MEDICAL CENTER PROJECT MANUAL for GENERAL CONTRACTOR CONTRACTS

Amend Article 10.3 of the Special Conditions to read:

- 10.3 With the express purpose of expediting construction and providing the opportunity for cooperation of affected parties, progress meetings will be held and attended by representatives of:
 - (1) The Owner's Project Manager
 - (2) The Consultant.
 - (3) General Contractor.
 - (4) Sub-contractors.
 - (5) Others requested to attend (as deemed necessary by CPMD).
 - (6) Hospital Representative
 - (7) Medical Center Physical Plant Representative

Amend Article 24.2.1.2 of the Special Conditions to read:

24.2.1.2 SECTION OF A BUILDING OUTAGE

The Owner's Project Manager is the General Contractor's contact with the University for requesting Utility Outages. The Owner's Project Manager will work with PPDMC as outlined below to facilitate the outage. The established standard within the University Departments and Divisions of a section of a building shall be a written request prior to outage in the time frames noted below. The written request shall include the type of utility to be interrupted, when the outage is desired, reason for outage, length of outage, and what will be affected by the outage.

- 24.2.1.2.a. All outages require a two-week minimum notice. Giving such notice does not guarantee the outage will occur on the date requested. (HVAC, RO Water, Security, Pneumatic)
- 24.2.1.2.b. PPDMC has an Outage Coordinator who will research and record all the pertinent information necessary to schedule the outage. PPD employees, departments, operations, etc. will be notified by the Outage Coordinator about the pending outage.
- 24.2.1.2.c. The Outage Coordinator will document the work necessary to schedule, noting any difficulties that cannot be solved.
- 24.2.1.2.d. The Outage Coordinator will schedule the outage and notify contractor. If outage cannot be scheduled, they will notify appropriate parties.
- 24.2.1.2.e. The Outage Coordinator will make all notifications to affected personnel and will alert the proper staff so necessary preparations can be made within the affected areas.
- 24.2.1.2.f .When work has been completed, the Outage Coordinator, or his designate, will notify affected personnel that the system is back in service.
- 24.2.1.2.g. Contractors DO NOT have the authority to turn utilities off or on. This should only be done by the PPDMC Outage Coordinator.

Amend Article 33 of the Special Conditions to read:

ARTICLE 33 EMERGENCY VEHICLE AND FIRE TRUCK ACCESS

Access to the Medical Center Loading Dock must be maintained during construction for local fire truck access to the fire alarm annunciator panels located adjacent to the loading dock. General Contractor shall coordinate with the local fire department that would respond to an alarm during the initial startup of construction to ensure a complete understanding of their requirements.

The following Articles are in addition to and take precedence over the provisions of the Special conditions for the Project.

ARTICLE 46 LOADING DOCK

- 46.1 All demolition materials will be brought through the loading dock to the dumpster.
- 46.2 All new material and equipment, except for items requiring use of the front entry, shall be delivered to the main loading dock.
- 46.3 The loading dock shall be the primary access for construction workers. Construction workers shall use stairway near the designated elevator.

ARTICLE 47 CONSTRUCTION PATH

47.1 The construction path to each individual air handler will be coordinated in advance between the Contractor and the UK Project Manager. Construction paths will include path for personnel and for moving coils to air handler location.

ARTICLE 48 HOSPITAL PROJECT PROCEDURE:

- 48.1 This Project involves part of a fully functioning Hospital and teaching facility. During the construction of the new Work and all renovation, the Hospital is to remain fully functioning. No service offered by the Hospital will be allowed to be interrupted. This will require careful scheduling and consultation with the Owner and the Consultant. The Hospital will attempt to cooperate as much as possible but their need to provide full medical care will supersede any construction aspect.
- 48.2 The General Contractor shall organize his Work so that the Work shall cause a minimum of interference and disturbance to the Owner. Work will occur over occupied areas. This will require anticipation and careful scheduling of any noisy work above the area, or access through the area.
- 48.3 Coordination shall occur between the General Contractor and the Owner regarding access to areas outside of the immediate designated construction areas, including access to room's adjacent horizontal, or vertical that the General Contractor may need to access in order to run/connect utilities. Coordination for access shall be discussed in the monthly Progress Meetings as required by Article 10 of these Special Conditions. General Contractor shall also provide to the Owner written notice, one week prior to the anticipated need for access. Approval for access to the adjacent areas must be received by the General Contractor, prior to final scheduling of the Work. Failure to notify the Owner of the need for access will result in the stoppage of Work in the area for which access is required until approval is obtained. Any additional cost for such stoppage will be the General Contractor's responsibility.
- 48.4 No live electrical wiring, including temporary lighting, may be left exposed in areas of public or staff access.
- 48.5 In no instance may a corridor be blocked or its clear width reduced to less than 4'0".

- 48.6 "NOISY WORK": Areas to receive noisy Work above patient care areas. The General Contractor shall utilize tools or equipment of low velocity or drilling to limit the noise generated from Work which will be disruptive to patients. Any hammer drilling and impact type tools/equipment which are to be utilized in the Work by the General Contractor shall be strictly limited. Falling materials that damage ceilings, walls, pipes, and equipment shall become the General Contractor's responsibility to repair and/or replace at no cost to the Owner.
- 48.7 The General Contractor is hereby advised that any noisy Work which is disruptive will be required to stop upon notice from Owner's Project Manager. General Contractor will be notified by Owner's Project Manager when noisy Work can resume. General Contractor shall notify Owner's Project Manager 48 hours prior to the start of any noisy Work.
 - Noisy work shall be performed after 6:00 p.m. and before 7:00 a.m.
 - Perimeter wall construction around the Work Area shall be erected after 6:00 p.m. and before 7:00 a.m.
 - All bulky materials shall be delivered after 6:00 p.m. and before 7:00 a.m.

ARTICLE 49 WORKING HOURS/ACCESS: FOR MEDICAL CENTER/HOSPITAL

49.1 Normal Work hours are defined as a period between 7:00 a.m. to 5:00 p.m., Monday through Friday. General Contractor shall notify Owner's Project Manager one working day prior to performance of any Work for permission to do any Work during non-normal Work hours.

ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY

50.1 Security badges will be required for all construction personnel at General Contractor's cost of \$25.00 each from Hospital Security located in Pavilion A room A.00.807. Badges for Good Samaritan can be obtained in the Human Resources Office at the Good Samaritan Hospital, Room B102, for vendors working at Good Samaritan Hospital. Each badge will contain a picture, name and firm name. A UKHC identification badge must be worn on the upper torso at all times when working on UKHC property. No pins or labels shall be attached.

If you report to work without your badge, you must proceed to the Security Office in Pavilion A room A.00.807 or Good Samaritan Human Resources Office B102 to purchase a temporary badge. If your badge is lost or stolen, report it to Security, 859-323-6946, immediately. The contractor or employee must pay for all badges. Cash or check only is accepted for payment. New badges are \$15.00 and must be renewed annually with \$15.00 annual renewal fee.

- 50.2 The General Contractors and subcontractors are responsible for the security of their own materials, tools, and equipment on the project site. The Owner is not responsible for theft or vandalism to any such materials, tools, or equipment. The General Contractor shall coordinate with Medical Center Security prior to entering spaces other than Construction Limits.
- 50.3 The General Contractor shall assist in providing workers schedule to Medical Center Security personnel when it is evident his workmen will have access to unsecured areas within the building after normal work hours.
- The General Contractor shall secure the Project Limits for safety of building users working in adjacent spaces. **NO DOOR at any time should be held or propped open for any reason.** All contractors should receive keys or badge access via their UK Project manager.
- Any General Contractor having a field office or job trailer shall provide a key to the Owner's Project Manager, only to be used in the case of fire or security emergency.
- 50.6 The Owner will provide construction cores for keying during the life of the project and permanent cores at conclusion of construction. Hardware supplier to coordinate with University Key Shop.

- 50.7 Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- 50.8 Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide Owner with one set of keys.

ARTICLE 51 – HOSPITAL CONSTRUCTION CERTIFICATION

- 51.1 This Project involves working in a fully functioning Hospital. Individuals responsible for the work occurring on the site should be thoroughly familiar with the hazards and procedures associated with construction in the healthcare environment.
- 51.2 All superintendents and foremen for the General Contractor and the Mechanical and Electrical sub-contractors shall be required to hold at least one (1) of the certifications listed below from the associated organizations prior to working in the UK Albert B. Chandler Hospital or UK Good Samaritan Hospital. Any other trade contractor with more than four (4) individuals working on the site at one (1) time shall have one individual who holds at least one of the certifications listed below from the associated organizations prior to working in the UK Albert B. Chandler Hospital or UK Good Samaritan Hospital.

Healthcare Construction Certificate - American Society for Healthcare Engineers Certified Healthcare Contractor - Kentucky Society of Healthcare Engineers

51.3 Should the required certifications not be in effect at the date of the work order, the University project manager may, at his or her discretion, grant a grace period for the required training.

ARTICLE 52 – APPEARANCE

52.1 All contracted vendors performing work for The University of Kentucky HealthCare facilities must dress in a professional manner. A company uniform is preferred; however, if one is not provided, dress shall include work pants and a work shirt. All hats must either have the company logo or be a solid color with no logo. Casual sportswear such as blue jeans, shorts, sweat suits, t-shirts, or tank tops are not approved apparel. Clothing must be clean, and without rips or tears. The attire is intended to portray the image of well groomed, professional individuals.

Failure to comply can lead to the vendor being asked to leave the premises until the issues have been resolved.

ARTICLE 53 - HIPAA (The Health Insurance Portability and Accountably Act)

53.1 While working on the University of Kentucky Medical Center you will encounter patients or research and must follow the HIPPA guidelines. We must protect the well-being of patients, families and visitors as well as any and all research projects that are vital to the University. You shall respect the privacy of our patients, their families and any research that you may encounter while on campus.

For a complete understanding of the HIPAA Rules & Regulations please visit: http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.htm

ARTICLE 54 – SAFETY & FIRE PROCEDURES

54.1 Paging Codes

The UK HealthCare facilities use specific codes to alert staff about hazards or potential hazards in the area, and to call designated staff to action. These codes are designed to communicate information to those that need it without unduly alarming patients and visitors. All persons working in the facility are to take the appropriate action should a code be announced. Designated staff members have assigned roles in response to these codes. You may be asked to stop work and secure your area in response to any of these codes.

A list of pertinent codes are outlined below:

- Code Black: Bomb/Bomb Threat
- Code Blue: Medical Emergency (adult or pediatric)
- Code Pink: Infant or Child abduction
- Code Red: Fire
- Code Silver: Active Shooter
- Code Yellow: Disaster plan activation (internal or external)
- Assistance please (location): Uncontrolled individual

54.2 Fire Procedures

54.2.a. Fire Notification

UK HealthCare has a fire prevention program to protect patients, visitors, and staff from the dangers of fire. As a part of your orientation to this facility, please locate the fire alarms, extinguishers, and evacuation routes within or adjacent to the project site.

If fire, smoke, or excessive heat is detected within the UK HealthCare facilities, the fire notification system is activated. You will hear chimes over the paging system, followed by "code red" and the location of the alarm. In addition, the alarm system is activated periodically for fire drills and system testing.

When an alarm is activated, smoke and fire doors throughout the building will close. Staff will close doors to patient rooms, clear corridors, and implement other response procedures.

In all UK HealthCare facility buildings with exception of the Hospitals you must evacuate immediately when the fire alarm sounds. In the Hospitals, you will be able to remain in the project site throughout the response. Please listen carefully to the overhead paging announcements for instructions that might affect you. If an order is given to evacuate, please secure the project site and exit the building.

54.2.b. Your Role in Fire Response

As a Contractor, you have a role in fire response. If you discover a fire in your area:

Rescue anyone in immediate danger, if possible.
Activate the nearest fire alarm and call 911.
Contain, close doors that line the corridor.

Extinguish, if possible, and evacuate, if necessary.

54.2.c. Building Life Safety Features

UK HealthCare facilities are constructed with many life safety features to protect building occupants from fire. You must know the location of the following:

Fire Alarms
Fire Extinguishers
Emergency Exits
Evacuation Routes

Medical Gas Valves for the area in which you are working. Contractors/vendors are NEVER to close medical gas valves

If any life safety system must be taken out of service, you must coordinate the outage with the PPD Project Manager and the PPD Outage Coordinator prior to beginning work. You must put in place a temporary but equivalent system approved by the Campus Fire Marshall.

The UK HealthCare Medical Facilities are composed of smoke and fire compartments designed to contain the hazard should a fire break out. <u>If a rated fire, smoke, or corridor wall is penetrated, you must patch the wall using a UL listed firestop assembly the day that the penetration is made.</u>

ARTICLE 55 - Interim Life Safety Measures (ILSM)

The University of Kentucky has established an Interim Life Safety Program (ILSM) to manage safety hazards that could be created by construction, renovation, internal disaster, or other alteration to UK HealthCare buildings or grounds.

A review will be done for every project and will be implemented when a life safety code deficiency or other hazard places building occupants at significant risk. When life safety systems are impaired, the Hospital Safety Officer, General Contractor, or designee, will use established criteria to evaluate the risk and to implement appropriate ILSM to compensate for these deficiencies.

When construction or renovation poses other significant safety hazards, the safety officer and contractor or designee will implement other safety measures appropriate to the situation.

Planning for Interim Life Safety Measures

The Hospital Environment of Care Committee has approved criteria to be used to help determine appropriate ISLM to implement when a life safety code deficiency is identified.

The Hospital Safety Officer, or designee, will participate in or review documentation from project development, pre-construction, and construction progress meetings to ensure that safety issues and concerns are identified and addressed proactively, whenever possible.

UK project manager will notify the Hospital Safety Officer prior to the start of any construction or renovation project and prior to the start of a new project phase. The Key project participants will identify safety issues, concerns, and methods of maintaining a safe work environment.

The Safety Officer and UK staff will regularly inspect all construction sites. The Safety Surveillance Team will conduct regular building inspections to identify risks and hazards.

<u>Criteria for Implementation of Interim Life Safety Measures (ILSM) at the University of Kentucky HealthCare Facilities.</u>

In general, the Safety Officer or designee will use the criteria below to determine appropriate interim life safety measures. In all cases, additional measures may be taken, if warranted, to protect the building's occupants.

When the integrity of an exit access, exit, or discharge area is altered or compromised:

- Ensure free and unobstructed exit
- Ensure escape route for construction workers
- · Provide additional training for UK staff and signage when alternative exits are designated
- Increase debris removal schedule to reduce building's flammable and combustible load to lowest feasible level
- Conduct at least two fire drills per shift per quarter

- When the integrity of a building's defend-in-place compartments/features (fire barriers, smoke barriers, floor slabs, corridor wells) are significantly compromised
- Ensure that construction partitions are smoke-tight and built of noncombustible or limited combustible materials

When a building's fire alarm, detection, and/or suppression systems are impaired:

- Implement temporary but equivalent, fire alarm, detection, or suppression systems
- Inspect and test temporary systems monthly
- Ensure that construction partitions are smoke tight and built of noncombustible or limited combustible materials
- Provide additional fire-fighting equipment & train staff to use

When temporary sources of ignition (cutting, welding, plumber's torch) are involved:

- Initial contractor will provide hot work permit and follow its guidelines
- Ensure free and unobstructed exits
- Ensure fire alarm, detection, and suppression systems are in working order
- Provide additional fire-fighting equipment (a fire extinguisher every 50 feet) and train staff to use
- Decrease combustible load to lowest feasible level

When large quantities of combustibles or debris are present or involved:

- Increase debris removal schedule
- Provide additional fire-fighting equipment (a fire extinguisher every 50 feet) and train staff to use
- Ensure that construction partitions are smoke tight and built of noncombustible or limited combustible material

Infection Control

When an employee is working in any patient care area or on any patient care equipment, he/she must follow the standard precautions outlined below:

- Wear gloves when there is a possibility that you will touch any body substances or equipment contaminated by body substances (blood, urine, feces, wound drainage, oral secretions, sputum, and vomitus.)
- Wear a fluid resistant gown, masks and/or goggles when there is any possibility that your eyes, mucous membranes or clothing will be splashed or sprayed by body substances or exposure to contaminated equipment.
- During construction/renovation projects or in situations when plumbing is inadvertently interrupted, it is recommended that personnel wear appropriate personal protective equipment. Traffic must be restricted from this area.
- Discard all personal protective clothing in accordance with standard precautions.
- Wash hands thoroughly with antibacterial soap immediately following work.
- Eating, drinking and smoking are restricted to designated areas.

<u>Infection Control Policy for construction at the University of Kentucky Healthcare Facilities</u>

It is the policy of the University of Kentucky HealthCare to prevent illness in patients related to construction dust and airborne fungi. This document spells out requirements that contractors with University of Kentucky Chandler and Good Samaritan Hospital and in-house workers should follow in order to minimize risks of construction to our patients.

Classification of Jobs:

Class I: These projects do not generate appreciable dust or airborne particulate matter. Examples include minor plumbing, electrical, carpentry and duct work; some aesthetic improvements; installation of phones, computers, gas and TV hook-up lines in existing conduits, etc.

Class II: These projects generate dust or other airborne particulate matter and hence require barrier precautions. Examples include construction of new walls; construction of new rooms; major utility changes; major equipment installation; demolition of wallboard; plaster, ceramic tile, ceiling and floor tile removal; removal of windows; removal of casework, etc. Routine maintenance where dust is produced in patient care areas is included. These projects must follow construction standards for the hospital.

Sequence of Events:

UK project manager will work with the Infection Control Department to determine if the project is Class I or Class II based on an ICRA (Infection Control Risk Assessment) evaluation completed by the Infection Control Department.

The project manager should invite a representative of Infection Control to the initial design meeting for the project (and other meetings as appropriate).

The ICRA will be posted on the job site and must be adhered to throughout the project unless otherwise determined by the Infection Control Representative.

Ventilation System

- All ventilation systems to operating rooms, recovery rooms, delivery rooms, newborn nurseries and special care units will have a HEPA filtered clean air supply. These systems will be maintained and serviced according to the established preventive maintenance programs to assure clean air supply.
- Patient rooms which house patients with air-borne infections (requiring negative pressure) will
 be inspected according to the preventive maintenance program to prevent the spread of
 potential air-borne pathogens.
- Personnel performing routine maintenance or repairing ventilation systems of negative pressure should wear a NIOSH approved respirator.
- Personnel entering rooms housing known or suspected TB patients are required to wear a properly fitted NIOSH approved respirator.

Aspergillums

Aspergillums are a microbial contaminant which can cause serious complications for patients who are susceptible or in a high risk category. Most nosocomial airborne mold infections are caused by aspergillums; species. This species is widely distributed in our natural environment and can grow on almost anything. When ceilings or walls are disturbed, or activity associated with normal renovations or maintenance, it results in airborne disbursements of particulate matter (dust), which may carry aspergillums spores and infect patients.

UK and its contractors will make every effort to minimize the release of aspergillums in high risk areas. Renovation in or adjacent to high risk areas will be controlled through proper separation and HEPA air flow filtering to reduce the potential dangers to patients. The method used to control dust control must be reviewed by and approved by the Infection Control Department. High risk areas are defined as follows:

Any area a patient with an immune compromised system will be put in additional harm's way by your service or act of service.

No major construction shall occur in the Transplant Clinic without involvement of the Transplant Department Director. The area must be vacated of patients before any such work can occur.

Procedure:

- Before construction begins contact Infection Control at 859-323-4609.
- Proceed cautiously when removing or installing ceiling tiles in the high risk areas.
- On major construction/renovation, air tight partitions shall separate the renovation site from other space occupied by patients. The barrier shall be tested for tightness. Ventilation leading from the area being renovated should be blocked at its point of exit from the room.
- HEPA filtration of air will be required
- Whenever possible, create a negative air flow on the construction/renovation site.
- Keep the work area as clean and dust free as possible.
- Ensure that infection control measures are in effect.
- Use sticky mats outside of barrier.

Infection Control Oversight

- Infection Control must inspect work site before demolition/construction begins.
- Infection Control will make periodic visits to work site to ensure compliance ICRA standards.
- Contractors will receive information and education about Infection Control Standards at the preconstruction meeting

SEE THE FOLLOWING ATTACHMENTS A THROUGH C.

ARTICLE 8.7.3 Attachment A – Uniformat Component List

SAP Object Type No.	Component Name				
D5030.0232	Access Control Panel				
D3050.0110	Air Conditioning Comp Rm Unit				
D3030.0610	Air Conditioning Compressor				
D3030.0620	Air Conditioning Condensing Unit				
D3050.0120	Air Conditioning Pkg Rooftop Unit				
D3050.0130	Air Conditioning Pkg Terminal Unt				
D3030.0630	Air Conditioning Split System				
D3050.0140	Air Conditioning Unit Package				
D3050.0150	Air Conditioning Unit Window				
D3050.0710	Air Curtain / Heater				
D2090.0120	Air Dryer				
D3010.0443	Air Eliminator				
D3040.0110	Air Handling Unit				
D5090.0220	Auto Transfer Switch - Electrical				
	Automatic Door Operator				
D2020.0330	Backflow Preventers				
D3020.0110	Boiler, Steam System				
D5030.0241	Camera				
D5030.0231	Card Access System				
D3030.0300	Chiller, Reciprocate				
E1090.0250	Chutes & Collectors				
D5010.0510	Circuit Breaker Panel				
F1020.0230	Clean Rooms				
F1020.0240	Cold Storage Rooms				
D2090.0110	Compressor, Air				
D3060.0250	Controls, Building System				
E1090.0317	Cooler, Commercial				
D3030.0510	Cooling Tower, Packaged				
D2010.1300	Copper Silver Ion Equipment				
D4090.0510	Dampers Fire				
D4090.0500	Dampers Fire/Smoke				
D4090.0520	Dampers Smoke				
D3050.0400	Dehumidifiers				
D2090.0200	Deionized Water System				
E1090.0391	Dishwasher, Commercial				
B2030.0160	Door, Auto Entrance				

B2030.0100 Door, Exterior Entrance	_	,		
C1020.0320 Door, Smoke Partition D2010.0800 Drinking Fountain D5010.0350 Electric Switchboard E1030.0310 Elevator, Dock Leveler D1090.0120 Elevator, Dumbwaiter Electric D109.0130 Elevator, Dumbwaiter Hydraulic D1010.0140 Elevator, Hydraulic Passenger D1010.0120 Elevator, Hydraulic Passenger D1010.0230 Elevator, Flatform Lift D1010.0240 Elevator, Sidewalk Lift D1010.0130 Elevator, Traction Freight D1010.0110 Elevator, Traction Passenger D1010.0110 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1100 Emergency Eyewash/Shower D5090.0810 Emergency Eyewash/Shower D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3050.0520 Fan Coil Unit D3040.0121 Fan, Exhaust D3040.0122 Fan, Axial D5030.0134 Fire Alarm Anunciator D5030.0134 Fire	B2030.0100	Door, Exterior Entrance		
D2010.0800 Drinking Fountain	C1020.0330	Door, Fire Separate		
D5010.0350 Electric Switchboard	C1020.0320	Door, Smoke Partition		
E1030.0310 Elevator, Dock Leveler	D2010.0800	Drinking Fountain		
D1090.0120 Elevator, Dumbwaiter Electric D1090.0130 Elevator, Dumbwaiter Hydraulic D1010.0140 Elevator, Hydraulic Freight D1010.0120 Elevator, Hydraulic Passenger D1010.0230 Elevator, Platform Lift D1010.0240 Elevator, Sidewalk Lift D1010.0130 Elevator, Sidewalk Lift D1010.0130 Elevator, Traction Freight D1010.0110 Elevator, Traction Passenger D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Eyewash/Shower D3050.0600 Emergency Eyewash/Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Centrifugal D3040.0121 Fan, Centrifugal D3040.0121 Fire Alarm Annunciator D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm Door Holder D5030.0134 Fire Alarm Door Holder D5030.0135 Fire Alarm Horns D5030.0136 Fire Alarm Horns D5030.0137 Fire Alarm Pull Station D5030.0137 Fire Alarm Pull Station D5030.0138 Fire Alarm Pull Station D5030.0139 Fire Alarm Pull Station D5030.0130 Fire Alarm System D5030.0131 Fire Alarm System D5030.0133 Fire Alarm System D5030.0133 Fire Alarm System D5030.0133 Fire Alarm System D5030.0133 Fire Alarm System D5030.0138 Fire Alarm System D6030.0100 Fire Extinguisher Cabinet	D5010.0350	Electric Switchboard		
D1090.0130 Elevator, Dumbwaiter Hydraulic	E1030.0310	Elevator, Dock Leveler		
D1010.0140 Elevator, Hydraulic Freight	D1090.0120	·		
D1010.0120 Elevator, Hydraulic Passenger	D1090.0130	Elevator, Dumbwaiter Hydraulic		
D1010.0230 Elevator, Platform Lift	D1010.0140	Elevator, Hydraulic Freight		
D1010.0240 Elevator, Sidewalk Lift D1010.0130 Elevator, Traction Freight D1010.0110 Elevator, Traction Passenger D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3040.0120 Fan Coil Unit D3040.0121 Fan, Cantrifugal D3040.0122 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0134 Fire Alarm Annunciator D5030.0135 Fire Alarm Door Holder D5030.0139 Fire Alarm Door Holder D5030.0130 Fire Alarm Heat Detectors D5030.0131 Fire Alarm Heat Detectors D5030.0133 Fire Alarm Horns D5030.0135 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Signal Speaker D5030.0133 Fire Alarm Signal Dev <	D1010.0120	Elevator, Hydraulic Passenger		
D1010.0130 Elevator, Traction Freight D1010.0110 Elevator, Traction Passenger D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Generator D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3040.0121 Fan, Cantrifugal D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0121 Fan, Exhaust D5030.0144 Fire Alarm Annunciator D5030.0133 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0133 Fire Alarm Heat Detector D5030.0136 Fire Alarm Heat Detectors D5030.0137 Fire Alarm Pull Station D5030.0138 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Signal Speaker D5030.0133 Fire Alarm System D5030.0138 Fire Alarm System	D1010.0230	Elevator, Platform Lift		
D1010.0110 Elevator, Traction Passenger D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1200 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm Av Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Door Holder D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0137 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm Signal Signal Dev	D1010.0240	Elevator, Sidewalk Lift		
D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm Av Devices D5030.0139 Fire Alarm Door Holder D5030.0131 Fire Alarm Heat Detector D5030.0133 Fire Alarm Heat Detectors D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Signal Speaker D5030.0131 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Signal Speaker D5030.0133 Fire Alarm Signal Dev D40	D1010.0130	Elevator, Traction Freight		
D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AN Devices D5030.0139 Fire Alarm Door Holder D5030.0139 Fire Alarm Door Holder D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Heat Detectors D5030.0137 Fire Alarm Panel D5030.0138 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D1010.0110	Elevator, Traction Passenger		
D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0141 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0134 Fire Alarm Heat Detectors D5030.0135 Fire Alarm Panel D5030.0136 Fire Alarm Signal Speaker D5030.0137 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Extinguisher Cabinet	D1010.0220	Elevator, Wheelchair Lift		
D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0134 Fire Alarm Annunciator D5030.0139 Fire Alarm Door Holder D5030.0139 Fire Alarm Door Holder D5030.0133 Fire Alarm Heat Detector D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D2010.1100	Emergency Eyewash		
D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0131 Fire Alarm Heat Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0137 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Extinguisher Cabinet	D2010.1000	Emergency Eyewash/Shower		
D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5090.0810	Emergency Generator		
F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D2010.1200	Emergency Shower		
D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D3050.0600	Energy Recovery Unit		
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D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D3050.0520	Fan Coil Unit		
D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D3040.0122	Fan, Axial		
D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D3040.0121	Fan, Centrifugal		
D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D3040.0410	Fan, Exhaust		
D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0141	Fire Alarm Annunciator		
D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0134	Fire Alarm AV Devices		
D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0139	Fire Alarm Door Holder		
D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0144	Fire Alarm Duct Detector		
D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0133	Fire Alarm Heat Detectors		
D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0136	Fire Alarm Horns		
D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0131	Fire Alarm Panel		
D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0135	Fire Alarm Pull Station		
D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0137	Fire Alarm Signal Speaker		
D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0132	Fire Alarm Smoke Detectors		
D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet	D5030.0130	Fire Alarm System		
D4030.0100 Fire Extinguisher Cabinet	D5030.0138	Fire Alarm Visual Signal Dev		
	D4030.0200	Fire Blanket & Cabinet		
D4030.0300 Fire Extinguisher Wheeled	D4030.0100	Fire Extinguisher Cabinet		
	D4030.0300	Fire Extinguisher Wheeled		

D4090.0300 Fire Extinguishing System, CO2 D4090.0400 Fire Extinguishing System, CO2 D4090.0400 Fire Extinguishing System, Dry Chemical D4090.0400 Fire Extinguishing System, Dry Chemical D4090.0000 Fire Extinguishing System, Other G3010.0310 Fire Hydrant E1090.0330 Food Cooking Equipment E1090.0310 Food Storage/Prep Equipment D2090.0400 Fuel Oil System D3040.0460 Fume Hood System D3040.0460 Fume Hood System D3030.0500 Furnaces D2030.0260 Grease Trap D3050.0580 Heat Exchanger D400.0580 Heater Demestic Water D3050.0581 Heater, Cabinet Unit D3050.0581 Heater, Cast Iron Radiator D3050.0581 Heater, Fin Tube Radiator D3050.0580 Heater, Init Vent D3050.0560 Heater, Unit Vent D3050.0570 Heater, Unit Vent D3050.0570 Heater, Unit Vent D4040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0330 Light, Emergency Exterior D5020.0231 Light, Emergency Interior D5020.0231 Light, Emergency Interior D5020.0231 Light, Emergency Interior D5020.0334 Medical Gas Alarm E1020.0835 Medical Gas Alarm E1020.0836 Medical Gas N2O E1020.0837 Medical Gas N2O E1020.0838 Medical Horrogen E1020.0839 Medical Gas N2O E1020.0830 Medical Gas N2O E1020.0831 Medical Gas System E1020.0832 Medical Sterilizer Equipment E1020.0833 Medical Sterilizer Equipment E1020.0834 Medical Sterilizer Equipment E1020.0835 Medical Sterilizer Equipment E1020.0836 Medical Sterilizer Equipment E1020.0837 Medical Sterilizer Equipment E1020.0838 Medical Nator Control Center D5010.0720 Motor, Electric				
D4090.0400 Fire Extinguishing System, Dry Chemical	D4090.0300	Fire Extinguishing System, Clean		
D4090.0100 Fire Extinguishing System, Foam	D4090.0200	Fire Extinguishing System, CO2		
D4090.0000 Fire Extinguishing System, Other G3010.0310 Fire Hydrant	D4090.0400	Fire Extinguishing System, Dry Chemical		
G3010.0310 Fire Hydrant	D4090.0100	Fire Extinguishing System, Foam		
E1090.0330 Food Cooking Equipment	D4090.0000	Fire Extinguishing System, Other		
E1090.0310 Food Storage/Prep Equipment	G3010.0310			
D2090.0400	E1090.0330	Food Cooking Equipment		
D3040.0460 Fume Hood System	E1090.0310	Food Storage/Prep Equipment		
D3020.0310 Furnaces	D2090.0400	Fuel Oil System		
D2030.0260 Grease Trap	D3040.0460	Fume Hood System		
D3050.0580 Heat Exchanger D2020.0260 Heater Domestic Water D3050.0521 Heater, Cabinet Unit D3050.0530 Heater, Cast Iron Radiator D3050.0540 Heater, Induction Unit D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0230 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.0900 Medical Gas Area Alarm E1020.0834 Medical Gas Auto Pressure Switch E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0830 Medical Gas System E1020.0830 Medical Gas System E1020.0831 Medical Nedical Nitrogen E1020.0832 Medical Sterilizer Equipment E102	D3020.0310	Furnaces		
D2020.0260 Heater Domestic Water D3050.0521 Heater, Cabinet Unit D3050.0581 Heater, Cast Iron Radiator D3050.0530 Heater, Fin Tube Radiation D3050.0540 Heater, Induction Unit D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Gas Alarm E1020.0900 Medical Gas Alarm E1020.0900 Medical Gas Aven Pressure Switch E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas N20 E1020.0835 Medical Gas N20 E1020.0837 Medical Gas System E1020.0838 Medical Gas System E1020.0830 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump	D2030.0260	Grease Trap		
D3050.0521 Heater, Cabinet Unit D3050.0581 Heater, Cast Iron Radiator D3050.0530 Heater, Fin Tube Radiation D3050.0540 Heater, Induction Unit D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0330 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.0900 Medical Gas Area Alarm E1020.0840 Medical Gas Area Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas Sultet E1020.0837 Medical Gas Sultet E1020.0838 Medical Gas System E1020.0838 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0580	Heat Exchanger		
D3050.0581 Heater, Cast Iron Radiator D3050.0530 Heater, Fin Tube Radiation D3050.0540 Heater, Induction Unit D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0231 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Gas Alarm E1020.0900 Medical Gas Alarm E1020.0900 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D2020.0260	Heater Domestic Water		
D3050.0530	D3050.0521	Heater, Cabinet Unit		
D3050.0540 Heater, Induction Unit D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0231 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.0900 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0838 Medical Gas System E1020.0830 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0581	Heater, Cast Iron Radiator		
D3050.0560 Heater, Unit D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0231 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Nanifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas System E1020.0838 Medical Gas System E1020.0830 Medical Nitrogen E1020.0831 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0530	Heater, Fin Tube Radiation		
D3050.0570 Heater, Unit Vent F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0838 Medical Gas System E1020.0838 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0540	Heater, Induction Unit		
F1040.0700 Heliport System E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0230 Light, Emergency Exterior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0832 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0560	Heater, Unit		
E1090.0340 Hood/Vent Equip D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0231 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0839 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0570	Heater, Unit Vent		
D3050.0300 Humidifier E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	F1040.0700	Heliport System		
E1090.0380 Ice Machines D5020.0330 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Avea Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1090.0340	Hood/Vent Equip		
D5020.0330 Light, Emergency Exterior D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0830 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D3050.0300	Humidifier		
D5020.0230 Light, Emergency Interior D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0838 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1090.0380	Ice Machines		
D5020.0231 Light, Exit E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D5020.0330	Light, Emergency Exterior		
E1020.0831 Medical Air Compressor E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D5020.0230	Light, Emergency Interior		
E1020.0900 Medical Gas Alarm E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	D5020.0231	Light, Exit		
E1020.1000 Medical Gas Area Alarm E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0831	Medical Air Compressor		
E1020.0840 Medical Gas Auto Pressure Switch E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0900	Medical Gas Alarm		
E1020.0834 Medical Gas Manifold E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.1000	Medical Gas Area Alarm		
E1020.0835 Medical Gas N2O E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0840	Medical Gas Auto Pressure Switch		
E1020.0839 Medical Gas Outlet E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0834	Medical Gas Manifold		
E1020.0837 Medical Gas Shut-off Valve E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0835	Medical Gas N2O		
E1020.0830 Medical Gas System E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0839	Medical Gas Outlet		
E1020.0838 Medical Nitrogen E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0837	Medical Gas Shut-off Valve		
E1020.0810 Medical Sterilizer Equipment E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0830	Medical Gas System		
E1020.0832 Medical Vacuum Pump D5010.0711 Motor Control Center	E1020.0838	Medical Nitrogen		
D5010.0711 Motor Control Center	E1020.0810	Medical Sterilizer Equipment		
	E1020.0832	Medical Vacuum Pump		
D5010.0720 Motor, Electric	D5010.0711	Motor Control Center		
	D5010.0720	Motor, Electric		

D5030.0431	Nurse Call System		
E1090.0210	Packaged Incinerator		
D3010.0550	Packaged Solar Equipment		
D5030.0420	Paging Systems		
C1010.0180	Partition Fire Rated		
C1010.0190	Partition, Smoke		
D1090.0141	Pneumatic Tube Blower		
D1090.0142	Pneumatic Tube Station		
D1090.0140	Pneumatic Tube System		
D1090.0143	Pneumatic Tube Transfer Unit		
D3010.0430	Pump		
D3030.0710	Pump, Air Source Heat		
D3010.0432	Pump, Chilled Water		
D2020.0222	Pump, Domestic Hot Water Recirculation		
D2020.0221	Pump, Domestic Water Booster		
D4010.0111	Pump, Fire		
D3010.0431	Pump, Heating Water		
D4010.0112	Pump, Jockey Fire		
D3030.0720	Pump, Rooftop Heat		
D3010.0433	Pump, Steam		
D2040.0270	Pump, Sump		
D2030.0330	Pump, Waste		
D2020.0220	Pump, Water Booster		
D3030.0730	Pump, Water Heat		
E1090.0315	Refrigerator/Freezer, Commercial		
D3040.0123	Return Air Fan		
D2090.1200	Reverse Osmosis System		
D3030.0420	Scroll Chiller		
D4010.0300	Sprinkler, Combo System		
D4010.0400	Sprinkler, Deluge System		
D4010.0200	Sprinkler, Dry-Pipe		
D4020.0100	Sprinkler, Standpipe		
D4010.0100	Sprinkler, Wet-Pipe		
D3050.0310	Steam Generator		
D5010.0840	Switchgear, Medium Voltage		
D3010.0441	Tank, Expansion Compressor		
D2020.0310	Tank, Expansion Domestic		
D2020.0320	Tank, Expansion Reheat		
D2090.0410	Tank, Fuel Oil		
D3010.0444	Tank, Steam Flash		
D5010.0210	Transformer, Low-Volt 2nd		

D5010.0410	Transformer, Low-Volt Inter
D5010.0110	Transformer, Main
D3020.0150	Trap, Steam
D5090.0110	UPS - Computer
D5090.0120	UPS - Other
D2090.1310	Vacuum Pump
D3010.0435	VFD - Pump
D3040.0190	VFD HVAC
D5010.0850	VFD/VSD
E1090.0316	Walk-in-Refrigerator
D2090.0210	Water Softener Equipment
D3010.0490	Water Treatment Equipment

ARTICLE 8.7.3 Attachment B – Equipment List Spreadsheet Data Categories

Uniformat Component ID Component Name Description Name Equipment No. PPDMC will enter Model No. Room Location	this data
Component Name Description Name Equipment No. PPDMC will enter Model No.	this data
Description Name Equipment No. PPDMC will enter Model No.	this data
Name Equipment No. PPDMC will enter Model No.	this data
Equipment No. PPDMC will enter Model No.	this data
Model No.	this data
Room Location	
Functional Location PPDMC will enter	this data
Manufacturer	
Supplier	
Installing Contractor	
Serial No.	
Main Work Center PPDMC will enter	this data
Comments(30 char's) PPDMC will enter	this data
Critical PPDMC will enter	this data
JCAH Code PPDMC will enter	this data
Patient Room? PPDMC will enter	this data
Vendor ID PPDMC will enter	this data
Vendor Type PPDMC will enter	this data
Vendor - Other Info PPDMC will enter	this data
Equipment Life PPDMC will enter	this data
Area Serviced	
Contains Lead?	
Contains Asbestos?	
Contains PCBs?	
Motor Frame	
Motor Style	
Motor HP	
Motor Phase	
Motor Volts	
Motor RPM	
Fan CFM	
Fan RPM	
Fan Static	_
Fan Type	
Fan RPM 2	
Pump Head	
Pump Inlet	

Pump GPM	
Pump Outlet	
Motor Operating Amps	
Condition	PPDMC will enter this data
Disconnect Location	
Motor FLA	
Belts	
Filters	

ARTICLE 8.7.3 Attachment C - Example Preventative Maintenance Procedures

Description	Name	Equipment No.	Frequency	Maintenance Procedure	Maintenance Parts & Items
Air Handling Unit	AHU-1	M-12345	Monthly	Check Belts	
Air Handling Unit	AHU-1	M-12345	Quarterly	Grease bearings	Grease type xyz
					Belt model abc-
Air Handling Unit	AHU-1	M-12345	Annually	Replace Belts	123
Air Handling Unit	AHU-2	M-98765	Monthly	Check Belts	

The blue highlighted column will be filled in by PPDMC.