



*Los Angeles World Airports*

## Data Dictionary

August 23, 2017





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## Section Contents

1	Version History .....	1
2	Document Purpose .....	1
3	Common Asset Information and Attributes .....	2
4	Data Dictionary Definitions .....	11
5	Facility Building.....	12
B20	Exterior Closure (EXT).....	13
B2030	Exterior Doors (RDR).....	14
B203004	Overhead & Roll-Up Doors (ODR).....	15
B203098	Other Exterior Specialty Doors (SDR) .....	16
B30	Roofing SYSTEM (ROS) .....	17
B3010	Roofing (ROF) .....	19
C1020	Interior Door (IDR) .....	21
C102003	Fire Door (FDR).....	22
C102004	Sliding and Folding Door (SFD).....	23
C102005	COMMERCIAL Overhead Door (CDR).....	24
C30	Interior Finishes (INF) .....	25
D10	Conveyance (CVY).....	26
D1010	Elevator & Lifts (ELE) .....	27
D101002	Passenger Elevator (ELV) .....	28
D101003	Freight Elevator (FLV) .....	30
D101004	Wheelchair Lift (MNL).....	32
D1020	Escalators & Moving Walks (ESC).....	33
D102001	Escalator (ESC).....	35
D102002	Moving Walkway (MWW).....	37
D1030	Passenger Boarding Bridge System (PBS) .....	39
D103001	Pre-Conditioned Air - Passenger Boarding Bridge (PCA).....	40
D103002	Bridge - Passenger Boarding Bridge (PBB).....	41
D103003	Ground Power - Passenger Boarding Bridge (GPU).....	42
D1090	Other Conveying Systems (OCS) .....	43
D109002	Conveyors (CBT).....	44
D109006	Baggage Handling System (BHS).....	45
D20	Plumbing System (PLM) .....	46
D2010	Plumbing Fixtures (RRM) .....	47
D2020	Domestic Water Distribution (DWD) .....	48
D202001	Pipes and Fittings (PAF).....	50
D202002	Valves and Hydrants (VAH).....	51

D202003	Water Heaters (WHR).....	52
D202009	Domestic Water Supply Pumps (BSP).....	53
D2030	Sanitary Waste (SWE).....	55
D203004	Sanitary Waste Equipment (SWE).....	57
D2090	Other Plumbing Systems (OPS) .....	59
D209005	Compressor (CMP).....	60
D30	HVAC (HVA).....	61
D302001	Boiler (BLR) .....	62
D302002	Hot Water Distribution System Pumps (HWP).....	63
D302005	Auxiliary Equipment (AUX) .....	65
D3030	Cooling Generating System (CGS).....	66
D303001	Chilled Water Distribution System Pumps (CWP).....	67
D303002	Condensing Unit (CDN) .....	69
D304007	Exhaust Fan (EXF) .....	70
D304008	Air Handling Unit (AHU).....	71
D304099	Other Distribution Systems (ODS).....	73
D3050	Terminal and Package Units (ATU) .....	74
D305003	Fan Coil Unit (FCU) .....	75
D305006	Package Unit (PKG) .....	77
D305099	Critical Room Air Conditioning Unit (CRC) .....	79
D306098	Controls & Instrumentation (CTL) .....	80
D309099	Ice Machine .....	81
D40	Fire Protection (FPS).....	82
D4010	Sprinklers (SPK) .....	83
D402098	Fire Pumps (PMP) .....	84
D402099	Fire Hose Cabinet (FHC).....	86
D5010	Electrical Service and Distribution (ESD).....	87
D501001	Main Transformer (TNH).....	88
D501002	Secondary Transformer (TNR) .....	89
D501003	Switchboard (SWB) .....	90
D501005	Distribution Panel (EDP).....	91
D501007	Motor Control Center (MCC).....	92
D501020	Steam Turbine (SMT) .....	93
D501030	Gas Turbine (GST) .....	94
D503001	Fire Alarm Control Panel (FCP).....	95
D509002	Generator (GEN) .....	96
D509005	Inverter Units & Battery Packs (INV).....	97



# DATA DICTIONARY

D509009	Uninterruptable Power Supply (UPS) .....	98
D509099	Electrical Regulator (REG) .....	99
E102002	Medical Equipment (MED).....	100
E109003	Waste Handling Equipment (WHP).....	101
E109099	Cardboard Baler (CBB).....	102
F105002	Building Automation System (BAS) .....	103
G2010	Roadways (RDS).....	104
G201004	Signs (SGN) .....	105
G201060	Runways (RWY) .....	106
G201064	Runway Marking System and Lighting (RNM) .....	107
G201070	Taxiways (TWY) .....	108
G201074	Taxiway Marking System and Lighting (TWM) .....	109
G201080	Aprons (APN) .....	110
G201084	Apron Marking System and Lighting (APM).....	111
G2020	Parking Lots and Parking Structures (PKS).....	112
G204001	Fences & Gates (GAT) .....	113
G204005	Signage System (SGS).....	114
G2050	Landscaping (LND).....	115
G205005	Planting (PLT).....	116
G205007	Irrigation (IRR) .....	117
G302003	Sewer Lift Station (SLS) .....	118
G303003	Sump Pump / Lift Station (SMP).....	120
G305006	On-Site Cooling Tower (CGT) .....	122
G3060	Fuel (FUL) .....	123
G306004	Fuel Tanks (FLT) .....	124
G403001	Telecommunication System (TES) .....	125
G403099	Site Security & Alarm Systems (SAS).....	126
G9010	Tunnels (TNL).....	127
G909001	Vehicular Bridges (BRD).....	128
G909099	Jet Blast Deflector (JBD) .....	129
	Registered Components – NO ATTRIBUTES.....	130
	Appendix A: ASTM UNIFORMAT II Classification for Building Elements (E1557-09).....	131

## 1 VERSION HISTORY

Data Dictionary Release	Description	Author	Date
1	Initial Release	FMUG	August 31, 2012
2	Reformat	AMD – Phu Tong, Jacobs - Jennifer Mims, Don Cathorall	June 26, 2017

## 2 DOCUMENT PURPOSE

- The FMUG Asset Management Division owns and maintains this document, which provides guidelines for populating information in the Facility Management System (Maximo).
- In addition, the document specifies the asset (system/component) information contractors and capital programs are responsible to provide to LAWA to populate Maximo.

### 3 COMMON ASSET INFORMATION AND ATTRIBUTES

The following information is common across all asset classifications in Maximo and populated by LAWA.

1. Asset ID (Maximo generated number – provided by LAWA AMD)
2. SAP ID#
3. F/S/C Number
4. Criticality
5. Condition Rate
6. Inspection Date
7. Year Built
8. Acquisition Cost
9. Replacement Cost
10. Campus Location
11. Address
12. Failure class

The data provider (i.e. Project Manager, Contractor, etc.) is responsible for providing the following 10 data components electronically (i.e. flat file, excel form, etc.) to LAWA.

1. Maximo asset ID (*Maximo generated – if coordinated upfront with LAWA FMUG AMD*)
2. System/Component description – see Table 2 below for guidelines
3. Location (i.e. terminal, floor, room)
4. Installation Year
5. Design Life
6. Manufacturer
7. Model Number
8. Serial Number
9. Asset (system/component) specifications detailed in following tables
10. Warranty \*\*

\*\* Warranty information requirements as specified in contract

The LAWA Facilities Management System employs a structure of facilities, systems and components defined below and in Table 1.

**Hierarchical Level: Facility**

Facility Group: Defined in Table 1  
Code: Defined in Table 1  
Description: Facility identifiers represent a single constructed item versus a complex assembly of structures.

**Hierarchical Level: System**

Facility Association: Varies depending on the facility to which the system belongs.  
Code: Follows naming procedure and code indicated in this document.  
Description: System identifiers represent an associated complex assembly of components.

**Hierarchical Level: Sub-System**

System Association: Varies depending on the system to which the sub-system belongs.  
Code: Follows naming procedure and code indicated in this document.  
Description: System identifiers represent an associated complex assembly of components.

**Hierarchical Level: Component**

System/Sub-System Association: Varies depending upon the system or sub-system to which the component belongs.  
Code: Follows naming procedure and code indicated in this document.  
Description: Component identifiers represent a single device or piece of equipment in a system or sub-system.

Table 1: Facility Groups, Types, and Codes

Facility Group / Class	Facility Type	Code
Grounds	Fencing – Regular	FNR
	Fencing – Security Perimeter	FNS
	Gates – Regular	GTR
	Gates – Security Perimeter	GTS
	Irrigation	IRR
	Infield	IFL
	Walls – Regular	WLR
	Walls – Security Perimeter	WLS
	Landscaping	LND
Transportation Infrastructure	Aprons	APR
	Blast Fence	BLF
	Blast Pad/Stopway	STW
	Bridges	BRG
	Dust Cap	DCP
	Parking Lots	PKL
	Roads	RDS
	Service Roads	VSR
	Service Roads – Taxiway Crossing	VSX
	Service Roads – Restricted	VSS
	Runway	RWY
	Runway Shoulder	SHR
	Signage	SGN
	Taxiway	TWY
	Taxiway Shoulder	SHT
	Taxilane	TLN
Tunnels	TNL	

Facility Group / Class	Facility Type	Code
Building	Airport Fire	AFS
	Airport Police	APL
	Air Traffic Control	ATC
	Commercial	CML
	Cargo	CRG
	Central Utility Plant	CUP
	Hangar	HGR
	Maintenance	MNT
	Office	OFF
	Parking Structure	PKS
	Safety – (Fire, ATC)	SAF
	Security – (APD, TSA, DHS)	SEC
	Remote Gates	RGT
	Security Post	SPB
	Terminal	TER
Service	SVC	
Warehouse	WHS	

Utility Infrastructure	Communication	COM
	Fuel	FUL
	Natural Gas	NTG
	Storm Water	STW
	Sanitary Sewer	SWR
	Water	WTR
	Compressed Air	CMS
	Industrial Waste	INW
	Electrical	ELE
	Heat / Cool Distribution	HCD

Table 2: Systems and Components, Names, and Codes

System Name	System Code	Component Name	Component Code
Baggage Handling System	BHS	Conveyor Section	CBT
Cooling Generation System	CGS	Cooling Tower	CGT
Cooling Generation System	CGS	Glycol Chiller Unit	GCU
Communication	COM	Communication Components	CMC
Communication Pipe Network	CPN	Communication Ductbank	CDB
Communication Pipe Network	CPN	Communications Vault	CMV
Conveyance	CVY	Elevator (Passenger)	ELV
Conveyance	CVY	Escalator	ESC
Conveyance	CVY	Elevator (Freight)	FLV
Conveyance	CVY	Wheelchair Lift	MNL
Conveyance	CVY	Moving Walkway	MWW
Electrical	ELC	Automatic Transfer Switch	ATS
Electrical	ELC	Disconnect Switch	DCS
Electrical	ELC	Electric Drive Motor	EDM
Electrical	ELC	Distribution Panel	EDP
Electrical	ELC	Enclosed Transfer Switch	ETS
Electrical	ELC	Generator	GEN
Electrical	ELC	Lighting Control Panel	LCP
Electrical	ELC	Motor Control Center	MCC
Electrical	ELC	Micro Panel	MCP
Electrical	ELC	Main Metalclad Switchgear	MCS
Electrical	ELC	Metering Switchgear	MSG
Electrical	ELC	Rapid Recharging Station	RPS
Electrical	ELC	Switchboard	SWB
Electrical	ELC	Transformer	TNF
Electrical	ELC	Uninterruptible Power Supply	UPS
Electrical	ELC	Visual Docking Guidance System	VDG
Electrical	ELC	Variable Frequency Drive	VFD



## DATA DICTIONARY

Electrical	ELC	Vista Switchgear	VSG
Electrical	ELC	Wireless Access Point	WAP
Exterior Closure	EXT	Commercial Overhead Door	CDR
Exterior Closure	EXT	Exterior Door	RDR
Exterior Closure	EXT	Other Exterior Specialty Doors	SDR
Fuel Pipe Network	FPN	Fuel Tank	FLT
Fire Protection	FPS	Fire Alarm Control Panel	FCP
Fire Protection	FPS	Fire Pump	FPM
Heat Generation System	HGS	Boiler	BLR
Heat Generation System	HGS	Heat Exchanger	HEX
HVAC	HVA	Air Handling Unit	AHU
HVAC	HVA	Air Terminal Unit	ATU
HVAC	HVA	Condenser Unit	CDN
HVAC	HVA	Computer Room Air Conditioner Unit	CRC
HVAC	HVA	Door Air Curtain	DAC
HVAC	HVA	Condenser Water Pump	DWP
HVAC	HVA	Exhaust Fan	EXF
HVAC	HVA	Fan Coil Unit	FCU
HVAC	HVA	Fire/Smoke Damper	FSD
HVAC	HVA	Makeup Air Unit	MAU
HVAC	HVA	Motorized Damper/Louver	MDP
HVAC	HVA	Pollution Control Unit	PCU
HVAC	HVA	Pressurization Fan Unit	PFU
HVAC	HVA	Supply Fan Unit	SFU
HVAC	HVA	Thermostat Mixing Valve	TMV
HVAC	HVA	Variable Air Volume	VAV
Interior Finishes	INF	Fire Door	FDR
Interior Finishes	INF	Interior Door	IDR
Interior Finishes	INF	Overhead Door	ODR
Interior Finishes	INF	Sliding and Folding Door	SFD



## DATA DICTIONARY

Industrial Waste System	IWS	Trash Compactor	TRC
Mechanical	MEC	Air Cooled Chiller Unit	ACU
Mechanical	MEC	Air Separator Tank	AST
Mechanical	MEC	Compressor	CMP
Mechanical	MEC	Chiller Water Pump	CWP
Mechanical	MEC	Expansion Tank	EXT
Mechanical	MEC	Glycol Chilled Water Pump	GWP
Mechanical	MEC	Hot Water Pump	HWP
Mechanical	MEC	Ice Storage Tank	IST
Mechanical	MEC	Pump	PMP
Mechanical	MEC	Sewage Ejector Pump	SEP
Mechanical	MEC	Sump Pump	SMP
Mechanical	MEC	Storage Tank	SRT
Mechanical	MEC	Temporary Hot Water Pump	TWP
Passenger Boarding Bridge	PBB	Ground Power Unit - PBB	GPU
Passenger Boarding Bridge	PBB	Passenger Boarding Bridge	PBB
Passenger Boarding Bridge	PBB	PCA Air handling Unit -PBB	PCA
Passenger Boarding Bridge	PBB	Potable Water Cabinet	PWC
Plumbing System	PLM	Backflow Preventer	BFP
Plumbing System	PLM	Domestic Water Supply Pump	BSP
Plumbing System	PLM	Drinking Fountain	DRF
Registered System - No Attributes	PLM	Fire Hose Cabinet	FHC
Plumbing System	PLM	Floor Sink	FLS
Registered System - No Attributes	PLM	Fire Extinguisher	FXH
Plumbing System	PLM	Grease Interceptor Tank	GIT
Plumbing System	PLM	Heat Trace Tape	HTT
Plumbing System	PLM	Lavatory	LAV
Registered System - No Attributes	PLM	Medical Device	MED
Plumbing System	PLM	Meter (Gas, Electric, Water)	MTR
Plumbing System	PLM	Pressure Reducing Valve	PRV

Plumbing System	PLM	Restroom Standard Sink	SNK
Plumbing System	PLM	Sanity Waste Equipment	SWE
Plumbing System	PLM	Trap Primer	TRP
Plumbing System	PLM	Urinal	URL
Plumbing System	PLM	Hot Water Circulation Pump	WCP
Plumbing System	PLM	Domestic Water Filtration Equipment	WFE
Plumbing System	PLM	Water Heater	WHR
Plumbing System	PLM	Domestic Water Heat Exchanger	WHX
Roofing	ROF	Roof	ROF
Undefined	VNT	Signs	SGN
Tunnel - Ventilation	VNT	Tunnel Exhaust Fan	TXF
Cooling Generation System	CGS	Glycol Chiller Unit	GCU
Communication	COM	Communication Components	CMC
Communication Pipe Network	CPN	Communication Ductbank	CDB
Communication Pipe Network	CPN	Communications Vault	CMV
Conveyance	CVY	Elevator (Passenger)	ELV
Conveyance	CVY	Escalator	ESC
Conveyance	CVY	Elevator (Freight)	FLV
Conveyance	CVY	Wheelchair Lift	MNL
Conveyance	CVY	Moving Walkway	MWW
Electrical	ELC	Automatic Transfer Switch	ATS
Electrical	ELC	Disconnect Switch	DCS
Electrical	ELC	Electric Drive Motor	EDM
Electrical	ELC	Distribution Panel	EDP
Electrical	ELC	Enclosed Transfer Switch	ETS
Electrical	ELC	Generator	GEN
Electrical	ELC	Lighting Control Panel	LCP
Electrical	ELC	Motor Control Center	MCC

## 4 DATA DICTIONARY DEFINITIONS

- Attribute:** A characteristic or feature of a facility, system/sub-system or component.
- Data Type:** A category of data. Typical data types are logical (true/false), numeric, alphanumeric (character), and dates. When data are assigned a type, they cannot be treated like another type. For example, alphanumeric data cannot be calculated and digits within numeric data cannot be isolated. Date types can only contain valid dates.
- Unit:** A unit (of measurement) is a definite magnitude of a physical quantity that is used as a standard for measurement of the same physical quantity.
- Domain:** A domain is the set of possible data values of an attribute, which have a standard set of characteristics.
- Range of Values:** The range specifies the lower and upper boundaries of the values that an attribute may legally have.

## 5 FACILITY BUILDING

**Hierarchical Level:** Facility

**Facility Group:** Building

**Code:** Terminal (TER), Office (OFF), Cargo (CRG), Aircraft Rescue Fire Fighting (ARF), Central Utility Plant (CUP), Maintenance Buildings (MNT)

**Description:** A relatively permanent enclosed construction over a plot of land, having a roof and usually windows and often more than one level, used for any of a wide variety of activities, as living, working, or manufacturing. Each facility may also have additional unique characteristics beyond the basic information.

Attribute	Data Type	Unit	Domain / Range of Values
Building Type	ALN	N/A	Terminal, Office, Cargo, Aircraft Rescue Firefighting, Parking Structure, Maintenance
Building Description	ALN		A narrative description of the building
Year of Last Renovation	ALN	N/A	Year of the last renovation that modified the depreciation rate
Initial Occupancy Date	ALN	N/A	Date that the building was first occupied
Ownership	ALN	N/A	LAWA, Tenant/Other
Gross Area	Numeric	SF	Gross square footage
Source of Area	ALN	N/A	As-built drawing, survey
Rentable Area	Numeric	SF	Net rentable area
Maintainable Area	Numeric	SF	Net area maintained
Circulation Area	Numeric	SF	Net circulation space
Budget Number	Numeric	N/A	Accounting number for financial transactions
Type of Construction	ALN	N/A	Temporary, Permanent

All Buildings share the same basic attributes. The following buildings have additional specific attributes.



## DATA DICTIONARY

### B20 EXTERIOR CLOSURE (EXT)

Hierarchical Level: System  
Facility Association: Terminal  
Code: EXT  
Description: Exterior enclosure of a building including walls, exterior load bearing wall, doors and windows, excluding roofing.

Attribute	Data Type	Unit	Domain / Range of Values
System Description	ALN	N/A	A narrative description of the entity

## B2030 EXTERIOR DOORS (RDR)

Hierarchical Level: Component

System Association: Exterior

Code: RDR

Description: Exterior doors of a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Aluminum Store Front Swing Double Doors, qty	Numeric	EA	Number of doors
Commercial Overhead Doors, qty	Numeric	EA	Number of doors
Exterior Doors, qty	Numeric	EA	Number of doors
Fixed Aluminum Double Pane/Thermal Windows, qty	Numeric	EA	Number of doors
Fixed Aluminum Single Pane Windows, qty	Numeric	EA	Number of doors
Glass Store Front Sliding Double Doors, qty	Numeric	EA	Number of doors
Steel Solid Core Swing Double Doors, qty	Numeric	EA	Number of doors
Steel Solid Core Swing Single Doors, qty	Numeric	EA	Number of doors

## B203004 OVERHEAD & ROLL-UP DOORS (ODR)

Hierarchical Level: Component

System Association: Exterior

Code: ODR

Description: Overhead and roll-up doors installed in the exterior walls or exterior skin. Assemblies include frames, hardware, hoisting devices, and finish and other associated work.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Operating Mechanism	ALN	N/A	Automatic, Manual
Motion Detection	ALN	N/A	Yes, No
Panic Hardware	ALN	N/A	Yes, No
Width	Numeric	FEET	Width of the door
Height	Numeric	FEET	Height of the door
Material	ALN	N/A	Wood, Metal Grate, Metal Frame and Panels, Metal Frame with Glass Panels
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## B203098 OTHER EXTERIOR SPECIALTY DOORS (SDR)

Hierarchical Level: Component

System Association: Exterior

Code: SDR

Description: Any special type door used in the exterior wall or skin of the building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Operating Mechanism	ALN	N/A	Automatic, Manual
Motion Detection	ALN	N/A	Yes, No
Panic Hardware	ALN	N/A	Yes, No
Width	Numeric	FEET	Width of the door
Height	Numeric	FEET	Height of the door
Material	ALN	N/A	Wood, Metal Grate, Metal Frame and Panels, Metal Frame with Glass Panels
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating

## B30 ROOFING SYSTEM (ROS)

Hierarchical Level: Location - System

Facility Association: Terminal

Code: ROS

Description: This system includes all waterproof roof coverings and insulation, expansion joints, together with skylights, hatches, ventilators, and all required trim. In addition to roof coverings, the system includes all waterproof membranes and traffic toppings over below enclosed areas, balconies, and etc.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   ROS### per the Facility and Space Naming Convention
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Mansard, Dome, Hip, Shed, Gambrel, Canopy, Flat, A Frame/Gable, Arch
Sub System (Roof Types)	ALN	N/A	Build up, Single PLY, Panel
Material	ALN	N/A	Built-up, Modified bituminous, Single-ply membrane unballasted, Inverted membrane, Roll roofing, Asphalt shingles, Architectural shingles, Wood shingles, Wood shake roofing, Slate tile, Clay tile, Metal panel, Standing seam metal, Fiberglass, Copper, Lead-coated copper, Polyurethane spray-on roofing, Elastomeric roof coating, Other, Single-ply membrane ballasted, Glass
Is Ballasted	ALN	N/A	Yes, No
Ballast Material	ALN	N/A	Pavers, River-rock
Pitch	Numeric	degrees	Roof pitch
Has Lightning Protection	ALN	N/A	False, True
Primary Roof Drain Count	Numeric	EA	Number of primary roof drains
Secondary Roof Drain Count	Numeric	EA	Number of secondary roof drains
Gutter Count	Numeric	EA	Number of gutters
Downspout Count	Numeric	EA	Number of downspouts
Ventilators, qty	Numeric	EA	Number of ventilators
Skylights, qty	Numeric	EA	Number of skylights
Antenna, qty	Numeric	EA	Number of antennas
Screening, qty	Numeric	EA	Number of screening
Roof Type	ALN	N/A	Flat, Gambrel, Mansard, Hipped, Shed, Gable
Adjusted Serviceability Estimate ASE	Numeric	N/A	Adjusted Serviceability Estimate



Attribute	Data Type	Unit	Domain / Range of Values
Optimum Repair Cost	Numeric	\$US	Cost of repair
Minimum Repair Coat	Numeric	\$US	Cost of repair
Roof Area	Numeric	SF	Square footage of roof area



## B3010 ROOFING (ROF)

Hierarchical Level: Location - Component

Facility Association: Terminal

Code: ROF

Description: This system includes all waterproof roof coverings and insulation, expansion joints, together with skylights, hatches, ventilators, and all required trim. In addition to roof coverings, the system includes all waterproof membranes and traffic toppings over below enclosed areas, balconies, and etc.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   ROF### per the Facility and Space Naming Convention
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Mansard, Dome, Hip, Shed, Gambrel, Canopy, Flat, A Frame/Gable, Arch
Sub System (Roof Types)	ALN	N/A	Build up, Single PLY, Panel
Material	ALN	N/A	Built-up, Modified bituminous, Single-ply membrane unballasted, Inverted membrane, Roll roofing, Asphalt shingles, Architectural shingles, Wood shingles, Wood shake roofing, Slate tile, Clay tile, Metal panel, Standing seam metal, Fiberglass, Copper, Lead-coated copper, Polyurethane spray-on roofing, Elastomeric roof coating, Other, Single-ply membrane ballasted, Glass
Is Ballasted	ALN	N/A	Yes, No
Ballast Material	ALN	N/A	Pavers, River-rock
Pitch	Numeric	degrees	Roof pitch
Has Lightning Protection	ALN	N/A	False, True
Primary Roof Drain Count	Numeric	EA	Number of primary roof drains
Secondary Roof Drain Count	Numeric	EA	Number of secondary roof drains
Gutter Count	Numeric	EA	Number of gutters
Downspout Count	Numeric	EA	Number of downspouts
Ventilators, qty	Numeric	EA	Number of ventilators
Skylights, qty	Numeric	EA	Number of skylights
Antenna, qty	Numeric	EA	Number of antennas
Screening, qty	Numeric	EA	Number of screening
Roof Type	ALN	N/A	Flat, Gambrel, Mansard, Hipped, Shed, Gable
Adjusted Serviceability Estimate ASE	Numeric	N/A	Adjusted Serviceability Estimate



Attribute	Data Type	Unit	Domain / Range of Values
Optimum Repair Cost	Numeric	\$US	Cost of repair
Minimum Repair Coat	Numeric	\$US	Cost of repair
Roof Area	Numeric	SF	Square footage of roof area

## C1020 INTERIOR DOOR (IDR)

Hierarchical Level: Component

System Association: Interior

Code: IDR

Description: All interior doors: Standard, Glazed, Fire door, Sliding and Folding door, Overhead door, Gates, Door hardware

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to

## C102003 FIRE DOOR (FDR)

Hierarchical Level: Component

System Association: Interior

Code: FDR

Description: Assemblies include all interior fire doors, all necessary frames, hardware, and sensing devices integral with doors.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Operating Mechanism	ALN	N/A	Automatic, Manual
Motion Detection	ALN	N/A	Yes, No
Panic Hardware	ALN	N/A	Yes, No
Width	ALN	FEET	Width of the door
Height	ALN	FEET	Height of the door
Material	ALN	N/A	Wood, Metal Grate, Metal Frame and Panels, Metal Frame with Glass Panels
Fire Rating	Numeric	Hour	Time for the fire resistance

## C102004 SLIDING AND FOLDING DOOR (SFD)

Hierarchical Level: Component

System Association: Interior

Code: SFD

Description: Assemblies include all sliding and folding doors with frames, hardware, locking devices, tracks, and supporting systems.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Operating Mechanism	ALN	N/A	Automatic, Manual
Motion Detection	ALN	N/A	Yes, No
Panic Hardware	ALN	N/A	Yes, No
Width	Numeric	FEET	Width of the door
Height	Numeric	FEET	Height of the door
Material	ALN	N/A	Wood, Metal Grate, Metal Frame and Panels, Metal Frame with Glass Panels

## C102005 COMMERCIAL OVERHEAD DOOR (CDR)

Hierarchical Level: Component

System Association: Interior

Code: CDR

Description: Overhead doors installed in the interior of a facility. Assemblies include frames, hardware, hoisting devices, and finish and other associated work.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Operating Mechanism	ALN	N/A	Automatic, Manual
Motion Detection	ALN	N/A	Yes, No
Panic Hardware	ALN	N/A	Yes, No
Width	Numeric	FEET	Width of the door
Height	Numeric	FEET	Height of the door
Material	ALN	N/A	Wood, Metal Grate, Metal Frame and Panels, Metal Frame with Glass Panels
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating

## C30 INTERIOR FINISHES (INF)

Hierarchical Level: System

Facility Association: Terminal

Code: INF

Description: Interior finishes for walls, floors and ceilings.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Interior Window, Area	Numeric	SF	Total area of interior windows
Interior Walls, Painted	Numeric	SF	Total area of painted walls
Interior Walls, Other	Numeric	SF	Total area of other wall coverings
Flooring Type 1	ALN	N/A	Terrazzo, Carpet, VCT, Ceramic Tile, Unfinished, Quarry Tile, Other
Flooring Area 1, qty	Numeric	SF	Total area of flooring
Flooring Type 2	ALN	N/A	Terrazzo, Carpet, VCT, Ceramic Tile, Unfinished, Quarry Tile, Other
Flooring Area 2, qty	Numeric	SF	Total area of flooring
Flooring Type 3	ALN	N/A	Terrazzo, Carpet, VCT, Ceramic Tile, Unfinished, Quarry Tile, Other
Flooring Area 3, qty	Numeric	SF	Total area of flooring
Interior Door,	Numeric	EA	Total number of interior doors
Ceiling Type 1	ALN	N/A	Acoustic, Drywall, Concrete, Other
Ceiling Area 1, qty	Numeric	SF	Total area of ceiling structure
Ceiling Type 2	ALN	N/A	Acoustic, Drywall, Concrete, Other
Ceiling Area 2, qty	Numeric	SF	Total area of ceiling structure
Ceiling Type 3	ALN	N/A	Acoustic, Drywall, Concrete, Other
Ceiling Area 3, qty	Numeric	SF	Total area of ceiling structure

## D10 CONVEYANCE (CVY)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: CVY  
 Description: All means of transportation from one floor to another or from one part of a corridor to another.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Hydraulic Elevators, qty	Numeric	EA	Number of hydraulic elevators
Traction Elevators, qty	Numeric	EA	Number of traction style elevators
Escalators, qty	Numeric	EA	Number of escalators
Moving Walkways, qty	Numeric	EA	Number of moving walkways

## D1010 ELEVATOR & LIFTS (ELE)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: ELE  
 Description: All means of transportation from one floor to another.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Hydraulic Elevators, qty	Numeric	EA	Number of hydraulic elevators
Traction Elevators, qty	Numeric	EA	Number of traction style elevators
Escalators, qty	Numeric	EA	Number of escalators
Moving Walkways, qty	Numeric	EA	Number of moving walkways

## D101002 PASSENGER ELEVATOR (ELV)

Hierarchical Level: Component

System Association: Conveyance

Code: ELV

Description: An enclosed compartment that is raised or lowered mechanically, used as transportation between levels in a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Traction, Hydraulic, MRL
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
State Number	ALN	N/A	Unique ID assigned by the state
Front and Rear Doors	ALN	N/A	Yes, No
Number Of Floors Served	Numeric	FL	Number Of Floors Served
Weight Capacity	Numeric	LBS	Capacity Rating
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Controller Type	ALN	N/A	ACRT, ACVF, DCSS, Hydro
Opening Type	ALN	N/A	Front, Rear, Both
Phone Number	Numeric	N/A	Phone number of the elevator call-box
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
			cooled, Water proof, Explosion proof
Door Operator Type	ALN	N/A	Side, Center
Hatch Cab Door Speed	ALN	N/A	one speed, two speed, center opening
Hatch Cab Door Size	Numeric	SF	Area of the cab door
Hatch Door Opening	Numeric	N/A	Area of the hatch opening
Governor Rope Diameter	Numeric	IN	Diameter of governor roper
Governor Rope Type	ALN	N/A	Iron, Traction, Extra High Strength Traction
Hoist Type	ALN	N/A	Belt, Rope
Hoist Rope Type	ALN	N/A	Iron, Traction, Extra High Strength Traction
Hoist Rope Quantity	Numeric	EA	Hoist Rope Quantity
Piston Diameter	Numeric	IN	Piston Diameter
Hoist Rope Diameter	Numeric	IN	Hoist Rope Diameter
Person Capacity	Numeric	EA	Capacity Rating

## D101003 FREIGHT ELEVATOR (FLV)

Hierarchical Level: Component

System Association: Conveyance

Code: FLV

Description: An enclosed compartment that is raised or lowered mechanically, used as transportation between levels in a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Traction, Hydraulic, MRL
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
State Number	ALN	N/A	Unique ID assigned by the state
Front and Rear Doors	ALN	N/A	Yes, No
Number Of Floors Served	Numeric	Ea.	Number Of Floors Served
Weight Capacity	Numeric	LBS	Capacity Rating
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Controller Type	ALN	N/A	ACRT, ACVF, DCSS, Hydro
Opening Type	ALN	N/A	Front, Rear, Both
Phone Number	Numeric	N/A	Phone number of the elevator call-box
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
			cooled, Water proof, Explosion proof
Door Operator Type	ALN	N/A	Side, Center
Hatch Cab Door Speed	ALN	N/A	one speed, two speed, center opening
Hatch Cab Door Size	Numeric	SF	Area of the cab door
Hatch Door Opening	Numeric	N/A	Area of the hatch opening
Governor Rope Diameter	Numeric	IN	Diameter of governor roper
Governor Rope Type	ALN	N/A	Iron, Traction, Extra High Strength Traction
Hoist Type	ALN	N/A	Belt, Rope
Hoist Rope Type	ALN	N/A	Iron, Traction, Extra High Strength Traction
Hoist Rope Diameter	Numeric	IN	Hoist Rope Diameter
Hoist Rope Quantity	Numeric	EA	Hoist Rope Quantity
Piston Diameter	Numeric	IN	Piston Diameter
Person Capacity	Numeric	EA	Capacity Rating

## D101004 WHEELCHAIR LIFT (MNL)

Hierarchical Level: Component

Facility Association: Cargo

Code: MNL

Description: A is a device for getting workers, equipment, and/or materials to where they are needed.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   MNL###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Scissor lift, boom lift
State Number	ALN	N/A	Unique ID assigned by the state
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Extension Capacity	Numeric	FEET	Capacity
Operating Weight	Numeric	LBS	Operating Weight
Platform Capacity	Numeric	LBS	Platform Capacity
Platform Height	Numeric	FEET	Platform Height
Platform Length	Numeric	IN	Platform Length
Platform Width	Numeric	IN	Platform Width
Stowed Height	Numeric	IN	Stowed Height
Width	Numeric	IN	Width
Drive Type	ALN	N/A	Hydraulic, Screw
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D1020 ESCALATORS & MOVING WALKS (ESC)

Hierarchical Level: System

System Association: Conveyance

Code: ESC

Description: A set of moving steps, attached to a continuously circulating belt that carries people up and down levels of a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Direction of Travel	ALN	N/A	Up, Down
Width	Numeric	FEET	Width of escalator
Length	Numeric	FEET	Length of escalator
Escalator Rise	Numeric	FEET	Escalator Rise (floor to floor distance)
State Number	ALN	N/A	Unique ID assigned by the state
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Controller Type	ALN	N/A	ACRT, ACVF, DCSS, Hydro
Step Width	Numeric	IN	Width of steps
Step Quantity	Numeric	EA	Number of steps
Step Chain Type	ALN	N/A	2, 4
Step Chain Manufacturer	ALN	N/A	Select from list of step chain manufacturers
Handrail Length	Numeric	FEET	Handrail Length
Handrail Drive Type	ALN	N/A	Sprocket, Helical Pinion Gear, Pulley, Friction
Motor Quantity	Numeric	EA	Number of motors
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US,

Attribute	Data Type	Unit	Domain / Range of Values
			445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D102001 ESCALATOR (ESC)

Hierarchical Level: Component

System Association: Conveyance

Code: ESC

Description: A set of moving steps, attached to a continuously circulating belt that carries people up and down levels of a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Direction of Travel	ALN	N/A	Up, Down
Width	Numeric	FEET	Width of escalator
Length	Numeric	FEET	Length of escalator
Escalator Rise	Numeric	FEET	Escalator Rise (floor to floor distance)
State Number	ALN	N/A	Unique ID assigned by the state
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Controller Type	ALN	N/A	ACRT, ACVF, DCSS, Hydro
Step Width	Numeric	IN	Width of steps
Step Quantity	Numeric	EA	Number of steps
Step Chain Type	ALN	N/A	2, 4
Step Chain Manufacturer	ALN	N/A	Select from list of step chain manufacturer
Handrail Length	Numeric	FEET	Handrail Length
Handrail Drive Type	ALN	N/A	Sprocket, Helical Pinion Gear, Pulley, Friction
Motor Quantity	Numeric	EA	Number of motors
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US,

Attribute	Data Type	Unit	Domain / Range of Values
			445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D102002 MOVING WALKWAY (MWW)

Hierarchical Level: Component

System Association: Conveyance

Code: MWW

Description: A moving conveyor belt that serves as transportation over flat or slightly inclined surfaces and may also be known as a moving sidewalk.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Direction of Travel	ALN	N/A	Up, Down
Width	Numeric	FEET	Width of escalator
Length	Numeric	FEET	Length of escalator
Escalator Rise	Numeric	FEET	Rise of elevator
State Number	ALN	N/A	Unique ID assigned by the state
Manufacturer Contract Number	ALN	N/A	Manufacturer Contract Number
Controller Type	ALN	N/A	ACRT, ACVF, DCSS, Hydro
Step Width	Numeric	IN	Width of steps
Step Quantity	Numeric	EA	Number of steps
Step Chain Type	ALN	N/A	2, 4
Step Chain Manufacturer	ALN	N/A	Select from list of step chain manufacturers
Handrail Length	Numeric	FEET	Handrail Length
Handrail Drive Type	ALN	N/A	Sprocket, Helical Pinion Gear, Pulley, Friction
Motor Quantity	Numeric	EA	Number of motors
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS,

Attribute	Data Type	Unit	Domain / Range of Values
			447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D1030 PASSENGER BOARDING BRIDGE SYSTEM (PBS)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: PBS  
 Description: .

Attribute	Data Type	Unit	Domain / Range of Values
Bar Code	Numeric	N/A	Bar code cross-reference
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Panel voltage 120, 240
Auto Level	ALN	N/A	Yes, no
Type	ALN	N/A	Apron Drive, Radial, Fixed Pedestal, Elevated "T", Standard Drive, Single Motor High Drive Round Tube, Single Motor High Drive Square Tube
Aircraft Served	ALN	N/A	737, 757, MD80, CRJ-200, etc.

## D103001 PRE-CONDITIONED AIR - PASSENGER BOARDING BRIDGE (PCA)

Hierarchical Level: System

Facility Association: Terminal

Code: PCA

Description: A separated air conditioning supply for the extendable bridge, which is used loading passengers onto aircraft. It provides protected access from the gate to the plane.

Attribute	Data Type	Unit	Domain / Range of Values
Bar Code	Numeric	N/A	Bar code cross-reference
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Panel voltage 120, 240
Has Cooling Coils	ALN	Yes, No	Does the unit have cooling coils?
Has Heating Coils	ALN	Yes, No	Does the unit have heating coils?
CFM	Numeric	CFM	Volume of air flow
Tonnage	Numeric	TONS	Cooling rating
BTU	Numeric	BTU	Heating rating
Return Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum
Supply Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum
Return Fan Size	Numeric	N/A	Fan Size
Return Fan Class	ALN	N/A	1,2,3,4
Supply Fan Size	Numeric	N/A	Fan Size



## DATA DICTIONARY

### D103002 BRIDGE - PASSENGER BOARDING BRIDGE (PBB)

Hierarchical Level: System

Facility Association: Terminal

Code: PBB

Description: An extendable bridge for loading passengers onto aircraft. It provides protected access from the gate to the plane.

Attribute	Data Type	Unit	Domain / Range of Values
Bar Code	Numeric	N/A	Bar code cross-reference
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Panel voltage 120, 240
Auto Level	ALN	N/A	Yes, no
Type	ALN	N/A	Apron Drive, Radial, Fixed Pedestal, Elevated "T", Standard Drive, Single Motor High Drive Round Tube, Single Motor High Drive Square Tube
Aircraft Served	ALN	N/A	737, 757, MD80, CRJ-200, etc.

## D103003 GROUND POWER - PASSENGER BOARDING BRIDGE (GPU)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: GPU  
 Description: A separated power supply for the extendable bridge, which is used loading passengers onto aircraft. It provides protected access from the gate to the plane.

Attribute	Data Type	Unit	Domain / Range of Values
Bar Code	Numeric	N/A	Bar code cross-reference
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Panel voltage 120, 240
Phase	ALN	N/A	1 Phase, 3 Phase
Type	ALN	N/A	Apron Drive, Radial, Fixed Pedestal, Elevated "T", Standard Drive, Single Motor High Drive Round Tube, Single Motor High Drive Square Tube

## D1090 OTHER CONVEYING SYSTEMS (OCS)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: OCS  
 Description: .

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   OCS###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Inbound, Carousels, Oversize, ticket counter, Curbside, Mainline, Recirculation line, Scanner array,
Area Served	ALN	N/A	Arrival Level, Departure Level, Baggage Make-up Area

## D109002 CONVEYORS (CBT)

Hierarchical Level: Component  
 Facility Association: Terminal and/or Maintenance  
 Code: CBT  
 Description: A belt that transports items from one location to another.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   CBT###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity

## D109006 BAGGAGE HANDLING SYSTEM (BHS)

Hierarchical Level: System

Facility Association: Terminal

Code: BHS

Description: A system that transports checked luggage from ticket counters to areas where bags can be loaded onto aircraft.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   BHS###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Inbound, Carousels, Oversize, ticket counter, Curbside, Mainline, Recirculation line, Scanner array,
Area Served	ALN	N/A	Arrival Level, Departure Level, Baggage Make-up Area
Number of Conveyors	Numeric	EA	Number of Conveyors
Conveyor Length	Numeric	FEET	Overall conveyor Length
Number of Merge Conveyors	Numeric	EA	Number of Merge Conveyors
Number of Diverters	Numeric	EA	Number of Diverters
Number of Sortation Units	Numeric	EA	Number of Sortation Units
Number of Carousels	Numeric	EA	Number of Carousels
Breaker Switch, qty	Numeric	EA	Breaker Switch Quantity
KVA	Numeric	KVA	Current Capacity
SPACES	Numeric	EA	Total Quantity of Breaker Spaces
VOLTAGE	ALN	N/A	Voltage

## D20 PLUMBING SYSTEM (PLM)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: PLM  
 Description: A system to deliver water in a building.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System ID	ALN	N/A	Unique id for the entity   PLM###
System Type	ALN	N/A	Hot Water, Cold Water
System Description	ALN	N/A	A narrative description of the entity
Condition Rating Date	ALN	N/A	Date condition rating was determined

## D2010 PLUMBING FIXTURES (RRM)

Hierarchical Level: Location

Facility Association: Terminal

Code: Room Number

Description: A room equipped with plumbing fixtures such as toilets, urinals, wash basins, hand dryers, change stations, faucets, etc.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Toilets, qty	Numeric	EA	Number of Toilets
Toilet Compartments, qty	Numeric	EA	Number of Toilet Compartments
Urinals, qty	Numeric	EA	Number of Urinals
Urinal Screens, qty	Numeric	EA	Number of Urinal Screens
Changing Tables, qty	Numeric	EA	Number of Changing Tables
Counter Areas, qty	Numeric	SF	Counter Area
Hand Dryers, qty	Numeric	EA	Number of Hand Dryers
Light Fixtures, qty	Numeric	EA	Number of Light Fixtures
Wall Areas, qty	Numeric	SF	Wall Area
Dispensing Fixtures, qty	Numeric	EA	Number of Dispensing Fixtures
Sinks, qty	Numeric	EA	Number of Sinks
Sink Type	ALN	N/A	Hand, Slop, Pedestal, Trough, Vessel
Faucets	Numeric	EA	Number of Faucets
Faucet Type	ALN	N/A	Ball, Disc, Cartridge, Compression
Gender	ALN	N/A	Female, Male, Family
Handicap	ALN	Y/N	Is this a handicap accessible? Yes or No



## D2020 DOMESTIC WATER DISTRIBUTION (DWD)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: DWD  
 Description: .

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity DWD###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Application Type	ALN	N/A	Domestic Water, Fire Protection, Sanitary Sewer, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D202001 PIPES AND FITTINGS (PAF)

Hierarchical Level: System

Facility Association: Terminal

Code: PAF

Description: Assemblies include all pipe, fittings, and associated work with regard to domestic water supply. The unit of measure at the assembly level is number of fixtures.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Type	ALN	N/A	Hot Water, Cold Water
System Description	ALN	N/A	A narrative description of the entity
Material	ALN	N/A	Type of metal
Size	ALN	IN	Fitting Size

## D202002 VALVES AND HYDRANTS (VAH)

Hierarchical Level: System

Facility Association: Terminal

Code: VAH

Description: Assemblies include all valves and hydrants. Hose bibbs are included.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Type	ALN	N/A	Hot Water, Cold Water
System Description	ALN	N/A	A narrative description of the entity
Material	ALN	N/A	Type of metal
Seat(Trim)	ALN	N/A	Type
Elastomers	ALN	N/A	Type
Control Tubing	ALN	N/A	Type

## D202003 WATER HEATERS (WHR)

Hierarchical Level: Component

Facility Association: Terminal

Code: EWH

Description:

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
State ID Number	ALN	N/A	
Tank Size	NUMERIC	L	
National Board Number	NUMERIC	N/A	
Maximum Allowable Working Pressure	NUMERIC	PSI	
Maximum Allowable Working Temperature	NUMERIC	DEG	
Heating Surface Area	NUMERIC	SF	
Maximum Steam Capacity (lbs/hr)	NUMERIC	LBS	
Input Capacity (BTU/hr)	NUMERIC	BTU	
Output Capacity (BTU/hr)	NUMERIC	BTU	
Safety Relief Valve Set Pressure	NUMERIC	PSI	

## D202009 DOMESTIC WATER SUPPLY PUMPS (BSP)

Hierarchical Level: Component

Facility Association: Terminal

Code: BSP

Description: A domestic water conveyance device. Includes booster pumps.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D2030 SANITARY WASTE (SWE)

Hierarchical Level: Component  
 Facility Association: Terminal  
 Code: SWE  
 Description: A sanitary waste conveyance device.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity SWE###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D203004 SANITARY WASTE EQUIPMENT (SWE)

Hierarchical Level: Component

Facility Association: Terminal

Code: SWE

Description: A sanitary waste device. Includes grinder pumps.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Application Type	ALN	N/A	Domestic Water, Fire Protection. ...
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Motor Manufacturer
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D2090 Other Plumbing Systems (OPS)

Hierarchical Level: System

Facility Association: Terminal

Code: OPS

Description:

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Air Handling Units, qty	Numeric	EA	Number of air handling units
Condensing Units, qty	Numeric	EA	Number of condensing units
Heat Exchangers, qty	Numeric	EA	Number of heat exchanges
VFDs, qty	Numeric	EA	Number of Numericiable frequency drives
Vehicle Exhaust Removal Systems, qty	Numeric	EA	Number of vehicle exhaust systems
Boilers, qty	Numeric	EA	Number of boilers
Chillers, qty	Numeric	EA	Number of chillers
Cooling Towers, qty	Numeric	EA	Number of cooling towers
Furnaces, qty	Numeric	EA	Number of furnaces
Packaged Unit, qty	Numeric	EA	Number of packaged units
Supply Fans, qty	Numeric	EA	Number of supply fans



## D209005 COMPRESSOR (CMP)

Hierarchical Level: Facility  
 Facility Group: Utility Infrastructure  
 Code: CMP  
 Description: Air Compressors.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System type	ALN	N/A	
Has Air Drier?	Integer	N/A	Yes, No
Air Control Type	Combo	N/A	Dual, Single
Maximum Pressure	Number	psi	Maximum Pressure
Tank Size	Number	gallons	Tank Size
Cooling Method	Combo	N/A	Air, Water, Oil
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Frame Size	Combo	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Number	volts	Operating voltage for the motor
Motor Phases	Combo	N/A	1 Phase, 3 Phase
Motor Amps	Number	amps	Current draw for the motor
Motor Horse Power	Number	hp	Motor HP rating
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Motor Power Source	Combo	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Oil Type	Var	N/A	Type of oil
Oil Capacity	Number	gallons	Oil Capacity
Refrigerant Type	ALN	N/A	Type of refrigerant
Refrigerant Amount	Numeric	Pounds	Refrigerant Capacity

## D30 HVAC (HVA)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: HVA  
 Description: Heating, ventilation and air conditioning equipment.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Air Handling Units, qty	Numeric	EA	Number of air handling units
Condensing Units, qty	Numeric	EA	Number of condensing units
Heat Exchangers, qty	Numeric	EA	Number of heat exchanges
VFDs, qty	Numeric	EA	Number of Numericial frequency drives
Vehicle Exhaust Removal Systems, qty	Numeric	EA	Number of vehicle exhaust systems
Boilers, qty	Numeric	EA	Number of boilers
Chillers, qty	Numeric	EA	Number of chillers
Cooling Towers, qty	Numeric	EA	Number of cooling towers
Furnaces, qty	Numeric	EA	Number of furnaces
Packaged Unit, qty	Numeric	EA	Number of packaged units
Supply Fans, qty	Numeric	EA	Number of supply fans

## D302001 BOILER (BLR)

Hierarchical Level: System  
 Facility Association: Central Utility Plant  
 Code: BLR  
 Description: Heat generating system.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
State ID Number	ALN	N/A	
Tank Size	NUMERIC	L	
National Board Number	NUMERIC	N/A	
Maximum Allowable Working Pressure	NUMERIC	PSI	
Maximum Allowable Working Temperature	NUMERIC	DEG	
Heating Surface Area	NUMERIC	SF	
Maximum Steam Capacity (lbs/hr)	NUMERIC	LBS	
Input Capacity (BTU/hr)	NUMERIC	BTU	
Output Capacity (BTU/hr)	NUMERIC	BTU	
Safety Relief Valve Set Pressure	NUMERIC	PSI	

## D302002 HOT WATER DISTRIBUTION SYSTEM PUMPS (HWP)

Hierarchical Level: Component  
 Facility Association: Terminal (from Central Utility Plant)  
 Code: HWP  
 Description: A hydronic water pump used to regulate hot heating water from Central Utility Plant into Terminal buildings.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component

Attribute	Data Type	Unit	Domain / Range of Values
Motor Voltage	Number	volts	Operating voltage for the motor
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D302005 AUXILIARY EQUIPMENT (AUX)

Hierarchical Level: Component  
 Facility Association: Central Utility Plant  
 Code: AUX  
 Description: Heat generating system.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Tank Size	NUMERIC	L	
Maximum Allowable Working Pressure	NUMERIC	PSI	
Maximum Allowable Working Temperature	NUMERIC	DEG	
Motor Amps	Numeric	AMPS	Motor Amperage
Motor Volts	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	Numeric	N/A	1 Phase, 3 Phase
Power Consumption	Numeric	KW	Total power consumption of the unit
Safety Relief Valve Set Pressure	NUMERIC	PSI	

## D3030 COOLING GENERATING SYSTEM (CGS)

Hierarchical Level: System  
 Facility Association: Central Utility Plant  
 Code: CGS  
 Description: Cooling generating system.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Tonnage	Numeric	TONS	Cooling rating in tons
Max. Steam Capacity	Numeric	LBS	Maximum Steam Capacity in lbs/hr
Motor Amps	Numeric	AMPS	Motor Amperage
Motor Volts	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	Numeric	N/A	1 Phase, 3 Phase
Power Consumption	Numeric	KW	Total power consumption of the chiller
Power Source	ALN	N/A	Electric, steam, etc.



## D303001 CHILLED WATER DISTRIBUTION SYSTEM PUMPS (CWP)

Hierarchical Level: Component  
 Facility Association: Terminal (from Central Utility Plant)  
 Code: CWP  
 Description: A hydronic water pump used to regulate chilled cooling water from Central Utility Plant into Terminal buildings.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component

Attribute	Data Type	Unit	Domain / Range of Values
Motor Voltage	Number	volts	Operating voltage for the motor
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D303002 CONDENSING UNIT (CDN)

Hierarchical Level: Component

System Association: HVAC

Code: CDN

Description: The exterior component of a cooling system that includes a compressor and condensing coil.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Cooling Type	ALN	N/A	Air cooled, Water cooled
Tonnage	Numeric	TONS	Capacity of condenser

## D304007 EXHAUST FAN (EXF)

Hierarchical Level: Component

System Association: HVAC

Code: EXF

Description: A fan for ventilating an enclosed space by moving air from the interior to the exterior of a building. The exhaust fan motor must be greater than one horsepower.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	axial, centrifugal, propeller, centrifugal, mixed flow, utility
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
CFM	Numeric	CFM	Air flow volume (design)
Use	ALN	N/A	Exhaust, Supply
Fan Size	Numeric	IN	Size if fan in inches
RPM	Numeric	RPM	Maximum RPM
Mount Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horsepower	Numeric	HP	Motor HP rating
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D304008 AIR HANDLING UNIT (AHU)

Hierarchical Level: Component  
 System Association: HVAC  
 Code: AHU  
 Description: A/C Shop to supply description

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Single Zone, Multi Zone
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Has Cooling Coils	ALN	Yes No	Does the unit have cooling coils?
Has Heating Coils	ALN	Yes No	Does the unit have heating coils?
Heat System Type	ALN	N/A	None, Electric, Steam, Hot Fluid
Number Of VAV Boxes	Numeric	EA	Number Of VAV Boxes
CFM	Numeric	CFM	Volume of air flow
Tonnage	Numeric	TONS	Cooling rating
BTU	Numeric	BTU	Heating rating
Motor Manufacturer	ALN	N/A	Motor Manufacturer
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
Return Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum
Supply Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum

Attribute	Data Type	Unit	Domain / Range of Values
Return Fan Size	Numeric	N/A	Fan Size
Return Fan Class	ALN	N/A	1,2,3,4
Supply Fan Size	Numeric	N/A	Fan Size
Supply Fan Class	ALN	N/A	1,2,3,4
Return Belt Tension	Numeric	LBS	Belt Tension
Supply Belt Tension	Numeric	LBS	Belt Tension
Number of Filters	Numeric	EA	Total number of filters in unit
Filter Size	N/A	N/A	Dimensions of filter
Filter MERV Rating	Numeric	N/A	Density of filter media
Number of VFDs	Numeric	EA	Number of VFDs associated with unit
Has UV Lights	N/A	Yes, No	Does the unit have UV lighting?
Has Ionization	N/A	Yes, No	Does the unit have Ionization?
Has PCO (Photo Catalytic Oxidation)	N/A	Yes, No	Does the unit have PCO?
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D304099 OTHER DISTRIBUTION SYSTEMS (ODS)

Hierarchical Level: System

System Association: HVAC

Code: ODS

Description: Other distribution systems that include special systems or special devices not included in designated assembly categories under D3040 Distribution Systems. These devices or systems are the Air Handling Unit (AHU) Filters specifically located in Department of Water & Power (DWP) vaults or other locations such as an outside air intake on a roof.

Attribute	Data Type	Unit	Domain / Range of Values
System Description	ALN	N/A	A narrative description of the entity
Efficiency	ALN	N/A	Efficiency such as: MERV 8, MERV 11, MERV 13
Filter Type	ALN	N/A	Type of Filter: AHU or other
Filter Depth	Numeric	Inches	Filter Depth in Inches
Media Type	ALN	N/A	Type of Media such as: Synthetic, DuraFlex, etc
Max Operating Temperature	Numeric	°F	Maximum operating temperature in degrees Fahrenheit

## D3050 TERMINAL AND PACKAGE UNITS (ATU)

Hierarchical Level: System

System Association: HVAC

Code: ATU

Description: Terminal units located downstream of a supply main from an Air Handling Unit or other supply. These units are not typically standalone and function as portions of an entire HVAC system.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to

## D305003 FAN COIL UNIT (FCU)

Hierarchical Level: Component

System Association: HVAC

Code: FCU

Description: A device consisting of a heating or cooling coil and fan. A fan coil unit is not typically connected to ductwork and is used to control the temperature in the space where it is installed, or serve multiple spaces.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Single Zone, Multi Zone
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Mount Type	ALN	N/A	Wall mount, floor mounted, wall mounted
Has Cooling Coils	ALN	Yes, No	Does the unit of cooling coils?
Has Heating Coils	ALN	Yes, No	Does the unit of heating coils?
Heating Coils	ALN	N/A	Hot Water, Steam, Electric
Cooling Coils	ALN	N/A	Chilled Water, DX
CFM	Numeric	CFM	Volume of air flow
Tonnage	Numeric	TONS	Cooling rating
BTU	Numeric	BTU	Heating rating
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
Number of Filters	Numeric	EA	Total number of filters in unit
Filter Size	N/A	N/A	Dimensions of filter
Filter MERV Rating	Numeric	N/A	Density of filter media
Has VFD	N/A	Yes, No	Does the unit have a VFD?
Has Condensate Pump	N/A	Yes, No	Does the unit have a Condensate Pump?
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof



## D305006 PACKAGE UNIT (PKG)

Hierarchical Level: Component

System Association: HVAC

Code: PKG

Description: A packaged assembly of air-conditioning equipment, such as coils, filters, humidifiers etc., which provide the treatment of air before it is distributed.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Single Zone, Multi Zone
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Has Cooling Coils	ALN	Yes No	Does the unit have cooling coils?
Has Heating Coils	ALN	Yes No	Does the unit have heating coils?
Heat System Type	ALN	N/A	None, Electric, Steam, Hot Fluid
Number Of VAV Boxes	Numeric	EA	Number Of VAV Boxes
CFM	Numeric	CFM	Volume of air flow
Tonnage	Numeric	TONS	Cooling rating
BTU	Numeric	BTU	Heating rating
Motor Manufacturer	ALN	N/A	Name of manufacturer
Motor Serial Number	ALN	N/A	Unique identifier for the Component
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating
Return Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum

Attribute	Data Type	Unit	Domain / Range of Values
Supply Fan Type	ALN	N/A	Double Inlet, Horizontal Plenum, Vertical Plenum
Return Fan Size	Numeric	N/A	Fan Size
Return Fan Class	ALN	N/A	1,2,3,4
Supply Fan Size	Numeric	N/A	Fan Size
Supply Fan Class	ALN	N/A	1,2,3,4
Return Belt Tension	Numeric	LBS	Belt Tension
Supply Belt Tension	Numeric	LBS	Belt Tension
Number of Filters	Numeric	EA	Total number of filters in unit
Filter Size	N/A	N/A	Dimensions of filter
Filter MERV Rating	Numeric	N/A	Density of filter media
Number of VFDs	Numeric	EA	Number of VFDs associated with unit
Has UV Lights	N/A	Yes, No	Does the unit have UV lighting?
Has Ionization	N/A	Yes, No	Does the unit have Ionization?
Has PCO (Photo Catalytic Oxidation)	N/A	Yes, No	Does the unit have PCO?
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D305099 CRITICAL ROOM AIR CONDITIONING UNIT (CRC)

Hierarchical Level: Component

System Association: HVAC

Code: CRC

Description: A packaged assembly of air-conditioning equipment to provide treatment of air before it is distributed in a computer room, MPOE room, electrical room or other critical room.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Tonnage	Numeric	TONS	Cooling rating
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Cooling Method	ALN	N/A	Chilled Water(CW) or Refrigerant(DX)
Belt Size	ALN	N/A	Size of belt

## D306098 CONTROLS & INSTRUMENTATION (CTL)

Hierarchical Level: Component

System Association: HVAC

Code: CTL

Description: Includes devices such as thermostats, timers, sensors, transmitters, control valves, etc., necessary to operate the system as designed.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Thermostat, Transmitter, Sensor, Alarm, Timer,
Input Voltage	ALN	VAC	Specify input voltage in VAC
Control Signal	ALN	mA	Signal for device as applicable
Power Consumption	ALN	VA	Power used
Operating Temperature	ALN	0 F	Temperature in degree F (min. to max.)
Mounting	ALN	N/A	Type of Mounting (i.e. wall, surface, floor, etc.)
Inputs	ALN	mA	i.e. 4 AC Inputs 24-40 VAC 3mA
Weight	Numeric	lbs	Weight in pounds
Calibration Range	Numeric	0 F	Calibration Range Min. Span in degrees
NEMA Designation	ALN	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof

## D309099 ICE MACHINE

Hierarchical Level: Component

System Association: HVA

Code: ICM

Description: An assembly that includes a special systems or special devices. The unit of measure is each device. This device is the ice machine under the HVA.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Device
Condenser Type	ALN	N/A	Type of condenser: Air Cooled or Liquid Cooled
Room Air Temperature	ALN	oF	Min 45oF to Max 110oF
Water Temperature	ALN	oF	Min 45oF to Max 90oF
Voltage	Numeric	V	Voltage
Potable Water Pressure	Numeric	PSIG	Min 20 PSIG to Max 100 PSIG
Portable Water Inlet Size	Numeric	Inch	Pipe Thread or Female Pipe Thread (FPT) size
Refrigeration System	Numeric	N/A	Refrigeration System i.e. thermostatic expansion valve-controlled R-404A refrigerant

## D40 FIRE PROTECTION (FPS)

Hierarchical Level: System

Facility Association: Terminal

Code: FPS

Description: Equipment used to mitigate and protect against the unwanted effects of fire.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Wet pipe, dry pipe, halon, CO <sub>2</sub> ,
Area Covered	ALN	N/A	Full, Partial
Is Fire Suppression included as a part of this system?	ALN	Yes, No	Is Fire Suppression included as a part of this system?
Is a Fire alarm included as a part of this system?	ALN	Yes, No	Is a Fire alarm included as a part of this system?

## D4010      SPRINKLERS (SPK)

Hierarchical Level:      System  
 Facility Association:      Terminal  
 Code:                      SPK  
 Description:              Water supply equipment and related piping from the equipment to the sprinkler head.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Wet pipe, dry pipe, halon, CO <sub>2</sub> ,
Area Covered	ALN	N/A	Full, Partial
Is Fire Suppression included as a part of this system?	ALN	Yes, No	Is Fire Suppression included as a part of this system?
Is a Fire alarm included as a part of this system?	ALN	Yes, No	Is a Fire alarm included as a part of this system?

## D402098 FIRE PUMPS (PMP)

Hierarchical Level: System  
 Facility Association: Terminal  
 Code: Fire PMP  
 Description: Part of a fire protection system's water supply needed when the water supply cannot provide sufficient pressure to meet the hydraulic design requirements of the fire protection system.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Pump Type	ALN	N/A	Fire Pump, Jockey Pump, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Motor Manufacturer
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## D402099 FIRE HOSE CABINET (FHC)

Hierarchical Level: Component

System Association: Fire Protection

Code: FHC

Description: The exterior component of a cooling system that includes a compressor and condensing coil.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to



## DATA DICTIONARY

### D5010 ELECTRICAL SERVICE AND DISTRIBUTION (ESD)

Hierarchical Level: System  
Facility Association: Central Utility Plant  
Code: ESD  
Description: Electrical service and distribution.

Attribute	Data Type	Unit	Domain / Rang of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Replacement Year	ALN	N/A	

## D501001 MAIN TRANSFORMER (TNH)

Hierarchical Level: Component

System Association: Electrical

Code: TNF

Description: A device that transfers electrical energy from one alternating circuit to another with a change in voltage, current, phase, or impedance.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Mounting	ALN	N/A	Floor, Wall/Ceiling, Grade
High Side Voltage	Numeric	VOLTS	High side voltage
Low Side Voltage	Numeric	VOLTS	Low side voltage
Current Capacity Rating	Numeric	AMPS	Current capacity rating
Step Down Voltage	Numeric	VOLTS	Step Down Voltage

## D501002 SECONDARY TRANSFORMER (TNR)

Hierarchical Level: Component

System Association: Electrical

Code: TNR

Description: A device that transfers electrical energy from one alternating circuit to another with a change in voltage, current, phase, or impedance.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Roll-up, Sectional
System ID	Numeric	N/A	The system ID that the component is associated to
Mounting	ALN	N/A	Floor, Wall/Ceiling, Grade
High Side Voltage	Numeric	VOLTS	High side voltage
Low Side Voltage	Numeric	VOLTS	Low side voltage
Current Capacity Rating	Numeric	AMPS	Current capacity rating

## D501003 SWITCHBOARD (SWB)

Hierarchical Level: Component

System Association: Electrical

Code: SWB

Description: Insulating panels containing electrical devices such as switches, circuit breakers, fuses and meters required to operate electrical equipment.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
High Side Voltage	Numeric	VOLTS	High Side Voltage
Amps	Numeric	AMPS	Amperage
Sections	Numeric	EA	Number of sections of switchgear
Switches, qty	Numeric	EA	Number of switches
Spaces, qty	Numeric	EA	Total quantity of spaces

## D501005 DISTRIBUTION PANEL (EDP)

Hierarchical Level: Component

System Association: Electrical

Code: EDP

Description: An electric panel used to distribute electricity within a building.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Panel voltage 120, 240
Current Capacity Rating	Numeric	AMPS	Current rating
Breaker Switches, qty	Numeric	EA	Number of breaker switches installed
Spares, qty	Numeric	EA	Number of spare slots
Spaces, qty	Numeric	EA	Total quantity of breaker spaces

## D501007 MOTOR CONTROL CENTER (MCC)

Hierarchical Level: Component

System Association: Electrical

Code: MCC

Description: A device or group of devices that serves to govern in some predetermined manner the performance of an electric motor. A motor controller might include a manual or automatic means for starting and stopping the motor, selecting forward or reverse rotation, selecting and regulating the speed, regulating or limiting the torque, and protecting against overloads and faults.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Voltage	Numeric	VOLTS	Voltage
Current Capacity Rating	Numeric	AMPS	Current Capacity Rating
Switches, qty	Numeric	EA	Number of breaker switches
Spares, qty	Numeric	EA	Number of spare slots
Spaces, qty	Numeric	EA	Total quantity of spaces

## D501020 STEAM TURBINE (SMT)

Hierarchical Level: System

Facility Association: Central Utility Plant

Code: SMT

Description: A device that extracts thermal energy from pressurized steam and uses it to do mechanical work on a rotating output shaft and suited to be used to drive an electrical generator.

Attribute	Data Type	Unit	Domain / Rang of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Replacement Year	ALN	N/A	

## D501030 GAS TURBINE (GST)

Hierarchical Level: System

Facility Association: Central Utility Plant

Code: GST

Description: A device is a type of internal combustion engine. It has an upstream rotating compressor coupled to a downstream turbine, and a combustion chamber in-between. Energy is then added by spraying fuel into the air and igniting it so the combustion generates a high-temperature flow.

Attribute	Data Type	Unit	Domain / Rang of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Replacement Year	ALN	N/A	

## D503001 FIRE ALARM CONTROL PANEL (FCP)

Hierarchical Level: Component

System Association: Fire Protection

Code: FCP

Description: An electrical panel that is the controlling component of a fire protection system.

Attribute	Data Type	Unit	Domain / Range of Values
System Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	Multiplex, Addressable, Releasing, Conventional, Coded
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Number Of Zones	Numeric	EA	Number Of Zones covered

## D509002 GENERATOR (GEN)

Hierarchical Level: Component

System Association: Electrical

Code: GEN

Description: Device used to convert mechanical energy into electricity.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Current Type	ALN	N/A	AC, DC
Fuel Type	ALN	N/A	Gasoline, Diesel, Propane, Other
Kilowatts	Numeric	KVA	Total generator capacity
Voltage	ALN	N/A	120/208, 120/240, 277/480, 2400/4160
Phase	ALN	N/A	1 Phase, 3 Phase

## D509005 INVERTER UNITS & BATTERY PACKS (INV)

Hierarchical Level: Component

System Association: Electrical

Code: INV

Description: Device used to convert mechanical energy into electricity.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Current Type	ALN	N/A	AC, DC
Fuel Type	ALN	N/A	Gasoline, Diesel, Propane, Other
Kilowatts	Numeric	KVA	Total generator capacity
Voltage	ALN	N/A	120/208, 120/240, 277/480, 2400/4160
Phase	ALN	N/A	1 Phase, 3 Phase

## D509009 UNINTERRUPTABLE POWER SUPPLY (UPS)

Hierarchical Level: Component

System Association: Electrical

Code: UPS

Description: Device used to convert mechanical energy into electricity.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Current Type	ALN	N/A	AC, DC
Fuel Type	ALN	N/A	Gasoline, Diesel, Propane, Other
Kilowatts	Numeric	KVA	Total generator capacity
Voltage	ALN	N/A	120/208, 120/240, 277/480, 2400/4160
Phase	ALN	N/A	1 Phase, 3 Phase

## D509099 ELECTRICAL REGULATOR (REG)

Hierarchical Level: Component

System Association: Electrical

Code: REG

Description: A device that provides control of runway lighting circuits, lighting control, or monitoring. The device/equipment can be supplied with a wide range of control and monitoring options. Tis electrical regulator device is under the electrical system.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Manufacturer	ALN	N/A	Select from list of component manufacturers
Serial Number	ALN	N/A	Unique identifier for the Component
Frequency	ALN	Hz	In Hertz (Hz)
Type	ALN	N/A	Typically D=Air Cooled, O=Oil Cooled
Kilowatts	Numeric	KVA	Total generator capacity
Input Voltage	Numeric	VOLTS	Voltage
Output Step Current	Numeric	AMPS	In Amps
Temperature Range	Numeric	°F	Temperature -40°F to +131°F

## E102002 MEDICAL EQUIPMENT (MED)

Hierarchical Level: Facility  
 Facility Group: Utility Infrastructure  
 Code: MED  
 Description: .

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System type	ALN	N/A	
Mount Type	ALN	N/A	Wall mount, floor mounted,
Ring Down	Numeric	Y/N	Is there a ring down system?
Phone Number	ALN	N/A	Phone number of the medical device

## E109003 WASTE HANDLING EQUIPMENT (WHP)

Hierarchical Level: Facility

Facility Group: Utility Infrastructure

Code: WHP

Description: The equipment may include clarification units, disinfection, sludge or nutrient removal units, discharge piping and trash compactors.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System type	ALN	N/A	
Motor Horse Power	Numeric	HP	Motor HP rating
Motor Quantity	Numeric	EA	Number of motors
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Manufacturer	ALN	N/A	Select from list of motor manufacturers
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor

## E109099 CARDBOARD BALER (CBB)

Hierarchical Level: Asset

Facility Association: Terminal

Code: CBB

Description: A piece of electronic equipment designed to crush and compact large amounts of cardboard into a single bale.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity   CBB###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Vertical or Horizontal
Bale Size	Numeric	IN	Bale size
Bale Volume	Numeric	CU FT	Bale Volume
Cycle Time	Numeric	SEC	Cycle Time
RPM	Numeric	RPM	Maximum RPM
Gallons Per Minute	Numeric	GPM	Gallons Per Minute
System Pressure	Numeric	PSI	Maximum PSI
Ram Face Pressure	Numeric	PSI	Maximum PSI
Overall Platen Force	Numeric	LBS	Overall Platen Force
Oil Capacity	Numeric	GAL	Oil Capacity
Cylinder Bore	Numeric	IN	Cylinder bore size
Cylinder Rod	Numeric	IN	Cylinder rod size
Cylinder Stroke	Numeric	IN	Cylinder stroke length
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phases	ALN	N/A	1 Phase, 3 Phase
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Horse Power	Numeric	HP	Motor HP rating

## F105002 BUILDING AUTOMATION SYSTEM (BAS)

Hierarchical Level: System

Facility Association: Terminal

Code: BAS

Description: A network of integrated computer instruments that automatically control a range of building operations from lighting to security access to fire safety control.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Lighting control, recording instrumentation, building control

## G2010 ROADWAYS (RDS)

Hierarchical Level: Facility

Facility Group: Transportation Infrastructure

Code: RDS

Description: A maintained right-of-way used for the passage of traffic. Roadways may be for airport, airline, public, security, or maintenance use and are generally engineered/ designed for the passage of vehicular traffic. The roadways can be inside and outside the AOA.

Attribute	Data Type	Unit	Domain / Range of Values
Road Description	ALN	N/A	A narrative description of the entity
Road Type	ALN	N/A	Alley, Arterial, Service, Dead-end
Surface Type	ALN	N/A	Asphalt, Concrete, other
Thickness	Numeric	IN	Thickness of the wearing course
Width	Numeric	FEET	Average width of the road
Lanes	Numeric	EA	Number of lanes
Length	Numeric	FEET	Length of the road

## G201004 SIGNS (SGN)

Hierarchical Level: Component  
 Facility Group: Transportation Infrastructure  
 Code: SGN  
 Description: Traffic signs installed to provide information to users. Signs are standardized using MUTCD codes to provide a standard to facilitate travel and to enhance traffic safety.

Attribute	Data Type	Unit	Domain / Range of Values
Sign Description	ALN	N/A	A narrative description of the entity
Sign Type	ALN	N/A	California MUTCD codes
Number of Fixtures	Numeric	N/A	Number of Fixtures
Fixture Type	ALN	N/A	Edge, Elevated, In-pavement

## G201060 RUNWAYS (RWY)

Hierarchical Level: Facility

Facility Group: Transportation Infrastructure

Code: RWY

Description: A maintained right-of-way used for the passage of traffic. Runways may be for airport, airline, public, security, or maintenance use and are generally engineered/ designed for the passage of vehicular traffic. The runways can be inside and outside the AOA.

Attribute	Data Type	Unit	Domain / Range of Values
Road Description	ALN	N/A	A narrative description of the entity
Road Type	ALN	N/A	Alley, Arterial, Service, Dead-end
Surface Type	ALN	N/A	Asphalt, Concrete, other
Thickness	Numeric	IN	Thickness of the wearing course
Width	Numeric	FEET	Average width
Length	Numeric	FEET	Length

## G201064 RUNWAY MARKING SYSTEM AND LIGHTING (RNM)

Hierarchical Level: System  
 Facility Association: Runways  
 Code: RNM  
 Description: Markings and lighting on the runway pavement and other runway markers used to guide/position aircraft.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Paint, Tape, Raised Pavement Marker (RPM)
Number of fixtures	Numeric	EA	Number of light fixtures
Fixture Type	ALN	N/A	Elevated, in-pavement, Edge
Voltage	Numeric	VOLTS	Voltage of the system

## G201070 TAXIWAYS (TWY)

Hierarchical Level: Facility  
 Facility Group: Transportation Infrastructure  
 Code: TWY  
 Description: Engineered surface constructed and maintained in accordance with FAA regulations for the movement of fixed-wing aircraft between runways, hangars, terminals, aprons, and related AOA elements.

Attribute	Data Type	Unit	Domain / Range of Values
Taxiway Description	ALN	N/A	A narrative description of the entity
Taxiway Type	ALN	N/A	Way, Lane
Surface Type	ALN	N/A	Asphalt, Concrete, other
Thickness	Numeric	IN	Thickness of the wearing course
Width	Numeric	FEET	Average
Length	Numeric	FEET	Length

## G201074 TAXIWAY MARKING SYSTEM AND LIGHTING (TWM)

Hierarchical Level: System

Facility Group: Taxiway

Code: TWM

Description: Markings and lighting on the taxiway pavement and other taxiway markers used to guide/position aircraft.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
System Type	ALN	N/A	Paint, Tape, Raised Pavement Marker (RPM)
Number of fixtures	Numeric	EA	Number of light fixtures
Fixture Type	ALN	N/A	Elevated, in-pavement, Edge
Voltage	Numeric	VOLTS	Voltage of the system

## G201080 APRONS (APN)

Hierarchical Level: Facility  
 Facility Group: Transportation Infrastructure  
 Code: APN  
 Description: An area used for parking aircraft, or moving aircraft from a terminal, hangar, storage, or maintenance area to another structure, runway, or helipad.

Attribute	Data Type	Unit	Domain / Range of Values
Apron Description	ALN	N/A	A narrative description of the entity
Surface Type	ALN	N/A	Asphalt, Concrete, other
Thickness	Numeric	IN	Thickness of the wearing course

## G201084 APRON MARKING SYSTEM AND LIGHTING (APM)

Hierarchical Level: System

Facility Association: Aprons

Code: APM

Description: Markings and lighting on the apron pavement and other apron markers used to guide/position aircraft.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description of the entity
Number of fixtures	Numeric	EA	Number of light fixtures
Fixture Type	ALN	N/A	Elevated, in-pavement, Edge
Voltage	Numeric	VOLTS	Voltage of the system

## G2020      PARKING LOTS AND PARKING STRUCTURES (PKS)

Hierarchical Level:      Facility  
 Facility Group:          Building  
 Code:                      PKS  
 Description:              A structure or building for parking vehicles.

Attribute	Data Type	Unit	Domain / Range of Values
Apron Description	ALN	N/A	A narrative description of the entity
Surface Type	ALN	N/A	Asphalt, Concrete, other
Fenced	Numeric	Y/N	Is the area fenced?
Parking Spaces, qty	Numeric	EA	Total Number of Parking Spaces
Handicap Spaces, qty	Numeric	EA	Number of Handicap Parking Spaces
EV Charging Spaces, qty	Numeric	EA	Number of Electric Vehicle Charging Stations
Area	Numeric	SF	Total square footage

## G204001 FENCES & GATES (GAT)

Hierarchical Level: Facility  
 Facility Group: Grounds  
 Code: GAT  
 Description: A structure that can be swung, drawn or lowered to block an entrance or passageway.

Attribute	Data Type	Unit	Domain / Range of Values
Gate Description	ALN	N/A	A narrative description of the entity
Airfield Security	ALN	Y/N	Is the fence for Airfield security?
Gate Type	ALN	N/A	Arm, Crash, Draw, Rolling, Swing, Vertical
Fence Type	ALN	N/A	Chain link, architectural, other
Length	Numeric	FEET	Total length of the gate
Height	Numeric	FEET	Average height of fencing
Motorized	Numeric	Y/N	Is the gate motorized?
Motor Voltage	Numeric	VOLTS	Operating voltage for the motor
Motor Phase	ALN	N/A	1 Phase, 3 Phase
Controller Manufacturer	ALN	N/A	Select from list of controller manufacturers
Security Wire	ALN	N/A	Razor wire, Galvanized 4 point barb wire, Permafuse 4 point barb wire, None

## G204005 SIGNAGE SYSTEM (SGS)

Hierarchical Level: System

Facility Group:

Code: SGS

Description: .

Attribute	Data Type	Unit	Domain / Range of Values
Signage System	ALN	N/A	A narrative description of the entity
Description			

## G2050 LANDSCAPING (LND)

Hierarchical Level: Facility

Facility Group: Grounds

Code: LND

Description: Areas that contain vegetation, rock, wood, and/or other natural or manufactured materials placed to improve appearance, control erosion, screen views, or control vehicular or personnel traffic as a part of an anti-terrorism plan.

Attribute	Data Type	Unit	Domain / Range of Values
Landscape Description	ALN	N/A	A narrative description of the entity
Landscape Type	ALN	N/A	Bed, Turf, Hardscape
Area	Numeric	SF	Total square footage of the landscape area

## G205005 PLANTING (PLT)

Hierarchical Level: System

Grounds Association: Landscaping

Code: PLT

Description: The description of the plantings in the landscape area.

Attribute	Data Type	Unit	Domain / Range of Values
Plant Description	ALN	N/A	A narrative description of the entity
Plant Type	ALN	N/A	Shrub, Tree, Flower, Bush
Scientific name	ALN	N/A	Scientific name for the plant – linked to the common name for the plant
Common Name	N/A	N/A	Common name for the plant – linked to the scientific name
Quantity	Numeric	EA / SF	The number of individual plants or the total coverage for ground cover in the landscape
Height	Numeric	FEET	Average height of the plant at maturity
Color	ALN	N/A	Color of the foliage, flowers of the plant
Native	ALN	Y/N	Is the plant native to the area?

## G205007 IRRIGATION (IRR)

Hierarchical Level: System

Grounds Association: Landscaping

Code: IRR

Description: A network of valves, chemical feeders, weather stations and/or control devices (manual or automatic) connected by piping or channels to a water source (potable or non-potable) that distribute water to; flood zones, sprinkler heads, and/or drip lines for the purpose of watering vegetation.

Attribute	Data Type	Unit	Domain / Range of Values
Irrigation Description	ALN	N/A	A narrative description of the entity
Irrigation Type	ALN	N/A	Ditch, Terraced, Drip, Sprinkler, Rotary, Center pivot
Maintainable Area	Numeric	SF	The square footage of coverage for the irrigation system

## G302003 SEWER LIFT STATION (SLS)

Hierarchical Level: Component  
 Facility Association: Terminal  
 Code: SLS  
 Description: A sanitary sewer conveyance device.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity SEP###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phase	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## G303003 SUMP PUMP / LIFT STATION (SMP)

Hierarchical Level: Component  
 Facility Association: Terminal  
 Code: SMP  
 Description: A storm water conveyance device.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	Unique id for the entity, SMP###
Bar Code	Numeric	N/A	Bar code cross-reference
System Description	ALN	N/A	A narrative description of the entity
Equipment Type	ALN	N/A	Pump, Motor, Fitting, ...
Coupling Bore Size	Numeric	IN	Coupling Bore Size in Inches
GPM	Numeric	GPM	Gallons Per Minute
Head Pressure	Numeric	FEET	Head Pressure in Feet
Impeller Diameter	Numeric	IN	Diameter of the Impeller in Inches
Keyway Size	Numeric	IN	Keyway Size in Inches
Material	ALN	N/A	Material
Mechanical Seal ID	Numeric	IN	Mechanical Seal identifier in inches
Motor Horse Power	Numeric	HP	Motor HP rating
Mounting Type	ALN	N/A	anti-vibration, base mount, close coupled, flange mounted, horizontal mount, in-line mount, roof mount, suspended, vertical mount, wall mount, floor mounted, wall mounted
Motor Amps	Numeric	AMPS	Current draw for the motor
Motor Frame Size	ALN	N/A	48, 56, 143, 143T, 145, 145T, 182, 182T, 184, 184T, 203, 204, 213, 213T, 215, 215T, 224, 225, 254, 254U, 254T, 256U, 256T, 284, 284U, 284T, 284TS, 286U, 286T, 286TS, 324, 324U, 324S, 324T, 324TS, 326, 326U, 326S, 326T, 326TS, 364, 364S, 364U, 364US, 364T, 364TS, 365, 365S, 365U, 365US, 365T, 365TS, 404, 404S, 404U, 404US, 404T, 404TS, 405, 405S, 405U, 405US, 405T, 405TS, 444, 444S, 444U, 444US, 444T, 444TS, 445, 445S, 445U, 445US, 445T, 445TS, 447TS, 449TS, 504U, 505, 505S
Motor Manufacturer	Text	N/A	Select from list of motor manufacturers
Motor Phase	ALN	N/A	1 Phase, 3 Phase
Motor Power Source	ALN	N/A	Electric, Gasoline, Diesel, Hydraulic, Pneumatic, Other
Motor Serial Number	Var	N/A	Unique identifier for the Component
Motor Voltage	Number	volts	Operating voltage for the motor



## DATA DICTIONARY

Attribute	Data Type	Unit	Domain / Range of Values
NEMA Designation	Combo	N/A	Drip proof, Splash proof, Totally enclosed fan cooled, Water proof, Explosion proof
Pump Manufacturer	ALN	N/A	Select from list of pump manufacturers
Radial Bearing ID	Number	inches	Radial Bearing ID
RPM	Number	rpm	Maximum rpm
Size	Number	inches	Flange size
Thrust Bearing ID	Number	inches	Thrust Bearing ID

## G305006 ON-SITE COOLING TOWER (CGT)

Hierarchical Level: Component  
 Facility Association: Cooling generating system (CGS)  
 Code: CGT  
 Description: Cooling Tower - heat removal devices used to transfer process waste heat to the atmosphere

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
Component Description	ALN	N/A	
Rating	Numeric	TONS	Cooling rating measured in tons

## G3060 FUEL (FUL)

Hierarchical Level: System  
 Facility Group: Utility Infrastructure  
 Code: FUL  
 Description: Fuel distribution systems.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System type	ALN	N/A	Diesel, Gas, Jet A-1, Jet B, CNG, Avgas

## G306004 FUEL TANKS (FLT)

Hierarchical Level: Component  
 System Association: Fuel System  
 Code: FLT  
 Description: Fuel storage tanks.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
Component Type	ALN	N/A	
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Fuel Type	ALN	N/A	Jet A-1, Jet-B, Avgas, Diesel, Gasoline, CNG
Capacity	Numeric	gallons	Fuel tank capacity in gallons



## DATA DICTIONARY

### G403001 TELECOMMUNICATION SYSTEM (TES)

Hierarchical Level: Facility  
 Facility Group: Utility Infrastructure  
 Code: TES  
 Description: A telephone, radio, television, data transmission, or other system in which information-bearing signals originated at one place are reproduced at a distant point.

Attribute	Data Type	Unit	Domain / Range of Values
System (Parent) ID	Numeric	N/A	System generated unique id for the entity   barcode
System Description	ALN	N/A	A narrative description for the entity
System Type	ALN	N/A	IT Network, CCTV, Phone, Radio, Security, Fire, Paging, Clock

## G403099 SITE SECURITY & ALARM SYSTEMS (SAS)

Hierarchical Level: Component

System Association: Communication

Code: SAS

Description: A component of a communication system such as a CCTV camera, Network router, radio base station, etc.

Attribute	Data Type	Unit	Domain / Range of Values
Component Description	ALN	N/A	A narrative description of the entity
System (Parent) ID	Numeric	N/A	The system (parent) ID that the component is associated to
Component Type	ALN	N/A	Camera, Network hub, Radio Base, Clock

## G9010 TUNNELS (TNL)

Hierarchical Level: Facility  
 Facility Group: Transportation Infrastructure  
 Code: TNL  
 Description: A tunnel providing access/passage to pedestrian or vehicular traffic.

Attribute	Data Type	Unit	Domain / Range of Values
Tunnel Description	ALN	N/A	A narrative description of the entity
Tunnel Type	ALN	N/A	Cut-and-cover, bored, Soft ground, jacked-box
Tunnel X-Section	ALN	N/A	Circular, Rectangular, Horseshoe
Liner Type	ALN	N/A	Unlined rock, Rock reinforcement, Shotcrete, Ribbed, Segmental, Placed concrete, Slurry wall
Invert Type	ALN	N/A	On grade, above grade
Finish Type	ALN	N/A	Painted, Natural, Shotcrete
Tunnel Width	Numeric	FEET	Width of tunnel and widest part
Tunnel Length	Numeric	FEET	Length of tunnel
Vertical Clearance	Numeric	FEET	Minimum (posted) vertical clearance for traffic
Condition Rating	Numeric	N/A	Rating from FHWA Highway and Rail Transit Tunnel Inspection Manual
Ventilation Types	ALN	N/A	Natural, Longitudinal, semi transverse, full transverse, etc.
Ventilation equipment	ALN	N/A	Yes, No
Sound Attenuators	ALN	N/A	Yes, No
Lighting System	ALN	N/A	Yes, No

## G909001 VEHICULAR BRIDGES (BRD)

Hierarchical Level: Facility

Facility Group: Transportation Infrastructure

Code: BRD

Description: A bridge is a structure erected over a waterway, road, or other obstruction, having a track or passageway for vehicular or pedestrian traffic or other moving loads.

Attribute	Data Type	Unit	Domain / Rang of Values
Bridge Description	ALN	N/A	A narrative description of the entity
Bridge Type	ALN	N/A	Beam, Cantilever, Arch, Suspension, Cable-stayed, Movable, Double-decked
Deck Material	ALN	N/A	Concrete, Asphalt, other
Deck Width	Numeric	FEET	Width of the bridge deck
Deck Length	Numeric	FEET	Length of the bridge deck
Load Rating	Numeric	LBS	Load rating of the bridge
Vertical Clearance	Numeric	FEET	Minimum clear distance under the bridge
Sufficiency Rating	Numeric	N/A	NBIS rating

## G909099 JET BLAST DEFLECTOR (JBD)

Hierarchical Level: Facility

Facility Group: Transportation Infrastructure

Code: JBD

Description: A jet blast deflector (JBD) or blast fence is a safety device that redirects the high energy exhaust from a jet engine to prevent damage and injury.

Attribute	Data Type	Unit	Domain / Range of Values
Description	ALN	N/A	A narrative description of the entity
Material	ALN	N/A	Concrete, Metal, Fiberglass, Other
Length	Numeric	FEET	Length of the blast fence
Height	Numeric	FEET	Height of the blast fence
Sound Attenuators	ALN	N/A	Yes, No

## REGISTERED COMPONENTS – NO ATTRIBUTES

The following components are registered but do not have associated attributes. In many cases these components require regular inspections and require verification and documentation.

Component Description	FSC Code	Requirement
Fire Extinguisher	FXH	Perform monthly inspections
Fire Hose Cabinet	FHC	Replace fire hoses after 5 years
Medical Devices	MED	Perform regular inspections
Air Vents	ARV	

## APPENDIX A: ASTM UNIFORMAT II CLASSIFICATION FOR BUILDING ELEMENTS (E1557-09)

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements
A SUBSTRUCTURE	A10 Foundations	A1010 Standard Foundations A1020 Special Foundations A1030 Slab on Grade
	A20 Basement Construction	A2010 Basement Excavation A2020 Basement Walls
B SHELL	B10 Superstructure	B1010 Floor Construction B1020 Roof Construction
	B20 Exterior Enclosure	B2010 Exterior Walls B2020 Exterior Windows B2030 Exterior Doors
	B30 Roofing	B3010 Roof Coverings B3020 Roof Openings
C INTERIORS	C10 Interior Construction	C1010 Partitions C1020 Interior Doors C1030 Fittings
	C20 Stairs	C2010 Stair Construction C2020 Stair Finishes
	C30 Interior Finishes	C3010 Wall Finishes C3020 Floor Finishes C3030 Ceiling Finishes
D SERVICES	D10 Conveying	D1010 Elevators & Lifts D1020 Escalators & Moving Walks D1030 Passenger Boarding Bridge System D1090 Other Conveying Systems
	D20 Plumbing	D2010 Plumbing Fixtures D2020 Domestic Water Distribution D2030 Sanitary Waste D2040 Rain Water Drainage D2090 Other Plumbing Systems
	D30 HVAC	D3010 Energy Supply D3020 Heat Generating Systems D3030 Cooling Generating Systems D3040 Distribution Systems D3050 Terminal & Package Units

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements
		D3060 Controls & Instrumentation D3070 Systems Testing & Balancing D3090 Other HVAC Systems & Equipment
	D40 Fire Protection	D4010 Sprinklers D4020 Standpipes D4030 Fire Protection Specialties D4090 Other Fire Protection Systems
	D50 Electrical	D5010 Electrical Service & Distribution D5020 Lighting and Branch Wiring D5030 Communications & Security D5090 Other Electrical Systems
E EQUIPMENT & FURNISHINGS	E10 Equipment	E1010 Commercial Equipment E1020 Institutional Equipment E1030 Vehicular Equipment E1090 Other Equipment
	E20 Furnishings	E2010 Fixed Furnishings E2020 Movable Furnishings
F SPECIAL CONSTRUCTION & DEMOLITION	F10 Special Construction	F1010 Special Structures F1020 Integrated Construction F1030 Special Construction Systems F1040 Special Facilities F1050 Special Controls and Instrumentation
	F20 Selective Building Demolition	F2010 Building Elements Demolition F2020 Hazardous Components Abatement

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements
G BUILDING SITEWORK	G10 Site Preparation	G1010 Site Clearing G1020 Site Demolition and Relocations G1030 Site Earthwork G1040 Hazardous Waste Remediation
	G20 Site Improvements	G2010 Roadways G2020 Parking Lots G2030 Pedestrian Paving G2040 Site Development G2050 Landscaping
	G30 Site Mechanical Utilities	G3010 Water Supply G3020 Sanitary Sewer G3030 Storm Sewer G3040 Heating Distribution G3050 Cooling Distribution G3060 Fuel Distribution G3090 Other Site Mechanical Utilities
	G40 Site Electrical Utilities	G4010 Electrical Distribution G4020 Site Lighting G4030 Site Communications & Security G4090 Other Site Electrical Utilities
	G90 Other Site Construction	G9010 Service and Pedestrian Tunnels G9090 Other Site Systems & Equipment

The classification was designed to meet the following additional requirements:

- Applies to any building type, although it is designed for commercial buildings.
- Allows specific details required for describing specialized buildings.
- Separates the classification of building elements from the classification of building related site-work.
- Relates to other elemental classifications such as the original UNIFORMAT and those of the Canadian Institute of Quantity Surveyors (CIQS) and the Royal Institute of Chartered Surveyors (RICS-UK).

UNIFORMAT II is not intended to classify elements of major civil works. Buildings, however, are usually accompanied by roads, utilities, parking areas and other non-building features. The UNIFORMAT II classification of building-related site-work is provided for exclusive use in support of construction of buildings so users do not have to resort to multiple elemental classifications for what is primarily a buildings project.

**Level 4 for the UNIFORMAT II Classification of Building- Related Site work**

Level 3 Elements	Level 4 Sub-Elements
A1010 Standard Foundations	A101001 Wall Foundations
	A101002 Column Foundations & Pile Caps
	A101003 Perimeter Drainage & Insulation
	A101099 Other Standard Foundations
A1020 Special Foundations	A102001 Pile Foundations
	A102002 Caissons
	A102003 Underpinning
	A102004 Dewatering
	A102005 Raft Foundations
	A102006 Pressure Injected Grouting
	A102009 Other Special Foundations
A1030 Slab on Grade	A103001 Standard Slab on Grade
	A103002 Structural Slab on Grade
	A103003 Inclined Slab on Grade
	A103004 Trenches
	A103005 Pits & Bases
	A103006 Foundation Drainage
	A103099 Other Slab on Grade
A2010 Basement Excavation	A201001 Excavation for Basements
	A201002 Structure Backfill &

Level 3 Elements	Level 4 Sub-Elements
	Compaction
	A201003 Shoring
	A202009 Other Basement Excavation
A2020 Basement Walls	A202001 Basement Wall Construction
	A202002 Moisture Protection
	A202003 Basement Wall Insulation
	A202009 Other Basement Walls
B1010 Floor Construction	B101001 Structural Frame
	B101002 Structural Interior Walls
	B101003 Floor Decks & Slabs
	B101004 Balcony Construction
	B101005 Ramps
	B101006 Floor Raceway Systems
B1020 Roof Construction	B101099 Other Floor Construction
	B102001 Structural Frame
	B102002 Structural Interior Walls
	B102003 Roof Decks & Slabs
	B102004 Canopies
	B102009 Other Roof Construction
	B2010 Exterior

Level 3 Elements	Level 4 Sub-Elements
Walls	B201002 Exterior Wall Backup Construction
	B201003 Insulation & Vapor Retarder
	B201004 Parapets
	B201005 Exterior Louvers & Screens
	B201006 Sun Control Devices (Exterior)
	B201007 Balcony Walls & Railings
	B201008 Exterior Soffits
	B201009 Screen Wall
	B201010 Exterior Coatings
	B201011 Joint Sealant
	B201099 Other Exterior Walls
B2020 Exterior Windows	B202001 Windows
	B202002 Storefronts
	B202003 Curtain Walls
	B202004 Exterior Glazing
	B202099 Other Exterior Windows
B2030 Exterior Doors	B203001 Solid Doors
	B203002 Glazed Exterior Doors
	B203003 Revolving Doors
	B203004 Overhead & Roll-Up Doors

Level 3 Elements	Level 4 Sub-Elements
	B203005 Hangar Doors
	B203006 Blast Resistant Doors
	B203007 Gates
	B203008 Exterior Door Hardware
	B203098 Other Exterior Specialty Doors
	B203099 Other Exterior Personnel Doors
B3010 Roof Coverings	B301001 High Slope Roof Coverings
	B301002 Low Slope Membrane Systems
	B301003 Roof Insulation & Fill
	B301004 Flashings & Trim
	B301005 Gutters and Downspouts
	B301006 Roof Openings and Supports
	B301099 Other Roofing
C1010 Partitions	C101001 Fixed Partitions
	C101002 Demountable Partitions
	C101003 Retractable Partitions
	C101004 Interior Guardrails & Screens
	C101005 Interior Windows
	C101006 Glazed Partitions and Storefronts
	C101007 Interior Glazing

Level 3 Elements	Level 4 Sub-Elements
	C101008 Joint Sealant
	C101099 Other Partitions
C1020 Interior Doors	C102001 Standard Interior Doors
	C102002 Glazed Interior Doors
	C102003 Fire Doors
	C102004 Sliding and Folding Doors
	C102005 Interior Overhead Doors
	C102006 Interior Gates
	C102007 Interior Door Hardware
	C102098 Other Interior Specialty Doors
	C102099 Other Interior Personnel Doors
C1030 Fittings	C103001 Compartments, Cubicles & Toilet Partitions
	C103002 Toilet & Bath Accessories
	C103006 Shelving
	C103007 Fire Extinguisher Cabinets
	C103008 Counters
	C103009 Cabinets
	C103010 Closets
	C103011 Firestopping Penetrations
C103012 Sprayed Fire-Resistive Materials	

Level 3 Elements	Level 4 Sub-Elements
	C103013 Raised Access Flooring
	C103014 Casework
	C103099 Other Interior Specialties
C2010 Stair Construction	C201001 Interior Stair Construction
	C201002 Exterior Stair Construction
	C201099 Other Stair Construction
C2020 Stair Finishes	C202001 Interior Stair Finish
C3010 Wall Finishes	C301001 Concrete Wall Finishes
	C301002 Plaster Wall Finishes
	C301003 Gypsum Wallboard Finishes
	C301004 Tile & Terrazzo Wall Finishes
	C301005 Painting to Walls
	C301006 Wall Coverings
	C301007 Acoustical Panels Adhered to Walls
	C301008 Special Coatings to Walls
	C301099 Other Wall Finishes
C3020 Floor Finishes	C302001 Tile Floor Finishes
	C302002 Terrazzo Floor Finishes
	C302003 Wood Flooring
	C302004 Resilient Floor

Level 3 Elements	Level 4 Sub-Elements
	Finishes
	C302005 Carpeting
	C302006 Masonry & Stone Flooring
	C302007 Painting & Staining Floors
	C302008 Wall Base Finishes
	C302009 Floor Toppings & Traffic Membranes
	C302010 Hardeners & Sealers
	C302099 Other Flooring & Floor Finishes
C3030 Ceiling Finishes	C303001 Exposed Concrete Finishes
	C303002 Plaster Ceiling Finishes
	C303003 Gypsum Wallboard Ceiling Finishes
	C303004 Acoustical Ceiling Tiles and Panels
	C303005 Wood Ceilings
	C303006 Painting & Staining Ceilings
	C303007 Suspensions Systems
	C303008 Metal Strip Ceilings
	C3033 Other Ceilings & Ceiling Finishes
D1010 Elevators & Lifts	D101001 General Construction Items
	D101002 Passenger Elevators
	D101003 Freight Elevators

Level 3 Elements	Level 4 Sub-Elements
	D101004 Wheelchair Lift
	D101099 Other Elevators
D1020 Escalators & Moving Walks	D102001 Moving Stairs
	D102002 Moving Walks
	D102099 Other Moving Stairs and Walks
D1020 Escalators & Moving Walks	D102001 Moving Stairs
	D102002 Moving Walks
	D102099 Other Moving Stairs & Walks
D1090 Other Conveying Systems	D109001 Pneumatic Tube Systems
	D109002 Conveyors
	D109003 Linen, Trash, & Mail Chutes
	D109004 Turntables
	D109005 Operable Scaffolding
	D109006 Transportation Systems
	D109007 Overhead Cranes
	D109099 Other Material Handling Systems
D2010 Plumbing Fixtures	D201001 Waterclosets
	D201002 Urinals
	D201003 Lavatories
	D201004 Sinks
	D201005 Showers/Tubs
	D201006 Drinking Fountains

Level 3 Elements	Level 4 Sub-Elements
	and Coolers
	D201007 Bidets
	D201099 Emergency Fixtures
D2020 Domestic Water Distribution	D202001 Pipes and Fittings
	D202002 Valves and Hydrants
	D202003 Domestic Water Equipment
	D202004 Insulation & Identification
	D202005 Specialties
	D202099 Other Domestic Water Supply
D2030 Sanitary Waste	D203001 Waste Pipe & Fittings
	D203002 Vent Pipe & Fittings
	D203003 Floor Drains
	D203004 Sanitary & Vent Equipment
	D203005 Insulation & Identification
	D203099 Other Sanitary Waste
D2040 Rain Water Drainage	D204001 Pipe & Fittings
	D204002 Roof Drains
	D204003 Rainwater Drainage Equipment
	D204004 Insulation & Identification
	D204099 Other Rain Water Drainage System
D2090 Other Plumbing Systems	D209001 Special Piping Systems

Level 3 Elements	Level 4 Sub-Elements
	D209002 Acid Waste Systems
	D209003 Interceptors
	D209004 Pool Piping and Equipment
	D209005 Compressor
	D209099 Other Special Plumbing Systems
D3010 Energy Supply	D301001 Oil Supply System
	D301002 Gas Supply System
	D301003 Coal Supply System
	D301004 Steam Supply System (From Central Plant)
	D301005 Hot Water Supply System (From Central Plant)
	D301006 Solar Energy Supply Systems
	D301007 Wind Energy Supply System
	D301009 Other Energy Supply
D3020 Heat Generating Systems	D302001 Steam Boilers
	D302002 Hot Water Boilers
	D302003 Furnaces
	D302004 Fuel-Fired Unit Heaters
	D302005 Auxiliary Equipment
	D302006 Equipment Thermal Insulation
	D302099 Other Heat Generating Systems
D3030 Cooling	D303001 Chilled Water

Level 3 Elements	Level 4 Sub-Elements
Generating Systems	Systems
	D303002 Direct Expansion Systems
	D303099 Other Cooling Generating Systems
D3040 Distribution Systems	D304001 Air Distribution, Heating, & Cooling
	D304002 Steam Distribution Systems
	D304003 Hot Water Distribution Systems
	D304004 Change Over Distribution Systems
	D304005 Glycol Distribution Systems
	D304006 Chilled Water Distribution Systems
	D304007 Exhaust Systems
	D304008 Air Handling Units
	D304099 Other Distribution Systems
D3050 Terminal & Package Units	D305001 Unit Ventilators
	D305002 Unit Heaters
	D305003 Fan Coil Units
	D305004 Fin Tube Radiation
	D305005 Electric Heating
	D305006 Package Units
	D305099 Other Terminal & Package Units
D3060 Controls &	D306001 HVAC Controls

Level 3 Elements	Level 4 Sub-Elements
Instrumentation	D306002 Electric Controls
	D306003 Pneumatic Controls
	D306004 Instrument Air Compressors
	D306005 Gas Purging Systems
	D306099 Other Controls & Instrumentation
D3070 Systems Testing & Balancing	D307001 Water Side Testing & Balancing – Heating & Cooling
	D307002 Air Side Testing & Balancing – Heating, Cooling, & Exhaust
	D307003 HVAC Commissioning
	D307099 Other Systems Testing & Balancing
D3090 Other HVAC Systems & Equipment	D309001 General Construction Items
	D309002 Refrigeration Systems
	D309099 Other Special Mechanical Systems
D4010 Sprinklers	D401001 Sprinklers & Releasing Devices
	D401002 Sprinkler Water Supply Equipment & Piping
D4020 Standpipe Systems	D402001 Standpipe Equipment & Piping
D4030 Fire Protection Specialties	D403001 Fire Extinguishing Devices
D4090 Other Fire Protection Systems	D409001 Carbon Dioxide Systems
	D409002 Foam Generating Systems

Level 3 Elements	Level 4 Sub-Elements
	D409003 Clean Agent Systems
	D409005 Hood & Duct Fire Protection
	D409099 Other Special Fire Protection Systems
D5010 Electrical Service & Distribution	D501001 Main Transformers
	D501002 Secondary Transformers
	D501003 Main Switch Boards
	D501004 Interior Distribution Transformers
	D501005 Panels
	D501006 Enclosed Circuit Breakers
	D501007 Motor Control Centers
	D501099 Other Service & Distribution
D5020 Lighting & Branch Wiring	D502001 Branch Wiring
	D502002 Lighting Equipment
	D502099 Other Lighting & Branch Wiring
D5030 Communications & Security	D503001 Fire Alarm Systems
	D503002 Telecommunication Systems
	D503003 Nurse Call Systems
	D503004 Public Address Systems
	D503005 Intercommunication Systems
	D503006 Clock & Program Systems

Level 3 Elements	Level 4 Sub-Elements
	D503007 Television Systems
	D503008 Security Systems
	D503099 Other Communications & Alarm Systems
D5090 Other Electrical Services	D509001 General Construction Items (Electrical)
	D509002 Emergency Lighting & Power
	D509003 Grounding Systems
	D509004 Lighting Systems
	D509005 Electric Heating
E1010 Commercial Equipment	E101001 Checkroom Equipment
	E101002 Registration Equipment
	E101003 Vending Equipment
	E101004 Laundry Equipment
	E101005 Security & Vault Equipment
	E101006 Teller & Service Equipment
	E101007 Mercantile Equipment
	E101008 Office Equipment
E1020 Institutional Equipment	E102001 Miscellaneous Common Fixed & Moveable Equipment
	E102002 Medical Equipment
	E102003 Laboratory Equipment
	E102004 Mortuary Equipment

Level 3 Elements	Level 4 Sub-Elements
	E102005 Auditorium & Stage Equipment
	E102006 Library Equipment
	E102007 Ecclesiastical Equipment
	E102008 Instrumental Equipment
	E102009 Audio-Visual Equipment
	D102010 Detention Equipment
E1030 Vehicular Equipment	E103301 Parking Control Equipment
	E103002 Loading Dock Equipment
	E103003 Warehouse Equipment
E1090 Other Equipment	E109001 Built-In Maintenance Equipment
	E109002 Food Service Equipment
	E109003 Waste Handling Equipment
	E109004 Residential Equipment
	E109005 Unit Kitchens
	E109006 Darkroom Equipment
	E109007 Athletic, Recreational, & Therapeutic Equipment
	E109008 Planetarium Equipment
	E109009 Observatory Equipment
	E109010 Agricultural Equipment

Level 3 Elements	Level 4 Sub-Elements
	E109099 Other Specialized Fixed & Moveable Equipment
E2010 Fixed Furnishings	E201001 Fixed Artwork
	E201002 Window Treatments
	E201003 Seating (Fixed)
	E201004 Fixed Floor Grilles & Mats
	E201005 Fixed Interior Landscaping
	E201099 Other Fixed Interior Furnishings
E2020 Movable Furnishings	E201001 Moveable Art Work
	E202002 Modular Prefabricated Furniture
	E202003 Freestanding Furniture
	E202004 Rugs & Accessories
	E202005 Moveable Multiple Seating
	E202006 Moveable Interior Landscaping
F1010 Special Structures	E202099 Other Moveable Furnishings
	F101001 Metal Building Systems
	F101002 Exterior Utility Buildings
	F101003 Air-Supported Structures
F1020 Integrated Construction	F101099 Other Special Construction
	F102001 Special Purpose Rooms

Level 3 Elements	Level 4 Sub-Elements
	F102002 Integrated Assemblies
	F102099 Other Integrated Construction
F1030 Special Construction Systems	F103001 Vaults
	F103002 Sound, Vibration, & Seismic Construction
	F103003 Radiation Protection
	F103099 Other Special Construction Systems
F1040 Special Facilities	F104001 Interior Swimming Pools
	F104002 Liquid & Gas Storage Tanks
	F104003 Kennels & Animal Shelters
	F104004 Site Constructed Incinerators
	F104005 Ice Rinks
	F104099 Other Special Facilities
F1050 Special Controls & Instrumentation	F105001 Recording Instrumentation
	F105002 Building Automation Systems
	F105099 Other Special Controls & Instrumentation
F2010 Building Elements Demolition	F201001 Substructure & Superstructure
	F201002 Exterior Closure
	F201003 Roofing
	F201004 Interior Construction & Finishes

Level 3 Elements	Level 4 Sub-Elements
	F201005 Conveying Systems
	F201006 Mechanical Systems
	F201007 Electrical Systems
	F201008 Equipment & Furnishings
	F201099 Other Non-Hazardous Selective Building Demolition
F2020 Hazardous Components Abatement	F202001 Substructure & Superstructure
	F202002 Exterior Closure
	F202003 Roofing
	F202004 Interior Construction & Finishes
	F202005 Conveying Systems
	F202006 Mechanical Systems
	F202007 Electrical Systems
	F202008 Equipment & Furnishings
	F202099 Other Hazardous Selective Building Demolition
G1010 Site Clearing	G101001 Clearing
	G101002 Tree Removal
	G101003 Stump Removal
	G101004 Chipping
	G101005 Grubbing
	G101006 Selective Thinning
	G101007 Debris Disposal
	G101099 Other Site Clearing

Level 3 Elements	Level 4 Sub-Elements
G1020 Site Demolition & Relocation	G102001 Building Mass Demolition
	G102002 Above Ground Site Demolition
	G102003 Underground Site Demolition
	G102004 Building Relocation
	G102005 Utility Relocation
	G102006 Fencing Relocation
	G102007 Site Cleanup
	G102099 Other Site Demolition & Relocations
	G1030 Site Earthwork
G103002 Common Excavation	
G103003 Rock Excavation	
G103004 Fill & Borrow	
G103005 Compaction	
G103006 Soil Stabilization	
G103007 Slope Stabilization	
G103008 Soil Treatment	
G103009 Shoring	
G103010 Temporary Dewatering	
G103011 Temporary Erosion & Sediment Control	
G103099 Other Site Earthwork	
G1040 Hazardous Waste Remediation	G104001 Removal of Contaminated Soil
	G104002 Soil Restoration &

Level 3 Elements	Level 4 Sub-Elements
	Treatment
	G104099 Other Hazardous Waste Remediation
G2010 Roadways	G201001 Bases & Subbases
	G201002 Curbs & Gutters
	G201003 Paved Surfaces
	G201004 Marking & Signage
	G201005 Guardrails & Barriers
	G201006 Resurfacing
	G201099 Other Roadways
	G2020 Parking Lots
G202001 Curbs & Gutters	
G202003 Paved Surfaces	
G202004 Marking & Signage	
G202005 Guardrails & Barriers	
G202006 Resurfacing	
G202007 Miscellaneous Structures & Equipment	
G202099 Other Parking Lots	
G2030 Pedestrian Paving	
	G203002 Curbs & Gutters
	G203003 Paved Surfaces
	G203004 Guardrails & Barriers
	G203005 Resurfacing
	G203099 Other Walks, Steps, &

Level 3 Elements	Level 4 Sub-Elements
	Terraces
G2040 Site Development	G204001 Fencing & Gates
	G204002 Retaining Walls
	G204003 Exterior Furnishings
	G204004 Security Structures
	G204005 Signage
	G204006 Fountains & Pools
	G204007 Playing Fields
	G204008 Terrace & Perimeter Walls
	G204009 Flagpoles
	G204099 Other Site Improvements
G2050 Landscaping	G205001 Fine Grading & Soil Preparation
	G205002 Erosion Control Measures
	G205003 Topsoil & Planting Beds
	G205004 Seeding, Sprigging, & Sodding
	G205005 Plantings
	G205006 Planters
	G205007 Irrigation Systems
	G205099 Other Landscaping
G3010 Water Supply	G301001 Well Systems
	G301002 Potable Water Distribution
	G301003 Potable Water

Level 3 Elements	Level 4 Sub-Elements	
	Storage	
	G301004 Fire Protection Water Distribution	
	G301005 Fire Protection Water Storage	
	G301006 Non-Potable Water Distribution	
	G301007 Pumping Stations	
	G301008 Packaged Water Treatment Plants	
	G301099 Other Water Supply	
	G3020 Sanitary Sewer	G302001 Sanitary Sewer Piping
		G302002 Sanitary Sewer Manholes & Cleanouts
G302003 Lift Stations & Pumping Stations		
G302004 Packaged Sanitary Sewer Treatment Plants		
G302005 Septic Tanks		
G302006 Drain Fields		
G302099 Other Sanitary Sewer		
G3030 Storm Sewer	G303001 Storm Sewer Piping	
	G303002 Storm Sewer Structures	
	G303003 Lift Stations	
	G303004 Culverts	
	G303005 Headwalls	
	G303006 Erosion & Sediment Control Measures	

Level 3 Elements	Level 4 Sub-Elements
	G303007 Stormwater Management
	G303099 Other Storm Sewer
G3040 Heating Distribution	G304001 Overhead Hot Water Systems
	G304002 Overhead Steam Systems
	G304003 Underground Hot Water Systems
	G304004 Underground Steam Distribution Systems
	G304005 Reinforced Concrete Manholes & Valve Boxes
	G304006 Pumping Stations
	G305099 Other Heating Distribution
G3050 Cooling Distribution	G305001 Overhead Cooling Systems
	G305002 Underground Cooling Systems
	G305003 Trenchboxes
	G305004 Wells for Cooling
	G305005 Pumping Station
	G305006 On-Site Cooling Towers
	G305099 Other Cooling Distribution
G3060 Fuel Distribution	G306001 Liquid Fuel Distribution Piping
	G306002 Aviation Fuel Distribution Piping System
	G306003 Liquid Fuel Dispensing Equipment

Level 3 Elements	Level 4 Sub-Elements
	G306004 Liquid Fuel Storage Tanks
	G306005 Liquid Fuel System Trenchboxes
	G306006 Gas Distribution Piping System
	G306007 Gas Storage Tanks
	G306008 Gas System Trenchboxes
	G306098 Other Gas Distribution
	G306099 Other Gas Distribution
G3090 Other Site Mechanical Utilities	G309001 Industrial Waste Pipe
	G309002 Industrial Waste Manhole & Cleanouts
	G309003 Industrial Waste Lift Stations
	G309004 Industrial Waste Holding Tanks & Separators
	G309005 Industrial Waste Trenchboxes
	G309009 Other Industrial Waste
G4010 Electrical Distribution	G401001 Substations
	G401002 Transformers
	G401003 Switches, Controls & Devices
	G401004 Overhead Electric Conductors
	G401005 Towers, Poles, Crossarms & Insulators
	G401006 Underground Electric Conductors
	G401007 Ductbanks, Manholes,

Level 3 Elements	Level 4 Sub-Elements
	Handholes, & Raceways
	G401008 Grounding Systems
	G401009 Metering
	G401099 Other Electrical Transmission & Distribution
G4020 Site Lighting	G402001 Transformers
	G402002 Overhead Electric Conductors
	G402003 Towers, Poles, Crossarms, & Insulators
	G402004 Underground Electric Conductors
	G402005 Ductbanks, Manholes & Handholes
	G402006 Exterior Lighting Fixtures & Controls
	G402007 Grounding Systems
	G402008 Special Security Lighting Systems
	G402099 Other Area Lighting
G4030 Site Communication & Security	G403001 Telecommunications System
	G403002 Sound System
	G403003 Fire Alarm Systems
	G403004 Cable TV Systems (CATV)
	G403005 Cables & Wiring
	G403006 Ductbanks, Manholes, & Handholes
	G403007 Towers, Poles, & Stands

Level 3 Elements	Level 4 Sub-Elements
	G403008 TV Cameras & Monitors
	G403009 Grounding Systems
	G403098 Other Communication & Alarm
	G403099 Other Security Systems
G4090 Other Site Electrical Utilities	G409001 Sacrificial Anode Cathodic Protection System
	G409002 Induced Current Cathodic Protection System
	G409003 Emergency Power Generation
	G409099 Other Cathodic Protection
G9010 Other Site Systems	G901001 Construction of Service & Pedestrian Tunnels
	G901002 Prefabricated Service & Pedestrian Tunnels
G9090 Other Site Construction	G909001 Bridges
	G909002 Railroad Spurs
	G909003 Snow Melting Systems
	G909009 Other Special Construction