2. The installing contractor is also responsible for the following additional documentation to the manufacturer's representative if visualization / graphical floorplan software is provided as part of bid package:
   a. As-Built floor plan drawings showing device address locations required above. All documentation shall remain legible when reproducing/scanning drawing files for electronic submission.
   b. As-Built electrical lighting drawings (reflected ceiling plan) in PDF and CAD format. Architectural floor plans shall be based on as-built conditions.
      (1) CAD files shall have layers already turned on/off as desired to be shown in the graphical floorplan background images. The following CAD elements are recommended to be hidden to produce an ideal background graphical image:
      Titleblock
      Text- Inclusive of room names and numbers, fixture tags and drawings notes
      Fixture wiring and homeruns
      Control devices
      Hatching or poché of light fixtures or architectural elements
      (2) CAD files shall be of AutoCAD 2013 or earlier, Revit file overall floor plan views shall be exported to AutoCAD 2013.

3.2 System Startup

A. Upon completion of installation by the installer, including completion of all required verification and documentation required by the manufacturer, the system shall be started up and programmed.
   1. For CAT5 wired devices, low voltage network cable testing shall be performed prior to system startup.
B. System start-up and programming shall include:
   1. Verifying operational communication to all system devices.
   2. Programming the network devices into functional control zones to meet the required sequence of operation.
   3. Programming and verifying all sequence of operations.
C. Initial start-up and programming is to occur on-site.

3.3 Project Turnover

A. System Documentation
   1. Submit software database file with desired device labels and notes completed. Changes to this file will not be made by the factory.
   2. Installing contractor to grant access to the owner for the programming database, if requested.
B. Owner Training
   1. Provisions for onsite training for owner and designated attendees to be included in submittal package.

END OF SECTION

SECTION 26 27 26 - WIRING DEVICES AND PLATES

PART 1 GENERAL

1.1 DESCRIPTION

A. Work Included: Provide wiring devices and plates or blank plates only for all outlet boxes shown.

1.2 RELATED WORK

A. Section 26 00 00: General Provisions
B. Section 26 05 00: Basic Materials and Methods

1.3 CONTRACT CONDITIONS

A. Work of this Section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this Specification and accompanying Drawings.

1.4 PRODUCT SUBSTITUTIONS

A. Follow requirements specified in Section 01 25 00.

1.5 SUBMITTALS

A. Shop Drawings.
B. Product Data.
C. Operation Instructions and Maintenance Data.
D. Warranty.

PART 2 PRODUCTS

2.1 MATERIALS

A. Wiring devices shall be specification grade with special devices as noted on the Drawings. Should the Drawings indicate a device other than those listed herein without reference to catalog number, such device shall be of same grade and manufacture as specified below. Furnish a matching cap for all special purpose devices that do not have the common 120 volt NEMA 5-15R or 5-20R configuration.
B. Comparable grade devices to those listed as manufactured by Hubbell, Leviton and Pass & Seymour, are approved. All lighting switches and duplex receptacles installed shall be by the same manufacturer and have identical appearance characteristics, unless noted otherwise.

2.2 WALL SWITCHES

A. Line voltage switches, 20 ampere, 120 volt, quiet type, Hubbell 1221 series, gray exposed finish.
B. Switch with pilot, lighted clear toggle, Hubbell 1221-PL.
C. Keyed security switches: Maintained contact, key removal in both positions. Pass & Seymour PS20AC1KL (single pole), PS20AC2KL (double pole), PS20AC3KL (3-way)

2.3 RECEPTACLES

A. Duplex: 20 ampere, 3-wire, 2-pole grounding, NEMA 5-20R, Hubbell 5352 series, gray exposed finish.
B. Ground Fault Circuit Interrupting (GFCI/GFI): 20 ampere, 3-wire, 2-pole grounding, NEMA 5-20R, gray exposed finish, Hubbell GFR5352 series or approved substitute.
C. Tamperproof Duplex: 20 ampere, 3-wire, 2-pole grounding, NEMA 5-20R, Hubbell HBL8300SGGY series, gray exposed finish.
D. Special purpose receptacles: As noted on Drawings.

2.4 PLATES AND COVERS

A. Flush Finish Plates: .040-inch thick, type 302 stainless steel, brush finish, Leviton or Pass & Seymour.
B. Surface Covers: Galvanized or cadmium plated steel, 1/2-inch raised industrial type with openings appropriate for device installed.
C. Weatherproof:
   1. Damp locations: Hubbell HBL5205WO cover mounted horizontally with hinges up.
   2. Wet locations: Hubbell WP26M, Thomas & Betts Red-Dot series CKNM

PART 3 EXECUTION

3.1 INSTALLATION

A. Devices and finish plates to be installed plumb with building lines.
B. Finish plates and devices not to be installed until final painting is complete. Scratched or splattered finish plates and devices will not be accepted.
C. Wall-mounted receptacles shall be installed vertically at centerline height shown on the Drawings or as specified in 26 05 00-3.2.
D. Receptacles shall be tested for line to neutral, line to ground and neutral to ground faults. Correct any defective wiring.
E. All special plugs provided with the receptacles shall be given to the Owner in their cartons and a letter stating the date and the Owner's representative that received the materials.

END OF SECTION

SECTION 26 28 00 - CIRCUIT PROTECTIVE DEVICES (OVERCURRENT DEVICES)

PART 1 GENERAL

1.1 DESCRIPTION

A. Work Included:
   1. Provide overcurrent protective devices of the proper characteristics for the load served.
   2. Coordinate fuse size and circuit breaker combinations for selective tripping with minimum interruption of service.
   3. Provide fuses as indicated on the drawings, sized per NEC and appropriate for the load served as required for a fully operational system.
   4. All fuses shall be furnished of the same manufacturer.
   5. All circuit breakers shall be furnished of the same manufacturer as the distribution panel and branch panelboards.
   6. All fuses shall be installed by the electrical contractor at jobsite and only when equipment is to be energized. Fuses shall not be installed during shipment.

1.2 RELATED WORK

A. Section 26 00 00: General Provisions,
B. Section 26 05 00: Basic Materials and Methods,

1.3 CONTRACT CONDITIONS

A. Work of this Section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this Specification and accompanying Drawings.

1.4 PRODUCT SUBSTITUTIONS

A. Follow requirements specified in Section 01 25 00.

1.5 SUBMITTALS

A. Shop Drawings.
B. Product Data.
C. Operation and Maintenance data.

PART 2 PRODUCTS

2.1 FUSES

A. Provide 100,000 AIC, Current Limiting, UL, Time Delay Fuses.
B. For Feeders 601 amps to 6000 amps: Class L, KRP-C(J)SP Time Delay.
C. For Feeders 600 amps and less:
   1. Class RK-1, LPS-RK(J)SP for 600 Volt, Dual Element.
   2. Class RK-1, LPN-RK(J)SP for 250 Volt, Dual Element.
   3. Class J, LPJ(J)SP for 600 Volt & below, Dual Element.
D. For Motor Circuits 600 Volts and Below: Class RK-1 and Class J Sized @ 125% FLC of Motor.
E. Manufacturer: Bussmann System 300 Low-Peak, Littelfuse.

2.2 CIRCUIT BREAKERS

A. Circuit breakers shall be molded case, thermal magnetic type. Breakers shall have short circuit capacity rating to withstand the maximum short circuit duty which can be expected at the breaker location in the electrical system. Breakers mounted in branch panelboards shall be of the bolt-in type.
B. Minimum short circuit rating for any circuit breaker: 10,000 A.I.C. for 120V and 208V breakers, 22,000 A.I.C. for 277V and 480V breakers.
C. Provide circuit breaker lock-on handle guards to prevent accidental shut-off of equipment for breakers supplying time clocks, refrigeration, fire alarm, unswitched egress lighting and like systems.

2.3 SPARE FUSES AND SPARE FUSE CABINET

A. Provide 10% spare fuses, but not less than (3) of any one size and type.
B. Provide Bussmann spare fuse cabinet(s) #SFC as required for spare fuses. Install cabinet in electrical room.

2.4 SUBSTITUTION APPROVALS

A. If the electrical contractor wishes to furnish materials other than those specified, a written request, along with a complete short circuit and selective coordination study, shall be submitted to the engineer for evaluation at least 10 days prior to bid date. If the engineer's evaluation indicates acceptance, a written addendum will be issued listing the other acceptable manufacturer.

PART 3 EXECUTION

3.1 FUSES

A. Install fuses for motor protection to best protect the motor without nuisance tripping.
B. Provide one complete set of spare fuses of each amperage used on this project. Store spare fuses in a metal, hinged door cabinet located adjacent to the Main Distribution Panel. Label cabinet.
C. Provide pullers for fuses, stored with fuses in cabinet.

END OF SECTION

SECTION 26 28 16 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 GENERAL

1.1 DESCRIPTION

A. Work Included:
   1. Provide manual or magnetic motor starters of the proper characteristics for equipment as listed on the Drawings or not provided by Division 23, e.g. overhead door operators.
   2. Provide switches of proper characteristics as disconnecting means.

1.2 RELATED WORK

A. Section 26 00 00: General Provisions
B. Section 26 05 00: Basic Materials and Methods
C. Section 26 28 00: Circuit Protective Devices

1.3 CONTRACT CONDITIONS

A. Work of this Section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this Specification and accompanying Drawings.

1.4 PRODUCT SUBSTITUTIONS

A. Follow requirements specified in Section 01 25 00.

1.5 SUBMITTALS

A. Shop Drawings.
B. Product Data.
C. Operation Instruction and Maintenance Data.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS:

A. All motor starters and disconnects shall be of the same manufacturer as service equipment or load centers.

2.2 MOTOR STARTERS

A. Manual starters, toggle type, quick-make, quick-break with thermal overload protection and suitable enclosures.
B. Enclosures shall be NEMA 1 for indoor use and NEMA 3R where installed exposed to the weather or designated by the subscript "WP".
C. Magnetic starters, full voltage across the line non-reversing type, 120 volt coils, overload relays in each leg, H-O-A selector switches, red running pilot lights, auxiliary contacts, 120V control transformers and suitable enclosures. The starters shall be combination type with fusible switches where shown adjacent to the disconnect switch.

2.3 DISCONNECTS

A. Safety and disconnect switches shall be NEMA type HD (heavy duty), quick-make, quick-break, dual rated with electrical characteristics as required by the system voltage and the load served. Switches shall be equipped with a defeatable cover interlock.
B. Enclosures shall be NEMA 1 for indoor use and NEMA 3R where installed exposed to the weather or designated by the subscript "WP".
C. Disconnects shall be fusible or non-fusible as designated on Drawings and/or required by code.

PART 3 EXECUTION

3.1 CLEARANCES

A. Maintain all code required clearances under this work.

3.2 MOTOR STARTERS

A. Provide the motor starting equipment as shown on the Drawings and coordinate all motor "overload" starter relays.
B. Install the starters at the respective equipment unless shown otherwise.

3.3 DISCONNECT SWITCHES

A. Provide all code required disconnect switches under this work whether specifically shown or not.
B. Disconnect switches required when equipment is not in sight of the branch circuit panel or starter may be horsepower rated, toggle type in suitable enclosure, mounted at or on the equipment.

END OF SECTION

SECTION 26 50 00 - LIGHTING FIXTURES AND LAMPS

PART 1 GENERAL

1.1 DESCRIPTION

A. Conditions of the Contract and Sections 26 00 00 and 26 05 00 applies.
B. Work Included:
   1. Provide all lighting outlets indicated on the Drawings with a fixture of type designated and appropriate for the location. Outlet symbols on the Drawings without a type designation shall have a fixture the same as those used in similar or like locations.
   2. Where a fixture type designation has been omitted and cannot be determined by the Contractor, request a clarification from the Architect and provide a suitable fixture type as directed at no additional cost.
   3. Coordinate installation of lighting fixtures with the ceiling installation and all other trades to provide a total system that is neat and orderly in appearance.

1.2 FIXTURE SCHEDULE

A. Refer to drawing sheet E1.0.

1.3 SUBMITTALS

A. Shop Drawings.
B. Product Data.
C. Operation Instruction and Maintenance Data.

1.4 CONTROLS, INTERIOR LIGHTING

A. Provide lighting controls to comply with the current Oregon State Energy Code
B. Luminaires - see Luminaire Schedule located on drawings
C. Luminaires shall have embedded wireless networked controls that can be commissioned from the ground without the need for dedicated equipment.

PART 2 PRODUCTS

2.1 MATERIALS

A. Recessed fixtures shall have trims which fit neatly and tightly to the surfaces in which they are installed without leaks or gaps. Where necessary, install heat resistant non-rubber gaskets to prevent light leaks or moisture from entering between fixture trim and the surface to which they are mounted.
B. Fixtures installed under canopies, roof or open porches, and similar damp or wet locations shall be UL listed and labeled as suitable for damp or wet locations.

2.2 DRIVERS, LED

A. LED drivers shall be electronic type, labeled as compliant with radio frequency interference (RFI) requirements of FCC Title 47 Part 15, and comply with NEMA SSL 1 "Electronic Drivers for LED Devices, Arrays, or Systems". LED drivers shall have a sound rating of "A", have a minimum efficiency of 85%, and be rated for a THD of less than 20 percent at all input voltages.
B. Dimmable LED drivers shall be 0-10V type. Dimmable LED drivers shall be capable of dimming without LED strobing or flicker across their full dimming range.
C. Drivers shall be rated for the ambient temperatures in which they are located. Outdoor fixtures shall be equipped with ballasts or drivers rated for reliable starting to 0 degrees F. Indoor fixtures located in areas with direct sunlight or above normal ambient temperatures shall have ballasts or drivers rated at 65 degrees C minimum.

2.3 LUMINAIRE INTEGRAL BATTERY BACKUP

A. Luminaire battery backups will have a minimum initial output of 1400 lumens, except as noted below.
B. Recessed downlights and similar: Luminaire battery backups will have a minimum initial output of 10 watts.

2.4 LUMINAIRE INTEGRAL BATTERY BACKUP

A. Luminaire battery backups will have a minimum initial output of 1400 lumens, except as noted below.
B. Recessed downlights and similar: Luminaire battery backups will have a minimum initial output of 10 watts.

PART 3 GENERAL

3.1 INSTALLATION

A. Determine ceiling types in each area and provide suitable mounting frames where required for recessed fixtures.
B. Fixtures shall be left clean at the time of acceptance of the work with every lamp in operation. If fixtures are deemed dirty by the Architect at completion of the project, the Contractor shall clean them at no additional cost to the Owner.
C. Fixtures shall be carefully aligned, leveled in straight lines, and located as shown on the architectural reflected ceiling plan. The final decision as to adequacy of support and alignment, shall be given by the Architect. The fixtures shall be supported by separate means from the building structure per applicable seismic requirements and not from the ceiling system, ductwork, piping or other systems.
D. Fixtures shall be aimed or installed to provide the lighting pattern for which the fixture is designed.
E. Fixtures recessed into fire-rated ceiling assemblies shall include system maintaining such rating around fixture.
F. Fixtures located in Mechanical rooms and storage/utility rooms to be coordinated with duct work, piping and structural members. Adjust stems as required for proper illumination of the area.
G. Fixture Poles
   1. Set poles straight and plumb.
   2. Grout around pole base.

3.2 WIRING

A. Recessed fixtures served from a junction box above the ceiling may be connected with 3/8-inch flex, 2 No. 18. Provide 3 No. 18 wires where dual circuiting is called for. Provide ground continuity.

END OF SECTION

SECTION 28 31 00 - FIRE ALARM SYSTEM

PART 1 GENERAL

1.1 DESCRIPTION

A. Work Included:
   1. Furnish and install a **design-build** local fire alarm system as specified herein and as shown on the drawings. All system components shall be of one system manufacturer. All equipment shall be UL, FM listed and meet NFPA 72. All equipment and devices shall be listed by UL Inc. or approved by F.M. Laboratories. Existing Fire Alarm Control Panel is a Simplex 4002. All system components shall be of one system manufacturer.
   2. System shall include but not be limited to all controls, power supply, signal initiating and sounding devices, conduit, wiring and all other equipment necessary for a complete and operating system. All equipment shall be American made and assembled.
   3. Fire alarm devices shall be connected to the existing fire alarm system in the building.

1.2 RELATED WORK

A. Section 26 00 00: General Provisions
B. Section 26 05 00: Basic Materials and Methods
C. Section 26 05 33: Conduits, Raceways, Boxes and Fittings
D. Section 26 05 53: Identification
E. Section 26 05 19: Conductors and Connectors

1.3 SYSTEM OPERATION

A. Operation of any manual or automatic initiating device shall cause an alarm to sound, activate the Control-By-Event Program, indicate on the control panel the point in alarm/trouble, print in English language the alarm location/description and perform all auxiliary functions.
B. System shall be style 4, class B, on all communication and initiating loops. Any fault in the circuits shall be annunciated on the display and printed with time, date, location and type of the system fault.
C. System shall utilize a single pair of wires to power, transmit and receive data from the addressable analog initiating devices and to transmit commands to the remote-control points. The wire shall be sized for the length of communications loop but in no event shall it be less than #18-2 wire size. To facilitate low-cost additions to the system, systems using shielded cable is not be acceptable.

1.4 SUBMITTALS

A. Product Data.
B. Point Program Schedule.
C. Operation Instruction and Maintenance Data.
D. Shop Drawings (AutoCAD format).
E. Wiring Diagrams (AutoCAD format).
F. Floor Plans (AutoCAD format).

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. This specification document provides the requirements for the installation, programming, and configuration of a complete Silent Knight 6820 digital protocol addressable fire alarm system or approved equivalent. This system shall include, but not be limited to, system cabinet, power supply, built in Signaling Line Circuit (SLC), 80-character LCD annunciator, six programmable "Flexput" circuits, built in dual line digital communicator associated peripheral devices, batteries, wiring, conduit and other relevant components and accessories required to furnish a complete and operational Life Safety System
B. Documentation from the manufacturer shall be presented to the Architect and Engineer certifying that the persons making the final connections, system programming, checkout and providing the warranty are factory trained technicians in the employ of the factory authorized franchised dealer for the system installed.
C. Fire Alarm Control Panel
   1. The fire alarm control panel (FACP) shall be the Silent Knight 6820 analog addressable control panel or approved. The FACP must have a 6-amp power supply and be capable of expansion to a maximum of 54 total amps via bus connected expander modules that supervise low battery, loss of AC and loss of communication.
   2. The FACP shall provide the ability to have a text description of each system device, input zone and output group on the system. The use of individual lights to provide descriptions will not be acceptable.

2.2 SYSTEM OPERATION

A. Alarms
   1. When a device indicates any alarm condition, the control panel must respond within 10 seconds. The general Alarm or Supervisory alarm LED on the annunciator(s) should light and the LCD should prompt the user as to the number of current events. The alarm information must be stored in event memory for later review. Event memory must be available at the main and all remote annunciators.
   2. When the alarmed device is restored to normal, the control panel shall be required to be manually reset to clear the alarm condition, except that the alarms may be silenced as programmed.
   3. An alarm shall be silenced by a code or firefighter key at the main or remote annunciators. When silenced, this shall not prevent the resounding of subsequent events if another event should occur (subsequent alarm feature). When alarms are silenced the Silenced LED on the control panel, and on any remote annunciators, shall remain lit until the alarmed device is returned to normal.
B. Troubles
   1. When a device indicates a trouble condition, the control panel Trouble LED should light and the LCD should prompt the user as to the number of current events. The trouble information must be stored in event memory for later review. Event memory must be available at the main and all remote annunciators.
   2. When the device in trouble is restored to normal, the control panel shall be automatically reset. The trouble restore information must be stored in event memory for later review. Event memory must be available at the main and all remote annunciators. A trouble shall be silenced by a code or firefighter key at the main or remote annunciators. When silenced, this shall not prevent the resounding of subsequent events if another event should occur.
C. Supervision Methods
   1. Each SLC loop shall be electrically supervised for opens and ground faults in the circuit wiring, and shall be so arranged that a fault condition on any loop will not cause an alarm to sound. Additionally, every addressable device connected to the SLC will be supervised and individually identified if in a fault condition. The occurrence of any fault will light a Trouble LED and sound the system trouble sounder but will not interfere with the proper operation of any circuit which does not have a fault condition.
   2. Each indicating appliance circuit shall be electrically supervised for opens, grounds and short circuit faults, on the circuit wiring, and shall be so arranged that a fault condition on any indicating appliance circuit or group of circuits will not cause an alarm to sound. The occurrence of any fault will light the trouble LED and sound the system trouble sounder but will not interfere with the proper operation of any circuit which does not have a fault condition.

PART 3 SYSTEM COMPONENTS

3.1 CONTROL UNIT

A. System Cabinet Mounting
   1. The system cabinet shall be red and can be either surface or flush mounted. The cabinet door shall be easily removable to facilitate installation and service.
B. Audible System Trouble Sounder
   1. An audible system trouble sounder shall be an integral part of the control unit. Provisions shall also be provided for an optional supervised remote trouble signal.
C. Power Supply and Charger:
   1. The entire system shall operate on 24 VDC, filtered switch mode power supply with the rated current available of 6 Amps. The FACP must have a battery charging circuit capable of complying with the following requirements:
      a. Sixty (60) hours of battery standby with five (5) minutes of alarm signaling at the end of this sixty (60) hour period (as required per NFPA 72 remote station signaling requirements) using rechargeable batteries with automatic charger to maintain standby gel-cell batteries in a fully charged condition. OR
      b. Twenty-four (24) hours of battery standby with five (5) minutes of alarm signaling at the end of this twenty-four (24) hour period (as required per NFPA 72 central station signaling requirements) using rechargeable batteries with automatic charger to maintain gel-cell batteries in a fully charged condition.
   2. The power supply shall comply with U.L. Standard 864 for power limiting.
   3. The FACP will indicate a trouble condition if there is a loss of AC power or if the batteries are missing or of insufficient capacity to support proper system operation in the event of AC failure. A battery test will be performed automatically every minute to check the integrity of the batteries. The test must disconnect the batteries from the charging circuit and place a load on the battery to verify the battery condition.
   4. In the event that it is necessary to provide additional power one or more of the model 5895XL or 5496 distributed power modules shall be used to accomplish this purpose.
D. Connections and Circuits
   1. Connections to the light and power service shall be on a dedicated branch circuit in accordance with the National Fire Alarm Code NFPA 72, National Electrical Code (NEC) NFPA 70, and the local authority having jurisdiction (AHJ). The circuit and connections shall be mechanically protected.
   2. A circuit disconnecting means shall be accessible only to authorized personnel and shall be clearly marked "FIRE ALARM CIRCUIT CONTROL".

PART 4 WIRING

4.1 INSTALLER'S RESPONSIBILITIES

A. The installer shall coordinate the installation of the fire alarm equipment.
B. All conductors and wiring shall be installed according to the manufacturer's recommendations.
C. It shall be the installer's responsibility to coordinate with the supplier regarding the correct wiring procedures before installing any conduits or conductors.

4.2 INSTALLATION OF SYSTEM COMPONENTS

A. System components shall be installed in accordance with the latest revisions of the appropriate NFPA pamphlets, the requirements contained herein, National Electrical Code, local and state regulations, the requirements of the fire department and other applicable Authorities Having Jurisdiction (AHJ).
B. All wire used on the fire alarm system shall be U.L. listed as fire alarm protection signaling circuit cable per National Electrical Code, Articles 760.

PART 5 WARRANTY AND FINAL TEST

5.1 GENERAL

A. The contractor shall warrant all equipment and wiring free from inherent mechanical and electrical defects for one year (365 days) from the date of final acceptance.

5.2 FINAL TEST

A. Before the installation shall be considered completed and acceptable by the awarding authority, a test of the system shall be performed as follows:
B. The contractor's job foreman, a representative of the owner, and the fire department shall operate every building fire alarm device to ensure proper operation and correct annunciation at the control panel.
C. At least one half of all tests shall be performed on battery standby power.
D. Where application of heat would destroy any detector, it may be manually activated.

5.3 AS-BUILT DRAWINGS, TESTING, AND MAINTENANCE INSTRUCTIONS

A. As-Built Drawings
   1. A complete set of reproducible "as-built" drawings showing installed wiring, color coding, and wire tag notations for exact locations of all installed equipment, specific interconnections between all equipment, and internal wiring of the equipment shall be delivered to the owner upon completion of system.
B. Operating and Instruction Manuals
   1. Operating and instruction manuals shall be submitted prior to testing of the system. Three (3) complete sets of operating and instruction manuals shall be delivered to the owner upon completion. User operating instructions shall be provided prominently displayed on a separate sheet located next to the control unit in accordance with U.L. Standard 864.

END OF SECTION

source file: G:\2022 Work\LEEKA\LEK2202 ESD 112 - Academy Building\Electrical\E - Spec\Electrical spec - 49th - 06.07.22.docx

REVISED
4:14 pm, Oct 06, 2023

JOHN FRANK ROGERS — STATE OF WASHINGTON — 31894 — REGISTERED PROFESSIONAL ENGINEER — 10/6/2023

COPYRIGHT — LEEKA, INC. ALL RIGHTS RESERVED

LEEKA Architecture and Planning
Creating Positive Impressions in the Built Environment
1001 SE Water Avenue Suite 175
Portland, Oregon 97214
503.644.4222 tel
succeed@leekainc.com e-mail
www.leekainc.com web

Tenant Improvement ESD112 Mental Health Facility Phase II

2400 NE 65th Ave. Vancouver WA.

Revised:
- PCR 01 — DATE: AUG. 10, 2023
- APPLICANT EDITS — DATE: AUG. 17, 2023
- APPLICANT EDITS — DATE: SEPT. 22, 2023
- APPLICANT EDITS — DATE: OCT. 03, 2023

Job No: 2246
Date: February 18, 2023
File Size: 24x36
Progress set
DRAWN: JJD
CHECKED: JFR
Sheet Title: Electrical Specifications
Sheet Number: E9.02

SYSTEM DESIGN CONSULTANTS INC.
333 SE SECOND AVE, SUITE 100
PORTLAND OREGON 97214
503-248-0227
CONTACT: JEFFREY DAVIS