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EXECUTIVE SUMMARY

The long-term benefits of correct ongoing system operation greatly outweigh the initial commissioning process. Implementation of preventive maintenance, re-commissioning, and ongoing calibrations is a cost effective path to ensure the building's mechanical, lighting, and domestic hot water systems function as designed, meet the needs of the building operation, and that energy savings are realized throughout the life-cycle of the project building. If the components of this Systems Manual are followed by the operational staff the results lead to improved occupant well-being + productivity as well as prolonging the life of the commissioned equipment. Finally, above and beyond the initial commissioning process prior to building occupancy, the Systems Manual gives the operating staff the direction needed to maintain the equipment as defined by "Industry Best Practices".

The intent of the systems manual is to provide the operating staff the information needed to understand and optimally operate the commissioned systems. The manual includes the following sections:

- Resolution Plan
- List of Equipment Commissioned
- Commissioning Summary Report
 - Commissioning Plan
- As-Built Sequence of Operations
- Commissioning Summary Report
- Recommended Preventative Maintenance Plan & IOM's
- Recommended Schedule for Re-Commissioning
- Blank Functional Testing Forms
- Recommended Calibration Schedule
- Record Drawings
- Completed Test Reports
- Submittals

The expected annual energy consumption of the project building has been determined through an energy simulation model. It is recommended, and may be required by a Measurement & Verification Plan, to compare the first year of energy consumption to the expected energy consumption.

SUMMARY

is a sustainable consulting firm located in Milwaukee, Wisconsin. prepared this document for , Inc. The Commissioning Authority (CxA) and author of this report is , CxA.

The project building is a 707,653 square foot processing and distribution facility located in and consists of manufacturing facility and office. has set out to bring an awareness level for sustainability to a higher level by using the LEED Green Building Rating System as a benchmark for the project's achievements. will set a goal of LEED Silver for the project.

This report has been written to comply with the requirements of Energy & Atmosphere Prerequisite - Fundamental Commissioning, and Energy & Atmosphere Credit – Enhanced Commissioning, as outlined by the LEED for New Construction V4 Rating System.

Commissioning is the process of understanding the requirements of the owner through the development of the Owner's Project Requirements (OPR) and designing a facility that meets these needs through the creation of the Basis of Design (BOD). The CxA has reviewed the OPR and BOD for clarity and completeness. The relevant party has been held responsible for modifications to the OPR or BOD under the guidance of the CxA. The CxA has incorporated the commissioning requirements into the construction documents such that bidding contractors are aware of their roles and responsibilities with respect to the commissioning process. Finally, the CxA has verified the building's energy-related systems perform in accordance with the design intent and has included the findings within a written summary commissioning report.

The goal of the commissioning report is to ensure the project's energy related systems are installed, calibrated and perform according to the owner's project requirements, basis of design and construction documents. Benefits of commissioning include reduced energy use, lower operating costs, reduced contractor callbacks, better building documentation, improved occupant productivity and verification that the systems perform in accordance with the owner's project requirements.

SUMMARY

Commissioning process activities have been completed for the following energy-related systems:

- Heating, ventilating, air conditioning and refrigeration (HVAC&R) systems (mechanical and passive) and associated controls:
 - Air Handling Units + Associated Condensing Units
 - Boilers + Associated Pumps
 - Chillers
 - Make-Up Air Units
 - Variable Air Volume System
 - Fan Powered Induction with Reheat
 - DX Rooftop Air Conditioning Unit
 - Split System Cassette Heat Pumps
 - Supply and Exhaust Fans
 - Electric Heaters
 - Humidifiers
 - Motor Operated Dampers
- Lighting and daylighting controls
 - Occupancy Sensors
 - On/off Switches
- Domestic hot water system
 - Natural Gas Water Heater
 - Electric
 - Plumbing Fixtures
 - Domestic Water Pumps
- The project building does not encompass Renewable Energy Systems
- Other systems commissioned

In conclusion, this report contains the final OPR, BOD and commissioning plan implemented by the commissioning team. The completed Pre-Functional Checklists, Functional Testing Reports, and Issues Log can be found within the Appendix of this report. The Issues Log has been created to document all items found out of compliance with the Basis of Design. Issues that have been remedied have been noted as “resolved” and date of verification has been included. Issues that are still outstanding are written in red.

A summary commissioning report has been uploaded to LEED Online to document compliance.

SYSTEMS MANUAL

LIST OF EQUIPMENT COMMISSIONED

- Air Handling Units

- UAHU101
- UAHU201
- UAHU202
- UAHU203
- UAHU204
- UAHU301
- UAHU302
- UAHU303
- UAHU304
- UAHU305
- UAHU306
- UAHU307
- UAHU308
- UAHU309
- UAHU310
- UAHU311
- UAHU312
- UAHU313
- UAHU314

- Make-up Air Units

- UMAU201
 - UMAU202
 - UMAU203
 - UMAU204
 - UMAU205
 - UMAU206
 - UMAU207
 - UMAU208
 - UMAU209
 - UMAU210
 - UMAU211
 - UMAU301
 - UMAU302
 - UMAU303
 - UMAU304
 - UMAU305
 - UMAU401
 - UMAU402
 - UMAU403
-

SYSTEMS MANUAL

- UMAU404
 - Chillers
 - UCH001
 - UCH002
 - UCH003
 - Boilers
 - UBLR001
 - UBLR002
 - UBLR003
 - Cooling Towers
 - UCT001
 - UCT002
 - UCT003
 - VAVs
 - UVAV021
 - UVAV101
 - UVAV102
 - UVAV103
 - UVAV104
 - UVAV105
 - UVAV106
 - UVAV107
 - UVAV108
 - UVAV109
 - UVAV110
 - UVAV111
 - UVAV112
 - UVAV113
 - UVAV114
 - UVAV115
 - Fan Powered Induction Units – HW Reheat
 - UPIU101
 - UPIU102
 - UPIU103
 - UPIU104
 - UPIU105
 - UPIU106
-

SYSTEMS MANUAL

- UPIU107
 - UPIU108
 - UPIU201
 - UPIU202
 - UPIU203
 - UPIU204
 - UPIU205
 - UPIU206
 - UPIU207
 - UPIU208
 - UPIU209
 - UPIU210
 - UPIU211
 - UPIU212
 - UPIU213
 - UPIU214
 - UPIU215
 - UPIU216
 - UPIU217
 - UPIU218
 - UPIU219
 - Exhaust Fans
 - UEF101
 - UEF102
 - UEF201
 - UEF202
 - UEF204
 - UEF205
 - UEF206
 - UEF207
 - UEF208
 - UEF209
 - UEF210
 - UEF211
 - UEF212
 - UEF213
 - UEF214
 - UEF215
 - UEF301
 - UEF302
 - UEF303
-

SYSTEMS MANUAL

- UEF311
 - UEF401
 - UEF402
 - UEF403
 - UEF404
 - UEF405
 - UEF406
 - UEF407
 - Supply Fans
 - UBAF001
 - UBAF002
 - UBAF003
 - UBAF004
 - UBAF005
 - UBAF006
 - UBAF007
 - UBAF008
 - UBAF009
 - UBAF010
 - UBAF011
 - UBAF012
 - DX Rooftop Units
 - URTU201
 - URTU202
 - URTU203
 - URTU301
 - URTU302
 - URTU401
 - URTU402
 - Electric Heaters
 - UEH101
 - UEH102
 - UEH103
 - Pumps
 - UCHP001
 - UCHP002
 - UCHP003
 - UCHP004
-

SYSTEMS MANUAL

- UCHP005
 - UCHP006
 - UCWP001
 - UCWP002
 - UCWP003
 - UHWP001
 - UHWP002
 - UHWP003
 - UBCP001
 - UBCP002
 - UBCP003

 - Split System with Heat Pump
 - UOAC101
 - UIAC101
 - Electrical Systems
 - Lighting
 - Distribution
 - Domestic Hot Water Systems
 - Hot Water Tanks
 - Fixtures
-

SUMMARY COMMISSIONING REPORT

RESOLUTION PLAN

It is the responsibility of the owner to ensure the HVAC, controls and electric contractors resolve the open items detailed in the Issues Log. The Construction Manager will require all contractors to complete the outstanding items prior to final payment. The HVAC, controls and electrical contractors will agree to resolve the outstanding items in a timely manner at no cost to the owner.

The owner will ensure that issues involving equipment / specification disparities will be resolved. The owner will confirm with the engineer of record final design. The engineer will rule if the installed equipment / sequence shall remain. Items requiring changes in documentation will be performed by the respective contractor responsible for the associated equipment.

Once deficiencies are resolved the MEP contractors will provide training of installed systems to the building engineer. This training shall include the sequence of operation for each system as well as industry / manufacturer recommended maintenance procedures.

CONCLUSIONS

The installed, as-operating energy-related systems meet the Owners Project Requirements, Basis of Design, and contract documents. All future additions / modifications will follow the commissioning requirements implemented during the initial construction.

The Commissioning Authority (CxA) recommends that the building owner documents the energy performance and implement sustainable policies and plans for the following:

- Building Exterior and Hardscape
- Integrated Pest Management
- Erosion Control
- Landscape management
- Purchasing
- Waste
- Green Cleaning

Upon implementation of the plans, the documentation of building energy consumption, CxA recommends the building owner pursue LEED EBOM Certification to further increase their awareness and commitment to building sustainability.

DEFINITIONS

Acceptance

A formal action, taken by a person with appropriate authority (which may or may not be contractually defined) to declare that some aspect of the project meets the defined requirements, thus permitting subsequent activities to proceed.

Basis of Design

A document that records the concepts, calculations, decisions, and product selections used to meet the owner's project requirements and to satisfy applicable regulatory requirements, standards and guidelines. The document includes both narrative descriptions and lists of individual items that support the design process.

Checklists

Verification checklists that are developed and used during all phases of the commissioning process to verify that the owner's project requirements are being achieved. This includes checklists for general verification, plus testing, training and other specific requirements.

Commissioning

A systematic process of ensuring that all building systems perform according to the owner's project requirements, design intent, basis of design and contract documents. The process includes verification of installed mechanical systems and owner training.

Commissioning Authority

An entity identified by the owner who leads, plans, schedules and coordinates the commissioning team to implement the commissioning process. May also be referred to as the Commissioning Agent.

Commissioning Plan

A document that outlines the organization, schedule, allocation of resources, and documentation requirements of the commissioning process.

Commissioning Process

A quality focused process for enhancing the delivery of a project. The process focuses upon verifying and documenting that the facility and all of its systems and assemblies are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

Commissioning Manual

A document that records the activities and results of the commissioning process.

DEFINITIONS

Commissioning Team

The individuals who through coordinated actions are responsible for implementing the commissioning process.

Construction Documents

These include a wide range of documents that will vary from project to project and with the owner's needs, regulations, laws and municipalities. Construction documents usually include the project manual (specifications), plans (drawings), and general terms and conditions of the contract.

Coordination Drawings

Drawings showing the work of all trades to illustrate that equipment can be installed in the space allocated without compromising equipment function or access for maintenance or replacement. These drawings graphically illustrate and dimension manufacturer's recommended maintenance clearances.

Design Intent Documentation

Design intent document is a design phase narrative that explains how proposed designs responded to the owner's project requirements and how the building is intended to operate.

Owner's Project Requirements

A written document that details the functional requirements of a project and the expectations of how it will be used and operated. These include project goals, mechanical equipment efficiencies, success criteria and supporting information.

Test Procedure

A written protocol that defines methods, personnel, and expectations for tests conducted on components, equipment, assemblies, systems and interface among systems.

Training Plan

A written document that details the expectations, schedule, budget and deliverables of the commissioning process activities related to training of project operating and maintenance personnel, users and occupants.

Verification

The process by which specific documents, components, equipment, assemblies, systems and interface among systems are confirmed to comply with the criteria described in the owner's project requirements.

Construction Issues

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|------------------------|----------|---|----------|------------|
| CHK-4349-5 | Supply Static Pressure reads -0.05 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU314 - Air Handling Unit - Packaging near K-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4349-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand .. Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU314 - Air Handling Unit - Packaging near K-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4349-3 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU314 - Air Handling Unit - Packaging near K-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4349-2 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU314 - Air Handling Unit - Packaging near K-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4349-1 | RA AFMS is not installed | CLOSED AND VERIFIED BY | | UAHU314 - Air Handling Unit - Packaging near K-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4348-6 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU313 - Air Handling Unit - Packaging near G-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4348-5 | Fan VFDs do not shut down with a smoke alarm when placed in hand | VENDOR SUB COMPLETE | | UAHU313 - Air Handling Unit - Packaging near G-15 - 54T 20k cfm | | 12/25/2019 |
| CHK-4348-4 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU313 - Air Handling Unit - Packaging near G-15 - | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|------------------------|----------|---|----------|------------|
| | | | | 54T 20k cfm | | |
| CHK-4347-6 | Supply Static Pressure reads -0.60 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4347-5 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4347-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand | VENDOR SUB COMPLETE | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4347-3 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4346-5 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU311 - Air Handling Unit - Packaging near G-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4346-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand | VENDOR SUB COMPLETE | | UAHU311 - Air Handling Unit - Packaging near G-13 - 54T 20k cfm | | 12/25/2019 |
| CHK-4345-5 | Supply Static Pressure reads -0.45 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU310 - Air Handling Unit - Packaging near K-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4345-4 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU310 - Air Handling Unit - | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|--|----------|------------|
| | | | | Packaging near K-11 - 54T 20k cfm | | |
| CHK-4345-3 | Fan VFDs do not shut down with a smoke alarm when placed in hand .. | VENDOR SUB COMPLETE | | UAHU310 - Air Handling Unit - Packaging near K-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4345-2 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU310 - Air Handling Unit - Packaging near K-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4344-5 | Supply Static Pressure reads -0.45 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU309 - Air Handling Unit - Packaging near G-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4341-6 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4339-6 | Humidifier Installation not complete | VENDOR SUB COMPLETE | | UAHU304 - Air Handling Unit - Packaging near K-4 - 54T 20k cfm | | 12/25/2019 |
| CHK-4344-4 | Humidifier Installation not complete | VENDOR SUB COMPLETE | | UAHU309 - Air Handling Unit - Packaging near G-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4344-3 | Fan VFDs do not shut down with a smoke alarm when placed in hand . Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU309 - Air Handling Unit - Packaging near G-11 - 54T 20k cfm | | 12/25/2019 |
| CHK-4343-4 | Fan VFDs do not shut down with a | VENDOR SUB | | UAHU308 - | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|---|----------|------------|
| | smoke alarm when placed in hand . Clarify what is proper response? | COMPLETE | | Air Handling Unit - Packaging near K-9 - 54T 20k cfm | | |
| CHK-4342-5 | Supply Static Pressure reads -0.35 inwc with supply fan VFD at 100% | VENDOR SUB COMPLETE | | UAHU307 - Air Handling Unit - Packaging near G-9 - 54T 20k cfm | | 12/25/2019 |
| CHK-4342-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand . Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU307 - Air Handling Unit - Packaging near G-9 - 54T 20k cfm | | 12/25/2019 |
| CHK-4342-3 | OA AFMS is not calibrated | VENDOR SUB COMPLETE | | UAHU307 - Air Handling Unit - Packaging near G-9 - 54T 20k cfm | | 12/25/2019 |
| CHK-4341-5 | Supply Static Pressure reads -0.60 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4341-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand .. Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4341-3 | RA AFMS is not installed | FOR REVIEW | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4341-2 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|---|----------|------------|
| CHK-4340-6 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4340-5 | Fan VFDs do not shut down with a smoke alarm when placed in hand .Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4340-4 | Humidifier install is incomplete | VENDOR SUB COMPLETE | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4340-3 | Factory RA AFMS is not installed | VENDOR SUB COMPLETE | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/25/2019 |
| CHK-4339-5 | Supply Static Pressure reads -0.50 inwc with supply fan VFD at 100% | CLOSED AND VERIFIED BY | | UAHU304 - Air Handling Unit - Packaging near K-4 - 54T 20k cfm | | 12/25/2019 |
| CHK-4339-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand . Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU304 - Air Handling Unit - Packaging near K-4 - 54T 20k cfm | | 12/25/2019 |
| CHK-4338-4 | Humidifier install is not complete | VENDOR SUB COMPLETE | | UAHU303 - Air Handling Unit - Packaging near G-4 - 54T 20k cfm | | 12/25/2019 |
| CHK-4338-3 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU303 - Air Handling Unit - Packaging near G-4 - | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|--|----------|------------|
| | | | | 54T 20k cfm | | |
| CHK-4338-2 | Fan VFDs do not shut down with a smoke alarm when placed in hand. Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU303 - Air Handling Unit - Packaging near G-4 - 54T 20k cfm | | 12/25/2019 |
| CHK-4336-5 | RA AFMS is not installed | VENDOR SUB COMPLETE | | UAHU301 - Air Handling Unit - Packaging near G-2 - 54T 20k cfm | | 12/25/2019 |
| CHK-4337-6 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/25/2019 |
| CHK-4337-5 | SA Humidity sensor reads -25. | VENDOR SUB COMPLETE | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/25/2019 |
| CHK-4337-4 | Fan VFDs do not shut down with a smoke alarm when placed in hand .. Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/25/2019 |
| CHK-4336-4 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU301 - Air Handling Unit - Packaging near G-2 - 54T 20k cfm | | 12/25/2019 |
| CHK-4334-5 | Fan VFDs do not shut down when in hand with a smoke alarm.. Clarify proper response | VENDOR SUB COMPLETE | | UAHU203 - Air Handling Unit - Raw Matl Whse central - 37T 15250 cfm | | 12/25/2019 |
| CHK-4335-2 | Relief AFMS not installed | CLOSED AND VERIFIED BY | | UAHU204 - Air Handling Unit - Raw | | 12/25/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|---|----------|------------|
| | | | | Matl Whse east - 37T 15250 cfm | | |
| CHK-4333-4 | AHU has no supply temperature increase with HW valve at 100% open | VENDOR SUB COMPLETE | | UAHU202 - Air Handling Unit - Raw Matl Whse west - 37T 15250 cfm | | 12/25/2019 |
| CHK-4333-3 | OA AFMS is not calibrated | VENDOR SUB COMPLETE | | UAHU202 - Air Handling Unit - Raw Matl Whse west - 37T 15250 cfm | | 12/25/2019 |
| CHK-4331-3 | filter dp sensor reads 0 or negative value | CLOSED AND VERIFIED BY | | UAHU101 - Air Handling Unit - Main Office - 100T 24k cfm | | 12/25/2019 |
| CHK-4341-1 | There is no temperature gauges installed on the supply/return chilled pipes located within the unit's doghouse. | VENDOR SUB COMPLETE | | UAHU306 - Air Handling Unit - Packaging near K-7 - 54T 20k cfm | | 12/23/2019 |
| CHK-4340-2 | There is no temperature gauge installed on the supply chilled water pipe located within the unit's doghouse. | FOR REVIEW | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/23/2019 |
| CHK-4339-3 | There is no temperature gauges installed on the supply/return chilled and hot water pipes located within the unit's doghouse. | VENDOR SUB COMPLETE | | UAHU304 - Air Handling Unit - Packaging near K-4 - 54T 20k cfm | | 12/23/2019 |
| CHK-5233-1 | current transducer shows fan off with unit running. CT needs adjustment | VENDOR SUB COMPLETE | | UEF302 - Chiller Room Exhaust Fan | | 12/20/2019 |
| CHK-5234-1 | current transducer shows fan off with unit running. CT needs adjustment | VENDOR SUB COMPLETE | | UEF303 - Chiller Room Refrigerant Exhaust Fan | | 12/20/2019 |
| CHK-5235-1 | current transducer shows fan off | FOR REVIEW | | UEF311 - | | 12/20/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|---|----------|------------|
| | with unit running. CT needs adjustment | | | Boiler Room Exhaust Fan | | |
| CHK-5232-1 | Fan status CT not installed | VENDOR SUB COMPLETE | | UEF301 - Chiller Room Exhaust Fan | | 12/20/2019 |
| CHK-5303-1 | What is the condenser water pump speed control sequence? Pumps currently operate at fixed speed | CLOSED AND VERIFIED BY | | UCWP001 - Condenser Water Pump 1 | | 12/20/2019 |
| CHK-5286-1 | Boiler 2 has delayed interlock which holds unit off. Requires reset at boiler panel and the BAS. | VENDOR SUB COMPLETE | | UBLR002 - Boiler 2 | | 12/20/2019 |
| CHK-4344-2 | SA AFMS is not calibrated | VENDOR SUB COMPLETE | | UAHU309 - Air Handling Unit - Packaging near G-11 - 54T 20k cfm | | 12/20/2019 |
| CHK-4343-2 | RA AFMS is not installed | CLOSED AND VERIFIED BY | | UAHU308 - Air Handling Unit - Packaging near K-9 - 54T 20k cfm | | 12/20/2019 |
| CHK-4343-3 | OA AFMS is not calibrated | VENDOR SUB COMPLETE | | UAHU308 - Air Handling Unit - Packaging near K-9 - 54T 20k cfm | | 12/20/2019 |
| CHK-4343-1 | Supply static pressure sensor reads -0.25 | CLOSED AND VERIFIED BY | | UAHU308 - Air Handling Unit - Packaging near K-9 - 54T 20k cfm | | 12/20/2019 |
| CHK-4337-3 | Return Fan does not run | CLOSED AND VERIFIED BY | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/20/2019 |
| CHK-4339-1 | Return AFMS not installed | FOR REVIEW | | UAHU304 - Air Handling Unit - Packaging | | 12/20/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|---|----------|------------|
| | | | | near K-4 - 54T 20k cfm | | |
| CHK-4339-2 | OA AFMS is not calibrated | FOR REVIEW | | UAHU304 - Air Handling Unit - Packaging near K-4 - 54T 20k cfm | | 12/20/2019 |
| CHK-4337-2 | RA AFMS is not installed | CLOSED AND VERIFIED BY | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/20/2019 |
| CHK-5306-2 | Pump displays status failure at the BAS. Possible cause is the setting on the pump status current transducer | VENDOR SUB COMPLETE | | UHWP001 - HHW Secondary Loop Pump 1 | | 12/20/2019 |
| CHK-5306-3 | Pump display status failure. Possible cause is the setting on the pump status current transducer | VENDOR SUB COMPLETE | | UHWP001 - HHW Secondary Loop Pump 1 | | 12/20/2019 |
| CHK-5306-4 | Pump display status failure. Possible cause is the setting on the pump status current transducer | VENDOR SUB COMPLETE | | UHWP001 - HHW Secondary Loop Pump 1 | | 12/20/2019 |
| CHK-5285-4 | Calculated HW Supply setpoint should be added to the graphic for user reference | VENDOR SUB COMPLETE | | UBLR001 - Boiler 1 | | 12/20/2019 |
| CHK-5306-1 | Value jumps around eratically. Was not an issue during initial test. | VENDOR SUB COMPLETE | | UHWP001 - HHW Secondary Loop Pump 1 | | 12/20/2019 |
| CHK-5288-2 | Chiller plant sequence was not commissioned under full system operation. Additional review during post occupancy visit | FOR REVIEW | | UCH001 | | 12/19/2019 |
| CHK-5288-3 | Chilled water system graphics are not complete. Information needs to be verified on the page | VENDOR SUB COMPLETE | | UCH001 | | 12/19/2019 |
| CHK-5297-1 | Pump integration is complete but graphic is not in place. | VENDOR SUB COMPLETE | | UCHP004 - CHW Secondary Loop Pump 1 | | 12/19/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|------------------------|----------|---|----------|------------|
| CHK-5441-1 | OA AFMS not installed | FOR REVIEW | | URTU302 - Packaged RTU 13T 6000 cfm no heat Elec Room single zone VAV | | 12/19/2019 |
| CHK-5440-2 | AFMS is not installed | FOR REVIEW | | URTU301 - Packaged RTU 13T 6000 cfm no heat Elec Room single zone VAV | | 12/19/2019 |
| CHK-5441-2 | The unit runs in cooling mode continuously. Does not respond to thermostat input or BAS setpoint. | VENDOR SUB COMPLETE | | URTU302 - Packaged RTU 13T 6000 cfm no heat Elec Room single zone VAV | | 12/19/2019 |
| CHK-5288-1 | Refrigerant monitor system non installed | VENDOR SUB COMPLETE | | UCH001 | | 12/19/2019 |
| CHK-5439-1 | Thermostat display doesn't match measurement | FOR REVIEW | | URTU201 - Packaged RTU 3T 1000 cfm gas heat Bean Receiving single zone CAV | | 12/19/2019 |
| CHK-5440-1 | The BAS zone temp doesn't reflect the thermostat or the measurement. | VENDOR SUB COMPLETE | | URTU301 - Packaged RTU 13T 6000 cfm no heat Elec Room single zone VAV | | 12/19/2019 |
| CHK-5443-2 | The BAS zone temp doesn't reflect the thermostat and the measurement. | VENDOR SUB COMPLETE | | URTU402 - Packaged RTU 3T 1600 cfm gas heat DC North Office single zone VAV | | 12/19/2019 |
| CHK-5442-4 | Supply air temperature increases until the zone temperature reach | FOR REVIEW | | URTU401 - Packaged | | 12/19/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|------------------------|----------|--|----------|------------|
| | 75 F. | | | RTU 4T 1900 cfm gas heat DC Shipping Office single zone VAV | | |
| CHK-5442-3 | The BAS zone temp doesn't reflect the thermostat and the measurement. | FOR REVIEW | | URTU401 - Packaged RTU 4T 1900 cfm gas heat DC Shipping Office single zone VAV | | 12/19/2019 |
| CHK-5443-1 | Supply AFMS is not installed | FOR REVIEW | | URTU402 - Packaged RTU 3T 1600 cfm gas heat DC North Office single zone VAV | | 12/19/2019 |
| CHK-5285-3 | Boiler manager is not used to control boiler systems. This also prevents software integration of boiler points. | VENDOR SUB COMPLETE | | UBLR001 - Boiler 1 | | 12/19/2019 |
| CHK-5249-1 | Unit has a noticeable vibration when running. Unit was shut down after Cx testing | FOR REVIEW | | UMAU207 - Make Up Air Unit 15,000 cfm, 80/20% recirc DeGas | | 12/19/2019 |
| CHK-5249-2 | Supply AFMS is not calibrated | FOR REVIEW | | UMAU207 - Make Up Air Unit 15,000 cfm, 80/20% recirc DeGas | | 12/19/2019 |
| CHK-5252-1 | Filters are sucked in. | VENDOR SUB COMPLETE | | UMAU210 - Make Up Air Unit 15,000 cfm, 100% OA, VAV Roasting | | 12/19/2019 |
| CHK-5252-2 | Unable to test due to power issue at unit | VENDOR SUB COMPLETE | | UMAU210 - Make Up Air Unit 15,000 cfm, 100% OA, VAV Roasting | | 12/19/2019 |
| CHK-5251-1 | Unable to test the unit due to | VENDOR SUB | | UMAU209 - | | 12/19/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|-----------------------------------|------------------------|----------|--|----------|------------|
| | power issue | COMPLETE | | Make Up Air Unit 15,000 cfm, 100% OA, VAV Roasting | | |
| CHK-5248-1 | Unable to test due to power issue | VENDOR SUB COMPLETE | | UMAU206 - Make Up Air Unit 15,000 cfm, 80/20% recirc Roasting | | 12/19/2019 |
| CHK-5444-1 | OA AFMS not installed | FOR REVIEW | | URTU202 - Packaged RTU 5T 1600 cfm gas heat Raw Matl Receiving Office multi- zone VAV | | 12/19/2019 |
| CHK-5444-2 | Value not on graphic | VENDOR SUB COMPLETE | | URTU202 - Packaged RTU 5T 1600 cfm gas heat Raw Matl Receiving Office multi- zone VAV | | 12/19/2019 |
| CHK-5445-1 | Noise from motor when unit runs | FOR REVIEW | | URTU203 - Packaged RTU 3.8T 1400 cfm gas heat CP Control Room multi-zone VAV | | 12/19/2019 |
| CHK-5445-2 | OA AFMS is not installed | FOR REVIEW | | URTU203 - Packaged RTU 3.8T 1400 cfm gas heat CP Control Room multi-zone VAV | | 12/19/2019 |
| CHK-5445-3 | Value is not graphic | VENDOR SUB COMPLETE | | URTU203 - Packaged RTU 3.8T 1400 cfm gas heat CP | | 12/19/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|------------------------|----------|---|----------|------------|
| | | | | Control Room multi-zone VAV | | |
| CHK-5445-4 | Value is not on graphics | VENDOR SUB COMPLETE | | URTU203 - Packaged RTU 3.8T 1400 cfm gas heat CP Control Room multi-zone VAV | | 12/19/2019 |
| CHK-5445-5 | Sensor is loose from mounting | FOR REVIEW | | URTU203 - Packaged RTU 3.8T 1400 cfm gas heat CP Control Room multi-zone VAV | | 12/19/2019 |
| CHK-5442-1 | Factory supply sensor not installed | VENDOR SUB COMPLETE | | URTU401 - Packaged RTU 4T 1900 cfm gas heat DC Shipping Office single zone VAV | | 12/19/2019 |
| CHK-5442-2 | Supply AFMS is not installed | FOR REVIEW | | URTU401 - Packaged RTU 4T 1900 cfm gas heat DC Shipping Office single zone VAV | | 12/19/2019 |
| CHK-5246-1 | Supply AFMS is not calibrated | FOR REVIEW | | UMAU204 - Make Up Air Unit 10,000 cfm, 80/20% recirc Partner Coffee | | 12/18/2019 |
| CHK-5255-1 | filter status Transducer is not installed | FOR REVIEW | | UMAU302 - Make Up Air Unit 15,000 cfm, 80/20% recirc Boiler room | | 12/18/2019 |
| CHK-5245-1 | Supply AFMS NEEDS CALIBRATION | FOR REVIEW | | UMAU203 - Make Up Air | | 12/18/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|------------------------|----------|--|----------|------------|
| | | | | Unit 12,000 cfm, 80/20% recirc Green Bean Storage | | |
| CHK-5287-2 | Hard wired lockout prevents boiler from starting. UBCP003 operating at 60 Hz. Occurred multiple times during day of testing | VENDOR SUB COMPLETE | | UBLR003 - Boiler 3 | | 12/19/2019 |
| CHK-5256-3 | Unit is not heating with command from BAS. Possible issue with local safeties | FOR REVIEW | | UMAU303 - Make Up Air Unit 40,000 cfm, 100% OA, VAV | | 12/19/2019 |
| CHK-5315-2 | Return air grille isn't sealed appropriately | FOR REVIEW | | UPIU107 - Powered Induction Unit | | 12/19/2019 |
| CHK-5477-5 | Conference room 1203 and 1226 do not have mid-level control (the original design was on/off/ mid-level) | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5477-6 | HR storage 1220 light cannot be turned off by the switch. | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5477-3 | Light switch at First Aid 1118 doesn't function. | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5477-4 | The light control located in restroom 1103 (by lobby west) does not work | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5477-2 | Two light fixtures are down at Workstation 1134 | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5477-1 | The light near the column K-2 (the wall between office and packaging) is broken. | FOR REVIEW | | U-Lighting | | 12/19/2019 |
| CHK-5311-2 | T-stat is covered by the refrigerator | IN PROGRESS | | UPIU103 - Powered Induction Unit | | 12/18/2019 |
| CHK-5253-1 | AFMS needs calibration | VENDOR SUB COMPLETE | | UMAU211 - Make Up Air Unit 15,000 cfm, 100% OA, VAV Grinding | | 12/18/2019 |
| CHK-5250-1 | Supply air AFMS is not calibrated | FOR REVIEW | | UMAU208 - Make Up Air | | 12/18/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|--|----------|------------|
| | | | | Unit 15,000 cfm, 80/20% recirc Grinding | | |
| CHK-5257-2 | Power supply wires have come loose from wire tie mounts | FOR REVIEW | | UMAU304 - Make Up Air Unit 40,000 cfm, 100% OA, VAV | | 12/18/2019 |
| CHK-5247-1 | Filter is sucked in | VENDOR SUB COMPLETE | | UMAU205 - Make Up Air Unit 25,000 cfm, 80/20% recirc Trash/ Recycle | | 12/18/2019 |
| CHK-5287-1 | UBCP003 drive display has failed | FOR REVIEW | | UBLR003 - Boiler 3 | | 12/18/2019 |
| CHK-5256-2 | Damper endswitch status does not alarm | FOR REVIEW | | UMAU303 - Make Up Air Unit 40,000 cfm, 100% OA, VAV | | 12/18/2019 |
| CHK-5316-2 | Effective heat/cool setpoints are incorrect | FOR REVIEW | | UPIU108 - Powered Induction Unit | | 12/18/2019 |
| CHK-5313-2 | Not stable. Off during occupied mode. | VENDOR SUB COMPLETE | | UPIU105 - Powered Induction Unit | | 12/18/2019 |
| CHK-5318-2 | The valve is on, but the temperature is not increased . Effective heat/cool setpoints are incorrect. | CLOSED AND VERIFIED BY | | UPIU110 - Powered Induction Unit | | 12/18/2019 |
| CHK-5285-2 | Boiler is producing 125 deg, building supply reads 105 with primary pumps at 60Hz. Building Supply temp is lower than expected value. | VENDOR SUB COMPLETE | | UBLR001 - Boiler 1 | | 12/18/2019 |
| CHK-5256-1 | BAS graphic is incomplete. Data is not present | CLOSED AND VERIFIED BY | | UMAU303 - Make Up Air Unit 40,000 cfm, 100% OA, VAV | | 12/18/2019 |
| CHK-5257-1 | BAS graphic is incomplete. Data is not present | VENDOR SUB COMPLETE | | UMAU304 - Make Up Air Unit 40,000 | | 12/18/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|---|----------|------------|
| | | | | cfm, 100% OA, VAV | | |
| CHK-5258-1 | BAS graphic is incomplete. Data is not present | VENDOR SUB COMPLETE | | UMAU305 - Make Up Air Unit 40,000 cfm, 100% OA, VAV | | 12/18/2019 |
| CHK-5308-1 | Issue with pump coupling or coupling cover is loose. Excessive noise and vibration from the coupling. | VENDOR SUB COMPLETE | | UHWP002 - HHW Secondary Loop Pump 2 | | 12/18/2019 |
| CHK-5285-1 | Unit has failed flow switch. | FOR REVIEW | | UBLR001 - Boiler 1 | | 12/18/2019 |
| CHK-5259-1 | Filter is sucked into damper | VENDOR SUB COMPLETE | | UMAU401 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5260-2 | Filter is sucked into damper | VENDOR SUB COMPLETE | | UMAU402 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5260-3 | OA AFMS is configuration is not complete | FOR REVIEW | | UMAU402 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5260-1 | Building pressure sensor is not installed | CLOSED AND VERIFIED BY | | UMAU402 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5261-2 | OA AFMS needs config parameters set. | FOR REVIEW | | UMAU403 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5261-3 | Unit has one filter sucked in | VENDOR SUB COMPLETE | | UMAU403 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5261-1 | Building pressure sensor not installed | CLOSED AND VERIFIED BY | | UMAU403 - Make Up Air | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|------------------------|----------|--|----------|------------|
| | | | | Unit 12,000 cfm, 100% OA, CAV | | |
| CHK-5262-3 | OA AFMS configuration is not complete. | FOR REVIEW | | UMAU404 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5262-2 | Filters are sucked in | VENDOR SUB COMPLETE | | UMAU404 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-5239-1 | Disconnect labeled URTU402 | FOR REVIEW | | UEF404 - Finished Goods Whse Exhaust Fan | | 12/17/2019 |
| CHK-5262-1 | Building static pressure sensor not installed | FOR REVIEW | | UMAU404 - Make Up Air Unit 12,000 cfm, 100% OA, CAV | | 12/17/2019 |
| CHK-4331-2 | Dog house door latch needs adjustment. Unit does not compress the seal when closed | FOR REVIEW | | UAHU101 - Air Handling Unit - Main Office - 100T 24k cfm | | 12/17/2019 |
| CHK-4331-1 | OA AFMS not calibrated | FOR REVIEW | | UAHU101 - Air Handling Unit - Main Office - 100T 24k cfm | | 12/17/2019 |
| CHK-4332-3 | Water in the control panel. Possible damage to controller | FOR REVIEW | | UAHU201 - Air Handling Unit - Maintenance -24T 7000 cfm | | 12/17/2019 |
| CHK-4332-4 | Latch and door handle are loose for relief fan compartment door | FOR REVIEW | | UAHU201 - Air Handling Unit - Maintenance -24T 7000 cfm | | 12/17/2019 |
| CHK-4332-1 | building static pressure sensor Install is not complete | FOR REVIEW | | UAHU201 - Air Handling | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|------------------------|----------|--|----------|------------|
| | | | | Unit - Maintenance -24T 7000 cfm | | |
| CHK-4332-2 | Supply static pressure install is not complete | FOR REVIEW | | UAHU201 - Air Handling Unit - Maintenance -24T 7000 cfm | | 12/17/2019 |
| CHK-4333-1 | building static pressure sensor Install is incomplete | FOR REVIEW | | UAHU202 - Air Handling Unit - Raw Matl Whse west - 37T 15250 cfm | | 12/17/2019 |
| CHK-5330-1 | Thermostat is not provided | FOR REVIEW | | UPIU212 - Powered Induction Unit | | 12/17/2019 |
| CHK-5335-1 | Under construction, thermostat is not provided. | FOR REVIEW | | UPIU217 - Powered Induction Unit | | 12/17/2019 |
| CHK-5336-1 | Under construction, thermostat is not provided. | FOR REVIEW | | UPIU218 - Powered Induction Unit | | 12/17/2019 |
| CHK-5337-1 | Under construction, thermostat is not provided. | FOR REVIEW | | UPIU219 - Powered Induction Unit | | 12/17/2019 |
| CHK-5329-1 | Thermostat is not provided(solved) | VENDOR SUB COMPLETE | | UPIU211 - Powered Induction Unit | | 12/17/2019 |
| CHK-5332-1 | Thermostat is not provided (solved) | VENDOR SUB COMPLETE | | UPIU214 - Powered Induction Unit | | 12/17/2019 |
| CHK-5331-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU213 - Powered Induction Unit | | 12/17/2019 |
| CHK-4334-1 | Building Static pressure tubing install not complete | VENDOR SUB COMPLETE | | UAHU203 - Air Handling Unit - Raw Matl Whse central - 37T 15250 cfm | | 12/17/2019 |
| CHK-4334-2 | Supply static pressure tubing | VENDOR SUB | | UAHU203 - | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------|----------|---|----------|------------|
| | install not complete | COMPLETE | | Air Handling Unit - Raw Matl Whse central - 37T 15250 cfm | | |
| CHK-4334-3 | OA AFMS Calibration is not complete | VENDOR SUB COMPLETE | | UAHU203 - Air Handling Unit - Raw Matl Whse central - 37T 15250 cfm | | 12/17/2019 |
| CHK-4334-4 | Relief AFMS not installed | VENDOR SUB COMPLETE | | UAHU203 - Air Handling Unit - Raw Matl Whse central - 37T 15250 cfm | | 12/17/2019 |
| CHK-5334-1 | Thermostat is not installed (solved) | VENDOR SUB COMPLETE | | UPIU216 - Powered Induction Unit | | 12/17/2019 |
| CHK-5333-2 | The diffuser produces very loud noise. | FOR REVIEW | | UPIU215 - Powered Induction Unit | | 12/17/2019 |
| CHK-5333-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU215 - Powered Induction Unit | | 12/17/2019 |
| CHK-5328-1 | Thermostat is not stalled yet (solved) | VENDOR SUB COMPLETE | | UPIU210 - Powered Induction Unit | | 12/17/2019 |
| CHK-5327-1 | T stat for PIU209 is covered by furnitures. | IN PROGRESS | | UPIU209 - Powered Induction Unit | | 12/17/2019 |
| CHK-5325-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU207 - Powered Induction Unit | | 12/17/2019 |
| CHK-5326-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU208 - Powered Induction Unit | | 12/17/2019 |
| CHK-5324-1 | Fan is off (solved) | VENDOR SUB COMPLETE | | UPIU206 - Powered Induction Unit | | 12/17/2019 |
| CHK-5324-2 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU206 - Powered Induction Unit | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|---|----------|------------|
| CHK-4335-1 | OA AFMS Not calibrated | VENDOR SUB COMPLETE | | UAHU204 - Air Handling Unit - Raw Matl Whse east - 37T 15250 cfm | | 12/17/2019 |
| CHK-5323-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU205 - Powered Induction Unit | | 12/17/2019 |
| CHK-5321-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU203 - Powered Induction Unit | | 12/17/2019 |
| CHK-5322-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU204 - Powered Induction Unit | | 12/17/2019 |
| CHK-4346-3 | Unit not calibrated | VENDOR SUB COMPLETE | | UAHU311 - Air Handling Unit - Packaging near G-13 - 54T 20k cfm | | 12/17/2019 |
| CHK-5319-3 | No increase to the supply temperature when the valve is 100% on | VENDOR SUB COMPLETE | | UPIU201 - Powered Induction Unit | | 12/17/2019 |
| CHK-5319-2 | Fan is off | VENDOR SUB COMPLETE | | UPIU201 - Powered Induction Unit | | 12/17/2019 |
| CHK-5320-1 | Cannot override | FOR REVIEW | | UPIU202 - Powered Induction Unit | | 12/17/2019 |
| CHK-5320-2 | Cannot turn on/ override | VENDOR SUB COMPLETE | | UPIU202 - Powered Induction Unit | | 12/17/2019 |
| CHK-5319-1 | Fan is not on, damper open delayed | VENDOR SUB COMPLETE | | UPIU201 - Powered Induction Unit | | 12/17/2019 |
| CHK-4348-2 | Supply static pressure reads -1.1 inwc | CLOSED AND VERIFIED BY | | UAHU313 - Air Handling Unit - Packaging near G-15 - 54T 20k cfm | | 12/17/2019 |
| CHK-4348-3 | Outdoor pressure reference is not installed | VENDOR SUB COMPLETE | | UAHU313 - Air Handling | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|--|----------|------------|
| | | | | Unit - Packaging near G-15 - 54T 20k cfm | | |
| CHK-5312-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU104 - Powered Induction Unit | | 12/17/2019 |
| CHK-5313-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU105 - Powered Induction Unit | | 12/17/2019 |
| CHK-5314-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU106 - Powered Induction Unit | | 12/17/2019 |
| CHK-5315-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU107 - Powered Induction Unit | | 12/17/2019 |
| CHK-5316-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU108 - Powered Induction Unit | | 12/17/2019 |
| CHK-5317-2 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU109 - Powered Induction Unit | | 12/17/2019 |
| CHK-5309-3 | No increase to the supply temperature when the valve is 100% on | VENDOR SUB COMPLETE | | UPIU101 - Powered Induction Unit | | 12/17/2019 |
| CHK-5318-1 | Overriding PIU to occupied mode does not communicate with BAS (solved) | VENDOR SUB COMPLETE | | UPIU110 - Powered Induction Unit | | 12/17/2019 |
| CHK-4348-1 | RA AFMS not installed | CLOSED AND VERIFIED BY | | UAHU313 - Air Handling Unit - Packaging near G-15 - 54T 20k cfm | | 12/17/2019 |
| CHK-5311-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU103 - Powered Induction Unit | | 12/17/2019 |
| CHK-5310-2 | No increase to the supply temperature when the valve is 100% on | VENDOR SUB COMPLETE | | UPIU102 - Powered Induction Unit | | 12/17/2019 |
| CHK-5310-1 | No increase to the supply temperature when the valve is 100% on (solved) | VENDOR SUB COMPLETE | | UPIU102 - Powered Induction Unit | | 12/17/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|---|---------------------------|----------|--|----------|------------|
| CHK-4337-1 | Humidifier Install is not complete | VENDOR SUB COMPLETE | | UAHU302 - Air Handling Unit - Packaging near K-2 - 54T 20k cfm | | 12/17/2019 |
| CHK-5309-1 | Override off (solved) | VENDOR SUB COMPLETE | | UPIU101 - Powered Induction Unit | | 12/17/2019 |
| CHK-5309-2 | Override off within 10 seconds (solved) | VENDOR SUB COMPLETE | | UPIU101 - Powered Induction Unit | | 12/17/2019 |
| CHK-5317-1 | This PIU replaces VAV110 | FOR REVIEW | | UPIU109 - Powered Induction Unit | | 12/17/2019 |
| CHK-5267-1 | VAV105 is controlled by two T-stat because of the setting of temporary wall. One is on the east wall of the training room and another is on the column. The control logic between these two T-stat is not programmed appropriately. The T-stat on the wall doesn't control the VAV, but override unoccupied mode with the T-stat on the column. | VENDOR SUB COMPLETE | | UVAV105 - VAV Terminal | | 12/17/2019 |
| CHK-5270-1 | The VAV does not communicate with BAS (solved) | VENDOR SUB COMPLETE | | UVAV108 - VAV Terminal | | 12/17/2019 |
| CHK-4345-1 | RA AFMS not installed | CLOSED AND VERIFIED BY | | UAHU310 - Air Handling Unit - Packaging near K-11 - 54T 20k cfm | | 12/16/2019 |
| CHK-4347-2 | RA AFMS is not installed | CLOSED AND VERIFIED BY | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/16/2019 |
| CHK-4347-1 | Supply Fan chamber door sticks closed | FOR REVIEW | | UAHU312 - Air Handling Unit - Packaging near K-13 - 54T 20k cfm | | 12/16/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|---------------------------|----------|--|----------|------------|
| CHK-4346-2 | AFMS not installed in unit | CLOSED AND VERIFIED BY | | UAHU311 - Air Handling Unit - Packaging near G-13 - 54T 20k cfm | | 12/16/2019 |
| CHK-4346-1 | Sensor displays reading of -25% on the BAS | CLOSED AND VERIFIED BY | | UAHU311 - Air Handling Unit - Packaging near G-13 - 54T 20k cfm | | 12/16/2019 |
| CHK-4344-1 | RA AFMS not installed | VENDOR SUB COMPLETE | | UAHU309 - Air Handling Unit - Packaging near G-11 - 54T 20k cfm | | 12/16/2019 |
| CHK-4340-1 | Supply humidity Sensor reading 0% | VENDOR SUB COMPLETE | | UAHU305 - Air Handling Unit - Packaging near G-7 - 54T 20k cfm | | 12/16/2019 |
| CHK-4342-1 | RA AFMS not installed | CLOSED AND VERIFIED BY | | UAHU307 - Air Handling Unit - Packaging near G-9 - 54T 20k cfm | | 12/16/2019 |
| CHK-4342-2 | Humidifier Installation not complete | VENDOR SUB COMPLETE | | UAHU307 - Air Handling Unit - Packaging near G-9 - 54T 20k cfm | | 12/16/2019 |
| CHK-4338-1 | RA AFMS is not installed | VENDOR SUB COMPLETE | | UAHU303 - Air Handling Unit - Packaging near G-4 - 54T 20k cfm | | 12/16/2019 |
| CHK-4336-1 | Supply humidity sensor installation is not complete | VENDOR SUB COMPLETE | | UAHU301 - Air Handling Unit - Packaging near G-2 - | | 12/16/2019 |

| Number | Description | Status | Priority | Asset | Assigned | Due Date |
|------------|--|------------------------|----------|---|----------|------------|
| | | | | 54T 20k cfm | | |
| CHK-4336-2 | Fan VFDs do not shut down with a smoke alarm when placed in hand .. Clarify what is proper response? | VENDOR SUB COMPLETE | | UAHU301 - Air Handling Unit - Packaging near G-2 - 54T 20k cfm | | 12/16/2019 |
| CHK-4336-3 | Humidifier install is incomplete | VENDOR SUB COMPLETE | | UAHU301 - Air Handling Unit - Packaging near G-2 - 54T 20k cfm | | 12/16/2019 |