

## APPENDIX A

### SCOPE OF WORK

#### BUILDER SUSTAINMENT MANAGEMENT SYSTEM IMPLEMENTATION

(Iowa Version)  
Years Two through Five

##### 1.0 GENERAL INFORMATION.

The Architect-Engineer (A-E), in accordance with this Scope of Work (SOW), shall implement the BUILDER Sustainment Management System (BUILDER SMS), hereafter referred to as BUILDER. This Scope of Work refers specifically to the implementation of BUILDER in the State of Iowa.

**1.1 Description of Services / Introduction:** The A-E shall provide all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, and other items and non-personal services necessary to implement BUILDER SMS or the most current version available. The A-E shall perform to the standards in this Request for Proposal (RFP) and to the standards described in the most current versions of the BUILDER USER MANUAL and the BUILDER Condition Assessment Manual.

**1.2 Background:** The intent of this Scope of Work is to provide guidance on the implementation process of BUILDER SMS. This implementation will improve building inspection data and the facility management business processes.

BUILDER SMS was developed by U.S. Army Corps of Engineers - Engineer Research Development Center - Construction Engineering Research Laboratory (USACE-ERDC- CERL). BUILDER is a software application for building asset lifecycle management.

BUILDER stores real property building information and more detailed system inventory is modeled and/or collected which identifies building components and their key life-cycle attributes such as the age, material and capacity. Inspections are then performed on the various components to determine engineering based objective and repeatable Condition Index (CI) measures which relate the general physical health of the asset. Functionality assessments can be performed to evaluate user requirement changes, compliance and obsolescence issues. This provides a comprehensive picture of the overall performance of building assets and their key components. With information about condition, functionality, and remaining service life, BUILDER guides the development of short and long-range work plans based on sound investment strategies, prioritization criteria, and budget constraints.

BUILDER consolidates a variety of building-related management issues into a single decision-support package. The system gives functional managers and decision-makers access to building inventory, current building condition indices, probability-based condition prediction models, and functionality-based mission, compliance, and obsolescence issues. It also employs knowledge based inspection scheduling process.

##### 1.2.1 Applicable Publications (Current Editions):

**1.2.1.1** The A-E shall abide by all applicable regulations, publications, manuals, and local policies and procedures current at the time of Contract award.

**1.2.1.2** Latest version of BUILDER SMS User Manual available at <https://www.sms.erdcdren.mil>.

**1.2.1.3** Latest version of BUILDER Condition Assessment Manual for Building Component-Sections, available at <https://www.sms.erdcdren.mil/Support/Help-FAQ-News>.

**1.2.1.4** Army Regulation (AR) 420-1 Army Facilities Management

**1.2.1.5** AR 25-2 Information Assurance

**1.2.1.6** AR 530-1 Operations Security (OPSEC)

**1.2.2 Selection of Subcontractors:** The BUILDER Implementation may require the use of sub-contractors to perform these efforts. The State Contracting Officer (SKO) and selected A-E will review and approve all subcontractors proposed to accomplish this work.

**1.3 Objectives:** BUILDER implementation will be performed for all facilities requiring an inspection that are located in the State of Iowa listed in **TECHNICAL EXHIBIT 5** and belonging to the Iowa Army National Guard.

**1.4 Scope:** The A-E shall provide all necessary labor, supervision, equipment, materials and supplies required to accomplish the tasks listed below in the SOW, Section 4.0 at the sites described in **TECHNICAL EXHIBIT 5**. The A-E shall submit pricing, experience, and qualifications data in general accordance with the requirements specified in the base RFP.

## **1.5 General Information:**

**1.5.1 Quality Control (QC):** The A-E shall develop and maintain an effective QC program to ensure services are performed in accordance with this SOW. The A-E shall develop and implement procedures to identify, prevent, and ensure non-recurrence of defective services. The A-E's QC program is the means by which he assures himself that his work complies with the requirement of the contract. The A-E shall deliver the Draft Quality Control Plan (QCP) within **14 working days** following the award of the Contract. The A-E shall provide for review and approval one (1) copy of the Draft QCP to the SKO. Upon receipt of comments the A-E shall provide the Final QCP within **five (5) working days** to the SKO.

**1.5.2 Quality Assurance (QA):** The Owner shall evaluate the A-E's performance in accordance with the Quality Assurance Surveillance Plan. This plan is primarily focused on what the Owner must do to ensure that the A-E has performed in accordance with the performance standards. Upon completion of work at each installation, the NGB Quality Assurance team will conduct QA assessments of data for buildings selected by the State Construction and Facility Management Officer (CFMO) and/or QA representative. Findings will be forwarded to A-E for correction, incorporations, and/or to develop corrective action

**1.5.3 Recognized Holidays:** The A-E is not required to provide services on the following Federal Holidays:

New Year's Day

Martin Luther King Jr Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

**1.5.4 Hours of Operation:** Work is generally performed during the Owner's regular business hours, which are Monday through Friday between the approximate hours of 0700 and 1700, except federal holidays. The A-E is responsible for conducting business, during these hours except Federal holidays or when the Owner facility is closed due to local or national emergencies, administrative closings, or similar Owner directed facility closings. Building access may be obtained on weekends, given the unique schedule of Army National Guard organizations. The A-E is encouraged to plan accordingly. The A-E must at all times maintain an adequate workforce for the uninterrupted performance of all tasks defined within this SOW when the Owner facility is not closed for the above reasons. When hiring ~~personnel~~, the A-E shall keep in mind that stability and continuity of the workforce are essential.

**1.5.5 Place of Performance:** The tasks described in Section 4.0 will be performed at various locations throughout northwest and northeast Iowa. See **TECHNICAL EXHIBIT 5** for listing of buildings.

**1.5.6 Type of Contract:** This is a firm fixed price Contract for Year 2 only, with options for years 3 through 5. Future years will be dependent upon funding and will be executed as a change order to the base contract in subsequent fiscal years as funding becomes available.

**1.5.7 Security Requirements:** Unless otherwise determined by the SKO, work performed under this Contract is unclassified. However, Trustworthiness Security is required as determined by SKO. All Army National Guard facility commanders and coordinators will be required to provide escorts to the A-E to ensure the assessment team has access to the facilities. The A-E shall comply with all applicable Department of Defense (DoD) security regulations and procedures during the performance of this Contract. The A-E shall not disclose and must safeguard procurement sensitive information, computer systems and data, privacy act data, and Owner personnel work products, which are obtained or generated in the performance of this Contract.

The following security requirements are mandatory and non-negotiable:

a. The A-E shall ensure all personnel performing on this Contract have a completed favorable National Agency Check. At least two personnel from the A-E shall have a current NACLC at the time of notice to proceed.

b. The A-E shall ensure at least one or more personnel that will be on site possess a Government issued Common Access Card (CAC).

c. The A-E shall treat all information related to this Contract as "Official DoD Information" - all information that is in the custody and control of the DoD, relates to information in the custody and control of the Department, or was acquired by DoD employees as part of their official duties or because of their official status within the Department.

d. The A-E shall process Official DoD Information only on information systems which have been granted the required certification and accreditation (including hardware and software).

e. The A-E shall ensure all Personal Identifiable Information (PII) (protected under the Privacy Act of 1974) is safeguarded as Controlled Unclassified.

f. Information: Examples of personal information include but are not limited to: Social Security Number; age; military rank; civilian grade; marital status; race; salary; private emails; home/office numbers/addresses; medical information; employment eligibility; disciplinary information; names along with duty address (postal or email) published in directories, organizational charts and rosters.

**Disclosure of Information:**

Information made available to the A-E by the Owner for the performance or administration of this effort shall be used only for those purposes and shall not be used in any other way without the written consent of the Owner. The A-E agrees to assume responsibility for protecting the confidentiality of Owner records, which is not considered public information. The A-E or employee of the A-E to whom information may be made available or disclosed shall be notified in writing by the A-E that such information may be disclosed only for purposes and to the extent authorized herein. The A-E shall not release any information related to this Contract to the public, media or other unauthorized persons or organizations unless the Owner has conducted the appropriate security review and granted approval (e.g. posting information to a public website).

**1.5.7.1 Physical Security:** The A-E shall be responsible for safeguarding all Owner equipment, information and property provided for contractor use. At the close of each work period, Owner facilities, equipment, and materials shall be secured.

**1.5.7.2 Key Control:** The A-E shall establish and implement methods of making sure all keys/key cards issued to the A-E by the Owner are not lost or misplaced and are not used by unauthorized persons. **NOTE: All references to keys include key cards.** No keys issued to the A-E by the Owner shall be duplicated. The A-E shall develop procedures covering key control that shall be included in the QCP. Such procedures shall include turn-in of any issued keys by personnel who no longer require access to locked areas. The A-E shall immediately report any occurrences of lost or duplicate keys/key cards to the SKO.

**1.5.7.2.1** In the event keys, other than master keys, are lost or duplicated, the A-E shall, upon direction of the SKO, re-key or replace the affected lock or locks; however, the Owner, at its option, may replace the affected lock or locks or perform re-keying. When the replacement of locks or re-keying is performed by the Owner, the total cost of re-keying or the replacement of the lock or locks shall become the responsibility of the A-E. This action would require a modification to the Contract along with an adjustment in the firm fixed price of the Contract. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Owner, the total cost for replacement of all locks and keys for that system shall become the responsibility of the A-E. This action would require a modification to the Contract along with an adjustment in the firm fixed price of the Contract.

**1.5.7.2.2** The A-E shall prohibit the use of Owner issued keys/key cards by any persons other than the A-E's employees. The A-E shall prohibit the opening of locked areas by A-E employees to permit entrance of persons other than A-E employees engaged in the performance of assigned work in those areas, or personnel authorized entrance by the SKO.

**1.5.8 Special Qualifications:** The A-E shall ensure that its management and assessment teams are experienced in providing documentation of BUILDER implementation, inventory/inspection assessment and data entry.

**1.5.9 Post Award Conference Meetings/Periodic In-progress Review Teleconferences:** The A-E agrees to attend up to two (2) post award conferences (1 at the Kick-off Meeting, and 1 at Completion). The meetings will be hosted at Camp Dodge, Johnston, IA. The State CFMO and other Owner personnel, as appropriate, may meet periodically with the A-E to review the A-E's performance. The A-E agrees to a weekly teleconference call to discuss the upcoming schedule, potential issues, data review discussion, and any other topic relevant to the performance of this Contract. Additionally, during these meetings the SKO, State CFMO's and staff will appraise the A-E of how the Owner views the A-E's performance and the A-E shall apprise the Owner of problems, if any, being experienced. Appropriate action shall be taken to resolve outstanding issues.

**1.5.10 A-E Key Personnel:** The A-E personnel are considered key personnel by the Owner and must have the minimum qualifications. The A-E is to deliver document(s) of required expertise. The A-E shall provide a project manager who shall be responsible for the performance of the work. The name of this person and an alternate who shall act for the A-E when the manager is absent shall be designated in writing to the SKO. The project manager or alternate shall have full authority to act for the A-E on all Contract matters relating to daily operation of this Contract. The project manager or alternate shall be available between 8:00 a.m. to 4:30 p.m., Monday thru Friday except Federal holidays or when the Owner facility is closed for administrative reasons.

**a. Project Manager:** Responsible for coordinating all site visit actions for the team such as coordination with installation facility managers for access into all required facilities, coordination with installation security personnel to ensure all physical security requirements are followed for specific buildings, coordination for an assembly area for conducting on site briefings, safety meetings, etc., coordination with a public works /lead facility manager at each installation to include conducting an in-brief and out-brief and notification of any immediate safety items that need relayed to the installation. Project Managers shall have experience in facility management, specifically related to military installations. Project Managers shall have experience with military operations security and any physical security related items associated with Army National Guard Installations. The Project Manager must have demonstrated experience with facility inventory, assessment and associated data collection and entry to BUILDER SMS. Demonstrated experience is successful completion of BUILDER SMS implementation for other Defense Department or Owner organizations.

**b. Alternate Project Manager:** The Alternate Project Manager must be able to assume the same responsibilities as the Project Manager. The Alternate Project Manager must have demonstrated experience with facility inventory, assessment and associated data collection and entry to BUILDER SMS. Demonstrated experience is successful completion of BUILDER SMS implementation for other Defense Department or Owner organizations.

**c. Inspection Supervisor:** Responsible for scheduling and organizing the inspection team responsibilities. Inspector Supervisor is responsible for ensuring 100% of the required inventory is captured and assessed prior to departure from a site. Inspection Supervisor shall have facility management experience related to all aspects of a facility (architectural, HVAC, electrical, and plumbing).

**d. Inspector:** Responsible for performing facility inventory and condition assessment related to his/her specific discipline area. Inspector shall be familiar with the ASTM Unifomat inventory structure as it pertains to his/her discipline area. Inspector is responsible for entering inventory and assessment information into the BUILDER Remote Entry Database (BRED) which is a Windows (PC) based software. The ASTM Unifomat system disciplines related to a BUILDER inventory include: A 10 Foundations, A20 Basement Construction, B10 Superstructure, B20 Exterior Closure, B30 Roofing, C10 Interior Construction, C20 Staircases, C30 Interior Finishes, D10 Conveying Systems, D20 Plumbing, D30 HVAC, D40 Fire Protection, and D50 Electrical. The A-E team discipline areas and inspector specialty breakdown must incorporate all the systems listed. In general, the following inspector disciplines will be able to cover the system inventory: Architectural Inspectors, HVAC

Inspectors, Structural Inspectors, Electrical Inspectors, and Plumbing Inspectors.

**e. Data Manager/Data Clerk:** Responsible for management of all the inspector's inventory and assessment data. Responsible for ensuring proper file management of BRED files and 100% accountability of the data. Responsible for performing quality control and data integrity checks on all inspection data to ensure all necessary areas of a facility have been inspected and the BRED data is reflecting this. After 100% accountability and quality assurance of the inspector's BRED files, Data Clerk is responsible for importing all BRED inspection data into the ARNG instance of the BUILDER web interface. Responsible for coordination with GERL personnel for troubleshooting and BRED import problems.

**1.5.11 Identification of Contractor (A-E Employees):** A-E personnel attending meetings, answering Owner telephones, and working in other situations where their contractor status is not obvious to third parties are required to identify themselves as such to avoid creating an impression in the minds of members of the public that they are Owner officials. They must also ensure that all documents or reports produced by contractors are suitably marked as contractor products or that contractor participation is appropriately disclosed. A-E personnel will be required, at their own expense, to obtain and wear badges identifying the individual and company name during the performance of this Contract.

**1.5.12 A-E Travel:** The A-E shall be required to travel to the post award conferences and to the State installations during the performance of this Contract to conduct BUILDER SMS implementation, attend meetings, conferences, and conduct internal training. The A-E will be authorized travel expenses required to perform the key tasks of this Contract. No travel to off-site training locations will occur under this Contract. These costs shall be included in the lump sum proposal submitted with this RFP.

**1.5.13 Other Direct Costs:** This category includes travel (outlined in 1.5.12), reproduction, and shipping expenses associated with internal training activities and site visits. These costs shall be included in the lump sum proposal submitted with this RFP.

**1.5.14 Data Rights:** The Owner has unlimited rights to all documents/material produced under this Contract. All documents and materials, to include the source codes of any software, produced under this Contract shall be Owner owned and are the property of the Owner with all rights and privileges of ownership/copyright belonging exclusively to the Owner. These documents and materials may not be used or sold by the A-E without written permission from the SKO. All materials supplied to the Owner shall be the sole property of the Owner and may not be used for any other purpose. This right does not abrogate any other Owner rights. Also, for further information reference is made to DFAR provisions (DFAR 52.227-14-Rights in Data – General).

**1.5.15 Organizational Conflict of Interest (OCI):** The A-E and subcontractor personnel performing work under this Contract may receive, have access to or participate in the development of proprietary or source selection information (e.g., cost or pricing information, budget information or analyses, specifications or work statements, etc.) or perform evaluation services which may create a current or subsequent OCI. The A-E shall notify the SKO immediately whenever it becomes aware that such access or participation may result in any actual or potential OCI and upon request from the Contracting Officer shall promptly submit a plan to avoid or mitigate any such OCI. The A-E's mitigation plan will be determined to be acceptable solely at the discretion of the SKO and in the event the SKO unilaterally determines that any such OCI cannot be satisfactorily avoided or mitigated, the Contracting Officer may affect other remedies as he or she deems necessary, including prohibiting the A-E from participation in subsequent contracted requirements which may be affected by the OCI.

## **2.0 OWNER FURNISHED PROPERTY, EQUIPMENT, AND SERVICES.**

**2.1 Services:** On a limited basis and only for direct support necessary for the A-E to perform the specific requirements as stated in this Contract, the Owner may provide the A-E with a temporary work space, miscellaneous equipment, and incidental consumable operating supplies.

**2.2 Facilities:** The Owner will provide access to the required facilities necessary to perform the BUILDER SMS Implementation Inspection/Assessment.

**2.3 Utilities:** If necessary during the Inspection/Assessment, the Owner will provide basic utilities needed by the A-E. The A-E shall instruct employees in utilities conservation practices. The A-E shall be responsible for operating under conditions that preclude the waste of utilities, which include turning off the water faucets or valves after using the required amount to accomplish cleaning vehicles and equipment.

## **3.0 A-E FURNISHED ITEMS AND RESPONSIBILITIES.**

**3.1 General:** Except as provided in the Section 2.0 "Owner Furnished Property, Equipment, and Services", the A-E shall furnish the necessary personnel, material, equipment, services, and facilities to perform the SOW included herein. The A-E shall furnish all supplies, equipment, facilities and services required to perform work under this Contract that are not listed under Section 2.0 of this SOW.

## **4.0 SPECIFIC TASKS.**

**4.0.a. TASK- Kick-off Conference Call:** Immediately following award of this Contract a conference call will be held between the SKO, State CFMO and A-E to consider a variety of programmatic issues; agree on the word processing software that will be used (i.e., text in Microsoft Word, pdf version of deliverables, tables in MS Word or Excel, and shape files for all graphics used in the deliverables); resolve any schedule discrepancies; numbers of hard copies and CDs of Draft and Final deliverables, and address any concerns related to the future Kick-off Meeting(s) to immediately follow this call. The A-E shall arrange the conference call and shall be responsible for preparing minutes of the call submitting them to the SKO within **three (3) working days** following the call.

**4.0.b. TASK - Project Management Plan CPMP:** The A-E shall present a draft PMP for Owner review three (3) days prior to the Kick-off Meeting. The PMP will identify specific tasks to be performed and be consistent with implementation guidance specified in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memo of September 10, 2013, the latest version of the BUILDER SMS User Manual, and this SOW. The draft PMP shall contain a minimum of the following elements:

- A detailed schedule, based on the more general schedule prepared as part of the A-E's proposal that will outline the management approach to completing the BUILDER assessments. This schedule(s) shall reflect the following:
  - Completion of the BUILDER assessments.
  - Schedule for all deliverables. In this schedule, except for the PMP, the Owner shall be allocated review time for all deliverables specified. The approved project schedule shall be the basis for determining timeliness of project milestone deliverables. Any changes to the project schedule during the course of the Contract will also be subject to Owner approval.
- A description of the technical approach, management approach, and or the planning, execution, and completion of the performance objectives to include a quality control plan and acknowledging that the NGB Quality Assurance Team will be expected to carry out quality assurance.

- The PMP shall contain information on how accelerated review and comment periods will be maintained and incentives that will be used to ensure schedules will be maintained. The State is not averse to considering new A-E-proposed internal management approaches that expedite comment and review periods, as long as these approaches do not conflict with already established policies.
- A description of the process to provide project status reports to the SKO to include the frequency and content of status reports.
- A description of contingency approaches that detail how the A-E will still attempt to meet established BUILDER assessment deadlines in the event that particular events, such as extended State review periods, occur that are outside of the A-E's control.
- Any other relevant information that conveys the A-E's management approach.

The Work Action Plan (WAP) is to be a very detailed schedule for execution of work at ARNG installations.

**4.0.b.1** After initiation of work on the BUILDER assessments, the A-E may have to modify the PMP to account for installation specific conditions. While internal milestones may be adjusted, the schedule to complete the contract shall be maintained as originally proposed. Once modifications are complete, the modified PMP shall be provided to the SKO for review and comment and eventual approval. If the A-E determines that the original schedule cannot be maintained, the A-E shall immediately notify the SKO.

**4.0.b.2** The draft PMP shall be submitted to the Owner for review three (3) days prior to the Kick-off Meeting. The draft PMP shall be subject to Owner review and approval. In preparation of the PMP the A-E shall abide by Quality Management, Quality Control, and Quality Assurance. The PMP shall be no more than 30 pages in length.

**4.0.c TASK-Kick-off Meeting.** Within **14 working days** of the Notice to Proceed, the A-E shall schedule the initial Post Award Conference orientation meeting with the SKO and State CFMO. The A-E, with appropriate personnel, is required to attend and participate in this meeting which will be designed to: (1) identify all Army National Guard personnel, State CFMO staff, and A-E Points of Contact that will be involved in the project; (2) assure a common understanding of subtask requirements and objectives; (3) discuss the A-E's draft PMP and schedule; (4) become familiar with the relevant Army National Guard programs and outstanding concerns/issues; and (5) address other pertinent issues. The meeting will be hosted at the State installation, but the A-E shall be responsible for the agenda and the actual conduct of the meeting. The A-E shall prepare minutes of the meeting and submit them to the SKO within **three (3) working days** following the meeting.

**4.0.d TASK-Contract Conclusion Meeting.** Within **14 working days** of the Owner Acceptance of the Final Location Report, the A-E shall schedule the Conclusion Post Award Conference meeting with the SKO. The A-E, with appropriate personnel, is required to attend and participate in this meeting which will be designed to

discuss lessons learned and other issues/concerns that occurred during the performance of the contract. The meeting will be hosted at the State installation, but the A-E shall be responsible for the agenda and the actual conduct of the meeting. The A-E shall prepare minutes of the meeting and submit them to the SKO within **three (3) working days** following the meeting.

#### **4.1 TASK - Basic Services:**

- a.** The A-E shall provide a Calibration Plan, for Owner review and approval, which establishes the process and procedures intended for the Contract team on the method to conduct inventory and assessment in accordance with the latest version of BUILDER Condition Assessment Manual. The Calibration Plan will include the method for conducting QC for validating consistent data collection, assessment, and input. The A-E shall implement the Calibration Plan and location kick-off at each installation prior to any on-site validation and assessment activity. Owner personnel will participate in the "Field Assessment Team Calibration and Location Kick-off" meeting in order to gain an understanding of the process for inventory and assessment and the quality control methods being utilized by the A-E. A maximum of four (4) key Owner personnel will be in attendance. There is no need for other "users". Installation CFMO's and staff will be responsible for providing space suitable for the Field Assessment Team Calibration, approximately 25 personnel. The A-E shall present using a PowerPoint presentation and provide suitable materials/handouts to the Team.
- b.** The A-E shall be responsible for coordinating all site visit actions for the Field Calibration and Assessment team such as: coordination with site managers and the Owner project management team for access into all required facilities, coordination with site security personnel to ensure all physical security requirements are followed for specific buildings, coordination for an assembly area for conducting on site briefings, safety meetings, etc., coordination with a public works / lead site manager at each site to include conducting an in-brief and out-brief PowerPoint presentation, notification of any immediate safety items that need to be relayed to the site and the conduct of required training
- c.** The A-E shall be responsible for scheduling and organizing all FCA team responsibilities. The A-E is responsible for ensuring 100% of the required inventory is captured and assessed prior to departure (unless otherwise indicated in this SOW).

#### **4.2 TASK- Inventory:**

- a.** The A-E shall populate the building system inventory of components into the latest version of BUILDER SMS for buildings as designated by award of this Contract in accordance with the latest BUILDER Manual located on the GERL website at: <http://www.sms.erdcdren.mil/Products/BUILDER/Downloads>.

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**Iowa Army National Guard Facilities** - Number of facilities and total square feet are approximately for this contract (first year of contract) are:

Buildings - 99

Square Feet – 833,470 SF (approximately 20% of the total inventory of the Iowa Army National Guard see **TECHNICAL EXHIBIT 5**)

Subsequent years' (years two through four of the contract) buildings and square feet will be established and cost negotiated upon completion of previous years' work. Follow-on years are also dependent upon availability of federal funding.

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- b.** The list of actual building numbers and associated real property information will be pre-

populated into BUILDER via the HQIS/GFEBS by Owner personnel. GERL will populate BUILDER with the full building inventory list for ARNG installations. The A-E shall download the information from the server to the A-E's "production site" in order to confirm the actual buildings' numbers. The A-E shall submit a Discrepancy List outlining differences between HQIS/GFEBS data and "eyes on" data. Also, the Discrepancy List is to include buildings that are demolished, funded to be demolished, verified as structures, or are currently undergoing/funded for major renovation. This is a portion of the validation process. The A-E shall talk with facility commanders or coordinators to validate the information and then confirm they inspected the facilities. Information/deviations will be provided to the SKO so corrections can be made in HQIS/GFEBS.

- c. Building system inventory includes: A10 Foundations, A20 Basement Construction, B10 Superstructure, B20 Exterior Closure, B30 Roofing, C10 Interior Construction, C20 Staircases, C30 Interior Finishes, D10 Conveying Systems, D20 Plumbing, 030 Heating, Ventilation and Air Conditioning (HVAC), D40 Fire Protection, and D50 Electrical. Installed real property specialty equipment not found in any of the previous systems will be input into E109090 with a full description of what makes the equipment unique.
- d. BUILDER inventory shall be performed in American Society of Testing and Materials (ASTM) Uniformat II convention, in accordance with **TECHNICAL EXHIBIT 3, Inventory and Inspection Requirements List**. *{Note: the details of this Inventory and Inspection Requirements List detail the inspection method to be used for buildings by System and Component...ensure you read and understand the requirement}*
- e. Building inventory for similar building types and footprints shall be created using building template or copy features in BUILDER, but each building must have an individual walk-through to verify accurate building inventory.

Based on previous lessons learned, time and costs can be saved by grouping similar facilities and utilizing the BUILDER "Template" feature or copy feature to accomplish facility inventory. The A-E is required to utilize templates to the maximum extent possible. Barracks, Brigade, and Battalion Headquarters, Motor Pool facilities, and Readiness Centers are often multiple versions of the same building design (this applies to the inventory portion, for the assessment portion, each facility would have a walk through to verify the condition and the equipment boiler plate information). For inventory of facilities that will utilize templates, refer to the following instructions.

1. Within each category code, the A-E shall group similar facilities by construction type, size and age. (Owner representatives at the installation will verify the actual list of facilities that qualify for templating.)
  2. For one representative facility in each template group, A-E shall do a full inventory as specified in **TECHNICAL EXHIBIT 3**. A-E shall denote which facility was the representative facility.
  3. For the remaining facilities in each group, A-E shall apply the representative building's inventory to create inventory structure for the other buildings in the group. This will be accomplished using BUILDER's "template" feature or copy feature.
  4. All facilities will get an individual "eyes-on" inspection per **TECHNICAL EXHIBIT 3**.
  5. For buildings inventoried by template or copy feature, during the inspection process, any significant variation from the template model shall be noted and reported.
- f. Material quantities of components present in the building, e.g. roofing surfaces, shall be measured or based on reasonable estimates.

- g. Component installation dates shall be manually entered based on available information, which shall include building construction date, date of renovation, or nameplate data, or all of above. Every effort must be made to input the most accurate date and data available (i.e., conversations with Area Facility Operations Specialists [AFOS], unit personnel or building occupants to verify any assumptions made). The following pieces of information should be reviewed/considered (where available and correct) in order to provide accurate install dates (order of precedence to be provided): (1) Equipment tags; (2) Drawings; (3) Project Files; (4) Life Safety plans; (5) FM staff input; (6) Statement of Condition; (7) Plans for Improvement. Where this information is either unavailable or is not helpful to determine the install date, the contractor is authorized to make a "best guess" as to the age of the equipment and provide this install date into BUILDER with the Inspection Comment that it is based on the inspector's judgment.
- h. On mechanical/electrical equipment where nameplate data exists, collect equipment ID information under the section details module of the latest version of BUILDER SMS for linking to HQIS data (this applies to the inventory portion, for the assessment each facility would have a walk through to verify the equipment boiler plate information).
- i. Building components should be "sectioned" by material type, age, and then by floor (See attached standardized sectioning instruction). In addition, any major mechanical equipment items (e.g. Chillers, boilers, Air Handler Units, etc.) shall be sectioned individually for each unit.

For portions of facilities that are abandoned/mothballed, these areas should be sectioned separately, rated appropriately based on the condition of components within that area, and noted as abandoned.

- j. Any component where age and/or use are significantly different within the building should be sectioned accordingly. When it is necessary to enter items as separate sections due to type, location, age, etc., A-E shall use descriptive and consistent section naming conventions for identification and location purposes.
- k. Section comments shall be input to identify the location of the specific section and/or the section services. Each section comment shall begin with the date, affiliation, and inspector's initials input between vertical brackets, for example: [13 JUL 15 USACE-CERL BGH]. Provide the location of the sectioned component in the component section name by using an easily locatable feature such as: the item's floor and room number, or as an example for a roof section: Roof, 2nd floor, NW corner, etc. If there are multiple roof sections the A-E shall provide a Roof Section Plan showing where each roof section is located in addition to providing the section location in the Section Comment field within BUILDER.
- l. The A-E shall enter specific equipment nameplate information into the BUILDER Section Details portion of the database. Each Section Detail comment shall begin with the date, affiliation, and inspector's initials input between vertical brackets. For example: [13 Jul 15 USACE-CERL BGH].
- m. Additional guidance on inventory and assessment practices is provided in **TECHNICAL EXHIBIT 3, Inventory and Inspection Requirements List**.
- n. The A-E must become familiar with the methodology of sectioning already entered into BUILDER SMS and adopt the same methodology and naming conventions.

#### **4.3 TASK- Inspection/Assessment:**

The A-E shall perform baseline visual inspections of building components inventoried in TASK 4.2 using

BUILDER methodology. Inspector will utilize the Direct Rating Assessment method supplemented with specific Distresses observed when the component-section is given any rating lower than Green minus (G-). The specific 23 BUILDER distresses and their associated definitions are found in the BUILDER SMS Condition Assessment Manual as referenced in **TECHNICAL EXHIBIT 3**.

- a. The A-E will make every effort to ensure that the individual assessment team members fully understand this specific rating method. Cross checking and comparing the results by different assessment teams of buildings where ratings have been completed shall be a standard sampling practice in the A-E's QC Plan to ensure that each discipline sees and rates deficiencies in the same manner and with the same result. The documented results of these cross check shall be provided to the Owner upon request.
- b. The A-E shall attempt to visually inspect all components identified in TASK 4.2. This includes utilization of ladders, flashlights and any other equipment necessary to gain access for a visual inspection. In cases where items cannot be at least partially evaluated visually due to concealment, that component-section should not receive an inspection and an Inspection Comment entered stating the Component could not be evaluated due to concealment. (BUILDER will default to an age-based rating.) Note that if there are visible or showing signs of a problem apparent in a partially concealed component, those issues shall be noted by the inspector. Note that the A-E will not be required to conduct formal confined space operations to gain access. The contractor will use ladders when it is necessary to view items needed for the inventory that are located in mechanical rooms or at the exterior.
- c. Inspector shall input an inspection comment when giving a component-section any rating lower than Green Minus (G-). Each inspection comment shall begin with the date, affiliation, and inspector's initials input between vertical brackets. For example: [13 JUL15 USACE-CERL BH].
- d. Directly following the name designation for each inspection comment the A-E shall enter the keyword for one or more of the observed Distress. For example: [13 Jul 15 USACE-CERL BGH]. Corroded – Valves rusted, Leaks – Valves leak water.
- e. A-E inspection sampling methods within a building may be utilized provided they conform to the guidelines expressed in the BUILDER Condition Assessment Manual. Sampling Names should be clear and provide a location of the sample.
- f. For occupied and unoccupied buildings equal to or less than 1,000 square feet, an abbreviated general inspection will be accomplished. A-E shall model, or use the copy feature, using templates in BUILDER to populate components for floor, walls, and roof. During the walkthrough, the A-E can verify quantities, determine what services are present (water, electrical, heat, etc.) and direct rate the condition of the components.
- g. Facility inventory may include those classified as historical buildings. The facility listing in paragraph 4.4.b. below identifies those historical buildings (highlighted in purple). CERL will ensure the historical field in BUILDER is unlocked for these facilities.
- h. During the validation and assessment process, the A-E shall take one photograph of the front elevation, or a representative elevation view, and upload that photograph to the BUILDER database, attached to the facility record. The A-E must comply with regulations governing the use of photographic equipment on the military reservations visited. Permission to take necessary photographs will be coordinated with the site security representative.
- i. In addition, all visible deficiencies shall include pictures to be recorded in the BUILDER database. A representative photograph of any assessment given less than Green Minus (G-)

will be attached to each specific assessment. The photograph will clearly capture the assessed distress with enough detail to represent the distress to the viewer.

- j. The Owner also requests all photographs taken during the site assessment to be copied to a DVD and submitted as part of the contract deliverables. The photographs will be named with sufficient detail as to allow the viewer to understand the intent of the photo (i.e., including building number, location, system, and component). Photographs will be stored and transferred in digital format and grouped in folders by building number.

#### **4.4 TASK - Schedule of Site Visits and List of Facilities:**

- a. The A-E shall facilitate the scheduling of site visits for completion of inventory and inspection tasks as outlined in TASKS 4.1, 4.2, and 4.3. All buildings to be inventoried and inspected are maintained by the CFMO.
- b. The **TECHNICAL EXHIBIT 5** provides the listing of the facility inventory applicable for BUILDER assessment at Camp Dodge, Johnston, IA for this particular Contract and is based on current building inventory contained in HQIS.

#### **4.5 TASK - Deliverables/Deliverable Schedule:**

The A-E shall provide deliverables in accordance with the Submittal Schedule Matrix shown in **TECHNICAL EXHIBIT 2, Deliverables/Submittal Schedule**. Owner review times are outlined within this matrix. The A-E shall have a maximum of 14 calendar days from the day comments are received to incorporate all changes and submit the final deliverable to the Owner. All days identified in the matrix are intended to be calendar days unless otherwise specified.

Deliverables shall follow a standard format. Sample formats will be provided by the A-E for Owner approval prior to commencement of work. The A-E shall provide one (1) copy of the final deliverables on Microsoft Office compatible file format. The A-E shall utilize Max.Gov website for the upload and download of project related information forms, formats, templates, checklists, and reports as a central repository.

#### **4.6 TASK-Submittal Schedules:**

- a. The A-E shall prepare submittals in accordance with the Submittal Schedule Matrix, shown in **TECHNICAL EXHIBIT 2** at the end of this document, for Owner review and comments.
- b. The period of performance from Contract award to receipt of the Final BUILDER SMS Database is 12 months from the award date of this Contract.

#### **4.7 TASK-Deliverables:**

The A-E shall provide the following deliverables to the SKO and the Owner:

- a. Work Action Plan (WAP) –WAP is to address how the A-E plans to accomplish the SOW. Plan shall include, at minimum, planned inspection schedule (Microsoft Project Schedule V2007), assessment team organization chart, list and qualifications of field team members (experience/training), along with their cell phone numbers in order to easily locate them in the field during an assessment, Safety Plan, inventory, inspection process, and facilities proposed for templates.
- b. Accident Prevention Plan – An Accident Prevention Plan (APP) shall be developed and submitted in accordance with EM 385-1-1 Section 01.A.12. The plan shall address each of the elements/sub-elements in the outline contained in EM 385-1-1 Appendix A in the order that they are provided in the manual. If an item is not applicable because of the nature of work to be performed, this exception shall be stated and a justification shall be provided. Each major phase of work to be performed shall be identified. Within each major phase, all activities, tasks or definable features of work shall be identified that will require an Activity Hazard Analysis (AHA). The APP shall also address any unusual or unique aspects of the project or activity to include but not limited to address the use of Personnel Protective Equipment (PPE), inspection procedures, confined space entry, proper climbing techniques during roof access, etc. Applicable Occupational Safety and Health Administration (OSHA) and EM 385-1-1 standards shall be referenced and followed (note that the most stringent standard shall apply). Emergency notification numbers for medical emergencies, as well as location of nearest hospital emergency facility will be distributed to each assessment team member. The A-E shall conduct safety briefings with field assessment personnel on a frequent basis (e.g. weekly) to include ongoing lessons learned from inspections. The A-E shall make themselves aware of and adhere to any additional (local to inspection site) safety requirements.
- c. Monthly Execution Schedule – Execution schedule to include monthly status of assessment, site coordination activities, A-E team members assigned to each location and buildings, data upload, and QC status per Site. Sample format will be provided by the A-E for Owner approval prior to commencement of work.

- d. Quality Control (QC) Plan – Documents QC process. Process to outline how the A-E shall ensure that field data is collected based on BUILDER Condition Assessment Manual and data entered into BUILDER database accurately reflects building inventory and condition. The interval of A-E QC spot checks shall be determined by statistical confidence that the data is accurate per inventory/assessment team member. Also include in QC Plan an outline of experience/certification/training for each team member based on system assessment responsibility.
- e. Quality Control (QC) Report – Identify buildings, systems, components and component sections that were QC'd and state findings. Address how systemic issues were identified and how they were addressed. Submit QC reports **five (5) calendar days** after each site field assessment trip.
- f. HQIS Discrepancy List – Outline differences between HQIS data and eyes on data (Building SF, #Stories, etc.). Also include buildings that are demolished, funded to be demolished, verified as structures, or are currently undergoing or are funded for major renovation.
- g. BUILDER Lessons Learned – The A-E will capture lessons learned on an ongoing basis from individual assessments and other tasks associated with this contract. All lessons learned will be separated based on categories (e.g. Planning, Execution, Post Survey, Data Management, Travel, etc.). The goal is to promote consistency of effort in BUILDER projects, improve performance for all teams working the FCA for the customer, and to and to facilitate communication between Project Manager and Assessment team members. Lessons learned will be provided to the Owner in writing and shall be implemented on an on-going basis throughout this assessment. Specific input regarding the Scope of Work for this contract and BUILDER™ Implementation Resource Guide shall be provided by the A-E as part of this task. The A-E shall keep record of the actual man-hours required for each building inventory and assessment. The lessons learned document shall be continually updated and provided to the Owner 21 days after each site assessment.
- h. BUILDER Electronic Database – Inventory and Inspection data input by A-E to Web Based version of BUILDER.
- i. Calibration Plan and Location Kick-off Meetings – Establishes the process and procedures intended for the A-E team on the method to conduct inventory and assessment in accordance with the latest version of BUILDER SMS standards. The Calibration Plan will include the method for conducting quality control for validating consistent data collection and assessment. The A-E shall conduct and implement the Calibration Plan at the installation prior to any on-site activity. Owner personnel, including the State CFMO and staff will participate in the "Field Assessment Team Calibration" to understand the validation and assessment process and the quality control being accomplished by the A-E. A maximum of four (4) key Owner personnel will be in attendance. There is no need for other "users". The CFMO has agreed to provide space for the Field

Assessment Team Calibration, approximately 25 personnel. The A-E shall provide suitable materials/handouts for the Team.

- j. Data Analysis - After the inventory and inspection data is uploaded by the A-E to BUILDER's Web Based version, the A-E shall perform data analysis to include preparation of a ten year unconstrained work plan using State CFMO's established Standards, Policies, and Prioritization Schemes. The A-E shall generate scenarios using BUILDER's "Scenarios" functionality. Scenarios is a simulation tool that uses BUILDER's databases and coded processes to project repair and replacement work requirements for up to ten years. Work items projected by BUILDER will be provided by BUILDER's standard work item reports. The A-E will review and compare the work item forecast with notes generated during the field inspection (4.3.c). Task 4.3.c work item determination is based on engineering judgment separate from BUILDER's inspection process. This analysis will be used to confirm standards and policies used for the analysis of work items generation after condition indices have been computed by BUILDER. This SOW does not include packaging work items into specific projects. At the conclusion of this Task, the A-E shall consolidate the analyzed information into a report. One report shall be prepared for each location listed in paragraph 1.3 of this SOW. The report will address the following: a) Inventory and Inspection, b) Condition Index Findings and Analysis, c) Work Plan and Scenarios, d) Comparison of BUILDER Work Plans and Field Inspection Observations. Reports shall be prepared in Microsoft Excel and Microsoft Word. A-E shall conduct a review teleconference after report comments are received. The intent is to reconcile comments and make data corrections data prior to final report submission.
- k. Draft Installation Report - At the conclusion of each location assessment, data collection, and data upload/analysis, the A-E shall consolidate the information into a draft installation report (for Camp Dodge only). The A-E shall meet the following section requirements and site specific aspects. At a minimum, each section shall contain a narrative of data evaluated, findings and results. The report shall be outlined as follows:
- 1) Section 1 - Executive Summary  
Executive narrative summarizing means, methods, analysis and findings of the survey. Overview discussion of the elements of the SOW, intent and conduct of the FCA shall be discussed. Summarizes approach taken in order to conduct the assessment. Identifies building components assessed. Provides a summary of reporting conditions, findings as a result of the assessment, and recommendations.
  - 2) Section 2 - Facility Summary Report  
Numeric and graphical roll-up of BUILDER™ FCA data that provides a clear summation or holistic picture of FCA results for all assessed assets, grouped by each roll-up level. Individual Building Reports that provide detailed facility data concerning site characteristics and specifics pertaining to each facility system condition and recommendations.
  - 3) Section 3 - Facility System Condition Summary Report  
Numeric and graphical roll-up of BUILDER™ FCA data that provides a clear summation or holistic picture of facility systems within each facility. Each assessed system shall also be augmented with a written narrative that, at a minimum, shall include general information and status. Each assessed item coded 'Red' shall be represented with a photograph in this report.
  - 4) Section 4 –Worst First  
Sorting of all facilities using the PI score in order of worst to best conditions.
  - 5) Section 5 –Detailed Work Action Report

Complete listing of all related work actions as recommended within BUILDER. This list shall be sorted by priority (BUILDER will determine priority)

- I. Final Location Report - After receipt of Owner comments on the Draft Installation Report submittal (Task 4.7.k) the A-E, having reviewed and documented changes shall return to the Owner a Final Site Report.
- m. Draft and Final Data Upload Memos - Upon successful upload of all Location and Site data onto BUILDER the A-E will provide a memorandum of completion along with the Final Installation Report to the Owner.

#### **4.8 TASK - Site Conditions:**

- a. All Sites are Controlled Facilities. The A-E's staff shall be required to submit personnel information and documentation based on the local site security requirements. A-E personnel shall abide by all local security policies and procedures as provided by local security officials.
- b. The SKO retains the right to request removal of A-E personnel, regardless of prior clearance or adjudication status, whose actions, while assigned to this Contract, clearly conflict with the interests of the Owner or violate a safety or security procedure. The reason for removal shall be fully documented in writing by the Contracting Officer. When and if such removal occurs, the A-E shall, within **five (5) working days**, assign qualified personnel to any vacancy(s) thus created.
- c. Work shall be accomplished during normal duty hours, which are generally between 7:00 and 5:00 p.m. Monday through Friday except Federal Holidays, but it is the A-E's responsibility to coordinate with the local Installation Commander or Coordinator for the actual work schedule. The A-E shall take all precautions available to minimize disruptions to functions during performance under this Contract.

- d. Each A-E assessment team member shall wear a reflective safety vest when actively performing work at each site and display their individual identification badge.
- e. The A-E shall coordinate all site visits with the SKO, State CFMO, and installation point of contact no less than **forty-five (45) working days** before commencing work at the respective activity in order for the site to gather and provide floor plans, active work plans, on-going projects, etc.
- f. The A-E shall arrange transportation, lodging, and meals to the work location. Travel costs shall be identified separately in the A-E's fee proposal; however all costs shall be included in the final fixed price.

**4.9 TASK - Location and Facility Out-brief Presentations:** At the conclusion of the assessment at each location, the A-E shall conduct a cursory (one hour or less) close-out meeting (out-brief) to the location facility manager(s) and provide an overview of the efforts conducted and information collected. The A-E will be responsible for providing a summary of activities performed during the FCA using PowerPoint and handouts for the participants. The Out-brief presentation slides will include:

- 1) Program Overview
- 2) Data Results (Since the data will neither be fully QC'd nor uploaded into BUILDER at this time, only provide a sample of the deficiencies found during the assessment. However, if any critical life safety, CCIR type conditions that may be discovered, be reported immediately.)
- 3) Identification and remedy of any Life Safety issue discovered during the FCA
- 4) Data not collected
- 5) Schedule of Events after data collection

The A-E is required to notify the SKO and State CFMO of critical issues that may affect the contract performance and/or human health and the environment. A copy of the site out-brief presentation shall be submitted to the Owner no later than seven (7) working days after the out-brief.

**4.10 TASK - Schedule:** The A-E shall provide a schedule for approval by the SKO to determine that all requirements have been addressed and that sufficient time has been allocated to each task. The work schedule must show a consistent work effort to complete all requirements within the required delivery period.

## **5.0 MISCELLANEOUS REQUIREMENTS.**

**5.1 Monthly Progress Reports (MPRs):** The A-E shall prepare and submit a MPR to the Owner. The MPR shall address work identified in this SOW. This report shall be sent (includes electronically) to the SKO and the KO. The names, addresses, and phone numbers of the recipients will be provided to the A-E at the Kick-

off Briefing and Site Calibration Meetings. The monthly report shall contain an accurate, up-to-date account of all work accomplishments and outstanding issues. This report shall be no longer than three (3) pages and shall contain a statement of progress against the schedule developed by the A-E. This report shall be submitted to the Owner no later than the 10th day of the next month following the end of the monthly period covered by each report. The A-E shall report progress both as (1) "percent complete" for each TASK and (2) an aggregate "overall percent complete" for the total Contract. The SKO will base the periodic Contract payment decisions on the "overall percent complete" reports.

**5.2 Contract Administration:** The A-E shall accept directions only from the authorized State Contracting Officer (SKO) or their authorized representative. Any changes to the project scope or other provisions of this Contract must be authorized in writing by the Contracting Officer. The SKO is Ms. Jocelyn Brincks, [Jocelyn.brincks@iowa.gov](mailto:Jocelyn.brincks@iowa.gov), 515-252-4522.

**5.3 Administrative Record:** The administrative record is the entirety of information, data, and correspondence relied upon to execute this Contract. The record is inclusive of all data, information, and analysis - either generated or obtained from other sources - used to support documentation and analysis. The administrative record is essentially the agency's file as it relates to this action. The record shall be organized and indexed by topic to the highest extent possible and submitted to the SKO or their authorized representative within 30 days of completion of this Contract.

**5.4 Memoranda/Action Item List:** The A-E shall furnish the Owner a memorandum of each meeting held, summarizing the agreements reached along with an updated Action Item List. All memoranda shall be provided within **three (3) workdays** of the meetings.

**5.5 Editorial Requirements:** The reports shall be printed front and back on recycled paper unless specified otherwise. Draft reports shall number each line to facilitate reviews. The size of pages shall be 8.5 by 11 inches, except for foldout maps, charts, or other illustrative material. Type size and the font used must be approved by the Owner prior to printing. Both Draft and Final reports shall additionally be provided in pdf format.

**5.6 Computer Software:** Documents shall be placed on CDs and provided to the Owner in the word processing format agreed upon at the Kick-off Conference Call/Meeting (i.e., text in Microsoft Word; pdf version of deliverables, tables in Microsoft Word or Excel, provide shape files for all graphics used in the deliverables). The mailing list shall be saved on CD's and provided to the Owner.

**5.7 Release of Data:** All data, reports, and materials contained or developed for this project shall not be released or discussed without written approval of the Owner.

**5.8 Distribution:** The A-E is responsible for reproducing all document deliverables.

**5.9 Cover Letters:** The A-E shall insert a cover letter with each document submittal and indicate the project, project phase, the date the comments are due, to whom comments are to be submitted, the date and location of the review conference, etc., as appropriate. (NOTE: depending on the recipient, not all letters will contain the same information.) The contents of the cover letters shall be coordinated with SKO prior to the submittal date. The cover letter shall not be bound into the document.

**5.10 Submittals:** All submittals shall be coordinated through the SKO for this project.

**5.11 Inspection and Acceptance:**

5.11.1 Inspection During Progress. During the entire execution of the Contract, all work associated with this Contract, to include all the A-E's work shall be subject to, and available for, inspection by the SKO or their representatives.

5.11.2 Inspection of Delivered Work. As soon as practicable after delivery of work and/or data upload, subject matter experts will spot check for serious errors or an undue number of minor errors indicating mistakes or carelessness on the part of the A-E. The subject matter experts may forego a thorough inspection and return the entire facility condition assessment data collection package for rechecking and correction by the A-E, if necessary.

5.11.3 Re-submission of facility condition assessment data collection package. In the event that documents submitted for review are deemed to be deficient or incomplete for a particular stage of completion, the A-E will be required to correct the deficiencies and resubmit the documents in the quantities originally required and within a reasonable time as specified by the SKO. The cost of accomplishing the re-submission of the data package shall be absorbed by the A-E.

5.11.4 Acceptance. Tentative acceptance of work delivered in any installment will be the basis for estimating partial payments for completed work but shall not be construed as final acceptance. Work tentatively accepted but later proven by subsequent inspection to be not acceptable shall be corrected by the A-E, without additional cost to the Owner. Final acceptance of the work will not be made until all work under the Contract has been delivered and found to be acceptable.

**6.0 PERIOD OF PERFORMANCE.** The period of performance for the completion of this Contract shall be for an indeterminate time, and completion of contract work will be dependent on work performed rather than time. The intent is to award the initial contract based on the currently established Year Two facility list (**TECHNICAL EXHIBIT 5**), and extend the contract via change order for years Three through Five. Year Three and beyond will be executed dependent upon federal funding and perhaps other circumstances not currently foreseen

**7.0 SCHEDULE OF WORK.** The actual schedule for completing each of the TASKs shall be prepared in accordance with Section 4.0. This schedule will be coordinated with the SKO for approval.

**8.0 POINTS OF CONTACT.**

**The SKO for this Contract is:**

Mrs. Jocelyn Brincks  
[Jocelyn.Brincks@iowa.gov](mailto:Jocelyn.Brincks@iowa.gov)  
(515) 252-4522

**The SKO Authorized Representative is:**

Ms. Tammy Avery  
[Tamera.m.avery.nfg@mail.mil](mailto:Tamera.m.avery.nfg@mail.mil)  
(515) 252-4587

**The NGB BUILDER Program Manager is:**

Mr. Richard Krewson

[richard.k.krewson.civ@mail.mil](mailto:richard.k.krewson.civ@mail.mil)

703-607-2106

**9.0 SUBMISSION AND APPROVAL OF WORK.**

**9.1** Within 10 days after date of award of the Contract, the A-E shall prepare a progress report and submit it for approval. Phased submittals will be defined at this time. The schedule shall show the various items included in the Contract and the order in which A-E proposes to carry out the work, with dates on which the A-E will start the features of the work and the contemplated dates for completing same. Proposed submittal formats will be established at this time. This proposed and actual progress will be updated each month. Significant milestones such as review submittals shall be annotated. Such schedule shall provide for completion of all work within the Contract time. The A-E shall assign sufficient technical, supervisory, and administrative personnel to ensure the execution of the work in accordance with the approved progress schedule.

**9.2** The A-E shall correct the progress schedule at the end of each month and shall deliver up to three (3) copies to the SKO. Inasmuch as monthly partial payments to the A-E are based to a large extent on the progress schedule, the monthly corrections shall be realistically made to the best ability of the A-E.

**9.3** Review Comments: For each Review Submittal, the A-E will be furnished comments. If the A-E disagrees technically with any comment or comments and does not intend to comply with the comment, the A-E shall clearly outline, with ample justification, the reasons for noncompliance within seven (7) working days after receipt of these comments in order that the comment can be resolved. The disposition of the remaining comments shall be furnished in writing with the next scheduled submittal. The A-E is cautioned in that if they believe the action required by any comment exceeds the requirements of this Contract, the A-E shall take no action and notify the SKO in writing immediately.

**9.4** Needs List: Throughout the life of this Contract, the A-E shall furnish the SKO a "needs" list prior to the weekly teleconference. This list shall itemize in an orderly fashion data required by the A-E to advance the project in a timely manner. Each list shall include a sequence number, description of action item, and remarks. The list will be maintained on a continuous basis with satisfied action items checked off and new action items added as required. Once a request for information is initiated, items shall remain on the list until the requested information has been furnished or otherwise resolved. The A-E shall mail copies of the list to both the SKO and the agencies tasked with supplying the information.

**9.6** Payment: Partial payments, as authorized by the SKO, will be made monthly for the amount and value of the work and services performed by the A-E in accordance with the provisions of the Contract. The A-E shall submit an updated progress chart with each payment estimate. This estimate will be verified by the SKO utilizing the progress report submitted by the A-E and independent analyses of progress. Payment applications will be submitted in PDF format via e-mail to the SKO and the technical representative for review.

**10.0 CONDUCT OF WORK.**

In performance of Contracts with the State of Iowa, the A-E shall:

**10.1** Schedules: Make every effort to meet project schedule milestones which were established at negotiations and/or at the Kick-off Meeting. In this connection, the A-E will bring to the attention of the SKO any conflict in criteria, lack of criteria, or any condition that appears to put the project schedule in jeopardy if not resolved.

**10.2** A-E Instructions: The A-E shall accept instructions only from the SKO or their authorized representative. Any changes to the Contract scope must be authorized in writing by the Contracting Officer.

**10.3 A-E Responsibilities:** The A-E has complete responsibility for the professional quality, technical accuracy, and coordination of all work or materials produced and furnished by his in-house and consultant's forces. The A-E shall correct or revise any errors or deficiencies in his work, notwithstanding any review, approval, acceptance, or payment by the Owner. Thus the responsibility continues after final payment is made to the A-E. Corrections and changes resulting from review of the A-E's completed work will not be made by the Owner but will be returned to the A-E for correction. The A-E shall always be liable to the Owner for damages to the Owner caused by negligent performance by the A-E.

## **TECHNICAL EXHIBIT 1**

Not Used.

## TECHNICAL EXHIBIT 2

### DELIVERABLES/SUBMITTAL SCHEDULE

Unless otherwise directed by SKO, the A-E shall prepare deliverables in accordance with the Submittal Schedule Matrix, shown below, for Owner review and comments.

#### SUBMITTAL SCHEDULE MATRIX:

DELIVERABLES	SKO Copies	SCHEDULE
Minutes of Kick-off Conference Call	1 each	3 Working days following the call
Draft Project Management Plan {Task 4.0b)	1 each	3 Working days prior to the Kick-off Meeting
Minutes of Each installation Kick-off Meeting	1 each	3 Working days following the meeting
Draft Work Action Plan (4.7.a)	1 each	14 days prior to start of installation orientation meetings
Owner Review		14 Calendar days after receipt of Draft Work Plan
Calibration Plan (Task 4.7.i)	1 each	14 Calendar days after Owner Review and approval of Work Action Plan
Owner Review		14 Calendar days after receipt of Calibration Plan
Draft QC Plan {Task 4.7.d)	1 each	14 days prior to kickoff meeting(s)
Owner Review		14 Calendar days after receipt of Draft QC Plan
HQIIS Discrepancy List (Task 4.7.f)	1 each	21 Calendar days after field work completion of each installation
Monthly Execution Schedule (Task 4.7.c)	1 each	Due on the 1st of each month
QC Report (Task 4.7.e)	1 each	5 Calendar days after field work completion of each installation
BUILDER Lessons Learned (Task 4.7.o)	1 each	21 Calendar days after field work completion of each installation
Data Upload Memo (Task 4.7.m), Draft BUILDER SMS Database (Task 4.2.a) Inventory and Inspection Information (Task 4.2 and 4.3), and Draft Location Report (Task 4.7.k)	1 each	30 Calendar days after field work completion of each installation
Owner Review		21 Calendar days after receipt of Draft BUILDER SMS Database
Final Data Upload Memo (Task 4.7.m), Final BUILDER SMS Database (Task 4.2.a) Inventory and Inspection Information (Task 4.2 and 4.3), and Final Location Report (Task 4.7.1)	1 each	7 Calendar Days after A-E receipt of Owner review comments for Draft BUILDER SMS Database

## TECHNICAL EXHIBIT 3

### INVENTORY AND INSPECTION REQUIREMENTS LIST

The following is a list of UNIFORMAT II Level 2 and 3 Elements and Components to be included in the inspection/inventory for this Contract.

**PLEASE NOTE THE FOLLOWING** – Except where noted, each element/component is to be inventoried; inventory/inspection method is to be direct with a distress description given, and for any rating below Green Minus, cite one or more of the twenty-three distress categories in the Inspection Comment.

#### A10 Foundations –

- A1010 Standard Foundations
- A1020 Special Foundations
- A1030 Slab On Grade

#### A20 Basement Construction –

- A2010 Basement Excavation (no inventory required)
- A2020 Basement Walls

#### B10 Superstructure

- B1010 Floor Construction
- B1020 Roof Construction

#### B20 Exterior Enclosure

- B2010 Exterior Walls
- B2020 Exterior Windows
- B2030 Exterior Doors

#### B30 Roofing

- B3010 Roof Coverings
- B3020 Roof Openings

#### C10 Interior Construction

- C1010 Partitions
- C1020 Interior Doors
- C1030 Specialties

#### C20 Stairs

- C2010 Stair Construction
- C2020 Stair Finishes (no inventory required)

#### C30 Interior Finishes

- C3010 Wall Finishes
- C3020 Wall Finishes
- C3030 Ceiling Finishes
- C3040 Interior Coatings/Special Finishes

#### D10 Conveying Systems

- D1010 Elevators and Lifts
- D1020 Weight Handling Equipment
- D1030 Escalators and Moving Walkways
- D1090 Other Conveying Systems

#### D20 Plumbing

- D2010 Plumbing Fixtures
- D2020 Domestic Water Distribution

D2030 Sanitary Waste  
D2040 Rain Water Drainage  
D2090 Other Plumbing Systems

D30 HVAC

D3010 Energy Supply  
D3020 Heat Generating Systems  
D3030 Cooling Generating Systems  
D3040 Distribution Systems  
D3050 Terminal and Package Units  
D3060 Controls and Instrumentation (no inventory required)  
D3070 Systems Testing and Balancing (no inventory required)  
D3090 Other HVAC Systems and Equipment

D40 Fire Protection

D4010 Fire Alarm and Detection Systems  
D4020 Fire Water Supply/Equipment  
D4030 Standpipe Systems  
D4040 Sprinklers  
D4050 Fire Protection Specialties (no inventory required)  
D4090 Other Fire Protection Systems

D50 Electrical

D5010 Electrical Service and Distribution  
D5020 Lighting and Branch Wiring  
D5030 Communications and Security  
D5090 Other Electrical Systems

E10 Equipment

E1010 Commercial Equipment  
E1020 Institutional Equipment  
E1030 Vehicular Equipment  
E1090 Other Equipment

The Direct Rating method is:

- Based on Fully Operational (Green), Reduced Operation (Amber), Failed Operation (Red)
- Each rating has plus or minus classifiers to augment the base rating
- Accomplished at component-section level (UNIFORMAT II)
- When providing Amber and/or Red Direct ratings category of Distress will be input in the inspection comment field of BUILDER

Plan Take Off (PTO) data may be substituted for Model data when accurate drawings are available. In general, the best data available will be used.

## **TECHNICAL EXHIBIT 4**

### **Photograph Upload Procedure**

#### **BRED 3.3-Image Linking Workflow**

Photographs may be individually loaded into BUILDER with their corresponding BUILDER elements, whether the element is building, component-section, section, or condition index. However, the process can be time intensive. This document describes procedures for preparing photographs to be imported into BUILDER using the latest version of BRED.

##### **Step 1: Using the Correct BUILDER Remote Entry Database (BRED) Software Version**

1. If you are using a previous version of BRED 3.1, please go to your Windows Programs menu, find "ERDC-CERL" under All Programs, then "BUILDER RED 3.1" and click on "Check For Updates". This process will guide you through the process to upgrade to the latest BRED version.
2. If you do not have a previous version of BRED 3.1, please use the following link to download the BRED installer package:  
<http://www.smserdc.dren.mil/Products/BUILDER/Downloads>

**NOTE 1: BRED 3.0 IS NOT COMPATIBLE WITH THE ARMY INSTANCE OF BUILDER. PLEASE BE SURE YOU HAVE the most recent BRED version INSTALLED.**

**NOTE 2: IF YOU ARE WORKING WITH MULTIPLE BUILDER PROJECTS IN WHICH ONE IS ON BUILDER 3.1 AND THE OTHER IS STILL USING THE ORIGINAL VERSION OF BUILDER, YOU CAN HAVE BOTH BRED 3.0 AND BRED 3.1 INSTALLED AT THE SAME TIME ON YOUR COMPUTER.**

3. You can add images directly in BRED by selecting the correct node on the Navigation tree that you would like to add the images to or by dragging the image onto the BRED window.
4. After dropping images into BRED an import screen will pop up. You will need to check "all Pending" on the Image pop up window and then close this window when you have completed attaching images. Once you close the Image window, the Image attachment icon should have the number of image that were attached to that node.
5. When you have completed your work in the BRED file and the Image file, you can now import both the BRED file and the "image archive" file to BUILDER. The "image archive" file is also called the "bredpackage" file. This file has an extension of "bredpackage" and should be located in the same folder where your BRED file is located. Once you import both the BRED file and the image archive file, your files will appear in BUILDER.

**TECHNICAL EXHIBIT 5**  
**BUILDING LISTING (YEAR TWO)**

<u>SITE NAME</u>	<u>INSNO-FACNO</u>	<u>CATCODE</u>	<u>SCOPE</u>	<u>AGE</u>	<u>Q-Rating</u>
Boone	19A25-OMS10	21407	12345 SF	60	Q3
Boone	19A25-HZWS2	44228	104 SF	10	Q1
Boone	19A25-HZWS3	44228	38 SF	4	Q1
Boone	19A25-WASHC	44224	723 SF	32	Q3
Boone	19A25-MVSB1	44230	7748 SF	33	Q1
Boone	19A25-MVSB2	44230	18291 SF	30	Q1
Boone	19A25-POL00	44228	275 SF	56	Q2
Boone	19A25-AASF1	21110	34185 SF	28	Q3
Boone	19A25-POL0A	14165	197 SF	35	Q1
Boone	19A25-ARMRY	17180	77321 SF	57	Q2
Charles City	19A50-ARMRY	17180	18762 SF	62	Q1
Charles City	19A50-AUSB1	44224	1514 SF	33	Q2
Charles City	19A50-MVSB1	44263	2521 SF	33	Q1
Dubuque	19B30-ARMRY	17180	31631 SF	37	Q1
Dubuque	19B30-MVSB2	44230	16085 SF	18	Q1
Dubuque	19B30-MVSB1	44230	14114 SF	31	Q1
Dubuque	19B30-POL00	44240	238 SF	37	Q2
Dubuque	19B30-MVSB3	44230	7581 SF	37	Q1
Estherville	19B40-ARM02	14163	1087 SF	17	Q1
Estherville	19B40-ARM02	17180	28469 SF	17	Q2
Estherville	19B40-ARM02	44263	3925 SF	17	Q2
Estherville	19B40-MVSB1	44230	4080 SF	33	Q3
Fort Dodge	19B55-ARMRY	17180	37475 SF	66	Q2
Fort Dodge	19B55-OMS11	14163	1084 SF	71	Q2
Fort Dodge	19B55-OMS11	21407	9146 SF	71	Q2
Fort Dodge	19B55-HZWS1	44228	103 SF	3	Q1
Fort Dodge	19B55-MVSB1	44230	18293 SF	33	Q1
Fort Dodge	19B55-AUSB1	44224	1612 SF	33	Q2
Fort Dodge	19B55-FOTS1	13120	99 SF	9	Q2
Iowa Falls	19C05-ARMRY	17180	20721 SF	44	Q1
Iowa Falls	19C05-HZWST	44228	79 SF	9	Q1
Iowa Falls	19C05-AUSB1	44224	1134 SF	33	Q2
Iowa Falls	19C05-POL00	44240	145 SF	31	Q2
Le Mars	19C40-ARMRY	17180	18876 SF	60	Q2
Le Mars	19C40-HZWST	44228	130 SF	17	Q2
Le Mars	19C40-AUSB1	44224	1554 SF	33	Q3
Le Mars	19C40-MVSB1	44230	7580 SF	33	Q2
Marshalltown	19C50-ARMRY	17180	16630 SF	63	Q3
Marshalltown	19C50-AUSB2	44224	199 SF	8	Q1
Marshalltown	19C50-MVSB1	44224	1317 SF	33	Q3
Marshalltown	19C50-MVSB1	44263	6325 SF	33	Q3

Marshalltown	19C50-AUSB1	44224	1617 SF	33	Q3
Mason City	19C55-ARMRY	17180	25020 SF	30	Q1
Mason City	19C55-WASHC	14163	3816 SF	30	Q2
Mason City	19C55-OMS05	21407	4965 SF	30	Q3
Mason City	19C55-POL00	44240	104 SF	30	Q2
Mason City	19C55-MVSB1	44263	22872 SF	33	Q2
Mason City	19C55-HZWS1	44224	133 SF	23	Q2
Mason City	19C55-HZWS3	44228	149 SF	23	Q2
Oelwein	19C90-ARMRY	17180	17680 SF	66	Q1
Oelwein	19C90-AUSB1	44224	1498 SF	33	Q2
Oelwein	19C90-MVSB1	44263	2627 SF	31	Q2
Sheldon	19D35-ARMRY	17180	16653 SF	58	Q3
Sheldon	19D35-MVSB1	21411	3063 SF	33	Q2
Sheldon	19D35-MVSB1	44224	2028 SF	33	Q3
Sheldon	19D35-MVSB2	44263	12126 SF	20	Q3
Sheldon	19D35-HZWST	44228	100 SF	12	Q1
Sheldon	19D35-AUSB1	44224	1571 SF	33	Q3
Sioux City	19D30-OMS03	14163	763 SF	50	Q3
Sioux City	19D30-ARMRY	17180	31800 SF	50	Q1
Sioux City	19D30-OMS03	21407	10259 SF	50	Q4
Sioux City	19D30-HZWS1	44228	149 SF	25	Q3
Sioux City	19D30-MVSB2	44224	1177 SF	31	Q2
Sioux City	19D30-MVSB2	44263	14680 SF	31	Q2
Sioux City	19D30-POL00	44240	116 SF	51	Q3
Sioux City	19D30-MVSB1	44230	7596 SF	33	Q1
Sioux City	19D30-HZWST	44228	149 SF	29	Q2
Sioux City	19D30-FOTS1	13120	102 SF	9	Q2
Spencer	19D45-ARMRY	17180	18890 SF	63	Q1
Spencer	19D45-HZWST	44228	73 SF	18	
Spencer	19D45-AUSB1	44224	1636 SF	33	Q2
Spencer	19D45-MVSB1	44230	4034 SF	33	Q1
Storm Lake	19D50-OMS11	14163	1040 SF	64	Q2
Storm Lake	19D50-ARMRY	17180	17486 SF	59	Q2
Storm Lake	19D50-OMS11	21411	3480 SF	64	Q3
Storm Lake	19D50-MVSB2	44230	6087 SF	33	Q1
Storm Lake	19D50-POL00	44228	261 SF	56	Q3
Storm Lake	19D50-AUSB2	44224	813 SF	14	Q1
Storm Lake	19D50-AUSB1	44224	1244 SF	33	Q2
Waterloo Airport	19D70-COVTA	17139	992 SF	66	Q1
Waterloo Airport	19D70-COVT1	17139	128 SF	66	Q1
Waterloo Airport	19D70-OMS02	14163	833 SF	67	Q3
Waterloo Airport	19D70-ARMRY	17180	35492 SF	66	Q3
Waterloo Airport	19D70-OMS02	21407	6328 SF	67	Q4
Waterloo Airport	19D70-MVSB4	21411	4846 SF	31	Q3
Waterloo Airport	19D70-MVSB3	44230	7537 SF	33	Q2
Waterloo Airport	19D70-MVSB4	44224	1123 SF	31	Q3

Waterloo Airport	19D70-MVSB4	44263	3039 SF	31	Q3
Waterloo Airport	19D70-POL01	44240	258 SF	46	Q2
Waterloo Airport	19D70-AUSB1	44224	1971 SF	33	Q3
Waterloo Airport	19D70-WASHC	44224	729 SF	32	Q3
Waterloo Airport	19D70-HZWST	44228	81 SF	29	Q2
Waterloo Big Rock	19D65-PUMPH	14165	107 SF	22	Q1
Waterloo Big Rock	19D65-AASF2	17180	24760 SF	46	Q1
Waterloo Big Rock	19D65-MVSB3	21411	1663 SF	30	Q1
Waterloo Big Rock	19D65-ACSTR	44263	13040 SF	10	Q1
Waterloo Big Rock	19D65-MVSB3	44263	6077 SF	30	Q1
Waterloo Big Rock	19D65-AUSB1	44224	2869 SF	33	Q2
Waterloo Big Rock	19D65-AASF2	21110	60004 SF	46	Q2