- d. Referenced Dcuments:
 - i. Associated electronic files of referenced docume/intern 'equipment information'
 - ii. File names of electronic fileshall match what is referenced in appropriate fields for document nameWhen the welbased tool is used this will be accomplished during the upload process.
- 2. Deliverable Format:TheContractor will provide facilities information, per the following:
 - a. Contact, spatial, and equipment information shall be provided in spreadsheet format. For an example of of the contact of th

(XLS)exported from that webbased tool. Format of deliverables, content, and schedule are addressed in other parts of this specification section.

End of this section contains all tables.

Table 01- Required Equipment List

Table 02 Equipment Attributes

Table 03 Example Data Format

Note – The intent of Table 03 is to show an example of what the "hard copy" or objective deliverable wouldconstitute for Contractor to Owner transmittal. When a websel tool is used to organize and compile the data and documents, it is also required to have a final set of deliverables that can be transmitted to the Owner.

Table 04 Reference Document Examp

PART 3 EXECUTION

3.1 Process

A. Web-Based Tooflor use

The information in this specification section is presented in tables (originated in XLS format). However, some critical aspects of the FM Data have relationships that are best managed in a relational database tool (and format). Therefore, a tool (a webbased software) is available to facilitate and simplify the organization of the required data and documents specified by the narrative and tables included herein. The webbased tool provides means by which the complexities of the requirement can be more readily achieved, managed, verified, and handed over to the Owner during transition to operations and construction contract closeut. The webbased tool has been preonfigured to match the data requirements of the specification in advance for use by the construction team. That its provides in quality assurance and data validation. The tool also allowfor delegation of tradespecific roles to subcontractors by the Contractor (if so elected by the Contractor). The web based tool provides a consistent platform by which the Owner's project manager and the Owner's designated facilities management cartigamizan review progress of data and documents across multiple projects that aperioness. The webbased tool also

- Data shall be submitted (made available) to owner at agreed upon milestone dates for review purposes. The owner will review data for accuracy with documents and field conditionarious means.
- c. Followingreview at various stagesthe owner will provide the contractor with an issue report. Issue reports will contain any discovered deviations from field conditions or inaccuracies of facilities data. Any identified deviations from field conditions (issues) will require the contractor correct and resumit the data within two(2) weeksof receiving the issue report.

C. Tools:

a. The Contractor shall maintain the facilities an agement at a within adata management too such as O&M Logger, and be approved by the owner's operation and mainter age aization. The facilities data tool shall be capable of validating that ming standards from this specification are followed during data collection. Also, the facilities data tool shall provide constant access to the Owner for ongoing review comment, and export to spreadsheet form a The facilities data tool shall also allow for access project information on mobile platforms in the field redata collection and field review purposes.

Table 01 Required Equipment List

- Note 1: This list (table) includes required equipment that can also be called an "Equipment Type Matrix" because the list is organized by "Asset Types".
- Note 2 "Serialized" Assets are assets that will have an individual instance by piece of equipment and will be tracked individually. Example: AHU or Chiller. "Group" Assets are assets that will be handled as a "group" and not tracked individually. Example: Interior Lights

Asset Type (Note 1)	Comments	Туре	System
DOOR			

System	Asset Type	Attributes
ELEC	DP	capacity*
ELEC	DP	mainbuscurrent
ELEC	DP	aicrating
ELEC	GENERATOR	power*
ELEC	GENERATOR	electrical

System	Asset Type	Attributes
ELEC	MOTOR	breakhorsepowerin bhp
ELEC	Power Equipment	power*
ELEC	Power Equipment	electricalpanelname*
ELEC	Power Equipment	capacity*
ELEC	PULIBOX	locationin space(ex: southwall, nearparkinglot)
ELEC	PULIBOX	power*
ELEC	Solar/PVEquipment	power*
ELEC	Solar/PVEquipment	electricalpanelname*
ELEC	Solar/PVEquipment	capacity*
ELEC	Solar/PVEquipment	celltype
ELEC	Solar/PVEquipment	powertolerance
ELEC	Solar/PVEquipment	numberof cells
ELEC	SurgeProtectors	power*
ELEC	SurgeProtectors	electricalpanelname*
ELEC	SurgeProtectors	maxallowedvoltagedrop
ELEC	SurgeProtectors	net impendence
ELEC	UPSSystem	power*
ELEC	UPSSystem	
ELEC	UPSSystem	nm

System	Asset Type	Attributes
HVAC	CoolingTower	operationtemperaturerange
HVAC	CoolingTower	ambientdesigndry bulb temp
HVAC	CoolingTower	ambientdesignwet bulb temp
HVAC	Dampers	capacity*
HVAC	Dampers	maximumairflow rate
HVAC	Dampers	nominalair flow rate
HVAC	Dampers	openpressuredrop
HVAC	Dampers	leakagefully closed
HVAC	Dampers	IPaddress
HVAC	Dampers	BASs

System	Asset Type	Attributes	
HVAC	FCU	fan type	
HVAC	FCU	type of fan drive	
HVAC	FCU	fansize(inches)	
HVAC	FCU	fan efficiencyin %or pf	
HVAC	FCU	staticpressuren "inches"	
HVAC	Heat Exchangers	electre	

System	Asset Type	Attributes		
HVAC	Unit Heater	electrica panelname*		
HVAC	Unit Heater	capacity*		
HVAC	Unit Heater	temp rise		
HVAC	VFD	power*		
HVAC	VFD	electricalpanelname*		
HVAC	VFD	minimumoutputfrequency		
HVAC	VFD	maximumoutputfrequency		
HVAC	Water Valves	capacity*		
HVAC	Water Valves	maximumoperatingpressure		
HVAC	Water Valves	valveoperation		
HVAC	Water Valves	type		

Table 03 Example Data Format

SpaceInformation - Tab						
Name Floor	Category	C	Ceiling			

Table 04 Reference Document Example

Note—the following directory format isor the electronic files that are part of the deliverable.



END OF SECTION