



KEY PLAN - AREA OF WORK
NO SCALE

FIRE ALARM SYMBOLS	
SYMBOL	DESCRIPTION
☐	FIRE ALARM SYSTEM MANUAL PULL STATION. 48" A.F.F.
☐	FIRE ALARM SYSTEM VISUAL (STROBE) DEVICE. WALL MOUNTED 80" A.F.F. CANDELLA RATING PER NFPA 72, U.N.O.
☐	FIRE ALARM SYSTEM COMBINATION (HORN/ STROBE) AUDIBLE/ VISUAL DEVICE. WALL MOUNTED 80" A.F.F.; CANDELLA RATING PER NFPA 72, U.N.O.
⊙	FIRE ALARM SYSTEM SMOKE DETECTOR
⊙	FIRE ALARM SYSTEM SMOKE DETECTOR - DUCT TYPE
⊙	FIRE ALARM SYSTEM HEAT DETECTOR - RATE-OF-RISE / FIXED TEMPERATURE.
⊙	FIRE ALARM SYSTEM HEAT DETECTOR - FIXED TEMPERATURE
☐	FIRE ALARM SYSTEM SPRINKLER FLOW SWITCH - FURNISH AND INSTALL UNDER DIVISION 23. CONNECT UNDER DIVISION 26
☐	FIRE ALARM SYSTEM SPRINKLER TAMPER SWITCH - FURNISH AND INSTALL UNDER DIVISION 23. CONNECT UNDER DIVISION 26
☐	FIRE ALARM SYSTEM MAGNETIC DOOR HOLDER - COORDINATE WITH DOOR SUPPLIER, MOUNT FLUSH IN WALL UNLESS NOTED OTHERWISE
☐	FIRE ALARM SYSTEM PANEL - "FAAP" DESIGNATES FIRE ALARM CONTROL PANEL, SURFACE MOUNTED; "FAAP" DESIGNATES FIRE ALARM ANNUNCIATOR PANEL, RECESSED MOUNTED
⊙	SMOKE DETECTOR - SINGLE STATION, AC POWER WITH BATTERY BACKUP MONITORED BY FIRE ALARM SYSTEM.
⊙	FIRE ALARM SYSTEM COMBINATION CARBON MONOXIDE/SMOKE DETECTOR.

NOTES

- DUCT SMOKE DETECTOR FURNISHED UNDER DIVISION 26, INSTALLED UNDER DIVISION 23 AND WIRED UNDER DIVISION 26. ALL HVAC UNITS OVER 2000 CFM SHALL HAVE DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURNS OF EACH ROOF TOP UNIT, AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
- NUMBER ADJACENT TO VISUAL SIGNALING DEVICE INDICATES CANDELLA RATING OF DEVICE.
- DIVISION 23 SHALL FURNISH AND INSTALL ALL FIRE SMOKE DAMPERS AND FIRE DAMPERS. SMOKE DAMPERS SHALL BE PROVIDED WITH DUCT SMOKE DETECTORS BY DIVISION 23. ALL REQUIRED POWER AND CONTROL WIRING, TRANSFORMERS, ACTUATORS, RELAYS, MODULES AND OTHER COMPONENTS TO BE FURNISHED AND INSTALLED BY DIVISION 23. DIVISION 26 SHALL MONITOR THE SMOKE DAMPERS VIA THE FIRE ALARM SYSTEM. DIVISION 26 TO PROVIDE COMPONENTS AND WIRING AS REQUIRED TO MONITOR FIRE SMOKE DAMPERS.
- DIVISION 26 TO PROVIDE ALL WIRING, RELAYS, MODULES, TRANSFORMERS REQUIRED TO CONNECT ALL SMOKE DAMPERS TO THE FIRE ALARM SYSTEM. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS TO CONFIRM QUANTITY AND LOCATIONS OF SMOKE AND FIRE DAMPERS.

GENERAL REQUIREMENTS	
1. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS OF THIS PROJECT.	
2. BID PHASE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DOCUMENTS TO INCLUDE PLANS AND SPECIFICATIONS FOR THE ARCHITECTURAL AND OTHER WORK UNDER OTHER DIVISIONS THAT CAN AFFECT THE WORK OF THIS DIVISION. THE CONTRACTOR SHALL ISSUE A FORMAL REQUEST FOR INFORMATION FOR CLARIFICATIONS OF ANY DISCREPANCIES IN THE DOCUMENTS PRIOR TO FINAL BID SUBMISSION.	
3. FIRE-CONSTRUCTION: IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL REVISED DOCUMENTS TO INCLUDE ARCHITECTURAL PLANS AND WORK UNDER OTHER DIVISIONS THAT CAN AFFECT THE WORK OF THIS DIVISION. THIS INCLUDES REVIEW OF ALL ADDENDUMS, REVISIONS AND SHOP DRAWINGS THAT AFFECT THE WORK OF THIS DIVISION. THE CONTRACTOR SHALL NOTIFY THE A/E TEAM OF ANY DISCREPANCIES PRIOR TO FINAL ROUGH-IN.	

SPECIAL CONDITIONS	
A. DEMOLITION COORDINATION:	
1. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR ADDITIONAL DEMOLITION REQUIREMENTS.	
2. REFER TO ARCHITECTURAL PLANS AND/OR SUPPLEMENTAL DOCUMENTS FOR CONSTRUCTION PHASE SEQUENCE REQUIREMENTS FOR OCCUPIED SPACES AFFECTED BY THE WORK.	
3. NOTIFY THE OWNER OF ANY WORK THAT MAY DISRUPT OTHER AREAS OUTSIDE OF THE WORK AREA.	
B. WORK IN EXISTING CEILINGS:	
1. REFER TO ARCHITECTURAL CEILING PLAN AND RELATED DETAILS FOR CEILING CONDITIONS, ADDITIONAL REQUIREMENTS, AND SYSTEM INSTALLATION COORDINATION. REFER TO ARCHITECTURAL PLANS FOR AREAS TO BE DEMOLISHED AND PROVIDED WITH NEW CEILING FINISHES. ALL OTHER AREAS ARE EXISTING CEILINGS TO REMAIN.	
C. EQUIPMENT COORDINATION:	
1. REFER TO ARCHITECTURAL EQUIPMENT PLANS, FURNITURE PLANS, ELEVATIONS, CASEWORK ELEVATIONS AND OTHER RELATED PLANS FOR ADDITIONAL MEP PROVISIONS.	
D. PATIENT CARE GROUNDING:	
1. ALL POWER & LIGHTING CIRCUITS SERVING PATIENT CARE AREAS (INCLUDING NURSING PATIENT ROOMS) SHALL HAVE REDUNDANT GROUNDING CONNECTIONS IN COMPLIANCE WITH NEC 70 ARTICLE 517.13(A) & (B).	

NURSE CALL SYSTEM SYMBOLS	
SYMBOL	DESCRIPTION
☐	DOME LIGHT - EMERGENCY STATION. MOUNT IN CEILING OUTSIDE OF ENTRY DOOR UNLESS NOTED OTHERWISE.
⊙	PATIENT BED STATION - 44" A.F.F. UNLESS NOTED OTHERWISE.
☐	EMERGENCY PULLCORD STATION - 44" A.F.F. UNLESS NOTED OTHERWISE.
☐	DUTY STATION - 44" A.F.F. UNLESS NOTED OTHERWISE.
☐	HELP STATION - MUSHROOM TYPE PUSHBUTTON. 44" A.F.F. UNLESS NOTED OTHERWISE.
☐	NURSE CALL SYSTEM PULL CORD.

NOTE: NURSE CALL SYSTEM SHALL BE WIRED FOR NURSING ROOMS, AND WIRELESS FOR ASSISTED LIVING ROOMS AND NEW PUBLIC TOILET ROOMS.

SECURITY SYSTEM SYMBOLS	
SYMBOL	DESCRIPTION
⊙	ELECTRO-MAGNETIC LOCK
⊙	ELECTRIC LOCK - MOUNT IN DOOR FRAME (NO OUTSIDE ENTRY - LOBBY DOOR)
⊙	DOOR RELEASE
⊙	LOCAL ALARM SOUNDER - EXIT ALARM. MOUNT ABOVE DOOR
☐	CLOSED CIRCUIT TELEVISION CAMERA - 6" BELOW CEILING

ELECTRICAL DRAWING LIST		
No.	Sheet No.	Sheet Title
1	E01	COVER SHEET ELECTRICAL
2	E11	GROUND FLOOR PLAN POWER
3	E12	GROUND FLOOR PLAN ADDITION POWER
4	E13	FIRST FLOOR PLAN POWER
5	E14	FIRST FLOOR PLAN ADDITION POWER
6	E15	SECOND & THIRD FLOOR PLANS POWER
7	E16	SECOND FLOOR PLAN ADDITION POWER
8	E17	THIRD FLOOR PLAN ADDITION POWER
9	E21	GROUND FLOOR PLAN LIGHTING
10	E22	GROUND FLOOR PLAN ADDITION LIGHTING
11	E23	FIRST FLOOR PLAN LIGHTING
12	E24	FIRST FLOOR PLAN ADDITION LIGHTING
13	E25	SECOND & THIRD FLOOR PLANS LIGHTING
14	E26	SECOND FLOOR PLAN ADDITION LIGHTING
15	E27	THIRD FLOOR PLAN ADDITION LIGHTING
16	E31	FOOD SERVICE PLANS ELECTRICAL
17	E32	TYPICAL UNIT PLANS ELECTRICAL
18	E41	POWER RISER DIAGRAM
19	E42	ELECTRICAL DETAILS & DIAGRAMS
20	E51	ELECTRICAL SCHEDULES
21	E52	ELECTRICAL SCHEDULES
22	E53	ELECTRICAL SCHEDULES
23		
24		
25		

ELECTRICAL SYMBOL LIST			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
☐	DUPLEX RECEPTACLE - STANDARD, 125 VOLT. 18" A.F.F.	☐	SWITCH - RHEOSTAT FOR FAN CONTROL. PROVIDE NEUTRAL CONDUCTOR AT ALL SWITCHES.
☐	DUPLEX RECEPTACLE - STANDARD, 125 VOLT. 44" A.F.F.	☐	CONTACTOR: SEE PLANS FOR SPECIFICATIONS
☐	DUPLEX RECEPTACLE - GFI PROTECTED, 125 VOLT. 44" A.F.F. AT COUNTER, OTHERWISE AT 18" A.F.F.	☐	MANUAL THERMAL MOTOR STARTER. SIZE OVERLOAD AS REQUIRED.
☐	ELECTRIC WATER COOLER - PROVIDE DEDICATED CIRCUIT WITH GFCI PROTECTION. (VERIFY ELECTRICAL REQUIREMENTS AND MOUNTING HEIGHTS PRIOR TO ROUGH-IN)	☐	TIME CLOCK
☐	DUPLEX RECEPTACLE - WP AND GFI PROTECTED, 125 VOLT. 18" A.F.F.	☐	MOTOR CONNECTION. SEE SCHEDULE FOR HP RATING, UNLESS NOTED OTHERWISE.
☐	DROP CORD WITH DUPLEX RECEPTACLE	☐	CONTROL EQUIPMENT
☐	QUAD OUTLET; TWO 125 VOLT DUPLEX RECEPTACLES; MOUNTED AT 18" A.F.F. UNLESS NOTED OTHERWISE.	☐	PHOTOCELL - CIRCUIT CONTROLLED AS INDICATED ON PLANS.
☐	SIMPLEX RECEPTACLE - SPECIAL PURPOSE. VERIFY CONFIGURATION. 18" A.F.F.	☐	WIRING UP
☐	FLOOR BOX (WITH DUPLEX RECEPTACLE SHOWN). DEVICE TYPE SHALL BE AS INDICATED ON THE DRAWINGS. FLUSH IN FLOOR.	☐	WIRING DOWN
☐	DUPLEX RECEPTACLE, 125 VOLT. FLUSH IN CEILING.	☐	WIRING CONCEALED ABOVE CEILING OR IN WALL (2 CONDUCTORS + EQUIPMENT GROUND MINIMUM UNLESS NOTED OTHERWISE).
☐	VOICE OUTLET. 18" A.F.F.	☐	WIRING BELOW GRADE OR BELOW FINISHED SLAB (0" C. - 2#10 + 1#10 EQUIPMENT GROUND MINIMUM UNLESS NOTED OTHERWISE)
☐	DATA OUTLET. 18" A.F.F.	☐	WIRING: NEUTRAL (OVERSIZED TICK), 2 PHASE CONDUCTORS
☐	COMBINATION VOICE/DATA OUTLET. 18" A.F.F.	☐	WIRING: INSULATED EQUIPMENT GROUND CONDUCTOR
☐	FLOOR BOX DATA OUTLET. FLUSH IN FLOOR	☐	HOMERUN TO PANEL (SOURCE PANEL & CIRCUIT NUMBERS, AS INDICATED)
☐	FLOOR BOX COMBINATION VOICE/DATA OUTLET. FLUSH IN FLOOR	☐	FLEXIBLE WIRING: CONDUCTORS TO MATCH SUPPLY CIRCUIT
☐	TELEVISION OUTLET - CATV SYSTEM. 18" A.F.F.	☐	ELECTRICAL PANEL: 120/208 VOLT - SURFACE, RECESSED MOUNTED
☐	PDI ARM MOUNTED TELEVISION, WITH RG6 CABLE AND JACK + CAT 6 POWERED CABLE AND JACK. MOUNT 53" A.F.F. RUN CAT 6 CABLE TO POWER SOURCE IN MECHANICAL ROOM 172.	☐	ELECTRICAL PANEL: 277/480 VOLT - SURFACE, RECESSED MOUNTED
☐	JUNCTION OR PULL BOX - SIZE PER N.E.C. UNLESS NOTED OTHERWISE.	☐	PLAN NOTE - REFER TO NOTES ON DRAWING.
☐	MULTI-OUTLET RACEWAY - SIMPLEX OUTLETS 12" ON CENTER UNLESS NOTED OTHERWISE. MOUNT ABOVE COUNTER.	☐	EQUIPMENT CONNECTION NOTE - SEE SCHEDULE.
☐	SWITCH - SINGLE POLE, DOUBLE POLE, THREE WAY, FOUR WAY, SUPERSCRIPT DENOTES OUTLETS CONTROLLED. 44" A.F.F. PROVIDE NEUTRAL CONDUCTOR AT ALL SWITCHES.	☐	SYMBOL INDICATES 24 HOUR LIGHT (NIGHT LIGHT)
☐	SWITCH - DIMMER, MOUNT AT 44" A.F.F. PROVIDE NEUTRAL CONDUCTOR AT ALL SWITCHES. (0-TO VOLT LED COMPATIBLE/CONNECT WIRING TO DRIVER)	☐	MOTOR OPERATED DAMPER - CONNECT TO FIRE ALARM SYSTEM AS REQUIRED.
☐	SWITCH - KEY OPERATED, PILOT LIGHT, MOTOR RATED. PROVIDE NEUTRAL CONDUCTOR AT ALL SWITCHES.	☐	AREA OF RESCUE TWO-WAY COMMUNICATION SYSTEM CALL BOX (RATH #2100 SERIES OR EQUAL).
☐	SWITCH - OCCUPANCY SENSOR (WATSTOPPER). PROVIDE NEUTRAL CONDUCTOR AT ALL SWITCHES.	☐	AREA OF RESCUE SYSTEM BASE STATION WITH SURFACE MOUNT CABINET (RATH #2500-2058 SERIES). PROVIDE WITH POWER SUPPLY.

POWER DISTRIBUTION SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
3/225	INDICATES 3-POLE/3-PHASE, 225A TRIP (FRAME RATING FOR SWITCH)	☐	FSS
2/100	INDICATES 2-POLE/1-PHASE, 100A TRIP (FRAME RATING FOR SWITCH)	☐	NFSS
60F	INDICATES 60A FUSE RATING	☐	CFSS
☐	FUSED SWITCH	☐	METER
☐	CIRCUIT BREAKER	☐	GROUNDING ELECTRODE
☐	MOTOR CONNECTION - 3 PHASE	☐	STEP DOWN TRANSFORMER
☐	MOTOR CONNECTION - 1 PHASE		

FEEDER LEGEND		EXISTING CONDITIONS	
DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION
X	SETS - QTY. OF PARALLEL SETS (1 SET IF BLANK)	(N)	NEW EQUIPMENT
3#XXX	WIRE SIZE IN AWG.	(E)	EXISTING EQUIPMENT TO REMAIN
1#XXX N	NEUTRAL SIZE	(R)	EXISTING EQUIPMENT RELOCATED
1#XXX G	EQUIPMENT GROUND	(X)	EXISTING EQUIPMENT TO BE REMOVED
X" C	CONDUIT SIZE	(X/R)	EXISTING EQUIPMENT TO BE RELOCATED

NOTE: ALL EQUIPMENT SHOWN IS NEW U.N.O.

ABBREVIATIONS	
DESIGNATION	DESCRIPTION
A.F.F.	ABOVE FINISHED FLOOR (TO CENTERLINE UNO)
C	CONDUIT
C/B	CIRCUIT BREAKER
CFSS	COMBINATION FUSED STARTER SWITCH
ECB	ENCLOSED CIRCUIT BREAKER
EW	ELECTRIC WATER COOLER (VERIFY MTD.)
G	EQUIPMENT GROUND
GFC	GROUND FAULT INTERRUPTER C/B
GFI	GROUND FAULT CIRCUIT INTERRUPTER
FSS	FUSED SAFETY SWITCH
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MOD	MOTOR OPERATED DAMPER
NL	NON-FUSED SAFETY SWITCH
NL	NIGHTLIGHT (24 HOUR OPERATION)
SP	SHUNT TRIP CIRCUIT BREAKER
SP	SURGE SUPPRESSOR
TG	TRANSFORMER GROUND
UNO	UNLESS NOTED OTHERWISE
WP	WEATHERPROOF (NEMA 3R UNO)

REVISION	BY
REVISION 1	
REVISION 2	
ADDENDUM #2	

Professional Certification I certify that these documents were prepared or approved by me, and that I am duly licensed Professional Engineer under the laws of the State of Maryland, license number 22792, expiration date August 04, 2020.

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COVER SHEET ELECTRICAL

DATE: Dec. 06, 2019
SCALE: As Noted
DRAWN:
JOB:
SHEET: **E0.1**