

CONSTRUCTION SAFETY & PROJECT MANUAL

June 2020

It is the responsibility of every individual Contractor to ensure they read, understand, and follow this manual as a condition of employment on every CN project. This manual must be reviewed annually by all Contractors.

Table of Contents

Safety Standards	4
Regulations	
Personal Protective Equipment	
Fire Safety	5
Lockout/Tag-out	6
Confined Spaces	6
Slips, Trips and Falls	6
Noise Control	6
Power Tools, Hand Tools and Electrical Cords	6
Lifts	7
Bloodborne Pathogens	7
Hazardous Materials	7
Flammable Products	7
Housekeeping	7
Core Drilling	
Ladders	
Scaffolding	9
Cranes/Picks	9
Road Closures	
Incident Reporting	
Contractor Building Access	11
Identification Badging	
Radio Communication	
Personnel Behavior	
Parking	
Cafeteria	
Bathrooms	
Patient Confidentiality	
What Not To Do	
Emergency Code Alerts	

Safety and Security Violations & Disciplinary Action Plan	14
Project Standards	15
Scope of Work	15
Daily Construction Reports	16
Construction Schedule	16
Owner Meetings	16
Safety Meetings	16
Systems Disable and Outages	
Risk Assessments	
Infection Control	
Signage	20
Site Logistics and Material Delivery	20
Engineering Inventory System	21
Tests, Inspections and Quality Control	22
Project Closeout	22
Attachment A – Children's National Policies & Procedures	
Attachment B – Control Room Work Forms & Permits	
Attachment C – Building Access Request Form	
Attachment D – Risk Assessment Forms	••••••
Attachment E – Equipment Inventory Form & Systems List	••••••
Attachment F – Equipment Inventory Log	
Attachment G – Construction Project Turnover Checklist	•••••



Safety Standards

Children's National (CN) will expect all employees and Contractors to comply with and enforce the Safety Standards which include, but shall not necessarily be limited to, those listed below. These Safety Standards are specifically included in, and enforceable under, every CN Contract Agreement. It is the responsibility of every individual Contractor to ensure they read, understand, and follow them as a condition of employment on every CN project. These Safety Standards are a contract document and will be strictly enforced.

All new Contractor employees, sub tier Contractor employees, vendors, etc. are required to attend Contractor Safety Training and take the Annual Contractor Safety Quiz in order to perform work at Children's National. Prior to the completion of the contractor safety training quiz, all Contractors must complete the credentialing requirements within the Green Security System and complete the Access Request Form to access the interior / occupied spaces in the building. Contractor Safety Training will be performed by Children's National and will occur on a weekly basis. Any employee that does not attend and sign off on the training or display a photo ID badge will not be allowed to be on site. To obtain a temporary daily pass, Contractors can sign in at the Green Security kiosk located at the Emergency Department entrance and the Main Atrium check in desk. Temporary Badges will only be issued to those who visit the Main Campus \geq 4 visits per year OR for \geq 5 working days per visit. If you exceed the number of visits you are required to submit for a badge card through Green Security.

Each Contractor performing work on any Children's National project is contractually obligated to comply with all statutory safety requirements as well as any supplemental Children's National Policies and Procedures articulated in the bid and contract documents. Contractors must agree to comply with these Safety Standards and communicate them to their employees. Further, all Contractors working on Children's National properties are responsible for contractually obligating its Contractors/Suppliers/Vendors to comply with these standards. Failure to comply will result in disciplinary actions as listed in the Safety & Security Violations & Disciplinary Action Plan. It is the responsibility of each of the Contractors to account for all of their employees throughout the day and at the end of each workday.

Regulations

- 1. The Contractor shall at all times abide by the Policies and Procedures of Children's National , and all amendments including those that may be issued during the duration of the Contract.
- 2. Refer to Attachment A Children's National Policies & Procedures for particular regulations that pertain to all Contractors.
- 3. Refer to Attachment B Control Room Work Forms & Permits for required forms and permits that must be provided to CN on a regular basis during the course of the performance of work.

Personal Protective Equipment

- 1. Safety equipment shall be provided as needed by each individual Contractor for their employees. This includes, but is not limited to:
 - a. Hard Hats
 - b. Appropriate work boots
 - c. Safety glasses
 - d. Filter lenses for welding/hot work
 - e. Appropriate hand protection to hazards (i.e. cut resistant gloves)
 - f. Appropriate clothing to hazards
 - g. Hearing protection
 - h. Respiratory protection



Fire Safety

- 1. CN has the right to stop any work at any time if it is determined that unsafe conditions exist. The Contractor is responsible to correct all unsafe conditions and must obtain approval of such corrections prior to commencing further work.
- 2. The Contractor must provide portable fire extinguishers with current inspection tags, mounted on brackets throughout the area of work.
- 3. Hot Work Operations
 - a. Contractors must notify CN beforehand if scope of work will involve any type of hot work and obtain a Hot Work Permit. Hot Work Permits are required on a daily basis for any operations involving open flame or producing heat and/or sparks. This work includes, but is not limited to, welding, brazing, cutting, grinding, soldering, thawing pipe, torch applied roofing or chemical welding.
 - b. Maintain portable fire extinguishers within reach during any hot work operations.
 - c. Keep means of egress from hot work area clear and open.
 - d. Inform personnel in hot work area of the location of the nearest fire alarm pull station.
 - e. Remove all flammable materials to a location at least 35 feet from all hot work operations.
 - f. Cover fixed flammable items within 35 feet of hot work operations with fire-resistant blankets.
 - g. Maintain a fire watch for a minimum of 30 minutes following completion of each hot work operation.
 - h. Welding screens should be placed in the area of hot work to protect eyes of people passing by, as required.
 - i. Refer to Attachment B Control Room Work Forms & Permits for additional Hot Work Permit requirements and information.
- 4. Penetrations in Fire- or Smoke-Rated Walls
 - a. Contractors must notify CN during the Risk Assessment process if the scope of work will involve penetrations through smoke or fire rated barriers.
 - b. Scope of work must include life safety plans of work area.
 - c. An Above Ceiling and Rated Wall Penetration Work Permit is required for all work taking place above existing ceilings or penetrating existing fire- and smoke-rated walls. One permit will be issued for the duration of the project.
 - d. Seal all penetrations in fire- and smoke-rated walls immediately after demolition or installation of penetrating item. All firestopping of penetrations in new or existing fire- and smoke-rated walls shall be performed using products manufactured by Hilti, Inc. and by an installer meeting one of the following requirements:
 - i. Firestop installer shall be a CN-approved firestopping vendor. A list of approved vendors is available from the Engineering Department.
 - ii. Firestop installer shall be trained and certified by Hilti, Inc. Submit a copy of the Hilti Certification with the Above Ceiling and Rated Wall Penetration Work Permit.
 - e. The Above Ceiling and Rated Wall Penetration Work-Ladder Tag shall be displayed on the ladder used during the work or at the entrance to the work area.
 - f. Notify the Engineering or Construction Department when penetration and firestopping work is completed. The Engineering or Construction Department will inspect the completed work. The Contractor must correct any deficiencies found by such inspection.
 - g. Any and all fire or smoke Walls compromised during the construction process, must be repaired within four hours, or otherwise protected using temporary Code compliant, UL Classified methodology and systems. Alternatively, a Risk Assessment must be completed and Interim Life Safety Measures implemented, if required, based on the Risk Assessment. CN shall be identified immediately if a fire or smoke wall is compromised and not repaired within four hours.

- h. Failure to seal off fire or smoke Wall penetrations without notice to CN is grounds for termination of contract and dismissal from the project.
- 5. Interim Life Safety Measures (ILSM)
 - a. If any part of the Life Safety System, including, but not limited to, smoke detectors, fire alarms, sprinkler system, fire exits, etc is disabled for more than 4 hours then ILSM must be implemented.
 - b. ILSM measures will be recommended by the Safety department and may include additional firefighting equipment, fire watch, communication to affected areas, etc.
- 6. Provide readily available shutoff valves at all combustible tanks. Do not store extra combustible tanks within the building.
- 7. Refer to "Systems Disable and Outages" section for additional pre-impairment, safety and procedural requirements.

Lockout/Tag-out

- 1. Contractors shall provide a lock and tag on the main energy isolating device and any points where the equipment or circuits could be energized to prevent potential release of hazardous energy before performing service, maintenance or work of equipment. Contractors are responsible for providing their own locks and tags.
- 2. Contractors must verify that the system is properly locked out prior to beginning any work.

Confined Spaces

- 1. Contractors shall comply with the OSHA Permit-Required Confined Space standard, which mandates practices and procedures for safe entry and work within permit-required confined spaces.
- 2. Contractors shall be familiar with Children's National Confined Space Policy & Procedures. This includes a list of confined spaces at CN.

Slips, Trips and Falls

- 1. No persons will be allowed to work at heights over six feet (6'-o") without the use of a fall protection system.
- 2. Contractors shall follow OSHA's Fall Protection Standard to prevent falls from heights and slips or trips on walking & working surfaces.
- 3. Keep trip, slip and fall hazards away from public and patient care areas so that no one else falls either. Water spills must be cleaned up immediately. Major water or moisture events must be reported to Children's National immediately. Contractors shall comply with Children's National Water Intrusion Response Policy & Procedure.
- 4. Contractors shall provide barriers around work area that includes caution tape, cones or other warning accessories.

Noise Control

- All Contractors are responsible to follow the Children's National Hearing Conservation Program provided to help minimize occupational hearing loss to all persons working in areas or with equipment that have noise levels equal to or exceeding an eight-hour time-weighted average (TWA) sound limit of 85 dBA (decibels measured on the A scale of a sound level meter).
- 2. All hearing protection, training and annual hearing tests required are the responsibility of the Contractor to provide to its employees.
- 3. Contractors must notify CN ahead of time if scope of work will involve loud noise levels or vibrations.

Power Tools, Hand Tools and Electrical Cords

- 1. All Contractors shall not issue or permit the use of unsafe hand tools. Tools and/or cords found in poor or unsafe condition must immediately be removed from the work site.
- 2. All electric power tools and negative air machines must be connected to ground fault circuit interrupters. No tools or equipment shall be connected to emergency power.
- 3. All table saws shall be equipped with anti-restart devices.
- 4. All cutting/grinding devices shall have the proper guarding installed.

- 5. Cords found without ground plugs or that are not double insulated shall be immediately cut to prevent future use and disposed of.
- 6. Personnel operating powdered actuated tools must have valid brand specific training credentials. Documentation of training shall be made available upon request.

Lifts

- 1. DO NOT operate any sort of lift on Children's National property until you have received proper training as required by OSHA. Documentation of training shall be made available upon request. This includes, but is not limited to, boom lifts, scissor lifts, bucket trucks, fork lifts, material lifts, hoists, etc.
- 2. When operating a lift, the following is required, at a minimum:
 - a. All personnel using a man lift must be tied off inside the lift.
 - b. All fingers must be kept inside of the basket. Do not let fingers get pinched between basket rail and building wall.
 - c. Set man lift level to ground to avoid tip over hazard.
 - d. Do not exceed load capacity.
 - e. Do not throw items up or down from the lift. Items need to be securely lowered or lifted.

Bloodborne Pathogens

- 1. A Biohazard Symbol is used to designate objects which are contaminated with blood or other body fluids. Avoid contact with these containers.
- 2. All employees who have an exposure incident shall wash the area with soap and water and notify their supervisor/manager immediately. An Employee/Visitor Accident Variance report shall be completed.
- 3. Contractors shall contact Occupational Health for any possible exposures.

Hazardous Materials

- 1. Refer to the General Conditions for general requirements related to hazardous materials.
- 2. All Contractors are required to take precautions when dealing with hazardous chemicals/components that require special handling and control fumes and special hazards. Read all labels before using chemicals in the Hospital. Notify Children's National if any additional air ventilation is required on a project and make sure all necessary exhaust and air filters are in place before work begins.
- 3. All Contractor's Chemical Information Lists and Safety Data Sheets must be provided prior to starting work. The information must be available to all workers and other authorized personnel, for the duration of the work.
- 4. All hazardous material containers must be labeled with contents and hazards utilizing Globally Harmonized System (GHS).

Flammable Products

- 1. Flammable items, liquids or gas, such as gasoline, propane, diesel fuel, etc. shall be in approved containers or fire resistant cabinets.
- 2. Flammable items may not be left in the Hospital or construction zone at the end of your work day.
- 3. Flammable and combustible liquids/vapors require GHS label.

Housekeeping

- 1. This Contractor shall be responsible to identify, for proper disposal, any hazardous or toxic debris and/or materials resulting from this Contractor's operations.
- 2. During the course of construction, alteration or repairs, debris shall be kept cleared from work areas, passageways and stairs, in and around buildings or other structures.

- 3. Debris must be cleaned up and removed from the work zone in covered containers at regular intervals and at the end of each work day by each Contractor or Contractor who creates such debris. Container exteriors shall be free of dust prior to exiting the work zone.
- 4. If, in the opinion of Children's National, any Contractor fails to maintain appropriate levels of cleanliness and safety, Children's National shall have the right to stop the operations of the Contractor and cause the conditions to be corrected. All costs (overtime, inefficiency, etc.) due to correcting the condition and any costs associated with crew delays shall be borne by the offending Contractor.
- 5. Once work is completed in an area, The Contractor shall remove all surplus materials from that area and leave it in a clean condition.
- 6. It is the responsibility of the Contractor to provide for dust control. If a justified complaint is received from the Hospital or governing official, the Contractor shall immediately stop work and take whatever steps are necessary to correct the situation.

Core Drilling

- 1. Prior to core drilling holes or cutting through any concrete deck:
 - a. Secure permission from CN to drill the hole.
 - b. No core drilling is permitted prior to X-ray or GPR scanning being completed.
 - c. Be sure the area below the drilled area is secured so that if the core falls through, there is no danger of injuring anyone below. Provide a watchman below if conditions so require.
 - d. Be prepared to immediately cover the new holes with adequate materials. Covers to be marked "Hole" and secured against accidental removal or displacement.

Ladders

- 1. Ladders used inside the facility must be fiberglass, with the exception of area near the MRI magnets; Special nonmagnetic ladders are required for use near MRI magnets.
- 2. Inspect ladders before each use.
- 3. Ladders are not to be painted, except for periodic inspection color coding, numbering or identification.
- 4. Ladders are not to be used to support scaffold boards, as work benches or for any use other than their intended purpose.
- 5. Only one person shall be on a ladder at any time.
- 6. Metal ladders must not be used in electric welding operations or near electrical services or lines.
- 7. When ascending or descending a ladder, climbers shall face the ladder and maintain a firm grip.
- 8. Do not carry tools while ascending or descending ladder. Use a hand line.
- 9. Ladders with broken or missing rungs, split side rails or other defects shall not be used.
- 10. Ladders shall be placed on a substantial base, and the area around the top and bottom of the ladder shall be kept clear.
- 11. Straight ladders must be secured at all times to the structure which you are climbing. This includes tying with rope, wire, hooks, etc.
- 12. The foot of the ladder should be placed approximately 1/4 of its length away from the vertical plane of its top support.
- 13. The top of the ladder must extend at least three feet (3'-o") above its supporting point when used for access to an elevated area.
- 14. Extension ladders must be overlapped by a length of at least three (3) rungs.
- 15. Do not stand on the top two steps of a stepladder.
- 16. Stepladders must be opened completely with all four feet resting on a sound level footing.
- 17. Two stepladders shall not be used as supports for scaffold boards.

- 18. Only one employee at a time will be permitted to work on a stepladder.
- 19. Stepladders may not be "cut down" or otherwise altered in any manner that compromises their strength.
- 20. Stepladders may not be used to gain access to the upper levels.
- 21. Stepladders must be used in the open position.

Scaffolding

- 1. Construct scaffolds to meet OSHA Standards
- 2. All scaffolds must be inspected prior to each shift; All components must be properly installed (base plates, cross brace pins, etc.)
- 3. When installed, all baseplates must be nailed to mudsills.
- 4. All scaffold planking shall be free of knots and cracks (Class A Scaffold Lumber) and shall completely cover the work platform. Only planking that has been inspected and has had its ends color-coded "green" is permissible for use as scaffold plank. Un-inspected or damaged planking shall be color-coded "red" and cannot be used for scaffold work platforms.
- 5. Planks used as mudsills cannot return to service as a work platform.
- 6. Employee training documentation must be made available upon request.
- 7. Standard guardrails and toe boards/netting shall be installed on all open sides and ends of scaffold platforms more than six feet (6'-o") above the ground or floor.
- 8. Employees must utilize fall protection while working on any scaffold platform over six feet (6'-o") in height that is not provided with a standard guardrail and/or complete deck.
- 9. An access ladder must be provided on all scaffolds.
- 10. All scaffolds must be erected plumb and level.
- 11. Material shall not be stacked more than 24" on scaffold deck.
- 12. All diagonal braces must be installed prior to use. (unless designed to support intended load)
- 13. No scaffold shall be erected, moved, dismantled, or altered except under the supervision of a designated competent person.
- 14. Stilts are not allowed to be worn.
- 15. Maintain an approved scaffold inspection and tagging system.

Cranes/Picks

- 1. All Contractors planning to use a crane or any material-handling equipment for loading, unloading, and lifting materials/equipment must provide a suitable Crane Lift Plan. Providing all applicable items at least four weeks prior to crane arriving on site.
- 2. A Crane Lift Plan must include, but not limited to, the following:
 - a. Site conditions checklist
 - b. Layout drawing for the crane location
 - c. Load chart identifying heaviest anticipated load in all configurations
 - d. Operator and Rigger/Signalmen qualifications
 - e. Annual Inspection results
 - f. Daily crane inspections
 - g. Detailed Maintenance log
 - h. Capacities of rigging devices
 - i. Traffic Control Plans, if applicable
 - j. Completed Job Hazard Analysis detailing crane operation
 - k. Ensure the swing radius of the load does not pass over public



- 3. Operators will ensure that the crane has been properly set up (outriggers, extended, crane level, away from overhead lines) prior to each pick. The operator is ultimately responsible for the safe operation of the equipment.
- 4. The Contractor is to ensure that a pre-lift meeting is held and any requirements pertaining to any lift(s) are performed and/or provided.
- 5. Additional safety guidelines for crane lifts include, at a minimum:
 - a. Use a tag line to control the load
 - b. Barrier off back end of crane
 - c. Do not stand under the load
 - d. Use fall protection when receiving load inside building

Road Closures

- Any scope requiring road closures on Michigan Ave, the Emergency Department (ED) drive lane or any other roads on campus must be communicated in-advanced with ECIC, Transportation, Engineering, Security and Patient Care areas, neighboring properties (MedStar, Washington Medical Center, Etc.) and Colonial Parking. Road closures must be discussed during the Risk Assessment meetings. DC Metro Police should be contacted as well for Michigan Ave lane closures.
- 2. This subcontractor is responsible for any traffic control as necessary including flag personnel, police details and/or barricades required for the complete execution for the scope of work.
- 3. When transporting material/equipment to the staging location or to loading dock the following is required, at a minimum:
 - a. Use qualified flaggers
 - b. Use of vehicles with flashers in front and behind the lift
 - c. Lighted cones on road
 - d. Construction Equipment Operator must have a DC Class 7 License and must be present during transportation and operation

Incident Reporting

- 1. All Contractors are required to report any incident immediately, no matter how small the incident/near miss may be.
- 2. The Contractor, with the assistance of the CN Project Manager, shall complete and submit a Safety Event Report using RL Solutions. This can be submitted from a Children's National computer or smart phone connected to the Children's National Staff network. Examples of incidents include:
 - a. Bodily injury, exposure to body fluids/hazardous materials, slips/trips/falls
 - b. Abandonment, abduction, abuse, breach of privacy, disaster, entrapment, property damage, smoking, stalking, suicide attempt, suspicious package
 - c. Patient fell from bed, chair, crib, etc.
 - d. Blocked/obstructed hallway, cleanliness of facility, improper storage, spill, temperature of facility, unsafe conditions, etc.
 - e. Destructive behavior, harassment, suspected substance abuse, etc.



Contractor Building Access

Access to interior occupied spaces of the Hospital will be granted on a discretionary basis. Special clearance is needed for access to the roof and interstitial floor and is only granted for the duration of the project. Access to these areas is via card reader; if an individual's identification badge is not working for access, keys to the roof and interstitial floors may be checked out at the Engineering Department's Control Room (ext. 6040).

Refer to Attachment C – Building Access Request Form that is required to be completed in order to obtain building access.

Identification Badging

- 1. All employees of the Contractor and all subcontractors are required to wear identification badges at all times while on the Hospital premises.
 - a. All new Contractor employees, sub tier Contractor employees, vendors, etc. are required to attend Contractor Safety Training and take the Annual Contractor Safety Quiz in order to perform work at Children's National.
 - b. Prior to the completion of the contractor safety training quiz, all Contractors must complete the credentialing requirements within the Green Security System and complete the Access Request Form to access the interior / occupied spaces in the building.
 - c. Contractor Safety Training will be performed by Children's National and will occur on a weekly basis. Any employee that does not attend and sign off on the training or display a photo ID badge will not be allowed to be on site.
 - d. To obtain a temporary daily pass, Contractors can sign in at the Green Security kiosk located at the Emergency Department entrance and the Main Atrium check in desk. Temporary Badges will only be issued to those who visit the Main Campus ≥4 visits per year OR for ≥ 5 working days per visit. If you exceed the number of visits you are required to submit for a badge card through Green Security.
- 2. Badge Rules
 - a. Badges shall be noticeably fixed to outer garments above elbow level.
 - b. Any of the Contractor's personnel or subcontractor's personnel who do not present their badge at all times will be denied access to the Hospital or will be escorted off the premises by Security.
 - c. Badges shall be used only by the personnel to whom they are issued. Violation of this policy shall result in permanent revocation of the badge and permanent dismissal from the Hospital premises.
- 3. Keys
 - a. Keys shall be checked out daily through the Engineering Department's Control Room and returned upon completion of work each day/night. Keys are not to be removed from the premises.
 - b. Any misplaced or lost keys shall be the responsibility of the Contractor as well as the cost incurred by CN to have any areas in the building re-keyed due to such loss.
 - c. Contractor must notify CN immediately of any lost keys. Lost keys will incur a \$20.00 replacement fee.

Radio Communication

- 1. All on-site contractors shall have at least one radio per worksite present on at all times
- 2. Contractors should provide enough radios to their employees to fulfill this requirement
- 3. A limited number of radios are available in the Control Room for daily use.

Personnel Behavior

- 1. The Contractor is responsible for training all employees in a behavioral manner acceptable to CN. This manner shall include courtesy to all patients, propriety of language, and the volume level of conversation.
- 2. Excessive sound transmission will not be tolerated. Refer to "Noise Control" section for additional requirements.

3. Children's National is committed to providing a harassment-free environment in which the talents of a diverse workforce are both valued and respected. Harassment, including sexual harassment, whether verbal or physical is illegal, unacceptable, and will not be tolerated. All people are entitled to work in a respectful work environment. Language, pictures, and items that may be offensive to specific groups or individuals are not permitted.

Parking

 No parking is available to any Contractor personnel or subcontractor's personnel. The Contractor shall arrange offsite parking for Contractor and subcontractor personnel. The Contractor may apply for off-site parking to the Parking & Transportation Office at the cost of the Contractor.

Cafeteria

- 1. All Contractors and subcontractors must use designated break rooms as directed by the Contractor.
- 2. If a break room is not designated, Contractor's and subcontractors' personnel may use the CN Cafeteria under the following conditions:
 - a. Personnel shall abide by the rules of the "Personnel Behavior" article above.
 - b. Use is limited to the hours of 10:30 a.m. to 11:30 a.m., 3:30 p.m. to 4:30 p.m., and after 7:00 p.m.

Bathrooms

- 1. All Contractor's personnel and subcontractors' personnel should use portable facilities whenever possible, as provided by the Contractor.
- 2. If portable facilities are not available or practical, and when working in the Hospital, Contractors may use the bathroom facilities located at the 1st Floor Main Elevator Lobby or at the 2nd Floor near the Cafeteria.

Patient Confidentiality

 All Contractors must respect the patient's right to privacy and may be exposed to information considered confidential. No information regarding patient care should be discussed with individuals who are not directly involved in the care of the patient.

What Not To Do

- 1. The following actions are specifically prohibited. Violation of any of these rules will result in disciplinary action:
 - Eating or drinking in work areas. Water in resalable containers is permitted.
 - The bringing or use of alcoholic beverages or the use of illegal substances / unauthorized drugs in the facility.
 - Keep items such as razors, scissors, aerosol and tools within the reach of a patient.
 - Sring non-work or task-specific related equipment, such as radios or microwaves, to the Hospital.
 - Bring or keep valuables at the Hospital.
 - Smoking inside or outside Children's National (including roof and parking garage)
 - Enter patient care areas (unless it is part of your job).
 - Engaging in activities in areas other than designated by employee's primary employer. Wandering about the project and impeding progress of others is not permitted.
 - Engaging in horseplay and/or fighting.
 - Possession of deadly weapons.
 - Harassment or discrimination of any kind.
 - Open fires are prohibited. This would also include cooking or heating food on the property.



Emergency Code Alerts

- 1. In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. CN uses these codes to communicate in emergencies and disasters:
 - RED = Fire
 - YELLOW = Caution Status (Follows after downgraded Code Red, but not All Clear)
 - GRAY = Tornado Warning
 - ORANGE = Disaster (internal or external) mass casualties coming
 - PURPLE = Shelter in place (Disaster with nuclear, biological or chemical agent)
 - NAVY = Biological event/Pandemic Plan
 - SROWN = Lockdown of entire campus. Do not attempt to leave.
 - PINK = Infant/Child Abduction
 - BLUE = Cardiopulmonary Arrest
 - WHITE = Bomb, Bomb Threat, Suspicious Package
 - BLACK = Evacuations order (partial or total orders may be given)
 - SILVER = Active Shooter
 - GREEN = Activate the trained Decon Team
 - ALL CLEAR = Emergency situation is over

NO JOB IS SO IMPORTANT THAT WE CANNOT TAKE THE TIME TO DO IT SAFELY AND <u>NO SHORTCUTS!</u>



Safety and Security Violations & Disciplinary Action Plan

Violation	1 st Offense	2 nd Offense	3 rd Offense
Smoking inside CN (including roof and parking garage)	Termination from CN		
Smoking outside CN	Written warning	Written warning 1 day suspension	Termination from CN
Lack of proper PPE: hardhats, safety glasses, boots, etc.	Stop until PPE is donned Written warning	Stop until PPE is donned Written Warning	Termination from project
Lack of Fall Protection	Stop work. Written Warning Retraining	Termination from project	
Improper use of ladder and/or scaffolding	Written warning	Written warning 1 day suspension	Termination from CN
Improper use or storage of gasoline	Written warning to employee and foreman. Possible termination of both	Discretionary termination from project. Minimum 1 day suspension	Foreman and employee removed from project
Improper storage of oxygen/acetylene/propane	Written warning to employee and foreman. Possible termination of both	Discretionary termination from project. Minimum 1 day suspension	Foreman and employee removed from project
Improper securing of material/equipment on roof	Written warning to employee and foreman. Possible termination of both	Discretionary termination from project. Minimum 1 day suspension	Foreman and employee removed from project
Food/Drink outside of authorized areas (service areas/interstitial floors are NEVER authorized)	Immediately remove items from area Written warning	Immediately remove items from area Written warning	Termination from project
Failure to comply with CN Hot Work Procedures	Stop work. Written warning. Retraining.	Stop work. Written warning. One day suspension.	Termination from project
Failure to comply with CN Above Ceiling Permit procedures	Stop work. Written warning. Retraining.	Stop work. Written warning. One day suspension.	Termination from project
Unauthorized parking on CN campus (All illegally parked vehicles are subject to ticketing/towing)	Written warning	Written warning. One day suspension. Discretionary termination.	Termination from CN
Unauthorized access to Patient Care floors, roof, or interstitial spaces	Written warning and/or one day suspension	One day suspension or termination from project	Termination from project
Tampering with door closures or propping open interstitial or fire doors	Written warning	Written warning One day suspension	Termination from project
Tampering with sprinkler heads	Written warning	Written warning One day suspension	Termination from project
Theft and/or Vandalism of CN property to include security cameras, equipment, and controlled entrances	Termination from CN		
Any other violation as identified by CN safety or management	Written warning and retraining OR Discretionary termination	Written warning and retraining OR Discretionary termination	Termination from project
Allowing unauthorized individuals access into Children's National without proper check-in	Final warning or Termination from CN		
Tampering with security equipment: cameras, video cable, ID card readers, locks, secured doors	Termination from CN		
Violating Children's National Violence Free Workplace Policy and Procedure: harassment/stalking, intimidation, vandalism, threats, assault	Termination from CN		
Failure to report safety hazards/workplace violence	Written warning	Final warning/suspension	Termination from CN



Project Standards

Children's National (CN) will expect all employees and Contractors to comply with and enforce the Project Standards which include, but shall not necessarily be limited to, those listed below. These Project Standards are specifically included in, and enforceable under, every CN Contract Agreement. It is the responsibility of every individual Contractor to ensure they read, understand, and follow them as a condition of employment on every CC project. These Project Standards will be strictly enforced and are a Contract Document.

All Contractors shall comply with "best practice" in the pediatric healthcare industry as well as all applicable statutes, laws, codes, ordinances, rules, and regulations currently in effect. CN operates in accordance with all codes and regulations associated with the National Fire Protection Associate (NFPA), The Joint Commission (TJC), FGI Guidelines for Design and Construction of Hospitals, Department of Health (DOH) and other Authorities Having Jurisdiction (AHJ). Contractors shall be accountable in managing major renovations, additions, occupancy changes and change of use in accordance with the entities above. Specific standards include, but are not limited to: NFPA 99 Chapter 4; NFPA 101 Chapter 18, 19 and 43 2012 edition; Joint Commission Standard EC.02.05; etc.

Scope of Work

- 1. Refer to the General Conditions for additional detail on general responsibilities and requirements related to the Contractor.
- 2. The Contractor shall examine the nature and location of the work and satisfy itself for its needs in the execution of its work. Any failure by the Contractor to acquaint itself with all the available information concerning the location of work does not relieve it from any obligations with respect to the execution of the work.
- 3. The Contractor shall study and compare all drawings and specifications prior to and during the execution of the work and shall notify CN in writing of any errors, inconsistencies, discrepancies, conflicts and omissions arising out of the contract documents or observed or discovered during the course of performance of the work.
- 4. The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the contract documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to CN in writing.
- 5. Immediately on discovery of a difference between site conditions and the Contract Documents, the Contractor shall prepare and submit a detailed Site Conditions Report along with a Request for Information. The report is to include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.
- 6. The Contractor shall supervise and direct the work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract, unless the contract documents give other specific instructions concerning these matters.
- 7. The Contractor shall be responsible to Children's National for acts and omissions of the Contractor's employees, subcontractors and their agents and employees, and other persons or entities performing portions of the work for, or on behalf of, the Contractor or any of its subcontractors.
- 8. The Contractor shall be responsible for inspection of portions of work already performed to determine that such portions are in proper condition to receive subsequent work.
- 9. Due to Children's National being a healthcare facility, Children's National must reserve the right to stop any construction operation causing excessive noise, dust or other similar scope as determined by Children's National. The Contractor agrees to track all stop work requests made by Children's National and if any claim for extra compensation due to the stoppage requests is to be submitted, the Contractor is to include the stoppage log with claim for review by the Children's National.



Daily Construction Reports

- 1. The Contractor is responsible to prepare a daily construction report recording, at a minimum, the date, subcontractors on site, general description of work accomplished, weather conditions, deliveries received, problems or conflicts in the field and planned work for the following day.
- The Daily Reports shall be maintained at the job site in an orderly manner and available to Children's National for review at any time. The Contractor may use the Children's National Construction Daily Report Form as included in Attachment B – Control Room Work Forms & Permits.
- 3. The Contractor is responsible to submit reports daily by the end of the work day.

Construction Schedule

- The Contractor is responsible to prepare and submit for Children's National approval a Construction Schedule created in Microsoft Project reflecting all of the significant activities required to complete the work. This shall be consistent with any schedule of substantial completion, milestone or other dates that are part of the contract agreement.
- 2. The construction schedule shall cover all field tasks, significant material deliveries, other off-site restraints such as permits, inspections, approvals, and milestones for start dates, completion dates and availability dates as required. Tasks shall be broken down into activities that allow monitoring monthly progress.
- 3. The Contractor shall develop, adjust and update the construction schedule on a monthly basis, or as needed, and distribute copies to Children's National for review and approval. Any adjustment to the construction schedule shall be made for the benefit of the project.
- 4. If any milestone date or substantial completion is affected from the schedule update, the Contractor must notify Children's National immediately.

Owner Meetings

- At least every other week, a meeting on the site involving the Contractor, the Architect, and Children's National shall be held to review progress and coordinate work schedules for the work ahead. The Contractor shall have in attendance at these meetings the Project Superintendent or the Project Manager or another person authorized to make decisions for the Contractor.
- 2. The Contractor shall provide a meeting agenda and record, transcribe and distribute meeting minutes to all attendees and Children's National within forty-eight (48) hours following the meeting.

Safety Meetings

- 1. All Contractors are required to participate in a monthly safety meeting with the Children's National Construction team. This meeting will be for purposes of discussing overall project safety topics and compliance with required project documentation.
 - a. The Contractor must ensure that all project documentation such a daily reports, hot work, pre-impairment forms, etc. are provided in a timely manner.

Systems Disable and Outages

- NO utilities (electricity, water, gas, plumbing, sprinkler and fire alarm) or services are to be cut off or disabled without following the proper Control Room Pre-Impairment System Disable Process as outlined in Attachment B – Control Room Work Forms & Permits.
- 2. Any work requiring the disabling of the sprinkler system, fire alarm, or the performing of any hot work on Children's National property (inside or outside), a system disable request form must be submitted to the Control Room.
 - a. Any non-life safety work that only requires shutdown of equipment/utilities (other than sprinkler, smoke detectors, etc.), a Request for Access or Shutdown of Equipment/Utilities Form must be completed daily and coordinated with Children's National well in advanced of scheduled work. Refer to "Utility and Service Outage Coordination" section below for further requirements.
- 3. Any period the fire alarm or sprinkler system needs to be disabled or hot work is performed at Children's National, a fire watch is required at **ALL TIMES**, regardless of duration of work.
 - a. Any work requiring the fire alarm/sprinkler system to be impaired for greater than four (4) hours within a 24-hour period requires Fire Marshal notification and approval. A Pre-Planned Impairment Plan Form shall be submitted the Monday one week prior to scheduled work.
 - b. The Fire Alarm/Sprinkler and Hot Work Disable Request Form must be submitted with Section 1 completed at least a day prior to work being performed. A separate form is required if:
 - i. The locations of work are separated by floor. (One request per floor per area of work)
 - ii. The locations of work are on the same floor, and do not share any of the same disabled points.
 - c. On the day of work, the Fire Watch Log and a Hot Work Permit, if applicable, must be completed.
 - d. Multiple fire watches can be present under the same disable form as long as all disabled points are identical.
 - i. When multiple fire watches are taking place under the same disable request, this must be noted on the request form.
 - ii. All fire watch logs must be turned in at the same time by the contractor once all work is completed.
- 4. Any above ceiling or fire wall penetration work through fire- or smoke-rated walls, an Above Ceiling and Firewall Penetration Work-Ladder Tag is required as outlined in the Fire Safety section of this document.
- 5. Utility and Service Outage Coordination
 - a. Utility and service outages shall be kept to a minimum, and will be permitted only with written approval by CN.
 - b. The Contractor is responsible to coordinate any panel outage that is required to complete the work. Panels include, but are not limited to, electrical (low voltage, high voltage), telecommunications/data, med-gas, fire alarm, audio-visual, etc.
 - c. The Contractor is responsible for searching out utility and service lines to determine the effect of any outage to the Hospital operations outside of the limit of the Contract. Approval shall be obtained from the CN Project Manager to execute such searches ahead of time.
 - d. The Contractor must provide a detailed outline and/or diagram(s) of field research completed to Children's National for approval.
 - e. The Contractor is responsible to attend meetings, if necessary, and coordinate with the Engineering Department to determine any components that may need to continue to be operating on a temporary basis during any outage, regardless of duration.

Risk Assessments

Any activity involving renovation, alterations, demolition or construction must be assessed for risks associated with the planned activity prior to the start of work in order to maintain a safe environment. This assessment may be required for multiple activities or phases, depending on the project. The Contractor must coordinate with the Children's National Project Manager to confirm if a Risk Assessment (RA) is required. No work can start until the Risk Assessment Team has reviewed the planned activity and RAs have been issued.

The RA Team meets on a weekly basis to review work plans, documents, assess projects as they relates to the team's area of responsibility, and discuss planned recommendations.

- 1. It is the responsibly of the Contractor to provide a Risk Assessment Plan outlining the risks and scope of work prior to the RA meeting.
- 2. The meeting to review the planned activity and assess risk should include representatives from the following areas:
 - a. Safety
 - b. Infection Control
 - c. Security
 - d. Construction/Engineering Administration
 - e. Contractor(s)
 - f. Management of the location where the activity is planned
 - g. Management of location adjacent to the planned activity
- 3. Prior to beginning work, the following Risk Assessments are required that will be provided from the RA Team and must be posted at the entrance to work:
 - a. Safety Risk Assessment
 - b. Infection Control Risk Assessment (ICRA)
 - c. Security Risk Assessment
- 4. The Contractor is responsible to maintain and post an Infection Control Daily Construction Monitoring Checklist. At a minimum, the checklist should include the date; ensure barriers are sealed, verify negative pressure, ensure sticky mats are changed, HEPA pre-filters are changed and corridors outside of site are cleaned and mopped. Refer to Infection Control section below for additional construction guidelines.
- 5. The Contractor is responsible to maintain and post a Safety Daily Checklist. The worksite should be inspected daily for safety and the checklist should be signed daily. If no work occurs at the worksite on a given day "no work" should be noted on the checklist.

Reporting to Risk Assessment meetings is not limited to project starts. Whenever there is an unusual event during the construction phase, the Contractor is to present additional details and obtain additional approval. Any open or outstanding tasks or items identified during the meeting should be resolved and documented in writing. Risk Assessment meetings should also be attended if the phase of construction is changing on multiple phase projects. Refer to Attachment D – Risk Assessment Forms required to present to the RA Team and during construction.

Infection Control

All construction and renovation projects must be managed in such a way to minimize the risk of hospital acquired infections in patients and employees due to construction and renovation projects. All efforts must be made to ensure dust containment and the prevention of moisture build-up during such projects. Contractors must follow all procedure outlined in the Risk Assessment and have an Infection Control Risk Assessment (ICRA) completed prior to the start of the project, including off-site projects. An ICRA is only valid for the plan provided before or during the Risk Assessment meeting.



All contractors shall be familiar with the Children's National Infection Control in Construction and Renovation Procedure. This can be provided upon request from Contractor. Included below are fundamental guidelines when working at CN:

- 1. Isolation
 - a. Construction activities causing disturbances of existing dust or creating new dust will be conducted in tight enclosures that cut off the flow of particles into adjacent areas.
 - b. Where containment is possible utilizing building walls and doors, all doors (except construction access doors) should be closed and sealed with duct tape to prevent dust and debris from escaping.
 - c. Construction, demolition, or reconstruction not capable of containment utilizing existing building walls and doors will use one of the following methods of isolation:
 - i. Airtight flame retardant rigid plastic barriers extending from floor to ceiling decking, or ceiling tiles if not removed. Plastic barrier seams will be sealed with duct tape to prevent dust and debris from escaping.
 - ii. Portable dust containment units with polyethylene pulled tight against floor and ceiling.
 - iii. Drywall barriers: seams or joints will be covered or sealed to prevent dust and debris from
 - escaping. Note: Drywall barriers must meet the same fire rating as the wall they are replacing.
 - d. Additional isolation requirements can be found in the Infection Control Procedure.
- 2. Ventilation
 - a. When indicated, negative air pressure must be maintained within the construction area.
 - b. The HVAC system shall be used where possible to help maintain negative air pressure. Contractors are responsible for blocking off supply ducts and covering return air ducts with 2" thick pleated air filters or plastic.
 - c. Where HVAC systems are not capable of maintaining negative air pressure in the work area, the contractor shall provide exhaust fans or HEPA filtered ventilation units to maintain negative air-pressure within the construction area. Exhaust fans or HEPA filtered ventilation units will run continuously, when construction is in progress. Contractors are responsible for maintaining equipment and replacement of HEPA and other filters in accordance with the manufacturer's recommendations.
- 3. Housekeeping
 - a. Walk-off/Sticky mats must be a minimum size of 24 inches x 36 inches and must be used at exits and entrances to the work area. These mats should be placed on the interior side of all doors exiting the construction area.
 - b. Any dust tracked outside of the construction area shall be vacuumed or damp-mopped immediately.
 - c. Adhesive walk-off/sticky mats shall be changed daily, or more frequently as needed, to maintain adhesive surfaces.
 - d. When construction is in an occupied area, the construction area shall be vacuumed or damp-mopped at least at the end of each shift. Vacuum cleaners shall be outfitted with HEPA filters.
- 4. Post Construction
 - a. Prior to the removal of isolation barriers the contractor shall vacuum and clean all surfaces in the completed construction area, rendering them free of dust.
 - b. Barrier materials should be removed carefully to minimize spreading of dirt and debris associated with construction. Barriers should be discarded as construction debris. Barrier materials should be wet wiped, HEPA vacuumed or water misted prior to removal.
 - c. The contractor shall remove all temporary filters and/or plastic covers from the air systems.
 - d. The contractor shall balance the ventilation system to design specifications.

Infection Control will determine the infection control project classification in the Risk Assessment as included in Attachment D. Infection Control will perform weekly construction site inspections for high risk, on-site project using the Infection Control weekly checklist as included in Attachment D.

Signage

- 1. The Contractor is responsible to provide all applicable labor law notices for all employees as required by federal and state laws and regulations.
- 2. In addition, all projects must have, at minimum, the following information posted at the main entrance to the worksite:
 - a. Building Permit and all applicable trade permits (electrical, gas, plumbing, mechanical, etc.)
 - b. PPE Requirements
 - c. Emergency Contacts (Project Manager, Superintendent, etc.)
 - d. Interim Life Safety Measures (ILSM)
 - i. Emergency exit routes, pre-impairment plans, fire-watch, etc.
 - ii. Permanent exit signage should be modified to show the actual exit route if different from normal and then un-modified at the end of the project.
 - e. Safety, Infection Control and Security Risk Assessments including Daily Construction IC Monitoring Checklist and Safety Daily Checklist.
- 3. If your project does not have a traditional entrance, the Contractor shall coordinate a board post location with Children's National.
- 4. The Contractor shall provide adequate temporary signage where needed depending on the nature of work (i.e., wet paint signs, caution, danger, etc.).
- 5. All signage that requires Children's National branding must be coordinated by the Contractor with Children's National prior to procurement.
- 6. If, in the process of performing work, any existing wayfinding signage is altered, the Contractor shall provide temporary signage that reflected the wayfinding signage that was removed in order to perform the work. This temporary signage must be coordinated with Children's National in advance and approved prior to procurement.
- 7. The Contractor is responsible to provide cones, barriers and coordinated signage when working in the parking garage or adjacent properties.

Site Logistics and Material Delivery

- 1. The Contractor shall be totally responsible for scheduling the delivery, receiving, unloading, inspecting, inventorying, storing, handling, relocating, hoisting, distributing, laying out, installing, cleaning and protecting of all material and/or equipment.
 - a. Any protection of materials will be at the cost and responsibility by the Contractor.
 - b. Removal of protection is also to be provided by the Contractor.
- 2. The Contractor accepts all risks of all equipment/material stored on the property. For any equipment/material received by this Contractor which is misplaced, lost or damaged, it will be this Contractor's responsibility to replace said equipment/materials at no cost or schedule impact.
- 3. The scheduling of all deliveries must be submitted to and approved by Children's National prior to delivery. All deliveries must be announced and fully coordinated with Children's National in advance. Children's National reserves the right not to allow trucks/deliveries if the material delivery is improperly scheduled.
- 4. Storage of material and equipment on a project shall be permitted only to the extent approved in advance by Children's National. Any stored object that obstructs the progress of any portion of the work or Hospital operations shall be promptly removed or relocated by the Contractor without reimbursement. Facilities for storage at the site will be very limited or non-existent and it shall be the Contractor's responsibility to make whatever arrangements may be necessary to insure proper material availability for maintenance of job progress.



Engineering Inventory System

CN identifies maintenance needs by utilizing yellow inventory "asset" tags on all equipment throughout the Hospital. The Contractor is responsible for following the CN inventory procedure outlined below in identifying existing equipment as well as tagging new equipment that is installed for the project.

- The Contractor must complete the Equipment Inventory Form included in Attachment E for each piece of equipment installed for the project. Attachment E – Equipment Form and Systems also includes a comprehensive list of all equipment and devices that require inventory tags.
- Prior to the commencement of work, the Contractor must complete an Equipment Inventory Log identifying all
 existing equipment within the construction area that has an inventory tag. Refer to Attachment F Equipment
 Inventory Log.
 - a. If equipment that is listed in the equipment inventory systems list is missing an inventory tag, the Contractor is to note on the inventory log and include the location of the equipment.
- 3. If equipment or devices are to be **REMOVED**, the Contractor shall:
 - a. Remove and note the inventory tag # before discarding item.
 - b. If any equipment or device is to be replaced directly (new or upgraded), it is to be noted correctly on the Equipment Inventory Form.
- 4. If equipment or devices are to be **RELOCATED**, the Contractor shall:
 - a. Provide the existing inventory tag ID.
 - b. Current location of the equipment or device.
 - c. New location of the equipment or device.
- 5. If a new piece of equipment or device is to be **INSTALLED**, the Contractor shall:
 - a. Provide an updated Equipment Inventory Log as part of a submittal package with all new equipment as applicable in the equipment inventory systems list that require maintenance tags. This updated log should include the existing equipment that was inventoried prior to construction starting and the new equipment installed.
- 6. The Contractor shall assemble all completed Equipment Inventory Forms for each utility system for submittal to the CN Project Manager.
 - a. The cover of the package must be the most up to date Equipment Inventory Log.
 - b. Nomenclature of equipment must follow nomenclature listed in the equipment inventory systems list.
 - c. Provide any applicable maintenance procedures, manuals, etc. as backup to the Equipment Inventory Form.
 - d. The Equipment Inventory Form will be used for the creation of new inventory tags. Depending on quantity of equipment or devices needing new tags, this process can take some time. The Contractor is to ensure this is coordinated with the project schedule as they must be installed prior to requesting punchlist inspections.
- 7. The Contractor is responsible to adhere new yellow inventory tags (provided by Children's National), to new equipment or device installed.



Tests, Inspections and Quality Control

- Children's National and the project consultants shall perform inspections in accordance with the Project Specifications. The Contractor must cooperate fully with any inspection, and ensure that all testing, inspection and quality requirements are satisfied. Any unacceptable work must be repaired and/or replaced to meet the criteria of the Contract Documents within forty-eight (48) hours.
 - a. The Contractor shall work with, and comply with all valid directives of the testing and inspection agency, engineers, etc.
 - b. All costs associated with unacceptable work will be the responsibility of the Contractor including, but not limited to, repairs, replacement, additional testing and inspections, etc.

Project Closeout

CN's Facilities and Construction departments have developed new requirements for the timely documentation and completion of project close-out. Refer to Attachment G – Construction Project Turnover Checklist for all items required to be submitted for closeout. To assist CN Contractors through the project closeout process, CN Facilities and Construction meet on a weekly basis to allow contractors to bring forward documentation, per the checklist, for review and acceptance prior to being fully turned over for use.

The Contractor shall also reference individual Project Specifications regarding the closeout requirements in order to ensure a complete project is turned over so that CN has the necessary documentation to continue to manage the facility.



Attachment A – Children's National Policies & Procedures



All Contractors performing work on any Children's National project is contractually obligated to comply with all Children's National Policies and Procedures. Below is a list of particular regulations that pertain to all Contractors:

- CH:FS:05a Electrical Safety of Hospital Owned Equipment Policy
- CH:FS:05aP Electrical Safety of Hospital Owned Equipment Procedure
- CH:FS:06a Domestic Hot Water Policy & Procedure
- CH:FS:07a Use of Personal Electrical Devices Policy
- CH:FS:07aP Use of Personal Electrical Devices Procedure
- CH:FS:07b Use of Electrical Extensions Cords Policy
- CH:FS:07bP Use of Electrical Extensions Cords Policy
- CH:FS:09 Interim Life Safety Measures
- CH:FS:09P Interim Life Safety Measures
- CH:FS 12/12P Hearing Conservation Program Policy and Procedure
- CH:FS:15 Risk Assessment for Renovation, Alteration or Construction Policy
- CH:FS:15P Risk Assessment for Renovation, Alteration or Construction Procedure
- CH:FS:16 Water Intrusion Response Policy
- CH:FS:16P Water Intrusion Response Procedure
- CH:FS:17 Confined Space Policy
- CH:FS:17P Confined Space Procedure
- CH:FS:20 Hot Work Policy
- CH:Fs:20p Hot Work Procedure
- CH:FS:7024 Above Ceiling Work Policy
- CHPC:I:20 Infection Control in Construction & Renovation Policy
- CHPC:I:20P Infection Control in Construction & Renovation Procedure
- CH:DIS:03 Code Red: Fire Plan EOP Annex
- CH:DIS:15 Code Silver Active Shooter Incident



Attachment B – Control Room Work Forms & Permits



Construction / Engineering Mandatory Work Forms

• General Contractor Daily Work Form-Submitted Daily

(*Daily report documenting work completed the current day and planned work for following day*) - Multiple projects can be listed on one form

- Note specific areas when pre-impairments are in effect (fire watch, hot work, equipment/utility shutdown, etc.)

Life Safety Forms

• Pre-Planned Impairment Plan – Submitted Weekly

(Any life safety work with impairment greater than 4 hours within a 24 hours period)

- Must be submitted the Monday one week prior to work
- Required for CNMC to submit to Fire Marshal
- Fire Alarm/Sprinkler and Hot Work Disable Request Form Submitted Daily

(Any time the fire alarm or sprinkler system needs to be disabled or hot work is performed)

- Fire watch required at ALL TIMES. Fire Watch Documentation Form must accompany this
- Reference Control Room Pre-Impairment Process Flowchart

• Hot Work Permit and Fire Watch Log – Submitted Daily

(Required to be submitted with Fire Alarm/Sprinkler and Hot Work Disable Request Form)

- If Hot Work is being performed, the Hot Work Permit must be filled out and is required on-site
- Fire Watch Log must be completed at all times when system is disabled

Non-Life Safety Forms

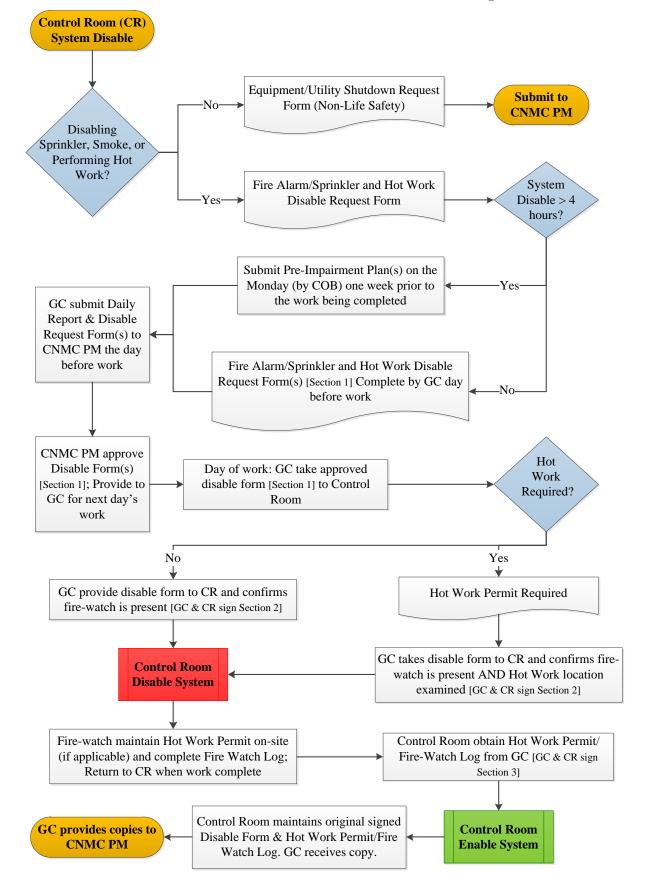
• Request for Access or Shutdown of Equipment/Utilities – Submitted Daily

(Any non-life safety work that required shutdown of Equipment/Utilities)

- Depending on utility/equipment requested to be accessed/shutdown, GC must coordinate with CNMC Project Management well in advanced.

- Above Ceiling and Firewall Penetration Work-Ladder Tag Submitted Daily (Any above ceiling or fire wall penetration work through fire or smoke rated walls and floors)
 - Form must be submitted the day prior to work for CNMC Project Management sign off







GENERAL CONTRACTOR DAILY WORK FORM

Date Submitted:

General Contractor:

Submitted By: _____

Work Completed Today:

Work Planned For Tomorrow (include locations, hot work, deliveries):



Children's National Medical Center, 111 Michigan Avenue, NW, Washington, D.C.

Engineering Control Room Operator Phone: 202-476-6040; Fax: 202-476-6488

Pre-Planned Impairment Plan prepared by:

Jacquie Forbes, Environmental Safety / Rodney Eason, Director of Engineering

Reason for shutdown:

Areas or buildings affected by shutdown:

Service component(s) being shut down:

NOTE: When sprinklers are impaired this includes a 30 minute impairment of the fire pump during draining and refill of the system.

Anticipated length of shutdown (include dates, not to exceed one month), completion time for repairs, hazard removal, or any other specifics:

Fire watch hours of operation:

Areas to be fire watched:

and type of personnel performing fire watch:

Party notified system	Notification	Notification	Person
OUT of service	time (out of	date (out of	giving
(Control Room Operator fill in contact names)	service)	service)	notice
Fire Marshal's office:			
Monitoring Service:			
Affected CNMC Dept:			
Affected CNMC Dept Supv: David Warye			
Building owner/representative: Jacquie Forbes/Rodney Eason			

Party notified system BACK in service (Control Room Operator fill in contact names)	Notification time (back in service)	Notification date (back in service)	Person giving notice
Fire Marshal's office:			
Monitoring Service:			
Affected CNMC Dept:			
Affected CNMC Dept Supv: David Warye			
Building owner/representative: Jacquie Forbes/Rodney Eason			

Fire watchers shall wear identification tags identifying them as fire watchers and shall carry radios on the engineering control room frequency. The engineering control room will notify the fire department and occupants immediately of a fire related emergency.

Building contact (Engineering Control Room Operator) acknowledges that that guidelines of the DC Fire Marshal's office must be adhered to as approved, and if compliance is not maintained, the fire watch approval will be voided, and appropriate action will follow.

Fire Marshal's life safety requirements, comments:

(If there are issues preventing approval of this document call 202-476-6040 immediately)

Fire Marshal email approval received on:

(Date)

Created by CNMC Safety Department, March 21, 2007 according to DC Fire Marshal Administrative Directive (FMAD) 06-01, Fire Watch Guidelines. Revised August, 2007 based upon revised FMAD 5-07. Revised Oct 2009 based upon revised FMAD 8-09, revised 1-24-11 per mtg with Fire Marshal.



Fire Alarm/Sprinkler System and Hot Work Disable Request Form

*<u>PROCEDURE</u>: Any time a fire detection/suppression system is taken out of service or Hot Work (HW) is performed at CN, a Fire Watch (FW) must be performed by a trained fire watcher, regardless of the duration of work. If a system disable is to last over 4 hours with-in a 24-hour period, a Pre-Impairment Form shall be submitted the Monday of the week prior to work being performed.

SECTION 1	Complete for CN M	anager Approval at	least one day prior to	work)

Project Name & Description of Work:					
CN Project Manager:		Contractor:			
Date of work being performed:		Approx. duration/t	ime of work:		
Location of work:					
Reason(s) for Disable Request (<i>check all th</i>		□Sprinkler System Impai □ Maintenance	rment:		
□ Inspection/Testing		□ Inspection/Testi	ng		
\Box Renovation/Demolition	Work	Renovation/Dem	-		
□ System Fault		□ System Fault			
Components being disabled:					
Disable > (4) hours in 24-hr period: \Box Yes	□No	If > (4) hours, was Pre-Impai	rment sent to FEMS: □Yes □No		
CN Manager Approval:		Employee ID #•	Date:		
(Si	gn Here)	_ Employee 1D #	Datt		
SECTION 2 (Complete to Disable System on day of work)					
Name of person(s) performing hot work:					
	(#1)	(#2)	(#3)		
Name of person(s) performing firewatch:	(#1)	(#2)	(#3)		
By signing below, I, the Permit-Authorizing the work location has been examined and t					
PAI / Work location examined by:		Date:	Time:		
	(Sign Here)				
Control Room:(Sign Here)	Employee ID#:	Date:	Time:		
SECTION 3 (Complete to Enable System af	fter work is complete	d)			
By signing below, I, the firewatch, have in progress and no combustible materials, fire		•	nd it to be free of any hot work in		
Firewatch:		Date:	Time:		
(Sign Here))				
Control Room receipt of firewatch docum	mentation form: [∃Yes □No			
Control Room:	Employee ID#:	Date:	Time:		



Hot Work Permit & Fire Watch Log

*<u>PROCEDURE</u>: Any time a fire detection/suppression system is taken out of service for any reason, a fire watch must be performed by a trained fire watcher. The affected area(s) must be inspected every hour for any fire hazards present and if present must be corrected immediately. In emergency situations please call the Control Room at 202-476-6045 or x6045.

Date:	Project Name:	CNMC Manager:	
Time Started:	Location (building, column lines):	Work to be done:	
Time Completed:			
Hot Work being performed: $\Box Y$	$es^* \Box No$ ([*] If yes, Hot Work Permit is required)	Name of Firewatch:	

- HOT WORK PERMIT

Seek and alternative, safer method to perform the work is possible. Ensure precautions are in place per NFPA 51B, 241 and OSHA before initiating hot work. This Hot Work Permit is required for any operation involving open flame or producing heat and/or sparks on Children's National property (inside or outside. This work includes, but is not limited to, welding, brazing, cutting, grinding, soldering, thawing pipe, torch-applied roofing or chemical welding.

Hot Work by: Employee Contractor Name (print):	Company:
□ Y □ N - Personal protective equipment provided, as required to perform task.	
\Box Y \Box N - Available sprinklers, hose streams, and extinguishers are in service and operable.	
\Box Y \Box N - Hot work equipment is in good working condition in accordance with manufacture	rer's specifications.
\Box Y \Box N - Special permission obtained to conduct hot work on metal vessels or piping lined	with rubber or plastic.
Requirements within 35 feet (11 m) of hot work:	Requirements for hot work on walls, ceilings or roofs:
\Box Y \Box N - Flammable liquid, lint, and oily deposits removed.	\Box Y \Box N - Construction is noncombustible and without combustible
\Box Y \Box N - Explosive atmosphere in area eliminated.	covering or insulation.
\Box Y \Box N - Floors swept clean and trash removed.	\Box Y \Box N - Combustible material on other side of walls, ceilings or
\Box Y \Box N - Combustible floors wet down or covered with damp sand or fire-	roofs is moved away.
resistive/noncombustible materials or equivalent.	Requirements for hot work on or in enclosed equipment: N/A
\square Y \square N - Personnel protected from electrical shock when floors are wet.	\Box Y \Box N - Enclosed equipment is cleaned of all combustibles.
\Box Y \Box N - Other combustible storage material removed or covered with listed or approved	\Box Y \Box N - Containers are purged of flammable liquid/vapor.
materials (welding pads, blankets or curtains; fire-resistive tarpaulins), metal shields, or	\Box Y \Box N - Pressurized vessels, piping, and equipment removed
noncombustible materials.	from service, isolated, and vented.
\Box Y \Box N - All wall and floor openings covered.	\Box Y \Box N - Lock-out/tag-out as required.
\Box Y \Box N - Ducts and conveyors that might carry sparks to distant combustible material	\Box Y \Box N - Proper ventilation provided.
covered, protected or shut down.	\Box Y \Box N - Confined Space Permit (if required).
Requirements for hot work fire watch and fire monitoring:	I verify that the above location has been examined, the
\Box Y \Box N - Fire Watch is provided during and for a minimum of 30 minutes after hot	precautions marked on the checklist have been taken, and
work, including any break activity.	permission is granted for this work.
\Box Y \Box N - Fire Watch is provided with suitable extinguishers and, where practical, a	I G G G G G G G G G G G G G G G G G G G
charged small hose.	Name of PAI (print):
\square Y \square N - Fire Watch is trained in use of equipment and in sounding alarm.	
\Box Y \Box N - Fire Watch can be required in adjoining area, above and below.	Signature of PAI:
\Box Y \Box N - per the PAI/Fire Watch, monitoring of hot work area has been extended	
beyond the 30 minutes.	

FIRE WATCH LOG

Ensure the following Conditions (where applicable):

Smoking prohibited; (2) Debris removed from work area(s);
 (3) Exits are clear from obstructions; (4) fire/smoke doors are operational; (5) remaining fire protections equipment is operational; (6) Combustible materials properly stored.

By signing below, I verify fire watch has been provided during work and for a minimum of 30 minutes after any hot work completed:

Fire watch completed by: _

Date: _____ Time: ___

Comments:

Time	Initial	Comply w/conditions li	sted *If No, list condition #
0000		Yes No	
0100		Yes No	
0200		Yes No	
0300		Yes No	
0400		Yes No	
0500		Yes No	
0600		Yes No	
0700		Yes No	
0800		Yes No	
0900		Yes No	
1000		Yes No	
1100		Yes No	
1200		Yes No	
1300		Yes No	
1400		Yes No	
1500		Yes No	
1600		Yes No	
1700		Yes No	
1800		Yes No	
1900		Yes No	
2000		Yes No	
2100		Yes No	
2200		Yes No	
2300		Yes No	



<u>Children's National Medical Center</u> <u>Request for Access to or Shutdown of Equipment/Utilities</u>

Requested Date of Shutdown Access:
Job Name: Description of Job: Requested Date of Shutdown Access: Reason for Shutdown/Access:
Requested Date of Shutdown Access:
Requested Date of Shutdown Access:
Reason for Shutdown/Access:
Length of Shutdown/Access (hours, days, etc.):
Requested by:
Company:
In-House:
Date:
CNMC Approval:
CNMC Staff Assigned:
Date:
Note or special Instructions:

CNMC personnel will shutdown and turn off equipment. Construction personnel are not allowed to turn on or off equipment (no exception) or to access any utility. A CNMC staff person must be present when utilities are accessed or shut down.

At the time of work, notify the control room for clearance to proceed.

Person Contacted:	Nursing AD	 Date:
	Unit Director	 Date:
	Charge Nurse _	 Date:
	Control Room	 Date:

Inspected by: _____

Date: _____



Project Name:#_____

PM/Work Order #_____

Above Ceiling Work Request / Permit

*<u>PROCEDURE</u>: This form must be filled out and presented during the weekly construction assessment meeting or to the Control room with all corresponding information. All Requests which are missing required information / documentation will be rejected.

SECTION 1 (Description of work)

Department Requesting Work:	Date:		
Staff/Contractor assigned:			
Pre-Inspection Requested: Yes No			
Time of work:	Duration of work: From:	To:	
Scope of Work:			
Location of work:			
Room(s):	Corridor(s):		
Number of Ladders required: \Box $assessed$) 1 2	\square (When (3) or more ladders are required the 3	nis is to be considered a project and must re risk	
SECTION 2 (System/Wall Type)			
□ Electrical	□ Plumbing □	Antenna	
□ Medical Gases	0	Lighting	
□ Air Conditioning	□Fire Stopping □	Nurse Call	
🗆 Fire Alarm/Sprinkler	□ Security □] Other:	
Inspectors Pre-inspection Signature SECTION 3 (Permit Request Type)	re (if requested)		
PM / Inspection ONLY (Life Safety Drawing's required)	Research/Exploratory ONLY (Life Safety Drawing's required)	(All Documents required – Section 4)	
SECTION 4 (Forms/paperwork) - Electro	onic Documentation Preferred		
□Life Safety Drawing's Received/Verified:□ICRA Received/Verified:			
□Safety/Risk Assessment Received/Ver	rified:		
SECTION 5 (CNMC Sign-off) must be CNM	C Construction PM/Facilities Manager/Control roor	n.	
CNMC Sign-off:	Date:	Time:	
SECTION 6 (Above Ceiling Permit)			
on which work above the visible ceiling will all fiberglass ladders, if work is being perfo from the hospital. Contractor supervision v	rmed outside of the posted work space. Worki	posted at the entrance to the work space or on ng without a permit will be cause for rejection tatives to assure a clear understanding of these	

Above Ceiling Work Permit

From:_____To:____

If Fire or Smoke walls were penetrated during this permitted time. Contractor signature:

and date:

of when penetration(s) were repaired is required.

SECTION 7 (CNMC Use Only)

Signature of final inspection /QC (when Applicable):____



Attachment C – Building Access Request Form



Children's National Medical Center

Contractor Access Request Form Real Estate Division – Construction & Facilities

		Date:
CONTACT INFORMATION		
Last Name: First	Name:	M.I.:
Address:	City:	
	State:	Zip Code:
COMPANY INFORMATION		
Company Name:		
Address:	City:	
	State:	Zip Code:
HR Representative Name:		
Phone: Email:		
CNMC Manager:		
Assignment State Date:		
Assignment End Date:		
s s i <u>—</u>	MUST BE COMPLETED PRIC Roof Fuel Room	PR TO ACCESS BEING GIVEN
Other (please include the card reader number):		
AUTHORIZED BY:		
Printed Name	Signature	Date



Attachment D – Risk Assessment Forms



[Project Name Here – Project Activity Here]

<u>PM(s):</u> Enter Children's PM Name & Contractor PM Name <u>Date Presented:</u> Enter Meeting Date

Date of Work:

Scope of work:

Risk Assessment:

- \succ
- ۶

New work:

- \succ
- ۶
- ۶

Potential issues:

- \triangleright
- \succ
- \triangleright
- \triangleright
- ۶

Safety Risk Assessment:

- ≻
- ≻

>

- >
- >

Security:

≻

 \triangleright

Infection control:

≻

SAMPLE TEMPLATE TO PROVIDE SCOPE OF WORK OVERVIEW FOR RISK ASSESSMENT MEETINGS



Safety/ILSM Weekly Inspection Log

<u>PROCEDURE</u>: This form shall be completed on a daily basis on ALL construction projects. When ILSM are necessary, the ILSM portion of this inspection log must be completed. At least weekly a random inspection will be completed by the CNMC project manager and/or the Life Safety Compliance Lead. Completed inspection logs must be returned to the CNMC PM on a weekly basis. In emergency situations please call the Control Room at x6040. Project Name/Description of work: Click here to enter text.

Project Manager: Click here to enter text.

Contractor: Click here to enter text.

	SUN	DAY	MON	NDAY	TUES	SDAY	WEDN	IESDAY	THUR	SDAY	FRI	DAY	SATU	RDAY
Week of: Click here to enter a date.	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
Exits are marked within Construction Area														
Hazardous materials are properly stored														
CNMC issued ID badges are visible														
All compressed gasses are properly stored/secured and removed from the job site daily														
Construction partitions are smoke tight and built with a non-combustible material														
Smoking is prohibited in all areas														
Proper PPE is available and used as required														
The following items are required as ILSM if any life safety system is impaired:	YES	N/A	YES	N/A	YES	N/A	YES	N/A	YES	N/A	YES	N/A	YES	N/A
Exits and corridors are unobstructed														
Rerouted exits checked, signage present, etc														
Emergency Personnel have unobstructed access														
If fire alarm detection and/or suppression system is impaired there is a pre- impairment, disable form and fire watch log														
Additional fire extinguishers are present and have current inspections														
Housekeeping and debris removal procedures are enforced														
Additional environmental tours are conducted														L
Daily Inspection Completed By (please initial):														
Weekly inspection completed by:														
Comments:														



Infection Control: Daily Construction Monitoring Checklist

Project Manager:	

Date	Barriers Sealed	Negative Pressure Verified	Sticky Mats Changed	HEPA Prefilters	Corridor Outside of Site Cleaned
Date	Darriers Sealed	Pressure Verified	Changed	Changed	and Mopped
					••
I	I	1	1	1	



Attachment E – Equipment Inventory Form & Systems List

		-		VENTORY		
POCEDURE: All equipment th	at is affected by a			PROJECT USE ON		ventory Form for all building syst
	CNMC Equipment I	nventory System	ns List. Forms s	hall be submitted p	prior to equipment being on-s	ite for CNMC to print and provid
Project Name:					Equ	ipment Tag ID#:
MC Manager:		-				
SECTION 1 (Must comple	te all items in order fo	or an asset sticker t	to be printed)			
Tag Type (Please Circl	e): NI	W	REPLA	CEMENT	REMOVED	UPDATE
Main Campus Locatio	n: SZ EAST	SZ WEST	SZ MAIN	SZ TRAILER	Other Location:	
Equipment	Nomenclature:				Location (List Room #):	
Area/Room Equip					Manufacturer:	
Department Equip					Model Number:	
	ent Supported:					
other Equiptio	enteupperteur			<u> </u>	Life Cycle Duration:	
Equipment Specification	ons: (fill-in all app	licable informati	ion)			
	e:			LBS:	CFM:	
	PS:	WATTS:		BTU:	TONS:	
VOL	S:	PHASE:		GPM:	TONS: FE RATING:	
+	łz:	KW/LVA:		MAX PSI:		(Class A,B,C,D,K)
FILTER SIZE (Incl. Qt	y):			_	FREON TYPE:	
BELTS SIZE (Incl. Qt	y):			_	FREON CHARGE:	
Motor Specifications:						2214
Nomenclatu	re:		AMPS:		HP:	RPM:
Nomenclatur Manufacture	re: er:		AMPS: VOLTS:		HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture	re:		AMPS: VOLTS:		HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture Serial Numbe	re: er: er:		AMPS: VOLTS:		HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture	re: er: er:		AMPS: VOLTS:		HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture Serial Numbe	re: er: er:		AMPS: VOLTS:		HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture Serial Numbe Additional Information	e: er: er:				HP: FRAME:	RPM: OTHER:
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must completed)	re: er: n/Notes: te after equipment is	installed and retur	rned to CNMC)			RPM: OTHER:
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In	re: er: n/Notes: te after equipment is stallation Date:	installed and retur	rned to CNMC)	Warranty S	itart Date*:	RPM: OTHER:
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In Vend	re: er: n/Notes: te after equipment is stallation Date: or Installed By:	installed and retur	rned to CNMC)	Warranty S		RPM: OTHER:
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In	re: er: n/Notes: te after equipment is stallation Date: or Installed By:	installed and retur	rned to CNMC)	Warranty S Warran	itart Date*:	
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In Vend Operation & Mainten	re: er: n/Notes: te after equipment is stallation Date: or Installed By:	installed and retur	rned to CNMC)	Warranty S Warran	itart Date*: nty Length:	
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must complete Equipment In Vend Operation & Mainten Emergency Ma	re: er: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided:	installed and retur	rned to CNMC)	Warranty S Warran	itart Date*: nty Length:	
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complete Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information:	re: er: //Notes: //No	installed and retur	rned to CNMC)	Warranty S Warran	itart Date*: nty Length:	
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc	re: er: n/Notes: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: h : LIFE S	installed and retur	ned to CNMC)	Warranty S Warran	itart Date*: nty Length:	
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complete Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information:	re: er: n/Notes: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: h : LIFE S	installed and retur YES YES	ned to CNMC)	Warranty S Warran *Equipr	itart Date*: nty Length: ment warranty starts when Substa	antial Completion is achieved
Nomenclatur Manufacture Serial Numbe Additional Information SECTION 2 (Must comple Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc	re: er: n/Notes: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: h : LIFE S	installed and retur YES YES AFETY	ned to CNMC) NO NO CRI	_ Warranty S _ Warran *Equipr TICAL	itart Date*: nty Length: ment warranty starts when Substa	antial Completion is achieved
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number	re: er: n/Notes: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: h : LIFE S	installed and retur YES YES AFETY	ned to CNMC) NO NO CRI	Warranty S Warran *Equipr TICAL	Start Date*: nty Length: ment warranty starts when Substa EQUIPMENT se Only:	antial Completion is achieved
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number Risk Group	re: er: n/Notes: n/Notes: n/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: anual Provided: h : LIFE S	installed and retur YES YES AFETY	NO NO NO CRI <u>C Constructi</u>	Warranty S Warran *Equipr TICAL	itart Date*: nty Length: ment warranty starts when Substa EQUIPMENT se Only: failure of equipment or sy	antial Completion is achieved
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number	re: er: m/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: anual Provided: h : Er: Category 1 -	installed and retur YES YES AFETY For CNM	NO NO NO CRI ⁻ C Constructi Rooms	Warranty S Warran *Equipr TICAL Con/Facilities Us Room in which major injury or Room in which	itart Date*:	antial Completion is achieved NORMAL stems is likely to cause
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number Risk Group	re: er: m/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: anual Provided: h : Er: Category 1 -	installed and retur YES YES AFETY For CNM	NO NO NO CRI ⁻ C Constructi Rooms	Warranty S Warran *Equipr FICAL Room in which major injury or Room in which minor injury to	itart Date*:	antial Completion is achieved NORMAL stems is likely to cause stems is likely to cause
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number Risk Group	re: er: m/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: anual Provided: h : Er: Category 1 -	installed and retur YES YES AFETY For CNM Critical Care General Care	NO NO NO CRI ⁻ C Constructi Rooms	Warranty S Warrant *Equipr FICAL Foon/Facilities Us Room in which major injury or Room in which minor injury to Room in which	itart Date*:	antial Completion is achieved NORMAL stems is likely to cause
Nomenclatur Manufacture Serial Number Additional Information SECTION 2 (Must complet Equipment In Vend Operation & Mainten Emergency Ma NFPA 99 Information: Electrical Branc Panel/Breaker Number Risk Group	re: er: m/Notes: m/Notes: te after equipment is stallation Date: or Installed By: ance Provided: anual Provided: anual Provided: anual Provided: category 1 - Category 2 - Category 3 -	installed and retur YES YES AFETY For CNM Critical Care General Care	NO NO NO CRI CConstructi Rooms	Warranty S Warranty *Equipr FICAL	itart Date*:	INORMAL Stems is likely to cause stems is likely to cause stem is not to cause injury

ABBREVIATION	NOMENCLATURE	DESCRIPTION
TWAC	A/C UNIT (THRU-WALL)	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
WAC	A/C UNIT (WINDOW)	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
ACOL	AFTERCOOLER	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS AFTERCOOLER
AIC	AIR CURTAIN	HVAC, TERMINAL & PACKAGE UNITS, UNIT VENTILATORS
ADRY	AIR DRYER	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
AFE	AIR FILTER (ELECTROSTATIC)	HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
HEPA	AIR FILTRATION SYS (HEPA)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
AHU		HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
ALD		
WPS		INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS
-		FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEM, FIRE ALARM DEVICES
AS	AIR SEPARATOR (HVAC)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
AS	AIR SEPARATOR (PLUMBING)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
AOL	AIRCRAFT OBSTRUCTION LIGHT	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
AMS	AMALGAM SEPARATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
ROOFA	ASPHALT SHINGLES	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS
AGVS	AUTO GUIDED VEHICLE SYSTEM	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
AUTO	AUTOCLAVE	PLUMBING, OTHER PLUMBING SYSTEMS, OTHER SPECIAL PLUMBING SYSTEMS
ACS	AUTOMATIC CART SYSTEM	CONVEYING OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS, AUTOMATIC CART SYSTEM
ACV	AUTOMATIC CONTROL VALVES	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
AD	AUTOMATIC DOOR EXTERIOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OTHER EXTERIOR SPECIALTY DOORS
AD	AUTOMATIC DOOR INTERIOR	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR PERSONNEL DOORS
ATS	AUTOMATIC TRANSFER SWITCH	ELECTRICAL, OTHER ELETRICAL SERVICES, EMERGENCY LIGHTING & POWER
BFPS	BACKFLOW PREVENTER FIRE	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECITON WATER PIPING AND EQUIPMENT
BFP	BACKFLOW PREVENTER PLUMBING	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
RB	BARRIER (ROAD)	SITE IMPROVEMENTS, ROADWAYS, GUARDRAILS & BARRIERS
PLB	BARRIER (PARKING)	SITE IMPROVEMENTS, PARKING LOTS, GUARDRAILS & BARRIERS
BBH	BASEBOARD HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
EPBC	BATTERY CHARGER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
BC	BATTERY CHARGER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
EPBM	BATTERY MONITOR (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
FAPS	BATTERY POWER SUPPLY (FIRE ALARM)	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
EPBS	BATTERY SYSTEM (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
BSD	BEAM SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICIES
BDIS	BEVERAGE DISPENSER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
BDA	BLAST DOOR ASSEMBLY	EXTERIOR ENCLOSURE, EXTERIOR DOORS, BLAST RESISTANT DOORS
BDT	BLOWDOWN TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
BLWR	BLOWER	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS
В	BOILER (HOT WATER)	HVAC, HEAT GENERATING SYSTEMS, BOILERS
BFDP	BOILER FEED PUMP	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
BFT	BOILER FEED TANK	HVAC, HEAT GENERATING STSTEMS, AUXILARY EQUIPMENT
BLRD	BOLLARD	SITE IMPROVEMENTS, ROADWAYS, GUARDRAILS AND BARRIERS
BF	BOOSTER FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
BP	BOOSTER PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
BPAN	BRAISING PAN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
OC	BRIDGE CRANE	CONVEYING, WEIGHT HANDLING EQUIPMENT, OVERHEAD CRANES

NOTE:

ABBREVIATION	NOMENCLATURE	DESCRIPTION
BUFF	BUFFER TANK	HVAC, COOLING GENERATING SYSTEM, CHILLED WATER SYSTEMS
BAS	BUILDING AUTOMATION SYSTEM	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
BL	BUILDING LIGHT	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
BLOS	BULK LIQUID OXYGEN SOURCE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
BPIS	BY-PASS/ISOLATION SWITCH	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
CABH	CABINET HEATER	HVAC, TERMINAL & PACKAGE UNIT, UNIT HEATERS
CBRA	CARBON ABSORBER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOKING
CO2S	CARBON DIOXIDE SENSOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
CMD	CARBON MONOXIDE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
CMM	CARBON MONOXIDE MONITOR	SPECIAL CONSTRUCTION, SPECIAL CTRLS/INSTRUMENTION, BUILDIND AUTOMATION SYSTEMS
CART	CART	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
CL	CART LIFT	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
CWASH	CART WASH CONVEYING	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
CWM	CART WASH MACHINE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CW	CART WASH MEDICAL	EQUIPMENT, INSTITUTIONAL EQUIPMENT, MEDICAL EQUIPMENT
SCP	CATHODIC PROTECTION	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, CATHODIC PROTECTION
CKV	CHECK VALVE	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
CFP	CHEMICAL FEED PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
CFS	CHEMICAL FEED SYSTEM	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CSF	CHEMICAL SHOT FEEDER (COLD)	HVAC, COOLING GENERATING SYSTEM, CHILLED WATER SYSTEM
CFT	CHEMICAL TANK	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CWS	CHEMICAL-WASTE SYSTEM	PLUMBING, OTHER PLUMBING SYSTEMS, ACID WASTE SYSTEMS
CHWP	CHILLED WATER PUMP	HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
CWST	CHILLED WATER STORAGE TANK	HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
СНА	CHILLER (ABSORPTION)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHC	CHILLER (CENTRIFUGAL)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHR	CHILLER (RECIPROCATING)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHRW	CHILLER (SCREW)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHRL	CHILLER (SCROLL)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHLS	CHLORINATION SYSTEM	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
CHOP	CHOPPER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CHUT	CHUTE	CONVEYING, OTHER CONVEYING SYSTEMS, LINEN, TRASH AND MAIL CHUTES
EPCB	CIRCUIT BREAKER	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
СВ	CIRCUIT BREAKER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
HWCP	CIRCULATING PUMP (HOT)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
CWCP	CIRCULATING PUMP (COLD)	HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
CDCP	CIRCULATING PUMP (AUX)	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
CAS	CLEAN AGENT SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, CLEAN AGENT SYSTEMS
CSGEN	CLEAN STEAM GENERATOR	
CDES	CO2 EXTINGUISHING SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, CARBON DIOXIDE SYSTEMS
COFF	COFFEE MAKER/URN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CIU	COIL INDUCTION UNIT	HVAC, TERMINAL & PACKAGE UNITS, OTHER TERMINAL & PACKAGE UNITS
CGD	COMBUSTIBLE GAS DETECTOR	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
CAF	COMBUSTION AIR FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
С	COMPRESSOR (HVAC)	HVAC, OTHER HVAC SYSTEMS & EQUIPMENT, REFRIGERATION SYSTEMS

NOTE:

ABBREVIATION	NOMENCLATURE	DESCRIPTION
C	COMPRESSOR (PLUMBING)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CRACU		HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
CRACO		
-		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
CRU		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUPMENT
ACC		HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
EVC		HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
WCC	CONDENSER (WATER-COOLED)	HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
CDWP	CONDENSER WATER PUMP	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CU	CONDENSING UNIT FOOD SERVICE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CU	CONDENSING UNIT HVAC	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
CAC	CONTROL AIR COMPRESSOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
СР	CONTROL PANEL (DUMBWAITER)	CONVEYING, ELEVATORS AND LIFTS, DUMBWAITERS
СР	CONTROL PANEL (DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
СР	CONTROL PANEL (CARBON DIOXIDE)	FIRE PROTECTION, OTHER FIRE PROTECITON SYSTEMS, CARBON DIOXIDE SYSTEMS
СР	CONTROL PANEL (ELEV FREIGHT)	CONVEYING, ELEVATOR AND LIFT, FREIGHT ELEVATORS
CP	CONTROL PANEL (ELEV PASS)	CONVEYING, ELEVATOR AND LIFT, PASSENGER ELEVATORS
СР	CONTROL PANEL (FREIGHT)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
СР	CONTROL PANEL (OTHER, CONVEYING)	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
СР	CONTROL PANEL PNEUMATIC TUBE	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS
CTLV	CONTROL VALVE	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING
CONT	CONTROLLER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
CONV	CONVEYOR	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CNB	CONVEYOR BELT	CONVEYING, OTHER CONVEYING SYSTEMS, CONVEYORS
СТ	COOLING TOWER	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CTF	COOLING TOWER FAN	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CSIS	COPPER-SILVER IONIZATION SYS	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
CYCS	CYCLONIC SEPARATOR	HVAC, COOLING GENERATING SYSTEM, CHILLED WATER SYSTEMS
GDT	DAY TANK	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DEA	DEAERATOR	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
DSH	DECONTAMINATION SHOWER	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DECT	DECONTAMINATION TANK	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DECTC	DECONTAMINATION TANK CONTROL	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DECP	DECONTAMINATION WATER PUMP	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DFRY	DEEP FRYER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
DHUM	DEHUMIDIFIER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DIS	DEIONIZATIONS STATION	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DA	DENTAL COMPRESSED AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DSV	DENTAL SURGICAL VACUUM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DADRY	DESICCANT AIR DRYER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DWD	DESICCANT WHEEL DEHUMIDIFIER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DDC	DIRECT DIGITAL CONTROL	HVAC, CONTROLS & INSTRUMENTATION, ELECTRONIC CONTROLS
EPDS	DISCONNECT SWITCH (EMER POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DS	DISCONNECT SWITCH	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
DW	DISHWASHER	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUIPMENT

ABBREVIATION	NOMENCLATURE	DESCRIPTION
EPDP	DISTRIBUTION PANELBOARD (EMER POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DP	DISTRIBUTION PANELBOARD	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
DVR	DIVERTER	CONVEYING. OTHER CONVEYING SYSTEMS. PHEUMATIC TUBE SYSTEM
	DOCK LEVELER	EQUIPMENT, VEHICULAR EQUIPMENT, LOADING DOCK EQUIPMENT
DSL	DOCK SCALE	EQUIPMENT, VEHICULAR EQUIPMENT, LOADING DOCK EQUIPMENT
	DOMESTIC CIRCULATING PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DEF	DOMESTIC FILTRATION SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DADCP	DOOR ACCESS CONTROL PANEL	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
DADCP	DOOR ACCESS CONTROL PANEL	
EDAG		ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
-	DOOR ASSEMBLY (EXT GLASS)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, GLAZED DOORS
EDA		EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS
EDAS	DOOR ASSEMBLY (EXT STEEL)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS
EDAW	DOOR ASSEMBLY (EXT WOOD)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS
IDAG	DOOR ASSEMBLY (INT GLASS)	INTERIOR CONSTRUCTION, INTERIOR DOORS, GLASED INTERIOR DOORS
IDA		INTERIOR CONSTRUCTION, INTERIOR DOORS, STANDARD INTERIOR DOORS
DHW	DOOR HARDWARE	EXTERIOR ENCLOSURE, EXTERIOR DOORS EXTERIOR DOOR HARDWARE
DHW	DOOR HARDWARE (INTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, INTERIOR DOOR HARDWARE
DRD	DOOR RELEASING DEVICE	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
DESG	DOUBLE-ENDED SWITCHGEAR	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
DFT	DRAFT FAN	HVAC, HEAT GENERATING SYSTEMS, BOILERS
DCOOL	DRINK COOLER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
DFC	DRINKING FOUNTAIN W/COOLER	PLUMBING, PLUMBING FIXTURES, DRINKING FOUNTAINS AND COOLERS
DV	DRIVERLESS VEHICLE	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
DCES	DRY CHEM EXTINGUISHING SYS	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
DCL	DRY COOLER	HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEM
DPSS	DRY PIPE SPRINKLER SYSTEM	FIRE PROTECTION, SPRINKLERS, SRINKLERS AND RELEASING DEVICES
DRYER	DRYER	
DHE	DUCT HEATER ELECTRIC	HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DHW	DUCT HEATER HOT WATER	HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DSD	DUCT SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
DBW	DUMBWAITER	CONVEYING, ELEVATORS AND LIFTS, DUMBWAITERS
DAS	DURESS ALARM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EEGD	EGRESS DOOR ASSEMBLY (EXTERIOR)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OTHER EXTERIOR SPECIALTY DOORS
EGD	EGRESS DOOR ASSEMBLY (INTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS
ELP	ELECTRIC LIFT PLATFORM	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
ETV	ELECTRIC TRACK VEHICLE	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
ELEV	ELECTRIC TRACTION ELEVATOR (FREIGHT)	CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS
ELEV	ELECTRIC TRACTION ELEVATOR (PASS)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
EUM	ELECTRIC UTILITY METER	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, METERING
MAGL	ELECTROMAGNETIC LOCK	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EMD	ELECTRONIC MESSAGE DISPLAY	SITE IMPROVEMENTS, SITE DEVELOPMENT, SIGNAGE
CAR	ELEVATOR CAR	CONVEYING, ELEVATOR AND LIFTS, PASSENGER ELEVATORS
EMCS	EMCS	ELECTRICAL, OTHER ELECTRICAL SERVICES, ENERGY MANAGEMENT CONTROL SYSTEM
ECS	EMERGENCY CALL SYSTEM	SITE ELECTRICAL UTILITIES, SITE COMMUNICATION AND SECURITY, ELECTRONIC SECURITY SYSTEMS
		and Letternione offerned, and common and And Decontry Letternomic Decontry Stateme

ABBREVIATION	NOMENCLATURE	DESCRIPTION
EWR	EMERGENCY EYE WASH RINSE	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
EFSO	EMERGENCY FUEL SHUTOFF	SITE CIVIL/MECHANICAL UTILITES, FUEL DISTRIBUTION, LIQUID FUEL STORAGE TANKS
EML	EMERGENCY LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
TL	TASK LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
ESS	EMERGENCY SAFETY STATION	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
ES	EMERGENCY SHOWER	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
ESO	EMERGENCY SHUTOFF	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, OTHER SPECIAL MECHANICAL SYSTEMS
ESPB	EMERGENCY STOP PUSH BUTTON	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
EECL	EMERGENCY-EXIT COMBO LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
ERU	ENERGY RECOVERY UNIT	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
ESCL	ESCALATOR	CONVEYING, ESCALATORS AND MOVING WALKS, ESCALATORS
EOA	ETHYLENE OXIDE ABATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
ECU	EVAPORATIVE COOLING UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
EAF	EXHAUST AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
EF	EXHAUST FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
EH	EXHAUST HOOD	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
KEH	EXHAUST HOOD (KITCHEN)	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
EHWS	EXHAUST HOOD WASH SYSTEM	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
EL	EXIT LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
ET	EXPANSION TANK (CHILLED)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
ET	EXPANSION TANK (HOT WATER)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
EXTS	EXTERIOR	STAIRS, STAIR CONSTRUCTION, INTERIOR AND EXTERIOR STAIRS
FAAA	FA AUDIO ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
FAAV	FA AUDIO VISUAL ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
FAVA	FA VISUAL ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
FCU	FAN COIL UNIT	HVAC, TERMINAL & PACKAGE UNITS, FAN COIL UNITS
FTR	FINNED TUBE RADIATOR	HVAC, TERMINAL & PACKAGE UNITS, FIN TUBE RADIATION
FACP	FIRE ALARM CONTROL PANEL	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
FACU	FIRE ALARM CONTROL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
FC	FIRE CURTAIN	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECITON SYSTEMS
FDM	FIRE DAMPER	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECITON SYSTEMS
FDC	FIRE DEPT CONNECTION	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
=DA	FIRE DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS
EC	FIRE EXTINGUISHER CABINET	INTERIOR CONSTRUCTION, SPECIALTIES, FIRE EXTINGUISHER CABINETS
FECK	FIRE EXTINGUISHER CLASS K	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
FECA	FIRE EXTINGUISHER CLN AGENT	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
-EF	FIRE EXTINGUISHER FOAM	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
FENM	FIRE EXTINGUISHER NON MAG	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EWT	FIRE EXTINGUISHER WATER	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
FECD	FIRE EXTINGUISHER-CO2	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
FEDC	FIRE EXTINGUISHER-DRY CHEM	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
FEH	FIRE EXTINGUISHER-HALON	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EWC	FIRE EXTINGUISHER-WET CHEM	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
-P	FIRE PUMP	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
=PC	FIRE PUMP CONTROLLER	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP

ABBREVIATIO	NOMENCLATURE	DESCRIPTION
FS	FIRE SHUTTER	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS
FPAR	FIXED PARTITIONS	INTERIOR CONSTRUCTION, PARTITIONS, FIXED PARTITIONS
FT	FLASH TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
FCV	FLOOR CONTROL VALVE	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING
FLC	FLOW COMPUTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
FLOS	FLOW SWITCH	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
FES	FOAM EXTINGUISHING SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, FOAM GENERATING EQUIPMENT
FDRA	FOLDING DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS
WARM	FOOD WARMER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
WE	FOUNTAIN	SITE IMPROVEMENTS, SITE DEVELOPMENTS, FOUNTAINS & POOLS
MFRZ	FREEZER (FREESTANDING, MEDICAL)	EQUIPMENT, INSTITUTIONAL EQIPMENT, MEDICAL EQUPMENT
LFRZ		
WIF	FREEZER (FREESTANDING, LAB)	EQUIPMENT, INSTITUTIONAL EQIPMENT, LABORATORY EQUPMENT
	FREEZER (WALK-IN)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
FAIT		HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
FLDS		SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, OTHER FUEL DISTRIBUTION
FLFS	FUEL LEVEL FLOAT SWITCH	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING AND POWER
FOI	FUEL OIL INDICATOR	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
FOP	FUEL OIL PUMP	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBTION, LIQUID FUEL STORAGE TANKS
FOST	FUEL STORAGE TANK	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, LIQUID FUEL STORAGE TANKS
FTP	FUEL TRANSFER PUMP	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
FTS	FUEL TRANSFER SYSTEM	
FH	FUME HOOD	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
FURN	FURNACE	HVAC, HEAT GENERATING SYSTEMS, FURNACES
GD	GARBAGE DISPOSAL (FOOD)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
LPGST	GAS STORAGE TANK	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, GAS STORAGE TANKS
GUM	GAS UTILITY METER	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
GA	GATE ASSEMBLY (EXTERIOR)	SITE IMPROVEMENTS, SITE DEVELOPMENT, FENCING & GATES
GATE	GATE ASSEMBLY (NTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, INTERIOR GATES
GAP	GENERATOR ALARM PANEL	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GCP	GENERATOR CONTROL PANEL	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GEN	GENERATOR SET	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GFS	GLYCOL FEED SYSTEM	HVAC, DISTRIBUTION SYSTEMS, GLYCOL DISTRIBUTION SYSTEMS
GP	GLYCOL PUMP	HVAC, DISTRIBUTION SYSTEMS, GLYCOL DISTRIBUTION SYSTEMS
GRL	GRILL	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
GRND	GROUNDING SYSTEM	ELECTRICAL, OTHER ELECTRICAL SERVICES, GROUNDING SYSTEMS
GND	GROUNDING SYSTEM	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, GROUNDING SYSTEMS
G&D	GUTTERS & DOWNSPOUTS	ROOFING, ROOF COVERINGS, GUTTERS & DOWNSPOUTS
HES	HALON EXTINGUISHING SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL PROTECTION SYSTEMS
HD	HEAT DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
HE	HEAT EXCHANGER	HVAC, HEAT GENERATING SYSTEMS, OTHER HEAT GENERATING SYSTEMS
HRU	HEAT RECOVERY UNIT	HVAC, HEAT GENERATING SYSTEMS, BOILERS
HSD	HEAT/SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
НРВ	HELIPAD BEACON	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
HPL	HELIPAD LIGHTING	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
HWAP	HIGH WATER ALARM PANEL	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT

ABBREVIATION	NOMENCLATURE	DESCRIPTION
HOIST	HOIST	CONVEYING, WEIGHT HANDLING EQUIPMENT, OVERHEAD CRANES
HB	HOSE BIB	
НС	HOSE DID HOSE CONNECTION	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
HWHC	HOSE CONNECTION HOT WATER HEATING CONVERTER	
HWP		PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
		HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
HUM		HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
ELEV		CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS
ELEV	HYDRAULIC ELEVATOR (PASS)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
HYDPU		CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS
IM	ICE MACHINE (KITCHEN)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
	INCINERATOR	EQUIPMENT, OTHER EQUIPMENT, WASTE HANDLING EQUIPMENT
IFS	INDUSTRIAL FILTRATION SYS (HEAT)	HVAC, HEAT GENERATING SYSTEMS, OTHER HEAT GENERATING SYSTEMS
IFS	INDUSTRIAL FILTRATION SYS (COLD)	HVAC, COOLING GENERATING SYSTEMS, OTHER COOLING GENERATING SYSTEMS
IPS	INFANT PROTECTION SYSTEM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
IA	INSTRUMENT COMPRESSED AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
INTS	INTERIOR STAIRS	STAIRS, STAIR CONSTRUCTION, INTERIOR AND EXTERIOR STAIRS
IW	INTERIOR WINDOWS	CONSTRUCTION, PARTITIONS, INTERIOR WINDOWS
IDS	INTRUSION DETECTION SYSTEM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
IEU	ION EXCHANGE UNIT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
ISS	IRRIGATION SPRINKLER SYSTEM	SITE IMPROVEMENTS, LANDSCAPING, IRRIGATION SYSTEMS
ISOM	ISOLATION PANELBOARD MONITOR	
ISOP	ISOLATION POWER PANEL	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
LVIV	ISOLATION VALVE (LAB VAC)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
ISOVP	ISOLATION VALVE (PROPANE)	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
ISOVN	ISOLATION VALVE (NATURAL GAS)	HVAC, ENERGY SUPPLY GAS SUPPLY SYSTEM
IV	ISOLATION VALVE (HEAT & COOL)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
LAIV	ISOLATION VALVE (LAB AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MAIV	ISOLATION VALVE (MED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MVIV	ISOLATION VALVE (MED VAC)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NIV	ISOLATION VALVE (NITROGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NOIV	ISOLATION VALVE (NITROUS OXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OIV	ISOLATION VALVE (OXYGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
SVIV	ISOLATION VALVE (SAFETY VALVE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
SGIV	ISOLATION VALVE (SPECIAL GAS)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
WAGDIV	ISOLATION VALVE (WASTE ANESTH GAS)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CDIV	ISOLATION VALVE (CARBON DIOXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DAIV	ISOLATION VALVE (DENTAL AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
JP	JOCKEY PUMP	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
JPC	JOCKEY PUMP CONTROLLER	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
STK	KETTLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
LA	LABORATORY COMPRESSED AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
	LABORATORY DUST EVACUATION	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
LFH	LABORATORY FUME HOOD	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
	LEAD LINED DOOR	INTERIOR CONSTURCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS
LM	LEVEL MONITORING	
		PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT

NOMENCLATURE	DESCRIPTION
	CONVEYING, ELEVATORS AND LIFTS, OTHER VERTICAL TRANSPORTATION EQUIPMENT
	SITE CIVIL/MECHANICAL UTILITIES, SANITARY SEWER, LIFT STATIONS AND PUMPING STATIONS
	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
	ELECTRICAL, OTHER ELECTRICAL SERVICES, LIGHTNING PROTECTION
	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, SUBSTATIONS
	ELECTRICAL OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
	ELECTRICAL, ELECTRICAL SERVICES, ENERGENCE LIGHTING & POWER
	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECTION WATER PIPING AND EQUIPMENT
	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION GAS DISTRIBUTION PIPING (NATURAL AND PROPANE)
	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION GAS DISTRIBUTION PIPING (NATURAL AND PROPANE)
	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING
	HVAC, TERMINAL & PACKAGE UNITS, UNIT VENTILATORS
	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (PROPANE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (MED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (NITROGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (NITROUS OXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (OXYGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD (SPECIAL GAS)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANIFOLD SUPPLY SOURCE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MANUAL PULL/PUSH STATION	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MANUAL TRANSFER SWITCH (E-POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MED GAS OUTLET	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MED GAS SYS-CARBON DIOXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MED GAS SYS-NITROGEN	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MED GAS SYS-NITROUS OXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MED GAS SYS-OXYGEN	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MED GAS-SYS ETHYLENE OXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MEDICAL COMPRESSED AIR	PLUMBING OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MEDICAL GAS ALARM PANEL	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MEDICAL-SURGICAL VACUUM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MEMBRANE (BUILT-UP)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS
	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS
	ROOFING, ROOF COVERINGS, LOWLOPE ROOF SYSTEMS
	LIFT LIFT STATION LIGHTING CONTROL DEVICE (EP) LIGHTING CONTROL DEVICE LIGHTNING PROTECTION SYSTEM LINE ISOLATION MONITOR LOAD BANK LOAD INTERRUPTER SWITCH LOAD SHED PANEL LOCAL ALARM PANEL MAIN DISCONNECT SWITCH (EMERGENCY POWER) MAIN DISCONNECT SWITCH MAIN DISCONNECT SWITCH MAIN DISCONNECT SWITCH MAIN DISCONNECT SWITCH MAIN DISTRIBUTION PANEL (EMERGENCY POWER) MAIN DISTRIBUTION PANEL (EMERGENCY POWER) MAIN DISTRIBUTION PANEL (EMERGENCY POWER) MAIN DISTRIBUTION PANEL (EMERGENCY POWER) MAIN SHUTOFF VALVE MAIN SHUTOFF VALVE MAIN SHUTOFF VALVE (NATURAL GAS) MAIN SHUT-OFF VALVE (ROPANE) MANIFOLD (ARGON) MANIFOLD (CARBON DIOXIDE) MANIFOLD (CARBON DIOXIDE) MANIFOLD (CARBON DIOXIDE) MANIFOLD (HELIUM) MANIFOLD (MED AIR) MANIFOLD (NITROGEN) MANIFOLD (NITROGEN) MANIFOLD (SPECIAL GAS) MANIFOLD (SPECIAL GAS) MANIFOLD SYS-NITROUS OXIDE) MANIFOLD SYS-NITROUS OXIDE MED GAS SYS-CARBON DIOXIDE MED GAS SYS-NITROUS OXIDE MED GAS SYS-

ABBREVIATION	NOMENCLATURE	DESCRIPTION
ROOFP	MEMBRANE (PVC)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS
ROOFF	MEMBRANE (SPF)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS
ROOFO	MEMBRANE (TPO)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS
ROOFM	METAL ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEM
MIX	MIXER (FLOOR)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
MB	MIXING BOX	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
MNACU	MNS AUTONOMOUS CONTROL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MNLOC	MNS LOCAL OPERATING CONSOLE	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MNTD	MNS LOCAL OF LIKETING CONSOLL MNS TEXTUAL DISPLAY (MASS NOTE ONLY)	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MON	MONITOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DACW	MONITOR/CONTROL WORKSTATION	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
M	MOTOR (FENCE, GATES)	SITE IMPROVEMENTS, SITE DEVELOPMENT, FENCING & GATES
M	MOTOR (FENCE, GATES) MOTOR (OTHER CONVEYING)	
M	MOTOR (DTHER CONVETING)	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
M	MOTOR (PASS ELEV) MOTOR (PLUMBING, DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
M		
		CONVEYING, OTHER CONVEYING SYSTEMS, PHEUMATIC TUBE SYSTEM
EPMCC	MOTOR CONTROL CENTER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MCC	MOTOR CONTROL CENTER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
MS		ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
MSDS		ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
EPMS	MOTOR STARTER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPMSDS	MOTOR STARTER (EMERGENCY POWER DS)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MWALK	MOVING WALK	CONVEYING, ESCALATORS AND MOVING WALKS, MOVING WALKS
MFACU	MSTR FA CNTRL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
NWT	NEAT WASTE TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
NCTS	NON-CHEMICAL TREATMENT SYS (CHILLED)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
OSEP	OIL SEPERATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OWS	OIL-WATER SEPARATOR	EQUIPMENT, OTHER EQUPMENT, WASTE HANDLING EQUIPMENT
OE	ORAL EVACUATION	PLUMBING, OTHER PLUBMING SYSTEMS, SPECIAL PIPING SYSTEMS
OAID	OUTDOOR AIR INTAKE DAMPER	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
OAF	OUTSIDE AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
OVEN	OVEN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
OHCD	OVERHEAD COILING DOOR	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS
OHRD	OVERHEAD DOOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OVERHEAD AND ROLL-UP DOORS
OMO	OXYGEN MONITOR (HVAC)	HVAC, CONTORLS & INSTRUMENTATION, HVAC CONTROLS
OXMON	OXYGEN MONITOR (PLUMBING)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OPM	OXYGEN PURITY METER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
PU	PACKAGE UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
PNL	PANELBOARD	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
EPNL	PANELBOARD (EMERGENCY)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
PPL	PARKING LOT LIGHT	SITE ELECTRICAL UTILITIES, SITE LIGHTING, EXTERIOR LIGHTING FIXTURES & CONTROLS
PHS	PH SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PAC	PLANT AIR COMPRESSOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
PLT	PLASTER TRAP	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
PHE	PLATE HEAT EXCHANGER	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS

ABBREVIATION	NOMENCLATURE	DESCRIPTION
PCP	PNEUMATIC CONTROL PANEL	HVAC, CONTROLS & INSTRUMENTATION, PNEUMATIC CONTROLS
PTS	PNEUMATIC TUBE SYSTEM	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS
PC	POWER CONDITIONER	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
PI	POWER INVERTER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, OTHER SERVICE AND DEVICES
PS	POWER SUPPLY	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
TDT	POWER TRANSFORMER (DRY TYPE)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, TRANSFORMERS
PHC	PREHEAT COIL	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
PG	PRESSURE GAUGE	PLUMBING, DOMESTIC WATER DISTRIBUTION, PIPES & FITTINGS
PRS	PRESSURE- REDUCING STATION	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
PRS	PRESSURE REDUCING VALVE (DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PRGV	PRESSURE REGULATING VALVE (PLUMBING, OTHER)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
PR	PRESSURE REGULATOR	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
PSW	PRESSURE SWITCH	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PT	PRESSURE TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PMA	PRESSURE-MONITORING ALARM	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
PA	PROCESS AIR COMPRESSOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
Р	PUMP (PASS ELEV)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
Р	PUMP (PLUMBING FIXUTES, OTHER)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
PPE	PURIFICATION PROCESS EQUIP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT
RH	RADIANT HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
GR	RADIATOR	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
RANG	RANGE TOP	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RTO	RANGE TOP OVEN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
FRZ	REACH-IN FREEZER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RF/FZ	REACH-IN REFRIG/FREEZER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RREF	REACH-IN REFRIGERATOR	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
R	RECEIVER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
GFCI	RECEPTACLE (GFCI)	ELECTRICAL, LIGHTING & BRANCH WIRING, BRANCH WIRING
RECT	RECLAIM TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT
RCP	RECTIFIER (CATHODIC PROTECTION)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, CATHODIC PROTECTION
REC	RECTIFIER	ELECTRICAL, OTHER ELECTIRCAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
EPREC	RECTIFIER (EPREC)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
RLD	REFRIGERANT LEAK DETECTOR	HVAC, CONTROLS AND INSTRUMENTATION, HVAC CONTROLS
RLM	REFRIGERANT LEAK MONITOR	HVAC, CONTROLS AND INSTRUMENTATION, HVAC CONTROLS
RRT	REFRIGERANT RECOVERY TANK	HVAC, OTHER HVAC SYSTEMS AND EQUPMENT, REFRIGERATION SYSTEMS
RCOOL	REFRIGERATED COOLERS	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RTAB	REFRIGERATED TABLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RAP	REFRIGERATION ALARM PANEL	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
MREF	REFRIGERATOR (FREESTANDING, MEDICAL	EQUIPMENT, INSTITUTIONAL EQUIPMENT, MEDICAL EQUIPMENT
LREF	REFRIGERATOR (LAB FREESTANDING)	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUIPMENT
MR	REFRIGERATOR (MORGUE)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
WIR	REFRIGERATOR (WALK-IN)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
REGA	REGENERATION ACTUATOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT
REGC	REGENERATION CONTROLLER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIMENT
RHC	REHEAT COIL	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING

NOTE:

ABBREVIATION	NOMENCLATURE	DESCRIPTION
RLF	RELIEF FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
FRAP	REMOTE ANNUNCIATOR PANEL	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
RS	RESERVE SYSTEM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
REST	RESIN TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT
RPAR	RETRACTABLE PARTITIONS	INTERIOR CONSTRUCTION, PARTITIONS, RETRACTABLE PARTITIONS
RAF	RETURN AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
ROU	REVERSE OSMOSIS UNIT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
RD	REVOLVING DOOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, REVOLVING DOORS
RHWS	RHW SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
RISE	RISER	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
RFD	ROOF DRAIN	ROOFING, ROOF COVERINGS, GUTTERS& DOWNSPOUTS
RFH	ROOF HATCH	ROOFING, ROOF COVERINGS, GOT PERS& DOWINSPOOLS ROOFING, ROOF COVERINGS, ROOF OPENINGS AND SUPPORTS
RTU	ROOFTOP UNIT	
RPM	ROOM PRESSURE MONITOR	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
		HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
SV		PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
SCOL	SAMPLE COOLER	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
SWS	SANITARY WASTE SYSTEM	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT
SCUP	SCUPPER	ROOFING, ROOF COVERINGS, GUTTERS& DOWNSPOUTS
VS	SECURITY VAULT/SAFE	SPECIAL CONSTRUCTION, SPECIAL CONSTRUCTION SYSTEMS, VAULTS
SWP	SEWAGE PUMP	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT
STHE	SHELL & TUBE HEAT EXCHANGER	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
SRS	SILVER RECOVERY SYSTEM	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
SKY	SKYLIGHT	ROOFING, ROOF COVERINGS, ROOF OPENINGS AND SUPPORTS
ROOFS	SLATE ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS
SFDA	SLIDING & FOLDING DOORS	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS
SDRA	SLIDING DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS
SD	SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
SDA	SMOKE DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS
SES	SMOKE EXHAUST SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
SIMS	SNOW & ICE MELTING SYSTEM	OTHER SITE CONSTRUCTION, OTHER SITE CONSTRUCTION, SNOW MELTING SYSTEM
SBTUM	SOLAR BTU METER	HVAC, ENERGY SUPPLY, SOLAR ENERGY STSTEMS
SCPW	SOLAR CONTROL PANEL (WATER)	HVAC, ENERGY SUPPLY, SOLAR ENERGY SYSTEMS
SPNL	SOLAR PANEL (ELECTRICAL)	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
SPNLW	SOLAR PANEL (WATER)	HVAC, ENERGY SUPPLY, SOLAR ENERGY SYSTEMS
SS	SOLID SEPERATOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
SFW	SPECIAL FUNCTION WINDOW	CONSTRUCTION, PARTITIONS, INTERIOR WINDOWS
STUC	SPLIT A/C CONDENSING UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
STUE	SPLIT A/C EVAP/BLOWER UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
SAC	SPRINKLER AIR COMPRESSOR	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECTIONWATER PIPING AND EQUIPMENT
S	SPRINKLERS	FIRE PROTECTION, SPRINKLERS, SPRINKLERS AND RELEASING DEVICES
ROOF	STANDING SEAM METAL ROOF	ROOFING, ROOF COVERINGS, OTHER ROOFING
SPSD	STANDPIPE SYSTEM (DRY)	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
SPSW	STANDPIPE SYSTEM (WET)	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
SCON	STEAM CONVERTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
SC	STEAM COOKER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT

NOTE:

ABBREVIATION	NOMENCLATURE	DESCRIPTION
SGEN	STEAM GENERATOR	HVAC, DISTRIBUTION SYSTEMS, STEAM DISTRIBUTION SYSTEMS
STAB	STEAM TABLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
STP	STEAM TRAP	HVAC, DISTRIBUTION SYSTEMS, STEAM DISTRIBUTION SYSTEMS
SUM	STEAM UTILITY METER	SITE CIVIL/MECHANICAL UTILITIES, HEATING DISTRIBUTION, OTHER HEATING DISTRIBUTION
STER	STERILIZER	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUIPMENT
SRC	STORAGE / RETRIEVAL CONVEYOR	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
FPST	STORAGE TANK (FP)	SITE CIVIL/MECHANICAL UTILITIES, WATER SUPPLY, FIRE PROTECITON WATER STORAGE
DWST	STORAGE TANK (DW)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
HWST	STORAGE TANK (HW)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
ST	STORAGE TANK (COLD)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
SEPSS	STORED EMER PWR SUPPLY SYS (GEN BATTERY BANKS)	TWAC, COOLING GENERATING STSTEINS, CHIELED WATCH STSTEINS
WSSH	STORM SHUTTER (WINDOWS)	EXTERIOR ENCLOSURE, EXTERIOR WINDOWS, OTHER EXTERIOR WINDOWS
SSH	STORM SHUTTER (DOORS)	EXTERIOR ENCLOSURE, EXTERIOR WINDOWS, OTHER EXTERIOR WINDOWS EXTERIOR ENCLOSURE, EXTERIOR DOORS, OVERHEAD AND ROLL-UP DOORS
STR STR		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUPMENT
		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
STR		PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
STR	STRAINER (OLD BASKEY TYPE)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
SP	SUMP PUMP	PLUMBING, RAIN WATER DRAINAGE, RAINWATER DRAINAGE EQUIPMENT
SAF		HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
SPD	SURGE PROTECTIVE DEVICE	ELECTRICAL, OTHER ELECTRICAL SERVICES, GOUNDING SYSTEMS
SRG	SURGE TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
EPSB	SWITCHBOARD (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SB	SWITCHBOARD	ELECTRICAL, ELECGTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
EPSG	SWITCHGEAR (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SG	SWITCHGEAR	ELECTRICAL, ELECTRICAL SERVICE AND DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
TS	TAMPER SWITCH	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
ТК	TANK	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
CAV	TERMINAL UNIT (CAV)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
VAV	TERMINAL UNIT (VAV)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
TMV	THERMOSTATIC MIXING VALVE (HVAC)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
TMV	THERMOSTATIC MIXING VALVE (PLUMBING)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
ROOFT	TILE ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS
TEF	TOILET EXHAUST FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
TUC	TRANSFER UNIT CONTROLLER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
EPTLF	TRANSFOMER (LIQUID FILLED)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPTDT	TRANSFORMER (DRY TYPE)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
TLF	TRANSFORMER (LIQUID-FILLED, MAIN TRANSFORMERS)	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MAIN TRANSFORMER
TLF	TRANSFORMER (LIQUID-FILLED, TRANSFORMERS)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, TRANSFORMERS
FATM	TRANSMITTER	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
TRAP	TRAP	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
тс	TRASH COMPACTOR	EQUIPMENT, OTHER EQUIPMENT, WASTE HANDLING EQUIPMENT
UVE	ULTRAVIOLET EQUIPMENT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
UVL	ULTRAVIOLET LIGHT	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
	ULTRAVIOLET STERILIZER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
UVS		

ABBREVIATION	NOMENCLATURE	DESCRIPTION
UAC		HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
UH	UNIT HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
UV	UNIT VENTILATOR	HVAC, TERMINAL AND PACKAGE UNITS, UNIT VENTILATORS
AVB	VACUUM BREAKER BEP	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
VCB	VACUUM CIRCUIT BREAKER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
HWV	VACCOM CIRCOT BREAKER	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
VLV	VALVE	HVAC, DISTRIBUTION STSTEINS, HOT WATER DISTRIBUTION STSTEINS
CWV		HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
EPVFD	VARIABLE FREQUENCY DRIVE (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
VFD		ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, OTHER SERVICE AND DISTRIBUTION
IDA	VAULT DOOR ASSEMBLY	SPECIAL CONSTRUCTION, SPECIAL CONSTRUCTION SYSTEMS, VAULTS
VES	VEHICLE EXHAUST SYSTEM	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
VENT	VENT	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
VF	VENTILATION FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
VR	VOLTAGE REGULATOR	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, SUBSTATIONS
WWP	WALKWAY PROTECTION (ROOF COVERING)	ROOFING, ROOF COVERINGS, OTHER ROOFING
WLVR	WALL LOUVER	EXTERIOR ENCLOSURE, EXTERIOR WALLS, EXTERIOR CLOSURE
WASHER	WASHER	
W&D	WASHER AND DRYER COMB	
WAGD	WASTE ANESTHETIC GAS DISP	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
WSTP	WASTEWATER PUMP	PLUMBING, PLUMBING FIXTURES, OTHER SANITARY WASTE
WAZR	WATER ANALIZER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WFM	WATER FLOW METER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DWG	WATER GONG	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WHA	WATER HAMMER ARRESTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WHM	WATER HARDNESS MONITOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
HWH	WATER HEATER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WMG	WATER MOTOR GONG	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
WPOL	WATER POLISHER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WPG	WATER PRESSURE GAUGE	PLUMBING, DOMESTIC WATER DISTRIBUTION, WATER PRESSURE GAUGE
WPR	WATER PRESSURE REGULATOR	PLUMBING, DOMESTIC WATER EQUIPMENT, WATER PRESSURE REGULATOR
WTRS	WATER SENSOR	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
WSS	WATER SOFTENING SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WTE	WATER TREATMENT EQUIPMENT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WTS	WATER TREATMENT SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WUM	WATER UTILITY METER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WFS	WATERFLOW SWITCH	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
WOS	WATER-OIL SEPARATOR	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT
WCES	WET CHEM EXTINGUISHING SYS	FIRE PROTECTION, OTHER PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
WPSS	WET PIPE SPRINKLER SYSTEM	FIRE PROTECTION, SPRINKLERS, SPRINKLERES AND RELEASING DEVICES
WCL	WHEELCHAIR LIFT	CONVEYING, ELEVATORS AND LIFTS, WHEELCHAIR LIFT
WDI	WIND DIRECTION INDICATOR	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
YTS		
		PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
LAZV		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MAZV	ZONE VALVE (MED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS

ABBREVIATION	NOMENCLATURE	DESCRIPTION
MVZV	ZONE VALVE (MED GAS & VAC)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NZV	ZONE VALVE (NITROGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NOZV	ZONE VALVE (NITROUS OXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OZV	ZONE VALVE (OXYGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
PAZV	ZONE VALVE (PROCESSED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
WAGDZV	ZONE VALVE (WASTE ANESTH GAS)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CDZV	ZONE VALVE CO2	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DAZV	ZONE VALVE DENTAL AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DSVZV	ZONE VALVE DENTAL VACUUM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS

ELECTRICAL SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
AOL	AIRCRAFT OBSTRUCTION LIGHT	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
ATS	AUTOMATIC TRANSFER SWITCH	ELECTRICAL, OTHER ELETRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPBC	BATTERY CHARGER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
BC	BATTERY CHARGER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
EPBM	BATTERY MONITOR (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPBS	BATTERY SYSTEM (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
BAS	BUILDING AUTOMATION SYSTEM	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
BL	BUILDING LIGHT	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
BPIS	BY-PASS/ISOLATION SWITCH	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SCP	CATHODIC PROTECTION	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, CATHODIC PROTECTION
EPCB	CIRCUIT BREAKER	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
СВ	CIRCUIT BREAKER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
GDT	DAY TANK	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPDS	DISCONNECT SWITCH (EMER POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DS	DISCONNECT SWITCH	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
EPDP	DISTRIBUTION PANELBOARD (EMER POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DP	DISTRIBUTION PANELBOARD	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
DADCP	DOOR ACCESS CONTROL PANEL	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
DAD	DOOR ACCESS DEVICE	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
DESG	DOUBLE-ENDED SWITCHGEAR	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
DAS	DURESS ALARM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EUM	ELECTRIC UTILITY METER	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, METERING
MAGL	ELECTROMAGNETIC LOCK	ELECTRICAL COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EMCS	EMCS	ELECTRICAL, OTHER ELECTRICAL SERVICES, ENERGY MANAGEMENT CONTROL SYSTEM
ECS	EMERGENCY CALL SYSTEM	SITE ELECTRICAL UTILITIES, SITE COMMUNICATION AND SECURITY, ELECTRONIC SECURITY SYSTEMS
EML	EMERGENCY LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
TL	TASK LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EECL	EMERGENCY-EXIT COMBO LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EL	EXIT LIGHT	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
FLFS	FUEL LEVEL FLOAT SWITCH	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING AND POWER
FOI	FUEL OIL INDICATOR	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
FTP	FUEL TRANSFER PUMP	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GAP	GENERATOR ALARM PANEL	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GCP	GENERATOR CONTROL PANEL	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GEN	GENERATOR SET	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GRND	GROUNDING SYSTEM	ELECTRICAL, OTHER ELECTRICAL SERVICES, GROUNDING SYSTEMS
GND	GROUNDING SYSTEM	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, GROUNDING SYSTEMS
НРВ	HELIPAD BEACON	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
HPL	HELIPAD LIGHTING	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS
IPS	INFANT PROTECTION SYSTEM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
IDS	INTRUSION DETECTION SYSTEM	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EPLCD	LIGHTING CONTROL DEVICE (EP)	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
LCD	LIGHTING CONTROL DEVICE	ELECTRICAL, LIGHTING & BRANCH WIRING, LIGHTING EQUIPMENT
LPS	LIGHTNING PROTECTION SYSTEM	ELECTRICAL, OTHER ELECTRICAL SERVICES, LIGHTNING PROTECTION
LIM	LINE ISOLATION MONITOR	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES

ELECTRICAL SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
GLB	LOAD BANK	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
LIS	LOAD INTERRUPTER SWITCH	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, SUBSTATIONS
LSP	LOAD SHED PANEL	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPMDS	MAIN DISCONNECT SWITCH (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MDS	MAIN DISCONNECT SWITCH	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
EPMDP	MAIN DISTRIBUTION PANEL (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MDP	MAIN DISTRIBUTION PANEL	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
MTS	MANUAL TRANSFER SWITCH (E-POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
DACW	MONITOR/CONTROL WORKSTATION	ELECTRICAL, COMMUNICATIONS & SECURITY, SECURITY SYSTEMS
EPMCC	MOTOR CONTROL CENTER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
MCC	MOTOR CONTROL CENTER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
MS	MOTOR STARTER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
MSDS	MOTOR STARTER DISCONNECT	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MOTOR CONTROL CENTERS
EPMS	MOTOR STARTER (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPMSDS	MOTOR STARTER (EMERGENCY POWER DS)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
PNL	PANELBOARD	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
EPNL	PANELBOARD (EMERGENCY)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
PPL	PARKING LOT LIGHT	SITE ELECTRICAL UTILITIES, SITE LIGHTING, EXTERIOR LIGHTING FIXTURES & CONTROLS
PC	POWER CONDITIONER	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
PI	POWER INVERTER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, OTHER SERVICE AND DISTRIBUTION
TDT	POWER TRANSFORMER (DRY TYPE)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, TRANSFORMERS
GR	RADIATOR	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
GFCI	RECEPTACLE (GFCI)	ELECTRICAL, LIGHTING & BRANCH WIRING, BRANCH WIRING
RCP	RECTIFIER (CATHODIC PROTECTION)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, CATHODIC PROTECTION
REC	RECTIFIER	ELECTRICAL, OTHER ELECTIRCAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
EPREC	RECTIFIER (EPREC)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SPNL	SOLAR PANEL (ELECTRICAL)	ELECTRICAL, OTHER ELECTRICAL SERVICES, OTHER SPECIAL SYSTEMS AND DEVICES
SPD	SURGE PROTECTIVE DEVICE	ELECTRICAL, OTHER ELECTRICAL SERVICES, GOUNDING SYSTEMS
EPSB	SWITCHBOARD (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SB	SWITCHBOARD	ELECTRICAL, ELECGTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
EPSG	SWITCHGEAR (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
SG	SWITCHGEAR	ELECTRICAL, ELECTRICAL SERVICE AND DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
EPTLF	TRANSFOMER (LIQUID FILLED)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
EPTDT	TRANSFORMER (DRY TYPE)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
TLF	TRANSFORMER (LIQUID-FILLED, MAIN TRANSFORMERS)	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, MAIN TRANSFORMER
TLF	TRANSFORMER (LIQUID-FILLED, TRANSFORMERS)	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, TRANSFORMERS
UVL	ULTRAVIOLET LIGHT	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
UPS	UNINTERUPTIBLE POWER SUPPLY	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
VCB	VACUUM CIRCUIT BREAKER	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, SERVICE ENTRANCE EQUIPMENT
EPVFD	VARIABLE FREQUENCY DRIVE (EMERGENCY POWER)	ELECTRICAL, OTHER ELECTRICAL SERVICES, EMERGENCY LIGHTING & POWER
VFD	VARIABLE FREQUENCY DRIVE	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, OTHER SERVICE AND DISTRIBUTION
VR	VOLTAGE REGULATOR	SITE ELECTRICAL UTILITIES, ELECTRICAL DISTRIBUTION, SUBSTATIONS
WDI	WIND DIRECTION INDICATOR	SITE IMPROVEMENTS, AIRFIELD PAVING, NAVIGATION AIDS

NOTE:

FIRE PROTECTION SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
WPS	AIR PRESSURE SWITCH	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEM, FIRE ALARM DEVICES
3FPS	BACKFLOW PREVENTER FIRE	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECITON WATER PIPING AND EQUIPMENT
APS	BATTERY POWER SUPPLY (FIRE ALARM)	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
BSD	BEAM SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICIES
CMD	CARBON MONOXIDE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
CAS	CLEAN AGENT SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, CLEAN AGENT SYSTEMS
CDES	CO2 EXTINGUISHING SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, CARBON DIOXIDE SYSTEMS
CP	CONTROL PANEL (CARBON DIOXIDE)	FIRE PROTECTION, OTHER FIRE PROTECITON SYSTEMS, CARBON DIOXIDE SYSTEMS
TLV	CONTROL VALVE	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING
RD	DOOR RELEASING DEVICE	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
DCES	DRY CHEM EXTINGUISHING SYS	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
PSS	DRY PIPE SPRINKLER SYSTEM	FIRE PROTECTION, SPRINKLERS, SRINKLERS AND RELEASING DEVICES
)SD	DUCT SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
AAA	FA AUDIO ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
AAV	FA AUDIO VISUAL ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
AVA	FA VISUAL ALARM	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
	FIRE ALARM CONTROL PANEL	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
ACU	FIRE ALARM CONTROL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
C	FIRE CURTAIN	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
DM	FIRE DAMPER	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
DC	FIRE DEPT CONNECTION	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
ECK	FIRE EXTINGUISHER CLASS K	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
ECA	FIRE EXTINGUISHER CLN AGENT	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EF	FIRE EXTINGUISHER FOAM	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
ENM	FIRE EXTINGUISHER NON MAG	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EWT	FIRE EXTINGUISHER WATER	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
ECD	FIRE EXTINGUISHER-CO2	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EDC	FIRE EXTINGUISHER-DRY CHEM	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EH	FIRE EXTINGUISHER-HALON	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS
EWC	FIRE EXTINGUISHER-WET CHEM	
P	FIRE PUMP	FIRE PROTECTION, FIRE PROTECTION SPECIALTIES, PORTABLE EXTINGUISHERS FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
PC	FIRE PUMP CONTROLLER	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
s	FIRE SHUTTER	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS
S CV	FLOOR CONTROL VALVE	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING
ES IES	FOAM EXTINGUISHING SYSTEM HALON EXTINGUISHING SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, FOAM GENERATING EQUIPMENT FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL PROTECTION SYSTEMS
ES D	HEAT DETECTOR	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL PROTECTION SYSTEMS
ISD		
	HEAT/SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
C P	HOSE CONNECTION	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
		FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
PC	JOCKEY PUMP CONTROLLER	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PUMP
/D		FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECTION WATER PIPING AND EQUIPMENT
MPS		FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MNACU	MNS AUTONOMOUS CONTROL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MNLOC	MNS LOCAL OPERATING CONSOLE	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES

FIRE PROTECTION SYSTEMS

Abbreviations and Nomencalture for Equipment

MNTD	MNS TEXTUAL DISPLAY (MASS NOTE ONLY)	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
MFACU	MSTR FA CNTRL UNIT	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
FRAP	REMOTE ANNUNCIATOR PANEL	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
RISE	RISER	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
SD	SMOKE DETECTOR	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
SDA	SMOKE DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS
SES	SMOKE EXHAUST SYSTEM	FIRE PROTECTION, OTHER FIRE PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
SAC	SPRINKLER AIR COMPRESSOR	FIRE PROTECTION, FIRE SUPP WATER SUPPLY/EQUIP, FIRE PROTECTIONWATER PIPING AND EQUIPMENT
S	SPRINKLERS	FIRE PROTECTION, SPRINKLERS, SPRINKLERS AND RELEASING DEVICES
SPSD	STANDPIPE SYSTEM (DRY)	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
SPSW	STANDPIPE SYSTEM (WET)	FIRE PROTECTION, STANDPIPE SYSTEMS, STANDPIPE EQUIPMENT & PIPING
FPST	STORAGE TANK (FP)	SITE CIVIL/MECHANICAL UTILITIES, WATER SUPPLY, FIRE PROTECITON WATER STORAGE
SEPSS	STORED EMER PWR SUPPLY SYS (GEN BATTERY BANKS)	
TS	TAMPER SWITCH	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
FATM	TRANSMITTER	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DISTRIBUTION
WMG	WATER MOTOR GONG	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
WFS	WATERFLOW SWITCH	FIRE PROTECTION, FIRE ALARM AND DETECTION SYSTEMS, FIRE ALARM DEVICES
WCES	WET CHEM EXTINGUISHING SYS	FIRE PROTECTION, OTHER PROTECTION SYSTEMS, OTHER SPECIAL FIRE PROTECTION SYSTEMS
WPSS	WET PIPE SPRINKLER SYSTEM	FIRE PROTECTION, SPRINKLERS, SPRINKLERES AND RELEASING DEVICES

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
TWAC	A/C UNIT (THRU-WALL)	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
WAC	A/C UNIT (WINDOW)	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
ACOL	AFTERCOOLER	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS AFTERCOOLER
AIC	AIR CURTAIN	HVAC, TERMINAL & PACKAGE UNITS, UNIT VENTILATORS
ADRY	AIR DRYER	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
AFE	AIR FILTER (ELECTROSTATIC)	HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
HEPA	AIR FILTRATION SYS (HEPA)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
AHU	AIR HANDLING UNIT	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
AS	AIR SEPARATOR (HVAC)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
ACV	AUTOMATIC CONTROL VALVES	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
BBH	BASEBOARD HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
BDT	BLOWDOWN TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
B	BOILER (HOT WATER)	HVAC, HEAT GENERATING SYSTEMS, BOILERS
BFDP	BOILER FEED PUMP	HVAC, HEAT GENERATING SYSTEMS, DULENS
BFT	BOILER FEED TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
BF	BOOSTER FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
BUFF	BUFFER TANK	HVAC, COOLING GENERATING SYSTEM, CHILLED WATER SYSTEMS
САВН	CABINET HEATER	HVAC, COOLING GENERATING STSTEIM, CHILLED WATER STSTEIMS HVAC, TERMINAL & PACKAGE UNIT, UNIT HEATERS
CBRA	CARBON ABSORBER	HVAC, TERMINAL & PACKAGE UNIT, UNIT HEATERS HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOKING
CO2S	CARBON DIOXIDE SENSOR	
CFS	CHEMICAL FEED SYSTEM	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
CSF		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CFT	CHEMICAL SHOT FEEDER (COLD) CHEMICAL TANK	HVAC, COOLING GENERATING SYSTEM, CHILLED WATER SYSTEM HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHWP		
		HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
CWST		HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
CHA		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHC		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHR		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHRW	CHILLER (SCREW)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CHRL		HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
HWCP		HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
CWCP		HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
CDCP		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
CSGEN		
CIU		HVAC, TERMINAL & PACKAGE UNITS, OTHER TERMINAL & PACKAGE UNITS
CGD	COMBUSTIBLE GAS DETECTOR	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
CAF		HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
C		HVAC, OTHER HVAC SYSTEMS & EQUIPMENT, REFRIGERATION SYSTEMS
CRACU		HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
CRP		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
CRU		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUPMENT
ACC		HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
EVC		HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
WCC		HVAC, COOLING GENERATING SYSTEMS, DIRECT EXPANSION SYSTEMS
CDWP	CONDENSER WATER PUMP	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS

NOTE:

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
CU	CONDENSING UNIT HVAC	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
CAC	CONTROL AIR COMPRESSOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
СТ	COOLING TOWER	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CTF	COOLING TOWER FAN	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
CYCS	CYCLONIC SEPARATOR	HVAC, COOLING GENERATING SISTEMS, CHILLED WATER SYSTEMS
DEA	DEAERATOR	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
DHUM	DEHUMIDIFIER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DWD	DESICCANT WHEEL DEHUMIDIFIER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DDC	DIRECT DIGITAL CONTROL	HVAC, CONTROLS & INSTRUMENTATION, ELECTRONIC CONTROLS
DEC	DRAFT FAN	HVAC, HEAT GENERATING SYSTEMS, BOILERS
DEL	DRAFT FAN DRY COOLER	HVAC, COOLING GENERATING SYSTEMS, DOLERS
DEL		
		HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
DHW	DUCT HEATER HOT WATER	HVAC, DISTRIBUTIONS SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
ESO	EMERGENCY SHUTOFF	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, OTHER SPECIAL MECHANICAL SYSTEMS
ESPB	EMERGENCY STOP PUSH BUTTON	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
ERU	ENERGY RECOVERY UNIT	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
ECU	EVAPORATIVE COOLING UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
EAF	EXHAUST AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
EF	EXHAUST FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
EH	EXHAUST HOOD	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
KEH	EXHAUST HOOD (KITCHEN)	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
EHWS	EXHAUST HOOD WASH SYSTEM	HVAC, DISTRIBUTION SYSTEM, EXHAUST SYSTEMS
ET	EXPANSION TANK (CHILLED)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
ET	EXPANSION TANK (HOT WATER)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
FCU	FAN COIL UNIT	HVAC, TERMINAL & PACKAGE UNITS, FAN COIL UNITS
FTR	FINNED TUBE RADIATOR	HVAC, TERMINAL & PACKAGE UNITS, FIN TUBE RADIATION
FT	FLASH TANK	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
FLOS	FLOW SWITCH	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
MFRZ	FREEZER (FREESTANDING, MEDICAL)	EQUIPMENT, INSTITUTIONAL EQIPMENT, MEDICAL EQUPMENT
LFRZ	FREEZER (FREESTANDING, LAB)	EQUIPMENT, INSTITUTIONAL EQIPMENT, LABORATORY EQUPMENT
WIF	FREEZER (WALK-IN)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
FAIT	FRESH AIR INTAKE	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
FH	FUME HOOD	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
FURN	FURNACE	HVAC, HEAT GENERATING SYSTEMS, FURNACES
GFS	GLYCOL FEED SYSTEM	HVAC, DISTRIBUTION SYSTEMS, GLYCOL DISTRIBUTION SYSTEMS
GP	GLYCOL PUMP	HVAC, DISTRIBUTION SYSTEMS, GLYCOL DISTRIBUTION SYSTEMS
HE	HEAT EXCHANGER	HVAC, HEAT GENERATING SYSTEMS, OTHER HEAT GENERATING SYSTEMS
HRU	HEAT RECOVERY UNIT	HVAC, HEAT GENERATING SYSTEMS, BOILERS
HWP	HOT WATER PUMP	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
HUM	HUMIDIFIER	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
IFS	INDUSTRIAL FILTRATION SYS (HEAT)	HVAC, HEAT GENERATING SYSTEMS, OTHER HEAT GENERATING SYSTEMS
IFS	INDUSTRIAL FILTRATION SYS (COLD)	HVAC, COOLING GENERATING SYSTEMS, OTHER COOLING GENERATING SYSTEMS
LFH	LABORATORY FUME HOOD	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
LAP	LOCAL ALARM PANEL	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
MUAU	MAKE-UP AIR UNIT	HVAC, TERMINAL & PACKAGE UNITS, UNIT VENTILATORS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
MB	MIXING BOX	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
NCTS	NON-CHEMICAL TREATMENT SYS (CHILLED)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
OAID	OUTDOOR AIR INTAKE DAMPER	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
OAF	OUTSIDE AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
OMO	OXYGEN MONITOR (HVAC)	HVAC, CONTORLS & INSTRUMENTATION, HVAC CONTROLS
PU	PACKAGE UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
PAC	PLANT AIR COMPRESSOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
PHE	PLATE HEAT EXCHANGER	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
PCP	PNEUMATIC CONTROL PANEL	HVAC, COOLING GENERATING STSTEMS, CHILLED WATER STSTEMS
PHC	PREHEAT COIL	HVAC, CONTROLS & INSTRUMENTATION, PREDMATIC CONTROLS
-		
PRS	PRESSURE- REDUCING STATION	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
PR	PRESSURE REGULATOR	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
PMA	PRESSURE-MONITORING ALARM	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
RH	RADIANT HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
RLD	REFRIGERANT LEAK DETECTOR	HVAC, CONTROLS AND INSTRUMENTATION, HVAC CONTROLS
RLM	REFRIGERANT LEAK MONITOR	HVAC, CONTROLS AND INSTRUMENTATION, HVAC CONTROLS
RRT	REFRIGERANT RECOVERY TANK	HVAC, OTHER HVAC SYSTEMS AND EQUPMENT, REFRIGERATION SYSTEMS
RAP	REFRIGERATION ALARM PANEL	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
MREF	REFRIGERATOR (FREESTANDING, MEDICAL	EQUIPMENT, INSTITUTIONAL EQUIPMENT, MEDICAL EQUIPMENT
LREF	REFRIGERATOR (LAB FREESTANDING)	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUIPMENT
MR	REFRIGERATOR (MORGUE)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
WIR	REFRIGERATOR (WALK-IN)	HVAC, OTHER HVAC SYSTEMS AND EQUIPMENT, REFRIGERATION SYSTEMS
RHC	REHEAT COIL	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
RLF	RELIEF FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
RAF	RETURN AIR FAN	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION HEATING & COOLING
RTU	ROOFTOP UNIT	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
RPM	ROOM PRESSURE MONITOR	HVAC, CONTROLS & INSTRUMENTATION, HVAC CONTROLS
SCOL	SAMPLE COOLER	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
STHE	SHELL & TUBE HEAT EXCHANGER	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
SBTUM	SOLAR BTU METER	HVAC, ENERGY SUPPLY, SOLAR ENERGY STSTEMS
SCPW	SOLAR CONTROL PANEL (WATER)	HVAC, ENERGY SUPPLY, SOLAR ENERGY SYSTEMS
SPNLW	SOLAR PANEL (WATER)	HVAC, ENERGY SUPPLY, SOLAR ENERGY SYSTEMS
STUC	SPLIT A/C CONDENSING UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
STUE	SPLIT A/C EVAP/BLOWER UNIT	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
SGEN	STEAM GENERATOR	HVAC, DISTRIBUTION SYSTEMS, STEAM DISTRIBUTION SYSTEMS
STP	STEAM TRAP	HVAC, DISTRIBUTION SYSTEMS, STEAM DISTRIBUTION SYSTEMS
SUM	STEAM UTILITY METER	SITE CIVIL/MECHANICAL UTILITIES, HEATING DISTRIBUTION, OTHER HEATING DISTRIBUTION
HWST	STORAGE TANK (HW)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
ST	STORAGE TANK (COLD)	HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
STR	STRAINER (HVAC AUX EQUIPMENT)	HVAC, COOLING GENERATING STSTEINS, CHILLED WATER STSTEINS HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUPMENT
STR	STRAINER (HVAC AOA EQUIPMENT)	HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT HVAC, COOLING GENERATING SYSTEMS, CHILLED WATER SYSTEMS
SAF	SUPPLY AIR FAN	HVAC, COOLING GENERATING STSTEINS, CHILLED WATER STSTEINS HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
SRG		
CAV		HVAC, HEAT GENERATING SYSTEMS, AUXILARY EQUIPMENT
-		HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
VAV	TERMINAL UNIT (VAV)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING

NOTE:

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
TMV	THERMOSTATIC MIXING VALVE (HVAC)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
TEF	TOILET EXHAUST FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
UAC	UNIT AIR CONDITIONER	HVAC, TERMINAL & PACKAGE UNITS, PACKAGE UNITS
UH	UNIT HEATER	HVAC, TERMINAL & PACKAGE UNITS, UNIT HEATERS
UV	UNIT VENTILATOR	HVAC, TERMINAL AND PACKAGE UNITS, UNIT VENTILATORS
HWV	VALVE (HOT)	HVAC, DISTRIBUTION SYSTEMS, HOT WATER DISTRIBUTION SYSTEMS
VLV	VALVE	HVAC, CONTROLS & INSTRUMENTATION, ELECTRONIC CONTROLS
CWV	VALVE (COLD))	HVAC, DISTRIBUTION SYSTEMS, CHILLED WATER DISTRIBUTION SYSTEMS
VES	VEHICLE EXHAUST SYSTEM	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
VENT	VENT	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS
VF	VENTILATION FAN	HVAC, DISTRIBUTION SYSTEMS, EXHAUST SYSTEMS

KITCHEN SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
BDIS	BEVERAGE DISPENSER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
BPAN	BRAISING PAN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CWM	CART WASH MACHINE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CHOP	CHOPPER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
COFF	COFFEE MAKER/URN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CU	CONDENSING UNIT FOOD SERVICE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
CONV	CONVEYOR	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
DFRY	DEEP FRYER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
DWM	DISHWASHING MACHINE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
DCOOL	DRINK COOLER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
WARM	FOOD WARMER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
GD	GARBAGE DISPOSAL (FOOD)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
GRL	GRILL	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
IM	ICE MACHINE (KITCHEN)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
STK	KETTLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
MIX	MIXER (FLOOR)	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
OVEN	OVEN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RANG	RANGE TOP	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RTO	RANGE TOP OVEN	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
FRZ	REACH-IN FREEZER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RF/FZ	REACH-IN REFRIG/FREEZER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RREF	REACH-IN REFRIGERATOR	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RCOOL	REFRIGERATED COOLERS	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
RTAB	REFRIGERATED TABLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
SC	STEAM COOKER	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT
STAB	STEAM TABLE	EQUIPMENT, OTHER EQUIPMENT, FOOD SERVICE EQUIPMENT

OTHER SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	/IATION NOMENCLATURE DESCRIPTION				
ALD	AIR LOCK DOOR	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS			
ROOFA	ASPHALT SHINGLES	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS			
AGVS	AUTO GUIDED VEHICLE SYSTEM	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
ACS	AUTOMATIC CART SYSTEM	CONVEYING OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS, AUTOMATIC CART SYSTEM			
AD	AUTOMATIC DOOR EXTERIOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OTHER EXTERIOR SPECIALTY DOORS			
AD	AUTOMATIC DOOR INTERIOR	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR PERSONNEL DOORS			
RB	BARRIER (ROAD)	SITE IMPROVEMENTS, ROADWAYS, GUARDRAILS & BARRIERS			
PLB	BARRIER (PARKING)	SITE IMPROVEMENTS, PARKING LOTS, GUARDRAILS & BARRIERS			
BDA	BLAST DOOR ASSEMBLY	EXTERIOR ENCLOSURE, EXTERIOR DOORS, BLAST RESISTANT DOORS			
BLWR	BLOWER	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS			
BLRD	BOLLARD	SITE IMPROVEMENTS, ROADWAYS, GUARDRAILS AND BARRIERS			
OC	BRIDGE CRANE	CONVEYING, WEIGHT HANDLING EQUIPMENT, OVERHEAD CRANES			
CMM	CARBON MONOXIDE MONITOR	SPECIAL CONSTRUCTION, SPECIAL CTRLS/INSTRUMENTION, BUILDIND AUTOMATION SYSTEMS			
CART	CART	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
CL	CART LIFT	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
CWASH	CART WASH CONVEYING	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
CWASH	CART WASH MEDICAL	EQUIPMENT, INSTITUTIONAL EQUIPMENT, MEDICAL EQUIPMENT			
CHUT	CHUTE	CONVEYING, OTHER CONVEYING SYSTEMS, LINEN, TRASH AND MAIL CHUTES			
CP					
		CONVEYING, ELEVATORS AND LIFTS, DUMBWAITERS			
CP		CONVEYING, ELEVATOR AND LIFT, FREIGHT ELEVATORS			
CP	CONTROL PANEL (ELEV PASS)	CONVEYING, ELEVATOR AND LIFT, PASSENGER ELEVATORS			
CP	CONTROL PANEL (FREIGHT)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS			
СР	CONTROL PANEL (OTHER, CONVEYING)	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
СР	CONTROL PANEL PNEUMATIC TUBE	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS			
CONT	CONTROLLER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
CNB	CONVEYOR BELT	CONVEYING, OTHER CONVEYING SYSTEMS, CONVEYORS			
DW	DISHWASHER	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUPIMENT			
DVR	DIVERTER	CONVEYING, OTHER CONVEYING SYSTEMS, PHEUMATIC TUBE SYSTEM			
DLV	DOCK LEVELER	EQUIPMENT, VEHICULAR EQUIPMENT, LOADING DOCK EQUIPMENT			
DSL	DOCK SCALE	EQUIPMENT, VEHICULAR EQUIPMENT, LOADING DOCK EQUIPMENT			
EDAG	DOOR ASSEMBLY (EXT GLASS)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, GLAZED DOORS			
EDA	DOOR ASSEMBLY (EXT SOLID)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS			
EDAS	DOOR ASSEMBLY (EXT STEEL)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS			
EDAW	DOOR ASSEMBLY (EXT WOOD)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, SOLID DOORS			
IDAG	DOOR ASSEMBLY (INT GLASS)	INTERIOR CONSTRUCTION, INTERIOR DOORS, GLASED INTERIOR DOORS			
IDA	DOOR ASSEMBLY (INTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, STANDARD INTERIOR DOORS			
DHW	DOOR HARDWARE	EXTERIOR ENCLOSURE, EXTERIOR DOORS EXTERIOR DOOR HARDWARE			
IDHW	DOOR HARDWARE (INTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, INTERIOR DOOR HARDWARE			
DV	DRIVERLESS VEHICLE	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
DRYER	DRYER				
DBW	DUMBWAITER	CONVEYING, ELEVATORS AND LIFTS, DUMBWAITERS			
EEGD	EGRESS DOOR ASSEMBLY (EXTERIOR)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OTHER EXTERIOR SPECIALTY DOORS			
IEGD	EGRESS DOOR ASSEMBLY (INTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS			
ELP	ELECTRIC LIFT PLATFORM	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			
ETV	ELECTRIC TRACK VEHICLE	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS			

OTHER SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	TION NOMENCLATURE DESCRIPTION			
ELEV	ELECTRIC TRACTION ELEVATOR (FREIGHT)	CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS		
ELEV	ELECTRIC TRACTION ELEVATOR (PASS)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS		
EMD	ELECTRONIC MESSAGE DISPLAY	SITE IMPROVEMENTS, SITE DEVELOPMENT, SIGNAGE		
CAR	ELEVATOR CAR	CONVEYING, ELEVATOR AND LIFTS, PASSENGER ELEVATORS		
EFSO	EMERGENCY FUEL SHUTOFF	SITE CIVIL/MECHANICAL UTILITES, FUEL DISTRIBUTION, LIQUID FUEL STORAGE TANKS		
ESCL	ESCALATOR	CONVEYING, ESCALATORS AND MOVING WALKS, ESCALATORS		
EXTS	EXTERIOR	STAIRS, STAIR CONSTRUCTION, INTERIOR AND EXTERIOR STAIRS		
FDA	FIRE DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, FIRE DOORS		
FEC	FIRE EXTINGUISHER CABINET	INTERIOR CONSTRUCTION, SPECIALTIES, FIRE EXTINGUISHER CABINETS		
FPAR	FIXED PARTITIONS	INTERIOR CONSTRUCTION, PARTITIONS, FIXED PARTITIONS		
FDRA	FOLDING DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS		
FLDS	FUEL LEAK DETECTION SYSTEM	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, OTHER FUEL DISTRIBUTION		
FOP	FUEL OIL PUMP	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, LIQUID FUEL STORAGE TANKS		
FOST	FUEL STORAGE TANK	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, LIQUID FUEL STORAGE TANKS		
FTS	FUEL TRANSFER SYSTEM			
LPGST	GAS STORAGE TANK	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION, GAS STORAGE TANKS		
GA	GATE ASSEMBLY (EXTERIOR)	SITE IMPROVEMENTS, SITE DEVELOPMENT, FENCING & GATES		
GATE	GATE ASSEMBLY (NTERIOR)	INTERIOR CONSTRUCTION, INTERIOR DOORS, INTERIOR GATES		
G&D	GUTTERS & DOWNSPOUTS	ROOFING, ROOF COVERINGS, GUTTERS & DOWNSPOUTS		
HOIST	HOIST	CONVEYING, WEIGHT HANDLING EQUIPMENT, OVERHEAD CRANES		
ELEV	HYDRAULIC ELEVATOR (FREIGHT)	CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS		
ELEV	HYDRAULIC ELEVATOR (PREIGHT)	CONVEYING, ELEVATORS AND LIFTS, PREIGHT ELEVATORS		
HYDPU	HYDRAULIC PUMP UNIT	CONVEYING, ELEVATORS AND LIFTS, FREIGHT ELEVATORS		
		EQUIPMENT, OTHER EQUIPMENT, WASTE HANDLING EQUIPMENT		
INTS		STAIRS, STAIR CONSTRUCTION, INTERIOR AND EXTERIOR STAIRS		
IW	INTERIOR WINDOWS IRRIGATION SPRINKLER SYSTEM	CONSTRUCTION, PARTITIONS, INTERIOR WINDOWS		
LLD		SITE IMPROVEMENTS, LANDSCAPING, IRRIGATION SYSTEMS		
	LEAD LINED DOOR	INTERIOR CONSTURCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS		
		CONVEYING, ELEVATORS AND LIFTS, OTHER VERTICAL TRANSPORTATION EQUIPMENT		
SLS		SITE CIVIL/MECHANICAL UTILITIES, SANITARY SEWER, LIFT STATIONS AND PUMPING STATIONS		
MSVN	MAIN SHUT-OFF VALVE (NATURAL GAS)	SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION GAS DISTRIBUTION PIPING (NATURAL AND PROPANE)		
MSVP		SITE CIVIL/MECHANICAL UTILITIES, FUEL DISTRIBUTION GAS DISTRIBUTION PIPING (NATURAL AND PROPANE)		
MSVS	MAIN SHUT-OFF VALVE (SPRINKLER)	FIRE PROTECTION, SPRINKLERS, SPRINKLER WATER SUPPLY EQUIPMENT AND PIPING		
ROOFU	MEMBRANE (BUILT-UP)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFE		ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFL		ROOFING, ROOF COVERINGS, LOWLOPE ROOF SYSTEMS		
ROOFB		ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFP	MEMBRANE (PVC)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFF	MEMBRANE (SPF)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFO	MEMBRANE (TPO)	ROOFING, ROOF COVERINGS, LOW SLOPE ROOF SYSTEMS		
ROOFM	METAL ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEM		
M	MOTOR (FENCE, GATES)	SITE IMPROVEMENTS, SITE DEVELOPMENT, FENCING & GATES		
M	MOTOR (OTHER CONVEYING)	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS		
M	MOTOR (PASS ELEV)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS		
М	MOTOR (PLUMBING, DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT		

NOTE:

OTHER SYSTEMS

Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION
М	MOTOR (PNEUMATIC TUBE)	CONVEYING, OTHER CONVEYING SYSTEMS, PHEUMATIC TUBE SYSTEM
MWALK	MOVING WALK	CONVEYING, ESCALATORS AND MOVING WALKS, MOVING WALKS
OWS	OIL-WATER SEPARATOR	EQUIPMENT, OTHER EQUPMENT, WASTE HANDLING EQUIPMENT
OHCD	OVERHEAD COILING DOOR	INTERIOR CONSTRUCTION, INTERIOR DOORS, OTHER INTERIOR SPECIALTY DOORS
OHRD	OVERHEAD DOOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OVERHEAD AND ROLL-UP DOORS
PTS	PNEUMATIC TUBE SYSTEM	CONVEYING, OTHER CONVEYING SYSTEMS, PNEUMATIC TUBE SYSTEMS
PS	POWER SUPPLY	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
Р	PUMP (PASS ELEV)	CONVEYING, ELEVATORS AND LIFTS, PASSENGER ELEVATORS
RPAR	RETRACTABLE PARTITIONS	INTERIOR CONSTRUCTION, PARTITIONS, RETRACTABLE PARTITIONS
RD	REVOLVING DOOR	EXTERIOR ENCLOSURE, EXTERIOR DOORS, REVOLVING DOORS
RFD	ROOF DRAIN	ROOFING, ROOF COVERINGS, GUTTERS& DOWNSPOUTS
RFH	ROOF HATCH	ROOFING, ROOF COVERINGS, ROOF OPENINGS AND SUPPORTS
SCUP	SCUPPER	ROOFING, ROOF COVERINGS, GUTTERS& DOWNSPOUTS
IVS	SECURITY VAULT/SAFE	SPECIAL CONSTRUCTION, SPECIAL CONSTRUCTION SYSTEMS, VAULTS
SKY	SKYLIGHT	ROOFING, ROOF COVERINGS, ROOF OPENINGS AND SUPPORTS
ROOFS	SLATE ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS
SFDA	SLIDING & FOLDING DOORS	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS
SDRA	SLIDING DOOR ASSEMBLY	INTERIOR CONSTRUCTION, INTERIOR DOORS, SLIDING & FOLDING DOORS
SIMS	SNOW & ICE MELTING SYSTEM	OTHER SITE CONSTRUCTION, OTHER SITE CONSTRUCTION, SNOW MELTING SYSTEM
SFW	SPECIAL FUNCTION WINDOW	CONSTRUCTION, PARTITIONS, INTERIOR WINDOWS
ROOF	STANDING SEAM METAL ROOF	ROOFING, ROOF COVERINGS, OTHER ROOFING
STER	STERILIZER	EQUIPMENT, INSTITUTIONAL EQUIPMENT, LABORATORY EQUIPMENT
SRC	STORAGE / RETRIEVAL CONVEYOR	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
WSSH	STORM SHUTTER (WINDOWS)	EXTERIOR ENCLOSURE, EXTERIOR WINDOWS, OTHER EXTERIOR WINDOWS
SSH	STORM SHUTTER (DOORS)	EXTERIOR ENCLOSURE, EXTERIOR DOORS, OVERHEAD AND ROLL-UP DOORS
ROOFT	TILE ROOF	ROOFING, ROOF COVERINGS, STEEP SLOPE ROOF SYSTEMS
TUC	TRANSFER UNIT CONTROLLER	CONVEYING, OTHER CONVEYING SYSTEMS, OTHER MATERIAL HANDLING SYSTEMS
тс	TRASH COMPACTOR	EQUIPMENT, OTHER EQUIPMENT, WASTE HANDLING EQUIPMENT
IDA	VAULT DOOR ASSEMBLY	SPECIAL CONSTRUCTION, SPECIAL CONSTRUCTION SYSTEMS, VAULTS
WLVR	WALL LOUVER	EXTERIOR ENCLOSURE, EXTERIOR WALLS, EXTERIOR CLOSURE
WASHER	WASHER	
W&D	WASHER AND DRYER COMB	

ABBREVIATION	NOMENCLATURE	DESCRIPTION
AS	AIR SEPARATOR (PLUMBING)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
AMS	AMALGAM SEPARATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
AUTO	AUTOCLAVE	PLUMBING, OTHER PLUMBING SYSTEMS, OTHER SPECIAL PLUMBING SYSTEMS
BFP	BACKFLOW PREVENTER PLUMBING	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
BP	BOOSTER PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
BLOS	BULK LIQUID OXYGEN SOURCE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CKV	CHECK VALVE	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
CFP	CHEMICAL FEED PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
cws	CHEMICAL-WASTE SYSTEM	PLUMBING, OTHER PLUMBING SYSTEMS, ACID WASTE SYSTEMS
CHLS	CHLORINATION SYSTEM	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
C	COMPRESSOR (PLUMBING)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CP	CONTROL PANEL (DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
CSIS	COPPER-SILVER IONIZATION SYS	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DSH		
DECT	DECONTAMINATION SHOWER DECONTAMINATION TANK	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
		PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DECTC		PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DECP		PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
DIS	DEIONIZATIONS STATION	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DA	DENTAL COMPRESSED AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DSV	DENTAL SURGICAL VACUUM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DADRY	DESICCANT AIR DRYER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DCP	DOMESTIC CIRCULATING PUMP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DFS	DOMESTIC FILTRATION SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
DFC	DRINKING FOUNTAIN W/COOLER	PLUMBING, PLUMBING FIXTURES, DRINKING FOUNTAINS AND COOLERS
EEW	EMERGENCY EYE WASH	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
EWR	EMERGENCY EYE WASH RINSE	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
ESS	EMERGENCY SAFETY STATION	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
ES	EMERGENCY SHOWER	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
EOA	ETHYLENE OXIDE ABATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
FLC	FLOW COMPUTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
WF	FOUNTAIN	SITE IMPROVEMENTS, SITE DEVELOPMENTS, FOUNTAINS & POOLS
GUM	GAS UTILITY METER	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
HWAP	HIGH WATER ALARM PANEL	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT
НВ	HOSE BIB	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
HWHC	HOT WATER HEATING CONVERTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
IA	INSTRUMENT COMPRESSED AIR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
IEU	ION EXCHANGE UNIT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
ISOM	ISOLATION PANELBOARD MONITOR	
ISOP	ISOLATION POWER PANEL	ELECTRICAL, ELECTRICAL SERVICE & DISTRIBUTION, PANELBOARDS
LVIV	ISOLATION VALVE (LAB VAC)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
ISOVP	ISOLATION VALVE (PROPANE)	HVAC, ENERGY SUPPLY, GAS SUPPLY SYSTEM
ISOVN	ISOLATION VALVE (NATURAL GAS)	HVAC, ENERGY SUPPLY GAS SUPPLY SYSTEM
IV	ISOLATION VALVE (HEAT & COOL)	HVAC, DISTRIBUTION SYSTEMS, AIR DISTRIBUTION, HEATING & COOLING
LAIV	ISOLATION VALVE (LAB AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MAIV	ISOLATION VALVE (MED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS

ABBREVIATION	NOMENCLATURE	DESCRIPTION
MVIV	ISOLATION VALVE (MED VAC)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NIV	ISOLATION VALVE (NITROGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NOIV	ISOLATION VALVE (NITROUS OXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OIV	ISOLATION VALVE (NITROUS OXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
SVIV	ISOLATION VALVE (OATGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
SGIV	ISOLATION VALVE (SAFETT VALVE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
WAGDIV		
CDIV		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
-		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
DAIV		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
LA		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
LDE		PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
		PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
MSVDW		PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS
AM	MANIFOLD (ARGON)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CO2M	MANIFOLD (CARBON DIOXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
HM	MANIFOLD (HELIUM)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
PM	MANIFOLD (PROPANE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MAM	MANIFOLD (MED AIR)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NM	MANIFOLD (NITROGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NOM	MANIFOLD (NITROUS OXIDE)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OM	MANIFOLD (OXYGEN)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
SPECIAL GAS MAN	MANIFOLD (SPECIAL GAS)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MSS	MANIFOLD SUPPLY SOURCE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MGO	MED GAS OUTLET	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
CO2	MED GAS SYS-CARBON DIOXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
Ν	MED GAS SYS-NITROGEN	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NO	MED GAS SYS-NITROUS OXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
0	MED GAS SYS-OXYGEN	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
ETO	MED GAS-SYS ETHYLENE OXIDE	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MA	MEDICAL COMPRESSED AIR	PLUMBING OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MGAP	MEDICAL GAS ALARM PANEL	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MV	MEDICAL-SURGICAL VACUUM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
MON	MONITOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
NWT	NEAT WASTE TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
OSEP	OIL SEPERATOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OE	ORAL EVACUATION	PLUMBING, OTHER PLUBMING SYSTEMS, SPECIAL PIPING SYSTEMS
OXMON	OXYGEN MONITOR (PLUMBING)	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
OPM	OXYGEN PURITY METER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS
PHS	PH SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PLT	PLASTER TRAP	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
PG	PRESSURE GAUGE	PLUMBING, DOMESTIC WATER DISTRIBUTION, PIPES & FITTINGS
PRV	PRESSURE REDUCING VALVE (DOMESTIC WATER)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PRGV	PRESSURE REGULATING VALVE (PLUMBING, OTHER)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES
PSW	PRESSURE SWITCH	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT
PT	PRESSURE TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT

PLUMBING SYSTEMS Abbreviations and Nomencalture for Equipment

ABBREVIATION	NOMENCLATURE	DESCRIPTION	
PA	PROCESS AIR COMPRESSOR	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS	
Р	PUMP (PLUMBING FIXUTES, OTHER)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
PPE	PURIFICATION PROCESS EQUIP	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT	
R	RECEIVER	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS	
RECT	RECLAIM TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT	
REGA	REGENERATION ACTUATOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT	
REGC	REGENERATION CONTROLLER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT	
RS	RESERVE SYSTEM	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS	
REST	RESIN TANK	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUPMENT	
ROU	REVERSE OSMOSIS UNIT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
RHWS	RHW SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
SV	SAFETY VALVE	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
SWS	SANITARY WASTE SYSTEM	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT	
SWP	SEWAGE PUMP	PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT	
SRS	SILVER RECOVERY SYSTEM	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
SS	SOLID SEPERATOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
SCON	STEAM CONVERTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
DWST	STORAGE TANK (DW)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
STR	STRAINER (PLUMBING, OTHER)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
STR	STRAINER (OLD BASKEY TYPE)	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
SP	SUMP PUMP	PLUMBING, RAIN WATER DRAINAGE, RAINWATER DRAINAGE EQUIPMENT	
ТК	TANK	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
TMV	THERMOSTATIC MIXING VALVE (PLUMBING)	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
TRAP	TRAP	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
UVE	ULTRAVIOLET EQUIPMENT	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
UVS	ULTRAVIOLET STERILIZER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
AVB	VACUUM BREAKER BFP	PLUMBING, DOMESTIC WATER DISTRIBUTION, VALVES & HYDRANTS	
WAGD	WASTE ANESTHETIC GAS DISP	PLUMBING, OTHER PLUMBING SYSTEMS, SPECIAL PIPING SYSTEMS	
WSTP	WASTEWATER PUMP	PLUMBING, PLUMBING FIXTURES, OTHER SANITARY WASTE	
WAZR	WATER ANALIZER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
WFM	WATER FLOW METER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
DWG	WATER GONG	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
WHA	WATER HAMMER ARRESTER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
WHM	WATER HARDNESS MONITOR	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
HWH	WATER HEATER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
WPOL	WATER POLISHER	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	
WPG	WATER PRESSURE GAUGE	PLUMBING, DOMESTIC WATER DISTRIBUTION, WATER PRESSURE GAUGE	
WPR	WATER PRESSURE REGULATOR	PLUMBING, DOMESTIC WATER EQUIPMENT, WATER PRESSURE REGULATOR	
WTRS	WATER SENSOR	PLUMBING, PLUMBING FIXTURES, OTHER PLUMBING FIXTURES	
WSS	WATER SOFTENING SYSTEM	PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT	

PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT

PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT

PLUMBING, DOMESTIC WATER DISTRIBUTION, DOMESTIC WATER EQUIPMENT

PLUMBING, SANITARY WASTE, SANITARY AND VENT EQUIPMENT

NOTE:

WTE

WTS

WUM

wos

All automatic and motorized valves should be tagged. Main supply and/or Return valves to any piece equipment should be tagged. All system valves over 2" should be tagged.

WATER TREATMENT EQUIPMENT

WATER TREATMENT SYSTEM

WATER UTILITY METER

WATER-OIL SEPARATOR



Attachment F – Equipment Inventory Log



Equipment Device Asset Tags Inventory Log - Fire Protection

Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

New devices shall have an equipment inventory sheet associated with it

				As a Result of Construction			
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)	Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXIS	TING Prior to Start of Construction:		•		•		
							\ge
							\ge
							\ge
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							\ge
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							\ge
							\ge
							$\boldsymbol{\succ}$
							\ge
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							\ge
							\ge
							\searrow
							\ge
							\ge



Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	RemovedRelocatedAdded(Y/N)(Y/N)(Y/N)
Devices/Equipment ADD	ED as a Result of Construction:				
				\geq	\succ
				\geq	>>>
				\sim	
				\sim	
				\sim	
				\checkmark	
				>	<
				>	<
				>	\bigcirc
				>	\sim
				>	$\bigcirc \bigcirc \bigcirc$
				\langle	\sim
				$\langle \rangle$	
				>	
				>	
				\sim	\geq
				\sim	
				\geq	
				>	
				>>	>>>>
				\geq	\rightarrow
				\geq	\bowtie
				\sim	\bowtie
				\searrow	\bowtie



Equipment Device Asset Tags Inventory Log - Plumbing

Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

				As a Result of Construction			
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)		Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXIS	STING Prior to Start of Construction:						
							\succ
							\succ
							\succ
							\succ
							$\boldsymbol{\succ}$
							\succ
							\succ
							\succ
							\times
							\times
							\succ
							\times
							\succ
							\succ
							\succ
							\succ
							\succ
							\times
							\succ
							\succ
							\succ
							\succ



Inventory Log - Plumbing

Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	RemovedRelocatedAdded(Y/N)(Y/N)(Y/N)
Devices/Equipment ADD	ED as a Result of Construction:				
				\searrow	\searrow
				\geq	\times
				\geq	\times
				\sim	\times
				\sim	
				\sim	
				\leq	
				\sim	
				\leq	
				\leq	
				\triangleleft	
				\leq	
				\checkmark	
	1				
				\triangleleft	
				\triangleleft	
				\triangleleft	
				>	
				>	
				>	\leftarrow



Equipment Device Asset Tags Inventory Log - HVAC Refigeration

Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

				As a	As a Result of Construction		
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)	Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXIS	TING Prior to Start of Construction:						
							\ge
							\ge
							\ge
							\ge
							\bowtie
							\bowtie
							\ge
							\bowtie
							\sim
							\bowtie
							\bowtie
							\sim
							\bowtie
							\sim
							\bowtie
							\bowtie
							\bowtie
							\bowtie
							\bowtie
							\bowtie
							\bowtie
							\bowtie



Equipment Device Asset Tags

Inventory Log - HVAC Refigeration

Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)Relocated (Y/N)Added (Y/N)
Devices/Equipment ADD	ED as a Result of Construction:				
				\ge	\bowtie
				\sim	
				\sim	
				\triangleleft	
				\triangleleft	
				>	
				>	
				>	
				>	$\langle \rangle \langle \rangle$
				>	\bigcirc
				>	
				>	\sim
				>	\sim
				$\langle \rangle$	\sim
				$\langle \rangle$	\sim
				$\langle \rangle$	
				$\left \right\rangle$	
				>	
				\searrow	
				\sim	
				\geq	
				\geq	
				>>	



Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

				As a Result of Construction			
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)		Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXIS	TING Prior to Start of Construction:			-		··	
							\succ
							\ge
							\ge
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							\ge
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							$\boldsymbol{\succ}$
							\succ
							\succ
							\succ
							\succ
							\ge
							$\boldsymbol{\succ}$
							\succ
							\succ
							\succ
							\succ
							\succ
							\succ



Equipment Device Asset Tags

Inventory Log - Electrical Systems

Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)Relocated (Y/N)Added (Y/N)
Devices/Equipment ADD	ED as a Result of Construction:				
				\geq	$\boxtimes \boxtimes$
				\geq	>>>
				\geq	\times
				\sim	
				\sim	
				\sim	
				\leq	
				\triangleleft	
				$\langle \rangle$	
				>	<
				>	<
				>	\frown
				>	\frown
				>	\frown
				$\langle \rangle$	\sim
				$\langle \rangle$	
				>	
				\geq	\sim
				\geq	\ge
				\geq	>>
				\geq	>>>
				>>	\times
				\geq	\bowtie
				\geq	\bowtie
				\sim	
				\sim	
				\checkmark	
				\leq	
				\sim	



Equipment Device Asset Tags Inventory Log - Kitchen

Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

				As a Result of Construction			
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)	Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXI	STING Prior to Start of Construction:		•				
							\ge
							\ge
							\succ
							\ge
							\ge
							\succ
							\succ
							\ge
							\ge
							$>\!$
							\geq
							\geq
							\geq
							\geq
							\geq
							\geq
							\geq
							\ge
							\geq
							$\geq \leq$
							\ge
							$>\!$



Inventory Log - Kitchen

Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)Relocated (Y/N)Added (Y/N)
Devices/Equipment ADD	ED as a Result of Construction:				
				\ge	$\searrow \bigtriangledown$
				\searrow	$\searrow \bigotimes$
				\ge	\times
				\geq	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				$>\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	\bowtie
				\ge	\ge
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\ge	\searrow
				\geq	$\searrow \bigtriangledown$
				\ge	\searrow
				\geq	$\searrow \bigtriangledown$
				\geq	$\searrow \bigtriangledown$
				\geq	$\searrow \bigtriangledown$
				\geq	$\searrow \boxtimes$
				\ge	$\searrow \bigtriangledown$
				\searrow	\boxtimes
				\geq	\boxtimes
				\ge	$\times \!$



Project Name	
Inventory Date	

Total Devices in Area

CNMC Project Manager

List ALL devices and equipment within construction area that have yellow ID tags

If a device is being removed, tag ID must be listed

If a device is being relocated, note new location of device

				As a Result of Construction			
Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)	Relocated (Y/N)	Added (Y/N)
Devices/Equipment EXI	STING Prior to Start of Construction:		•				
							\ge
							\ge
							\ge
							$\boldsymbol{\succ}$
							\ge
							\ge
							\ge
							\ge
							\ge
							\ge
							\succ
							\succ
							\succ
							\succ
							\succ
							\succ
							\succ
							\ge
							\ge
							\succ
							\ge
							\ge



Inventory Log - Other

Tag ID #	Equipment Nomeclature	Fire Device Address # (if applicable)	Location / Comments	Existing to Remain (Y/N)	Removed (Y/N)	Relocated (Y/N)	Added (Y/N)
Devices/Equipment ADD	ED as a Result of Construction:						
				\mathbb{N}	\succ	\succ	
				\sim	\sim	$\overline{}$	
				\sim	\sim	$\boldsymbol{\succ}$	
				\sim	\sim	\sim	
				\sim	$\mathbf{\sim}$	>	
					\leq	>	
				\leq	\leq	>	
				\checkmark		>	
				\triangleleft		\Leftrightarrow	
				>	<>	\Leftrightarrow	
				>	>	\Leftrightarrow	
					\bigcirc	\Leftrightarrow	
				\bigcirc	\bigcirc	\Leftrightarrow	
				>	\bigcirc	\Leftrightarrow	
				>	\bigtriangleup	\Leftrightarrow	
				$\langle \rangle$	\sim	\Leftrightarrow	
				$\langle \rangle$	\sim	\Leftrightarrow	
				>	\sim	>	
				>	\geq	>	
				\sim	\geq	>	
				\sim	\geq	\geq	
				\geq	\geq	\geq	
				\geq	\geq	$\geq \leq$	
				\geq	\triangleright	$\geq \leq$	
				\geq	\geq	\geq	
				\geq	\searrow	\succ	
				\geq	\searrow	\geq	
				\geq	\searrow	\geq	



Attachment G – Construction Project Turnover Checklist

Project Name: ______ Project Name:

Contractor: ______ Substantial Completion Date: _____ Turnover Date:

DESCRIPTION	SPEC. REF.	RESP.	ACCEPTED (Y or N/A)	DATE
General Requirements				
Project Contact Directory (A/E, GC, Subcontractors, Suppliers)	01 77 00	GC		
Contractor General Warranty	01 77 00	GC		
Copy of Building & Trade Permits (including extensions)	01 77 00	GC		
Copy of Third Party Inspection Certifications	01 77 00	GC		
Obtain AIA Certificate of Substantial Completion from A/E	01 77 00	GC		
Certificate of Occupancy	01 77 00	GC		
Department of Health / Fire Marshal Approval	01 77 00	CNH PM		
Submit signed off copy of Punch List	01 77 00	GC		
Submit Final Testing Records, as applicable:	01 77 00	GC		
– Fire Alarm Test		GC		
 Plumbing System Test 		GC		
 Water Test & Balance 		GC		
 NEC Load Test (emergency devices & generator load test) 		GC		
Electrical Service Ground Report		GC		
– Air Test & Balance		GC		
 Medical Gas Test & Certification 		GC		
– Domestic Hot Water		GC		
 Fire Extinguisher Certifications 		GC		
Fire/Smoke Damper Test Documentation		GC		
Final changeover of permanent locks and deliver keys to CNH	01 77 00 1.6	GC		
Operation & Maintenance (O&M) Manuals - 01 78 23				
Submit approved O&M Manuals (includes A/E approval stamp)	01 78 23	GC		
 Include summary of specified warranties; highlight extended warranties 	01 78 23	GC		
Submit Equipment Inventory Log & Asset Tag Forms	01 78 23 1.11	GC		
Submit Finish & Furnishing Material Documentation & Attic Stock:	01 78 23 1.13	GC		
Record Documents - 01 78 39				
Record Copy of Stamped Permit Drawings		CNH PM		
Submit As-Builts to A/E; including all changes	01 78 39 1.4	GC & A/E		
*Submit & Update Life Safety/Smoke Compartment Diagrams	01 78 39 1.4	A/E		
*Submit & Update Master MEP Drawings	01 78 39 1.4	A/E		
 Submit HVAC Diagrams (Limits of areas serviced by each HVAC unit) 	01 78 39 1.4	A/E		
*Update Life Safety Drawings & Facility Record Plans on ATG		Space Plan.		
*Submit One CAD Facility Record Plan locating the following items: (layer each item)	01 78 39 1.4	GC		
– Fire Dampers		GC		
 New and existing fire extinguishers 		GC		
 Shut-off valves (tag & provide valve schedule) 		GC		
– Eye wash stations		GC		
 Fire Alarm/Life Safety Devices (strobes, exit lights, smokes, etc.) 		GC		
– Fire Doors		GC		
– VAV Boxes		GC		

Children's National Hospital Construction Project Turnover Checklist

Project Name:

Project Name:
CNH PM Name:

Contractor: ______ Substantial Completion Date: ______ Turnover Date:

DESCRIPTION	SPEC. REF.	RESP.	ACCEPTED (Y or N/A)	DATE
Record Documents - 01 78 39 (Cont'd)				
Submit Medical Gas Schedule (outlets added/removed)		GC		
*Record Submittals required per specifications	01 78 39 1.5	GC		
*Above Ceiling Permits w/photos of all sealed fire penetrations and map with locations		GC		
Demonstrating & Training - 01 79 00 <i>(minimum 2 training sessions required for e</i>	ach system; Tuesday	's 7am & Thursd	ay's 3pm)	
Complete Instruction of Owner Personnel & Submit attendance records:	01 79 00 1.7	GC		
– Fire Protection System		GC		
– Plumbing System		GC		
 Building Automation System 		GC		
– HVAC System		GC		
 Refrigeration System 		GC		
– Electrical System		GC		
– Medical Equipment		GC		
- Communications/AV		GC		
 Other (door hardware, special finishes, etc.) 		GC		
Commissioning Requirements 01 91 13				
Commissioning Report, including the following:	01 91 13 3.9	CxA		
 Pre-startup reports 		GC & CxA		
 Approved test procedures 		CxA		
 Test data forms, completed and signed 		CxA		
 Weekly Progress reports 		CxA		
 Commissioning issues report log 		GC & CxA		
 Commissioning issues reports showing resolution of issues 		GC & CxA		
 Correspondence or other documents related to resolution of issues 		GC & CxA		
 List of unresolved issues and reason why the remaining unresolved 		GC & CxA		
 Graphics Control Room Insight & Desigo (CxA to verify) 		GC & CxA		
Building Automation Test	01 91 13 3.9	GC / CxA		
Certificate of Construction Phase Commissioning Completion	01 91 13 3.10	GC & CxA		
Miscellaneous (additional project specific requirements)				
Final Sign-Off				
		Date:		
Construction (CNH PM) Con	ntractor			
BioMed (If Applicable) Engineerin	ng (Regulatory)			
Security (If Applicable) Engine	ering (MEP)			

* Electronic only; not required to be submitted with hard copy of closeout binder