B.3 SCOPE OF WORK (SOW)

B.3.1 Summary

A. This firm fixed-price requirement is for Energy Control Procedures (ECP)/lockout tagout (LOTO) procedures, including installation, incorporation, program integration, training, and testing of a new Brady Link360 application at the Buffalo VA Medical Center located at 3495 Bailey Avenue, Buffalo, NY 14215, and the Batavia VA Medical Center, 222 Richmond Avenue, Batavia, NY 14020 from one base year from date of award plus the provision of four (4) option years. Contractor shall provide all personnel, materials, tools, labor, and travel necessary to complete the work and training to implement LOTO program to meet or exceed compliance with OSHA 1910.147, and ANSI/ASSE 244.1 guidance.

B.3.2 General

A. Contractor shall identify equipment and/or energy sources that require LOTO procedures, approximated at 650 ECPs for both campus', all categorized using the following options:
   1.Multi-Energy Source (Electric, Steam, Water, Gas, etc.)
   2.Single Energy Source located within employee control and supervision
   3.Single Energy source located outside employee control and supervision
B. Contractor shall provide software, development, and implementation of all ECPs identified.
   1.All ECPs shall be inputted and configured into the Brady Link360 platform. Contractor shall give COR access to the Brady Link360 account prior to printing to review/verify the accuracy of each procedure.
   2.Contractor shall submit draft lockout procedures digitally for approval before publishing to software or printing.
C. All procedures shall include at minimum:
   1. Name of equipment and EE number if applicable.
   2. Location of equipment.
   3. Primary and secondary types of hazardous energy (electrical, steam, water, thermal, stored pressure, etc.)
   4. Magnitude of energy source (volts, psi, etc.)
   5. Specific location of each disconnects (north side, front side, etc.)
   6. Method of LOTO isolation techniques.
   7. Type of LOTO device required (padlock, clamshell, circuit breaker, lockout device, etc.)
   8. Verification step to ensure the LOTO was performed correctly.
   9. Photos of the isolation points for clear identification.
   10. Graphic illustrations of an overhead layout of the equipment, identifying the location of all primary and secondary energy source.

i. Graphic illustrations shall be printed on an aluminum sign base with a 6-ring binder attached to it housing the procedures. (See section B.3.6 below).

11. Authorized department to perform LOTO procedures.
12. Description of steps to restore equipment to service.
13. The specific department required to be notified before shutdown and startup.
14. Personal Protective Equipment (PPE) to be donned.
15. Hazardous warnings such as confined space areas or ladders.
16. Specific location of each disconnect.
17. QR code linked to Brady Link360 for digital procedure retrieval using mobile device.

D. Contractor shall correct/re-perform any discrepancies found or integration errors found by COR before final acceptance of work.

E. Approved LOTO procedures shall be printed in full color and laminated using anti-UV 5mm lamination.

F. Final procedures shall be installed on or near equipment. In addition, a binder containing LOTO procedures shall be provided for each campus and tabulated by location and equipment type.

1. Equipment-specific aluminum energy source identification labels shall be placed that identify the lockout point and contain the following: equipment name, energy type, energy icon, energy magnitude, and VA logo. Labels shall be installed using aircraft stainless steel safety wire when attached to pipes and 3M double-sided tape on flat surfaces.
2. See section B.3.6 below for sample.

G. Contractor shall provide initial training on software, program, system, etc., for up to 15 personnel, delegated by COR, prior to final acceptance of work.

1. Training shall include ability to created new procedures for future equipment and updating existing procedures due to equipment modifications.
2. Training shall cover identifying energy sources and the data needed to write a lockout procedure.
3. Training shall include instructions on using the software program.

H. Certification and Accreditation requirements do not apply. A security accreditation package is not required.

B.3.3 Schedule

A. Contractor shall provide a proposed performance schedule/checklist with their quote proposal. The schedule/checklist shall be in the form of a progress chart of suitable scale to indicate the work scheduled for completion by any given date during the work period. The proposed schedule/checklist shall be reviewed by the COR. Any requirements for adjusting the schedule (e.g., to minimize disruption to the VA) shall be incorporated by the Contractor. No work shall be performed without 72 hours' notice to the COR.

1. The following are Federal Holidays observed by the facility and the Contractor shall not expect access to the VA Facility of VA employees on these dates unless notified otherwise by the COR.
    a) https://www.opm.gov/policy-data-oversight/pay-leave/federal-holidays/

B. Contractor shall report to COR (or designee) before and after performance of service and provide debrief of service performed.

C. The facility is a health care facility providing critical care 24 hours a day, and as such, disruptions in operations are not feasible and will need to be coordinated closely with the COR. Electrical work requiring shutdown may not be feasible and work may have to be conducted live.
    1. If it becomes difficult for the Contractor to complete the required services due to patient care related activities or security issues, the Contractor shall not be obligated to complete the work in the area of concern at the time of their scheduled visit. The Contractor shall be obligated to complete any incomplete portion of their work at the time of the next scheduled visit to the facility. The final authority relative to this decision will be the COR. Unless fully absolved by the VA, the Contractor shall be responsible for completing all work.

D. All electrical work not requiring an electrical shutdown or work outside of normal business hours shall be performed between 7:00am to 4:30pm, Monday through Friday.

E. Tasks requiring utility shutdowns may need to be conducted on weekends and/or outside of normal business hours. Utility shutdowns will be minimized to as short of duration as possible. All shutdown requests will require detailed work plans and scheduling prior to approval. Requests to conduct work on weekends and outside of normal duty hours must be submitted in writing at least fourteen (14) working days in advance of the anticipated work to the COR. If this new schedule is agreed upon, work can begin. The original written request will remain with all test documents along with any written agreements relative to the original requests.

B.3.4 Contractor Qualifications

A. All work shall comply with OSHA Control of Hazardous Energy (Lockout/ Tagout) Standard, 29 Code of Federal Regulations (CFR) 1910.147.

B. Contractor employees shall perform work with a VA staff escort, photo ID will be required to sign-in as a visitor and then a temporary contractor badge will be provided.

C. All Contractor employees working on-site shall always wear their issued Contractor badge above the waist while on the VAMC campus'.

D. All Contractor employees working on-site shall have minimum two (2) years' experience working on Energy Control Procedures, and OSHA approved 10-hour construction safety course, documentation requestable by the COR at any time.

E. Contractor shall have a supervisor always working on-site who is trained in NFPA 70E, deemed a "Qualified Person" as per Article 100, documentation requestable by the COR at any time.

B.3.5 Safety

A. The COR shall notify the Contractor of any safety issues and corrective actions to be taken.
B. At no time shall the fire alarm, nurse call, or other vital system be out of service. The contractor shall ensure they do not compromise any of these systems or other elements of the life safety system such as removal of a ceiling tile.
C. No tools or equipment shall be left unattended.
D. All work areas must be clean at the close of the day and shall be left in the same condition as before work started.
E. Contractor shall obtain all necessary New York State and Federal licenses and/or permits associated with this procurement. Contractor shall take all precautions necessary to protect persons and property from injury or damage.

B.3.6 Deliverables

A. Once drafted LOTO procedures are approved by COR, Contractor shall print in full color, laminated with 10 mil lamination material, and mounted to a 6-ring binder, flip-chart baseplate. Contractor shall also provide a separate binder containing all LOTO procedures for each campus organized by location and equipment type.
B. Contractor shall provide and install equipment specific energy source identification tags. These tags shall be constructed with 20-gauge aluminum, dimensions of 2 inch by 3.5 inch with ¼ inch radiused corners, including at minimum:
    a. Item name
    b. Energy type
    c. Energy icon
    d. VA logo
C. Tags shall be installed using aircraft stainless steel safety wire when attached to pipes and 3M double-sided tape on flat surfaces.
D. Contractor shall provide and mount a flip-chart baseplate on all equipment. The baseplate shall be constructed with 26-gauge aluminum, dimensions of 8 inch by 12 inch with ¼ inch radiused corners, including at minimum:
    a. Printed information using anti-UV ink.
    b. 6-ring binder to house procedures.
    c. Overhead graphic representation of equipment layout, identifying the location of all energy sources printed directly to the flip-chart baseplate.
    d. Visual reference for lockout point locations.
    e. Room layouts for remote LOTO points.

    f. Compass icon.
    g. Energy icons that match the Brady Link360 procedures.

E. Contractor shall provide and install tags on all outdoor equipment. Information shall be printed in anti-UV ink. The tags shall be constructed of 26-gauge aluminum, dimensions of 3 inch by 5 inch with ¼ inch radiused corners, including at minimum:
    a. Item name
    b. QR code linked to the digital Brady Link360 LOTO procedure
    c. VA logo.

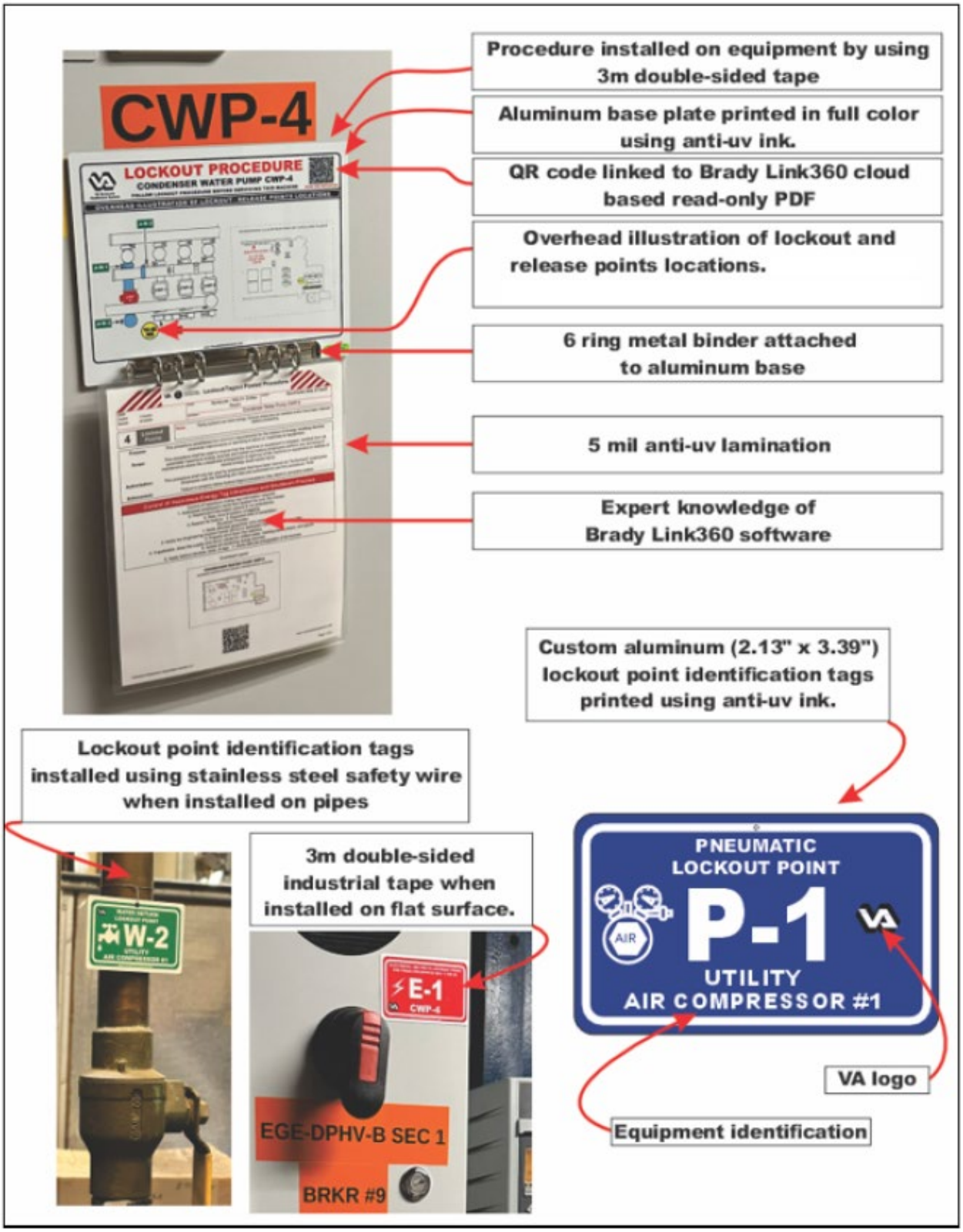
F. Contractor shall provide initial training for up to 15 VA employees, designated by the COR. Training shall include at minimum:
    a. Brady Link360 software and overall LOTO program usage.
    b. Creation of new procedures for future equipment.
    c. Updates to existing procedures due to modifications.
    d. Identification of energy sources and required data for procedure development.

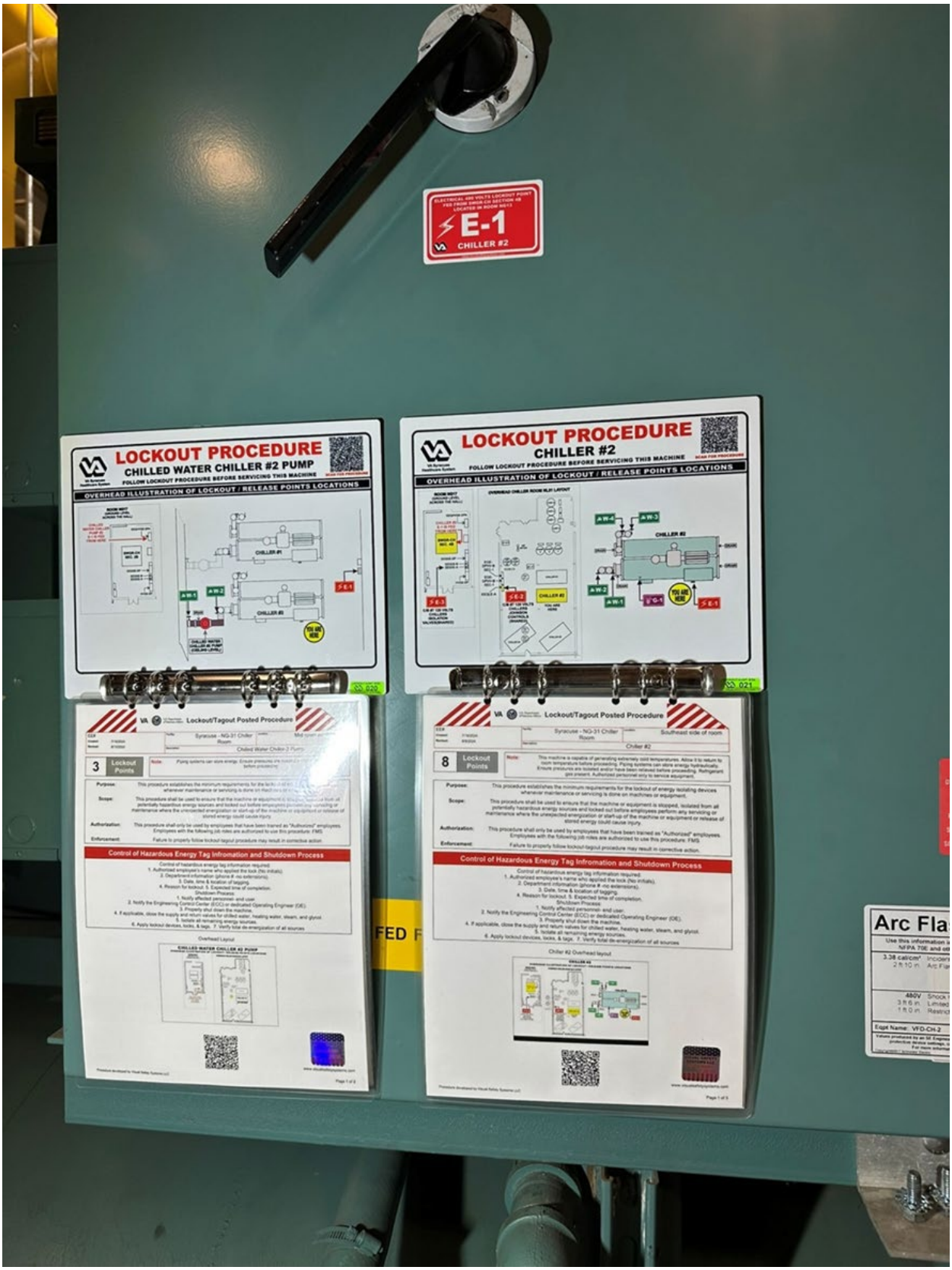
G. Contractor shall provide annual training for up to 90 VA employees, designated by the COR. Annual training shall include at minimum:
    a. A minimum of two (2) hours of instructor-led classroom instruction with a hands-on application component to take place throughout the facility to cover various examples of LOTO.
    b. Training shall be provided in four (4) individual sessions over the span of two (2) days, with 20-30 unique employees in each session.
    c. Provide certificates to employees showing completion of the annual training requirement and provide a digital copy for facilities records.

H. Contractor shall provide annual competency certification for up to 90 VA employees, designated by the COR. Competency certification shall include at minimum:
    a. A qualified inspector observing authorized employees implementing LOTO on equipment/items to ensure they are competent in all steps.
    b. Review each employee's understanding of their specific responsibilities under the ECP.
    c. Corrective actions of any deficiencies found during the observation.
        i. Incorrect energy isolation, improper lock application, or other dangerous issues shall be addressed and corrected immediately.
    d. Provide documentation showing the employee is fully competent and understands the ECP and is capable of safety implementing LOTO.

I. Contractor shall perform annual audits to review all LOTO procedures ensuring the facility remains in compliance with any future changes to the codes, policies, regulations, and standards.
    a. Update the reviewed date on all LOTO procedures in Brady Link360.
    b. Update all procedures that required revision and reprint the procedures.

B.3.7 Sample LOTO Procedures and Energy Source Labeling Requirements




E-1
CHILLER #2
LOCKOUT PROCEDURE
CHILLED WATER CHILLER #2 PUMP
FOLLOW LOCKOUT PROCEDURE BEFORE SERVICING THIS MACHINE
OVERHEAD ILLUSTRATION OF LOCKOUT / RELEASE POINTS LOCATIONS
LOCKOUT PROCEDURE
CHILLER #2
FOLLOW LOCKOUT PROCEDURE BEFORE SERVICING THIS MACHINE
OVERHEAD ILLUSTRATION OF LOCKOUT / RELEASE POINTS LOCATIONS
Lockout/Tagout Posted Procedure
Control of Hazardous Energy Tag Infromation and Shutdown Process
Lockout/Tagout Posted Procedure
Control of Hazardous Energy Tag Infromation and Shutdown Process
FED F
Arc Fla

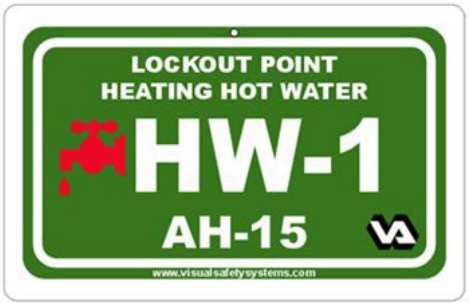
ELECTRICAL
LOCKOUT POINT
E-1
AH-15
www.visualsafetysystems.com

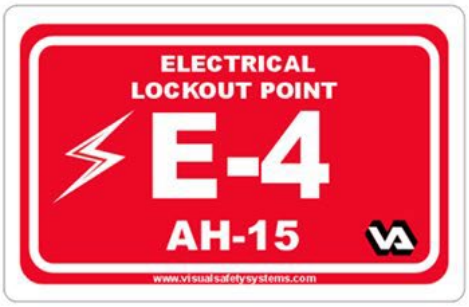
CHILLED WATER
LOCKOUT POINT
W-1
AH-15
www.visualsafetysystems.com

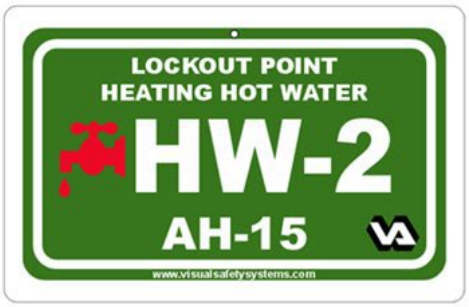
ELECTRICAL
LOCKOUT POINT
E-2
AH-15
www.visualsafetysystems.com

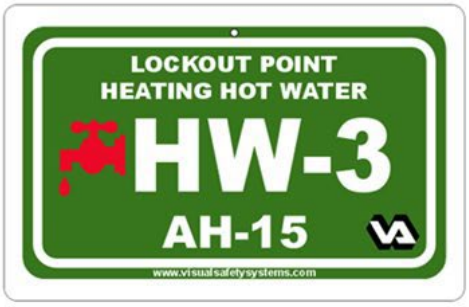
CHILLED WATER
LOCKOUT POINT
W-2
AH-15
www.visualsafetysystems.com

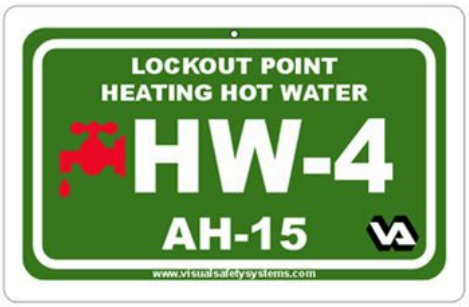
ELECTRICAL
LOCKOUT POINT
E-3
AH-15
www.visualsafetysystems.com


LOCKOUT POINT
HEATING HOT WATER
HW-1
AH-15
www.visualsafetysystems.com


ELECTRICAL
LOCKOUT POINT
E-4
AH-15
www.visualsafetysystems.com


LOCKOUT POINT
HEATING HOT WATER
HW-2
AH-15
www.visualsafetysystems.com


LOCKOUT POINT
HEATING HOT WATER
HW-3
AH-15
www.visualsafetysystems.com


LOCKOUT POINT
HEATING HOT WATER
HW-4
AH-15
www.visualsafetysystems.com

LOCKOUT POINT
CONDENSER WATER INLET 15-20 PSI
W-1
CWP-3

3" x 5" Metal QR code tag used for outdoor equipment