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**Pennsylvania**  
**Department of General Services**

**Request for Proposal for a Design-Build  
Contractor**

**Project No. DGS C-0577-0040 Phase 1**

**SCI Phoenix – HVAC System Repairs (SINGLE POINT  
CONTRACT SOLICITATION)**

**Collegeville, Montgomery County, Pennsylvania**

## Notice to Readers

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Please note that this proposal is valid for a period of 90 days.





# Land Acknowledgement

*We recognize and acknowledge Pennsylvania as being the land of the Erielhonan (Erie), Haudenosaunee (Iroquois), Lenni-Lenape, Shawnee, Susquehannock, and Tuscarora nations, and the Honniasont, Saluda, Saponi, Tutelo, and Wenrohronon tribes. We would like to show our respects to the ancestors that were silenced here and to the people of today that we wish to build a partnership with based on trust and respect. Ainsworth recognizes the systemic inequities that are present as a result of colonization and are committed to working together towards reconciliation.*



DGS

3<sup>rd</sup> Floor Arsenal Building, 1800 Herr Street, Harrisburg, PA 17103  
Phone: 717.783.3273 | Email: [sstanisic@pa.gov](mailto:sstanisic@pa.gov)

**RE: DGS C-0577-0040.2 P1 Design-Build Contractor**

July 7, 2024

Dear Susan Stanisic,

Ainsworth Inc. is pleased to submit our response for the **Design-Build Contractor for the DGS C-0577-0040.2 P1** project. Our team is excited about the opportunity to collaborate with the Department to successfully execute the scope of work outlined in this RFP for SCI Phoenix. Below, we provide an overview of our project scope and commitment to excellence.

Our approach to enhancing the HVAC system at SCI Phoenix involves leveraging our extensive experience with Delta Controls and the enteliWEB Energy software. Given the constraints of the existing facility, we will use the Building Management System (BMS) to create an energy model compliant with the 2018 International Energy Conservation Code (IECC) standards. Our team will utilize the enteliWEB software to set up virtual meters and track key performance indicators such as amperage, voltage, and runtime, ensuring accurate monitoring and reporting of energy usage. This comprehensive approach will help us meet and exceed the IECC requirements, optimizing energy efficiency and system performance.

Project Scope:

Upgrade server and graphics, review and define alarm points to eliminate nuisance alarms, and complete final programming and sequence of operation.

- Conduct a point-to-point check of field components to BAS control to ensure proper operation.
- Commission and tune HVAC systems as required, integrating them with fire alarm systems.
- Complete an energy model for verification of performance based on IECC 2018 requirements.
- Perform duct cleaning of Housing units P, Q, R, S, and T per ACR NADCA Standard – 2021 Edition.

Our team of skilled professionals is dedicated to delivering high-quality results that meet and exceed project expectations. We are committed to maintaining open communication, adhering to timelines, and ensuring that all project objectives are achieved. With our expertise in Delta Controls and enteliWEB Energy software, we are confident in our ability to provide efficient and effective solutions for SCI Phoenix.

We look forward to working closely with the Department of General Services on this important project. Please feel free to contact us at [Your Phone Number] or [Your Email Address] if you have any questions or require further information.

Thank you for the opportunity to collaborate on this initiative.

Sincerely,

Zach Eskin  
Account Executive – Construction  
551-235-0580 | [zach.eskin@ainsworth.com](mailto:zach.eskin@ainsworth.com)  
Ainsworth Inc.- 10 Centre Drive  
Monroe, NJ, 08831



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# Our Vision, Mission, and Values

## Our Vision

To be the world-leading provider of facility services and solutions.

## Our Mission

Our mission is to consistently deliver the best, most trusted facility services and innovative solutions to meet our client needs and standards.

## Our Values

### Respect People & Planet

#### PROTECTING ALL PEOPLE AND OUR PLANET



We are committed to providing a safe, healthy, and inclusive workplace while minimizing our negative impact on the environment.



### Strive for Excellence

#### HOLDING OURSELVES TO HIGHER STANDARDS



We deliver quality solutions and best-in-class value for our clients, while keeping a positive outlook and consistently working hard to improve.

### Be Honest & Accountable

#### TAKING RESPONSIBILITY FOR OUR ACTIONS, WORDS, AND THEIR IMPACT



We build the trust of our stakeholders by being transparent, fair, and meeting our commitments.

### Foster Innovation

#### EMBRACING NEW PERSPECTIVES, IDEAS & TECHNOLOGY



We value personal, professional, and organizational growth and welcome innovation adapting to emerging trends and customer needs.

### Promote Collaboration

#### ONE COMPANY, ONE CULTURE!



We are stronger together. Through our collaborative approach, we bring added value to our stakeholders and increased success for the Company as a whole.

## Corporate Profile

Ainsworth, a subsidiary of GDI Integrated Facility Services Inc. (TSX: GDI), stands as a premier integrated, multi-trade enterprise offering top-notch facility solutions. Our array of services encompasses HVAC, electrical, mechanical, IT (inclusive of data and structured cabling), and comprehensive technical maintenance. Catering to a diverse clientele ranging from commercial, governmental, industrial, institutional to residential property owners nationwide and internationally. GDI and Ainsworth collaboratively provide all-encompassing hard and soft services essential for the real estate sector. Leveraging our in-house capabilities and local expertise, we ensure unparalleled quality and efficiency in meeting our clients' needs.

Established in 1933, Ainsworth is a Canadian enterprise boasting a workforce of more than 2800 employees. Our American head Office is based in New York, with strategically positioned offices tailored to meet our clients' requirements 7 days a week, 24 hours a day.

### *Technical Experts Coast to Coast*

Our innovative and informed teams are dedicated to ensuring our customers derive optimal value from their investments. We swiftly adapt to technological advancements that propel our customers' growth and advancement. By facilitating their pursuit of peak profitability, we actively seek fresh and promising business collaborations and opportunities to broaden our range of solutions.

### *The measure of our success is the confidence our customers continue to place in us.*

In recent years, Ainsworth has diversified its services through internal initiatives, strategic acquisitions, and selective hiring. These services encompass various aspects of HVAC needs, contributing to achieving diverse technical, janitorial, management, administrative, and reporting objectives.

Additionally, these services assist our clients in addressing emerging HVAC trends, reducing emissions, waste to landfill, and energy consumption, thereby enhancing operational resilience and elevating the occupant experience.





# Locations

## Ainsworth USA Team

<b>179</b> New York	<b>54</b> New Jersey	<b>250</b> Pennsylvania
<b>44</b> Oregon	<b>11</b> Washington	<b>63</b> Michigan

**601 STRONG**

## Self-Performing Capability USA

	NY	NJ	PA	OR/WA	MI	MD/DE	MA
HVAC	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing
BAS	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	
Plumbing			Self-Performing		Self-Performing	Self-Performing	
Mechanical	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	
Electrical	Self-Performing			Self-Performing			
Cabling				Self-Performing			
Facility Maint. Services	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing
Energy Services	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing
Power Services					Self-Performing		
Refrigeration	Self-Performing		Self-Performing			Self-Performing	Self-Performing
Power Construction							
Motor Services (spec)	Specialty service	Specialty service	Specialty service	Specialty service	Specialty service	Specialty service	Specialty service
Remote BAS	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing	Self-Performing

Self-Performing  
 Specialty service -- onsite and delivery service available for all size of equipment

## Our National Reach & Local Touch means,

Our size and locations across Canada and the United States means our clients benefit from best practices and expertise from Coast-to-Coast, providing.

- Operational efficiency
- Purchasing power and
- Cost savings

### Mobile dispatch & work order App

Mobile work management app for technicians to be scheduled and deployed promptly based on the criticality of the issue. The app ensures that work order life cycle KPI's are met.

### Modern fleet with GPS tracking

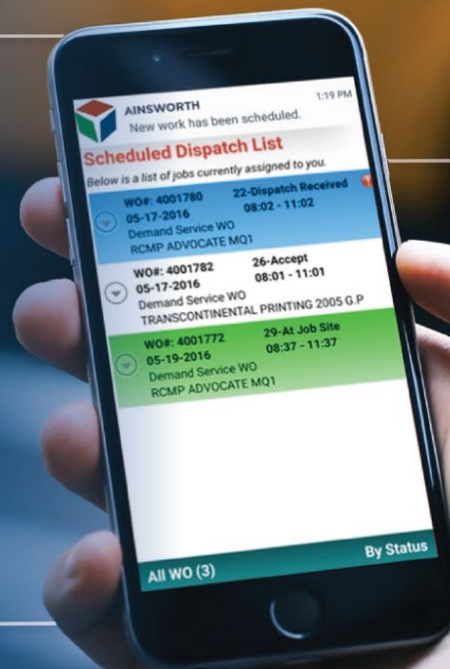
GPS capabilities allow transparency and efficiency across all units.

#### Mobile dispatch & workorder App

Mobile work management app for technicians to be scheduled and deployed at a timely manner based on criticality of issue. The app ensures that work order life cycle KPI's are met.

#### Modern fleet with GPS tracking

GPS capabilities allows transparency and efficiency across all units



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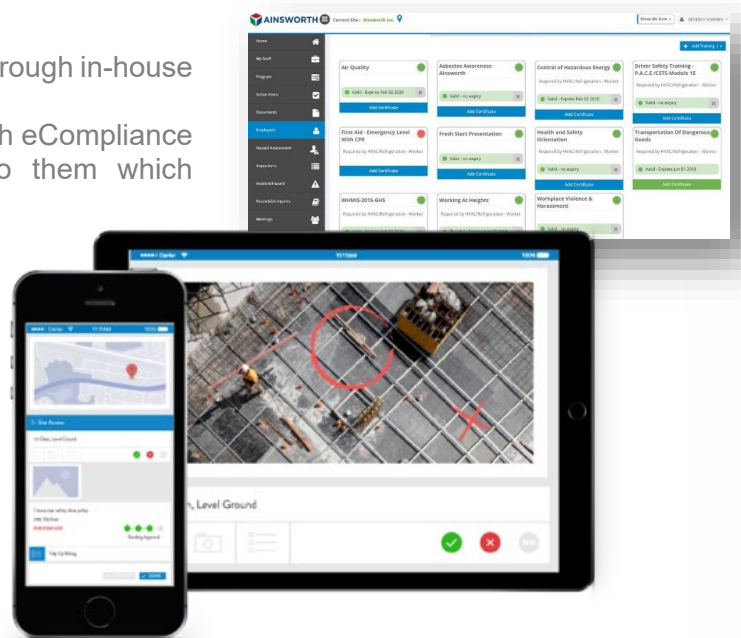
## Our Technology is Your Quality Assurance

- Response time analysis
- HS&E summary reports
- Trending & Failure Analysis reports
- PM vs. additional costs and trends
- Annual Capital Planning guidance and information
- Guidance about energy costs, cost predictability
- Providing a constant flow of new perspectives and ideas (innovation)
- Emissions reporting



## Ainsworth eCompliance

- Profiled training requirements for each employee, through in-house and external training programs
- Ainsworth monitors industry-specific training through eCompliance
- Each employee has an assigned job profile to them which populates the appropriate training and keeps track of all valid and expired courses
- We strive for a 20 / 20 training commitment



*20hrs HS&E and 20hrs Industry-specific Training*

## We Cover All of Your Needs

### *One Service Provider for All of Your Needs!*

Ainsworth brings unique strengths to our clients, stemming from two fundamental pillars.

- The first stems from our market coverage. This 'critical mass' provides Ainsworth the ability to support and service all major cities from coast to coast.
- The second is our vast in-house multi-trade expertise on virtually every aspect of building operation.

## North America's Technical Experts

### Mechanical Services

- Preventative Maintenance
- HVAC
- Chiller & Boiler
- Piping & Plumbing
- Refrigeration
- Insulation & Sheet Metal
- Healthy Ventilation (IAQ)

### Electrical Services

- New Construction & Retrofit
- Thermography
- Power Monitoring
- Emergency Response/Repair
- Structured Cabling
- Power Systems Engineering

### Connected Buildings

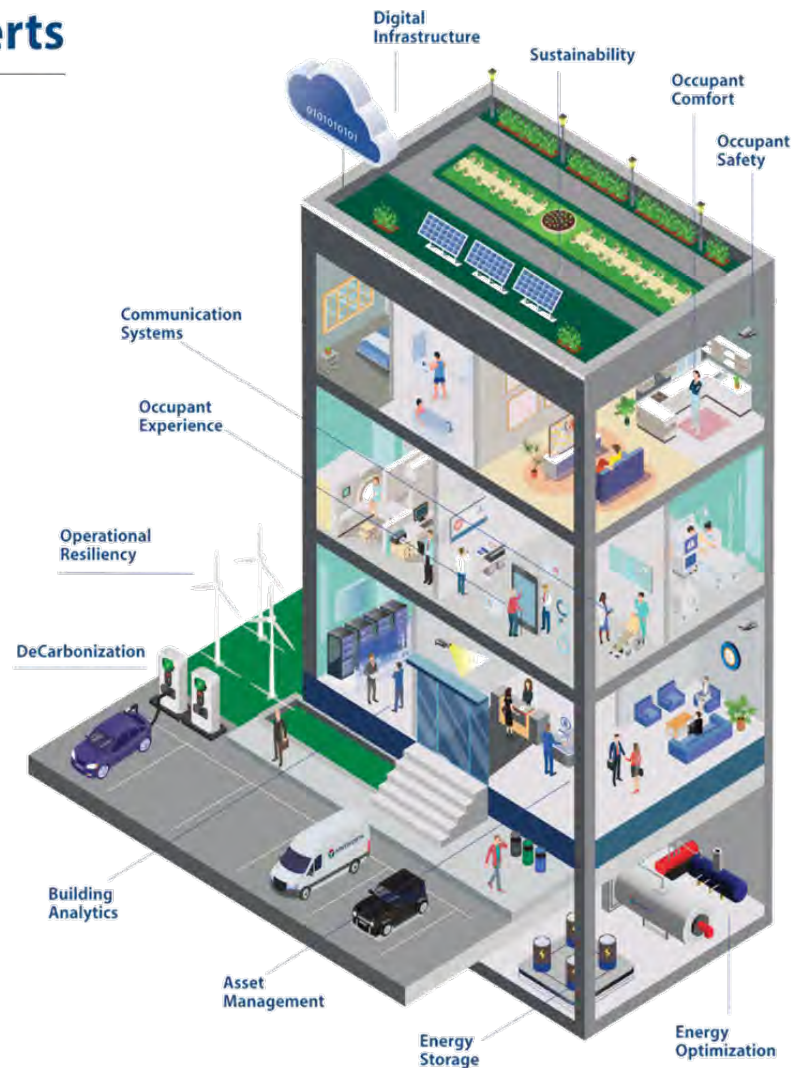
- Building Automation
- Lighting Controls
- Security
- Master System Integrator (MSI)
- Digital Twin Solutions
- Fault Detection

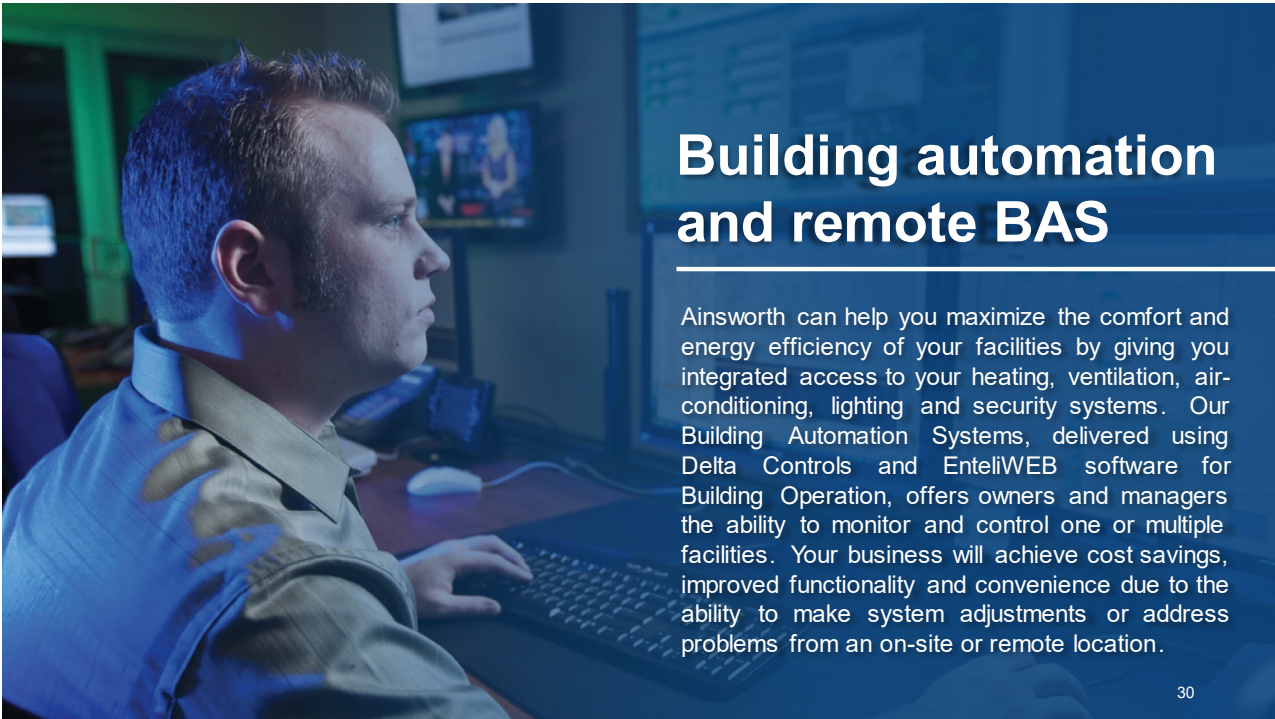
### Energy Performance

- Building Analytics
- Planning + Optimization
- Energy Retrofit
- Energy As A Service
- Onsite Power Generation

### Integrated Technical Solutions

- General Building Maintenance
- Tenant Services & Comfort Care
- Concierge Service
- Loading Dock & Mailroom Management
- Subcontractor Management
- 24/7 Call Centre Support





# Building automation and remote BAS

Ainsworth can help you maximize the comfort and energy efficiency of your facilities by giving you integrated access to your heating, ventilation, air-conditioning, lighting and security systems. Our Building Automation Systems, delivered using Delta Controls and EnteliWEB software for Building Operation, offers owners and managers the ability to monitor and control one or multiple facilities. Your business will achieve cost savings, improved functionality and convenience due to the ability to make system adjustments or address problems from an on-site or remote location.



# Electrical

Our certified electricians are trained to service all makes and models of electrical equipment. We are able to respond to the smallest of electrical needs, to facility wide upgrades and construction projects. We offer customized maintenance programs to meet the most challenging needs preventing unscheduled outages, extending equipment life and improving safety.



# HVAC, Chillers & Refrigeration

Ainsworth installs, repairs, maintains all makes and models of heating, ventilation, air conditioning and refrigeration. Our preventive and predictive maintenance service programs help commercial, industrial and institutional buildings keep HVACR systems running at optimal capacity, preventing unscheduled outages, extending equipment life and reducing operating costs and capital expenditures.

## 2.4 TECHNICAL SECTION 1:

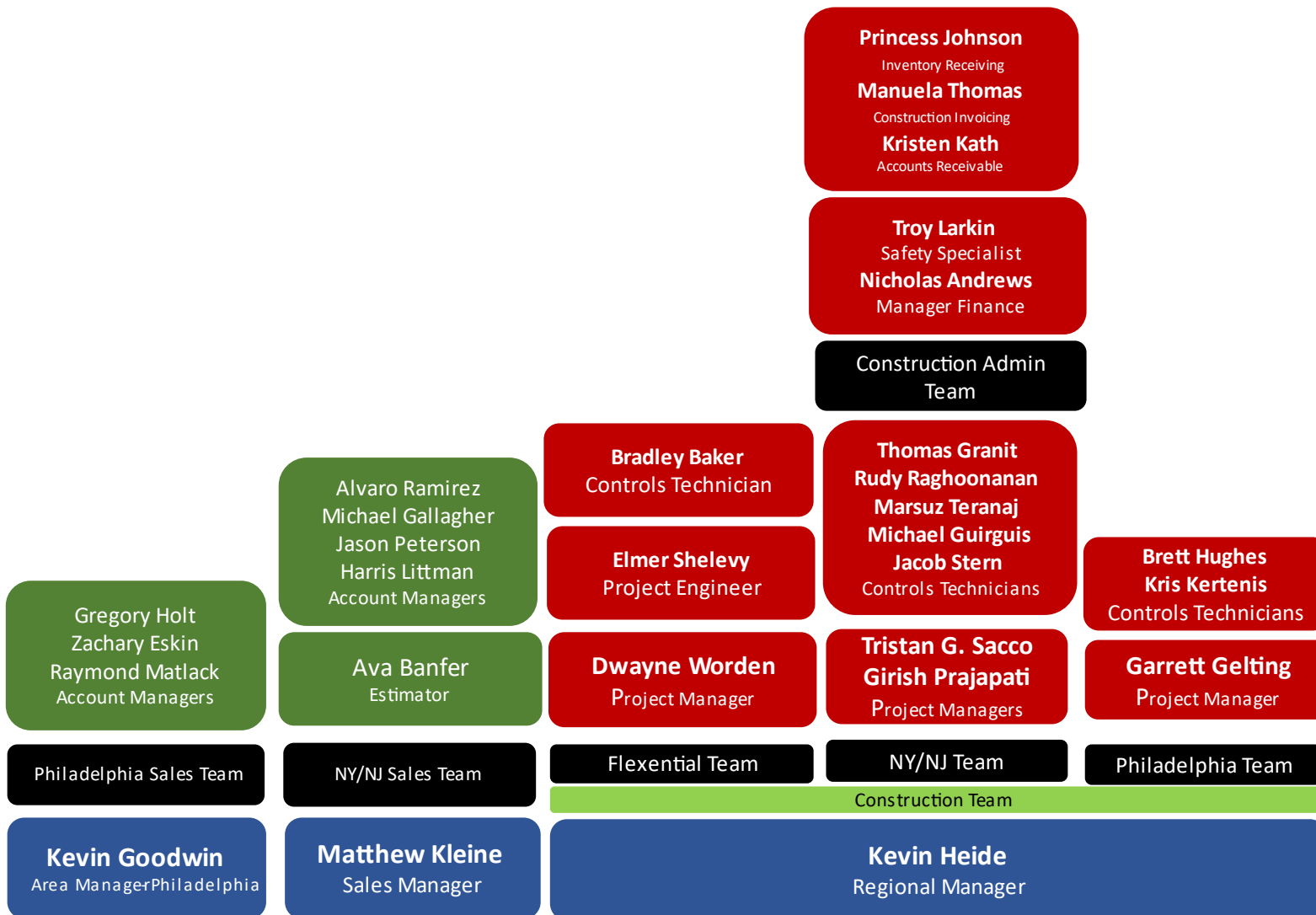
### PROJECT TEAM'S QUALIFICATIONS, EXPERIENCE AND PAST PERFORMANCE

28B2-4.1 Project Management Team Overview

#### Organizational Chart



SCI



# Phoenix

## Center of Excellence

Energy Services

Technological Innovation

Business Process

Quality Assurance

**Dina Mano** – Operations Support  
**Diane Russo** – Service Dispatch  
**Annette Fontanez** – Service Invoicing

### Service Admin Team

**Tanzie Raman**  
Service Engineer  
**Anthony Scola**  
Service Help Desk  
**George Johnson**  
Delivery Driver

### Service Team

**Trevor Markland**  
**Michael Tucciarone**  
**Pedro Pereira**  
**Robert Loebel**  
**Mario Pabon**  
**Fred Getto**  
**Christopher Mouro**  
**Samir Zejnilovic**  
Service Technicians  
  
**Haimnauth Sarran**  
Special Project Controls

### Service Team

**Christopher Spies**  
**Robert Smith**  
**Ryan Pascale**  
**Joesph Janoski**  
**Charles Cooper**  
**Cesar Bustamante**  
**Dean Brauch**  
**James Macario**  
HVAC Service

### Picatinny Mechanical Services

**Brett Taylor**  
**Emily Sutherland**  
Graphics Specialists  
**Christopher Ross**  
CAD Engineer

**Rudraunauth Singh**  
**Simon Zhou**  
**Daniel James**  
Design Engineers

### Engineering Team

**Sahar Kashif**  
**Kraig Ruff**  
HR Interns  
**Tanya Allen**  
HR Specialist

### HR Team

**Ralph Andrews**  
Service Manager

**Shishir Amin**  
Engineering Manager

**Tracy Ford**  
HR Manager

Our team is comprised entirely of Ainsworth Inc. staff, ensuring seamless collaboration and communication across all phases of a project. Having worked together on numerous projects over the years, (as seen in the project references) our team members have developed a deep understanding of each other's strengths and working styles. This synergy allows us to implement changes quickly and efficiently, adapting to project needs as they arise. Our well-established communication channels facilitate the smooth exchange of ideas and information, enabling us to maintain high standards of quality and performance. This integrated approach ensures that our clients benefit from a cohesive, responsive, and highly skilled team dedicated to the success of every project. We don't have to wait for a weekly meeting to discuss any changes in scope or any challenges that may arise.

## Project Management Structure

### Management Team:

**Kevin Heide - Branch Manager:** Kevin has been involved in the Building Automation industry for over 25+ years. He has extensive experience in engineering design, programming, graphics development, project management and team building. Kevin began his career with the organization as an intern in 1998, and has grown with the company as engineer, engineering manager, operations manager, and into his current role as regional manager. Kevin is dedicated to developing strong relationships with his client's and teammates. He focuses on adding value for our clients through technology innovation and collaboration.

**Role and Responsibility: Executive sponsorship for the project**

**Kevin Goodwin - Area Manager:** Kevin has been involved in the Mechanical industry for over 35+ years. He has extensive experience in sales management, business development, project management and engineering. He is a passionate leader with a proven track record of the ability to deliver operational excellence exceeding the customer's expectations

**Role and Responsibility: Project Executive**

**Garrett Gelting - Project Manager:** Garrett began his career in Automation 2016 and worked as a technician for over 5 years, prior to becoming a Project Manager, He prides himself on understanding his customers' needs and finding the solution that exceeds expectations. He has seen projects from beginning to end and that has given him insight into areas that can be difficult, he can navigate past the issue before it becomes a problem.

**Role and Responsibility:** For this project Garrett will be the Project Manager - Responsible for the day-to-day management of the project, including planning, execution, and closing, ensuring the project stays on schedule and within budget.

**Shishir Amin - Engineering Manager:** Shishir has been with Ainsworth for over 25+ years. He started as an engineer and now uses his expertise to coach newer engineers as the Engineering Manager. Shishir has extensive experience in engineering design, programming, and graphics development. He has been involved in developing engineering solutions for clients through technology and innovation.

**Role and Responsibility:** For this project he will be the Engineering Manager- Lead the team of engineers, providing technical guidance and ensuring the design meets project specifications and standards.



## Engineering and Technical Team:

### Engineers:

**Daniel James** – Application Engineer - Daniel has worked as an Application Engineer in the building automation industry for 13 years. He has experience in design, programming and creation of front-end graphics. He has worked on projects covering a wide range of market sectors such as Pharma, Health, Government, Education, Retail and Business. These projects include renovation, new construction and design/build. He joined Ainsworth in 2022. **Role and Responsibility:** Design Engineer of record, Daniel will be designing the project.

**Brett Taylor** – Graphics Engineer - Brett has been with Ainsworth for 13 years, developing graphics, drafting wiring and flow diagrams. Brett has a strong understanding of the systems and a high attention to detail allows him to develop solutions for clients BAS needs.

**Role and Responsibility:** Brett will take the designs Daniel created and create the graphics for the project

**Chris Ross** – Engineering Draftsperson - Chris has 2 years of experience in Building Automation Industry with expertise in Tridium Niagara and Delta controls. Currently working in Drafting/Graphics position to assist team members along project lifecycle. Information Technology graduate with specialization in Software Development (Java) and Design (Object Oriented Programming and Technical Writing).

**Role and Responsibility:** Chris will do Design and Document Generation and finalization

**Simon Zhou** – Project Engineer - Simon joined Ainsworth in 2020 . He has experience in Building Management Systems, HVAC Systems, BMS Programming (BACnet), CAD Software (Visio, AutoCAD) and Microsoft VBA programming.

**Role and Responsibility:** Simon will bring the design to the field technical team

### Technicians:

Assist engineers in implementing designs, conducting tests, and troubleshooting technical issues.

**Brett Hughes** – Technician - Brett has been with Ainsworth for 4 years. He has worked with field controls and done graphics work as well as engineering/programming work.

**Role and Responsibility:** Our technicians are in charge of the on site work and commissioning of the system

**Michael Guirguis**- Technician - Michael has been a Technician for 4+ years and has a background in Automation Control systems from Pennsylvania College of Technology. He is always determined to get a job to 100% completion and is very passionate about his work.

**Role and Responsibility:** Our technicians are in charge of the on site work and commissioning of the system

**Kris Kertenis** – Technician - Kris joined Ainsworth in 2023. He graduated in 2022 with a BSc. In Mechanical Engineering and is a technician.

**Role and Responsibility:** Our technicians are in charge of the on site work and commissioning of the system

**Trevor Markland**- Technician - Trevor joined Ainsworth in 2022 and has been in the industry for over 20 years. He will ensure everything is done to code and to scope

**Role and Responsibility:** Our technicians are in charge of the on site work and commissioning of the system

*Our Project team has worked together on the projects we have shared. Please see our project sheets for team involvement, in the same roles as listed above.*

The project includes three base bids with specific tasks and requirements.

**Base Bid #1** involves the recommissioning of the Building Automation System. This includes a point-to-point, sequential, and graphical checkout of each system, commissioning and tuning of all HVAC systems, and ensuring seamless integration of all HVAC systems with the fire alarm systems. Upgrades to existing programming and alarming, a new hosting server, and an upgraded enteliWEB software package are also part of this bid. Additionally, it involves identifying malfunctioning equipment or devices, providing balancing spot checks as needed, and offering 3rd party commissioning assistance. Owner and operator training will be provided to ensure proper system use and maintenance.

**Base Bid #2** This narrative outlines the approach to utilizing the existing Delta Controls Building Management System (BMS) to provide an energy model for the HVAC system at SCI Phoenix, ensuring compliance with the 2018 International Energy Conservation Code (IECC). Given the constraints of the existing facility and the inability to develop a software-based energy model, the BMS will be leveraged to monitor key inputs such as amperage, voltage, and runtime of HVAC equipment. This will enable the creation of virtual meters to track energy consumption and ensure adherence to the IECC standards. Please see Appendix 1 at the end of this document.

**Base Bid #3** focuses on duct cleaning of housing units P, Q, R, S, and T. This includes cleaning and/or treating diffusers and grilles with an EPA-registered sanitizer. The duct system will be cleaned under a true HEPA vacuum with 99.97% filtration at 0.3 microns, meeting clean room standards. Special air rake tools and rotary brushes will be used to pull debris back to the vacuum source, which will then be removed. Pneumatic brushes equipped with cameras will allow technicians and supervisors to inspect the work in progress. Air Handling Units (AHUs) will be cleaned with a HEPA vacuum and pressure washer, and coils will be cleaned with a non-corrosive coil cleaner and pressure washer, then treated with an EPA-registered sanitizer. Exhaust Fans (EFs) and Supply Fans (SFs) will be cleaned with compressed air, and Variable Air Volume (VAV) boxes will be cleaned with a HEPA contact vacuum. Accesses in the ductwork, which should be about every 25 feet and on each side of the turning vanes with a size of 16" x 16" or larger where available, will be the customer's responsibility. The ductwork must be accessible for cleaning, and the system must be de-energized during this process. The service will be carried out by trained and certified technicians in various safety and operational procedures, including HVAC Hygiene, High Reach Operation, Confined Space Entry Procedures, Confined Space Rescue, Hazard Communication, Fall Safety, Respiratory Protection, Mold remediation, Lockout/Tagout, and OSHA 30 Hour Training. Proper PPE, including gloves, Tyveks, full-face respirators, and other necessary safety gear, will be provided.

## Why the proposed management structure will best serve the interests of the Project

Ainsworth's proposed structure offers numerous benefits, including a clear hierarchy and well-defined responsibilities, which ensure accountability and efficient communication channels. Managers are able to concentrate on strategic oversight and coordination, while engineers and technicians dedicate their efforts to technical execution, promoting a specialized focus. This structure facilitates effective communication from top-level management to technical staff, reducing misunderstandings and enhancing project coherence. Additionally, it allows for efficient resource allocation, enabling managers to assign personnel to tasks based on expertise and project needs. Furthermore, the hierarchical setup supports effective risk management by enabling risk identification and mitigation at various levels of the project.

## Project Management Plan

### 1. Project Initiation

Project initiation involves setting clear objectives, defining the scope, and identifying deliverables to ensure a focused direction. It also includes identifying all stakeholders to understand their needs and expectations, which is crucial for aligning the project with their interests. Additionally, a feasibility study is conducted to assess the project's viability from technical, financial, and environmental perspectives, ensuring that the project is achievable and sustainable.



### 2. Project Planning

A detailed project plan is developed, outlining tasks, timelines, resources, and budget to ensure a clear roadmap for execution. A risk management plan is created to identify potential risks and devise mitigation strategies. To keep all stakeholders informed throughout the project lifecycle, a comprehensive communication plan is established. Resource allocation involves assigning roles and responsibilities to team members based on their expertise and the project requirements, ensuring that each task is handled by the most qualified individuals.

### 3. Project Execution

Team coordination is maintained through regular meetings and updates, ensuring effective collaboration among team members. Quality assurance measures are implemented to guarantee that all deliverables meet the required standards. Progress tracking involves monitoring the project against the plan and making necessary adjustments to stay on track and achieve the project objectives.

## 4. Project Monitoring and Control

Performance measurement is conducted using key performance indicators (KPIs) to evaluate the project's progress and success. Any issues that arise during project execution are promptly identified and resolved through effective issue management. Additionally, changes to the project scope, schedule, and budget are managed through a formal change control process, ensuring that all modifications are systematically assessed and approved to maintain project integrity.

## 5. Project Closing

Final deliverables are completed and verified to meet the required standards. Formal approval from stakeholders is obtained to confirm that the project objectives have been achieved. All project documentation is compiled for future reference and to capture lessons learned. A debriefing session with the team is conducted to discuss successes, challenges, and areas for improvement, ensuring continuous development and preparation for future projects

Our proposed management structure ensures that the project is managed efficiently, with clear roles and responsibilities, effective communication, and robust risk management. This structure supports the successful delivery of the project objectives while meeting stakeholder expectations. Ainsworth is excited about collaborating with DGS.

## 229B-4.2 Work Plan

Once the Notice of Selection / Letter of Intent is received, Ainsworth will begin with a Project kick off meeting with key stake holders to finalize details of the project scope, requirements, timelines and any specific expectations that SCI Pheonix may have. Contract will be finalized and signed by all parties. Detailed project planning will begin, our project team will develop a specific plan, outlining milestones, deadlines, resource allocations and risk management strategies. We will hold an internal kickoff meeting to ensure all team members are aligned with the project objectives and plan. The design phase will commence, information will be gathered for the site and detailed designs will include system architecture, hardware and software specifications, network design, and control strategies. We will present the design to the key stake holders for feedback and approval, then make necessary revisions based on input. Procurement, implementation and commissioning will follow. Please find detailed descriptions below.



information will be gathered for the site and detailed designs will include system architecture, hardware and software specifications, network design, and control strategies. We will present the design to the key stake holders for feedback and approval, then make necessary revisions based on input. Procurement, implementation and commissioning will follow. Please find detailed descriptions below.

### 1. Understanding of the design-build concept

Ainsworth will use an Integrated Approach which combines both design and construction responsibilities under a single contract. As the design-build contractor, we will oversee the entire project from initial concept through completion. Using a Single Point of Responsibility, Ainsworth Inc. is the sole entity accountable for

both the design and construction phases. This will simplify communication and decision-making process by having a single point of contact for the SCI Phoenix.

Our Collaborative Process encourages collaboration between designers and builders from the project's inception. This process promotes innovative solutions and more efficient problem-solving, as well as a streamlined Project Delivery. With the overlapping of design and construction phases, internal collaboration will often result in a faster project completion. We will be able to reduce the likelihood of delays and cost overruns since potential issues are addressed early on. The Integrated Approach typically offers more accurate and reliable cost estimates from the beginning, and the integrated nature of design and build phases can lead to significant time and cost savings.

This process also transfers a significant portion of the project's risk to us, as the design-build contractor. Ainsworth will be able to address any issues related to design errors or construction defects right away. The unified approach enhances quality control and ensure that the design intent is carried through to construction, which also facilitates easier management and coordination with suppliers. This model is more adaptable to changes and modifications during the project, which allows for more flexibility in managing unforeseen circumstances or evolving SCI Phoenix needs.

Communication between all parties is improved and from the client, directly to the designers, and builders. This reduces misunderstandings and discrepancies that can arise from separate contracts for design and construction.

#### **Ainsworth's Roles and Responsibilities:**

As the Design-Build Contractor: we will oversee the entire project, ensuring it stays on schedule and within budget, manage all construction activities, including subcontractors and suppliers. We will act as the primary point of contact for the client. Our team members will provide specialized design expertise and technical guidance. They will be responsible for creating and refining the project's design documents and plans as well as ensuring compliance with regulatory requirements and industry standards.

## **2. Preconstruction phase effort for the design-build concept**

Ainsworth understands that the preconstruction phase in the design-build process is crucial for setting the foundation for a successful project. It involves thorough planning, coordination, and communication to ensure that all aspects of the project are well-prepared before construction begins.

Key Stake Holder Consultation will be held to understand their vision and needs. We will define project goals, scope, and constraints. The Site Evaluation will allow us to conduct preliminary studies to assess site condition and evaluate potential risks and opportunities.

Ainsworth has a Design-Build Team assembled and ready to ensure early communication with key team members, including technicians, engineers, and key subcontractors to establish roles, responsibilities, and communication protocols. Kickoff meetings will be held to align the team on project objectives, schedules, and deliverables.

We will develop initial design concepts that align with the client's vision and project requirements. Our team will create conceptual drawings and sketches for SCI Phoenix review and feedback. Doing a Site Analysis and Investigation assessment to identify potential site-related risks and develop mitigation strategies.



Detailed Design and Engineering will be done and schematic designs will refine the conceptual design into more detailed schematic drawings and ensure compliance with building codes, regulations, and industry standards. All permits and regulatory compliance will be prepared and submitted to relevant authorities to obtain required permits and approvals for construction.

Our team will create a detailed project schedule outlining key milestones, deliverables, and timelines. We will ensure alignment of the schedule with client expectations and project constraints. Ainsworth will then secure contracts with key subcontractors and suppliers to ensure alignment with project schedules and budgets.

Preconstruction meetings with the design-build team, subcontractors, and key stakeholders will be held to review project plans, schedules, and roles to ensure everyone is aligned and prepared. All logistics and Mobilization Planning will begin and site logistics plans, including staging areas, access routes, and safety measures will be developed.

Our team will then prepare for site mobilization and the commencement of construction activities.

### 3. Critical materials and equipment

The construction phase in the design-build process at SCI Phoenix prioritizes coordination, quality control, and effective communication to ensure the project is completed on time, within budget, and to the client's satisfaction.

**Project Mobilization:** The process starts with site evaluation and data acquisition. Our team will then handle system engineering design equipment and material procurement to ensure timely delivery and avoid delays.

**Construction Management:** Supervision and coordination are critical in this phase. The Project Manager, Garrett Gelting, will oversee daily activities, coordinating efforts of subcontractors, suppliers, and workers. He will monitor and adjust the project schedule to ensure adherence to timelines and address any delays or changes promptly.

**Quality Control and Assurance:** Ainsworth's Quality Control and Assurance program will include regular inspections to ensure compliance with design specifications and building codes. Material testing and quality assurance checks will be conducted throughout construction, with detailed records maintained for inspections, test results, quality control measures, and any corrective actions taken.

**Safety Management and Planning:** A comprehensive safety plan will be developed and implemented. Safety training sessions will be conducted for all workers and subcontractors. Regular safety audits and inspections will be performed to enforce adherence to safety protocols and address any violations immediately.

**Communication and Coordination:** Effective communication is key to project success. Ainsworth will provide regular updates and progress reports to key stakeholders. Client site visits will be available to review progress. Regular coordination meetings with the design-build team and subcontractors will ensure clear communication and timely resolution of any issues.



**Change Order Management:** All change orders will be documented and managed. We will ensure client approval for any changes to the project scope, design, or schedule. Our team will assess the impact of changes on the project's timeline, budget, and resources, developing strategies to mitigate any negative effects.

**Construction Execution:** For the existing Building Automation System, we will conduct point-to-point, sequential, and graphical checkout of each system. HVAC systems will be commissioned and tuned, seamlessly integrated with fire alarm systems, and upgraded with the latest programming, alarming, server, and enteliWEB software package. Additionally, energy modeling and duct cleaning for housing units P, Q, R, S, & T will be executed.

**Problem-Solving and Conflict Resolution:** Any construction issues or conflicts will be promptly identified, documented, and

resolved in collaboration with the design team and relevant stakeholders. Implemented solutions will be communicated to all affected parties.

**Final Inspections and Punch List:** A substantial completion inspection will be conducted with the client and design team to identify any remaining work or deficiencies, creating a punch list. All punch list items

will be addressed and rectified, followed by final inspections to ensure all work meets quality standards and design specifications.

**Project Closeout:** Upon completion, all project documentation, including as-built drawings, warranties, and manuals, will be compiled and handed over to the client. Training sessions will be provided for the client on the operation and maintenance of building systems. A final walkthrough with the client will confirm satisfaction with the completed work and address any remaining concerns or issues promptly.

#### 4. Understanding of construction phase challenges and proposed solutions

The construction phase of the SCI Phoenix project comes with several challenges that require strategic solutions. One significant challenge is site and system access. To address this, consistent coordination with the Department is essential, including the provision of escorts and access approval documentation for employees and specific areas. Weekly schedule updates will help ensure smooth operations.

Working on a live and occupied site presents its own set of difficulties. Coordinating shutdowns with the Department for reprogramming and recommissioning, storing materials and tools in approved on-site areas, and potentially scheduling off-hours work are necessary steps to minimize disruptions.

Maintaining the project timeline is another critical aspect. To meet the schedule, multiple crews will be deployed, and remote system access will be set up in collaboration with the Department to enhance efficiency.

Malfunctioning devices are a common issue in such projects. A change order will be submitted for approval that includes labor hours and material to replace any malfunctioning devices discovered during the recommissioning of the systems.

Managing dual building automation systems is also a challenge. The existing graphics and programming will continue to run in parallel with any new systems being implemented. There will likely be two access points during the construction phase, and Ainsworth will assist the site maintenance crew with the operation of the site and equipment during this time, ensuring a smooth transition and minimal disruption to ongoing operations.



#### 5. Address long lead items (permits, etc.) and phasing of construction

The construction timeline will not be impacted by any long lead items, allowing the project to proceed smoothly. The phasing of construction will include several key steps to ensure a comprehensive and coordinated approach. Initially, pre-design document discovery and pre-design site discovery will be conducted to gather essential information. Following this, documentation for the new building automation system will be prepared in anticipation of on-site commissioning. Additionally, new programming, graphics,



and controller databases will be generated to support the updated system. Building lists will be created, with prioritization based on ease of access levels to facilitate an efficient change-over process. A detailed schedule will be developed for each building, outlining the sequence of activities.



The next phase involves point-to-point checkouts, commissioning, and tuning of HVAC systems on a building-by-building basis, ensuring optimal performance. Where necessary, duct cleaning will be carried out for each building. Coordination for fire system testing will also be managed individually for each building. If required by the Department, third-party commissioning will be undertaken to validate the systems' performance. Upon completion, all administrative login credentials for the software, devices, and server will be handed over to the facility's management. Comprehensive as-built documentation will be provided, and training sessions will be conducted to ensure the facility staff is well-equipped to manage the new systems. The project will conclude with a formal close-out process, ensuring all elements are completed and handed over satisfactorily.

## 6. Identify critical materials and equipment

Critical materials and equipment encompass any devices that are identified as faulty during the point-to-point and sequential checkout procedures. Such faulty devices and materials can render HVAC systems non-functional until they are replaced, necessitating additional visits from technicians and causing delays in the final check-out procedures. To mitigate these issues, early identification of faulty materials and devices is crucial. Implementing pattern recognition to identify parts or sensors that require frequent replacement on similar systems can help pre-emptively address these issues. By ordering these commonly faulty devices in excess and storing them on-site, immediate resolution can be achieved. This proactive approach ensures that even if a part needs replacement, it can be made available within several weeks, effectively eliminating long lead times and minimizing delays.

## 7. Approach to maintaining the overall schedule and strategy for meeting the project milestones.

Initial planning and scheduling are vital for successful project execution. This phase involves defining the project scope, objectives, and requirements, followed by developing a detailed schedule that outlines tasks, milestones, and timelines using tools like Gantt charts or software such as Microsoft Project. Effective resource allocation is crucial, involving the assignment of roles and responsibilities to team members and ensuring the availability and timely delivery of necessary materials and equipment. Risk management requires identifying potential risks, developing mitigation strategies, and regularly updating risk registers throughout the project lifecycle.



Monitoring progress involves implementing a system to track daily progress against the schedule, conducting regular site inspections, and holding progress meetings to ensure milestones are being met. Communication and coordination are essential, with open communication channels maintained among all stakeholders, including clients, contractors, and suppliers. Promptly addressing issues helps avoid delays and ensures alignment with project goals. Adaptability and contingency planning are also key; anticipating changes and having contingency plans in place allows for the evaluation and adjustment of schedules as necessary.

Quality control measures must be implemented to ensure that work meets the required standards and specifications. Detailed documentation and reporting are essential for maintaining records of progress, issues, and decisions made, as well as providing regular reports to stakeholders on project status and forecasted milestones. This comprehensive approach ensures that the project remains on track, meets quality standards, and achieves its objectives within the defined timeline.

## 8. Outline construction plan

No field offices will be utilized for this project. Instead, the visitor parking area will accommodate all Ainsworth employees and subcontractors, requiring a maximum of 12 spaces with license plates, make, and model details provided for each on-site vehicle. To enhance the efficiency of daily security checks, department-approved material and tool storage areas will be used. Coordination with the Department will ensure that escorts are available to match the construction crew, and working hours will be aligned with the Department's schedule.

## 9. Address Project Safety Plan, Management and Monitoring.

We have created a specific site safety plan for your site,





# Site Specific Health and Safety Plan

Project Name: SCI Phoenix – HVAC System Repairs (DGS C-0577-0040 Phase 1)

## 1. Project Details

<b>Contractor name:</b>	Ainsworth Inc.		
<b>Address:</b>	10 Centre Drive, Monroe Twp, NJ	<b>Phone:</b>	609-860-6600
<b>Safety Representative:</b>	Troy Larkins	<b>Phone:</b>	929-484-4011
<b>Project Description:</b>	HVAC System Repairs		
<b>Location of Work:</b>	1. Collegetown, Montgomery County, Pennsylvania		
	2.		
	3.		
<b>Project Manager:</b>	Garrett Gelting	<b>Phone:</b>	732-718-7246
<b>Site Foreman</b>		<b>Phone:</b>	
<b>Duration (approximate):</b>	<b>Start Date:</b> 10/1/24	<b>End date:</b>	1/24/26

## 2. Health and Safety Policy

Ainsworth Inc. is committed to the Health and Safety of all employees and the elimination of health and safety workplace injury and illness. Managers, supervisors, workers and their unions are all encouraged to participate in the Health and Safety program as we strive towards the goal of the elimination of all workplace injury and illness.

All workplace parties have Health and Safety responsibilities and accountabilities for themselves and each other. Managers and supervisors will ensure that the safe and healthy work conditions are maintained in his/her assigned work area. Workers are to work safely following legislated and company policies and practices.

This policy is to be implemented through continuous monitoring, annual reviews, mandatory health and safety training, and on-site inspections provided by the corporate Health and Safety Department.

Each employee will develop an awareness of the prevention of personal injury and make safe working conditions a way of life, both on and off the job. Safe work practices on all work sites are the key to our success and well being of our employees.

Ainsworth Inc. has a Return to Work Program that all members of the workplace have a shared responsibility to actively participate in when required.

Safety at Ainsworth Inc. is of equal importance to all of the other measures applied to the workplace.



## Site Specific Health and Safety Plan

### 3. Workplace Violence Policy

The company recognizes the potential for workplace violence and is committed to working with its employees to provide a safe working environment. Workplace violence will not be tolerated on company premises, or while an employee is conducting company business at other locations. Any violence committed by or against any employee is unacceptable and will be subject to the company's discipline policy and/or legal action.

For the purposes of this policy, violence includes but is not limited to:

- The exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury to the worker,
- An attempt to exercise physical force against a worker, in a workplace, that could cause physical harm to the worker
- A statement or behaviour that is reasonable for a worker to interpret as a threat to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker.

The company will take whatever steps are appropriate to protect our employees from potential risks associated with workplace violence.

Management will investigate and deal with all incidents and complaints of workplace violence in a fair and timely manner. The policy and program will be reviewed and updated, if required, annually. Supervisors must ensure that all measures and procedures are set out in the policy and the supporting program is carried out in the workplace. Workers are expected to comply with this policy and program and to report any concerns or complaints to their supervisor.

This policy prohibits reprisals against employees, acting in good faith, who report incidents of workplace violence or who are involved in an investigation. Management will take all reasonable and practical measures to prevent reprisals, threats of reprisal, or further violence.

With everyone's cooperation, we will continue to be a safe and healthy workplace.

### 4. Environmental Policy

It is the policy of Ainsworth Inc. ("Ainsworth") to ensure that all Environmental Legislation is complied with. This includes but is not limited to, Federal, Provincial and Municipal Acts and Regulations that are applicable in specific locations. All employees are encouraged to ensure no harm is done to the environment at work or recreation, and promote the use of recycling wherever possible.

Every employee of Ainsworth has the responsibility and the obligation to follow the laws with respect to prohibitions, reporting, restoration and seeking proper approvals on environmental issues and concerns. All adverse effects must be kept to an absolute minimum without jeopardizing the Health and Safety of themselves, fellow workers or the general public.

Ainsworth will only permit the use of proper licensed/approved transporters, dumpsites and de-commission facilities. Copies of all necessary documentation must be forwarded to head office.

All Ainsworth employees must report all accidental spills and emissions to proper government authorities and head office immediately.

We must work together as a team to be effective in ensuring all risks to the environment are minimized.



## Site Specific Health and Safety Plan

### 5. Responsibilities

#### Worker Duties and Responsibilities

It is the requirement of the employer and supervisors to ensure workers are trained as to their duties and responsibilities under legislated statutes and regulations. This will be achieved by Ainsworth Companies through orientation training and supervisory due diligence.

All workers shall perform their duties in accordance with applicable provincial legislation. They will be held accountable for their responsibilities and an annual performance review will evaluate their success.

#### Responsibilities

- Carry out their work in a responsible manner that will not create a further hazard to their own safety and health or the safety and health of other employees.
- Assist site supervision in the reduction and controlling of accident producing conditions and unsafe acts on the work site.
- Report any accidents, incidents, near misses and/or injuries immediately to their supervisor.
- Report any anticipated loss of work time to his/her supervisor as soon as possible after being treated by a physician following injury.
- Comply with the Ainsworth Companies safety rules, safe work practices and procedures and legislation.
- Know, understand and work in a safe manner following safe work practices and procedures.
- Know, understand and employ established rules and procedures for handling hazardous materials.
- Wear required personal protective equipment and maintain in good working order.
- Use all safety devices provided, ensure optimum condition and report any defects immediately to their supervisor.
- Report immediately to their supervisor any defective lighting, equipment, ventilation, floor, railing, guard, structure, unsafe conditions, practices or procedures.
- Report injuries, incidents and hazards immediately to supervisor.
- Use only the tools, equipment, materials, and processes that they are trained and authorized to.
- Use tools, equipment and materials only in the manner intended.
- Inspect work area, and keep workplace safe and orderly.
- Refrain from any horseplay or any other unacceptable conduct.
- Cooperate with the Health and Safety committee.

#### No worker shall,

- Remove or make ineffective any protective device required by the regulations or by Ainsworth Companies



## Site Specific Health and Safety Plan

- Use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other worker.
- Engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct.
- Workers are expected to comply with the health and safety initiatives of Ainsworth Companies. Any violations will result in disciplinary action.

An annual performance review to measure each of the above listed responsibilities will be performed by the senior manager.

### **Supervisor Duties and Responsibilities**

As defined under legislation, it is the employer's responsibility to ensure they appoint a "competent person" as a supervisor in accordance with provincial legislation. In order to meet this requirement, Ainsworth Companies will ensure our supervisors are trained and understand their duties and responsibilities as defined.

Supervisor/Foreman - means a person who has charge of a workplace or authority over a worker.

### **Responsibilities**

- Provide safe working conditions for all workers under his/her supervision.
- Provide instruction to workers in safe work procedures. As part of the routine duties, the Supervisor shall require employees to use personal protective equipment as appropriate, e.g., hard hats, goggles, masks, respirators, safety glasses or other items deemed necessary.
- Take corrective action to ensure physical conditions which are liable to cause or have caused accidents are corrected.
- Undertake the investigation of accidents, incidents or near misses to determine the underlying causes. These must be reported in detail to the Superintendent and the required report forms completed on a timely basis.
- Provide a good example for employees by always directing and performing work in a safe manner.
- Conduct weekly "tool box" talks about hazards that are present at the job-site.
- Conduct regular inspections for unsafe practices and conditions and ensure prompt corrective action to eliminate causes of accidents.
- Provide induction training to new/transferred workers, and reinforcement training to regular employees.
- Enforce rules, procedures, safe work and hygiene practices, health and safety standards and use of protective equipment.
- Advise worker of the existence of any known hazards or potential danger to the worker's health and safety.
- Respond to and correct unsafe acts and conditions.



## Site Specific Health and Safety Plan

- Commending worker health and safety performance.
- Performing worker job safety observation.
- Report and investigate all incidents/accidents resulting in personal injury and or property damage.
- Inform senior management of any known occupational health and safety concerns.
- Regularly evaluate worker safety performance and provide regular feedback including corrective measures.
- Take every precaution necessary in the circumstances for the protection of a worker.
- Cooperate with the Health and Safety committee.

An annual performance review to measure each of the above listed responsibilities will be performed by the senior manager.

### 6. Scope and Construction Activity Details

#### List Major activities

1. Upgrade server and graphics, review and define alarm points to eliminate nuisance alarms, complete Final programming and sequence of operation.
2. Point to point check of field component to BAS control to ensure proper operation.
3. Commission and tune HVAC systems as required. Integrate HVAC systems with fire alarm systems
4. Base Bid #2 - Complete Energy model for verification of performance.
5. Base Bid #3 - Duct cleaning Housing units P, Q, R, S, and T.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.

### 7. General Safety Rules

Workers shall work in compliance with the Provincial legislation and all Ainsworth Companies Safety Rules, Policies and Procedures.

Where required by the Provincial legislation, Ainsworth Companies Policy, or where directed by a supervisor, a worker will use and wear the personal protective equipment provided as required, in a safe and proper manner.



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CSA approved safety footwear shall be worn by all field staff throughout the course of their duties. Footwear appropriate in the circumstances must be worn by all other staff when required to enter operations work areas, or other non-common areas of the property. Fully enclosed, laced footwear with rubber soles and low heels is considered to be appropriate.

Good housekeeping must be maintained at all times. Fire exits must remain accessible and well lighted and all corridors, equipment, and electrical panels must always remain accessible. Spills must be cleaned up immediately, and all your work areas must remain clean and organized.

Do not operate, adjust or repair any power operated equipment without permission, and only if you thoroughly understand safe operating procedures. Safety guards shall not be removed, and any operational controls or switches shall not be by-passed or altered by any worker.

Unsafe conditions, equipment, or potential safety hazards related to your work must be reported to your supervisor immediately.

Any workplace accident, injury, or property damage must be reported to your supervisor, no matter how minor it may appear. A worker who witnesses, or who is made aware of an injury involving a fellow worker is required to notify their supervisor immediately.

You are required to wear suitable clothing appropriate for the work you are expected to conduct. Refrain from wearing loose fitting clothing or jewellery, which may become entangled in machinery or equipment or represent a safety hazard during the conduct of your duties.

Wiring and electrical cords shall be used, placed and maintained in a manner that does not pose a hazard to yourself, or another worker.

Smoking is prohibited within any of the buildings at all times.

Personal appliances or equipment are not allowed in the workplace.

Do not attempt to lift or move heavy objects. Ask for assistance.

Only employees who have received special training and authorization shall perform certain operations.

These include:

- Operations of any elevating lifting devices
- Operations of any powered moving vehicles
- Maintenance and repairs requiring lock-out procedures.
- Fall Protection required work.
- Confined Space Entry
- Any other specific operation deemed specific to the Ainsworth Companies as directed by the Supervisors / Managers
- Properly trained personnel shall conduct these tasks only, while wearing the appropriate protective equipment.

Any platform scaffolding, fork lift, or powered elevating lift devices must be thoroughly checked prior to implementing their use.

Exercise due caution when handling chemicals. Material Safety Data Sheets (MSDS) must be consulted prior to using any new chemical.





## Site Specific Health and Safety Plan

Rough or boisterous conduct will not be tolerated, and horseplay is strictly prohibited in the workplace.

No employee is to perform work with defective tools or equipment, or perform work or take any chance that may result in personal injury and / or property damage.

Where a defect is found in equipment, the Ainsworth Companies will ensure that steps are taken immediately to protect the health and safety of any worker who may be at risk until the defect is corrected; and the defect is corrected by a competent person in as timely a fashion as possible.

### **8. Lock Out / Tag Out Program**

Ainsworth is committed to protecting employees and contractors from the accidental start up, movement or release of electrical, mechanical, hydraulic, pneumatic, chemical or thermal energy.

#### **LOTO 14 Step Procedure**

*The site Supervisor is responsible for all Lock Out / Tag Out procedures.*

#### **STEP 1: LOCATE WORK AREA AND IDENTIFY EQUIPMENT, MACHINERY, OR OTHER SYSTEM COMPONENTS TO BE WORKED ON**

Identify the area with references such as floor, room name, elevation, or column number. Identify the equipment that is the subject of the work.

#### **STEP 2: IDENTIFY ALL ENERGY SOURCES**

Identify all energy sources affecting the equipment or machinery. Identify the various energy forms to be locked out such as electrical, momentum, pneumatic, hydraulic, steam, and gravity.

#### **STEP 3: IDENTIFY THE PARTS TO BE LOCKED OUT OR ISOLATED**

Identify systems that affect, or are affected by, the work being performed. These may include primary, secondary, backup, or emergency systems and interlocked remote equipment. Review the current system drawings for remote energy sources and, where required, identify and confirm with the client or owner the existence and location of any switches, power sources, controls, interlocks, or other devices necessary to isolate the system.

Remember that equipment may also be affected by:

- Time restrictions for completing the work.
- Time-activated devices.

#### **STEP 4: DETERMINE LOCKOUT METHODS**

Confirm that the lockout of all energy sources is possible.

Some equipment may have to be kept operational to maintain service to other equipment that cannot be shut down. Take appropriate steps to provide protection for workers while working near operating equipment. Equipment that can be locked out should be locked out by the methods most appropriate to the hazards.

#### **STEP 5: NOTIFY ALL PERSONNEL AFFECTED**

Shutting down equipment may affect operations in other locations, incoming shifts, or other trades who may be planning to operate the locked-out system. Before proceeding with the lockout, inform all personnel who will be affected. At construction sites with a large workforce or at relatively large factories, you may need to have special communication methods and permits or approvals.



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### STEP 6: SHUT DOWN EQUIPMENT AND MACHINERY

Qualified personnel must shut down the equipment, machinery, or other system components, placing them in a zero-energy state. Trace all systems to locate and lock out energy sources. The main source may be electrical, for instance, but pneumatic and other forms of energy may also be present.

Always look for other possible energy sources. All equipment capable of being energized or activated electrically, pneumatically, or hydraulically must be de-energized or de-activated by physically disconnecting or otherwise making the apparatus inoperable.

Always ensure that the client and operators are aware of the plan to shut down and lock out equipment, machinery, or other system components. In some cases, operations personnel or equipment operators may be required to shutdown components because of their special qualifications or knowledge of the system.

In determining what needs to be shut down and locked out, consider the different energy sources that may be found in the system.

### STEP 7: INSTALL LOCKOUT DEVICES

After the circuit has been de-energized and locked out by the person in charge, each worker involved in the lockout must be protected by placing his or her personal lock on the isolating device.

*Remember*—even though the disconnect is already locked out, you are not protected until you attach your own personal safety lock. Each worker must retain his or her key while the lock is in place. Only the worker in charge of the lock should have a key.

#### Locks

Locks should be high-quality pin-type, key-operated, and numbered to identify users.

#### Multiple locks and lockout bars

When several workers or trades are working on a machine, you can add additional locks by using a lockout bar. You can add any number of locks by inserting another lockout bar into the last hole of the previous bar.

#### Other lockout devices

**Scissors**—have holes for locks and should be made of hardened steel.

**Chains**—should be high quality and snug fitting.

**Blanks or blinds**—are solid metal plates inserted at flanged connections to prevent the flow of liquids or gases.

**Pins and clamps**—should be of high-quality materials and designed to fit the system.

### STEP 8: TAGGING

Each worker involved in a lockout operation must attach a durable tag to his or her personal lock. The tag must identify the worker's name, the worker's employer, the date and time of lockout, the work area involved, and the reason for the lockout. A tag in itself offers no guarantee that a machine or system is locked out. It simply provides information. A record must be kept of all equipment locked out or otherwise rendered inoperable so that all of these devices can be reactivated once the work is complete.



## Site Specific Health and Safety Plan

### STEP 9: VERIFY ZERO-ENERGY STATE

After any power or product remaining in the equipment has been discharged or disconnected by qualified personnel, verify that all personnel are clear of the equipment. Then try, with extreme caution, to start the equipment manually. Look for any movement or functions.

If none are observed, confirm that all energy sources are at a zero-energy state. Test the system to ensure that all electrical components are de-energized and de-activated, including interlocking and dependent systems that could feed into the system, either mechanically or electrically.

If meters are used to verify zero energy:

- Test the meter on a known live energy source.
- Compare with a co-worker's meter through testing the same known live energy source.
- Verify the zero energy state of the locked energy source.
- Re-test the meter on a known energy source.
- Compare with a co-worker's meter through testing the same known live energy source.

### **REMEMBER – TEST, LOCK, TAG, TEST, TRY**

### STEP 10: PERFORM THE TASK

Carry out and complete the work assignment.

### STEP 11: COMMUNICATE THAT WORK IS COMPLETE AND THAT ALL PERSONNEL ARE CLEAR

Ensure that personnel are clear of the locked-out equipment, machinery, or system.

Remove only **your** tags and locks.

Tell personnel that were originally informed of the lockout that the equipment, machinery, or system is no longer locked out.

### STEP 12: RESTORE POWER

Return systems to operational status and the switches to power ON. Have qualified personnel restart machinery or equipment.

### STEP 13: RETURN CONTROL TO OPERATING PERSONNEL

When all work is completed, the person in charge of the lockout operation should formally return control of the equipment or system to plant personnel.

### STEP 14: RECORD DATE/TIME LOCKOUT REMOVED AND SYSTEM RESTORED

This last step is important. It saves valuable information that may be lost if not recorded. Staff involved in the shutdown may not remain at the same jobsite. Owners or operators may require this information to help plan future shutdowns.

### Multiple Lockouts

1. Employees shall place **their own personal lock / tag** on each of the energy isolating devices(s).
2. When an energy-isolating device cannot accept multiple locks and tags, a multiple lock out / tag out device, e.g. Lock-bar (scissor, hasp, lock box, etc.) may be used.



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3. A single lock may be used to lock out/tag out the energy source(s). The key(s) to that lock(s) will be placed in a lock box or cabinet, which is capable of allowing multiple locks. Each employee will then use their own lock & tag to secure the lock box or cabinet. When each employee no longer needs to maintain their lockout protection, that person will remove their lock from the lock box or cabinet.

### Shift Changes

When there is a shift change, the following procedure must be followed in this order:

1. The incoming shift authorized worker will attach his/her lock and tag to the lockout device.
2. The outgoing shift authorized worker will remove his/her lock and tag from the lockout device.
3. The incoming shift authorized worker will communicate to the incoming shift affected personnel the presence of the lockout.

### Training

All workers performing lockouts and their supervisors must receive training. The training will include:

1. Pre-planning for the lockout by identifying all energy sources, switches, etc.
2. Where lockout is complex, a written sequence in checklist form should be prepared for equipment access, lockout/tag out, clearance, release and start-up.
3. Importance of lockouts;
4. Legal requirements for lockouts;
5. Company policy on lockouts;
6. The energy forms, hazards, and procedures (administrative and work-related) that must be followed;
7. The importance of following procedures;
8. Lockout errors to be avoided (for example, assuming the equipment is inoperable or that the job is too small to warrant a lockout);
9. The use and care of personal protective equipment;
10. Proper use of all tools.

### Reporting

The Company Lockout/Tag Out – Live Work Permit must be completed prior to each work assignment that requires locking out and tagging. Install securely the non-conductive Lockout Tags.

The following items will be listed on all Lockout Tags:

1. Reason for equipment being locked out.
2. Employee name.
3. Company name.
4. The date and time of the lockout.

## Site Specific Health and Safety Plan

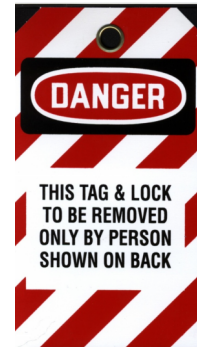
- Estimated time the circuit will be open.

### Posting

The Company Lockout/Tag Out – Live Work Permit will be conspicuously posted where the lockout procedure is in effect.

### JOB SPECIFIC LOCKOUTS: STEP-BY-STEP

- Receive work assignment.
- Follow the Company Lockout Tag Out procedures.
- Use the **Company Lockout Tag Out / Live Work Permit**
- Locate the area and identify the equipment, or machinery to be worked on.
- Identify all power sources affecting the equipment or machinery; including electrical, pneumatic, hydraulic, steam, gravity, and momentum.
- Determine what lockouts are required to perform the work assignment.
- Locate and identify all power source components on equipment, or machinery.
- Determine where it is physically possible to lock out each power source.
- When locking out is required, check with qualified staff before proceeding.
- Have qualified staff shutdown the equipment or machinery. Install your personal safety lock with tag indicating name, employer, time/date, and work location.
- Any power or product remaining in the equipment or machinery must be discharged or disconnected by qualified personnel.
- With extreme caution, try to manually power the installation, lines, or machinery.
- Look for any movement or functions, and verify zero energy.
- If none observed, try to start again.
- Again, look for any movement or functions.
- If still none, confirm that all power sources are at a zero energy state.
- Conduct work assignment.
- When work is complete and area ready to resume operation, remove all tags, locks, and lock devices. Check that all personnel are clear of machinery or live exposure.
- Have qualified personnel re-charge the installation or machinery.
- Assignment complete once the equipment or machinery has been recharged, and is operating satisfactorily.



## 9. Weekly Inspections

Workplace inspections are a key element of any effective health and safety program and internal responsibility system, actively involving both employer and employees in the identification of potential workplace hazards.



## Site Specific Health and Safety Plan

The basic objective of a workplace inspection is to:

1. identify and record potentially unsafe conditions associated with the work; including processes, equipment, industrial hygiene and work practices;
2. ensure that existing programs and controls are operative and sufficient;
3. provide inspection information to the employer for attention, and/or workplace safety/health committee for evaluation and recommendations for correction.

Ainsworth Companies will maintain a comprehensive program of safety inspections at all facilities and jobsites.

### Responsibilities

The Manager is responsible for the overall operation of the program.

Supervisors are responsible for conducting weekly formal and ongoing informal inspections of areas where their crews are working.

Workers are responsible for participating in and contributing to the inspection program.

### Inspection

An observational tour of the workplace for the specific purpose of identifying unsafe acts and unsafe conditions, and for determining the levels of compliance with established Safe Work Practices, Procedures, and Safety Rules. Once a job is underway, inspections are conducted on an ongoing basis to maintain the effectiveness of a safety program.

General housekeeping in the workplace and on the jobsite should receive considerable attention during your inspection. Good housekeeping, demonstrated by orderliness and cleanliness of the jobsite, usually suggests a safe and well managed job. Poor housekeeping ultimately leads to injuries and damage – and is the main root cause of slips and trips in the construction industry.

There are typically two main types of inspections:

- Ongoing (or informal) inspections; and
- Planned (or formal) inspections

### Ongoing (Informal) Inspections

Ongoing inspections should be conducted by supervisory personnel who do most of their work on the jobsite. They should constantly watch for unsafe acts and unsafe conditions. In many cases, supervisor can correct a problem by discussing an unsafe act with a worker or by issuing instructions to have an unsafe condition corrected. Situations that require additional corrective action must be recorded by the supervisors for follow up. Supervisors will encourage workers to bring forward their observations of unsafe acts and unsafe conditions on an ongoing basis. Management will initiate prompt corrective action in response to valid concerns of workers.

### Planned (Formal) Inspections

As the name suggests, planned inspections are structured events. They are conducted by the manager, by supervisors, or by an inspection team made up of management, supervisors and workers. Planned inspections must be conducted on a weekly scheduled basis. The basic procedure for conducting a planned inspection is:

1. Identify the inspection team (normally the site supervisor and a worker representative).
2. Locate and review reports of previous inspections.



## Site Specific Health and Safety Plan

3. Obtain an inspection report form.
4. Proceed with the inspection tour.
5. During the tour, get off the “beaten path”.
6. Look over, under, around, behind, inside, etc.
7. Take the time to observe the activities of all personnel.
8. Take immediate corrective action where there is imminent danger.
9. Record all unsafe acts and conditions.
10. On completion of the tour, rank the unsafe acts/conditions on a “worst case” first basis.
11. Identify corrective action required for each unsafe act/condition.
12. Assign a person responsibly for each corrective action and a date for completion.
13. Distribute copies of the inspection report to all employees at safety meetings.

### Posting and Review

The weekly inspection will remain posted in the workplace for the week that they apply to. They will then be forwarded management review. Any hazards that require management intervention to correct will be reported immediately.

## 10. Incident Reporting and Investigation

Reporting of injury and illness allows the management to implement corrective actions to eliminate potential for other injuries.

Injury – an event that results in physical harm to an employee

Illness – a deviation from the normal healthy state of the body

All incidents of illness and injury are to be reported using the prescribed procedure:

### Procedure

#### When to Report

All incidents of illness and injury are to be reported immediately to a worker’s supervisor. Any delay in reporting must be explained.

#### How to Report

Use an approved injury/illness report form.

### Notifications

#### Internal

- Immediate supervisor.
- Health and Safety Manager if the result is lost time so that an appropriate person is assigned to manage the claim.



## Site Specific Health and Safety Plan

- When an incident investigation is required, the Health and Safety Committee is to be notified as soon as possible.

### External

Provincial Compensation Board within 3 days as required (if there is a lost time, outside health care (family doctor, clinic, emergency room, chiropractor, physiotherapy etc.)

### Critical Injury

If a critical injury occurs, the Authority Having Jurisdiction and the Ainsworth Companies Health & Safety Manager must be immediately notified. Written notice must be given to the Authority Having Jurisdiction within 24 hours with all information as outlined in the applicable legislation.

### Non-Critical Occupational Injury and Occupational Illness

The H&S Committee (or health and safety representative) and the union (if applicable) must be notified within 4 days when a person has been injured at the workplace as a result of an accident, fire or explosion as per applicable laws and regulations.

### Treatment

Treatment is to be administered as the first step. A determination is made depending upon the severity as to first aid, or if medical treatment is required. If a worker requires medical treatment, transportation is provided to the nearest facility. If the worker is to go home transportation is provided, if required. In all cases that seem to be minor it is wise to consider medical treatment when there has been a loss of blood, strain, pull, twist or a fall. (Minor cuts; abrasions etc require first aid only.) The First Aiders have been trained to identify when further treatment is required.

### Recording

All records are to be completed as soon as possible and kept in the OH&S Manual as well as a copy in the employee file. Copies are to be made available to treating physician, Provincial Worker's Compensation Board or the MOL as required.

### Follow-Up

Follow-up for Lost Time – Manager of department.

Treatment follow-up by the supervisor – record in notes section of illness/injury reporting form.

Any required follow-up from incident investigation or recommendations to be reported through the Health and Safety Committee forms and tools.

### Incident Investigation

Every injury/incident should be investigated to determine loss and/or loss potential since, the severity of the actual loss in each event is often a matter of a slight difference in circumstances. The involvement of management and the H&S Committee offers assurance that the investigation is not a faultfinding exercise. The outcome(s) of the investigation should identify contributing factors and provide a forum for improvement to the health and safety program in the workplace.

It is the policy of Ainsworth Companies that incidents, injuries or illnesses in the workplace whether employee, visitor or customer, will be investigated and resolved with corrective action, communication and with the goal of preventing similar occurrences in the workplace.

### Immediate Investigation

There will be an immediate investigation of:





## Site Specific Health and Safety Plan

- Fatalities
- Critical Injuries
- Lost Time
- Occupational Illness
- Property/Merchandise Damage exceeding a value of \$ 500.00
- Fire
- Environmental Release

### Responsibilities

#### Investigator(s), Supervisor/Manager:

- Will receive training in accident/incident investigation and reporting.
- Shall participate in the investigation of any and all injuries/incidents that occur in their department.
- Ensure that the appropriate first aid is given.
- Where applicable, notify appropriate provincial authority.
- Provide transportation to a medical facility or the employee's home
- Investigate the accident, determine causes and take corrective action where appropriate
- Complete Accident Investigation form

#### Health and Safety Committee

A worker member shall participate in all injury/incident investigations.

- Monthly review of all injury/incident reports, analyze information and make recommendations to management to reduce recurrences.
- Follow-up is probably the most important step of the accident investigation procedure. The H&S Committee will follow-up with contact to the appropriate supervisor/department manager to ensure correct measures have been taken.

If there is no implementation of the recommendations; the contributing factors could surface in another accident.

## 11. Training Requirements

It is the Management's responsibility to ensure that the appropriate training is being performed within our facility for all employees. Employees require the knowledge and skills to perform activities safely and efficiently as they work.

Management has profiled training requirements for each worker within our facilities. Through in-house, and when necessary pre-approved outside organizations, Ainsworth will ensure that employees receive all required training.

The Ainsworth Companies will provide, and employees will participate in the following safety training:

- Safety Orientation for all new hires



## Site Specific Health and Safety Plan

- Job Specific training as required
- Safety meetings will be held on a regular basis
- Foreman/Supervisors shall have a valid First Aid Certificate

Employee training shall be provided to each employee with regards to the general safety procedures and to any hazards or safety procedures that are specific to that employee's work situation.

### Training Expiry Dates

The following is a list of training programs that you may be required to attend should it be a requirement of your job. These programs may be conducted in house or by an outside organization that has been pre-approved by the Health and Safety Department. For more information on these courses and to register, please contact your Supervisor or the Health and Safety Department.

***ALL WORKERS MUST HAVE UNDERGONE AINSWORTH SAFETY ORIENTATION BEFORE WORKING ON ANY CONSTRUCTION SITE***

## **12. Confined Spaces**

The definition of 'confined space' is consistent across all regulations. "Confined space" means a fully or partially enclosed space,

1. that is not both designed and constructed for continuous human occupancy, and
2. in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it."

If you have a space that is fully or partially enclosed, the two conditions – 1 and 2 (above) - must both apply before the space can be considered a "confined space".

### **Do I have a confined space in my workplace?**

To determine whether a "space" meets the definition of a confined space, consider the following 3 questions:

- Is the space fully or partially enclosed?
- Is the space not both designed and constructed for continuous human occupancy?
- Might an atmospheric hazard occur?

The only way to determine if a "space" meets the definition for a "confined space" is to evaluate it.

When you think you have a confined space, and you have work to complete in it, contact your Supervisor and the Health and Safety Department to have an Confined Space Assessment, Rescue Plan, Monitoring Program, and Permit completed.

**At NO time is any Ainsworth worker or subcontractor to enter a confined space without the written authorization of the Ainsworth Health and Safety Department.**



## Site Specific Health and Safety Plan

The Health and Safety Department can be contacted at the Ainsworth Head Office at 416-751-4420 a minimum of 48 hours before an expected entry into a confined space.

### 13. WHMIS Program

To ensure that employees are educated and practicing adequate care in dealing with chemicals and biological agents in their work areas.

The Ainsworth Companies is committed to the safety and health of our workers. WHMIS provides the legislated tools for all workers to receive up-to-date materials information needed to educate workers regarding the inherent risks associated with dangerous and toxic substance use, storage and handling in the workplace.

- The Ainsworth Companies is committed to the implementation of WHMIS through the following steps:
- Creating an inventory of all hazardous materials used in our work place;
- Obtaining MSDS's on all hazardous materials used in our work place;
- Training all workers to work safely with hazardous materials;
- Training all workers in the understanding of WHMIS labels and MSDS's.

Everyone at the Ainsworth Companies shares the responsibility and accountability for the implementation of WHMIS.

The Ainsworth Companies, through the H&S Committee will conduct a survey to identify the different types of chemicals and their quantities that are stored for use in the workplace. Ensure that supplier labels are present on the containers, and when products are decanted into other containers, they must have a workplace label.

The inventory will be shared with the management and input provided on accuracy of content. The inventory will then identify the Material Safety Data Sheets that need to be obtained from the supplier. The MSDS's will be filed and made accessible to the employees in the work area. The MSDS's will be maintained to ensure that they are current to within three years of the preparation date. Once expired, management will obtain current data sheets for the product.

Employees will be trained in the event they use or are in close proximity to a controlled product. The training must include the generic component of recognizing WHMIS symbols, reading of MSDS's, and the hazards associated with the different classes of compounds. The workplace specific component must include the specifics of handling, storing, use and disposal of products that an employee would come in contact with during the normal course of work.

The H&S Committee will review the program annually and provide recommendations to management on the shortcomings of the programs. Management will use the recommendations from the committee, to strengthen the program.

The chemical inventory and MSDS's will be managed in a supplementary document in our MSDS binder and kept at the workplace.

All employees will be made aware of this component prior to coming in contact with chemicals in the workplace.

### Evaluation



## Site Specific Health and Safety Plan

The H&S Committee shall evaluate the program annually to ensure compliance and remedy any shortcomings in the program. The health and safety representative(s) must be an integral part of the WHMIS system in the workplace.

### Symbols

***Please refer to your WHMIS Training for additional information regarding the 8 Symbols.***

### Labeling

A Controlled Product to be shipped or used at a site must be clearly marked with a label conforming to WHMIS regulation.

Suppliers are required to attach the label to each container and any inner container of Controlled Product that they supply. The following information must be provided:

1. Product name.
2. Name and address of the supplier.
3. Symbols for each of the product's hazard classes.
4. Main hazard of the product.
5. Precautions.
6. First aid measures.
7. Reference to the Material Safety Data Sheet.
8. Workplace labels must be provided for controlled products formulated on the work site and for those transferred/decanted from the original packaging into another container.

Workplace labels must be affixed to controlled products that have been transferred from the original container into another container or if a supplier label becomes defaced or illegible.

### Education and Training

WHMIS training will be provided to all Ainsworth Companies Workers who use a Controlled Product. The training will address:

- The purpose and content of Controlled Products Labels and MSDS and the responsibility for producing and utilizing them.
- The procedure for the safe storage and use of Controlled Products.
- Generic Program for handling hazardous materials emergencies.
- Understanding of the symbols and the information provided on WHMIS labels.
- Instruction in the application of the requirements presented in the Material(s) Safety Data Sheets.
- Site-specific and activity-specific instructions in the storage, handling and utilization of the Controlled Products that are to be used on the work site.
- The study of potential hazardous materials emergencies and the site-specific and personal emergency procedures to be applied in response.
- Remedial measures if exposed to hazardous material.



## Site Specific Health and Safety Plan

All employees, new hires, temporary, contract and office staff must be aware of the WHMIS components and how they relate to the work in their respective areas.

The Health & Safety Manager will be responsible to provide the initial training and whenever a new Controlled Product is brought to the site, or whenever new information becomes available on a Controlled Product, whichever comes first. All records of training shall be kept on file by the Safety Coordinator.

### **Material Safety Data Sheets (MSDS)**

A supplier is required to provide the purchaser with a valid MSDS with the first shipment of every controlled product. The MSDS presents more detailed and technical information about the product than the labels, and provides detailed handling and storage requirements, including emergency procedures.

By Law, the suppliers must update an MSDS when new information develops or every three years, whichever occurs first. An outdated MSDS should not be accepted from any supplier.

Workers are not required to handle hazardous waste.

## **14. Subcontractor Duties and Responsibilities**

To provide control of all workplace activities by requiring all persons performing work at the facility to comply with the same health and safety standards.

It is Ainsworth Companies responsibility to ensure that contractors, sub-contractors and their workers meet our Health and Safety Program requirements. By accepting responsibility and through active participation and co-operation we will together achieve our goal for a safe, healthy and productive work environment.

Any contractors working at Ainsworth Companies on a project/work involving the addition, alteration or maintenance of Ainsworth Companies buildings, grounds or services infrastructure must comply with the responsibilities and accountabilities set out herein.

### **Responsibilities**

- Contractors are required to read, sign and agree to comply with the requirements of this policy before any work commences.
- Where applicable, contractors must provide must provide a current Provincial Compensation Clearance Certificate.
- Contractors will ensure the health and safety of their workers. Any worker not working safely and/or not wearing appropriate personal protective equipment will be removed from the facility.
- Contractors will provide qualified workers with appropriate training for work to be performed.
- Contractors will ensure all work performed is in accordance with governing legislation/regulation/industry standards.
- Contractors are in possession of all necessary licenses, permits, registrations and insurance required.



## Site Specific Health and Safety Plan

- Contractors will immediately notify management of any potential hazards associated with the work to be performed.
- Contractors will ensure that their workers are aware of Ainsworth Companies Emergency Procedures, including First Aid stations, emergency exits and emergency numbers.
- Report hazards

The contractor will warrant that all of their workers have been appropriately trained for the work they are to perform for Ainsworth Companies.



## Site Specific Health and Safety Plan

<b><u>Ainsworth HSE Contacts</u></b>		
Karen Meunier, NCSO	587-645-4522	Karen.Meunier@ainsworth.com
Sean Thomson, NCSO	403-850-6598	Sean.Thomson@ainsworth.com
Kurt Runnalls, CRSP	647-210-2758	Kurt.Runnalls@ainsworth.com
<b><u>Other Emergency Contact</u></b>		
<b>Police/Ambulance</b>	<b>911</b>	
<b>Fire Department</b>	<b>911</b>	
<b>Gas Company</b>		
<b>Electric company</b>		
<b>Water Company</b>		
<b>Poison Control Centre</b>		
<b>Hospital</b>		
<b>Hospital Address</b>		

### 15. Emergency Contact Information



## Site Specific Health and Safety Plan

<b>Site Specific Requirements</b>	
<b>LOTO</b>	<ol style="list-style-type: none"> <li>1. All Ainsworth employees and sub-contractor employees are to apply an individual high quality lock to the intake valve prior to entering the Clear Well area. Each employee or sub-contractor employee is responsible for maintaining their own key and remove it at the end of each shift.</li> <li>2. Any additional LOTO requirements that may be identified during the course of the project shall also be locked out by the employee and/or sub-contractor employees are to apply an individual high quality lock to the equipment prior conducting any work on the equipment.</li> <li>3. LOTO permits shall be utilized for each time a piece of equipment is locked out.</li> </ol>
<b>Fall Protection</b>	<ol style="list-style-type: none"> <li>1. All Ainsworth employees and sub-contractor employees are to have verified that all fall arrest and confined rescue equipment shall be within the manufacturer's requirements for maintenance and/or replacement.</li> <li>2. A completed Fall Arrest Rescue plan shall be completed and all Ainsworth employees have received training on the rescue plan and those that are conducting the rescue have the necessary equipment to conduct it.</li> <li>3. All Ainsworth sub-contractors shall submit a Fall Arrest rescue plan prior to entering into any project where Ainsworth is acting as the General Contractor. This rescue plan is subject to the approval of the Ainsworth Environmental Health and Safety Department.</li> </ol>
<b>Confined Spaces</b>	<ol style="list-style-type: none"> <li>1. Four separate sets of Confined Space documents shall be completed for this job. Each set shall be developed in conjunction with the Ainsworth Environmental Health and Safety department and must be approved and on site prior to the beginning of the project.</li> <li>2. All Confined Space rescue equipment that is required shall be within the within the manufacturer's requirements for maintenance and/or replacement.</li> <li>3. All Confined Space Gas Monitoring equipment shall be bump tested prior to each use and is to meet all of the manufacturer's maintenance and calibration requirements prior to use.</li> <li>4. Additional Air Movers are required for each location. Both Positive and Negative air movers shall be used in each location.</li> <li>5. There shall be a minimum of 1 Ainsworth employee that shall have both Confined Space training and First Aid/CPR to act as the Confined Space Attendant whenever there is anyone within a confined space.</li> </ol>
<b>Multiple Contractors in a Confined Space</b>	<ol style="list-style-type: none"> <li>1. Should there be a requirement for multiple contractors working within a Confined Space, all necessary Confined Space Coordination Documents are to be completed prior to any work commencing in the Confined Space.</li> </ol>
<b>Electrical Work in Wet Areas</b>	<ol style="list-style-type: none"> <li>2. All electrical equipment that is being used in all areas within the scope of work for the duration of the project shall be protected by a GFCI receptacle.</li> </ol>
<b>Coring and Cutting of Concrete</b>	<ol style="list-style-type: none"> <li>1. Any Ainsworth employee or sub-contractor that is conducting and cutting or coring of concrete shall do so in a manner to reduce the exposure to all workers in the area to airborne silica. This can be completed by wet</li> </ol>





## Site Specific Health and Safety Plan

	<p>coring and cutting or another method. This process for dust reduction shall be included in this Site Specific Safety Plan.</p> <ul style="list-style-type: none"> <li>• _____</li> <li>• _____</li> <li>• _____</li> </ul>
<b>Hot Work Permits</b>	<ol style="list-style-type: none"> <li>1. At any time when hot work is going to be conducted a completed Hot Work Permit shall be completed for each time and location Hot Work is going to be taking place. A record of each permit shall be kept on site for the duration of the project.</li> </ol>
<b>Application of Stainless Steel Curing Agent</b>	<ol style="list-style-type: none"> <li>1. All PPE that has been identified on the MSDS shall be used and worn appropriately. If there are any additional concerns or questions with the use of this product, please contact the EHS Department prior to its use.</li> </ol>
<b>Personal Protective Equipment</b>	<ol style="list-style-type: none"> <li>1. All PPE that is to be used shall be used and maintained in accordance with the manufacturer's requirements. If there are any additional concerns or questions with the use of any PPE, please contact the HSE Department prior to its use.</li> </ol>
<b>Trade Licences and Certificates</b>	<ol style="list-style-type: none"> <li>1. All Ainsworth employees and sub-contractors shall have on site copies of all workers trade licences and certificates prior to the beginning of the project.</li> </ol>
<b>Additional Precautions</b>	<ol style="list-style-type: none"> <li>1.</li> </ol>
<b>Additional Precautions</b>	<ol style="list-style-type: none"> <li>2.</li> </ol>



## Site Specific Health and Safety Plan

APPROVALS			
DATE	POSITION	NAME	SIGNATURE
	Sub-Contractor		
	Sub-Contractor		
	Sub-Contractor		
	Sub-Contractor		
	Sub-Contractor		
	Sub-Contractor		
	Ainsworth Project Manager		
	Ainsworth Site Foreman		
	Ainsworth HSE Representative		

## HEALTH & SAFETY POLICY

TITLE:	APPROVED BY:	APPLICABLE LOCATIONS:	OWNER:
Health & Safety Policy	Craig Stanford	All Locations	Health, Safety & Environment

### Purpose

The purpose of this policy is to outline the President's commitment, on behalf of the senior management group and the company in general, to workplace health and safety.

### Scope

This policy applies to all managers, supervisors, employees, agents and subcontractors in our employ or under contract with our firm. This policy also applies to any visitors that may impacted by our business.

### Standard/Procedure

Ainsworth recognizes that the responsibilities for health and safety are shared. All employees will be equally responsible for working safely and to promote safe work practices, safe working conditions and a positive attitude toward preventing incidents. All employees, customers, subcontractors and visitors are required to comply with this policy and our commitments outlined below.

The Senior Leadership Team is committed to:

- **Assessing**, understanding and managing risk
- **Enabling** the creation of a positive culture holding each other accountable
- **Pro-actively** supporting employee wellbeing, health and providing a safe and healthy workplace that promotes occupational health
- **Empowering** and encouraging personnel to work in a safe and healthy way
- **Recognizing** that all workers have the right to a safe and healthy workplace
- **Intervening** if we believe that the work environment or task is unsafe, or we see an unsafe act
- **Preventing** all workplace incidents, placing special emphasis on safeguarding personnel and customers and minimizing major accident risks
- **Learning** from our successes and incidents, and freely sharing lessons with business partners
- **Working** with suppliers, business partners and workers in the pursuit of best practice
- **Continually** improving and setting measurable objectives and targets in business plans
- **Complying** with all legislative and regulatory requirements

To facilitate these commitments our business maintains a comprehensive health and safety management system that is continually audited. This policy and our performance is reviewed annually by the Senior Leadership Team.

January 2024

Date



Craig Stanford, President



# COMPANY SAFETY RULES

TITLE:	APPROVED BY:	APPLICABLE LOCATIONS:	OWNER:
Company Safety Rules	National Director, HSE	All Locations	Health, Safety & Environment

**It is expected that all employees will understand and abide by these rules and regulations. Any violations can result in progressive disciplinary action up to and including dismissal. These rules apply to all managers, supervisors, employees, agents and subcontractors in our employ or under contract with Ainsworth and/or its subsidiaries.**

1. Where work is to be performed at a height greater than 3 meters (10 ft.) or within 2 meters (6 ft.) of the edge of a roof that has no perimeter barrier or parapet wall at least 1 meter (3.2 ft.) high; appropriate fall protection methods shall be used.
2. In situations where no other means of access to a work area above or below ground level is present, an approved CSA/ANSI portable ladder must be used.
3. Good housekeeping is paramount. A place for everything and everything in its place. No object or material shall be placed, left, or stored in a location or manner that may endanger a fellow worker. Keep vehicles in an orderly manner and only keep what is needed to perform daily work.
4. Fire exits must remain accessible and well lighted and all corridors, equipment, and electrical panels must always remain accessible. Spills must be cleaned up immediately, and all your work areas must remain clean and organized.
5. Do not operate, adjust or repair any power operated equipment without permission, and only if you thoroughly understand safe operating procedures. Safety guards shall not be removed, and any operational controls or switches shall not be by-passed or altered by any worker.
6. Unsafe conditions, equipment, or potential safety hazards related to your work must be reported to your supervisor immediately. Every employee has a right to refuse unsafe work if they have reason to believe life is in immediate danger. Any work refusals must follow their provincial or state legislative requirements.

7. All employees must follow all safe work practices (SWP) and Safe job procedures (SJP) that apply to their work activity. If an employee is unsure on what SWP and/or SJP apply to their job, they are responsible to speak to their supervisor before commencing work.
8. No employee shall engage in fighting, inciting a fight, causing a fight, use of abusive language, use of threats, use of intimidation, provoking others, or harassing behavior. Please refer to Ainsworth Violence and Harassment policy.
9. Avoid all driver distractions while driving. Employees are required to employ a hands-free device to use a cell phone to send and receive calls but are not permitted to use a cell phone or any other device, such as tablets or laptops, either hand-held or hands-free to text, e-mail, or access the Internet. Talk will be limited to 1 minute or less and be restricted to business/dispatch updates, check-ins (business and personal) and emergency situations. The talk time can be exceeded in the event of an emergency where constant communication is needed, or important information must be discussed.
10. All incidents, injuries, unsafe conditions and "near misses", regardless of their nature, shall be promptly reported to supervisors.
11. You are required to wear suitable clothing appropriate for the work you are expected to conduct. Refrain from wearing loose fitting clothing or jewelry, which may become entangled in machinery or equipment or represent a safety hazard during the conduct of your duties.
12. Wiring and electrical cords shall be used, placed and maintained in a manner that does not pose a hazard to yourself, or another worker.
13. When working on electrical systems, Lock and Tag (LOTO) must be applied to all sources and verified that the system is at zero energy. Assume all voltages are dangerous.
14. The use of alcohol on a jobsite or our premises (including service vehicles) is prohibited. Anyone found under the influence of intoxicating beverages and/or drugs will be subject to disciplinary action.
15. Smoking is not permitted inside company vehicles as well as any Ainsworth building, trailer or structure. All employees must also follow all provincial or state legislative requirements prohibiting smoking.
16. Do not move or lift heavy material/objects alone; use lift assist equipment, get assistance and use your legs, not your back. If a second person is required on a job for any safety reason, a technician may contact the office and a second person will be dispatched without exception. Work will be suspended until the request can be accommodated.

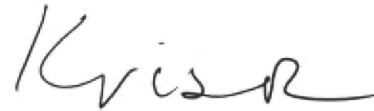
17. Personal protective equipment (safety footwear, eye protection/prescription eyeglasses, hard hats, gloves, Kevlar sleeves etc.) shall be worn when required by the company or supervisor.
18. Management must ensure that workers who may be required to use safety equipment or personal protective equipment are competent in the application, care, use, maintenance and limitations of that equipment.
19. Any platform scaffolding, fork lift, or powered elevating lift devices must be thoroughly checked prior to implementing their use.
20. Rough or boisterous conduct will not be tolerated, and horseplay is strictly prohibited in the workplace.
21. No employee is to perform work with defective tools or equipment or perform work or take any chance that may result in personal injury and / or property damage.
22. A worker must not carry out or cause to be carried out any work process or operate or cause to be operated any tool, appliance or equipment if that person has reasonable cause to believe that to do so would create an undue hazard to the health and safety of any person.

To facilitate these commitments, our business maintains a comprehensive health and safety management system that is continually audited. This policy and our performance are reviewed annually by the Senior Leadership Team.

January 2024

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Date



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Kris Ramkisson, HSE Director

## 10 - Provide outline and effectiveness of your QA/QC Plan;

The QA/QC outline for this project includes several key steps.

Initially, a pre-design database and equipment evaluation will be conducted. This will be followed by a point-to-point checkout to ensure all devices are functional, with checkout sheets provided for each Delta-controlled system. After the point-to-point check, a sequential checkout will be performed, again with corresponding sheets for each system. Following these checkouts, a system-by-system graphical check will be completed. All as-builts, checkout sheets, and O&Ms will be provided to the commissioning agent for review and approval.

The QA/QC effectiveness plan emphasizes consistency and compliance, ensuring all project activities adhere to established standards, reducing variability, and producing reliable results. It facilitates early detection and resolution of non-conformances and defects, minimizing their impact on timelines and costs. Improved communication and documentation enhance stakeholder communication and provide a reliable record of project activities and quality actions. The plan also enhances client satisfaction by demonstrating a commitment to quality, building trust through high-quality results.

Additionally, it incorporates risk management by identifying and mitigating quality-related risks, reducing the likelihood of rework, delays, and cost overruns. Continuous improvement is promoted through regular reviews, audits, and feedback, encouraging the implementation of best practices and lessons learned. Compliance with regulatory and industry standards is ensured, reducing the risk of legal issues. Efficient use of resources is achieved by preventing waste and rework, enhancing productivity and efficiency through well-defined procedures. Finally, the plan creates comprehensive documentation that can serve as a reference for future projects, helping to refine and improve QA/QC practices over time.

## 11. Describe closeout process for training of Commonwealth personnel and the receipt of manuals, commissioning, punch listing, and final closeout.

The construction closeout process in the design-build concept ensures that the project is thoroughly completed, all systems are fully operational, and the client is well-equipped to manage and maintain the facility. Effective training, comprehensive documentation, meticulous commissioning, and diligent punch list management are key to a successful closeout. Training sessions will be conducted for the client's facility management and operations staff, covering all HVAC building systems. Detailed operational procedures will be provided, including hands-on demonstrations and walkthroughs to ensure staff understand maintenance and troubleshooting.

Comprehensive operation and maintenance (O&M) manuals for all building systems and equipment, including manufacturer's instructions, warranty information, and maintenance schedules, will be





compiled and delivered. Final as-built drawings, reflecting all changes made during construction, will be provided, along with all warranty documents and certificates of compliance. A formal handover meeting will be conducted to review and explain the documentation to the client.

The commissioning phase involves comprehensive testing of systems under BAS control to verify they operate according to design specifications and performance criteria. Functional performance tests will be conducted to ensure systems work together seamlessly, simulating real-world

conditions to test system integration and performance. All commissioning test results will be documented, and a commissioning report detailing performance and any adjustments made will be provided to the client.

The punch listing process starts with a preliminary walkthrough with the design-build team to identify any incomplete or defective work, creating a detailed punch list of items to be addressed before final completion. A client walkthrough will then be performed to review the preliminary punch list and add any additional items identified by the client. All items on the punch list will be addressed and corrected promptly, ensuring high-quality standards are met. A final inspection with the client and design-build team will verify that all punch list items have been satisfactorily addressed.

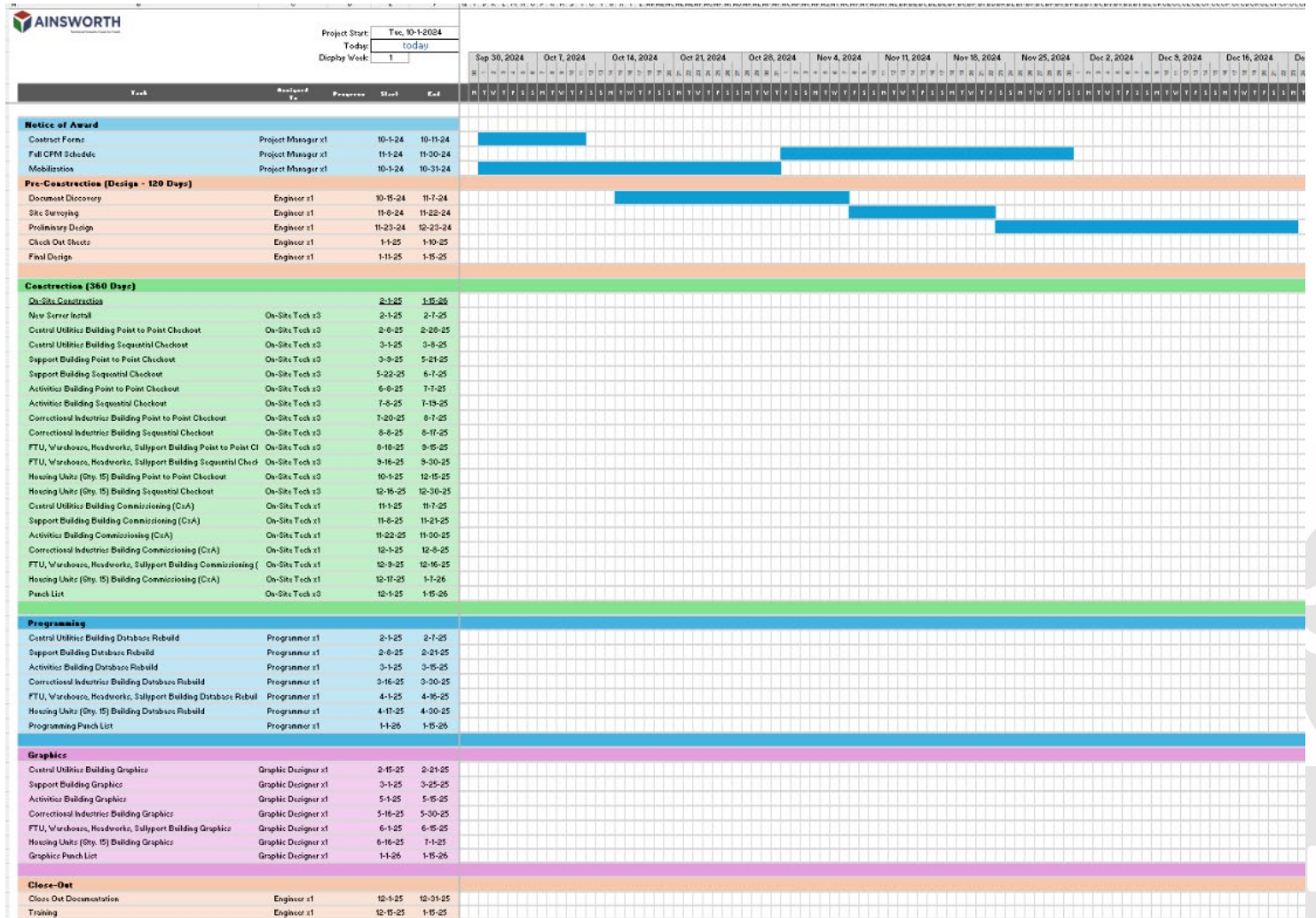
The final closeout phase includes verifying that all contractual obligations have been met, including the completion of punch list items and commissioning. A project closeout meeting will be held with the client to review the entire project and address any final concerns, discussing post-construction support, warranty services, and any additional client needs. The completed project will be formally handed over to the client, with a signed certificate of substantial completion obtained, indicating their acceptance of the project. Follow-up visits will be scheduled to ensure client satisfaction and address any post-turnover issues, maintaining communication with the client to support ongoing building operation and maintenance needs.





## 2-4.3 Project Master Schedule

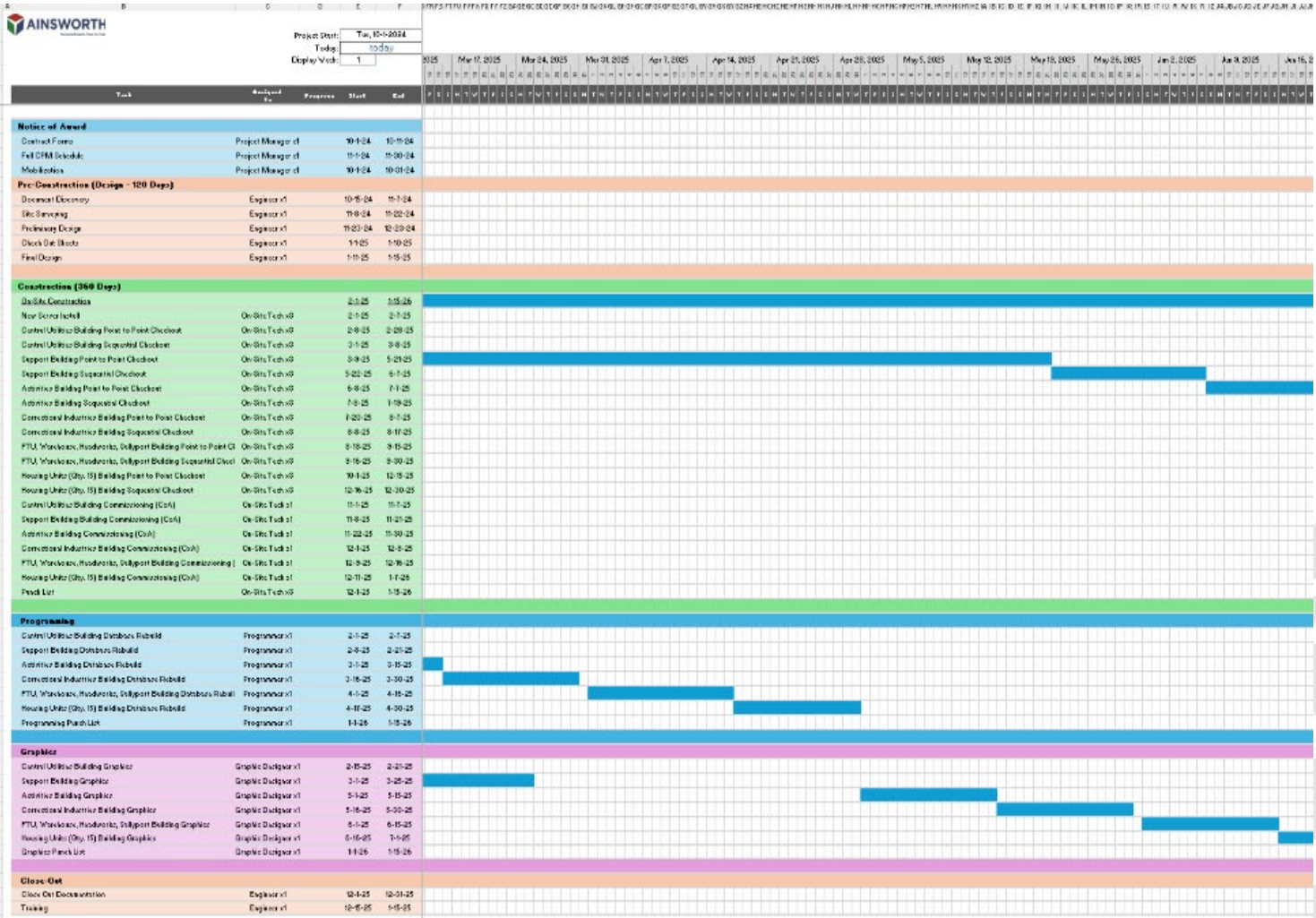
We have included a master schedule in the submission package.

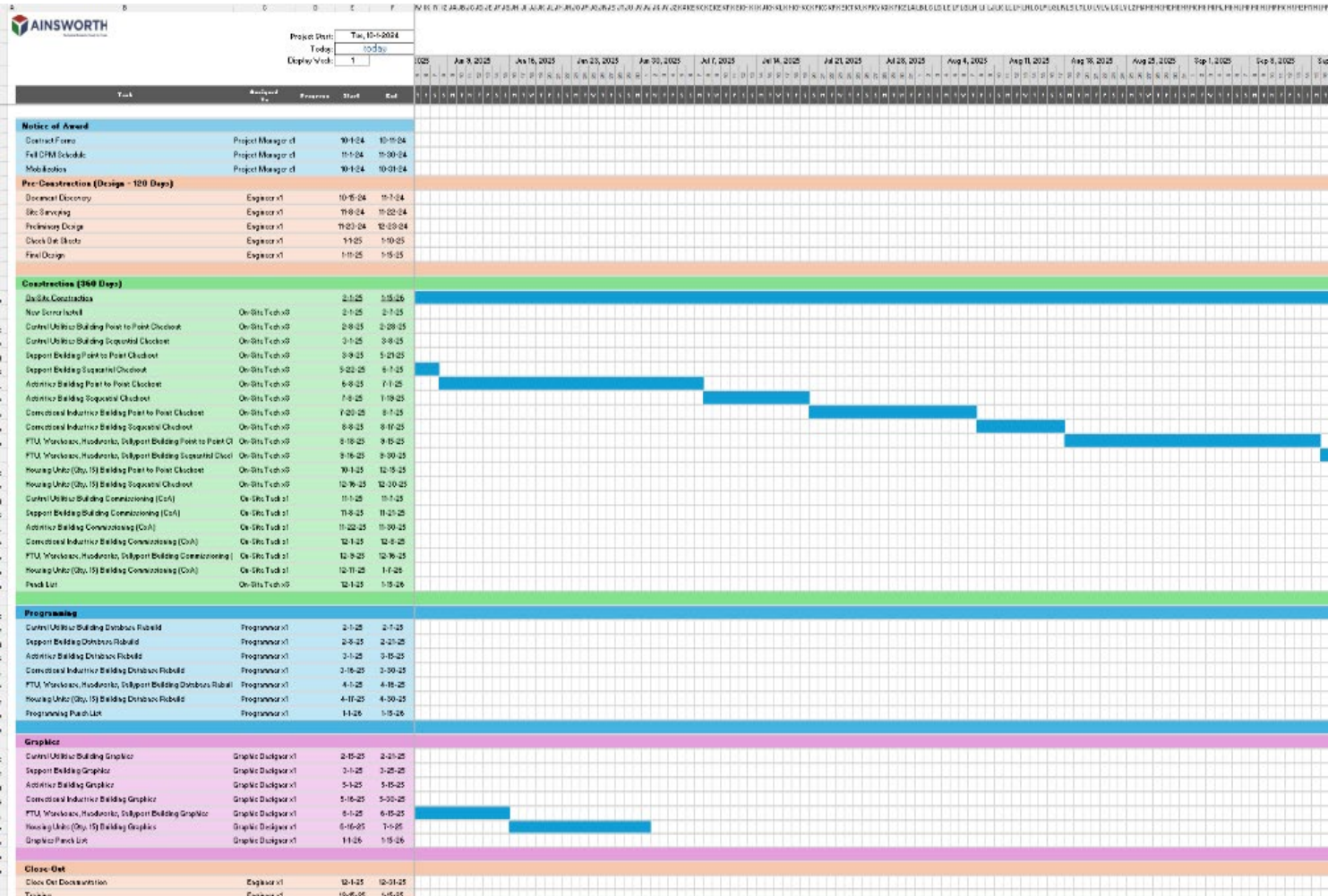


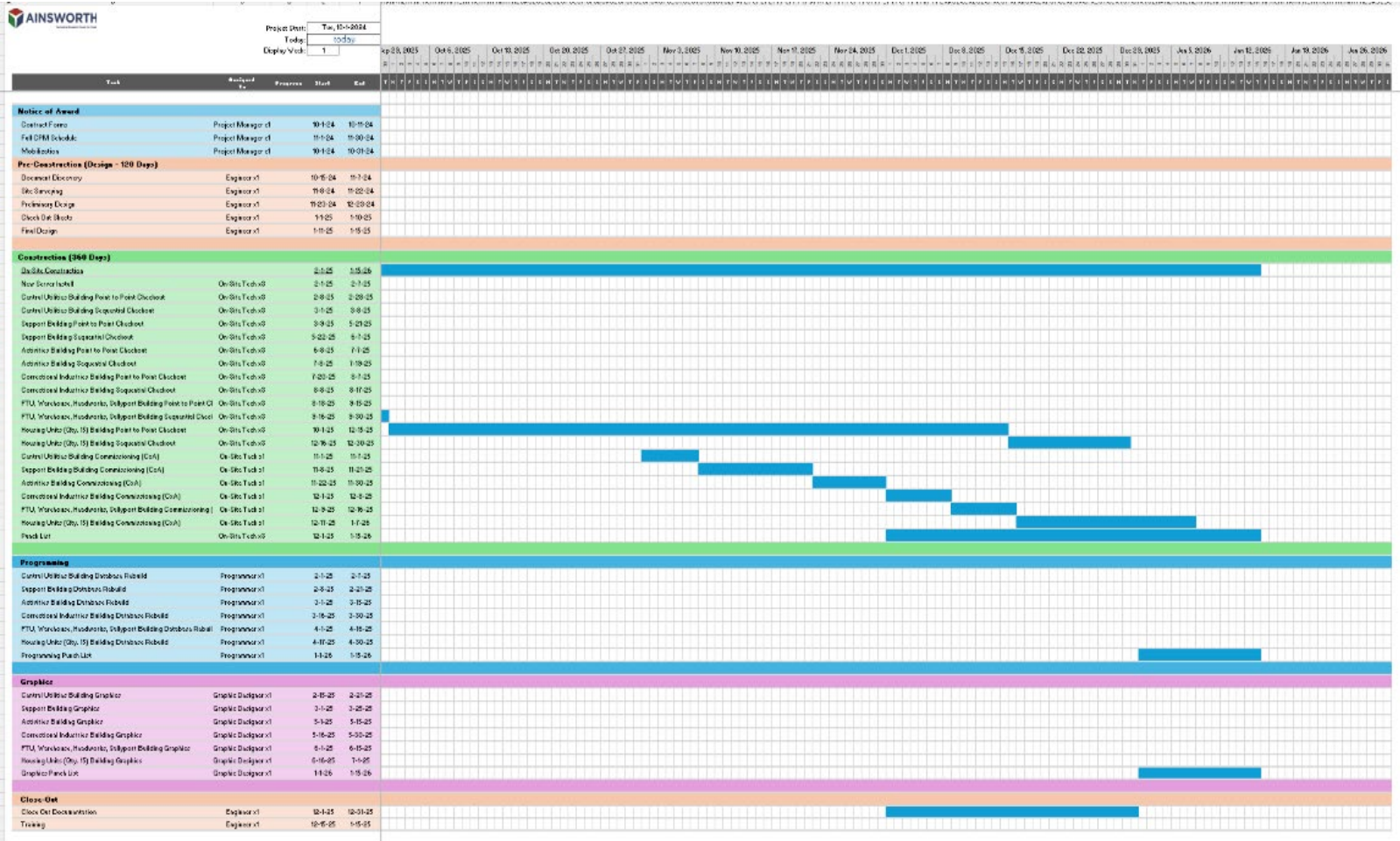


Project Start: Tue, 10-4-2024  
 Today: 10/25/24  
 Display Week: 1

Task	Assigned to	Resource	Start	End	27, 2024	Oct 30, 2024	Nov 6, 2024	Nov 13, 2024	Nov 20, 2024	Nov 27, 2024	Dec 3, 2024	Dec 10, 2024	Dec 17, 2024	Dec 24, 2024	Jan 3, 2025	Jan 10, 2025
<b>Notice of Award</b>																
Contract Form	Project Manager	d	10-1-24	10-11-24												
Full CPM Schedule	Project Manager	d	11-1-24	11-30-24												
Mobilization	Project Manager	d	10-1-24	10-31-24												
<b>Pre-Construction (Design - 120 Days)</b>																
Document Dictionary	Engineer	x1	10-15-24	11-7-24												
Site Surveying	Engineer	x1	11-8-24	11-22-24												
Preliminary Design	Engineer	x1	11-23-24	12-23-24												
Check Out Sheets	Engineer	x1	1-1-25	1-10-25												
Final Design	Engineer	x1	1-11-25	1-15-25												
<b>Construction (260 Days)</b>																
Site Construction			2-1-25	1-5-26												
Raw Sewer Install	On-Site Tech	x3	2-1-25	2-7-25												
Control/Utility Building Point to Point Checkout	On-Site Tech	x3	2-8-25	2-26-25												
Control/Utility Building Sequential Checkout	On-Site Tech	x3	3-1-25	3-8-25												
Support Building Point to Point Checkout	On-Site Tech	x3	3-9-25	5-21-25												
Support Building Sequential Checkout	On-Site Tech	x3	5-22-25	6-7-25												
Assistant Building Point to Point Checkout	On-Site Tech	x3	6-8-25	7-1-25												
Assistant Building Sequential Checkout	On-Site Tech	x3	7-8-25	7-18-25												
Correctional Institute Building Point to Point Checkout	On-Site Tech	x3	7-20-25	8-7-25												
Correctional Institute Building Sequential Checkout	On-Site Tech	x3	8-8-25	8-17-25												
PTU, Mechanical, Hoodworks, Support Building Point to Point Ck	On-Site Tech	x3	8-18-25	9-15-25												
PTU, Mechanical, Hoodworks, Support Building Sequential Ckck	On-Site Tech	x3	9-16-25	9-30-25												
Housing Units (Qty. 15) Building Point to Point Checkout	On-Site Tech	x3	10-1-25	12-15-25												
Housing Units (Qty. 15) Building Sequential Checkout	On-Site Tech	x3	12-16-25	12-31-25												
Control/Utility Building Commissioning (CxA)	On-Site Tech	1	11-1-25	11-1-25												
Support Building Building Commissioning (CxA)	On-Site Tech	1	11-8-25	11-21-25												
Assistant Building Commissioning (CxA)	On-Site Tech	1	11-22-25	11-30-25												
Correctional Institute Building Commissioning (CxA)	On-Site Tech	1	12-1-25	12-8-25												
PTU, Mechanical, Hoodworks, Support Building Commissioning	On-Site Tech	1	12-9-25	12-16-25												
Housing Units (Qty. 15) Building Commissioning (CxA)	On-Site Tech	1	12-17-25	1-1-26												
Final List	On-Site Tech	x3	12-1-25	1-5-26												
<b>Programming</b>																
Control/Utility Building Database Rebuild	Programmer	x1	2-1-25	2-7-25												
Support Building Database Rebuild	Programmer	x1	2-8-25	2-21-25												
Assistant Building Database Rebuild	Programmer	x1	2-1-25	3-15-25												
Correctional Institute Building Database Rebuild	Programmer	x1	2-16-25	2-30-25												
PTU, Mechanical, Hoodworks, Support Building Database Rebuild	Programmer	x1	4-1-25	4-15-25												
Housing Units (Qty. 15) Building Database Rebuild	Programmer	x1	4-17-25	4-30-25												
Programming Patch List	Programmer	x1	1-1-26	1-5-26												
<b>Graphics</b>																
Control/Utility Building Graphics	Graphic Designer	x1	2-15-25	2-21-25												
Support Building Graphics	Graphic Designer	x1	2-1-25	3-25-25												
Assistant Building Graphics	Graphic Designer	x1	5-1-25	5-15-25												
Correctional Institute Building Graphics	Graphic Designer	x1	5-16-25	5-31-25												
PTU, Mechanical, Hoodworks, Support Building Graphics	Graphic Designer	x1	6-1-25	6-15-25												
Housing Units (Qty. 15) Building Graphics	Graphic Designer	x1	6-16-25	7-1-25												
Graphics Patch List	Graphic Designer	x1	1-1-26	1-5-26												
<b>Close Out</b>																
Close Out Documentation	Engineer	x1	12-1-25	12-31-25												







Indicate any firm milestone required by DGS. See Part 4 of this RFP for the milestone dates that are to be included, if any.

The high level dates are: Design 10.1.24 and Construction 2.1.25

1. **Provide a narrative for the Master Schedule** Using the Critical Path Method (CPM) is crucial in construction scheduling as it helps set timelines, identify critical tasks impacting the project's completion, and mitigate delay effects. By using CPM, Ainsworth's project teams can pinpoint key tasks that, if delayed, could push back the overall schedule, enabling proactive management of potential issues. This method also helps us to justifying requests for additional time, based on documented delays affecting critical tasks. Overall, CPM enhances our project efficiency by ensuring that the most time-sensitive elements are prioritized and managed effectively.



The Master Schedule for the design-build construction of the design build includes a 120-day design phase followed by a 360-day construction phase. This timeline presents several challenges that must be addressed to ensure the project's success. The critical aspects of the schedule, the schedule logic, associated risks, and the team process are discussed below.

## Challenges and Proposed Solutions

### Design and Construction Timeline

**Challenge:** Completing the design in **120** days and the construction in **360** days requires detailed planning and high security standards.

**Solution:** Implement a fast-track design-build approach where design and construction activities overlap. Early packages for critical path components (e.g., graphics and databases) can be issued before the full design is completed. Regular coordination meetings between design and construction teams will ensure seamless integration of efforts.

### Coordination Among Stakeholders

**Challenge:** Ensuring effective communication and coordination among various stakeholders (e.g., designers, contractors, facility authorities, and regulatory bodies) within the schedule.

**Solution:** Establish a robust project management structure with clear communication channels and responsibilities. Weekly progress meetings and an integrated project management software platform will help keep all stakeholders informed and aligned.

### Risk of Delays Due to Unforeseen Conditions

**Challenge:** Unforeseen site conditions or other unexpected issues could disrupt the schedule.

**Solution:** Conduct thorough site investigations during the design stages to identify potential issues early. Develop contingency plans and allocate a buffer in the schedule to accommodate unexpected delays.

## Critical Aspects of the Schedule

### Critical Path Activities

Identifying and closely monitoring critical path activities is essential to ensure the project stays on track. Key activities include site preparation, foundation work, structural framing, and security systems installation.

### Milestone Dates

Key milestone dates such as design completion, point to point checkout, sequential commissioning, programming, and graphics must be met to avoid cascading delays. The team will focus efforts on these milestones and use milestone tracking tools to ensure adherence.



## Schedule Logic

### Sequential and Parallel Activities

The schedule logic will balance sequential and parallel activities to optimize efficiency. For example, while the point to point checkout is being completed, detailed graphics for the buildings can proceed concurrently.

### Dependencies and Interdependencies

Clearly defining dependencies and interdependencies among tasks is crucial. A detailed Gantt chart will outline these relationships, allowing for proactive management of task sequencing and identification of potential bottlenecks.

## Associated Risks and Mitigation Strategies



### Design Delays

**Risk:** Delays in design approvals or revisions.

**Mitigation:** Regular design reviews and early stakeholder engagement.

### Construction Delays

**Risk:** Weather-related delays, supply chain disruptions, or labor shortages.

**Mitigation:** Build weather contingencies into the schedule, secure reliable suppliers, and have backup labor resources.

### Security Requirements

**Risk:** Stringent security requirements could cause delays.

**Mitigation:** Integrate security considerations into all phases of design and construction and engage security consultants early in the process.

## Team Process to Ensure Achievement of Milestone Dates

### Integrated Project Team

Form an integrated project team comprising members from design, construction, project management, and client representatives to foster collaboration and alignment.

### Regular Progress Monitoring

Implement a rigorous progress monitoring system with weekly and monthly reviews to track performance against the schedule. Utilize project management software for real-time updates and transparency.

### Proactive Issue Resolution

Establish a proactive issue resolution process where potential problems are identified early and addressed promptly through collaborative problem-solving.

### Continuous Improvement

Encourage a culture of continuous improvement where lessons learned are documented and applied throughout the project to enhance efficiency and effectiveness.



## Conclusion

The proposed Master Schedule for the design-build project is challenging but achievable with careful planning, effective coordination, and proactive risk management. By focusing on critical aspects of the schedule, employing logical scheduling practices, mitigating risks, and fostering a collaborative team environment, the project can successfully meet its critical milestone dates and overall completion targets.



## 2-4.4 Qualifications

1. Design-Build Contractor Qualifications,
2. Design – MEP Design Qualification Form,
3. Construction - HVAC Construction Entity Qualifications,
4. Design – Retained Professional Qualifications

**Design - Build Contractor Qualifications**  
**Design – Retained Professional Qualifications**  
**Design – MEP Design Qualification**  
**Construction - HVAC Construction Entity Qualifications**

All of the categories will be completed by Ainsworth Inc. in house. Please adjust scoring accordingly.



**Design Build**



**Contact Information:**



**Philadelphia Housing Authority**

**Greg Martyak**  
Gregory.Martyak@pha.phila.gov  
Tel: 215-252-0089

## Philadelphia Housing Authority Site Repairs



### Design Build

**Scope of Work:** : Repair of an existing Delta Controls system including 12 sites and 46 buildings across the city of Philadelphia. This included new graphics, reprogramming of existing controllers, recommissioning and, if needed, replacement of existing devices, energy monitoring, updated alarming, reporting, and operator training (4 levels of operators - Admin, Maintenance Managers, Regionals, Site Supers). This project is actively being completed on schedule.

**Start date:** April 2023

**Completion Date:** July 2024, This project is actively being completed on schedule.

**Additional Information :**

- Value of Project: \$ 2,000,000

**Our Project Team Included:**

**Management Team:**

Kevin Goodwin, Kevin Heide, Shishir Amin, Garrett Gelting

**Engineering:**

Daniel James, Brett Taylor, Christopher Ross

**Technicians:**

Brett Hughes, Kris Kertenis, Trevor Markland and Michael Guiguis



### Contact Information:



Resorts World Casino

**Theresa Baldelli**  
Theresa.Baldelli@rwnewyork.com  
Tel: 718-215-3103



## Resorts World Casino – Grand Lobby and Hotel Expansion

### Design Build



**Scope of Work:** : Design assisted the engineer of record for a nearly 500,000 sqft expansion of NYC’s only casino. The expansion consisted of a ten-story 400 room four-star hotel, with five-star suites, and a new two-story grand entrance. Contract directly with the General Contract to be the Prime Building Automation Contractor responsible for all new work associated with building automation and technology.

Start date: January 2019  
Completion Date: August 2021  
Location: Queens NY

#### Additional Information :

- Value of Project: \$ \$ 3,000,000

#### Our Project Team Included:

##### Management Team:

Kevin Heide, Shishir Amin

##### Engineering:

Daniel James, Brett Taylor, Simon Zhou

##### Technicians:

Trevor Markland, Michael Guiguis





## Contact Information:

**Sciame**  
WHERE BUILDING IS AN ART

The Perelman Performing Arts Centre  
Sciame Construction

**Assad Tabatabaie**

[atabatabaie@sciame.com](mailto:atabatabaie@sciame.com)

Tel:646-630-6075

## The Perelman Performing Arts Center

### Design Build



**Scope of Work:** The creation of a performing arts center is a key component of the 2003 Master Plan developed by the Lower Manhattan Development Corporation to rebuild the 16-acre World Trade Center campus. Perelman Performing Arts Center (PAC NYC) is a 129,000 square foot building on multiple levels. The performance space offers flexible layouts in three theater spaces that can be combined to provide dozens of seating configurations, and the lobby level includes a restaurant, bar, terrace, and stage open to the public. Ainsworth was the Prime Building Automation Contractor responsible for all work associated with building automation and technology. This project required extensive coordination with local government as the foundation is part of a much larger campus wide structure utilizing shared HVAC resources.

**Start date:** January 2021

**Completion Date:** July 2023

**Location:** New York, NY

#### **Additional Information :**

- Value of Project: \$ 2,500,000.

#### **Our Project Team Included:**

##### **Management Team:**

Kevin Heide, Shishir Amin

##### **Engineering:**

Daniel James, Brett Taylor, Simon Zhou

##### **Technicians:**

Trevor Markland, Michael Guiguys





# Correctional Facilities





### Contact Information:



Picatinny Arsenal

John Chris Taylor Construction & Design

**John Chris Taylor**

[jctaylor@johnchristaylor.com](mailto:jctaylor@johnchristaylor.com)

Tel: 732-620-9957

## Picatinny Arsenal

### Correctional Facilities or Similar



**Scope of Work:** Picatinny Arsenal's Building Management System (BMS) is a sophisticated, integrated platform designed to oversee and control various building operations across the facility. This system monitors and manages critical functions such as heating, ventilation, air conditioning (HVAC), lighting, energy consumption, and security systems. The BMS at Picatinny Arsenal is essential for maintaining operational efficiency, ensuring optimal environmental conditions, and supporting the complex needs of its research and development activities. By leveraging advanced automation and real-time data analysis, the BMS enhances the facility's sustainability and reduces operational costs while providing a safe and comfortable environment for its personnel.

Servicing contractors, such as Ainsworth, working on the BMS at Picatinny Arsenal face significant access restrictions due to the facility's high-security nature. Given the sensitive and classified nature of the work conducted at the arsenal, contractors must undergo thorough background checks and obtain the necessary security clearances before accessing certain areas. Additionally, their movements within the facility are often closely monitored, and they may require escorts in high-security zones. These restrictions are in place to protect the integrity of the arsenal's operations and ensure that sensitive information and technologies remain secure. Despite these challenges, the contractors play a crucial role in maintaining the BMS and ensuring the continuous, efficient operation of Picatinny Arsenal's infrastructure.

Start date: 2007

Completion Date: On going

Location: Morris County NJ

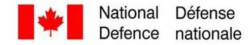
#### Additional Information :

- Value of Project: \$ 1,000,000. per annum





### Contact Information:



Department of Defence

Engineer: MCW Custom Solutions

Kevin Gibbard

[Kevin.Gibbard@forces.gc.ca](mailto:Kevin.Gibbard@forces.gc.ca)

Tel: 604.687.1821

## CFB Comox – Measure D EPC Project

### Correctional Facilities or Similar- HVAC Construction



**Scope of Work:** Complete BMS Controls retrofit of a standalone system for the complete site. Ainsworth embarked on a BMS controls system upgrade and energy monitoring project. Replacing the outdated controls, they introduced advanced BMS technology to enhance operational efficiency and energy management. The upgrade involved installing and fine-tuning HVAC controls and energy monitoring systems. Through planning and coordination, the engineers ensured minimal disruption and maintained high security standards. The successful completion of the upgrade significantly improved energy efficiency and monitoring, contributing to a more sustainable and cost-effective facility.

Start date: September 2022

Completion Date: August 2024

Location: Lazlo, BC

#### Additional Information :

- Value of Project: \$ 2,800,000



#### Contact Information:

#### Matsqui Institution

Engineer: Ameresco

Chris Jackson

[cjackson@ameresco.com](mailto:cjackson@ameresco.com)

Tel: 604.684.4984



## Matsqui Institution – Monitoring and Control System

### Correctional Facilities or Similar – HVAC Construction AINSWORTH

**Scope of Work:** BMS Controls System upgrade and Energy Monitoring in a Women's Correctional Facility. Ainsworth completed the retrofit of the Building Management System (BMS) for the entire site. The outdated standalone system was replaced with a Delta BMS, enhancing energy efficiency, climate control, and maintenance processes. Working meticulously to ensure minimal disruption and maximum security, the engineers installed, tested, and fine-tuned advanced HVAC controls. Through close collaboration with the facility staff, they ensured a smooth transition. The successful retrofit brought the facility into the modern era, significantly improving operational efficiency and comfort for both staff and inmates.

Start date: September 2022  
Completion Date: August 2024  
Location: Lazlo, BC

#### Additional Information :

- Value of Project: \$ 400,000



# HVAC – Controls, Commissioning and HMI Interfaces



### Contact Information:



Lincoln University - Aramark

### Henry Smith

Smith-henry2@aramark.com

Tel: 484-365-8061

## Lincoln University—Amos, Dickey, Vail and Cresson Hall

### Controls, Commissioning and HMI Interfaces



**Scope of Work:** Lincoln University HVAC system and building renovation. This is a new controls installation across three buildings within the traditional contractor tree. Ainsworth manages the entire Lincoln University campus and will be involved in the upcoming renovation to another campus building in 2026. Ainsworth is on schedule to complete all buildings.

Start date: September 2021  
Completion Date: August 2025  
Location: Lincoln University, PA

#### Additional Information :

- Value of Project: \$ 1,600,000

#### Our Project Team Included:

##### Management Team:

Kevin Goodwin, Kevin Heide, Shishir Amin, Garrett Gelting

##### Engineering:

Daniel James, Brett Taylor, Chris Ross

##### Technicians:

Trevor Markland, Michael Guiguis, Brett Hughes, Kris Kertenis



**Contact Information:**

Rancocas Valley High School Division

**Lisa Giovanelli**  
lgiovanelli@rvrhs.com  
Tel:609-267-0837



## Rancocas Valley Regional High School HVAC Upgrades

### Controls, Commissioning and HMI Interfaces



**Scope of Work:** HVAC system upgrades, new controls on a mix of existing to remain and new equipment. A complete system including, electrical subcontractor install, engineering design, graphics, programming, alarming, trending, COVID fresh air sequencing, reporting, and owner training.

Start date: March 2021  
Completion Date: April 2023  
Location: Mount Holly, NJ

**Additional Information :**

- Value of Project: \$ 2,000,000

**Our Project Team Included:**

**Management Team:**

Kevin Goodwin, Kevin Heide, Shishir Amin, Garrett Gelting

**Engineering:**

Daniel James, Brett Taylor, Christopher Ross

**Technicians:**

Brett Hughes, Kris Kertenis, Trevor Markland and Michael Guiguis





## Contact Information:

St John's University Health Center

**Joseph Hauser**

[hauserj@stjohns.edu](mailto:hauserj@stjohns.edu)

Tel: 718-840-8535



## St John's University Health Center

### HVAC Construction



**Scope of Work:** This 70,000 sq/ft leading-edge simulation facility will allow students at St. John's University to learn in a safe, realistic, clinical environment before they begin clinical rotation assignments at off-campus sites. The building will be heated and cooled using a geothermal field, which will include up to 66 wells drilled 499 feet below ground. This LEED Silver State-of-the-art building will leverage Ainsworth to control lighting, monitor space occupancy, and adjust temperatures throughout the building.

**Start date:** February 2022

**Completion Date:** August 2024

**Location:** New York, NY

#### **Additional Information :**

- Value of Project: \$ 1,150,000.

#### **Our Project Team Included:**

##### **Management Team:**

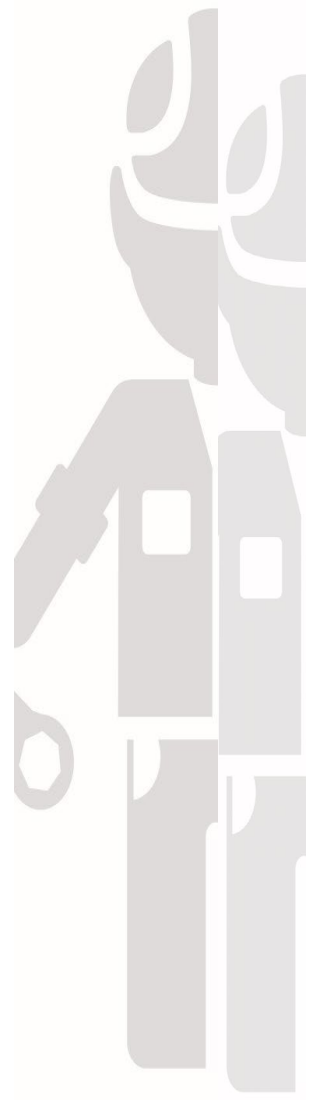
Kevin Heide, Shishir Amin

##### **Engineering:**

Daniel James, Brett Taylor, Simon Zhou

##### **Technicians:**

Trevor Markland, Michael Guiguis



a. Management Team Individual Qualifications

# Management Team



## Kevin Heide MBA Regional Manager – BAS East

### Expertise

Kevin has been involved in the Building Automation industry for over 25+ years. He has extensive experience in engineering design, programming, graphics development, project management and team building. Kevin began his career with the organization as an intern in 1998, and has grown with the company as engineer, engineering manager, operations manager, and into his current role as regional manager. Kevin is dedicated to developing strong relationships with his client's and teammates. He focuses on adding value for our clients through technology innovation and collaboration.

### Role within the Account

As the Regional Manager, Kevin oversees the building automation solutions team for the eastern US. Kevin is responsible for building the BAS group and casting a vision for how we serve our clients each day. He works to develop a cohesive team that seeks to bring innovative and exciting solutions to the industry and our clients. Kevin ensures the quality of our offerings and a client focused approach to each project.

### Qualifications & Business Affiliations

- Messiah College – BSE, Mechanical Engineering
- Liberty University - MBA

### Professional Experiences

- 2019 - 55 Water Street–  
Realtime Energy Monitoring Project \$850K
- 2020 - Powerhouse Workshop–  
Complete BMS \$950K
- 2021 - Rancocas Valley Regional High School  
Complete BMS replacement upgrade \$2.1M
- 2023 - The Perelman Center –  
Complete BMS Performing Arts Center. \$2.6M
- 2024 - Flexential  
New Data Centers BMS and EMS \$2.2M
- 2024 – St. John's University HSC  
Complete BMS Health and Science \$1.2M



## Kevin Goodwin PE, CEM Area Manager

### Expertise

Kevin has been involved in the Mechanical industry for over 35+ years. He has extensive experience in sales management, business development, project management and engineering. He is a passionate leader with a proven track record of the ability to deliver operational excellence exceeding the customer's expectations

### Role within the Account

As the Area Manager, Kevin oversees the multiple facets of the business region and ensures they operate smoothly, and everyone achieves their goals. He will ensure compliance with safety and regulatory requirements and maintain or exceed customer expectations.

### Qualifications & Business Affiliations

- Kettering University – BSME, Mechanical Engineering
- Mercer County Community College – Associate of Science (AS), Mechanical Engineering
- PE – Professional Engineer State of New Jersey
- CEM - Certified Energy Manager
- LEED AP

### Professional Experiences

- 2018 Catalent (formally Erytech)– New installation BMS and EMS for clean rooms \$1.1M
- 2019 Fashion District of Philadelphia- Complete BMS replacement upgrade \$2.8M
- 2021 Rancocas Valley Regional High School– Complete BMS replacement upgrade \$2.1M
- 2023 Philadelphia Housing Authority– City wide BMS system upgrade \$1.9M
- 2024 Flexential – New Data Centers BMS and EMS \$2.2M



## Shishir Amin Engineering Manager

### Expertise

Shishir has been with Ainsworth for over 25+ years. He started as an engineer and now uses his expertise to coach newer engineers as the Engineering Manager.

Shishir has extensive experience in engineering design, programming, and graphics development. He has been involved in developing engineering solutions for client through technology and innovation.

### Role within the Account

Shishir will be developing engineered solutions to complex building systems and coaching clients on the systems involved to control of temperature and humidity in critical spaces.

### Qualifications & Business Affiliations

- BS Mechanical Engineering, India
- MS Mechanical Engineering, Stevens Institute of Technology, Hoboken, NJ

### Professional Experiences

- Lincoln Center Central CHW Plant. Control and energy optimization design and programming of CHW plant with 15000 tons of cooling supply CHW to surrounding theater district.
- Fordham University. Design and programming of HVAC systems for all buildings at Lincoln Center Campus.
- Flexential. CHW plant controls for critical data center cooling for facilities throughout country
- VA Medical Center. Design and programming of controls for hospital systems





## Garrett Gelting Project Manager

### Expertise

Garrett began his career in Automation 2016 and worked as a technician for over 5 years, prior to becoming a Project Manager. He has another 7+ years working for an Electrician.

Garrett was brought on at Ainsworth to help in the newly developing Philadelphia market, as a technician, but also gaining experience in project management, engineering design, graphics, and sales. He now is in a project management role with a focus on engineering design and user front ends.

He prides himself on understanding his customers needs and find the solution that exceeds expectations. He has seen projects from beginning to end and that has given him insight into areas that can be difficult, he can navigate passed the issue before it becomes a problem.

### Role within the Account

As a project manager, Garrett will ensure everyone understands what roles they will play, that they understand the scope of work and oversee everything from beginning to end.

He prides himself on understanding his customers needs and find the solution that exceeds expectations.

He has seen projects from beginning to end and that has given him insight into areas that can be difficult, he can navigate passed the issue before it becomes a problem.

### Professional Experiences

### Qualifications & Business Affiliations

- Penn State University – BS in Electrical Engineering
- Villanova University – MBA in Operations and Management

- Fashion District of Philadelphia- Complete BMS replacement upgrade
- Rancocas Valley Regional High School- Complete BMS replacement upgrade
- Philadelphia Housing Authority- City wide BMS system upgrade
- Lincoln University Projects- Vail Hall, Amos Hall, Cresson Hall
- 1735 Market Street- High Rise Tenant Office Fit-outs and Building wide BMS Operations

## Statement of Readiness and Commitment of Resources.

Ainsworth confirms that the individuals identified in the referenced Request for Proposal (RFP) *Request for Proposal for a Design-Build Contractor Project No. DGS C-0577-0040 Phase 1 SCI Phoenix – HVAC System Repairs (SINGLE POINT CONTRACT SOLICITATION) Collegeville, Montgomery County, Pennsylvania* are available and will be fully committed to the project for the time periods outlined in the Project Master Schedule. Furthermore, the Resource Availability reported in item d. above will be allocated and dedicated to the project as detailed in the Project Master Schedule and Work Plan.

We assure you of our commitment to providing the necessary resources and personnel to ensure the successful execution and completion of the project.

## Statement regarding the entity’s policy as to Diversity in the Workplace, and the Employment of Veterans.

### Statement on the Employment of Veterans

At Ainsworth we believe in the power of diversity and the unique strengths that individuals from different backgrounds bring to our workforce. We recognize that veterans possess exceptional skills, leadership qualities, and a strong work ethic, cultivated through their military service. As such, we are committed to fostering a supportive and inclusive environment that not only values the contributions of our veterans but also actively seeks to empower them in their professional journeys.

**Commitment to Inclusion:** We are dedicated to creating a workplace culture that honors the experiences and sacrifices of our veterans. By integrating their diverse perspectives and skills, we enhance our organizational capabilities and drive innovation. Our commitment to inclusion ensures that veterans feel welcomed, respected, and valued as integral members of our team.

**Professional Development and Growth:** Understanding the transition from military to civilian employment can be challenging, we offer tailored support to help veterans navigate this change successfully. This includes mentorship programs, professional development opportunities, and career advancement pathways designed to leverage their unique talents and prepare them for leadership roles within our organization.

**Skills and Experience:** Veterans bring a wealth of experience in areas such as leadership, teamwork, problem-solving, and resilience. These attributes are not only transferable but also invaluable to our business operations. By harnessing these skills, we enhance our ability to meet challenges and achieve our strategic objectives.

**Recognition and Support:** We actively recognize and celebrate the contributions of our veteran employees through various initiatives and programs. This includes participation in veteran-focused events, partnerships with veteran organizations, and providing resources for continuous learning and development. We also ensure that our policies and practices are supportive of the unique needs of veterans, including those related to health and well-being.

**Community Engagement:** Our commitment extends beyond employment. We strive to be a part of the broader effort to support veterans within our community. By collaborating with local veteran organizations and participating in community service projects, we aim to contribute positively to the lives of veterans and their families.

At Ainsworth, we are proud to stand by our veterans, recognizing that their dedication and service contribute not only to our national security but also to the strength and success of our company. We are honored to provide a workplace where veterans can thrive, grow, and continue to make a difference.



## Diversity, Equity, Inclusion and Belonging

### Creating a best place to work

Diversity and Inclusion continues to be material to GDIGC, our stakeholders and our future success. We continue to demonstrate our commitment by providing a supportive work environment and a corporate culture which supports diversity and inclusion. We continue to develop diversity and inclusion organically through our commitment to develop programs, policy changes and 3rd party partnerships. In the last ESG report, we committed to the following approach and also developed specific diversity and inclusion targets. Please see below our progress since the last ESG report release in November 2022.



#### APPROACH

- Investing in programs that support diversity within our industry and our communities.
- Implementing more formalized Diversity and Inclusion Training.
- Developing and utilizing metrics to drive improvement.
- Partnering with organizations that will help us increase our diverse talent.
- Surveying the team regarding the formation of diversity network groups.



#### TARGETS

- Increase women in technical positions by 10% in 5 years
- Increase women in Senior Management to 15% by end of 2024 and 30% by end of 2026
- Increase women in Management by 10% in 3 years
- Implement tools to gather and analyze GDI demographic data across GDI to further develop targets to promote diversity & inclusion across the enterprise

### Completed and ongoing activities

**Established North American Diversity & Inclusion Committee** to define programs for managing unconscious bias and to increase opportunity across the GDI organization.

**Creation of Diversity & Inclusion Calendar** as part of the GDIGC Social Media Calendar by GDI Corporate Marketing; This will increase our awareness of the selected religious holidays, cultural occasions and national events, which align with our objectives

#### Internal supplier diversity activities:

- Partnership with Newbold Services in South Carolina, a certified Minority Business Enterprise (MBE), to provide opportunity for organizations seeking Janitorial and Facility Maintenance contract partners
- Initial survey indicates that 40% of our Modern Cleaning business franchisees in Canada are women, visible minorities, Aboriginals, veterans and handicapped/disabled people

**Membership in 3rd party organizations** to increase access for underserved communities and champion growth of minority-owned businesses e.g.,

- Canadian Aboriginal & Minorities Supplier Council (CAMSC)
- Canadian Council on Aboriginal Business (CCAB)
- Our Children's Medicine (OCM)
- Helping Indigenous People (HIP)



## Diversity Policy

### **PURPOSE:**

The purpose of this Policy is to set out Ainsworth's commitment to, and strategy for, establishing and maintaining a diverse and inclusive workplace, particularly for those who have been historically excluded from, and under-represented in, the workplace.

This includes individuals who are identified by grounds under human rights legislation, such as: Indigenous peoples; people with disabilities; individuals from racialized groups; people of diverse faiths and creeds; people with diverse gender identities or expressions which could include those who identify as trans, intersex, non-binary, bigender, polygender, agender, demigender, gender fluid, gender non-conforming, gender variant, genderqueer or two-spirited; people with diverse sexual orientations which could include those who identify as lesbian, gay, bisexual, pansexual, polysexual, asexual, demisexual, queer, questioning or two-spirited; and women.

### **SCOPE:**

This policy applies to all employees of Ainsworth Inc.

### **LEADERSHIP COMMITMENT TO DIVERSITY AND INCLUSION:**

We commit to developing, implementing, and maintaining best practices and strategies to enhance equality, diversity and inclusion at all Ainsworth locations. We make this commitment at all stages of the employment life cycle including recruitment, career advancement and separation.

The senior leadership will demonstrate their commitment to promoting and advancing diversity and inclusion by:

- Encouraging diversity and inclusion education/training on: discrimination and harassment; "unconscious bias," stereotyping, and the impact on performance perceptions.
- Ensuring that human resources staff has sufficient training and expertise in human rights legislation, and diversity and inclusion strategies.

### **RECRUITMENT**

In order to achieve our goal of enhancing diversity and inclusion, our commitment to diversity and inclusion will be set out in our recruitment and promotional materials (eg. job notices, website, formal and informal verbal or written communications with candidates).

### **RETENTION**

To achieve our goal of enhancing diversity and inclusion, some or all of the following strategies with respect to retention will be implemented:

- Accommodation:
  - grant and respect accommodation requests for: e.g. family responsibilities, physical accessibility for disabilities, diverse days of religious significance within reason;
- Mentoring:
  - ensure that senior leaders/managers will mentor employees from diverse communities;
  - encourage employees from diverse communities;

- Performance Management:
  - develop clear, written and communicated performance management policies;
  - ensure that performance reviews are conducted regularly on a set-schedule, as well as on an as-needed basis;
  - mandate training and education on an overt bias, as well as "unconscious bias," training for those who conduct performance reviews;

### **ADVANCEMENT**

To achieve our goal of enhancing diversity and inclusion, some or all of the following strategies with respect to advancement will be implemented:

- Clear Criteria:
  - develop clear, written and communicated criteria to evaluate candidates for leadership positions;
  - communicate the expectations and time frame for becoming a leader within the business;
  - ensure that regular, documented performance reviews are considered in advancement decisions;
- Leadership:
  - ensure diversity within the group of employees serving as the senior leadership team;
  - ensure that those in decision-making roles for promotions and advancement have had adequate diversity and inclusion education/training;
  - ensure that proper training has been provided on how to evaluate candidates for promotion and that the criteria is being applied consistently.

## 2. *Design – Retained Professional Qualifications*

Our Design team was part of the previous projects. Please refer to the pages above. You will find our design team qualifications below.

### a. **Individual Qualifications**

The responsibilities are listed in Section 1, with our Design Build examples. All of the scope of work listed in the RFP will be done in house. Please see our design team resumes on the following pages.

# Design Team



## Daniel James Application Engineer

### Expertise

Daniel has worked as an Application Engineer in the building automation industry for 13 years. He has experience in design, programming and creation of front-end graphics. He has worked on projects covering a wide range of market sectors such as Pharma, Health, Government, Education, Retail and Business. These projects include renovation, new construction and design/build. He joined Ainsworth in 2022.

### Role within the Account

As an Application Engineer, Daniel will design or redesign, develop, test, and implement complex software problems and applications. He will provide technical support and expertise, as well as Provide engineering design and programming of building automation systems tailored to meet the needs of the client/end user.

### Qualifications & Business Affiliations

- Drexel University – 2013 – BS Arch. Eng. – Mechanical Building Systems

### Professional Experiences

2022 - Lincoln University – Vail Hall – Design and Programming of the new and renovated portions of the Vail aHall building including the Geothermal Water systems and Air Handling Units.

2023 Lincoln University – Cresson Hall – Design and Programming the extension of the Vail Hall geothermal system to the renovated Cresson Hall; along with the airside portion of the building.

2022, 2023 – Joint Base McGuire-Dix-Lakehurst – Various Projects. Design and Programming of various base projects ranging from storage facilities, vehicle inspection bays and confinement areas.

2023 – Rocket Pharmaceuticals – Basement BMS and EMS Fitouts – Design and Programming of Water and Air systems for new lab areas, as well as the EMS monitoring system.

2023-2024 – PHA facilities – Various Projects – Worked with the design team on various projects to develop BMS solutions for the PHA client. Designed and Programmed the systems for community centers, residence buildings and maintenance/logistic buildings.





## Brett Taylor Graphics Engineer

### Expertise

Brett has been with Ainsworth for 13 years, developing graphics, drafting wiring and flow diagrams. Brett has a strong understanding of the systems and a high attention to detail allows him to develop solutions for clients BAS needs.

### Role within the Account

As a Graphic Engineer, Brett will create the Operator WorkStation graphics using Delta Controls enteliWEB software. He will use enteliVIZ HTML5 Designer & Sketchup 3D Modeling to create HVAC Systems, Floor Plans and pages for Sequences, Alarms and Scheduling.

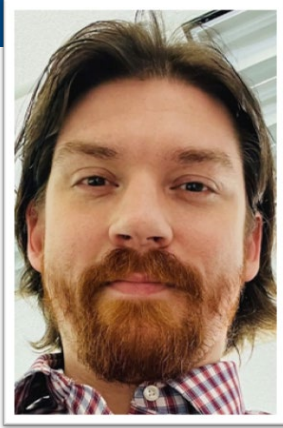
### Qualifications & Business Affiliations

Rutgers University - Bachelor of Science(BS) Landscape Architecture & Delta Controls George University

### Professional Experiences

- Perelman Center
- Resorts World Casino
- Powerhouse Workshop
- New York Police Academy
- Rancocas Valley Regional High School





## Chris Ross Engineering Draftsperson

### Expertise

Chris has 2 years of experience in Building Automation Industry with expertise in Tridium Niagara and Delta controls. Currently working in Drafting/Graphics position to assist team members along project lifecycle. Information Technology graduate with specialization in Software Development (Java) and Design (Object Oriented Programming and Technical Writing).

### Role within the Account

As an Engineering Draftsperson Chris will ensure submittal and final drawings meet specification in accordance with project requirements. He will work alongside project engineering team to construct drawings and other documentation. As well as assist Service department in various tasks such as graphics and database construction.

### Qualifications & Business Affiliations

DeVry University – B.S. Software Development and Design  
Various Cloud Certifications (AWS, Microsoft)

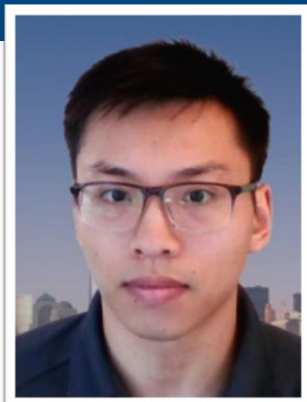
### Professional Experiences

2023 Philadelphia Housing Authority - Worked on extensive drawing set for client including over a dozen individual sites.

2024 Rocket Pharmaceutical - Completed drawing set for large site including BMS, EMS, and EMS (GxP)

2024 – JBMDL Tridium Niagara Configuration and Site Graphics.

2024 – 1 City Place – Created new site graphics for customer including navigation, summaries, and unit graphics.



## Simon Zhou Project Engineer

### Expertise

Simon joined Ainsworth in 2020 . He has experience in Building Management Systems, HVAC Systems, BMS Programming (BACnet), CAD Software (Visio, AutoCAD) and Microsoft VBA programming.

### Role within the Account

Simon will design and develop BMS solutions based on project requirements and specifications. He will oversee installation and commissioning of BMS subsystems.

### Qualifications & Business Affiliations

- Rutgers SOE, Mechanical Engineering (2016-2020)

### Professional Experiences

- Ainsworth (Aug 2020 – Now)

#### Projects Worked On:

- Flexential Data Centers: Design engineer responsible for engineering BMS system supporting N+1 redundancy in case of power failure
- 200 Lexington: Design and field engineer responsible for the expansion and recommissioning of their legacy BMS
- Isabella Geriatrics Center: Design engineer responsible for upgrade/recommissioning of legacy BMS
- VAMC HVAC Deficiencies: Design engineer responsible for recommissioning BMS/ upgrading existing hospital graphics

## Appendix G – Requirements Check List

### Requirements Checklist

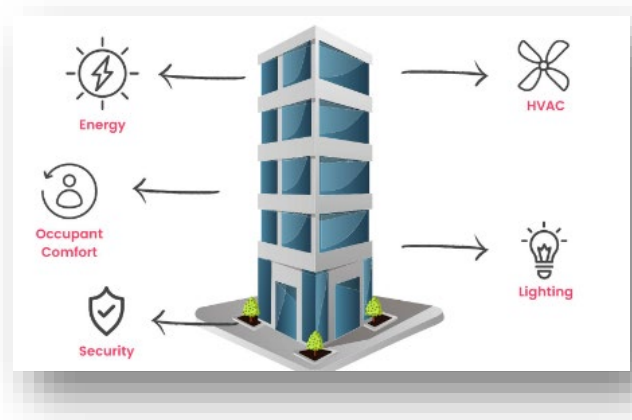
Indicate if the proposal meets each of following mandatory requirements. Any Proposal that has a “No” checked for an applicable item in the Mandatory section will be rejected as non-responsive. The Non-Mandatory section is intended to assist you in completing your Proposal.

<b>MANDATORY REQUIREMENTS (as applicable, if “No”, Proposal rejected as non-responsive):</b>	<b>Yes</b>	<b>No</b>
<u>Technical, Cost, and SDB/SB Submissions</u> included and separately sealed	✓	
If Prime Contractor is a Joint Venture:		✓
• Joint Venture Agreement submitted		✓
• Entity Authorization to Enter Into Joint Venture is included		✓
Proposal Signature Page properly completed	✓	
Affidavit for Use of Required Subcontractors	✓	
Non-Collusion Affidavit properly complete and notarized (Technical Section T-4B)	✓	
• If a Joint Venture, one Non-Collusion Affidavit for Joint Venture		✓
<b>NON-MANDATORY REQUIREMENTS CHECKLIST</b>	<b>Yes</b>	<b>No</b>
Technical Section 2-4.1 Project Management Team Overview	✓	
Technical Section 2-4.2 Work Plan	✓	
Technical Section 2-4.3 Project Master Schedule	✓	
Technical Section 2-4.4 Qualifications	✓	
o Technical Section 2-4.4.1 Design-Build Contractor Qualifications	✓	
o Technical Section 2-4.4.2 Design – Retained Professional(s) Qualification Form	✓	
o Technical Section 2-4.4.3 Design – MEP(s) Qualification Form	✓	
o Technical Section 2-4.4.4 Construction – HVAC Construction Subcontractor Qualification Form	✓	

# Appendix 1 – Energy Model Narrative

## Energy Model Project Overview – SCI Phoenix HVAC System

Ainsworth will use the Delta Controls Building Management System (BMS) to create an energy model for the HVAC system at SCI Phoenix. We will ensure that we are compliant with the 2018 International Energy Conservation Code (IECC) standards. Since we can't develop a new software-based energy model, the constraints of the existing facility and the inability to develop a software-based energy model, we'll use the BMS to monitor important data like amperage, voltage, and runtime of HVAC equipment. This will help us create virtual meters to track energy use and ensure we follow the IECC rules.



## Utilizing Building Management System (BMS) and Delta Controls enteliWEB Energy Software



Our team will use the Delta Controls enteliWEB Energy software to monitor and manage the HVAC system's energy performance. This advanced software will help us comply with the 2018 IECC by setting up virtual meters and tracking key performance indicators.

### How it works:

#### 1. Energy Monitoring and Reporting

Section C405.7 (Electrical Energy Monitoring): We'll set up the enteliWEB software to monitor the electrical consumption of HVAC equipment like chillers, air handling units (AHUs), fans, and pumps. Virtual meters will measure the energy use of each piece of equipment.

Sub-metering: The enteliWEB virtual meters will provide sub-metering for different HVAC components, allowing detailed tracking and reporting of energy consumption. The software's robust reporting capabilities will enable the generation of comprehensive energy usage reports.

#### 2. Equipment Performance Monitoring

Section C403.2 (Performance Requirements): The enteliWEB will monitor the performance of HVAC equipment by tracking amperage, voltage, and runtime. This will help us understand how efficiently the equipment is operating and identify any issues.

### 3. Temperature and Environmental Control

Section C403.2.4 (HVAC System Controls): The BMS, integrated with enteliWEB, will manage and monitor temperature settings, ensuring the HVAC system operates within the required temperature ranges. This includes controlling and recording the temperature set points to comply with the 2018 IECC.

### 4. Maintenance and Fault Detection

Section C403.2.3 (Fault Detection and Diagnostics): The enteliWEB will have fault detection and diagnostics capabilities to quickly identify and address any issues with the HVAC equipment. This will help maintain the system's efficiency and reliability.

### 5. Energy Efficiency Improvements

Section C406 (Additional Efficiency Package Options): The enteliWEB platform will support extra energy efficiency measures like variable speed controls for fans and pumps and high-efficiency motors. Monitoring and adjusting these components will help save energy.

## Implementation Plan

**System Setup:** Configure the BMS and enteliWEB software to monitor and record key inputs (amperage, voltage, runtime) for all major HVAC equipment.

**Virtual Metering:** Develop virtual meters within the enteliWEB platform to track energy consumption for chillers, AHUs, fans, and pumps.

**Data Collection:** Continuously collect and store data on equipment performance, energy use, and environmental conditions using enteliWEB's data logging capabilities.

**Reporting:** Generate regular reports on energy consumption and system performance using enteliWEB's reporting tools to ensure compliance with the 2018 IECC.

**Optimization:** Use the collected data and enteliWEB's analytical tools to identify opportunities for energy efficiency improvements and implement necessary adjustments.



## Conclusion

By using the existing BMS and the advanced features of the Delta Controls enteliWEB Energy software, the HVAC system at SCI Phoenix will meet the requirements of the 2018 IECC. The BMS and enteliWEB will provide comprehensive monitoring, reporting, and optimization of energy use, helping the facility achieve its energy efficiency and sustainability goals, which are to

## Appendix 2 – Delta Controls Partner Letter



05 July 2024

PA Department of Corrections | SCI Phoenix  
1200 Mokychic Drive  
Collegeville PA 19426

**Subject: Delta Controls Partner – Ainsworth Inc.**

Delta Controls has developed an outstanding reputation in the DDC marketplace based on the quality of its products and through the careful selection of its distributors.

Please be advised that Ainsworth Inc. is an authorized Delta Controls Partner in New York City and Central/Northern New Jersey and is committed to excellence in all aspects of the project delivery system. This is a business relationship that is valued and will remain in effect as per our Delta Controls Distributorship Agreement. The Northeast US market represents an important component of our marketplace and Delta Controls is committed to providing full sales, service and installation capabilities to these customers.

As part of the Delta Controls commitment to our distributors and their clients, we are dedicated to providing full support and warranty of our products through

- Forward/backward compatibility pathways to legacy systems
- Long term product functionality
- Factory technical support and training
- System Solution quality control via ISO 9001:2015

At Delta Controls, we are more than proud of our prominence among our rivals. Largely because this position stems from an acute sensitivity to market needs like yours, and dedicated distributors like Ainsworth Inc., with a commitment to excellence in installation and service.

Regards,

**Robert Hemmerdinger**  
Chief Sales & Marketing Officer

**Head Office**

17850 56 Ave. Surrey  
BC Canada V3S 1C7

**Phone/Fax**

Tel +1 604.574.9444  
Fax +1 604.574.7630

**Web /Email**

info@deltacontrols.com  
www.deltacontrols.com

**APPENDIX A**  
**PROPOSAL SIGNATURE PAGE**

## **Proposal Signature**

**Proposer's Representations and Authorizations.** Proposer by signing on the signature page and submitting its proposal understands, represents, acknowledges and certifies that:

- a. All information provided by, and representations made by, the Proposer in the proposal are material and important and will be relied upon by the Proposal Evaluation Committee in reviewing the Proposal and by DGS in awarding the contract. Any misrepresentation of a material fact or omission of material fact by the entity submitting the proposal shall be treated as fraudulent concealment from the Commonwealth of the true facts relating to the submission of the proposal. If the misrepresentation and/or omission of material fact is discovered during the review of the proposal, the proposal will be automatically disqualified. Discovery of the misrepresentation and/or omission of material fact after contract award constitutes grounds for defaulting the contractor and may lead to debarment procedures being instituted against the contractor. A misrepresentation shall be punishable under 18 Pa. C.S. § 4904.
- b. Proposer acknowledges that they have received, read and understood all Addenda issued for the Project.
- c. The price and amount of this proposal have been arrived at independently and without consultation, communication or agreement with any other Proposer or potential Proposer.
- d. Neither the price nor the amount of the proposal, and neither the approximate price nor the approximate amount of this proposal, have been disclosed to any other firm or person who is a Proposer or potential Proposer, and they will not be disclosed on or before the proposal submission deadline specified in the Notice to Proposers and the Calendar of Events.
- e. No attempt has been made or will be made to induce any firm or person to refrain from submitting a proposal on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
- f. The proposal is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
- g. To the best knowledge of the person signing the proposal for the Proposer, the Proposer, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any local, state or federal governmental agency and have not in



the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as disclosed by the Proposer in its proposal.

- h. To the best of knowledge of the person signing the proposal for the Proposer and except as otherwise disclosed by the Proposer in its proposal, the Proposer has no outstanding, delinquent obligations to Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Proposer that is owed to Commonwealth.
- i. The Proposer is not currently under suspension or debarment by Commonwealth, or any other local, state, or the federal government. If the Proposer cannot so certify, then it shall submit along with its proposal a written explanation of why it cannot make such certification.
- j. The Proposer has not, under separate contract with the DGS made any recommendations to DGS concerning the need for the services described in the proposal or the specifications for the services described in the proposal.
- k. Each Proposer, by submitting its proposal, authorizes all Commonwealth agencies to release to Commonwealth information related to liabilities to Commonwealth of Pennsylvania including, but not limited to, taxes, unemployment compensation, workers' compensation liabilities and Prevailing Wage Act.
- l. Until the selected Proposer receives a fully executed and approved written contract from the DGS, there is no legal and valid contract in law or in equity, and the Proposer should not begin to perform work. If a Letter of Intent has been issued, the Proposer may proceed in accordance with the terms of the Letter.
- m. Proposer is not currently engaged, and will not during the duration of the contract engage, in a boycott of a person or an entity based in or doing business with a jurisdiction which the Commonwealth is not prohibited by Congressional statute from engaging in trade or commerce; and is eligible to contract with the Commonwealth under Section 3604 of the Procurement Code.
- n. Proposer agrees and certifies to abide by, but not be limited to, the Commonwealth of Pennsylvania Acts, Provisions, Clauses, and Statements stated in the Contract Documents.

I am authorized to sign this proposal on behalf of the Proposer and I agree and state that ATNS WORTH INC (Name of Firm) understands and acknowledges that the above representations are material and important, and will be relied upon by the Department of General Services in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this proposal.

  
SIGNATURE

STEVEN HEDERSTADT  
PRINT NAME LEGIBLY

SENIOR VICE PRESIDENT  
TITLE

## **APPENDIX B**

### **NON-COLLUSION AFFIDAVIT**

#### INSTRUCTIONS FOR NONCOLLUSION AFFIDAVIT

1. This Noncollusion Affidavit is material to any contract awarded pursuant to this proposal. According to §4507 of the Commonwealth Procurement Code, 62 Pa.C.S. §4507, governmental agencies may require Noncollusion Affidavits to be submitted with proposals.
2. This Noncollusion Affidavit must be executed by the member, officer, or employee of the Proposer who makes the final decision on prices and the amount quoted in the proposal.
3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Proposer with responsibilities for the preparation, approval or submission of the proposal.
4. In the case of a proposal submitted by a joint venture, each party to the venture must be identified in the proposal documents and an affidavit must be submitted separately on behalf of each party to the joint venture.
5. The term “complementary proposal” as used in the affidavit has the meaning commonly associated with that term in the proposal process, and includes the knowing submission of proposals higher than the proposal of another firm, any intentionally high or noncompetitive proposal, and any other form of proposal submitted for the purpose of giving a false appearance of competition.
6. Failure to submit a Noncollusion affidavit with the Proposal in compliance with these instructions may result in disqualification of the proposal.

[Handwritten Signature]

(Signature)

STEVEN HEDENMADT

(Signatory's Printed Name)

SENIOR VICE PRESIDENT

(Signatory's Title)

SWORN TO AND SUBSCRIBED

BEFORE ME THIS 1 DAY OF

July, 2024

Nancy Falco

Notary Public

My Commission Expires

10/11/25

NANCY FALCO  
Notary Public, State of New York  
No. 01FA5052941  
Qualified in Kings County  
Commission Expires Dec. 11, 2025

# **APPENDIX D**

## **Affidavit for Use of Required Subcontractors**

I state that

AINSWORTH INC.  
10 CENTICE DRIVE  
MONROE, NJ 08831

(Name of Proposer, Address, Telephone Number, email address) submits this Proposal and understands and acknowledges that the above representations are material and important, and will be relied upon by the Department of General Services in awarding the contract(s) for which this Proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this proposal.

DATE: 7-1-24

**PROPOSER IS A PARTNERSHIP OR LIMITED LIABILITY COMPANY (LLC):**

Witness:

\_\_\_\_\_  
[Title]  
Member

By:

\_\_\_\_\_  
General Partner / Authorized LLC

**PROPOSER IS A CORPORATION:**

Attest:

\_\_\_\_\_  
Secretary

By:

[Signature]  
\_\_\_\_\_  
President/Vice President

**PROPOSER IS A JOINT VENTURE:**

Attest:

\_\_\_\_\_  
Secretary

By:

\_\_\_\_\_  
President

Attest:

\_\_\_\_\_  
Secretary

By:

\_\_\_\_\_  
President

SWORN TO AND SUBSCRIBED BEFORE ME THIS 1 DAY OF JULY,

2024  
[Signature]  
\_\_\_\_\_  
Notary Public

NANCY FALCO  
Notary Public, State of New York  
No. 01FA5052941  
Qualified in Kings County  
Commission Expires Dec. 11, 2025

My Commission Expires 12/11/25

## Affidavit for Use Of Required Sub-Contractors

DGS Project Number: C-0577-0040.2 P1

State of NY \_\_\_\_\_:

SS:

County of KINGS \_\_\_\_\_:

STEVEN HETDELSPROT, being duly sworn according to law, deposes and says that:

1. I am the Sr. Vice President (Title) of Answorth INC (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers (hereinafter collectively referred to as "Proposer").
2. Proposer has been fully informed respecting the preparation and contents of the Proposal to perform the Work which is the subject matter of the above listed DGS Project Number.
3. Proposer agrees that it will prepare or cause to be prepared separate design submissions for the following major divisions of work: HVAC, Plumbing and Electrical in accordance with the requirements of the Project Procedures Manual (PPM) attached as an Appendix to the RFP.
4. Proposer agrees that it will then solicit separate sealed bids for any of the work contained in the aforementioned major divisions of work.
5. Proposer agrees that it will award separate subcontracts for any of the work contained in the aforementioned major divisions of work to the lowest responsible bidders ("Responsible" shall be mean (1) acceptable to the DGS based upon clearance through the Commonwealth's Contractor Responsibility Program; and (2) acceptable to the DBC based upon acceptance by the DBC's Performance/Payment Bond Surety and the DBC's General Liability Insurance carrier [or CCIP carrier if applicable.]
6. Proposer agrees that the bidding process required therein will be made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm(s) or person(s) to submit a complementary or other noncompetitive proposal for the required division of work.

**[SIGNATURE PAGE FOR THIS AFFADAVIT  
IMMEDIATELY FOLLOWS]**