LIGHTS 100				LIGHTS 100	
			LIGHTS 100				LIGHTS 100	
			LIGHTS GD138, 139				LIGHTS GD138, 139	
			LIGHTS GD136, 137				LIGHTS GD136, 137	
			Left Side North Parking Lights				Left Side North Parking Lights	
			Middle North & canopy Lights				Middle North & canopy Lights	
			Right Side North Parking Lights				Right Side North Parking Lights	
			TA-NCB				TA-NCB	
			GD102 MECH ROOM LTS				GD102 MECH ROOM LTS	
			SPACE				SPACE	
			TR-T3 RP-NCB				TR-T3 RP-NCB	
			GD-100C Silver Recovery				GD-1C0C Silver Recovery	
			GD-100K/100J				GD-100K/100J	
							FCU 130, 132, 133, 134B	PHASE 1
							GD-139 LIGHTS	PHASE 1
							GD-610, GD135,136 LIGHTS	PHASE 1
							FCU 129, 135, 137, 139	PHASE 1
							GD130,130A,132,3,4,4B LIGHTS	PHASE 1

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			PHASE AND NOTES
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	
	RP-NCB			REPLACE	RP-NCB			PHASE 1
			G8_111/112 Shower Lights				G8_111/112 Shower Lights	
			GD-102 Fire Pump Low PSI Control Panel				GD-102 Fire Pump Low PSI Control Panel	
			Stairwell 5				Stairwell 5	
			C4				C4	
			GD-C3/C4				GD-C3/C4	
			NF (GD-100/100A)				NF (GD-100/100A)	
			500-UH-7 GD-102				500-UH-7 GD-102	
			500-UH-SW-55				500-UH-SW-55	
			NF (GD-103 Isolator W-Wall)				NF (GD-103 Isolator W-Wall)	
			NF (Silver Recovery)				NF (Silver Recovery)	
			NF (GD-103 E-Wall)				NF (GD-103 E-Wall)	
			NF (GD-103 E-Wall)				NF (GD-103 E-Wall)	
			Smoke Booth				Smoke Booth	
			GD-C1 Receptacles				GD-C1 Receptacles	
			GD-C1 Receptacles				GD-C1 Receptacles	
			GB-113/113A				GB-113/113A	
			GD-100B				GD-100B	
			The 3-Pole breaker in CKT 8,10,12 does not utilize B-Phase				The 3-Pole breaker in CKT 8,10,12 does not utilize B-Phase	
			GD-100B				GD-100B	
			WAC-/GB-103A				WAC-/GB-103A	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			GA-103				GA-103	
			GD-100B				GD-100B	
			Photo Cell & Coil Employee Parking Lot				Photo Cell & Coil Employee Parking Lot	
			NF (GD-102A AC)				NF (GD-102A AC)	
							RCPT GD-130	PHASE 1
							RCPT GD-131	PHASE 1
							RCPT CORR GD-C10, GD-133	PHASE 1
							RCPT GD-134A	PHASE 1
							RCPT GD-135 WEST	PHASE 1
							RCPT GD-135 EAST	PHASE 1
							GD-136 RCPT	PHASE 1
							GD-136 RCPT	PHASE 1
							RCPT GD-130A	PHASE 1
							RCPT GD-132	PHASE 1
							RCPT GD-134	PHASE 1
							RCPT GD-134B	PHASE 1
							RCPT GD-135 EAST	PHASE 1
							RCPT GD-136	PHASE 1
							RCP GD-134A	PHASE 1
	EQP-NCB			EXISTING	EQP-NCB			
			Pharmacy AC-Unit Basement Outside J-5				Pharmacy AC-Unit Basement Outside J-5	
			GD-100H				GD-100H	
			GD-100H				GD-100H	
			NF				NF	
			FCU-GD-102B				FCU-GD-102B	
			1D122B RTLS SWITCH L6-20R				1D122B RTLS SWITCH L6-20R	
			1D122B RTLS SWITCH L6-20R				1D122B RTLS SWITCH L6-20R	
			1D122B RTLS UPS L6-30R				1D122B RTLS UPS L6-30R	
			1D122B RTLS UPS L6-30R				1D122B RTLS UPS L6-30R	
			2 POLE TEMP WELDER				2 POLE TEMP WELDER	
			Flow Comp GD-102				Flow Comp GD-102	
			Johnson Controls Mech Rm				Johnson Controls Mech Rm	
			Hirsh Panel GD-102B				Hirsh Panel GD-102B	
			EQP-NC-1 1ST FLOOR				EQP-NC-1 1ST FLOOR	
							GD-102A UPS	PHASE 1
							NO#1, GD-C5/100T	PHASE 1
							NO#1, GD-100	PHASE 1
							GD-100G/100H	PHASE 1
							GD-100H/100J	PHASE 1
							GD-100J/100K	PHASE 1
				EXISTING	RP-SEB-SEC2	EXISTING		
							SUMP PUMP VLV STATION	PHASE 2
				EXISTING	ELS-NCB	EXISTING		
							EXITS & EM LIGHTS GD130-GD139	PHASE 1

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - CONSTRUCTION PHASING

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN -BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E201.2

VA FORM 08-6231

GENERAL NOTES

A. REVIEW THIS DRAWING IN CONJUNCTION WITH SHEETS GI401 & GI403 AND CORRESPONDING ARCHITECTURAL, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL AND FOODSERVICE DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THIS INFORMATION IS SUGGESTED, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED CONSTRUCTION PLANNING, SEQUENCING, MEANS, METHODS, PROCEDURES, COORDINATION AND PERFORMANCE OF THE WORK.

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	PHASE AND NOTES
				NEW	DP-KC	NEW		PHASE 3
							#119A MOBILE PLATE WARMER	PHASE 3
							#119F MOBILE PLATE WARMER	PHASE 3
							#124 MOBILE 5 WELL HOT FOOD UNIT	PHASE 3
							OFFICES G127, 128, 129, 130, 131, 100D, 100E, 100F AND G100G	PHASE 3
							G100B & G100J, K, L	PHASE 3
							#119 MOBILE PLATE WARMER	PHASE 3
							#124A MOBILE 5 WELL HOT FOOD UNIT	PHASE 3
							#124F MOBILE 5 WELL HOT FOOD UNIT	PHASE 3
							CORRIDORS G132, G107, G108, AND G109	PHASE 3
							G125A, G124, G104, G105, G106	PHASE 3
	DP-KB-SEC 4			REPLACE	DP-KB-SEC 4			PHASE 3 - REPLACE PANEL DURING SHORT OUTAGE. TERMINATE OLD EQUIPMENT ONTO NEW PANEL UNTIL THE OLD EQUIPMENT IS REPLACED
			KB-100				KB-100	PHASE 3
			KB-100				KB-100	PHASE 3
			KB-100 Sump Pump/GB-100				KB-100 Sump Pump/GB-100	PHASE 3
			KB-100 Hobart Mixer				RCPT G126	PHASE 4
			Receptacle Coffee Pot KB-100				RCPT G130	PHASE 3
			KB-100 Coffee Machine				RCPT G131	PHASE 4
			KB-100 Coffee Machine				RCPT G123, G123B	PHASE 3
			CC-1 Panel				RCPT G123A	PHASE 3
			Conveyor Control System				RCPT G100D	PHASE 4
			NF (G3-100)				RCPT G100E	PHASE 4
			KB-100				RCPT G100F	PHASE 4
			KB-100				CC-1 Panel	PHASE 3
			GB-100R/100N/102/106				RCPT G125A	PHASE 3
			KB-100				RCPT G100J	PHASE 3
			Translogic Tube Sys. Receptacle Below Mas				RCPT G100L	PHASE 3
			NF (Drain Gaurb 2)				RCPT G127	PHASE 4
			Food Processor				RCPT G128	PHASE 4
							RCPT G129	PHASE 4
							NF (GB-100)	PHASE 3
							KB-100	PHASE 3
							KB-100	PHASE 3
							GB-100R/100N/102/106	PHASE 3
							KB-100	PHASE 3
							Translogic Tube Sys. Receptacle Below Mas	PHASE 3
							NF (Drain Gaurb 2)	PHASE 3
							RCPTG100G	PHASE 3
							RCPTG124	PHASE 3
							RCPTG100K	PHASE 3
							RCPT CORR G107, G108	PHASE 3
	DP-KA-SEC1			REPLACE	DP-KA-SEC1			PHASE 2 - PROVIDE TEMPORARY PANEL FOR OLD EQUIPMENT AS EXISTING PANEL IS BEING REPLACED
			LITES SW B&C				LITES SW B&C	
			LITES SW F&H / GB-121/121M				LITES SW F&H / GB-121/121M	
			LITES				LITES	
			OVENS				#5 FLIGHT TYPE DISHWASHER	PHASE 2
			SLURRY PUMP				#7 SOILED BREAKDOWN TABLE	PHASE 3
			OVEN #2				#33 ROLL IN COMBINATION OVEN	PHASE 3
			FRYER K6061				TR-DP-KC 75KVA	PHASE 3
			RANGE K6041				LITES GE-100H / 100J/ 100K	
			OVEN K6261				LITES SW-/100G	
			LITES GE-100H / 100J/ 100K				LITES SW G&D	
			LITES SW-/100G				LITES	
			LITES SW G&D				LITES	
			LITES				LITESGE-122,122A, 100L,100N,100P,100R	
			LITES				WASTE COLLECTOR	PHASE 3
			LITESGE-122,122A, 100L,100N,100P,100R				#38 COMBINATION OVENS	PHASE 3
			NF (OVEN)				TR-DP-KB SEC3,4 150KVA	PHASE 3
			RIGHT SIDE FRYER					
			NF (RANGE K6051)					
			TILTING PAN					
			DISHWASHER GB-100					
	DP-KA-SEC2			DEMO	EQP-SWB2	NEW		PHASE 3 - (1) DEMO OLD DP-KA-SEC2 INSTALL NEW EQP-SWB2, (2) PROVIDE TEMPORARY PANEL FOR OLD EQUIPMENT AS EXISTING PANEL IS BEING REPLACED
			OVEN K6261				#120 PELLET BASE HEATERS	PHASE 3
			PNL. DP-KR				#120F PELLET BASE HEATERS	PHASE 3
			NEW SKIMMER				KITCHEN EM LIGHTS CLMN 6-9 , DO NOT SHUT OFF	PHASE 3
			DP-KB T-6 SECT 3 , DP-KB T-6 SECT 4				GB100 LIGHTS	PHASE 3
			STEAMER #1				#120A PELLET BASE HEATERS	PHASE 3
			TURBO WASH				#121 2 WELL HOT FOOD TABLE	PHASE 3
			KP-KB T-6 SECT 1 , KP-KB T-6 SECT 2				KITCHEN EM LIGHTS CLMN 9-11, DO NOT SHUT OFF	PHASE 3
			STEAMER #2					
PENTHOUSE				EXISTING	MCC-1A			
							ROOF FAN EF-50	PHASE 2
							ROOF FAN EF-51	PHASE 2

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	PHASE AND NOTES
GA-137H	DP-SA			REPLACE	DP-SA			PHASE 3
			SHREDDER BY THE DOCK				SHREDDER BY THE DOCK	
			PANEL RM 1D-148				PANEL RM 1D-148	
			SPARE TO RM GA 137A				SPARE TO RM GA 137A	
			COOK.CHILL XFMR DP-A				COOK.CHILL XFMR DP-A	
			SPARE TO RM GA 127A				SPARE TO RM GA 127A	
			SPARE TO RM GA 127D				SPARE TO RM GA 127D	
			SPARE TO DS-GE-106				SPARE TO DS-GE-106	
			SPARE TO RM GA 137D				SPARE TO RM GA 137D	
			SPARE TO RM GA 127D				SPARE TO RM GA 127D	
			TRASH COMPACTOR				TRASH COMPACTOR	
			T-7 DP-SB				T-7 DP-SB	
			EF XFMR ROOM				EF XFMR ROOM	
							TEMP AHU ON DOCK 30HP	PHASE 3
							SHUNT TRIP PNL NORMAL	PHASE 3
	DP-SB-SEBSEC1			EXISTING	DP-SB-SEC1	NEW		REPLACE TR FOR EXISTING DP-SB-SEC1
			DOCK RECEPTACLE				DOCK RECEPTACLE	
			TRASH & LINEN				TRASH & LINEN	
			TEST TABLE BIOMED				TEST TABLE BIOMED	
			TEST TABLE BIOMED				TEST TABLE BIOMED	
			DOCK RECEPTACLE BY SHREDER				DOCK RECEPTACLE BY SHREDER	
			CART WASH				CART WASH	
			BUS DUCT S-3. TEST TABLE BIOMED				BUS DUCT S-3, TEST TABLE BIOMED	
			BUS DUCT S-1 OFF				ITEM 13 WORK TABLE WITH SINK	PHASE 3
			KEY MACHINE				BUS DUCT S-1 OFF	
			STRIP RECEPTACLE				HOUSE PANEL 1	PHASE 3
			STRIP RECEPTACLE GA-138				#81C COMPOST AIR CURTAIN	PHASE 3
			STRIP RECEPTACLE GA 138				KEY MACHINE	
			TRAILER				STRIP RECEPTACLE	
			PNEUMATIC TUBE, NURSE CALL, PAGING				STRIP RECEPTACLE GA-138	
			DP-SB-SEC2 LOAD				STRIP RECEPTACLE GA 138	
							TRAILER	
							PNEUMATIC TUBE, NURSE CALL, PAGING	
							#80 COND DRAIN HEAT TRACE	PHASE 3
							#84 COND DRAIN HEAT TRACE	PHASE 3
							#98 COND DRAIN HEAT TRACE	PHASE 3
							DP-SB-SEC2 LOAD	
	DP-SB-SEC2			EXISTING	DP-SB-SEC2	NEW		
			Air Curtain 1				Air Curtair. 1	
			Air Curtain 1				Air Curtair. 1	
			Air Curtain 1				Air Curtair. 1	
			GA-137 Housekeeping				GA-137 Housekeeping	
			GA-137 Housekeeping				GA-137 Housekeeping	
			GA-137 Housekeeping				GA-137 Housekeeping	
			Air Curtain 2				Air Curtair. 2	
			Air Curtain 2				Air Curtair. 2	
			Air Curtain 2				Air Curtair. 2	
			Smoke Room Heater				Smoke Room Heater	
			Smoke Room Heater				Smoke Room Heater	
			Air Curtain Stock Area				Air Curtain Stock Area	
			Air Curtain Stock Area				Air Curtain Stock Area	
							#41 FLOOR MIXER	PHASE 3
							GD-137 PHARMACY LIGHTS	PHASE 1
							VAV G114,121 POWER	PHASE 3
							#51 ROLL IN BLAST FREEZER, COND	PHASE 3
							#51 ROLL IN FREEZER	PHASE 3
							#50 ROLL IN BLAT FREEZER, COND.	PHASE 3
							#50 ROLL IN BLAT FREEZER	PHASE 3
							#72 BLAST CHILLER/SHOCK FREEZER	PHASE 3
				REPLACE	HOUSE PNL			PHASE 1
							#39 SINGLE FRIER FILTER PUMP	PHASE 3
							#40 BAKING WORK TABLE RCPT	PHASE 3
							#54 WORK TABLE RCPT	PHASE 3
							#52 2 DOOR ROLL IN REFRIGERATOR	PHASE 3
							#52B 2 DOOR ROLL IN REFRIGERATOR	PHASE 3
							#65 SLICER	PHASE 3
							#70 FLOOR SCALE	PHASE 3
							#71 PREP TABLE W SINKS	PHASE 3
							#74 POTATO PEELER	PHASE 3
							CONDENSING UNITS 75, 80, 84, 88, 88, 93, 98, 107 LIGHTS , OUTLETS	PHASE 3
							G110, 111, 112, 113 LIGHTS	PHASE 3
							G116 LIGHTS	PHASE 3
							GD137 POWER STRIP	PHASE 3
							GD137 POWER STRIP	PHASE 3
							GD-137 RCPT	PHASE 3
							GD-139 RCPT	PHASE 1
							GD-139 RCPT	PHASE 1
							HEAT TRACE SLAB MEAT FREEZER	PHASE 3
							#40 BAKING WORK TABLE RCPT	PHASE 3
							#54 WORK TABLE, BLIXER	PHASE 3
							#52A 2 DOOR ROLL IN REFRIGERATOR	PHASE 3
							#57 FLOOR MIXER	PHASE 3
							#67 WORK TABLE	PHASE 3
							#70A FLOOR SCALE	PHASE 3
							#73 UNDERCOUNT. DISHWASHER	PHASE 3
							CONDENSING UNITS 75, 80, 93 LIGHTS, OUTLETS	PHASE 3
							#98 COMPOST FREEZER LIGHTS	PHASE 3
							G114, 115 LIGHTS	PHASE 3
							#81D COMPOST AIR CURTAIN	PHASE 3
							GD137 POWER STRIP	PHASE 3
							GD137 POWER STRIP	PHASE 3
							GD-138 RCPT	PHASE 1
							GD-139 RCPT	PHASE 1
							HEAT TRACE SLAB PRODUCE FREEZER	PHASE 3

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - CONSTRUCTION PHASING

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN -BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E201.1

VA FORM 08-6231

GENERAL NOTES

A. REVIEW THIS DRAWING IN CONJUNCTION WITH SHEETS GI401 & GI403 AND CORRESPONDING ARCHITECTURAL, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL AND FOODSERVICE DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THIS INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED CONSTRUCTION PLANNING, SEQUENCING, MEANS, METHODS, PROCEDURES, COORDINATION AND PERFORMANCE OF THE WORK.

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			PHASE AND NOTES
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	
					DPA-EQ			PHASE 3 - NEW DPA-EQ FEED FROM ATS-3
				NEW				
							TR DPA-EQ, NOTE 1	PHASE 3
							SHUNT TRIP PNL	PHASE 3
							#94 CONDENSING UNITS 75, 80, 84, 88, 88, 93, 98, 107	PHASE 3
							# 12 SCRAPPER COLLECTOR	PHASE 3
							#89 CONDENSING UNITS 75, 80, 93	PHASE 3
				NEW	DPA-EQ3 SEC1			PHASE 1
							#11 POWER SOAK SINK	PHASE 3
							#17 WORKTABLE W SINK	PHASE 3
							#41 FLOOR MIXER	PHASE 3
							#50 ROLL IN BLAST FREEZER COND	PHASE 3
							#62 WORKTABLE FEEDS #19	PHASE 3
							#88B VEGETABLE COOLER EVAP	PHASE 3
							GD139 REFRIGERATOR U7600	PHASE 1
							DPA-EQ3 SEC2	PHASE 3
							#20 WORKTABLE W SINK	PHASE 3
							#62 WORKTABLE FEEDS #53	PHASE 3
							#37 48" GRIDDLE W STAND	PHASE 3
							#51 ROLL IN BLAST FREEZER COND	PHASE 3
							#88A VEGETABLE COOLER EVAP	PHASE 3
							#93A WALK IN MEAT PULL EVAP	PHASE 3
							G139 REFRIG U7601	PHASE 1
				NEW	DPA-EQ3 SEC2			PHASE 3
							#50 ROLL IN BLAST FREEZER EVAP	PHASE 3
							#61 MEAT GRINDER	PHASE 3
							#59 WORK TABLE W SINK	PHASE 3
							#72 BLAST CHILL / SHOCK FREEZER	PHASE 3
							#76B, #76C, #81, #81A, #81B, #81C AIR CURTAINS	PHASE 3
							#80 MEAT FREEZER DEFROST	PHASE 3
							#85 GLASS DOOR SHELVING UNITS	PHASE 3
							#99 COMPOST FREEZER EVAP / DEFROST	PHASE 3
							#51 ROLL IN BLAST FREEZER EVAP	PHASE 3
							#55 WORK TABLE	PHASE 3
							#61 BLXER	PHASE 3
							#63 WORKTABLE	PHASE 3
							#75, #84, #88 LIGHTS	PHASE 3
							#80, #93, LIGHTS,	PHASE 3
							#80 MEAT FREEZER EVAP	PHASE 3
							#84A PRODUCEE/BREAD FREEZER DEFROST	PHASE 3
							75A & 75B EVAPORATORS	PHASE 3
GA-139A				EXISTING	LP-SEB			
							VFD EF-CU89 CONDENSERS 89,94	PHASE 3
							Office Lights 108/111/112/119	PHASE 3
							Office Lights 115/118/137/137f/137P/MedAdmin	PHASE 3
				EXISTING	ELS-SEB			
							SEWAGE EJECTOR PUMP SEP-1	PHASE 2
							SEWAGE EJECTOR PUMP SEP-2	PHASE 2
GB-102A	LP-NCB			REUSE	LP-NCB			PHASE 1
			LIGHTS 100-100A				LIGHTS 100-100A	
			LIGHTS 100				LIGHTS 100	
			LIGHTS 100				LIGHTS 100	
			LIGHTS GD138, 139				LIGHTS GD138, 139	
			LIGHTS GD136, 137				LIGHTS GD136, 137	
			Left Side North Parking Lights				Left Side North Parking Lights	
			Middle North & canopy Lights				Middle North & canopy Lights	
			Right Side North Parking Lights				Right Side North Parking Lights	
			TA-NCB				TA-NCB	
			GD102 MECH ROOM LTS				GD102 MECH ROOM LTS	
			SPACE				SPACE	
			TR-T3 RP-NCB				TR-T3 RP-NCB	
			GD-100C Silver Recovery				GD-1C0C Silver Recovery	
			GD-100K/100J				GD-100K/100J	
							FCU 130, 132, 133, 134B	PHASE 1
							GD-139 LIGHTS	PHASE 1
							GD-610, GD135,136 LIGHTS	PHASE 1
							FCU 129, 135, 137, 139	PHASE 1
							GD130,130A,132,3,4,4B LIGHTS	PHASE 1

ELECTRICAL PHASING SCHEDULE

EXISTING KITCHEN					NEW KITCHEN			PHASE AND NOTES
ELECTRIC CLOSET / ROOM	PANEL	POWER	EQUIPMENT	DEMO REPLACE NEW EXISTING REUSE	PANEL	POWER	EQUIPMENT	
	RP-NCB			REPLACE	RP-NCB			PHASE 1
			G8_111/112 Shower Lights				G8_111/112 Shower Lights	
			GD-102 Fire Pump Low PSI Control Panel				GD-102 Fire Pump Low PSI Control Panel	
			Stairwell 5				Stairwell 5	
			C4				C4	
			GD-C3/C4				GD-C3/C4	
			NF (GD-100/100A)				NF (GD-100/100A)	
			500-UH-7 GD-102				500-UH-7 GD-102	
			500-UH-SW-55				500-UH-SW-55	
			NF (GD-103 Isolator W-Wall)				NF (GD-103 Isolator W-Wall)	
			NF (Silver Recovery)				NF (Silver Recovery)	
			NF (GD-103 E-Wall)				NF (GD-103 E-Wall)	
			NF (GD-103 E-Wall)				NF (GD-103 E-Wall)	
			Smoke Booth				Smoke Booth	
			GD-C1 Receptacles				GD-C1 Receptacles	
			GD-C1 Receptacles				GD-C1 Receptacles	
			GB-113/113A				GB-113/113A	
			GD-100B				GD-100B	
			The 3-Pole breaker in CKT 8,10,12 does not utilize B-Phase				The 3-Pole breaker in CKT 8,10,12 does not utilize B-Phase	
			GD-100B				GD-100B	
			WAC-/GB-103A				WAC-/GB-103A	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			Interstit Receptacle/GD-100				Interstit Receptacle/GD-100	
			GA-103				GA-103	
			GD-100B				GD-100B	
			Photo Cell & Coil Employee Parking Lot				Photo Cell & Coil Employee Parking Lot	
			NF (GD-102A AC)				NF (GD-102A AC)	
							RCPT GD-130	PHASE 1
							RCPT GD-131	PHASE 1
							RCPT CORR GD-C10, GD-133	PHASE 1
							RCPT GD-134A	PHASE 1
							RCPT GD-135 WEST	PHASE 1
							RCPT GD-135 EAST	PHASE 1
							GD-136 RCPT	PHASE 1
							GD-136 RCPT	PHASE 1
							RCPT GD-130A	PHASE 1
							RCPT GD-132	PHASE 1
							RCPT GD-134	PHASE 1
							RCPT GD-134B	PHASE 1
							RCPT GD-135 EAST	PHASE 1
							RCPT GD-136	PHASE 1
							RCP GD-134A	PHASE 1
	EQP-NCB			EXISTING	EQP-NCB			
			Pharmacy AC-Unit Basement Outside J-5				Pharmacy AC-Unit Basement Outside J-5	
			GD-100H				GD-100H	
			GD-100H				GD-100H	
			NF				NF	
			FCU-GD-102B				FCU-GD-102B	
			1D122B RTLS SWITCH L6-20R				1D122B RTLS SWITCH L6-20R	
			1D122B RTLS SWITCH L6-20R				1D122B RTLS SWITCH L6-20R	
			1D122B RTLS UPS L6-30R				1D122B RTLS UPS L6-30R	
			1D122B RTLS UPS L6-30R				1D122B RTLS UPS L6-30R	
			2 POLE TEMP WELDER				2 POLE TEMP WELDER	
			Flow Comp GD-102				Flow Comp GD-102	
			Johnson Controls Mech Rm				Johnson Controls Mech Rm	
			Hirsh Panel GD-102B				Hirsh Panel GD-102B	
			EQP-NC-1 1ST FLOOR				EQP-NC-1 1ST FLOOR	
							GD-102A UPS	PHASE 1
							NO#1, GD-C5/100T	PHASE 1
							NO#1, GD-100	PHASE 1
							GD-100G/100H	PHASE 1
							GD-100H/100J	PHASE 1
							GD-100J/100K	PHASE 1
				EXISTING	RP-SEB-SEC2	EXISTING		
							SUMP PUMP VLV STATION	PHASE 2
				EXISTING	ELS-NCB	EXISTING		
							EXITS & EM LIGHTS GD130-GD139	PHASE 1

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - CONSTRUCTION PHASING

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN -BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

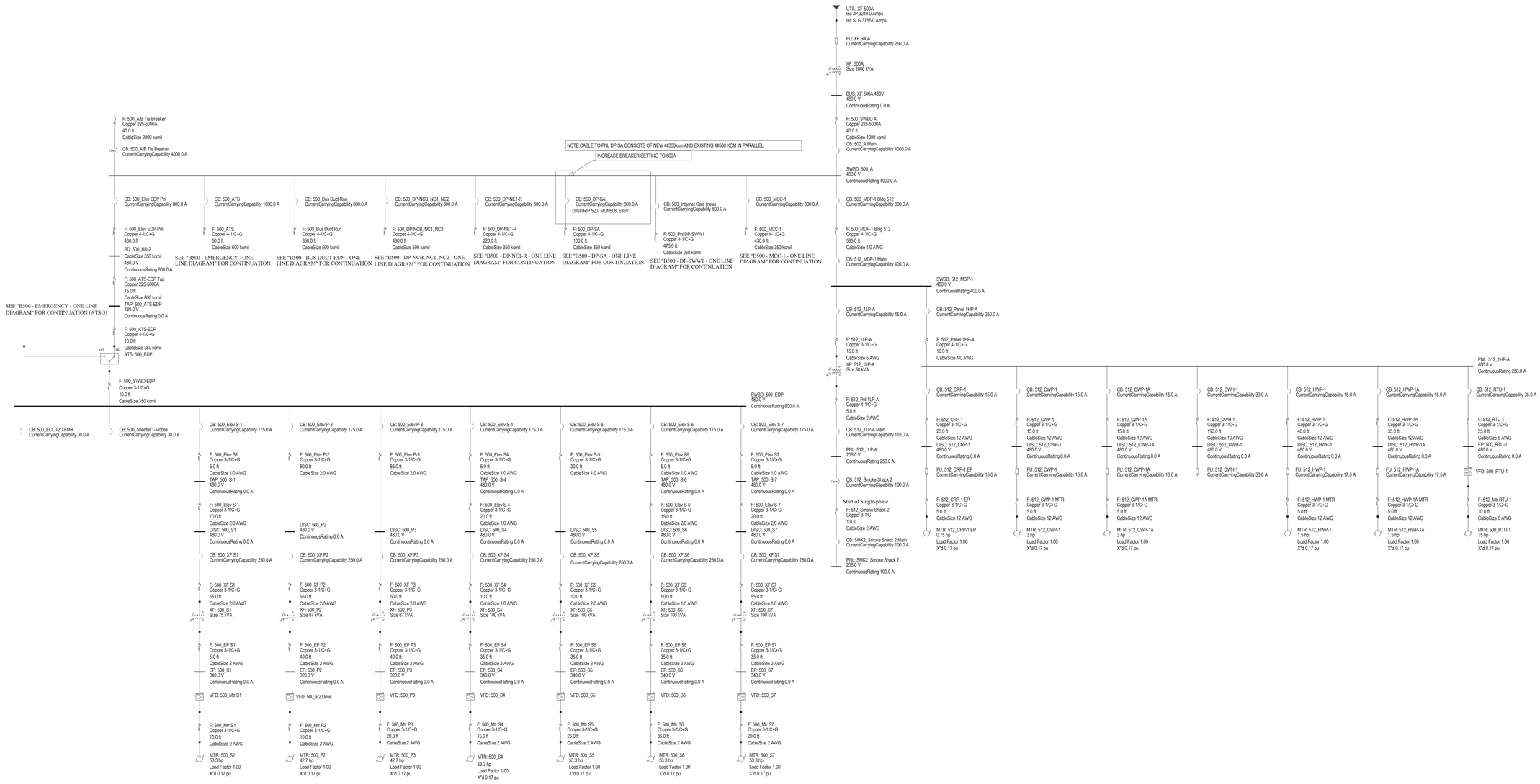
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E201.2

VA FORM 08-6231



VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-A

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

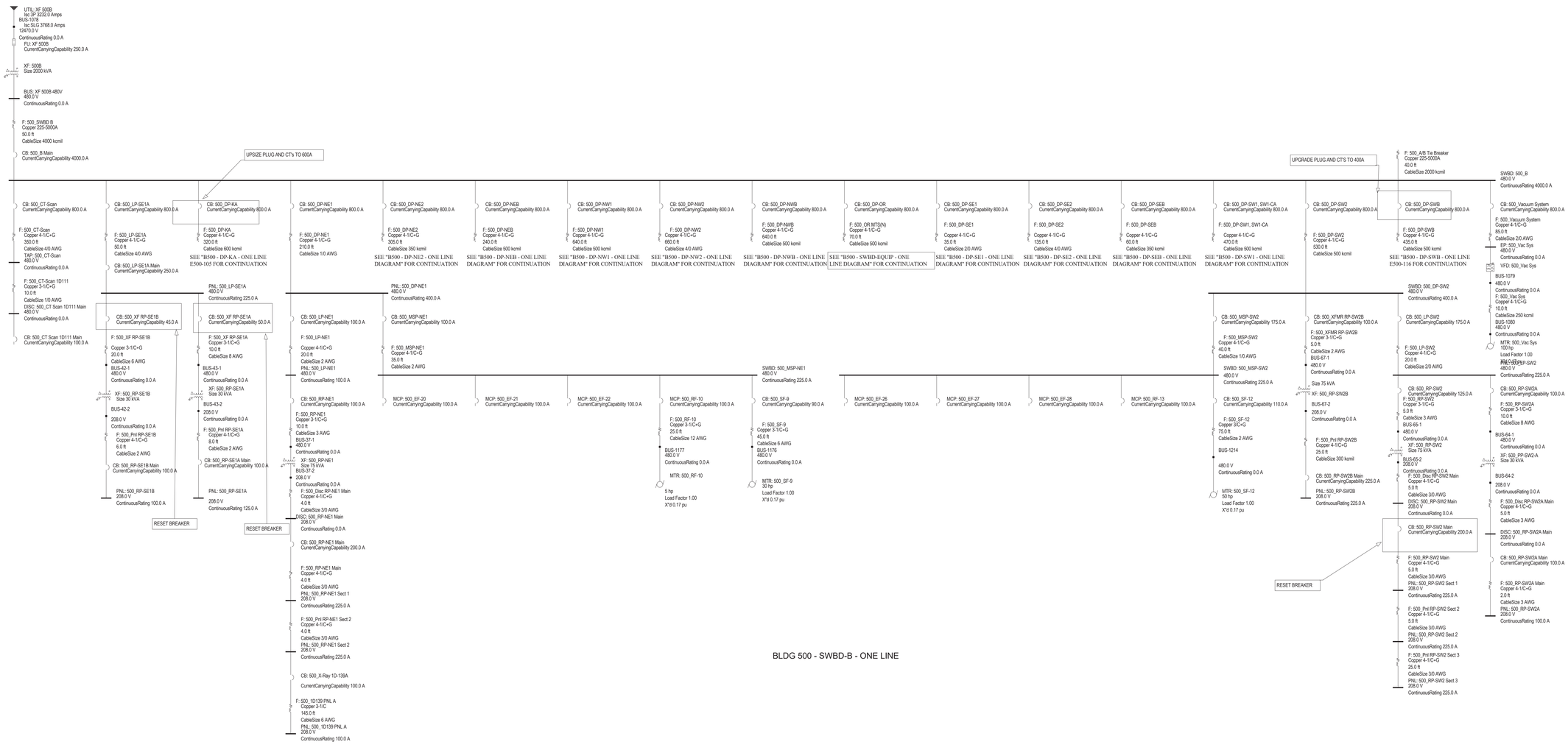
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-101

VA FORM 08-6231



BLDG 500 - SWBD-B - ONE LINE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL- SINGLE LINE BLDG 500-SWBD-500-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

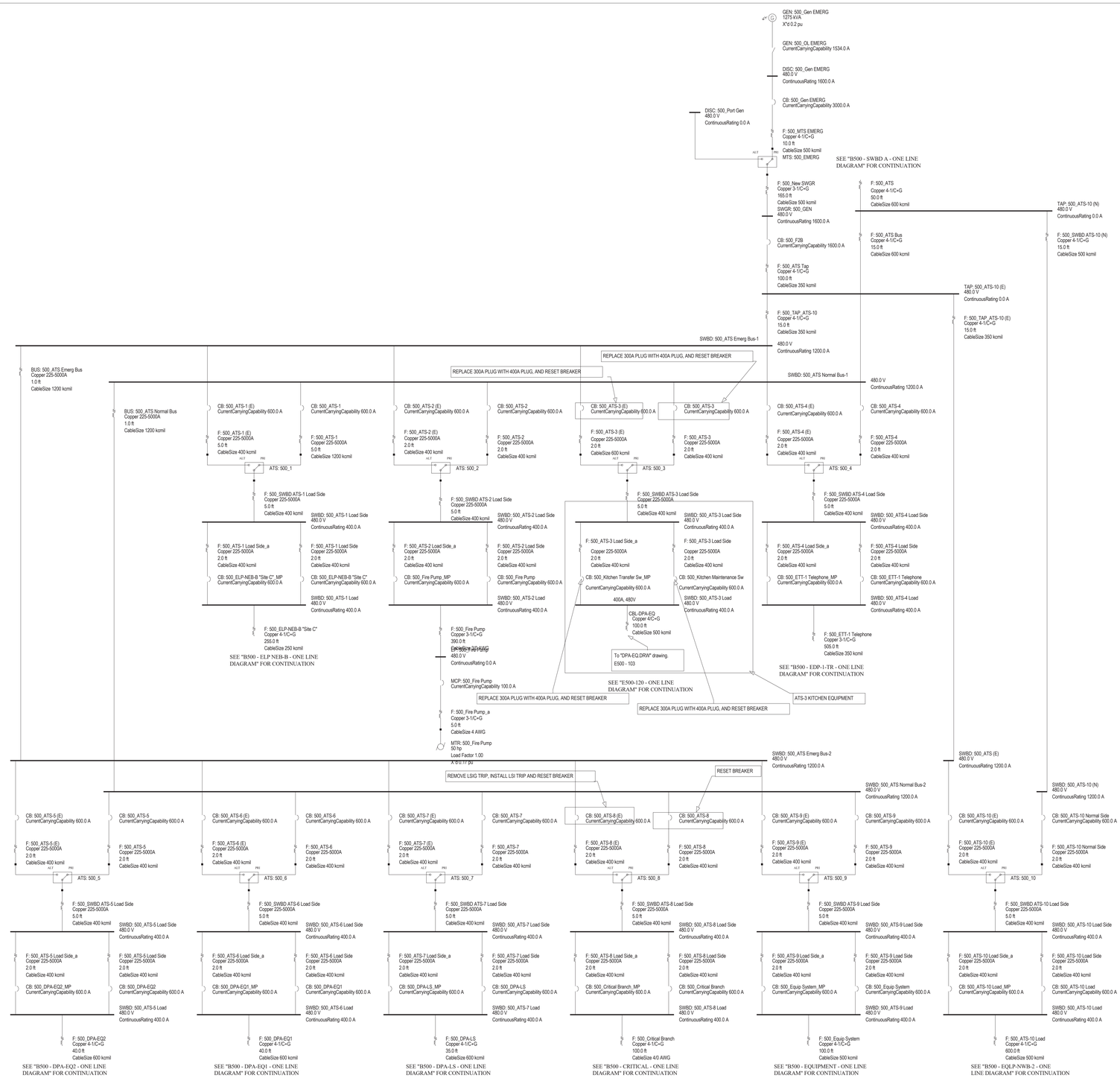
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E500-102

VA FORM 08-6231



BLDG 500 - SWBD - EMERGENCY -ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-EMERGENCY

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

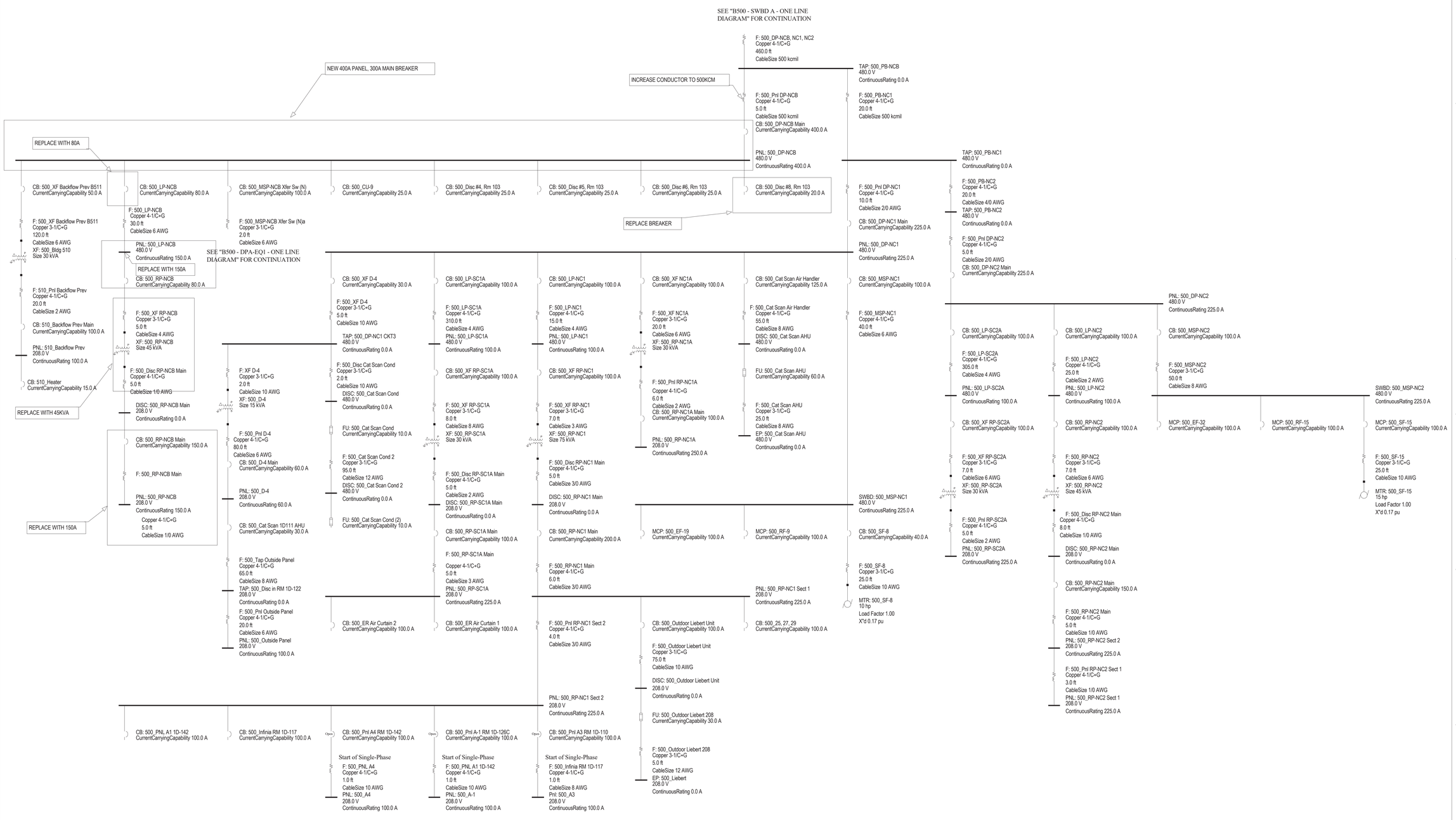
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-103

VA FORM 08-6231



BLDG 500 - DP - NCB_NC1_NC2 - ONE LINE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DP-NE-R & DP-NCB_NC1_NC2

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

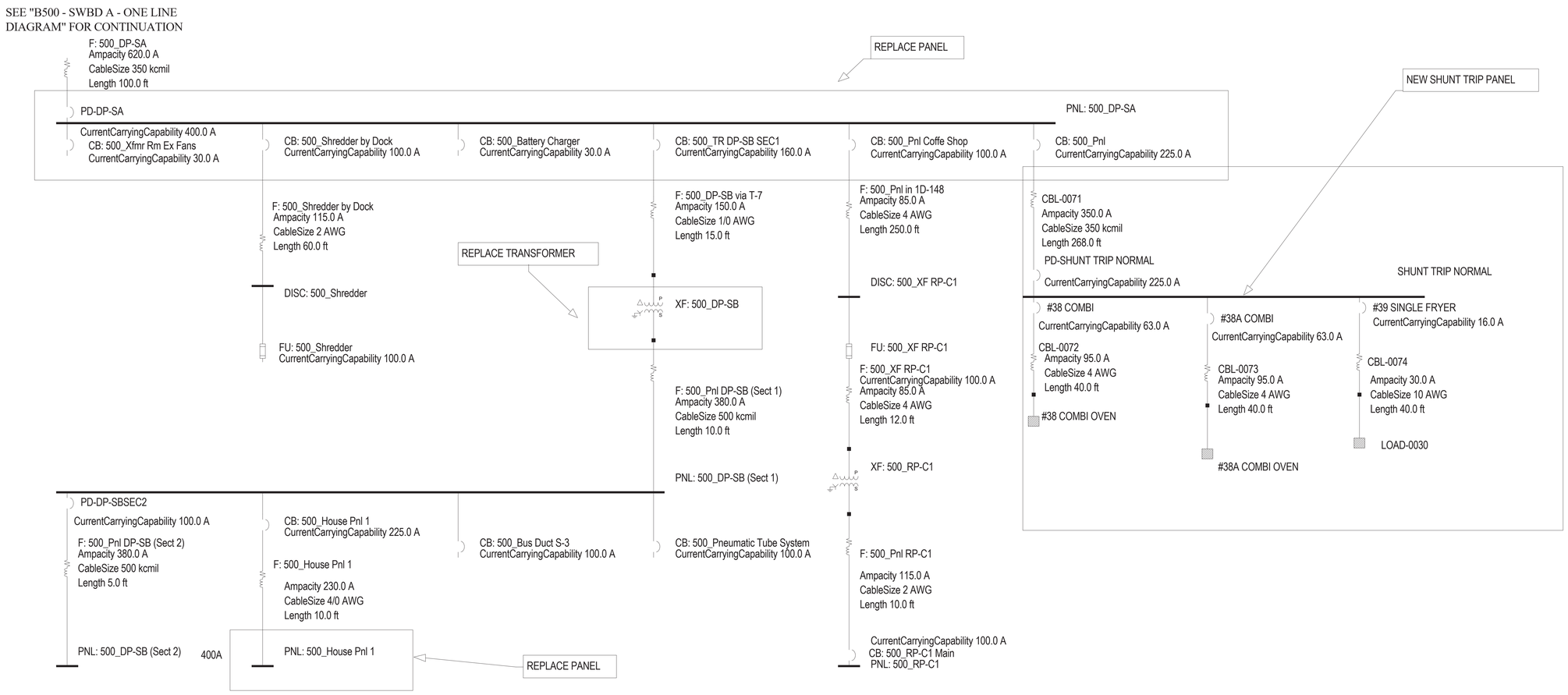
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E500-104

VA FORM 08-6231



BLDG 500 - DP - SA - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-SWW1, EDP-1-TR & DP-SA

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Drawing Number: E500-105

VA FORM 08-6231

SEE "B500 - EMERGENCY - ONE LINE DIAGRAM" FOR CONTINUATION (ATS-1)

F: 500_ELP-NEB-B "Site C"
Copper 4-1/C+G
255.0 ft
CableSize 250 kcmil

PNL: 500_ELP NEB-B
480.0 V
ContinuousRating 225.0 A

CB: 500_ELP NEB-B2
CurrentCarryingCapability 100.0 A

F: 500_ELP NEB-B2
Copper 4-1/C+G
60.0 ft
CableSize 3 AWG

CB: 500_ELP-NEB-B2 Main
CurrentCarryingCapability 100.0 A

CB: 500_Liebert #1 C Site
CurrentCarryingCapability 40.0 A

CB: 500_Bypass Disc
CurrentCarryingCapability 100.0 A

CB: 500_Liebert #2 C Site
CurrentCarryingCapability 40.0 A

CB: 500_Liebert #2 Comp Rm
CurrentCarryingCapability 30.0 A

CB: 500_Spare NEB (4)
CurrentCarryingCapability 20.0 A

CB: 500_Spare NEB (5)
CurrentCarryingCapability 20.0 A

F: 500_Disc UPS-NCB
Copper 3-1/C+G
10.0 ft
CableSize 2/0 AWG
DISC: 500_UPS-NCB
480.0 V
ContinuousRating 0.0 A

FU: 500_UPS NCB
CurrentCarryingCapability 200.0 A

F: 500_UPS NCB
Copper 3-1/C+G
10.0 ft
CableSize 2/0 AWG
DISC: 500_UPS
480.0 V
ContinuousRating 0.0 A

FU: 500_UPS
CurrentCarryingCapability 200.0 A

F: 500_UPS
Copper 3-1/C+G
10.0 ft
CableSize 4/0 AWG

UPS: 500_NCB

F: 500_UPS Bus
Copper 4-1/C+G
2.0 ft
CableSize 4/0 AWG
TAP: 500_UPS
208.0 V
ContinuousRating 0.0 A

F: 500_Disc EP-GD-102C
Copper 4-1/C+G
20.0 ft
CableSize 4/0 AWG
DISC: 500_EP-GD-102C
208.0 V
ContinuousRating 0.0 A

FU: 500_EP-GD-102C
CurrentCarryingCapability 200.0 A

F: 500_EP-GD-102C
Copper 4-1/C+G
5.0 ft
CableSize 4/0 AWG
PNL: 500_EP-GD-102C
208.0 V
ContinuousRating 225.0 A

CB: 500_208V Pnl in GD-102B
CurrentCarryingCapability 125.0 A

F: 500_208V Pnl in GD-102B
Copper 4-1/C+G
15.0 ft
CableSize 2 AWG

CB: 500_AC-P Main
CurrentCarryingCapability 100.0 A

PNL: 500_AC-P
208.0 V
ContinuousRating 250.0 A

CurrentCarryingCapability 40.0 A
CB: 500_Tel-2 Pump

CurrentCarryingCapability 40.0 A
CB: 500_Tel-1 Pump

CB: 500_Comp #1
CurrentCarryingCapability 30.0 A

F: 500_Comp #1
Copper 3-1/C+G
15.0 ft
CableSize 10 AWG

MTR: 500_Comp #1
15 hp
Load Factor 1.00
X"d 0.17 pu

CB: 500_Comp #2
CurrentCarryingCapability 30.0 A

F: 500_Comp #2
Copper 3-1/C+G
20.0 ft
CableSize 10 AWG

MTR: 500_Comp #2
15 hp
Load Factor 1.00
X"d 0.17 pu

CB: 500_Xfmr C-Site
CurrentCarryingCapability 70.0 A

F: 500_Xfmr C-Site
Copper 3-1/C+G
10.0 ft
CableSize 6 AWG

XF: 500_C-Site
Size 45 KVA

F: 500_Disc INT/ERP-NEB-C
Copper 4-1/C+G
5.0 ft
CableSize 1 AWG
DISC: 500_INT/ERP-NEB-C
208.0 V
ContinuousRating 0.0 A

FU: 500_INT/ERP-NEB-C
CurrentCarryingCapability 200.0 A

F: 500_INT/ERP-NEB-C
Copper 4-1/C+G
100.0 ft
CableSize 1 AWG
TAP: 500_PD Tap
208.0 V
ContinuousRating 0.0 A

F: 500_Disc R-70A Sect 1 Main
Copper 4-1/C+G
5.0 ft
CableSize 4 AWG
DISC: 500_R-70A Sect 1 Main
208.0 V
ContinuousRating 0.0 A

FU: 500_R-70A Main
CurrentCarryingCapability 100.0 A

F: 500_R-70A Main
Copper 4-1/C+G
10.0 ft
CableSize 4 AWG
PNL: 500_R-70A Sect 1
208.0 V
ContinuousRating 100.0 A

F: 500_Pnl R-70A Sect 2
Copper 4-1/C+G
5.0 ft
CableSize 2 AWG
PNL: 500_R-70A Sect 2
208.0 V
ContinuousRating 225.0 A

F: 500_Disc RF Filter
Copper 4-1/C+G
5.0 ft
CableSize 4 AWG
DISC: 500_RF Filter
208.0 V
ContinuousRating 0.0 A

FU: 500_RF Filter
CurrentCarryingCapability 100.0 A

F: 500_RF Filter
Copper 4-1/C+G
10.0 ft
CableSize 4 AWG
EP: 500_RF Filter
208.0 V
ContinuousRating 0.0 A

F: 500_Pnl Armory
Copper 4-1/C+G
5.0 ft
CableSize 4 AWG

CB: 500_Armory Main
CurrentCarryingCapability 70.0 A

PNL: 500_Armory
208.0 V
ContinuousRating 70.0 A

PNL: 500_ELP-NEB-B2
480.0 V
ContinuousRating 250.0 A

CB: 500_Pump #1
CurrentCarryingCapability 40.0 A

F: 500_Pump #1
Copper 3-1/C+G
45.0 ft
CableSize 10 AWG

VFD: Pump #1

MTR: 500_Pump #1
15 hp
Load Factor 1.00
X"d 0.17 pu

NEW 15HP PUMP, VFD, BREAKERS

CB: 500_E-1 EF
CurrentCarryingCapability 15.0 A

F: 500_E-1 EF
Copper 3-1/C+G
80.0 ft
CableSize 12 AWG
DISC: 500_EF-1 Starter
480.0 V
ContinuousRating 0.0 A

FU: 500_EF#1
CurrentCarryingCapability 6.0 A

F: 500_EF#1
Copper 3-1/C+G
10.0 ft
CableSize 12 AWG

MTR: 500_EF#1
0.5 hp
Load Factor 1.00
X"d 0.17 pu

CB: 500_E-7 EF
CurrentCarryingCapability 15.0 A

F: 500_E-7 EF
Copper 3-1/C+G
5.0 ft
CableSize 12 AWG
DISC: 500_E-7 EF Starter
480.0 V
ContinuousRating 0.0 A

FU: 500_E-7 EF
CurrentCarryingCapability 3.0 A

CB: 500_E-6 RF
CurrentCarryingCapability 15.0 A

F: 500_E-6 RF
Copper 3-1/C+G
5.0 ft
CableSize 12 AWG

VFD: 500_E-6 RF

MTR: 500_E-6 RF
5 hp
Load Factor 1.00
X"d 0.17 pu

CB: 500_E-8 EF
CurrentCarryingCapability 15.0 A

F: 500_E-8 EF
Copper 3-1/C+G
60.0 ft
CableSize 12 AWG
DISC: 500_EF-8 Starter
480.0 V
ContinuousRating 0.0 A

FU: 500_EF-8
CurrentCarryingCapability 6.0 A

F: 500_EF-8
Copper 3-1/C+G
10.0 ft
CableSize 12 AWG

MTR: 500_EF-8
0.75 hp
Load Factor 1.00
X"d 0.17 pu

CB: 500_AC-3
CurrentCarryingCapability 60.0 A

F: 500_AC-3
Copper 3-1/C+G
45.0 ft
CableSize 8 AWG
DISC: 500_AC-3 Starter
480.0 V
ContinuousRating 0.0 A

FU: 500_AC-3
CurrentCarryingCapability 30.0 A

VFD: 500_Mtr AC-3

MTR: 500_AC-3
20 hp
Load Factor 1.00
X"d 0.17 pu

NEW 15HP PUMP, VFD, BREAKERS

F: 500_Pump #2
Copper 3-1/C+G
45.0 ft
CableSize 10 AWG

MTR: 500_Pump #2
15 hp
Load Factor 1.00
X"d 0.17 pu

F: 500_Disc CCP
Copper 4-1/C+G
10.0 ft
CableSize 4/0 AWG
DISC: 500_CCP
208.0 V
ContinuousRating 0.0 A

F: 500_Pnl CCP Sect I
Copper 4-1/C+G
70.0 ft
CableSize 2/0 AWG

CB: 500_CCP Sect I Main
CurrentCarryingCapability 250.0 A

PNL: 500_CCP Sect I
208.0 V
ContinuousRating 200.0 A

CB: 500_UPS Pnl 2nd Fl
CurrentCarryingCapability 50.0 A

F: 500_UPS Pnl 2nd Fl
Copper 4-1/C+G
225.0 ft
CableSize 8 AWG

PNL: 500_UPS Pnl 2nd Fl
208.0 V
ContinuousRating 100.0 A

F: 500_Pnl CCP Sect II
Copper 4-1/C+G
5.0 ft
CableSize 2/0 AWG
PNL: 500_CCP Sect II
208.0 V
ContinuousRating 225.0 A

CB: 500_100A Panel (Tele Rm)
CurrentCarryingCapability 100.0 A

F: 500_100A Panel (Tele Rm)
Copper 4-1/C+G
75.0 ft
CableSize 2 AWG
PNL: 500_CCP Sect IIA
208.0 V
ContinuousRating 125.0 A

BLDG 500: PNL ELP-NEB

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-ELP-NEB-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

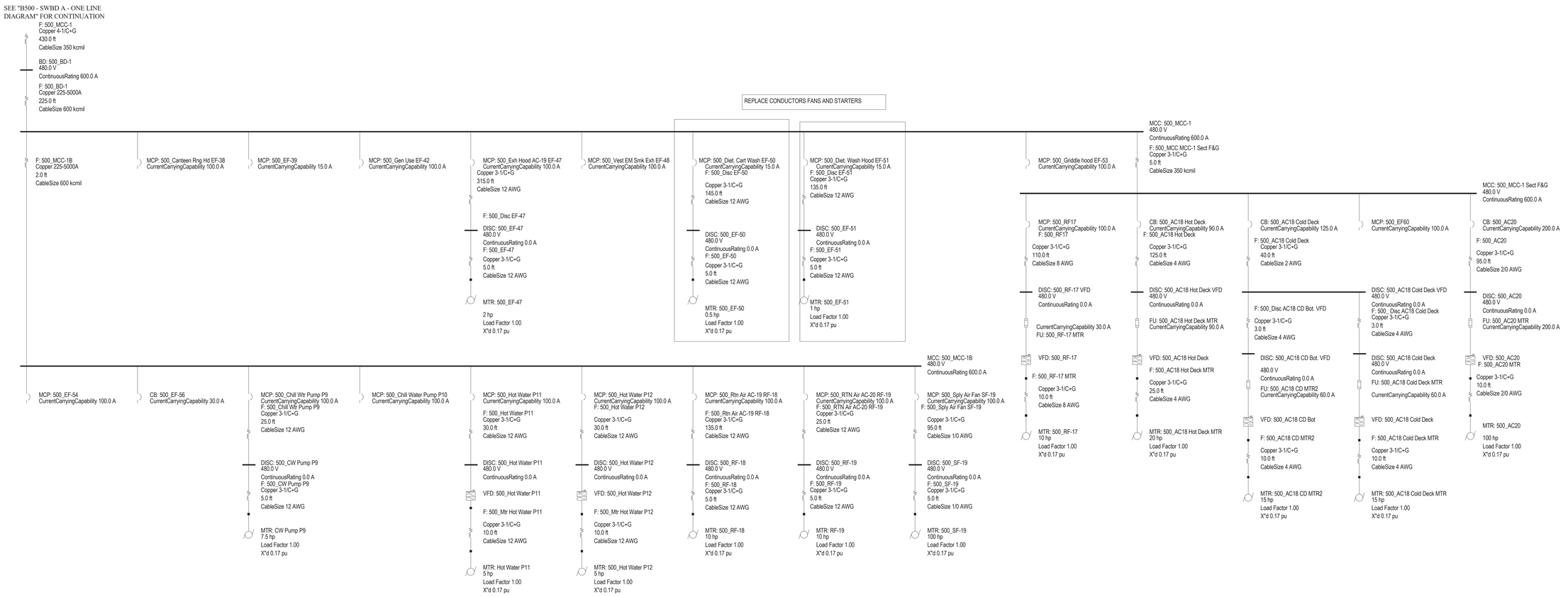
Issue Date: 07/23/21

Checked: WG

Drawn: BX

Drawing Number: E500-106

VA FORM 08-6231



BLDG 500 - MCC 1 - ONE LINE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-MCC-1 & SWBD-EMDP

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

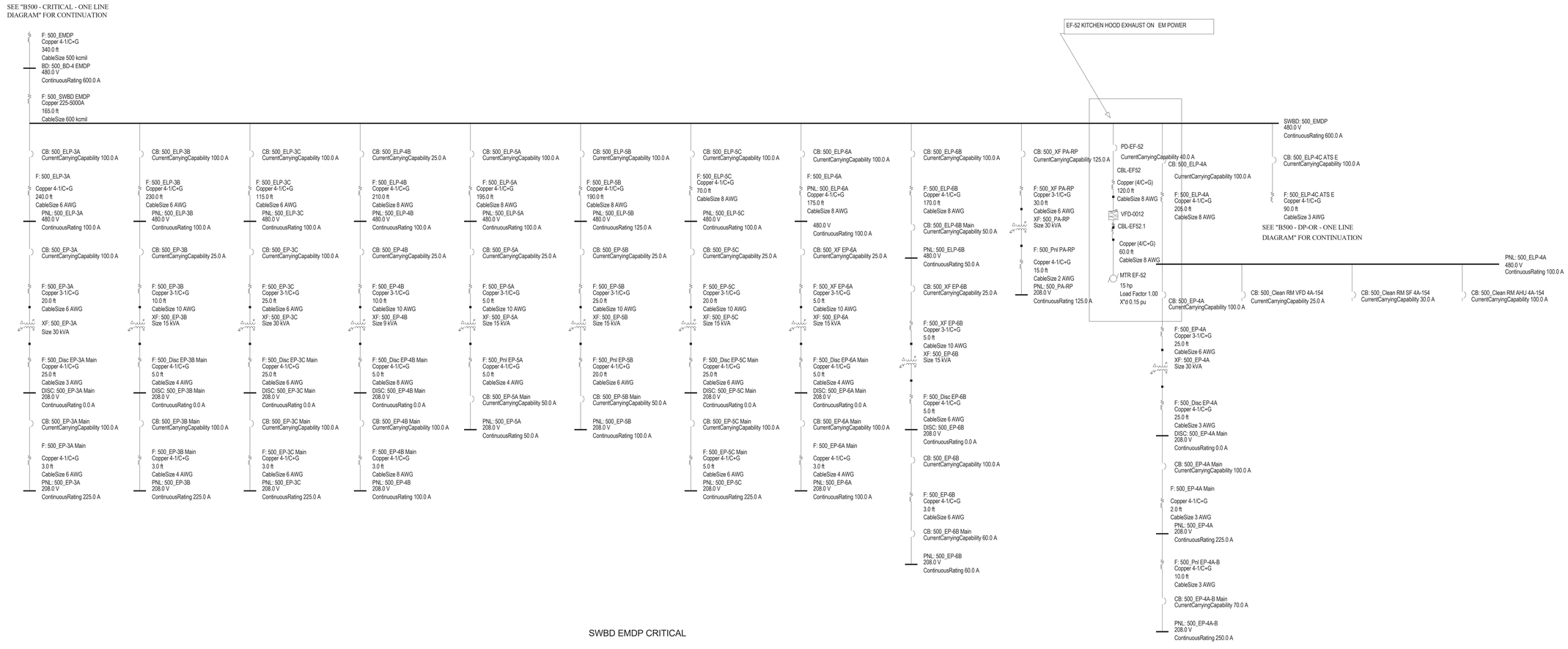
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-108

VA FORM 08-6231



SWBD EMDP CRITICAL

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-EMDP

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

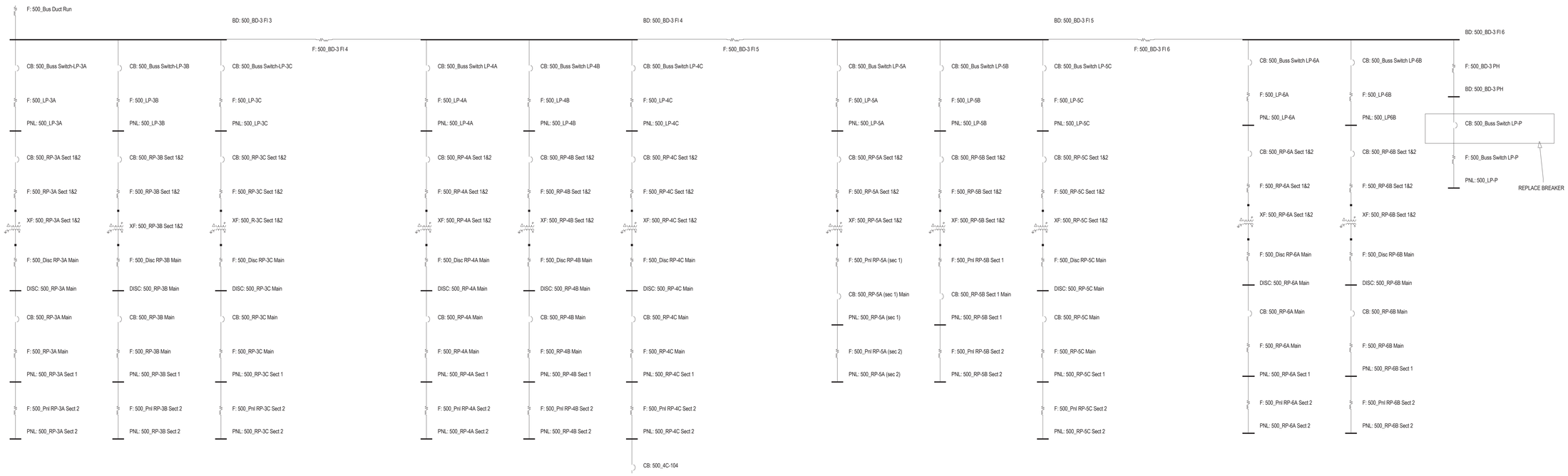
Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-108.1

VA FORM 08-6231

SEE "B500 - SWBD A - ONE LINE DIAGRAM" FOR CONTINUATION



BLDG 500 - BD - 3 - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-BD-3 & DPA-EQ1

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

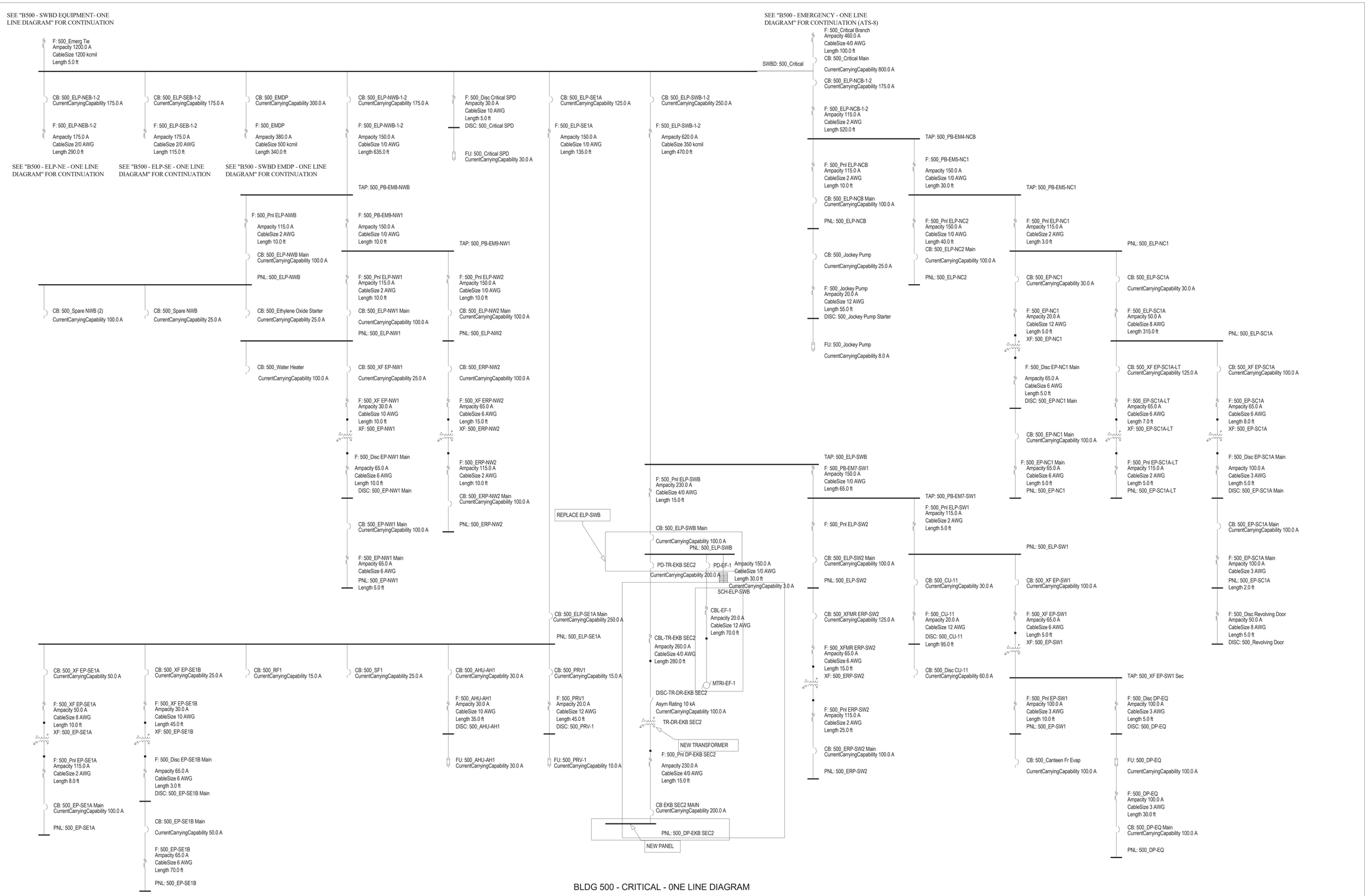
Issue Date: 07/23/21

Checked: WG

Drawn: BX

Drawing Number: E500-109

VA FORM 08-6231



BLDG 500 - CRITICAL - 0NE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-CRITICAL

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

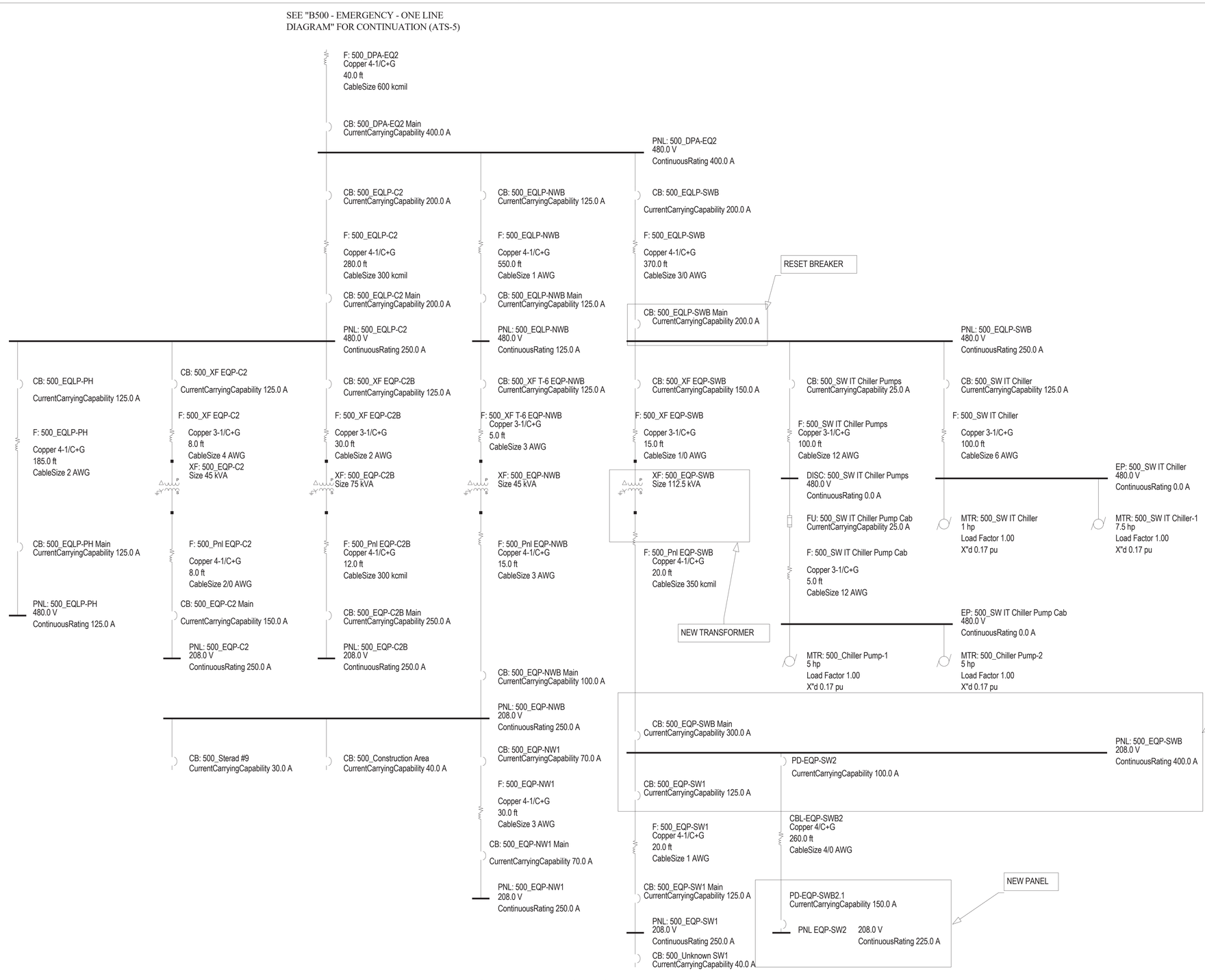
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E500-110

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231



BLDG 500 DPA - EQ2 - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DPA-EQ2

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

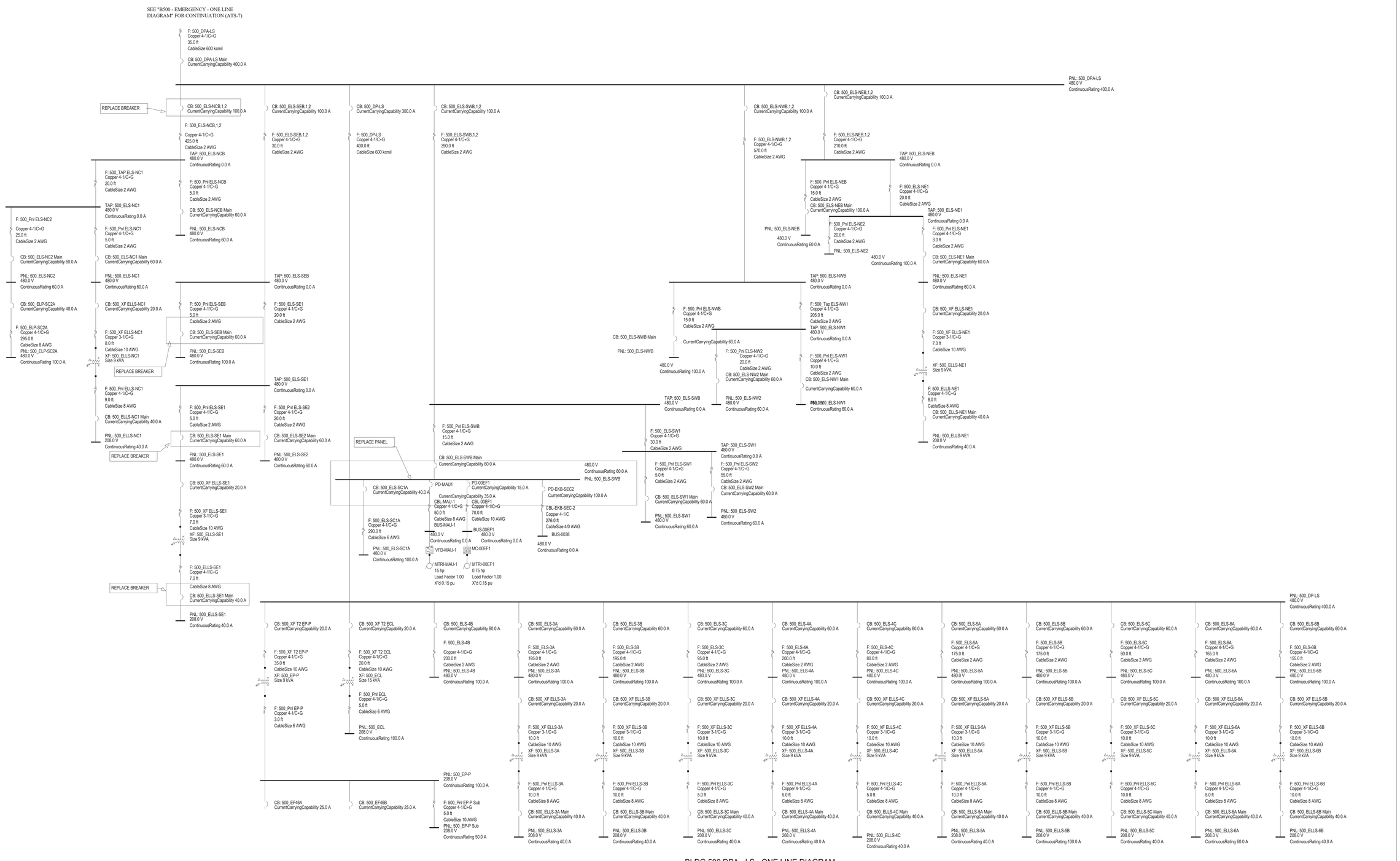
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E500-111

VA FORM 08-6231



BLDG 500 DPA - LS - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DPA-LS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

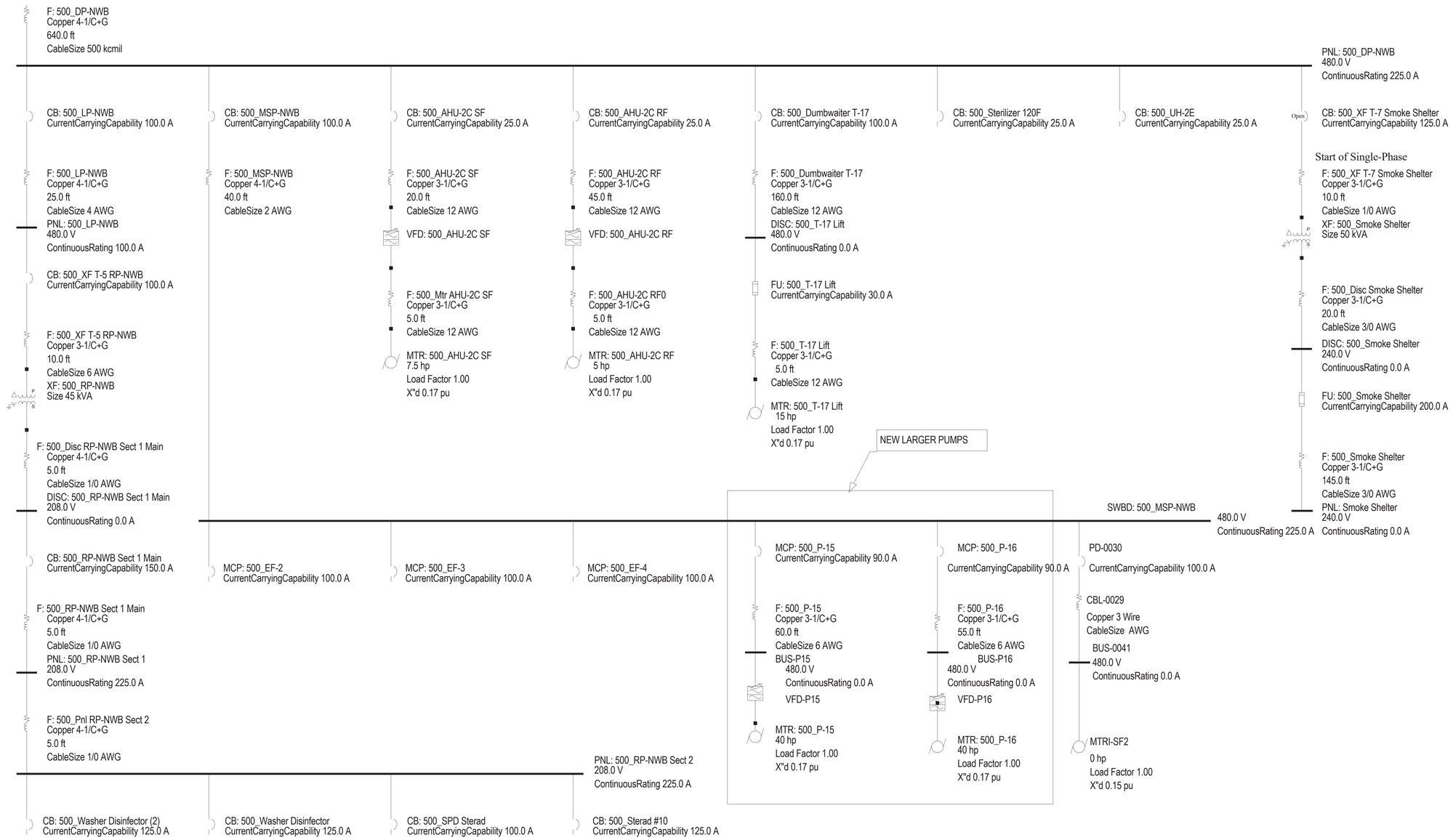
Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-111.1

VA FORM 08-6231

SEE "B500 - SWBD-B - ONE LINE DIAGRAM" FOR CONTINUATION



BLDG 500 - DP-NWB - ONE LINE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-NWB

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

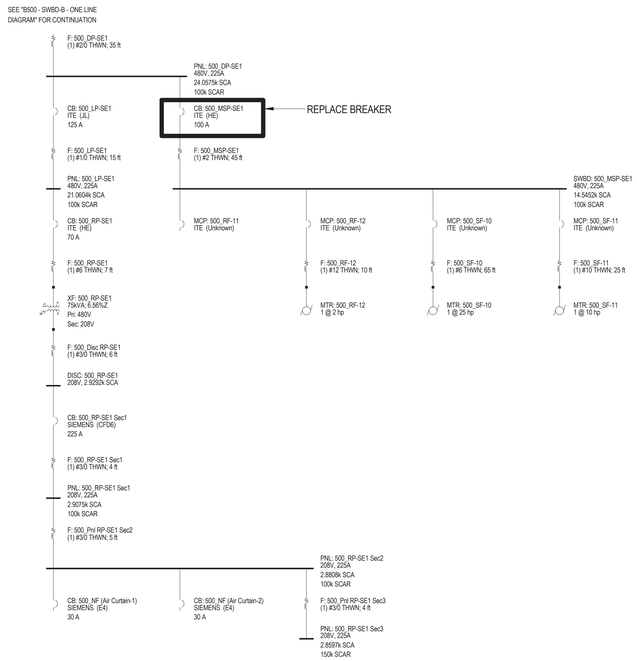
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

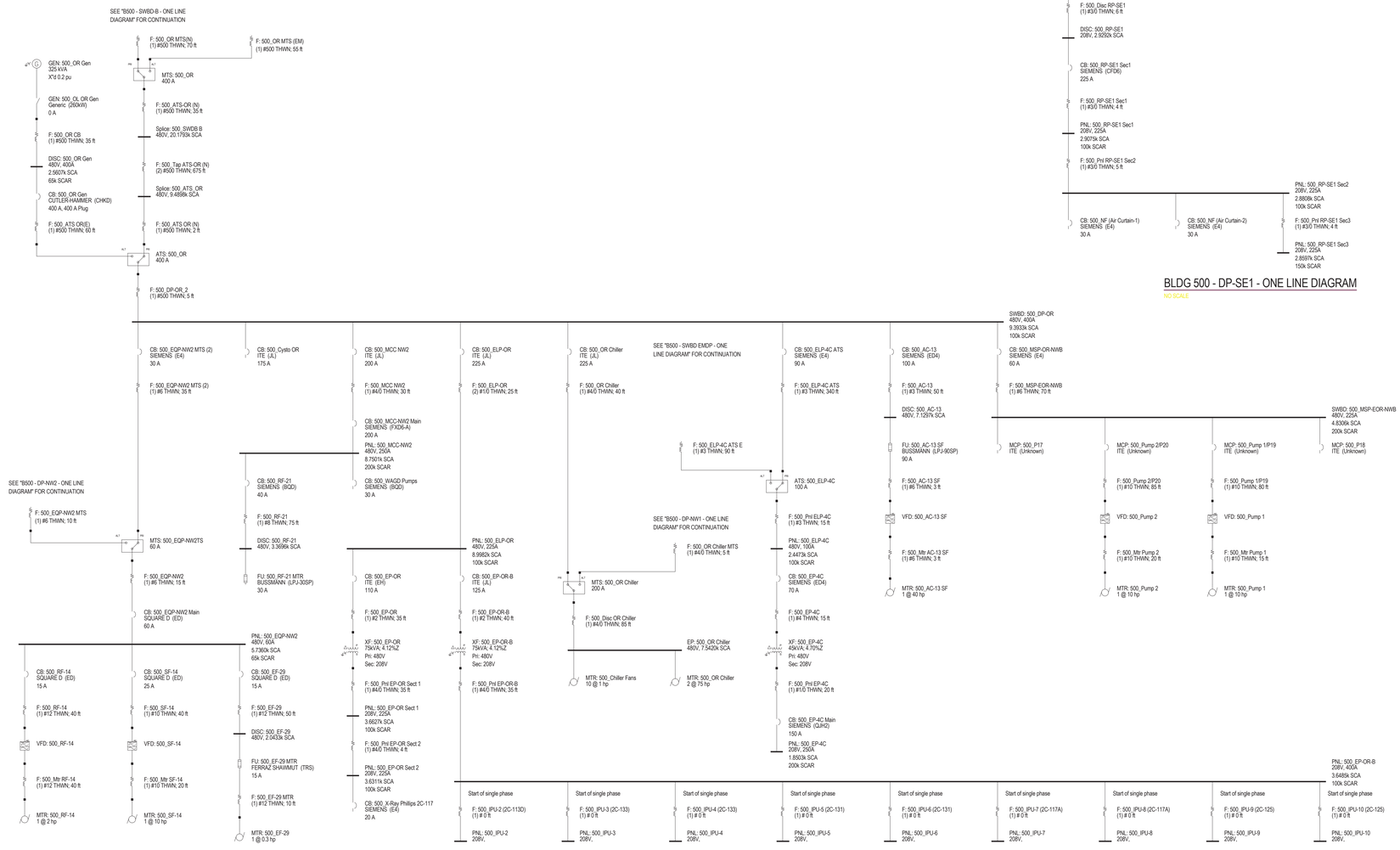
Drawing Number: E500-112

VA FORM 08-6231



BLDG 500 - DP-SE1 - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-OR - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SE1 & DP-OR

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

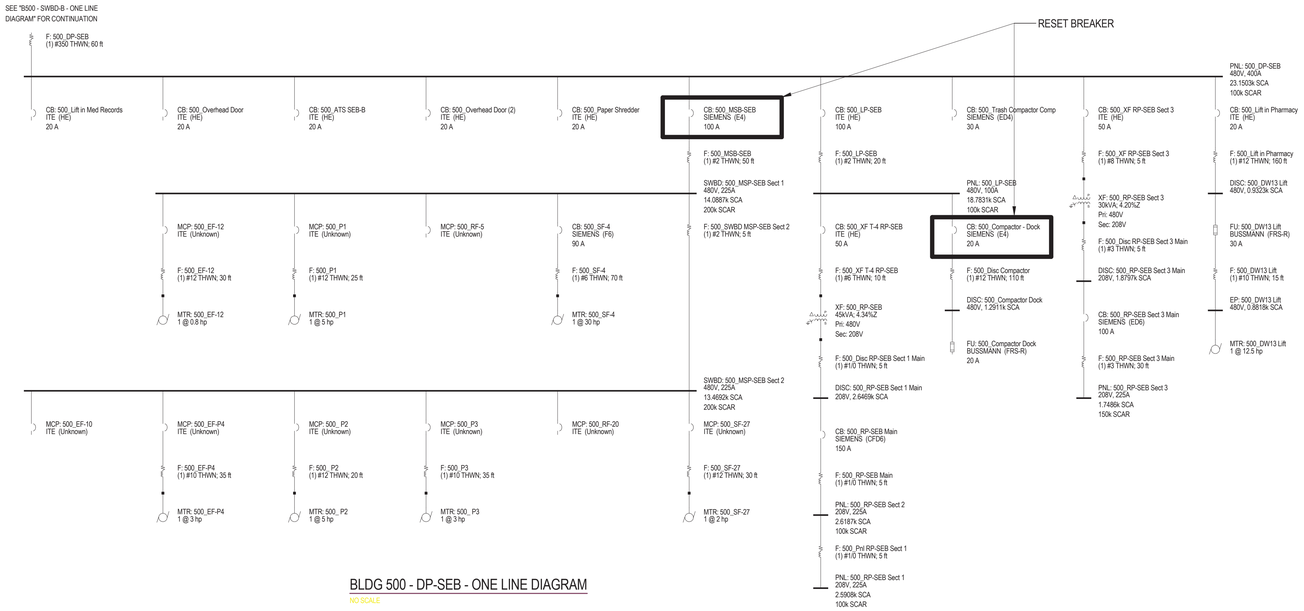
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E500-113

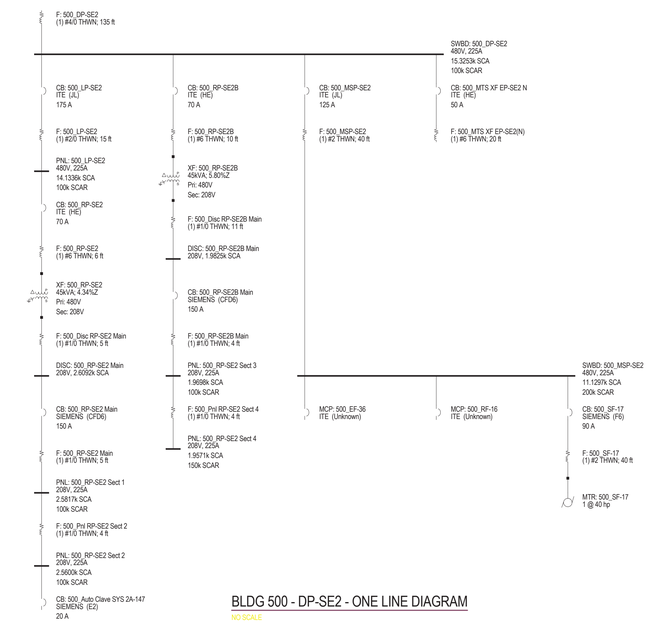
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231



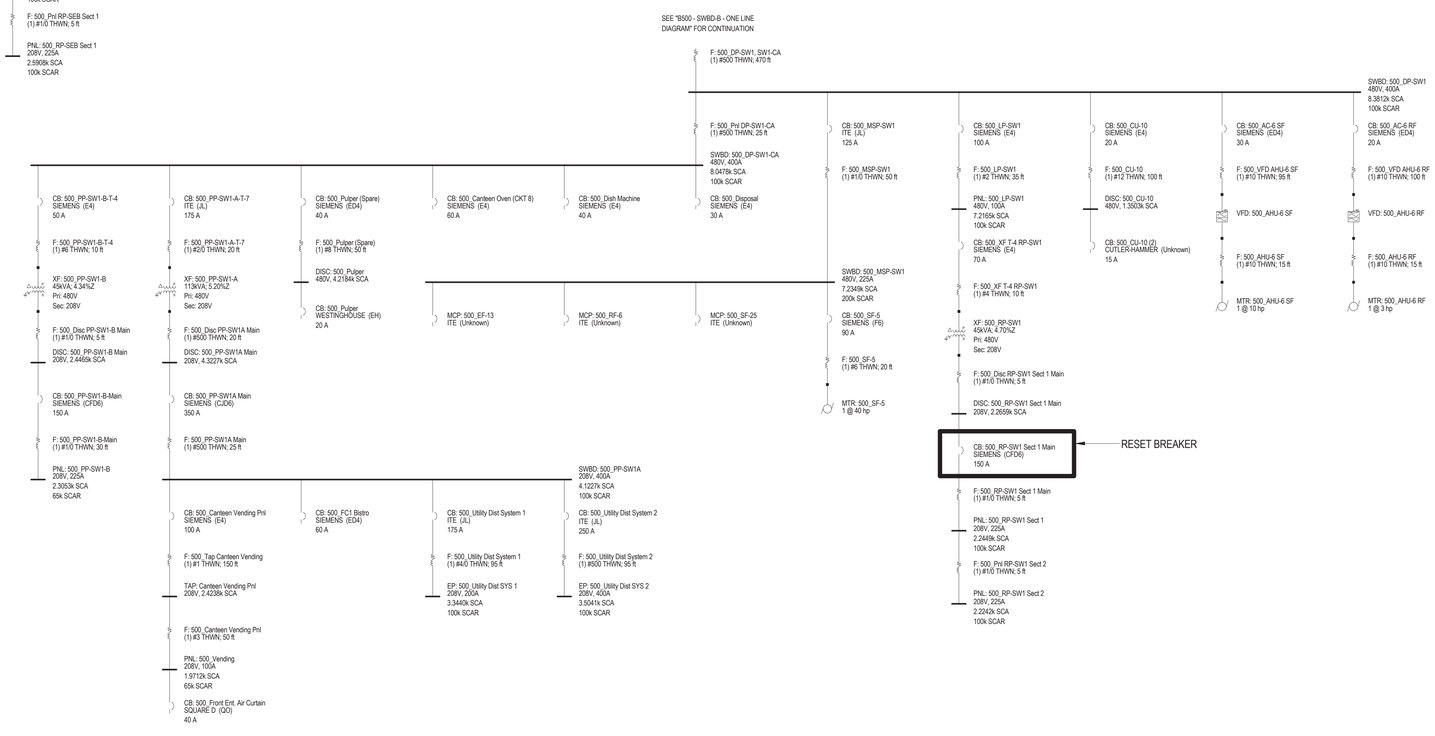
BLDG 500 - DP-SEB - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-SE2 - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-SW1 - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DP-SEB, DP-SE2 & DP-SW1

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

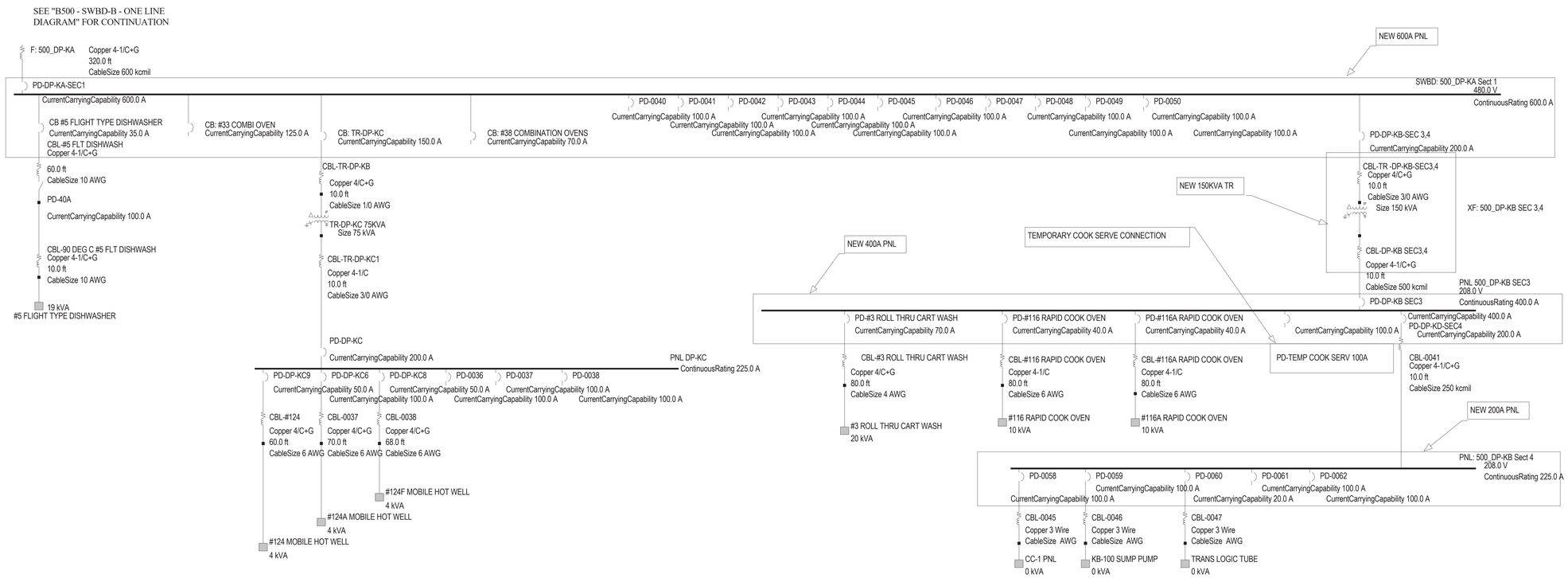
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E500-114

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231



BLDG 500 - DP - KA - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-KA

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

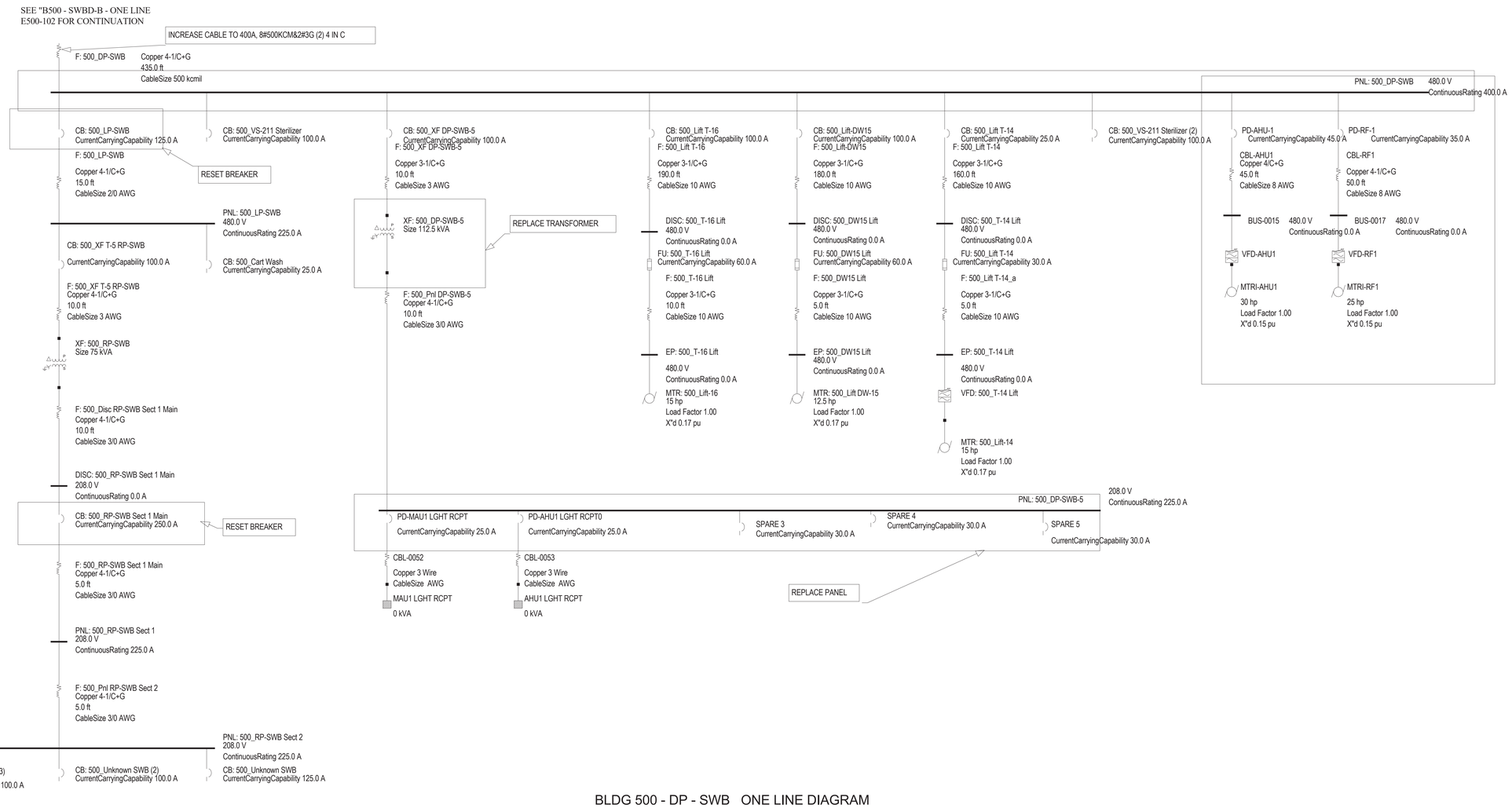
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E500-115

VA FORM 08-6231



BLDG 500 - DP - SWB ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-SWB-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

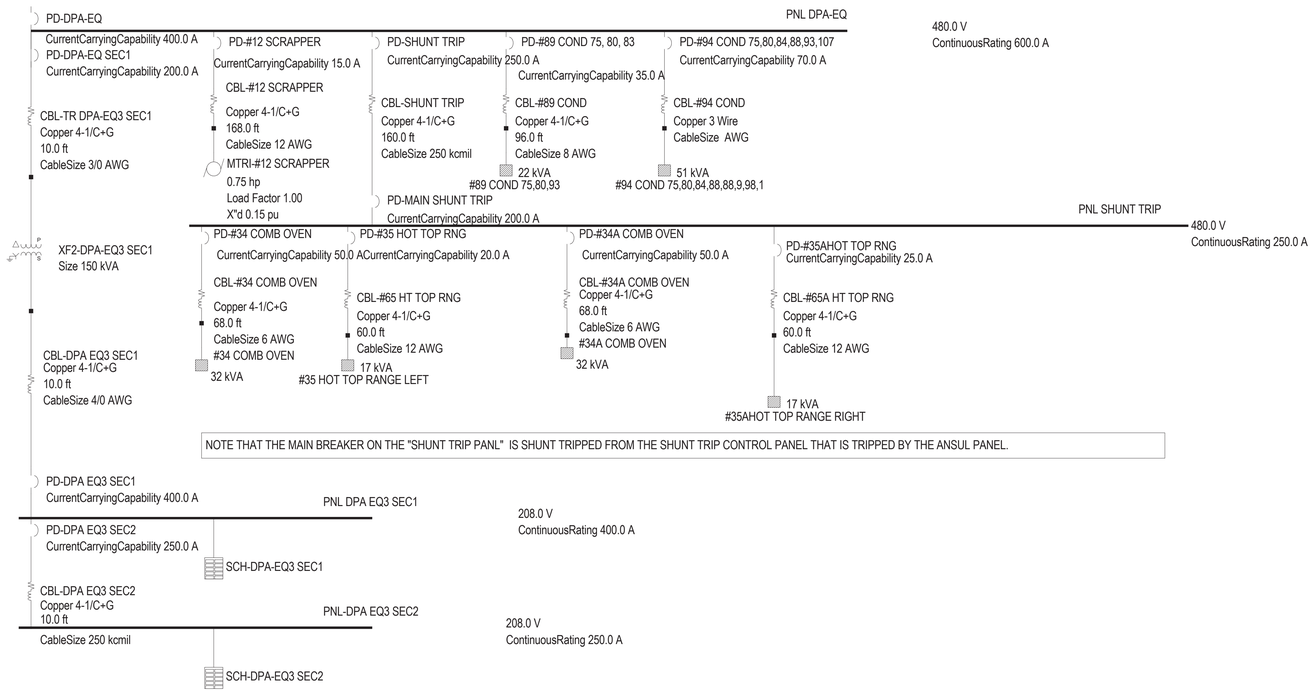
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: E500-116

VA FORM 08-6231



BLDG 500 - EMERGENCY PANEL DPA - EQ - ONE LINE DIAGRAM

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-EM PANEL-DPA-EQ

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E500-120

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - NEW PANELS ELEC. ROOM GA137H

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E600

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - NEW PANELS ELEC. ROOM GA139A

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E600-1

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - NEW PANELS ELEC. ROOM GB100E

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E600-2

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - NEW PANELS ELEC. ROOM GC105D

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E600-4

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - NEW PANELS ELEC. ROOM GD102A

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E600-5

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - ELECTRICAL EQUIPMENT, BREAKER AND PROTECTIVE DEVICES SCHEDULE

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E601

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - BREAKER SETTINGS LOW VOLTAGE 480 BREAKERS SWB-A AND SWB-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

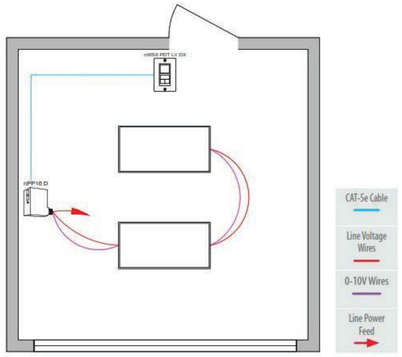
Project Number: 613-19-103

Building Number: 500

Drawing Number: E602

VA FORM 08-6231

Wired



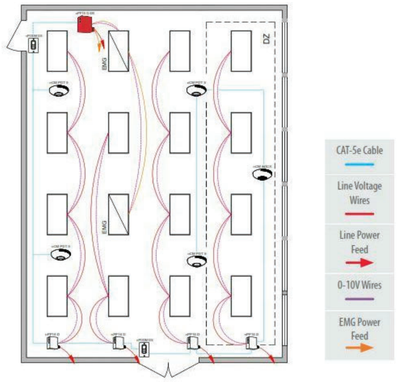
Bill of Materials

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nWSX PDT LV DX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower

1 PRIVATE OFFICE

NOT TO SCALE

Wired



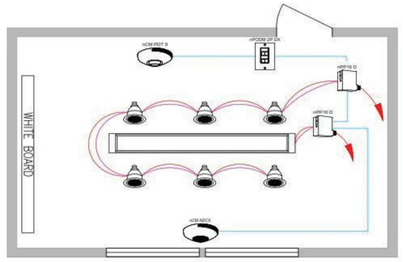
Bill of Materials

Symbol	Qty	Product #	Description
	4	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPP16 D ER EFP	Emergency Relay Pack with 0-10V Dimming Output
	2	nPODM DX	On/Off, Raise/Lower WallPod
	4	nCM PDT 9 RJB	Occupancy Sensor

2 OPEN OFFICE

NOT TO SCALE

Wired



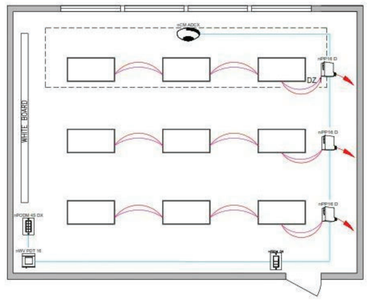
Bill of Materials

Symbol	Qty	Product #	Description
	2	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODM 2P DX	2-Pole On/Off, Raise/ Lower WallPod
	1	nCM PDT 9 RJB	Occupancy Sensor

3 CONFERENCE ROOM

NOT TO SCALE

Wired



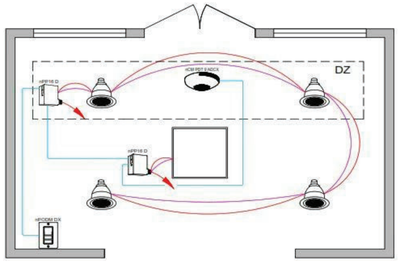
Bill of Materials

Symbol	Qty	Product #	Description
	3	nPP16 D EFP	Relay Module with 0-10V Dimming Output
	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nPODM 4S DX	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower

4 CLASSROOM

NOT TO SCALE

Wired



CAT-5e Cable | Line Voltage Wires | Line Power Feed | 0-10V Wires

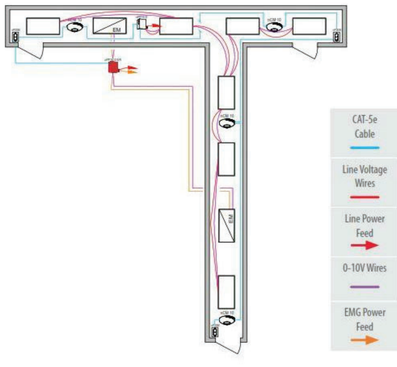
Bill of Materials

Symbol	Qty	Product #	Description
	2	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODM DX	On/Off, Raise/Lower WallPod

5 LOBBY

NOT TO SCALE

Wired



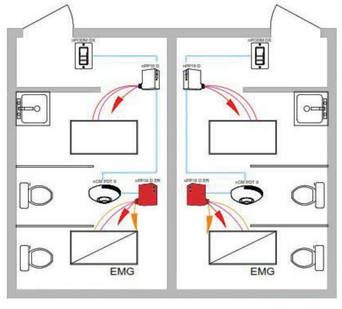
Bill of Materials

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPP16 D ER EFP	Emergency Relay Pack with 0-10V Dimming Output
	4	nCM 10 RJB	Occupancy Sensor
	3	nPODM	On/Off WallPod

6 CORRIDOR

NOT TO SCALE

Wired



CAT-5e Cable | 0-10V Wires | Line Voltage Wires | Line Power Feed | EM Power Feed

Bill of Materials

Symbol	Qty	Product #	Description
	2	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	2	nPP16 D ER EFP	Emergency Module with 0-10V Dimming Output
	2	nPODM DX	On/Off & Raise/ Lower WallPod
	2	nCM PDT 9 RJB	Occupancy Sensor

7 PUBLIC RESTROOM

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - ROOMS LIGHTING SCHEMES

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

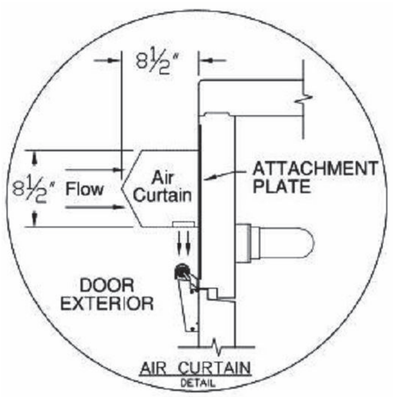
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

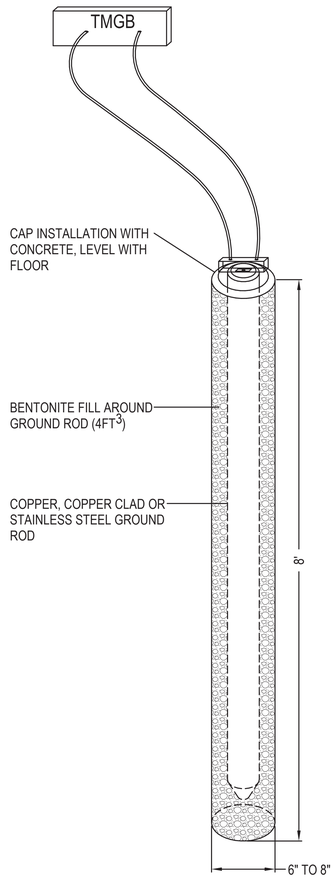
Drawing Number: E700

VA FORM 08-6231



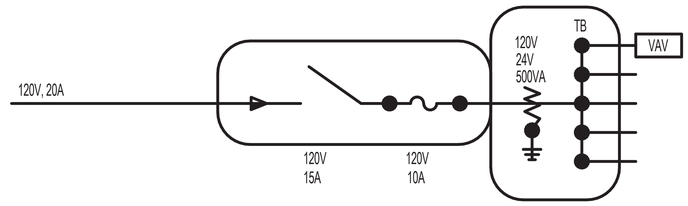
1 **AIR CURTAIN DETAIL**

NOT TO SCALE

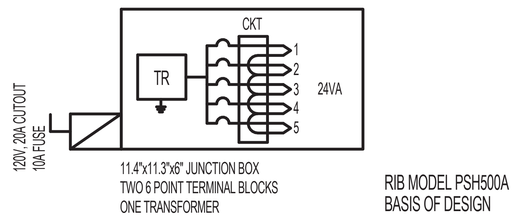


2 **GROUND TRIAD DETAILS**

NOT TO SCALE



SCHEMATIC DIAGRAM



3 **DETAILS FOR POWER SUPPLY TO VAV BOXES**

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - AIR CURTAIN, ANSUL MICROSWITCH AND GROUND TRIAD DETAILS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: E701

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - DETAILS - SECURITY

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

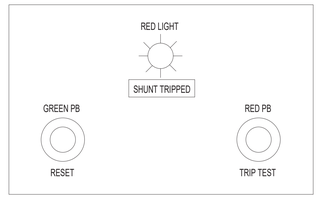
Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E702

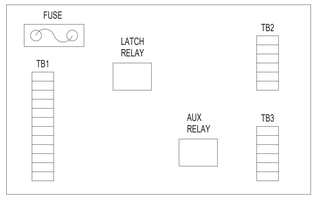
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231

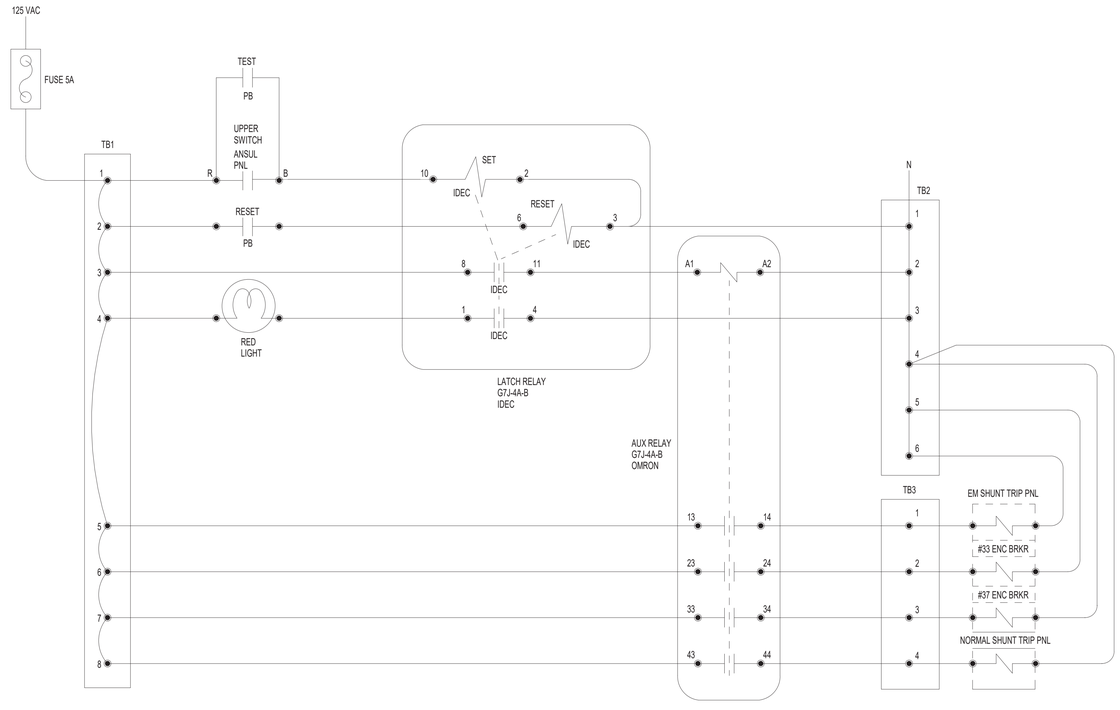
SHUNT TRIP CONTROL PANEL OPERATIONS		
SHUNT TRIP CONTROL PANEL SEQUENCE OF OPERATION	RESETTING THE SHUNT TRIP CONTROL PANEL	TESTING THE SHUNT TRIP CONTROL PANEL
1. WHEN THE ANSUL CONTROL PANEL CLOSES UPPER SWITCH CONTACTS "R AND B", CURRENT FLOWS THROUGH "SHUNT TRIP CONTROL PANEL" IDEC "SET" COIL. 2. THE IDEC "SET" COIL CLOSES CONTACT IDEC "8 AND 11", ALLOWING CURRENT TO FLOW THROUGH THE OMRON AUXILIARY RELAY COIL "A1 - A2". IT ALSO CLOSES CONTACTS IDEC "1 AND 4", TO TURN ON THE RED ALARM LIGHT. 3. THE OMRON AUXILIARY RELAY COIL "A1 - A2" CLOSES OMRON CONTACTS "13 AND 14", "23 AND 24" AND "33 AND 34". 4. OMRON CONTACTS "13 AND 14" SHUNT TRIP THE MAIN BREAKER IN THE SHUNT TRIP PANEL. THIS DE-ENERGIZES ELECTRICAL COOKING EQUIPMENT ITEMS # 34, #34A, #35, #35A, #38, #38A AND #39. 5. OMRON CONTACTS "23 AND 24" SHUNT TRIP THE ENCLOSED CIRCUIT BREAKER #33. THIS DE-ENERGIZES ELECTRICAL COOKING EQUIPMENT ITEM #33. 6. OMRON CONTACTS "33 AND 34" SHUNT TRIP THE ENCLOSED CIRCUIT BREAKER #37. THIS DE-ENERGIZES ELECTRICAL COOKING EQUIPMENT ITEM #37. NOTE: WHEN SHUNT TRIP BREAKERS ARE TRIPPED, THE BREAKER HANDLE SHOULD HAVE MOVED TOWARD "OFF" BUT NOT TOTALLY IN THE "OFF" POSITION. CAUTION: PRIOR TO WORKING ON OR CLEANING THE ELECTRICAL EQUIPMENT UNDER THE HOODS, HAVE A CERTIFIED ELECTRICIAN VERIFY THAT THERE IS NO POWER TO THIS EQUIPMENT! CAUTION: DO NOT OPERATE OR RESET THE SHUNT TRIP CONTROL PANEL UNTIL THE AHJ HAS CLEARED THE INCIDENT THAT TRIGGERED THE ANSUL FIRE PROTECTION SYSTEM. 7. FOLLOW "RESETTING THE SHUNT TRIP CONTROL PANEL" PROCEDURE TO RESTORE POWER TO THE ELECTRICAL COOKING EQUIPMENT.	CAUTION: CONFIRM THAT THE AHJ HAS CLEARED THE INCIDENT AND THAT ALL PERSONNEL ARE CLEAR OF THE ELECTRICAL COOKING EQUIPMENT. 1. IN THE SHUNT TRIP POWER PANEL, SWITCH ALL BREAKERS TO "OFF", INCLUDING THE MAIN BREAKER. 2. SWITCH ENCLOSED CIRCUIT BREAKER #33 TO OFF. 3. SWITCH ENCLOSED CIRCUIT BREAKER #37 TO OFF. 4. PROCEED TO THE ANSUL FIRE PROTECTION PANEL AND VERIFY THAT IT HAS BEEN RESTORED TO THE NORMAL STATE; I.E. NO ALARMS, NO TRIP SIGNALS. 5. PROCEED TO THE SHUNT TRIP CONTROL PANEL. 6. VERIFY THAT THE RED ALARM LIGHT IS STILL ON. 7. PRESS THE RESET PUSH BUTTON, AND THE RED LIGHT WILL GO OFF. IF THE LIGHT GOES OFF, THIS INDICATES THAT THE ANSUL TRIP SIGNAL IS OFF, AND THAT THE SHUNT TRIP CONTROL PANEL IS RESET TO NORMAL. NORMAL STATE WILL ALLOW YOU TO START ENERGIZING THE COOKING EQUIPMENT. NOTE: IF THE RED LIGHT DOES NOT GO OFF, THE ANSUL PANEL IS STILL SENDING A TRIP SIGNAL. 8. PROCEED TO THE SHUNT TRIP POWER PANEL TO START ENERGIZING THE COOKING EQUIPMENT. CLOSE THE MAIN BREAKER, THEN CLOSE REMAINING BREAKERS. 9. PROCEED TO ENCLOSED CIRCUIT BRTEAKER #33, AND CLOSE THE CIRCUIT BREAKER TO ENERGIZE ITEM #33. 10. PROCEED TO ENCLOSED CIRCUIT BRTEAKER #37, AND CLOSE THE CIRCUIT BREAKER TO ENERGIZE ITEM #37. NOTE: ALL ELECTRICAL COOKING EQUIPMENT BENEATH THE HOODS HAS BEEN RESTORED TO NORMAL.	NOTE: THIS TEST WILL VERIFY THE OPERATION OF THE SHUNT TRIP CONTROL PANEL AND ALSO TRIP ALL ELECTRICAL COOKING EQUIPMENT UNDER THE HOODS. THE TEST WILL NOT TRIGGER THE FIRE ALARM. 1. NOTIFY PERSONNEL THAT THE SHUNT TRIP SYSTEM WILL BE TESTED AND THAT ALL ELECTRICAL COOKING EQUIPMENT BENEATH THE HOOD WILL BE SHUT DOWN. 2. AT THE SHUNT TRIP CONTROL PANEL, PRESS THE "TEST" BUTTON. THIS WILL INITIATE STEPS NO. 2 THROUGH NO. 6 AS DESCRIBED IN "SHUNT TRIP CONTROL PANEL SEQUENCE OF OPERATION". 3. IF THE TEST FUNCTIONED PROPERLY, PROCEED TO RESET THE PANEL AND RE-ENERGIZE THE COOKING EQUIPMENT. 4. FOLLOW "RESETTING THE SHUNT TRIP CONTROL PANEL" FOR RESETTING THE PANEL AND THE COOKING EQUIPMENT.



PANEL DOOR



PANEL INSIDE



1 **SHUNT TRIP CONTROL PANEL**

NOT TO SCALE

BOM-SHUNT TRIP CONTROL PANEL					
ITEM	DESCRIPTION	PART NUMBER	MANUFACTURER	NOTES	ITEM NAME PLATE
1	CONTROL PANEL WITH KEY LOCK	N/A	ANY UL LISTED	NEMA 2 - 12" x 12" x 6"	"SHUNT TRIP CONTROL PANEL" BLACK WITH WHITE LETTERING
2	LATCHING RELAY	RR2KP-U AC102 RELAY, SR3P-06 SOCKET	IDEC	SELF MAINTAINED LATCH RELAY, DPDT, 120VAC, 10A CONTACTS, WITH SOCKET FOR DIN RAIL MOUNT. CONTRACTOR TO PROVIDE DIN RAIL FOR MOUNTING.	"SHUNT TRIP CONTROL PANEL" BLACK WITH WHITE LETTERING
3	AUXILIARY RELAY	G7J-4A-B RELAY, R99-04 W-BRACKET ACCESSORY	OMRON	RELAY WITH 4 SINGLE THROW-NO CONTACTE, COIL RATING 120 VAC, 25A CONTACTS, SCREW TERMINAL WIRING.	
4	RED INDICATING LIGHT	DR30D0L-L9RZC	FUJI ELECTRIC	30 mm RED INDICATING LIGHT, 115-127 VAC WITH TRANSFORMER	"SYSTEM TRIPPED" RED WITH WHITE LETTERING
5	GREEN RESET PUSH BUTTON	GCX1112	FUJI ELECTRIC	MOMENTARY EXTENDED PUSH BUTTON	"RESET SHUNT TRIP" GREEN WITH WHITE LETTERING
6	BLACK TEST BUTTON	GCX1110	FUJI ELECTRIC	MOMENTARY EXTENDED PUSH BUTTON	"TEST SHUNT TRIP" BLACK WITH WHITE LETTERING
7	TERMINAL BLOCK NO 1	N/A	ANY UL LISTED	12 POINT, 120VAC	"TB 1" BLACK WITH WHITE LETTERING
8	TERMINAL BLOCKS NO 2 AND 3	N/A	ANY UL LISTED	6 POINT, 120VAC	"TB 2" AND "TB 3" BLACK WITH WHITE LETTERING
9	WIRING	N/A	ANY UL LISTED	ALL WIRING #14, THHN, 70 DEG C, WITH RING LUG TERMINATIONS.	

VA CONTRACT NO: 36C24519C0171

Revisions:	Date:
100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - WIRING AND CONTROL DIAGRAMS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

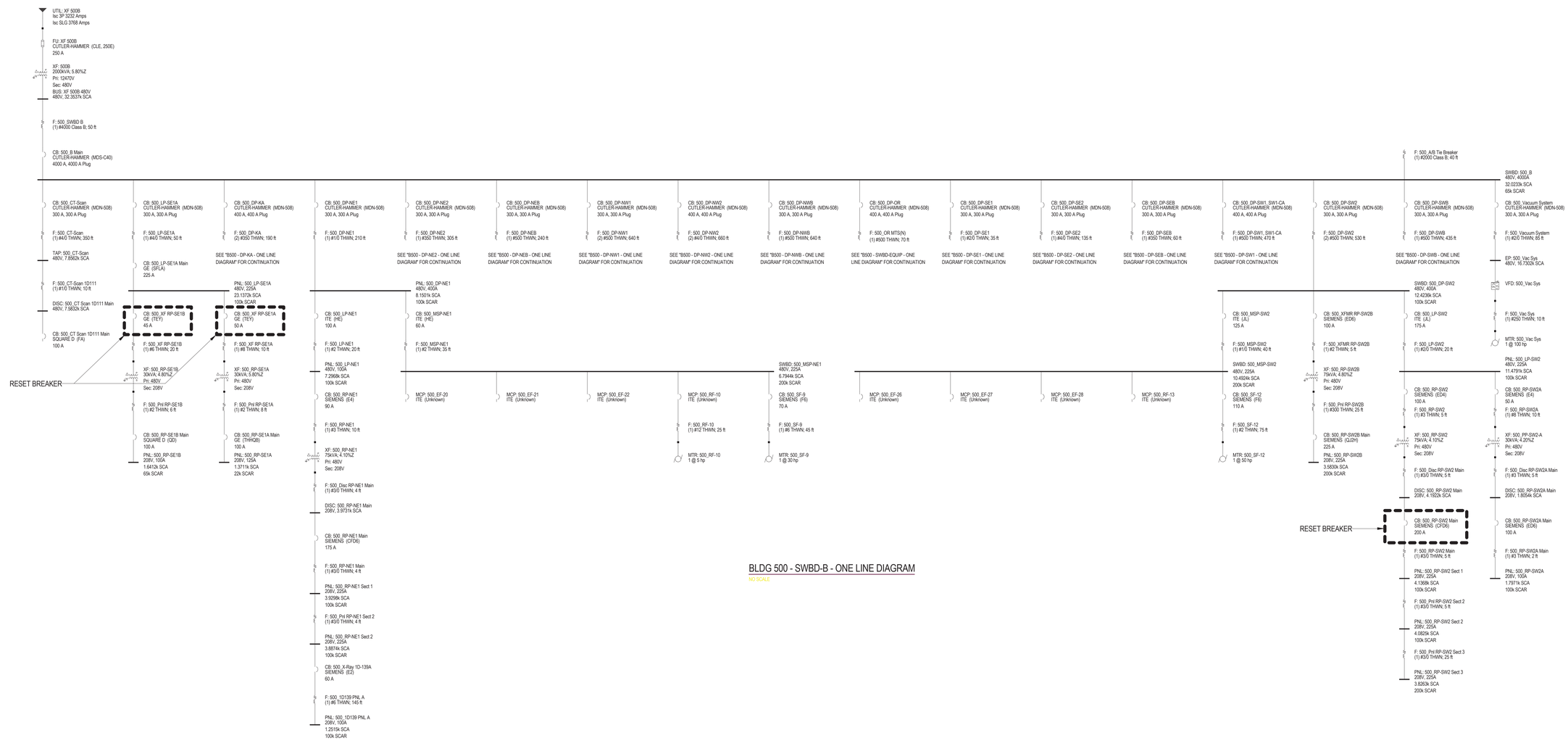
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: E703

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231



BLDG 500 - SWBD-B - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

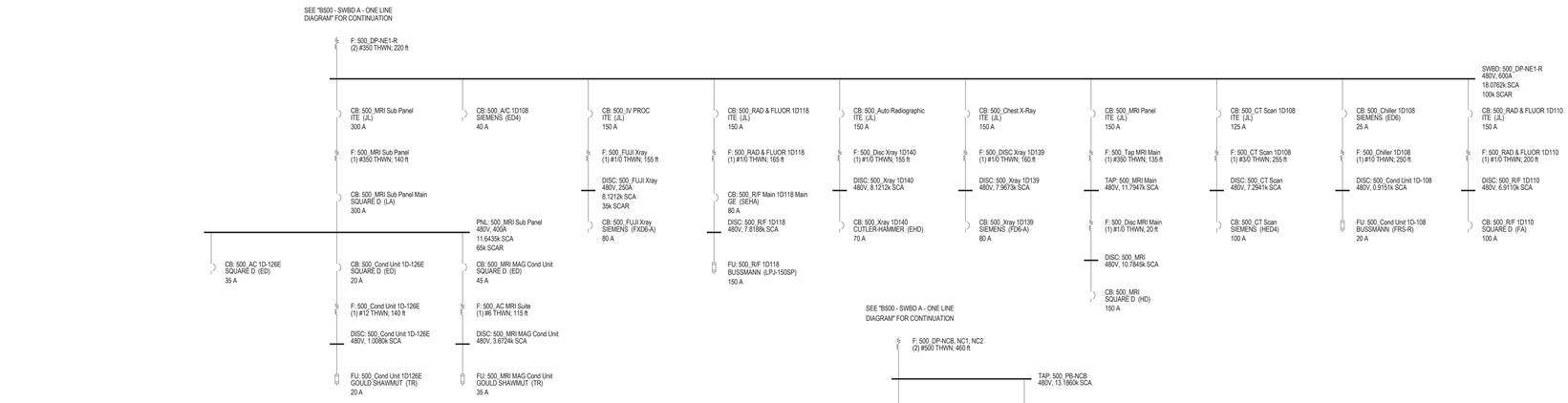
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

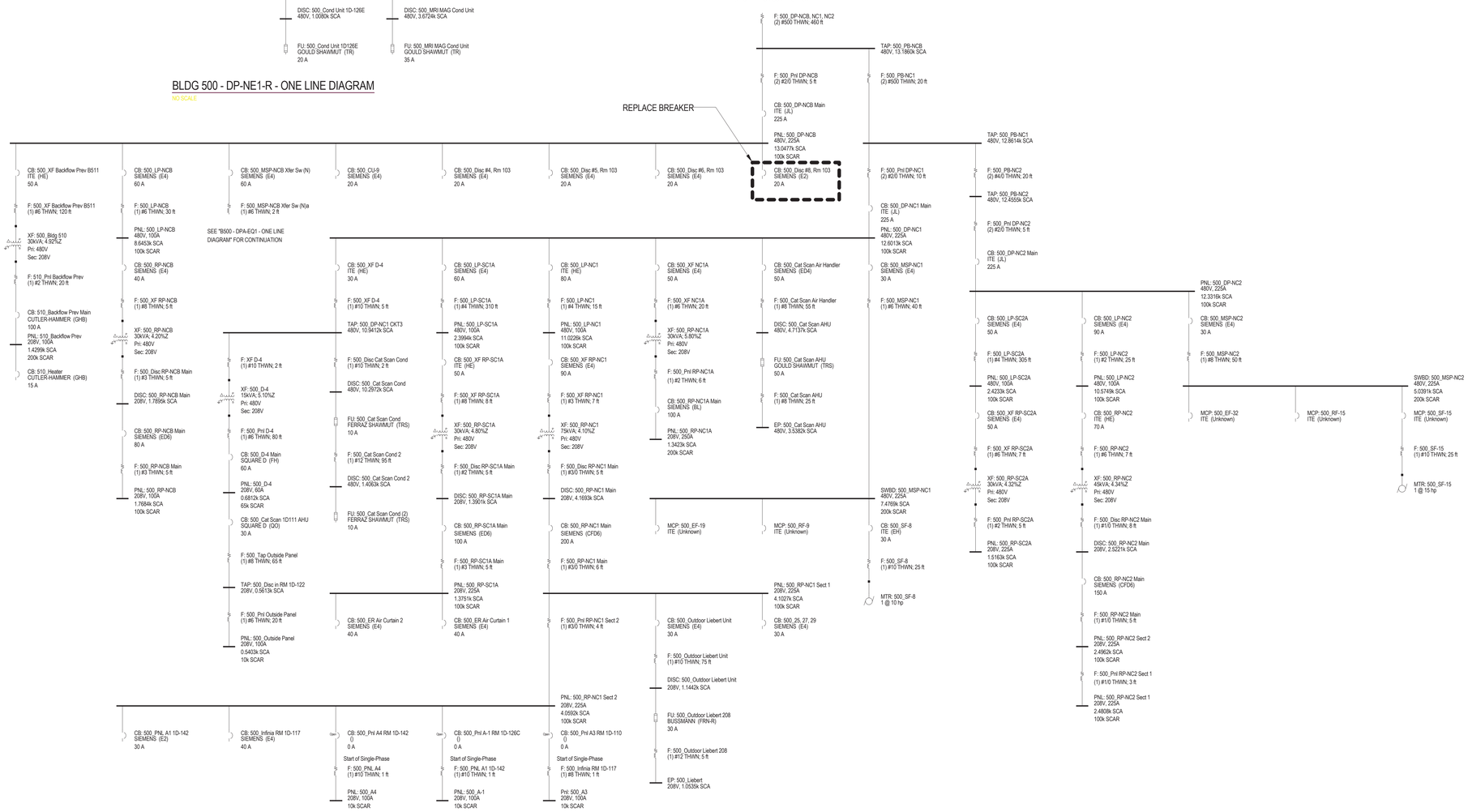
Drawing Number: ED500-102

VA FORM 08-6231



BLDG 500 - DP-NE1-R - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-NCB_NC1_NC2 - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DP-NE-R & DP-NCB_NC1_NC2

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

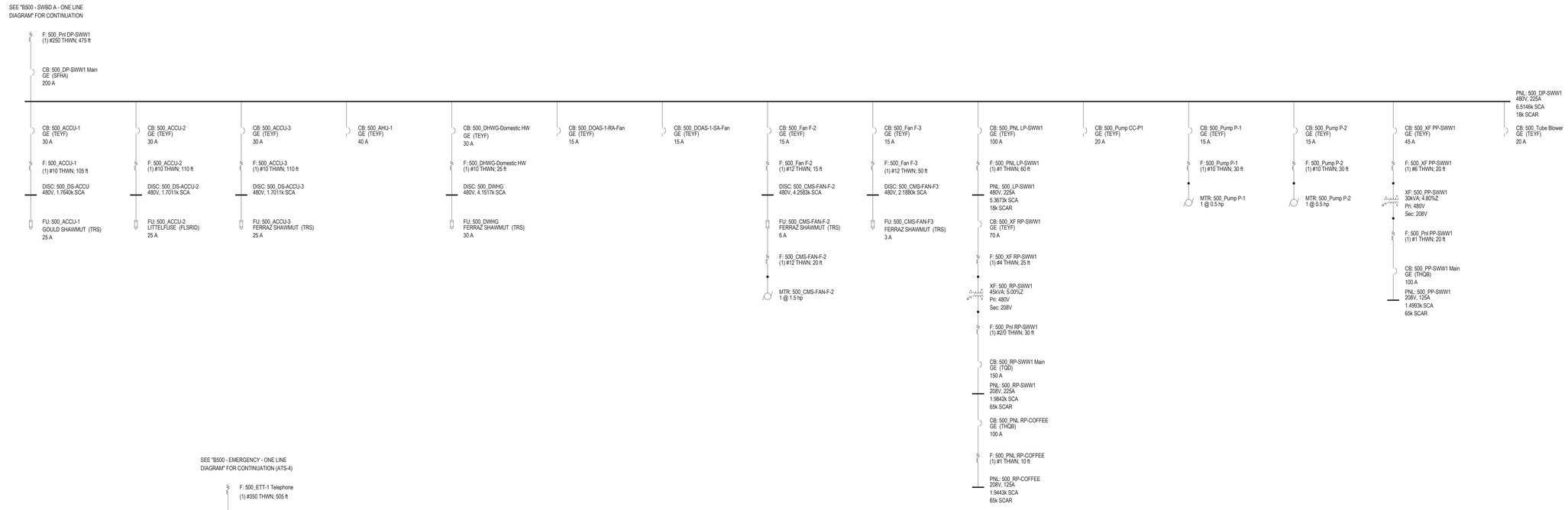
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

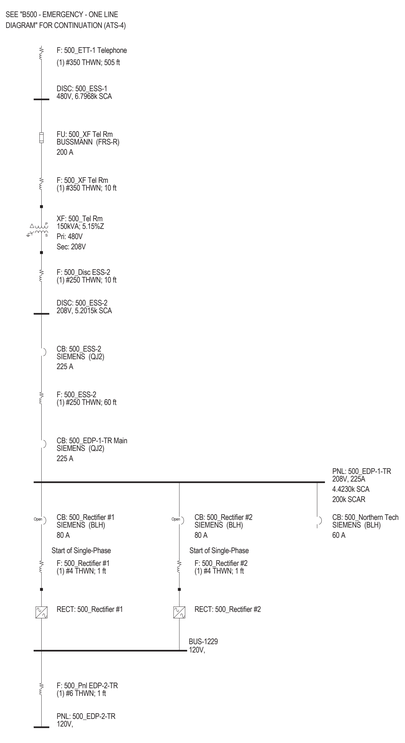
Drawing Number: ED500-104

VA FORM 08-6231



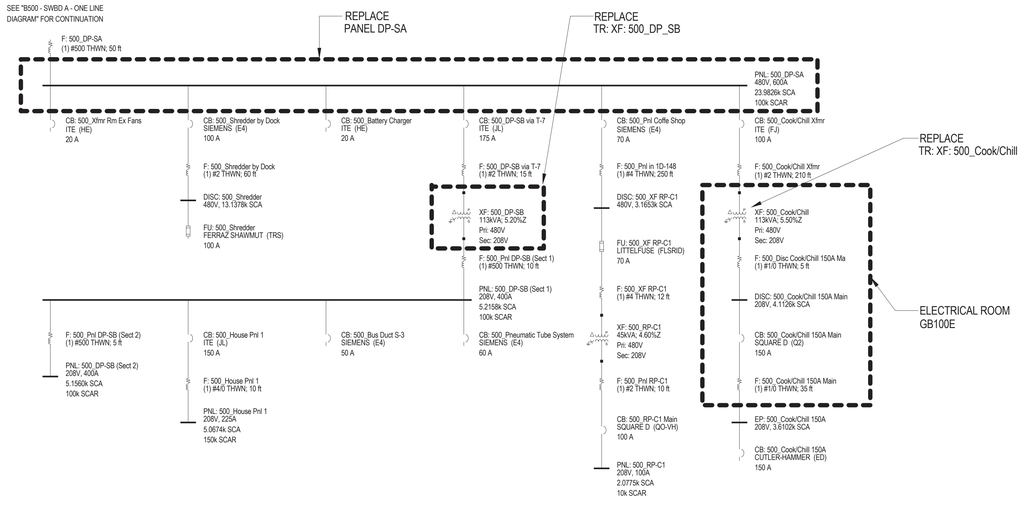
BLDG 500 - DP-SWW1 - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - EDP-1-TR - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-SA - ONE LINE DIAGRAM
ELECTRICAL ROOM GA137H

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-SWW1, EDP-1-TR & DP-SA

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

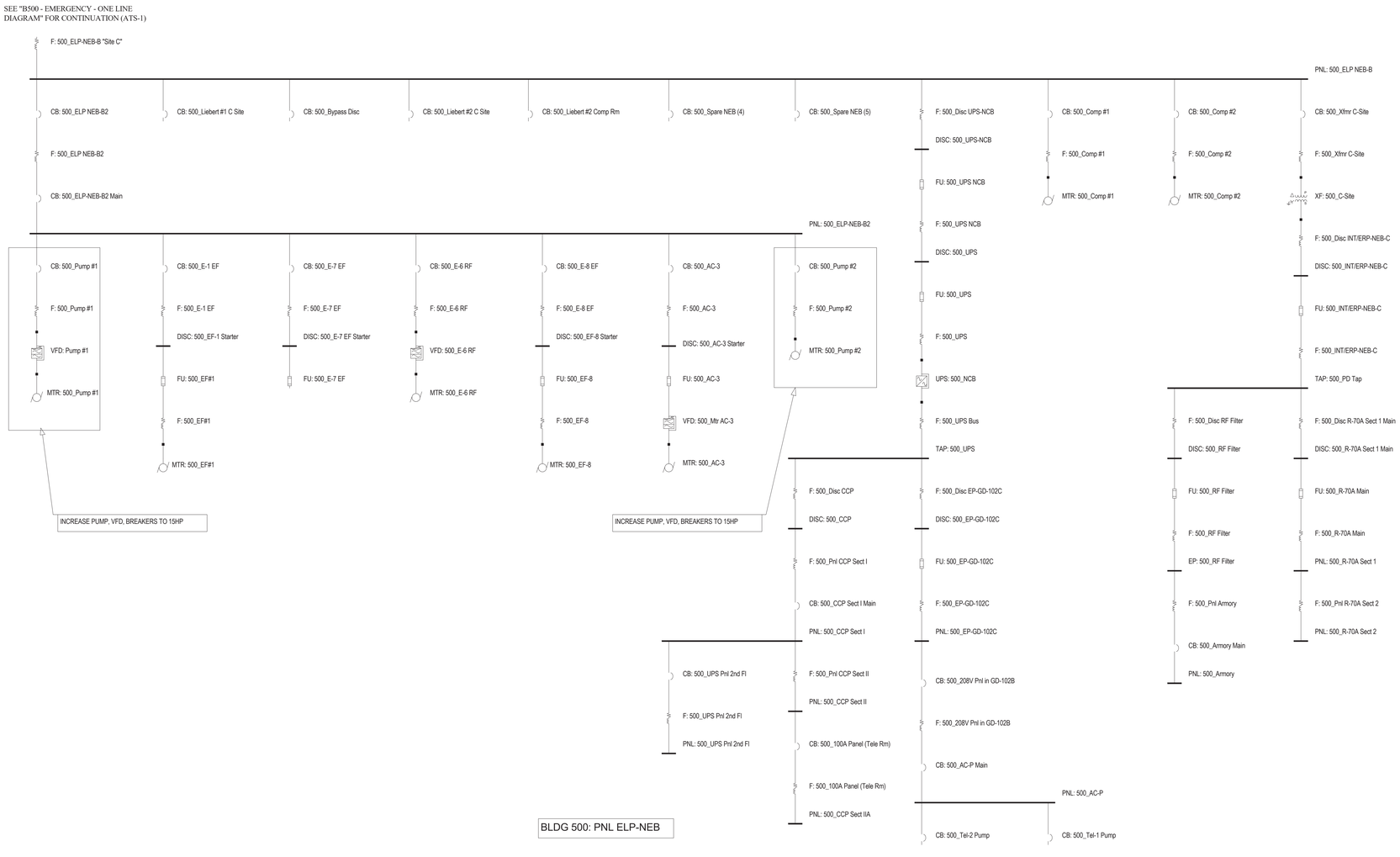
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: ED500-105

Issue Date	Checked	Drawn
07/23/21	WG	BX

VA FORM 08-6231



VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-ELP-NEB-B

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

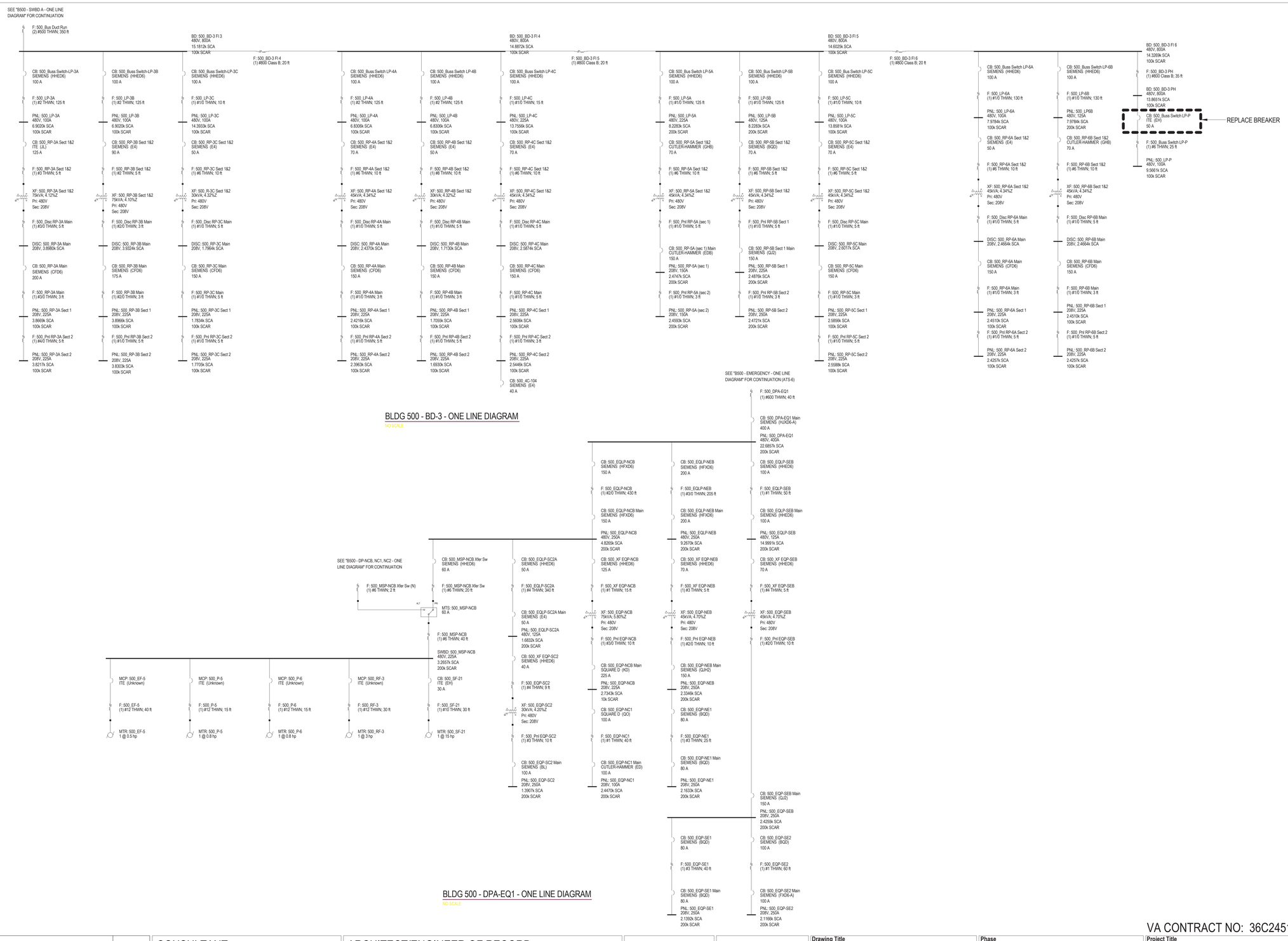
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: ED500-106

VA FORM 08-6231



BLDG 500 - BD-3 - ONE LINE DIAGRAM

NO SCALE

BLDG 500 - DPA-EQ1 - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-BD-3 & DPA-EQ1

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

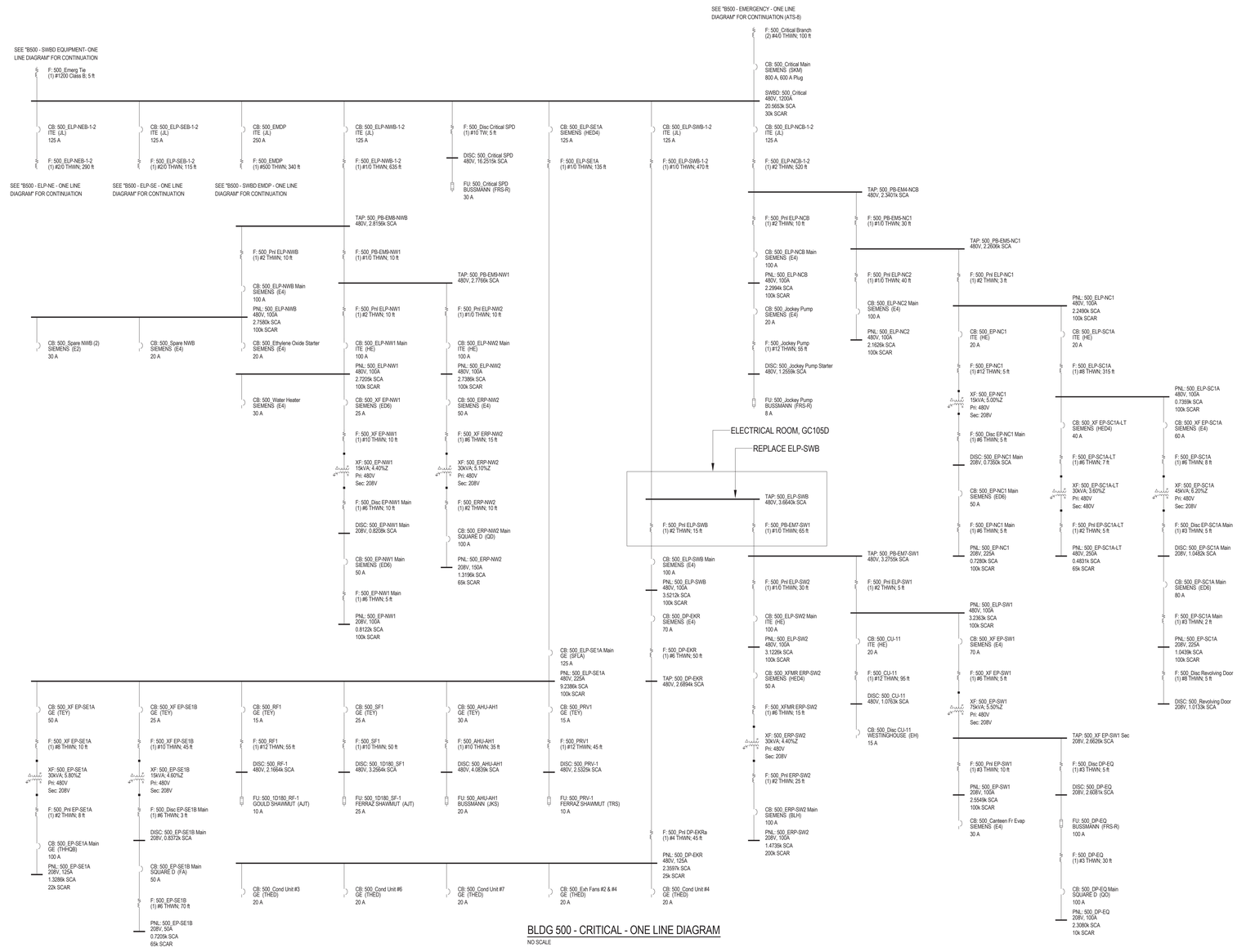
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: ED500-109

VA FORM 08-6231



BLDG 500 - CRITICAL - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-CRITICAL

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

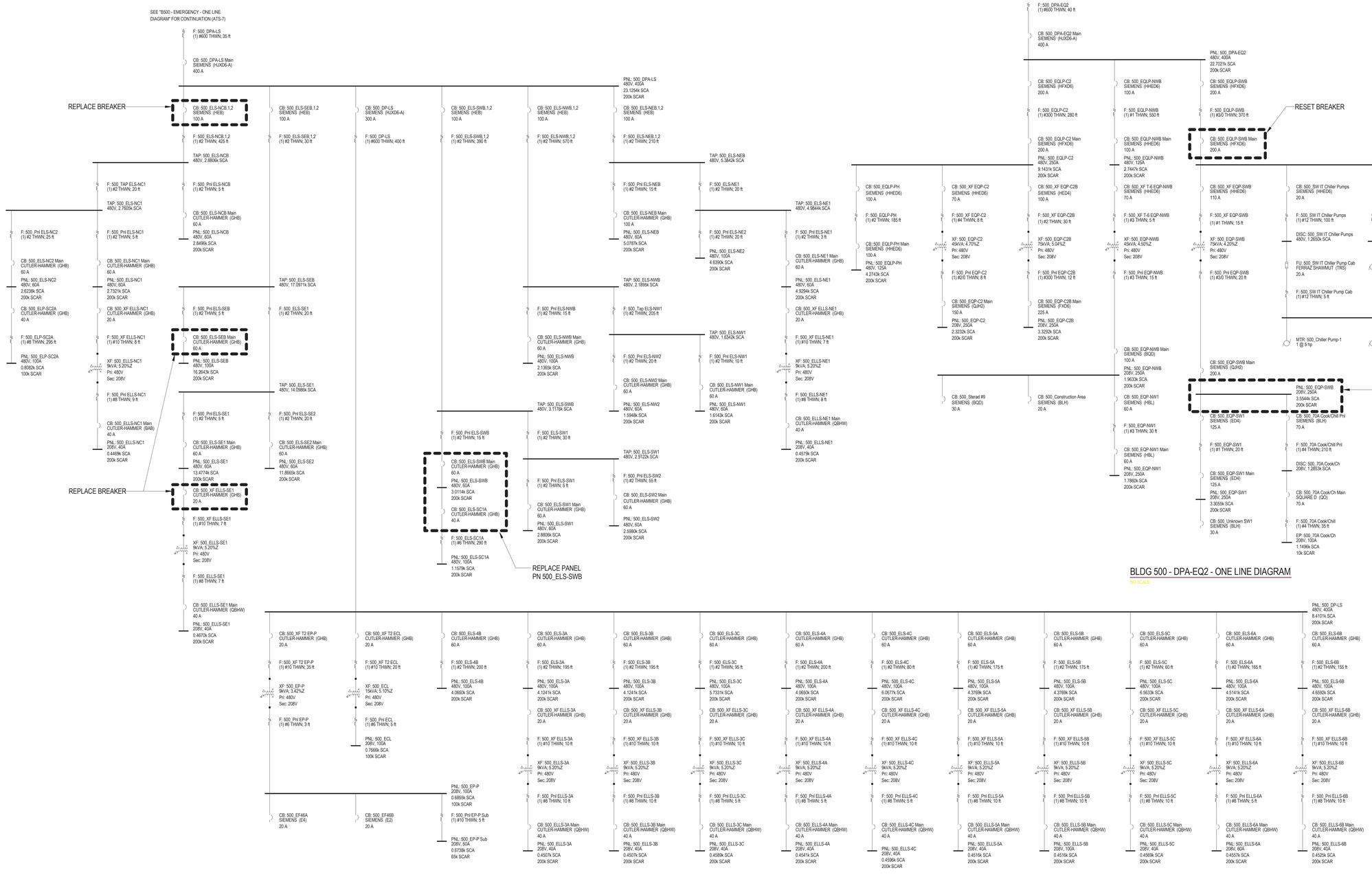
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: ED500-110

VA FORM 08-6231



BLDG 500 - DPA-LS - ONE LINE DIAGRAM

NO SCALE

BLDG 500 - DPA-EQ2 - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DPA-LS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

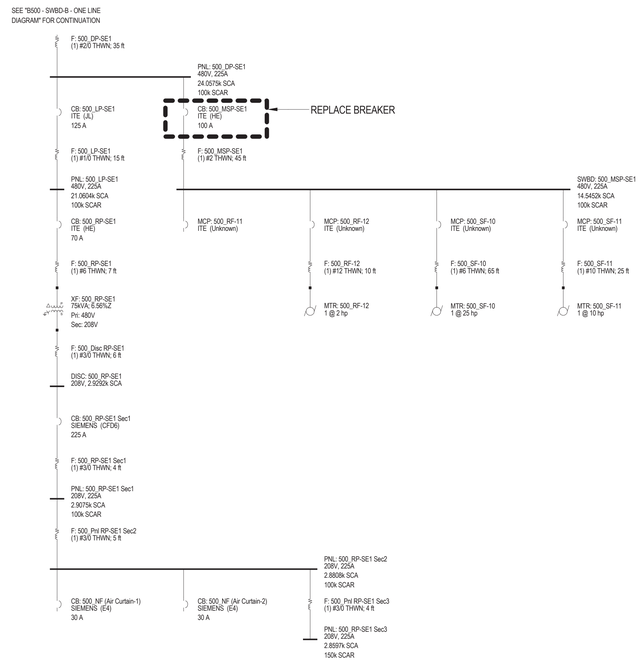
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

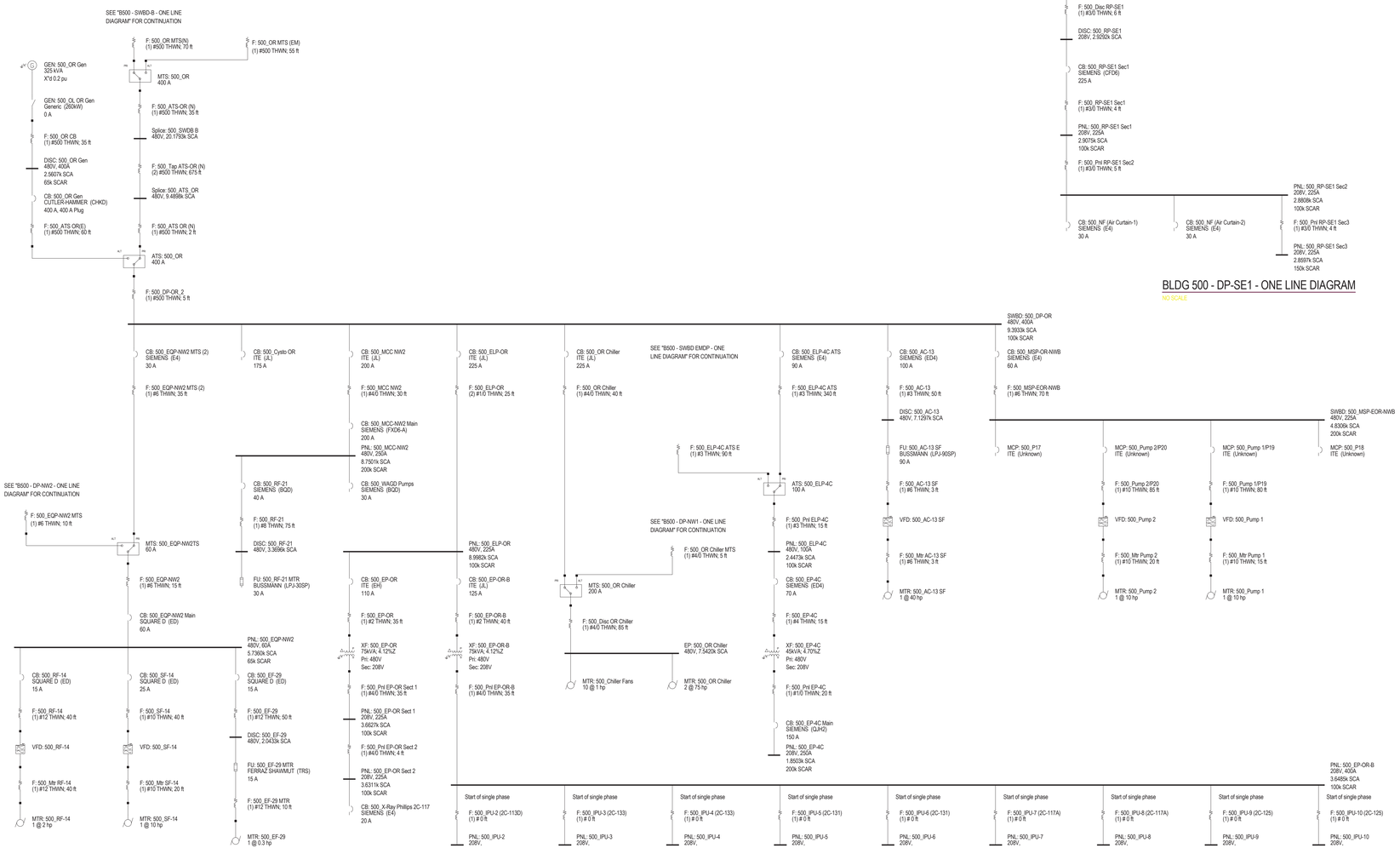
Drawing Number: ED500-111

VA FORM 08-6231



BLDG 500 - DP-SE1 - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-OR - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SE1 & DP-OR

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

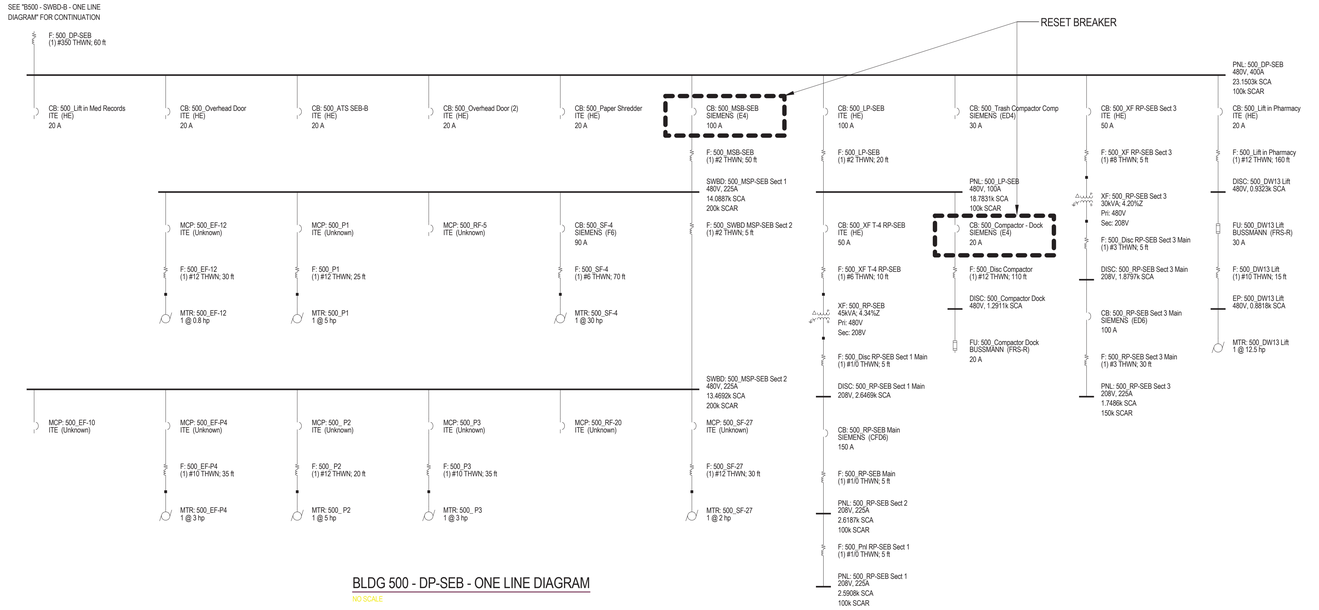
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

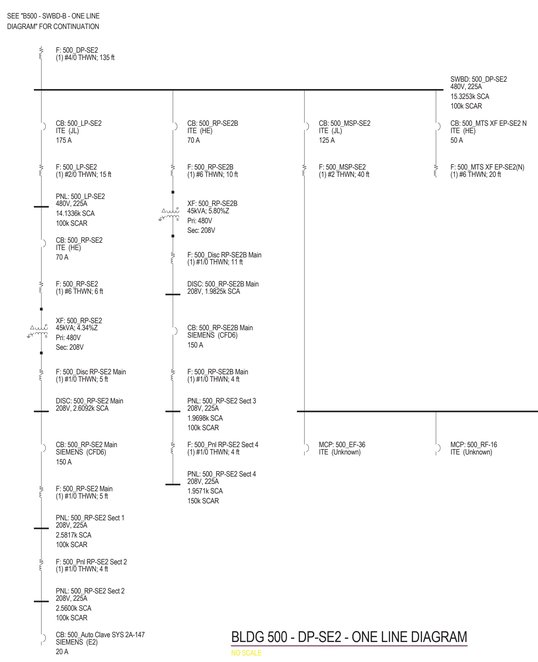
Drawing Number: ED500-113

VA FORM 08-6231



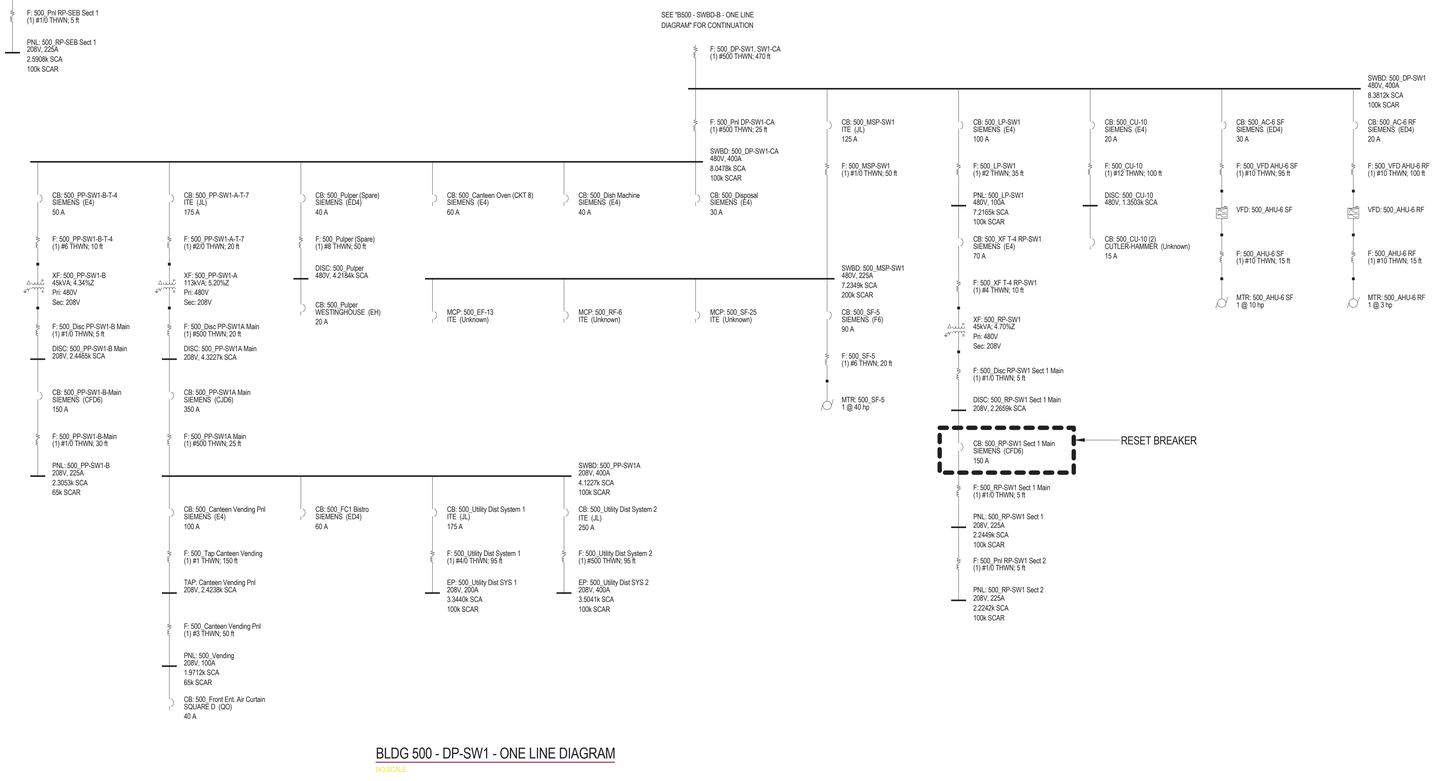
BLDG 500 - DP-SEB - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-SE2 - ONE LINE DIAGRAM

NO SCALE



BLDG 500 - DP-SW1 - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-SWBD-DP-SEB, DP-SE2 & DP-SW1

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

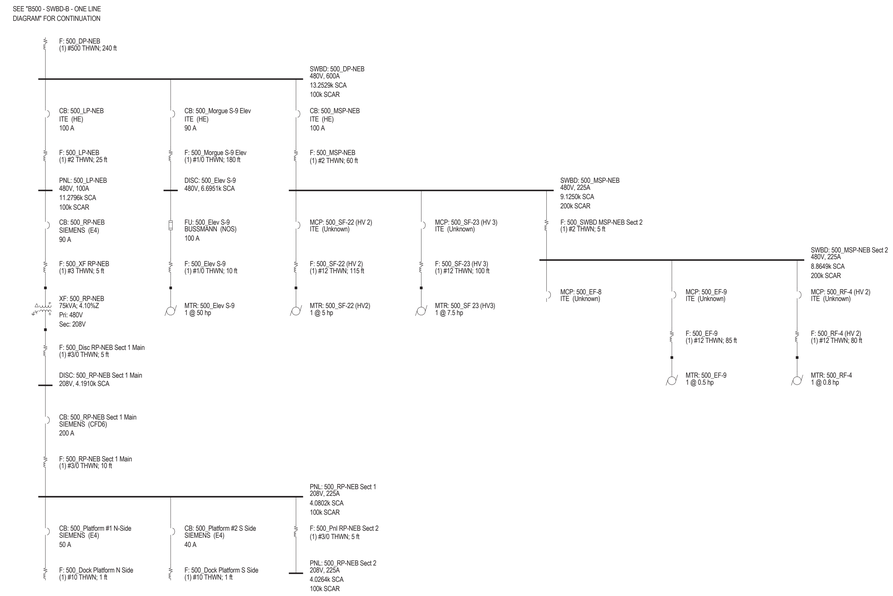
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

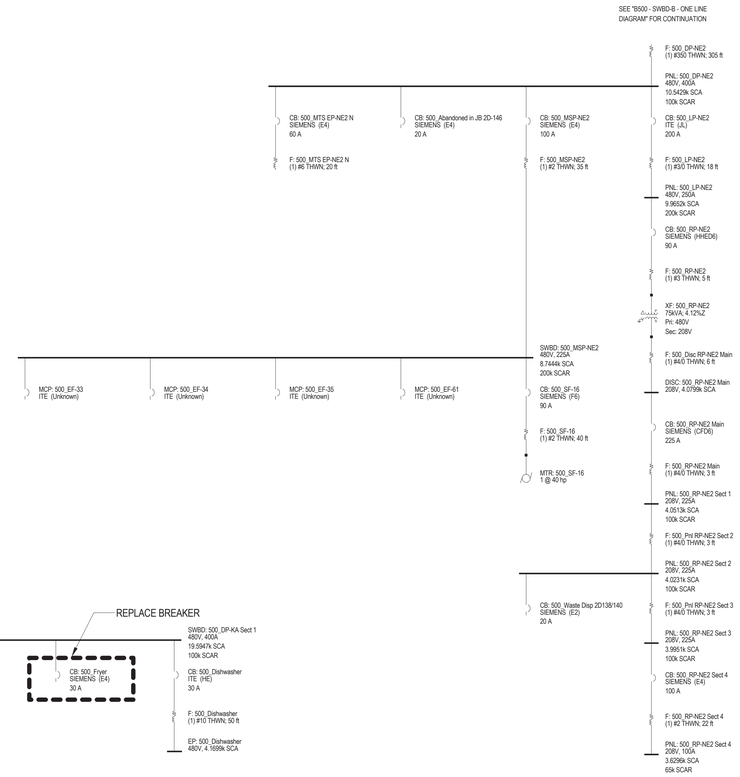
Drawing Number: ED500-114

VA FORM 08-6231



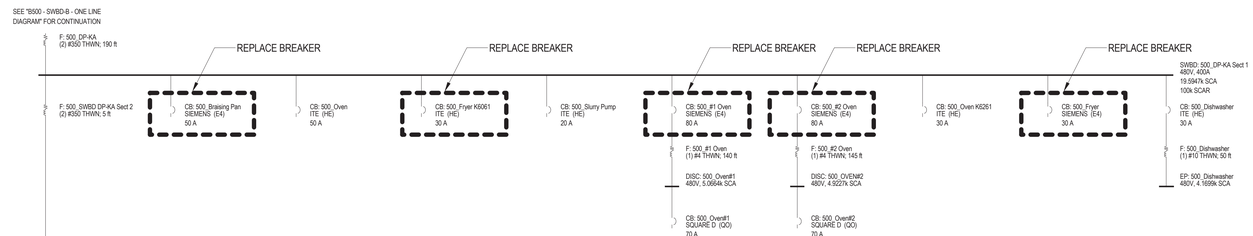
BLDG 500 - DP-NEB - ONE LINE DIAGRAM

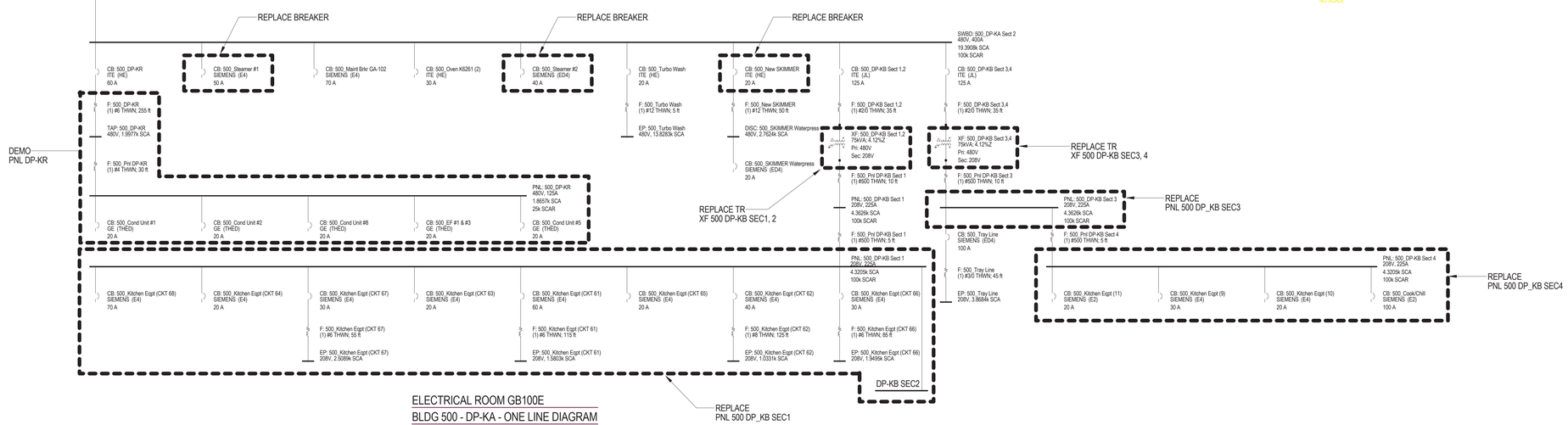
NO SCALE



BLDG 500 - DP-NE2 - ONE LINE DIAGRAM

NO SCALE





ELECTRICAL ROOM GB100E

BLDG 500 - DP-KA - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-NEB & DP-KA

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

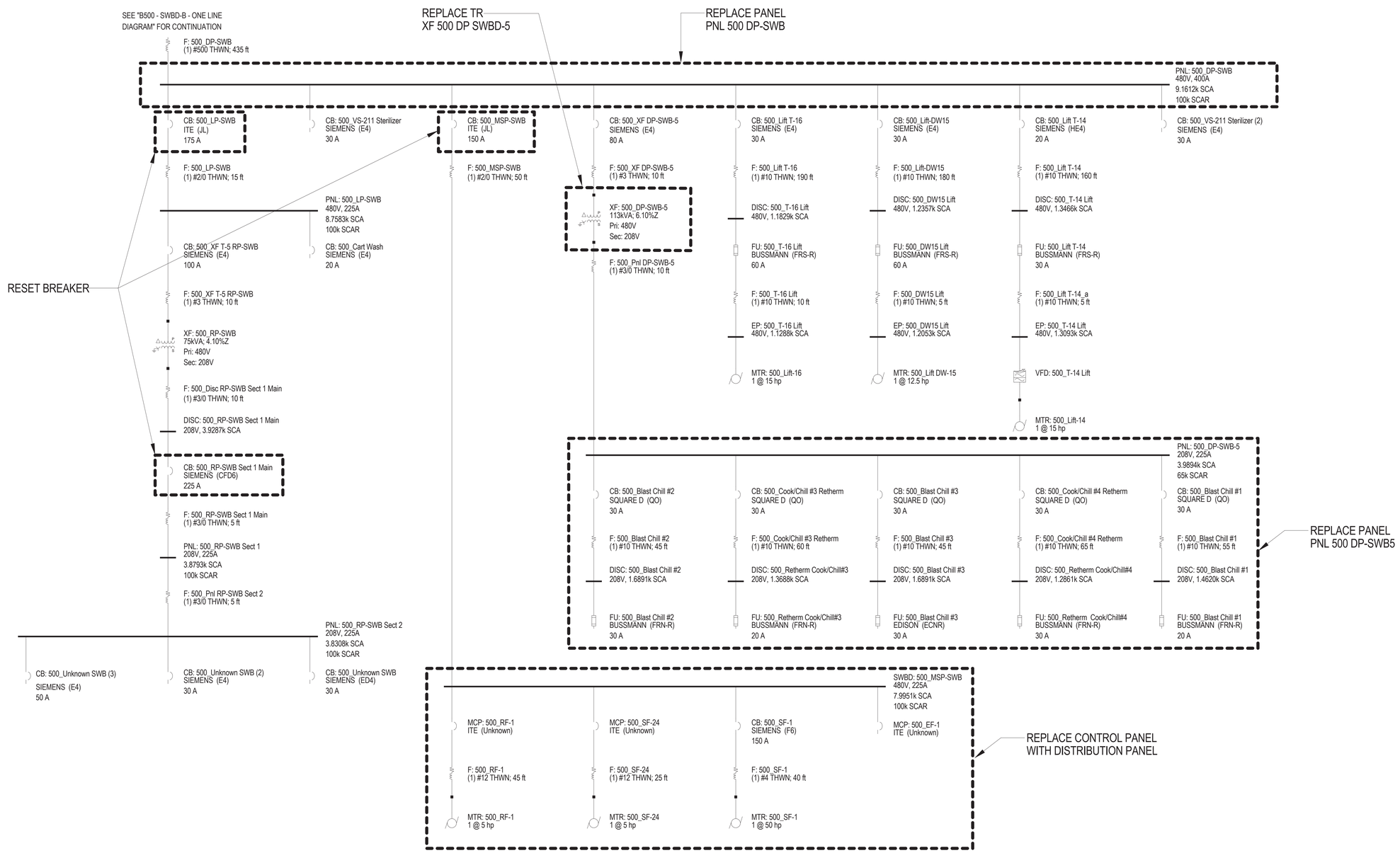
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: ED500-115

VA FORM 08-6231



ELECTRICAL ROOM GC105D

BLDG 500 - DP-SWB - ONE LINE DIAGRAM

NO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - SINGLE LINE BLDG 500-DP-SWB

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Drawing Number: ED500-116

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - DEMOLITION PANELS ELEC. ROOM GA139A

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: ED600-1

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - DEMOLITION PANELS ELEC. ROOM GB100E

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: ED600-2

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - DEMOLITION PANELS ELEC. ROOM GB123

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: ED600-3

VA FORM 08-6231

SEE AUTOCAD DRAWINGS

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - DEMOLITION PANELS ELEC. ROOM GC105D

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21

Checked: WG

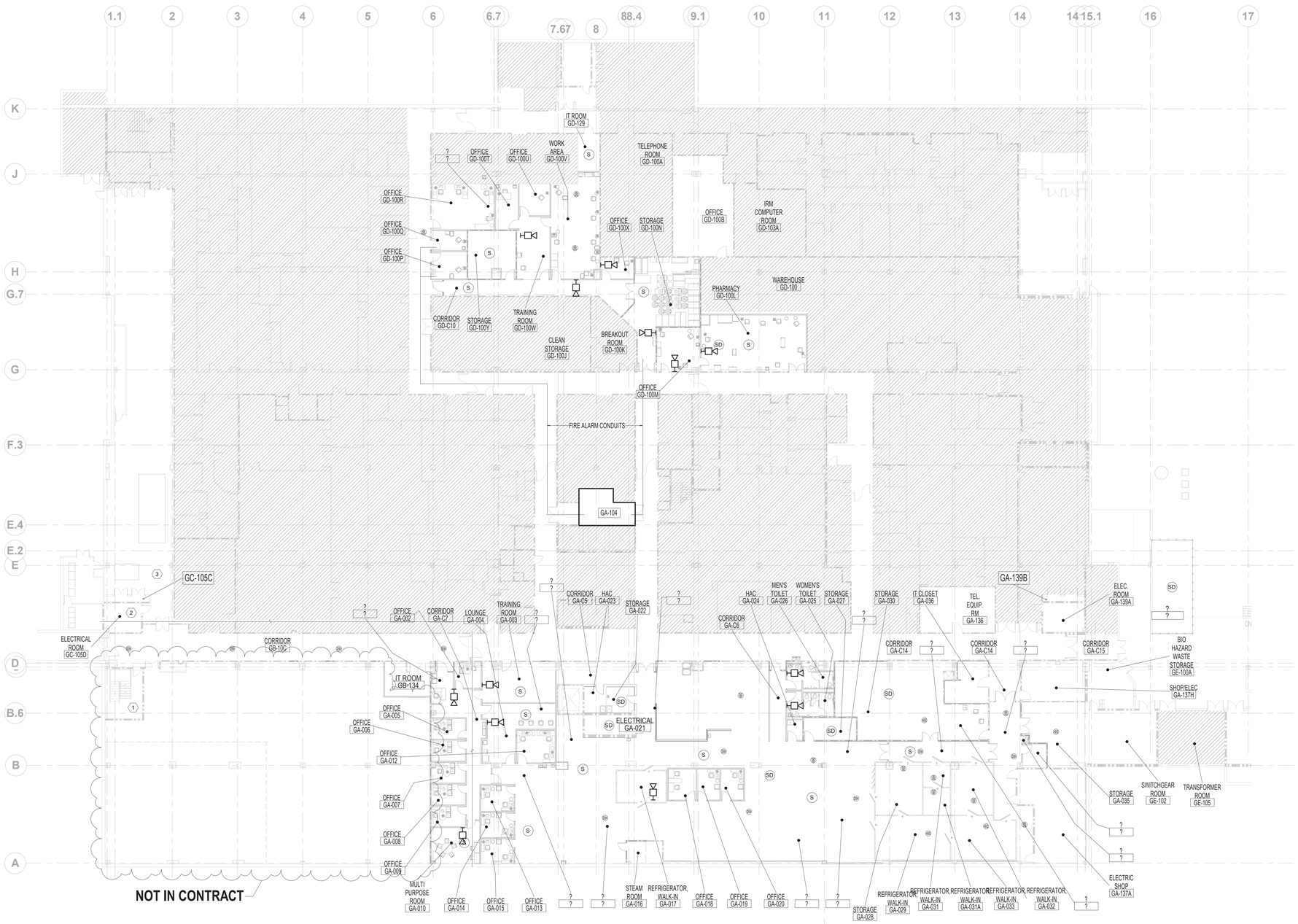
Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: ED600-4

VA FORM 08-6231



N

1 **FLOOR PLAN - OVERALL FIRE DETECTION AND ALARM PLAN**

1/16" = 1'-0"

0 8' 16' 32'

FIRE BARRIER LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION

GENERAL NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

D. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

E. RECONNECT THE FLOW SWITCHES AND TAMPER SWITCHS TO NEW SYSTEM. SEE KEY NOTES FOR LOCATIONS.

F. DESIGN FOR NOTIFICATION APPLIANCES IS BASED ON NFPA TABLE A.184.3 "AMBIENT SOUND LEVELS", OF 55 dBA FOR A BUSINESS OCCUPANCY. CONTRACTOR TO SET LEVELS OF NOTIFICATION COMPONENTS; HORNS, SPEAKERS ABOVE 55 dBA.

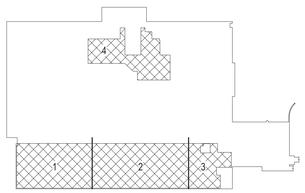
G. CONTRACTOR TO PURCHASE FOUR (4) I/O MODULES FOR THE FOUR FIRE ZONES.

H. SEE SCHEDULE ON EF100.3 FOR FIRE ALARM EQUIPMENTS.

I. ALL FIRE ALARM CIRCUITS PASSING THROUGH THE PROJECT BOUNDARIES SHALL BE MAINTAINED AND PROTECTED TO ENSURE CONTINUED OPERABILITY OF DEVICES OUTSIDE THE PROJECT AREAS.

KEY NOTES

1. RECONNECT FLOW AND TAMPER SWITCH 3-B8 ACTIVE IN STAIRWAY #3.
2. RECONNECT FLOW AND TAMPER SWITCH ACTIVE IN ELECTRICAL ROOM GC105D.
3. RECONNECT FLOW AND TAMPER SWITCH ACTIVE IN MECHANICAL AREA GC-105.



BASEMENT KEY PLAN

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
Revisions:	Date:

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - OVERALL FIRE DETECTION AND ALARM PLAN

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

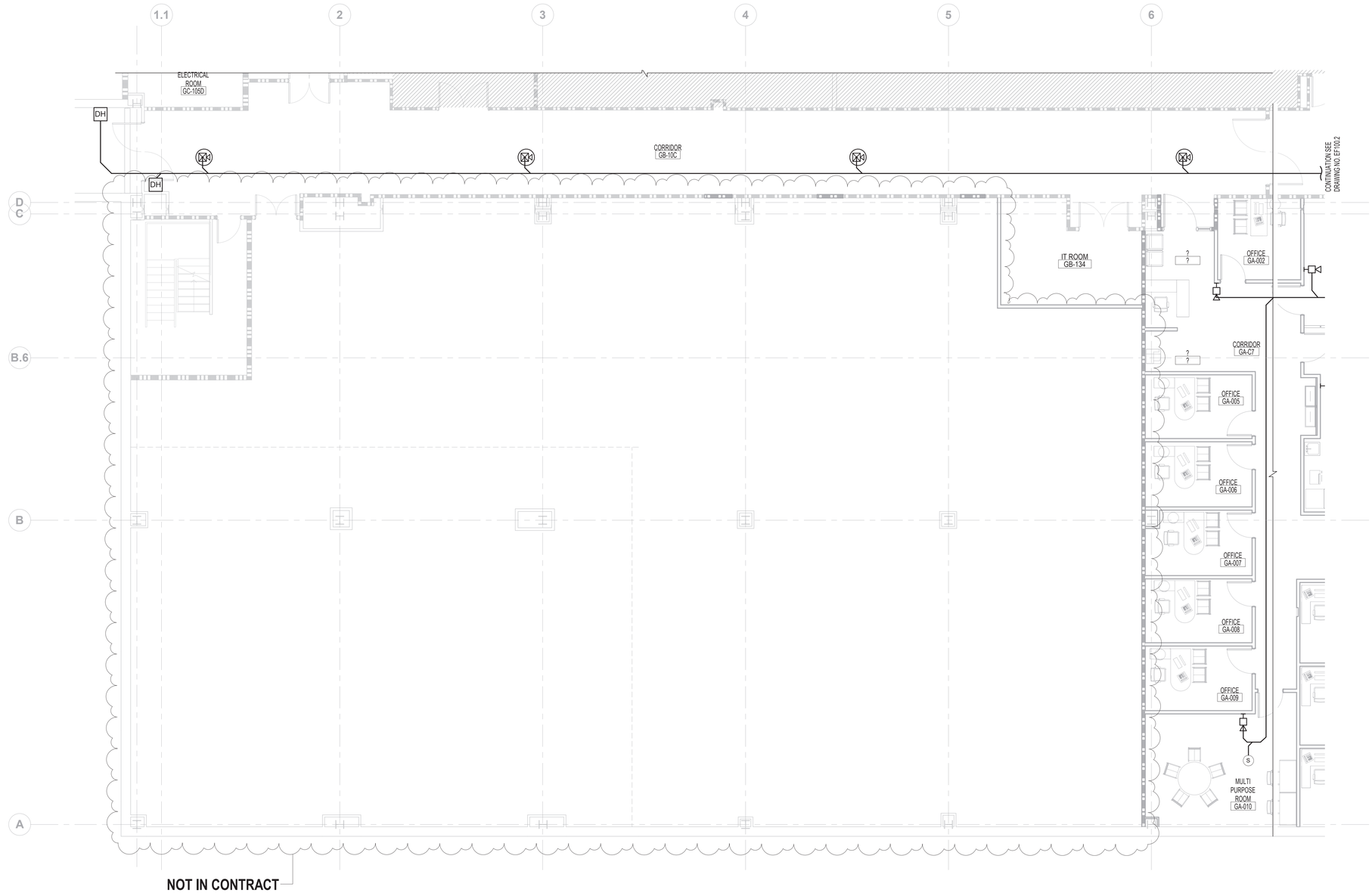
Project Number: 613-19-103

Building Number: 500

Drawing Number: EF100

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

VA FORM 08-6231



N

1 **FLOOR PLAN - ENLARGED FIRE DETECTION AND ALARM PLAN - AREA 1**

3/16" = 1'-0"

0 4' 8' 12'

FIRE BARRIER LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION

GENERAL NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

D. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

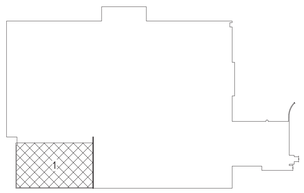
E. RECONNECT THE FLOW SWITCHES AND TAMPER SWITCHES TO NEW SYSTEM. SEE KEY NOTES FOR LOCATION.

F. INSTALL STROBE/HORN UNITS IN CORRIDOR ON CEILING EVERY 40 FT.

G. CONTRACTOR TO PROVID PROPER SIZED BACK BOXES FOR ALL COMPONENTS.

H. DESIGN FOR NOTIFICATION APPLIANCES IS BASED ON NFPA TABLE A.184.3 "AMBIENT SOUND LEVELS", OF 55 dBA FOR A BUSINESS OCCUPANCY. CONTRACTOR TO SET LEVELS OF NOTIFICATION COMPONENTS; HORNS, SPEAKERS ABOVE 55 dBA.

KEY NOTES



BASEMENT KEY PLAN - AREA 1

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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Drawing Title: ELECTRICAL - FIRE DETECTION AND ALARM PLAN, BASEMENT FLOOR - AREA 1

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

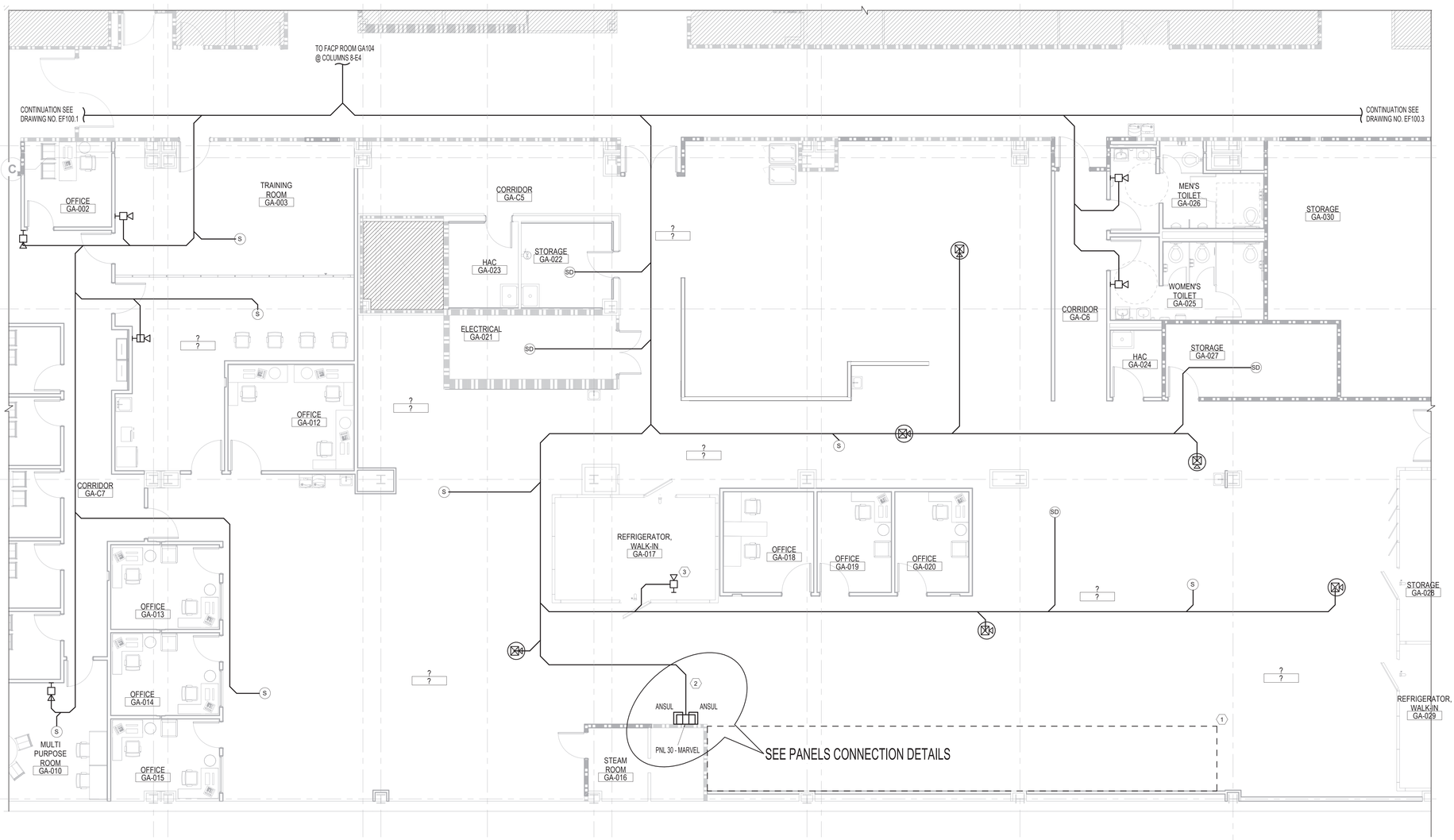
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: EF100.1

VA FORM 08-6231



FIRE BARRIER LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION

GENERAL NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

D. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

E. INSTALL STROBE/HORN UNITS IN EAST-WEST CORRIDOR, COLUMN "K", ON CEILING EVERY 40 FT.

F. CONTRACTOR TO PROVID PROPER SIZED BACK BOXES FOR ALL COMPONENTS.

G. FOLLOW REFRIGERATION MANUFACTURER'S GUIDELINES FOR PENETRATIONS THROUGH INSULATED WALLS.

H. DESIGN FOR NOTIFICATION APPLIANCES IS BASED ON NFPA TABLE A.184.3 "AMBIENT SOUND LEVELS", OF 55 dBA FOR A BUSINESS OCCUPANCY. CONTRACTOR TO SET LEVELS OF NOTIFICATION COMPONENTS; HORNS, SPEAKERS ABOVE 55 dBA.

KEY NOTES

1. MAKE THE KITCHEN HOOD AREA BETWEEN COLUMNS 8.4 AND 11 A DEDICATED "KITCHEN HOOD FIRE ZONE".

2. TERMINATE FIRE ALARM SIGNALS TO "NORMALLY OPEN" CONTACTS ON MARVEL CONTROL PANEL. SEE DRAWINGS QF-1 AND QF-1.1 FOR WIRING FROM ANSUL PANELS TO MARVEL AND MARVEL TO FIRE ALARM.

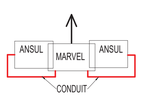
3. UTILIZE "OUTDOOR" RATED HORNS AND STROBES INSIDE THE REFRIGERATORS.

N

1 **FLOOR PLAN - ENLARGED FIRE DETECTION AND ALARM PLAN - AREA 2**

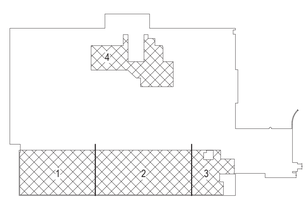
3/16" = 1'-0"

0 4' 8' 12'



2 **PANELS CONNECTION DETAIL**

NOT TO SCALE



BASEMENT KEY PLAN - AREA 2

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

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100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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Drawing Title: ELECTRICAL - FIRE DETECTION AND ALARM PLAN, BASEMENT FLOOR - AREA 2

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

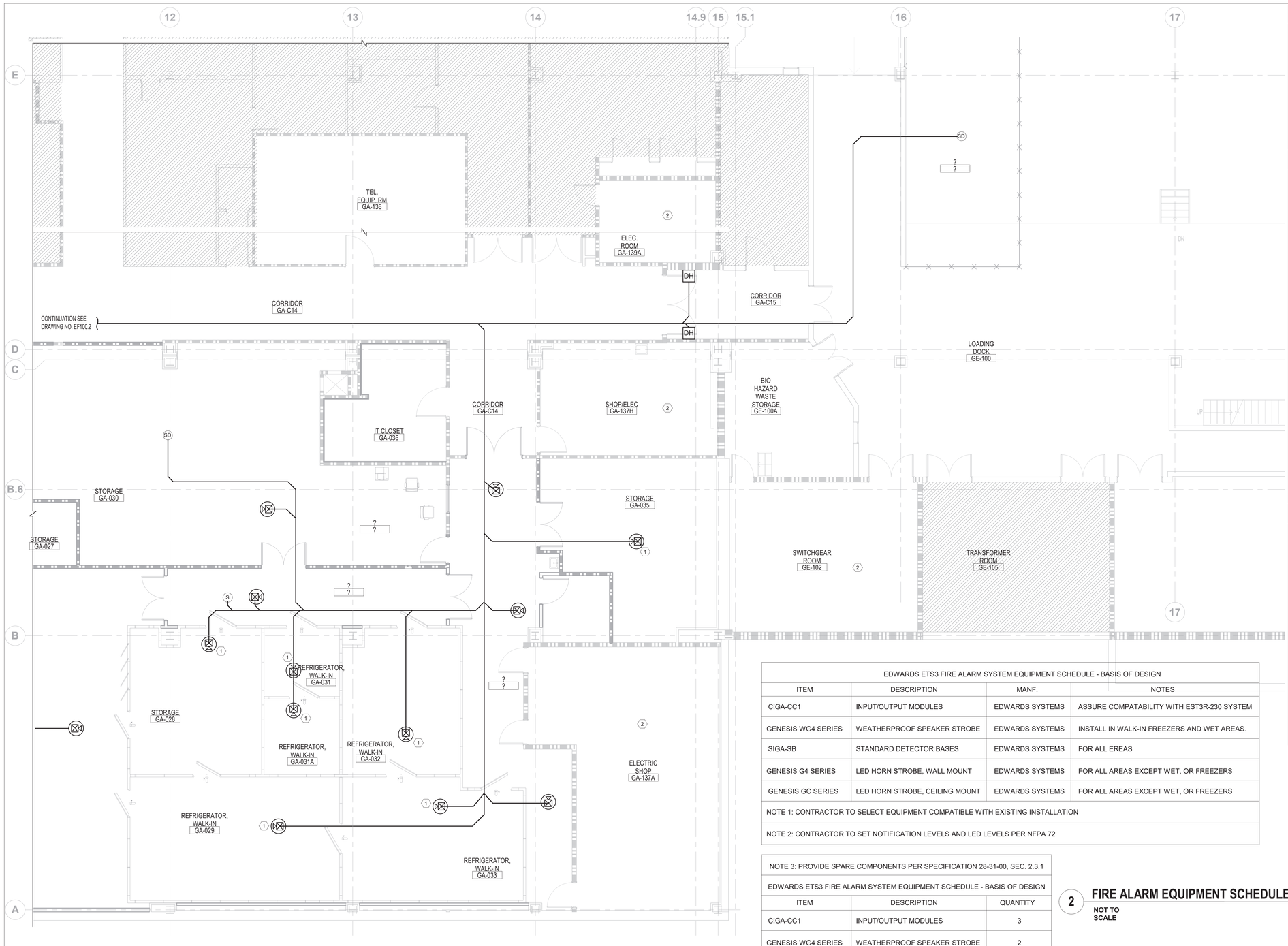
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Project Number: 613-19-103

Building Number: 500

Drawing Number: EF100.2

VA FORM 08-6231



N

1 FLOOR PLAN - ENLARGED FIRE DETECTION AND ALARM PLAN - AREA 3

3/16" = 1'-0"

0 4' 8' 12'

FIRE BARRIER LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION

GENERAL NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. KEEP FIRE ALARM / FIRE DETECTION ACTIVE DURING CONSTRUCTION IN ELECTRICAL SHOPS, CLOSETS AND SWITCHGEAR ROOM: GA-137G, GA-137H, GA-137A, GE-102 AND GE-104.

D. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

E. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

F. INSTALL STROBE/HORN UNITS IN EAST-WEST CORRIDOR, COLUMN "K", ON CEILING EVERY 40 FT.

G. CONTRACTOR TO PROVID PROPER SIZED BACK BOXES FOR ALL COMPONENTS.

H. FOLLOW REFRIGERATION MANUFACTURER'S GUIDELINES FOR PENETRATIONS THROUGH INSULATED WALLS.

I. DESIGN FOR NOTIFICATION APPLIANCES IS BASED ON NFPA TABLE A.184.3 "AMBIENT SOUND LEVELS", OF 55 dBA FOR A BUSINESS OCCUPANCY. CONTRACTOR TO SET LEVELS OF NOTIFICATION COMPONENTS; HORNS, SPEAKERS ABOVE 55 dBA.

KEY NOTES

1. UTILIZE "OUTDOOR" RATED HORNS AND STROBES INSIDE THE REFRIGERATORS.
2. LEAVE EXISTING SMOKE DETECTORS FUNCTIONAL IN ELECTRIC ROOMS GA137A, GA137H, GA139A, GE102.

EDWARDS ETS3 FIRE ALARM SYSTEM EQUIPMENT SCHEDULE - BASIS OF DESIGN

ITEM	DESCRIPTION	MANF.	NOTES
CIGA-CC1	INPUT/OUTPUT MODULES	EDWARDS SYSTEMS	ASSURE COMPATABILITY WITH EST3R-230 SYSTEM
GENESIS WG4 SERIES	WEATHERPROOF SPEAKER STROBE	EDWARDS SYSTEMS	INSTALL IN WALK-IN FREEZERS AND WET AREAS.
SIGA-SB	STANDARD DETECTOR BASES	EDWARDS SYSTEMS	FOR ALL EREAS
GENESIS G4 SERIES	LED HORN STROBE, WALL MOUNT	EDWARDS SYSTEMS	FOR ALL AREAS EXCEPT WET, OR FREEZERS
GENESIS GC SERIES	LED HORN STROBE, CEILING MOUNT	EDWARDS SYSTEMS	FOR ALL AREAS EXCEPT WET, OR FREEZERS
NOTE 1: CONTRACTOR TO SELECT EQUIPMENT COMPATIBLE WITH EXISTING INSTALLATION			
NOTE 2: CONTRACTOR TO SET NOTIFICATION LEVELS AND LED LEVELS PER NFPA 72			

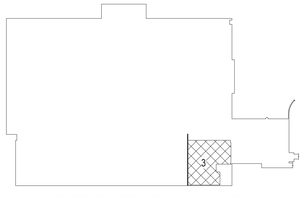
NOTE 3: PROVIDE SPARE COMPONENTS PER SPECIFICATION 28-31-00, SEC. 2.3.1

EDWARDS ETS3 FIRE ALARM SYSTEM EQUIPMENT SCHEDULE - BASIS OF DESIGN

ITEM	DESCRIPTION	QUANTITY
CIGA-CC1	INPUT/OUTPUT MODULES	3
GENESIS WG4 SERIES	WEATHERPROOF SPEAKER STROBE	2
GENESIS G4 SERIES	LED HORN STROBE, WALL MOUNT	3
GENESIS GC SERIES	LED HORN STROBE, CEILING MOUNT	3

2 FIRE ALARM EQUIPMENT SCHEDULE

NOT TO SCALE



BASEMENT KEY PLAN - AREA 3

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
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Drawing Title: ELECTRICAL - FIRE DETECTION AND ALARM PLAN, BASEMENT FLOOR - AREA 3

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

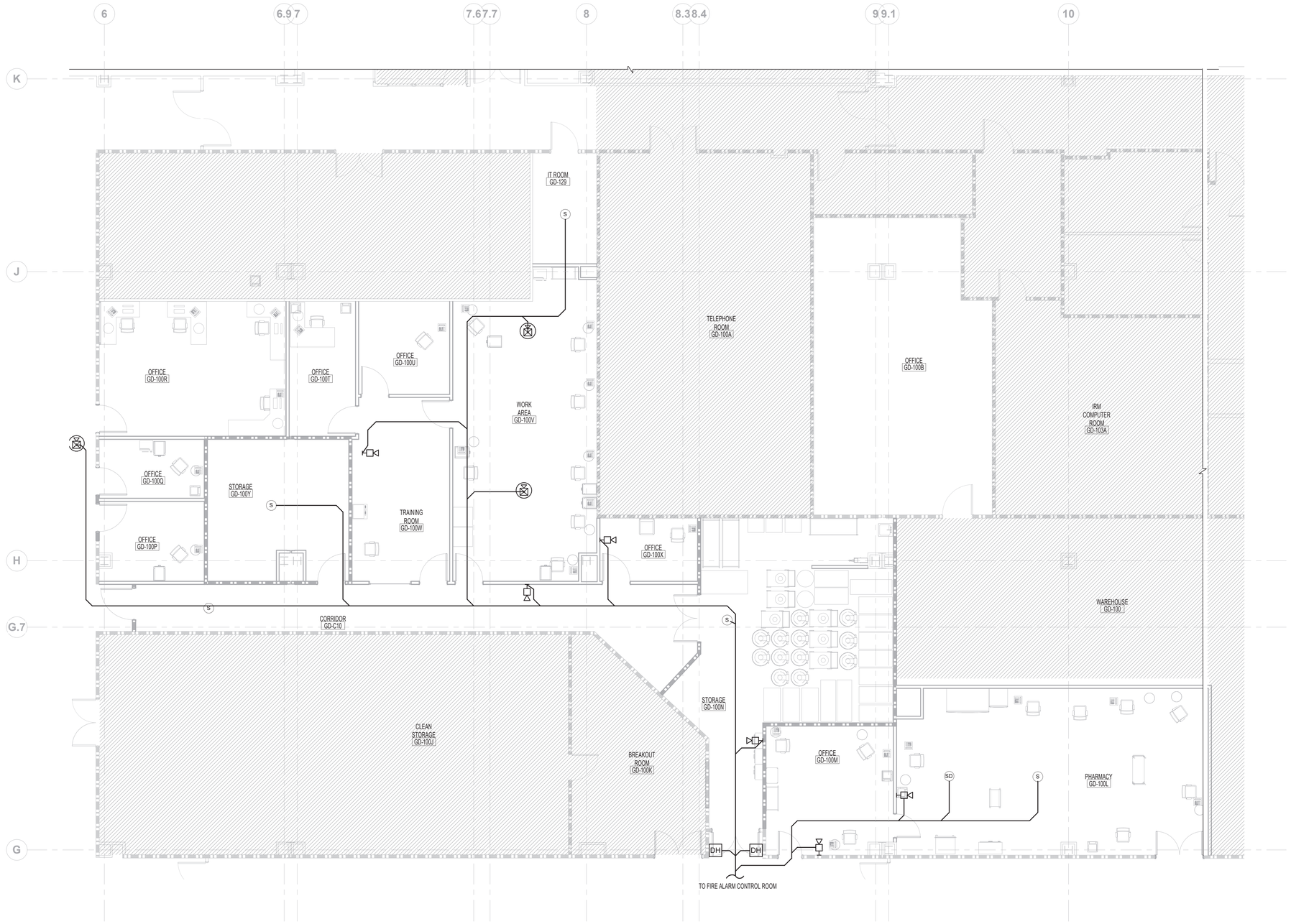
Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: EF100.3

VA FORM 08-6231



N

1 **FLOOR PLAN - ENLARGED FIRE DETECTION AND ALARM PLAN - AREA 4**

3/16" = 1'-0"

0 4' 8' 12'

FIRE BARRIER LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION

GENERAL NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. MAINTAIN ACTIVE FIRE ALARM / FIRE DETECTION SYSTEM IN ALL AREAS EXCEPT CONSTRUCTION AREA.

D. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

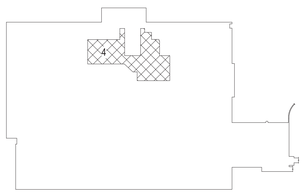
E. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

F. DO NOT DISTURB EXISTING FIRE ALARM / FIRE DETECTION EQUIPMENT IN CORRIDORS LEADING FROM CONSTRUCTION AREA TO THE FIRE.

G. CONTRACTOR TO PROVID PROPER SIZED BACK BOXES FOR ALL COMPONENTS.

H. DESIGN FOR NOTIFICATION APPLIANCES IS BASED ON NFPA TABLE A.184.3 "AMBIENT SOUND LEVELS", OF 55 dBA FOR A BUSINESS OCCUPANCY. CONTRACTOR TO SET LEVELS OF NOTIFICATION COMPONENTS; HORNS, SPEAKERS ABOVE 55 dBA.

KEY NOTES



BASEMENT KEY PLAN - AREA 4

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
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Drawing Title: ELECTRICAL - FIRE DETECTION AND ALARM PLAN, BASEMENT FLOOR - AREA 4

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Project Number: 613-19-103

Building Number: 500

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

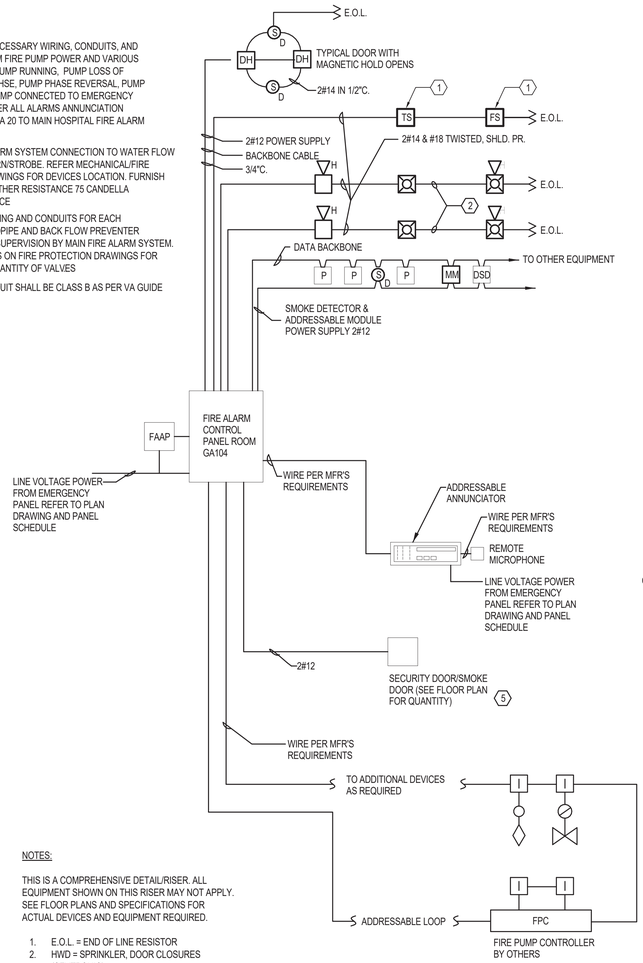
Issue Date: 07/23/21 | Checked: WG | Drawn: BX

Drawing Number: EF100.4

VA FORM 08-6231

NOTES:

1. PROVIDE ALL NECESSARY WIRING, CONDUITS, AND BACK BOX SYSTEM FIRE PUMP POWER AND VARIOUS ALARM SUCH AS PUMP RUNNING, PUMP LOSS OF POWER IN ANY PAHSE, PUMP PHASE REVERSAL, PUMP FAIL TO START, PUMP CONNECTED TO EMERGENCY POWER, AND OTHER ALL ALARMS ANNUNCIATION REQUIRED BY NFPA 20 TO MAIN HOSPITAL FIRE ALARM PANEL
2. MAINTAIN FIRE ALARM SYSTEM CONNECTION TO WATER FLOW NOTIFICATION HARN/STROBE. REFER MECHANICAL/FIRE PROTECTION DRAWINGS FOR DEVICES LOCATION. FURNISH AND INSTALL WEATHER RESISTANCE 75 CANDELLA HORN/STOBE DEVICE
3. MAINTAIN ALL WIRING AND CONDUITS FOR EACH SPRINKLER/STANDPIPE AND BACK FLOW PREVENTER CONTROL VALVE SUPERVISION BY MAIN FIRE ALARM SYSTEM. REFER TO DETAILS ON FIRE PROTECTION DRAWINGS FOR LOCATION AND QUANTITY OF VALVES
4. SUPERVISION CIRCUIT SHALL BE CLASS B AS PER VA GUIDE LINES.

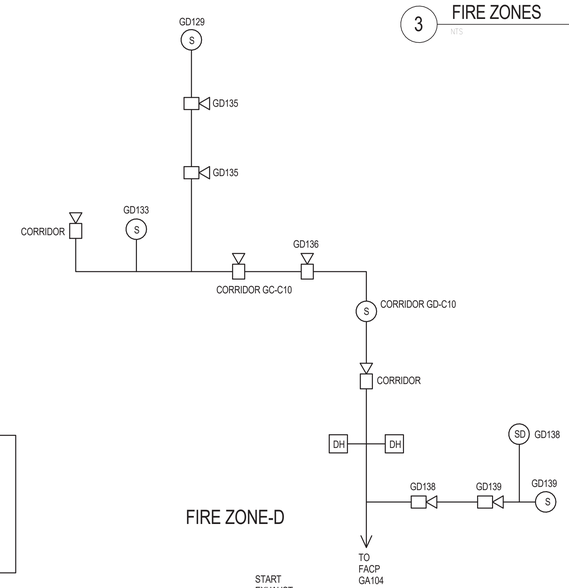


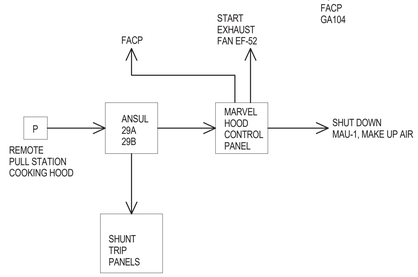
NOTES:

THIS IS A COMPREHENSIVE DETAIL/RISER. ALL EQUIPMENT SHOWN ON THIS RISER MAY NOT APPLY. SEE FLOOR PLANS AND SPECIFICATIONS FOR ACTUAL DEVICES AND EQUIPMENT REQUIRED.

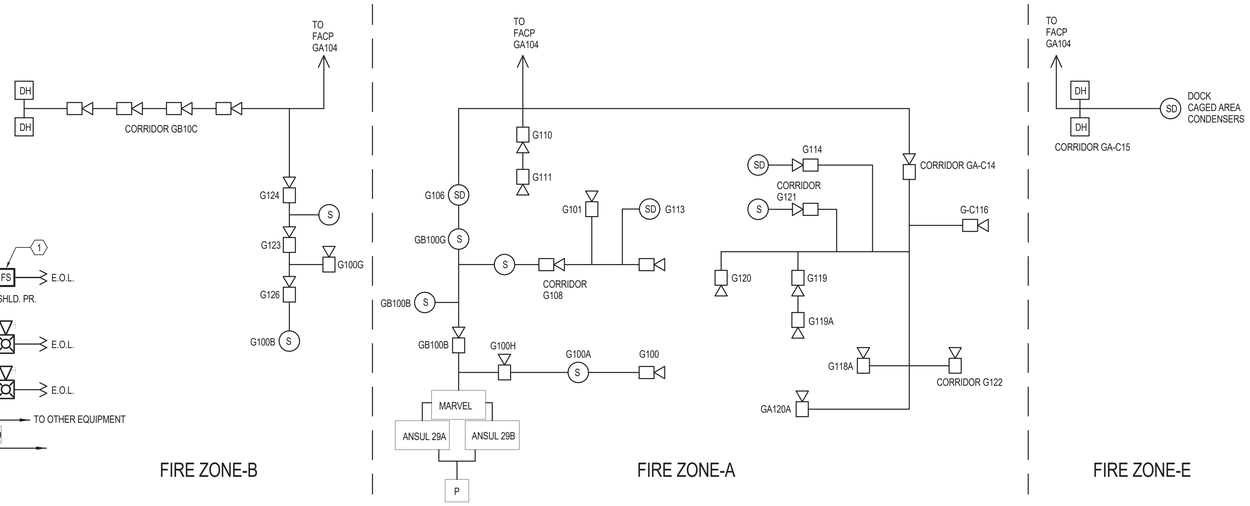
1. E.O.L. = END OF LINE RESISTOR
2. HWD = SPRINKLER, DOOR CLOSURES (SENTRONIC)

1 ADDRESSABLE FIRE ALARM SYSTEM RISER
NTS





2 ANSUL/MARVEL COOKING HOOD CONTROL BLOCK DIAGRAM
NTS



3 FIRE ZONES
NTS

GENERAL NOTES

A. CONTRACTOR SHALL COORDINATE FIRE ALARM AND DETECTION WORK WITH FIRE PROTECTION CONTRACTOR PRIOR TO SCHEDULING AND PERFORMING ANY WORK.

B. CONTRACTOR TO TEST FIRE ALARM / DETECTION SYSTEM PRIOR TO PERFORMING ANY WORK .

C. CONTRACTOR TO MAINTAIN ACTIVE FIRE ALARM / DETECTION SYSTEM OUTSIDE OF PROJECT AREAS.

D. FIRE ZONE RISER DIAGRAMS ARE PARTIALS THAT ONLY COVER THE NEW CONSTRUCTION AREAS. CONTRACTOR TO INCORPORATE THIS INFORMATION INTO THE LARGER EXISTING RISERS FOR EACH FIRE ZONE.

TABLE 7.3 FIRE ALARM SYSTEM INPUT OUTPUT MATRIX

*While NFPA 101 does not require some detectors to notify building occupants, VA requires all smoke detectors, other than duct smoke detectors, to notify building occupants. Only install smoke detectors when required by the Life Safety Code or its references.

INPUT DEVICE	OUTPUT	1. Sound general building alarm for Other and Ambulatory Health Care). See Section 7.2.1	2. Notify necessar staff for responsetor Health Care , Ambulatory Health Care** and Hotels buildings (alarm signal may be different on different t floors) .	3 . Notify Fire Department .	4. Initiate supervisory signal to a 24 - hour manned point for immediate response.	5. Close as sociate smoke barrier door on the floor .	6. Close damper s on fan proximate to detector .	7. Shut down air handler served by the detector .	8. Recall elevator	9. Initiate elevator shut down and disconnect elevator power .	10. Open** locked egress doors on floor of fire origin .	11. Releases Extinguishing Agent Under Cooking Hood	12. Disconnect fuel source from cooking equipment.
Duct Smoke Detector*					X		X	Xa					
Area Smoke Detector*		X	X	X							X		
Door Release Smoke Detector*		X	X	X		X	X				X		
Elevator Smoke Detector*		X	X	X					X				
Manual Pull Station		X	X	X		X					X		
Cooking Hood Remote Pull Station		X	X	X	X	X		X			X	X	X
Elevator Machine Room Heat Detector		X	X	X						X			
Generator Room Heat Detector		X	X	X							X		
Sprinkler Waterflow / Pressure Switch		X	X	X		X					X		
Water Control Valve Tamper													
Fire Pump (Any alarm condition required by NFPA 20)					X								
High/Low Pressure Dry-Pipe Sprinkler System					X								
Kitchen Hood Suppression System b		X	X	X	X	X					X		X
Gas Extinguishing Systems		X	X	X		X					X		
Dry-Pipe Valve Room Temperature Alarm					X								
Dedicated Fire Water Storage Tank Low Level					X								
Dedicated Fire Water Storage Tank Low Temperature					X								

*** This applies to Ambulatory Health Care Occupancies that require smoke barriers per NFPA 101 or are designed with multiple smoke zones.

a – Do not provide duct detectors in dedicated (100%) exhaust fans, they should continue to run.

b - Also sends signal to Marvel HOOD Control Panel that starts Exhaust Fan EF-52, and shuts down MAU-1 Make-Up air unit.

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL - FIRE PROTECTION DETAILS

Approved: Project Director

Phase: 100% CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title: RENOVATE/UPGRADE NFS KITCHEN - BUILDING 500 BASEMENT

Location: 510 BUTLER AVENUE, MARTINSBURG, WV 25405

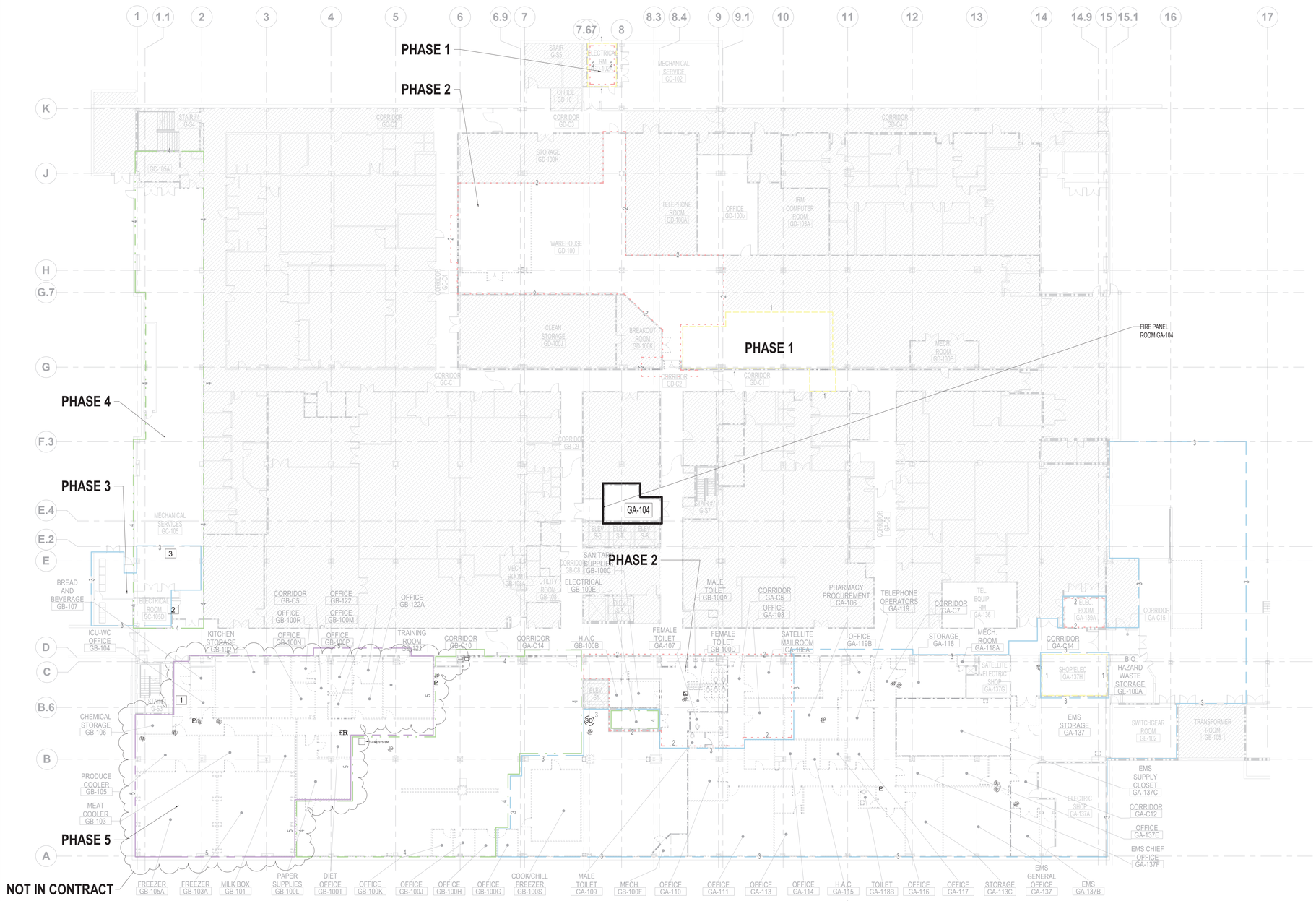
Project Number: 613-19-103

Building Number: 500

Drawing Number: EF100.5

Issue Date: 07/23/21 | Checked: Checker | Drawn: Author

VA FORM 08-6231



N

1 **FLOOR PLAN - OVERALL FIRE DETECTION AND ALARM DEMOLITION PLAN**

1/16" = 1'-0"

0 8' 16' 32'

LEGEND

- NEW 2 HOUR FIRE & SMOKE SEPARATION
- EXISTING 2 HOUR FIRE & SMOKE SEPARATION
- NEW 1 HOUR FIRE & SMOKE SEPARATION
- EXISTING 1 HOUR FIRE & SMOKE SEPARATION
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5

GENERAL DEMOLITION NOTES

A. ALL FIRE ALARM/FIRE DETECTION WORK SHALL BE PERFORMED BY A CERTIFIED CONTRACTOR.

B. CONTRACTOR SHALL COORDINATE WITH VA's FIRE PROTECTION TEAM.

C. WHEN SYSTEM IS TAKEN "OFFLINE" A FIRE WATCH WILL BE IMPLEMENTED PER VA REQUIREMENTS.

D. SIGNAL CLOSET WITH FIRE ALARM PANEL SHOWN WITH HEAVY BORDERS.

E. KEEP FLOW AND TAMPER SWITCHES FOR THE FIRE PROTECTION PIPING ACTIVE DURING CONSTRUCTION. INSTALL TEMPORARY WIRING DURING CONSTRUCTION. SEE KEY NOTES FOR LOCATIONS.

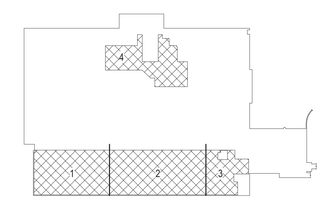
F. KEEP FIRE ALARM / DETECTION EQUIPMENT ACTIVE ON NORTH WALL OF COLUMN "K" EAST-WEST CORRIDOR. INSTALL TEMPORARY WIRING DURING CONSTRUCTION.

G. DEACTIVATE AND REMOVE ALL FIRE ALARM / DETECTION COMPONENTS AND WIRING THAT IS IN "K" COLUMN CORRIDOR AND SOUTH OF THE CORRIDOR.

H. TURN OVER COMPONENTS TO VA COR FOR DISPOSITION.

X KEY NOTES

1. KEEP FLOW AND TAMPER SWITCH 3-88 ACTIVE IN STAIRWAY #3.
2. KEEP FLOW AND TAMPER SWITCH ACTIVE IN ELECTRICAL ROOM GC105D.
3. KEEP FLOW AND TAMPER SWITCH ACTIVE IN MECHANICAL AREA GC-105.



BASEMENT KEY PLAN

NOT TO SCALE

VA CONTRACT NO: 36C24519C0171

100% CONSTRUCTION DOCUMENTS - FOR BID	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	02/12/2021
60% DESIGN DEVELOPMENT SUBMISSION	09/11/2020
30% SCHEMATIC DESIGN SUBMISSION	05/24/2020
Revisions:	Date:

CONSULTANT

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