May 4, 2020

DESIGN-BUILD REQUEST FOR PROPOSALS

TRI-CITIES READINESS CENTER
PROJECT NO. 18-586
RICHLAND, WA

BY DEPARTMENT OF ENTERPRISE SERVICES AND WASHINGTON MILITARY DEPARTMENT

STATEMENT OF QUALIFICATIONS DEADLINE:
MAY 19, 2020

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I. DESIGN-BUILD PROPOSAL REQUIREMENTS

1.0 Introduction

The State of Washington Department of Enterprise Services ("DES") is soliciting Proposals from the pre-qualified teams to provide design-build services for the Tri-Cities Readiness Center project in Richland, Washington. The primary mission of this project is to provide a cost-effective and operationally efficient, specialized training facility for the assigned units of the Washington Army National Guard and their personnel located in the Washington Military Department's Tri-Cities Area. The successful proposer will deliver an innovative, highly-efficient design constructed to essential facility standards; its robust construction assumes survivability and fitness for use in the event of a natural or man-made emergency.

DES is a certified public body using the design-build alternative public works contracting procedures authorized under Chapter 39.10 RCW and the Washington State Capital Projects Advisory Review Board's Project Review Committee. DES expects a collaborative, creative, and productive design-build process involving the design-builder, DES as owner, tenant agencies, and DES consultants.

The following Design-Build teams have been pre-qualified through a previously published Request for Qualifications. Proposals will only be accepted from the following Design-Build teams:

<u>Design-Build Team List:</u>

1. To be determined
2. To be determined
3. To be determined

2.0 Project Description and RFP Information

The Project is currently planned to consist of a cost-effective and operationally efficient specialized training facility located at the site bounded by Kingsgate Way, 1st Street and Polar Way with military vehicle parking, POV parking.

Size:
Authorized 39,731 Gross Square Feet (gsf). Work will also include associated site development, and other minor support facilities.

Budget:
The maximum allowable design and construction cost ("MADCC") for the Project, which cost is inclusive of the design and all other services to be performed under the design-build contract, is $13,150,900 including Washington State Sales Tax.

Performance:
The project will comply with NGB standards and achieve LEED Silver certification.

Contract Form:
Design-Build Contract between State of Washington Department of Enterprise Services (Owner) and Design-Builder – The contract form (included in Section II. of this RFP) is a lump sum contract.

A. Procurement Process

1. The Project will be completed using the design-build delivery method, as specified in Chapter 39.10 RCW and enabling legislation. DES has obtained agency certification to use design-build delivery.

2. This RFP is the second step in a two-step procurement process for the selection of the Design-Builder. Previously submitted Statements of Qualification were evaluated by the Evaluation Committee and the three most qualified ("Proposers") have been selected for this phase. Those Proposers who have been invited to proceed to the second step of the procurement process will submit a Design and Price Proposal in response to this RFP. In the event of any conflict between the RFQ and the RFP Documents, the RFP Documents shall govern.

3. Proposers are reminded that while the evaluation process under this RFP constitutes a new and different evaluation from that conducted under the RFQ, DES does intend to refer to the Statements of Qualification to evaluate Proposer's qualifications as addressed more specifically in Article IV. Proposers are expressly advised that to the extent they desire to make a change in their organizational structure, Key Personnel or designated Specialty Subcontractors from what was submitted in the Preliminary Proposal, they must notify DES no later than forty-five (45) days prior to the Proposal Due Date. DES will review such requests and provide a response within fourteen (14) days of its receipt of such proposed changes, provided, however, that DES shall have no obligation to approve such proposed changes and may approve or disapprove of such changes in its sole discretion.

4. Award of a Design-Build Contract ("Contract") will be made to the Proposer in accordance with the processes and requirements set forth in this RFP.

5. Proposers shall provide the best overall design within the MADCC funds available. No preference will be given to Proposers submitting a price proposal below the allocated MADCC. DES reserves the right to negotiate design details with the successful proposer during the post-award design phase.

B. Milestone Schedule

DES currently anticipates conducting the procurement of the Project in accordance with the following list of milestones leading to award of the Contract. This schedule is subject

to revision and DES reserves the right to modify this schedule as it finds necessary, in its sole discretion.

- Publish RFP	May 29, 2020
- Initial Proprietary Meetings	June 12, 2020
- Second Proprietary Meetings	July 3, 2020
- Third Proprietary Meetings	July 17, 2020
- Last Day for Questions	July 27, 2020
- Design & Price Proposals Due	August 7, 2020
- Presentation by D/B Teams	August 20- 21, 2020
- Announce Successful D/B Team	August 24, 2020
- Debrief of Unsuccessful Finalists (if requested)	August 26-28, 2020
Contracting:	
- Negotiation of Final Price	September 1-14, 2020
- Review/Approval (NGB)	September 1-14, 2020
Contract Award/NTP	September 14, 2020
Substantial Completion	460 Calendar Days From NTP
Final Completion	90 Calendar Days After Substantial Completion

C. DES's Point of Contact and Project Reference

DES' sole point of contact for this Project shall be David Hickman, Project Manager ("Point of Contact"). Mr. Hickman is the only individual authorized to discuss this RFP with any interested parties, including Proposers. All communications with Mr. Hickman about the Project or this RFP shall be via email. Proposers contacting other DES officials, consultants or tenants regarding this solicitation may be disqualified from competition.

David Hickman
Email: david.hickman@des.wa.gov

Proposers are specifically encouraged to contact Mr. Hickman throughout the process with questions, comments and/or recommendations regarding the proposal process, specific deliverables or other issues. Clarifications or changes to the RFP process resulting from correspondence with Proposers will be issued via Addendum.

D. Owner Consultants/Technical Support Not Eligible to Participate

A previously selected team of consultants including ALSC Architects, Coffman Engineers, and Design Balance LEED Consultants have prepared a Basis of Design document including a detailed architectural program, performance requirement and contracts. These consultants are not eligible to serve on design-build teams in any

capacity. The basis of design documents will be made available to Proposers. Proposers are prohibited from contacting or communicating with any owner consultants to solicit technical, legal, financial, contractual, or any other type of advice or information relative to the Project. All communications are to be through DES's Point of Contact.

E. Evaluation Committee

Design and Price Proposals will be evaluated by a committee ("Evaluation Committee") comprised of David Hickman and one other DES Project Manager, Washington Military Department representatives, ALSC Architects representative in a (non-voting) advisory role, and one public representative. Other technical, legal, and financial consultants, and/or DES staff with expertise in fields such as capital project management, operations and maintenance, engineering, design, construction, may serve as advisors to the Evaluation Committee. The Evaluation Committee shall review Proposals in accordance with the criteria defined in this RFP and in the best interest of the state.

F. Proposal Requirements

Article 4.0 describes specific information that must be included in Design and Price Proposals. The format for the presentation of such information is also described in Article 4.0, A. and Technical Proposal requirements are described in Article 4.0, B.

DES reserves the right to conduct an independent investigation of any information, including prior experience, provided in the Proposal or SOQ by contacting project references, accessing public information, contacting independent parties, or any other means.

Proposers interested in the use of the Survey CAD documents listed in the RFP Appendix 2.c. Survey Information, shall notify DES's Point of Contact and furnish an executed release of liability statement in the form set forth in RFP Appendix 3.a. Release of Liability for Use of CAD Drawings. Proposer's execution of such release of liability statement is a condition precedent to using this media.

Section II. of the RFP contains the proposed Design-Build Contract. Each Proposer shall review the proposed contract and provide comments regarding any aspect of the contract, including but not limited to terms that it considers to be ambiguous or to which it takes exception. Such comments will be submitted to DES's Point of Contact as soon as possible but no later than 30 days prior to the proposal due date. DES will review all comments received and, if it deems appropriate, in its sole discretion, may modify such contract through Addendum. Proposers shall base their Proposals on the terms and conditions of the Design-Build Contract included in the latest issued Addendum.

3.0 Pre-Submittal Procedures and Requirements

A. Proposer's Pre-Submittal Responsibilities and Representations

Each Proposer shall be responsible for thoroughly reviewing the RFP Documents, including any Addenda issued to such documents, and any and all conditions which may in any way affect its Proposal or the performance of the work on the Project, including but not limited to:

1. Examining and carefully studying the RFP Documents, including any Addenda and other information or data identified in the RFP Documents;

2. Visiting the Project Site and becoming familiar with and satisfying itself as to the general, local, and site conditions that may affect the cost, progress, or performance of its work on the Project;

3. Becoming familiar with and satisfying itself as to all federal, state, and local laws and regulations that may affect the cost, progress, or performance of its work on the Project; and

4. Determining that the RFP Documents with Addenda are sufficient to indicate and convey understanding of all terms and conditions for the performance of Proposer's work on the Project.

Each Proposer is responsible for promptly giving DES written notice, in accordance with the processes set forth in Article 5.0, C. here of, of: (a) all conflicts, errors, ambiguities, or discrepancies that Proposer discovers in the RFP Documents; and (b) aspects of the RFP Documents that Proposer does not understand. Any failure to do so shall be at Proposer's sole risk, and no relief for error or omission will be provided by DES.

B. Meetings and Site Visits
See 2.B Milestone Schedule.

4.0 Proposal Content

This article describes specific information that must be included in the Price Proposal and Design Submittal. The format for the presentation of such information is also described.

Proposals must be executed by the Proposer in the prime firm's name and signed by at least one duly authorized person (accompanied by evidence of authority to sign and bind the Design-Build Team), whose title must appear under the signature. In addition to signatures, names must be typed or legibly printed in blue ink. Proposals shall remain in full force and effect for a period of 120 days after the date such proposals are submitted to DES.

A. Proposal Format and Requirements

Provide nine (9) copies of the proposal in 8.5 x 11 inch 3-ring binder format with the following tabs between clearly defined sections. (Note: 18 x 24 inch Design Submittal drawings must be submitted in a separate bound set.)

Also, provide two (2) CD's with complete electronic PDF copy of proposal, design submittals, and all forms (if original forms are in Excel, please submit in same format).

Include a Table of Contents with the following sections. Tabs must be used to define each section and should be labeled with the following titles:

1. Cover Letter: Identify the two contracting parties of the Design-Build Team. Reference the General Contractor and Architect names in the cover letter.

2. Base Contract Price Proposal Form: Proposers must use RFP Appendix 3.e. Base Contract Price Proposal Form. Proposers must acknowledge on the Base Contract Price Proposal Form all Addenda issued for the RFP. All blanks on the Base Contract Price Proposal Form must be completed by printing in blue ink. Provide a copy of the executed proposal form.

3. Team Identification: Provide an organizational chart listing Design-Build team members, responsibilities and reporting paths. List all primary design professional and design-build subcontractors in proposal.

4. Proposer's Plan: Plan for facilitating DES and Military Department's involvement in its Design Process. Identify post-award design meetings, DES and WMD's review and approval process, milestone decision dates in support of the overall schedule.

5. Overall Sustainable Design Strategy: Provide a preliminary LEED score card and narrative on overall strategy to meet or exceed WMD's requirement of a LEED Silver Certified project.

6. Design Submittal: Provide Design-Build Technical Proposal as noted in Article 4.0, B.

7. Project Approach Additions:

   Outline the work you plan on self-performing within the contract scope and how you will ensure your work is competitive with subcontracting.

   Outline the use of Design-Builder contingencies within your Lump Sum and the potential use of contingency for building improvements as risk reduces.

   Outline how you can work with DES on the potential use of owner contingency as the project progresses and risk reduces in order to improve the project.

8. Energy Performance Program: Provide an outline of the energy performance program and goals, including, but not limited to, commissioning, warranty scope and duration, measurement & verification scope and duration, and the EUI target which will be achieved by the Design-Builder's proposal.

   Provide clear and thorough explanation of tenant requirements and responsibilities as occupants of the building, including ongoing maintenance and operations, in order to achieve the targeted EUI.

   Provide an energy model based on your proposed design.

9. ELCCA (Energy Life Cycle Cost Analysis) Work Plan: Provide a description of the Life Cycle Cost Analysis process used by the Design-Builder. Provide an overview of the alternatives considered. Provide a rationale for the final design decision relative to the ELCCA conducted by the Design-Builder. See Appendix 3.c. Energy Life Cycle Cost Spreadsheet. Provide based on annual hot water consumption of 50,000 gallons and 60% of that as domestic hot water. The Monday-Friday building population is 5, and the drill weekend once a month population is 120.

10. Preliminary Design and Construction Schedule: Schedule is to be no smaller than 11 x 17 inches and may be folded to fit into proposal summary binder. Provide a summary of key milestones on the first page of the design-build schedule.

11. Pricing Information: See Base Contract Price Proposal Form provided in Appendix 3.e. In addition to the Base Price Proposal Form outlined in item 2 above the Proposer shall submit a complete cost breakdown (Uniformat) for all design and construction work per Appendix 3.d, Price Proposal Cost Estimate form. Also provide a sample change order template identifying all markups to direct costs as requested with the form.

12. Inclusion Plan: Provide a Diverse Business Inclusion Plan for the Project on Appendix 3.j. Diverse Business Inclusion Plan form. See Article 9.0, E. Diverse Business Participation.

13. Safety and Health Program: The safety and health program adopted and used by the Prime Contractor firm of the Design-Build Team. Program must address and incorporate all applicable federal, state, and local safety and health requirements.

14. Quality Assurance and Testing Program: This is the program that will be adopted and used by the Design- Build Team specifically for this project. Program must address and incorporate all testing and inspection requirements meeting local codes, standards ordinances and as required by this RFP.

15. Outline Specifications: Provide an outline only for prescriptive specifications utilizing the CSI Master Format as noted in Article 4.0, B. Design-Build Technical Proposal Requirements.

16. Exceptions/Qualifications, Deviations and Assumptions: Provide a clear list of all material exceptions and/or qualifications, deviations, and assumptions used in the preparation of the Proposal. Proposers shall provide any proposed exceptions, qualifications, deviations, and assumptions to any aspect of the minimum requirements of the RFP Documents, including but not limited to the technical and performance requirements of the RFP Documents. Such exceptions, qualifications, deviations, and assumptions to the RFP Documents shall include: (a) complete description of proposed variation or deviation from the RFP design requirements; (b) the effect or changes in end use performance characteristics of such variation or deviation; and (c) the cost or savings benefit to DES for such variation or deviation. Notwithstanding the above, Proposers are on notice that DES is under no obligation to accept any proposed exception, qualification, deviation, or assumption and DES reserves the right to require the successful Proposer to conform strictly to all requirements of the RFP Documents. Use Appendix 3.g. Exceptions/Qualifications to RFP Scope form. Appendix 3.i. Design-Builder / Owner Responsibility Matrix outlines scope responsibilities between Design-Builder and Owner. Any exceptions or deviations to this Matrix must be identified within the Exceptions / Qualifications to RFP Scope form. All Proposers to review all reference and exhibit materials, and proposal forms noted in the appendices and provide completed forms within their proposals.

17. RFP Price Proposal Alternates: The following are alternates to the RFP that the Design Builder shall provide pricing per the Appendix 3.f., Alternates Price Proposal Cost Estimate Form.

    1. Renewable energy systems
    2. Extra efficient mechanical system
    3. Natural gas-fired backup generator in place of diesel
    4. Concrete paving in military vehicle parking

    Other alternatives can be proposed by the design builder if they see a benefit to The National Guard.

B. Design Submittal: Design-Build Technical Proposal

The following documentation comprises that portion of the Technical Proposal which describes all facets of the Proposed Design Proposal including supporting data such as Life Cycle Costing, LEED Pathway Assessment, Quality Assurance, and Code Compliance.

The Design-Build Technical Proposal submittal shall illustrate the scale and the relationships of the various programs, concepts, building and site improvements for the project. The design shall be substantial enough to communicate with DES the size, shape, quality and finishes of the proposed facility. This submittal is often referred to as Schematic Design documents.

Outline specifications for RFP Design Solution Submittals shall be limited to a maximum of 90 sheets double sided (180 pages). Provide nine (9) each 18x24, bound sets of the drawings listed. Include a Cover Sheet with full design-build team identification and drawing index.

1. Site / Civil
    a. Master plan development or site plan concept, including preliminary design for the following:
        i. Identify Limits of the Work.
        ii. ATFP building standoffs and separations.
        iii. Roof Plans/footprints of schematic building locations.
        iv. Grading, drainage and preliminary cut and fill calculations.
        v. Vehicular and pedestrian circulation and perimeter access control.
        vi. ADA Parking Requirements.
        vii. Fire Department Access and Circulation.
        viii. Utility Service locations (transformer, generators, etc.).
        ix. Site ADA Requirements
        x. Landscape areas.
    b. Identify existing utility locations/R.O.W./Easements.
    c. Coordinated new utility service locations (i.e., utility transformers, exterior generators, etc.).
    d. Certified Site Survey: Provided by future addendum.
    e. Soils Investigation: Provided by DES with RFP; provide interpretations by Design-Build team's geotechnical member.
    f. Context/Urban Design Narrative describing:
        i. The context of the project within the campus and surrounding community,
    g. Concept Site/Civil Design Narrative describing:
        i. Codes, standards
        ii. Overall site features.
        iii. Grading.
        iv. Drainage (storm water runoff, retention, detention).
        v. Utilities connections and service.
        vi. POV and military vehicle circulation and parking areas.
        vii. Pedestrian circulation: secure and non-secure.
        viii. Site lighting.
        ix. Landscape Narrative.

2. Architectural
    a. Floor Plans. Include schemes, based upon the RFP requirements, for the following:
        i. Identification of all major spaces (programmed areas, electrical rooms, mechanical rooms, shafts, chases, vertical transportation).
        ii. Names and net SF of individual areas/rooms/spaces.
        iii. Area separations (walls, floors, ceilings, roofs).
        iv. Occupancy separations (walls, floors, ceilings, roofs).

v. Security Zones and separations: full height walls noted.
vi. Accessibility provisions.
vii. Overall dimensions and grid dimensions.
viii. Finish Floor elevations.
ix. Provide plans at 1/16 inch scale.

b. Concept Elevations: 2 sides minimum.
c. Concept Sections: 3 sections minimum – these should be cut to clearly illustrate the relationship between single and double height spaces.
d. Code Analysis:
   i. Occupancy load/classification.
   ii. Type of construction.
   iii. Exiting requirements.
   iv. Area separation/fire walls.
   v. Height Restrictions.
   vi. Locations of setbacks, if any.
e. Concept Architectural Design Narrative describing:
   i. Codes, standards and local amendments.
   ii. Overall Project concept.
   iii. Functional Concepts including but not limited to:
      1) Description of unique processes or specialized equipment that are required by a particular design solution that will be required of the WMD for the proper operation and maintenance of the facility.
   iv. Building organization.
   v. Program comparison with RFP Document.
      1) Area calculations for the Building.
      2) Program net square footage vs. Design-Build Technical Proposal net square footage and deviations, also tabulate proposed gross square footage.
   vi. Basic materials and equipment selections.

3. Structural
   a. Concept Structural Design Narrative describing:
      i. Codes, standards and local amendments.
      ii. Design Loads:
         1) Dead and Live Loads.
         2) Lateral Loads:
            a) Seismic
            b) Wind
      iii. Proposed Foundation systems.
      iv. Roof and Floor Framing Systems.
      v. Proposed structural systems, including lateral systems, and material properties.

4. Mechanical
   a. Concept Mechanical Design Narrative describing:
      i. Codes, standards and local amendments.

ii. Proposed systems for the following:
   1) Heating, Cooling and Ventilation.
   2) Controls and Instrumentation.
   3) Filtration, if special requirements.
   4) Plumbing.
      a) Domestic Water.
      b) Sanitary Drainage.
      c) Rainwater Drainage.
      d) Natural Gas.
      e) Plumbing Fixtures.
   5) Fire Protection System.
iii. Connection/addition to existing systems requirements, and new stand-alone systems.
iv. Basic materials and equipment selections.
v. Identification of space requirements (for floor plan and interstitial).
vi. Identify Utility Companies.
   1) Water
   2) Sewer
   3) Gas

5. Electrical
   a. Concept Plan (typical room layouts) to include:
      i. Lighting
      ii. Power
   b. Schematic Electrical Design Narrative describing:
      i. Codes, standards and local amendments.
      ii. Defining of the Design for all electrical systems:
         1) Power Distribution.
         2) Interior Lighting.
         3) Exterior Lighting.
         4) Site Lighting.
      iii. Electrical Equipment.
         1) Space requirements, locations, clearances, etc.
      iv. Emergency power source.
         1) Emergency Generator.
         2) Exterior sound enclosure size and location requirements.
      v. Utility company vs. Contractor provided facilities.
         1) Identify Utility Companies.
            a) Electric: Richland Electric Cooperative
      vi. Connection/addition to existing systems requirements, and new standalone systems.
      vii. Basic materials and equipment selections.
      viii. Identification of space requirements (interstitial) and structural clearances.

6. Special Low Voltage Systems, Security, Fire and Life Safety, Communications.
   a. Concept Plan (typical control room and equipment room layouts) to include:

i. Control Panels.
ii. Special systems equipment organization.

b. Special Systems Design Narrative describing:
   i. Codes, standards and local amendments.
   ii. Defining of the Design for all Special Systems:
      1) Telephone and data.
      2) Security systems, interior and exterior.
         a) Interface with door locking systems.
         b) Video surveillance.
      3) Fire Alarm Systems.

c. Special Systems Equipment.
   i. Space requirements, locations, clearances, etc.

d. Emergency power source(s).
   i. Identification of systems requiring connections to emergency power.

e. Connection/addition to existing systems requirements, and new stand-alone systems.

f. Basic materials and equipment selections.

g. Identification of space requirements (interstitial and site) and clearances.

7. IT / Telecommunications / Secure IT
   a. Concept Plans to include:
      i. Equipment Room housing the Main Cross-connect.
      ii. Typical Telecommunications Room housing the Horizontal Cross-connect.
      iii. Outside plant telecommunications duct bank.
      iv. Typical horizontal cabling pathways of buildings.
   b. Telecommunications Design Narrative describing:
      i. Codes, standards and specific standards. See Section IV, Design Narrative.
      ii. Defining the Design for the Telecommunications Infrastructure:
         1) Equipment Room functionality.
         2) Telecommunication Rooms functionality.
         3) Horizontal cabling and pathways.
         4) Backbone cabling and pathways.
         5) Distribution topology.
         6) Outside plant duct bank system.
         7) Mechanical and electrical supporting systems.
      iii. Connection/addition to existing systems requirements and existing infrastructures.
      iv. Basic materials selections.
      v. Identification of space requirements.

8. Design-Build Alternates (See Appendix 3.f. Alternates Price Proposal Cost Form for Alternate descriptions).

C. Proposal Stage Memorandum of Understanding (Honorarium Agreement)

The honorarium will act as a proposal security and may be forfeited as defined below:

1. An honorarium of one hundred thousand dollars ($100,000.00) will be paid to unsuccessful Proposers submitting responsive, acceptable and adequate proposals that comply with the requirements of the RFP as determined by DES.

2. A Proposer may be deemed non-responsive for failing to follow proposal procedures and requirements, resulting in forfeiture of the honorarium. Honoraria will not be paid until a Design-Build Contract is signed with the selected Design-Build Team.

3. No honorarium shall be paid to any Proposer who voluntarily withdraws from this solicitation prior to submitting a Proposal, that withdraws its Proposal before 90 days after the Proposal due date or is non-compliant with the RFP.

4. No Honorarium shall be paid to any Proposer who is selected to participate in the Negotiation Phase and who unilaterally withdraws their Proposal during or prior to the completion of the Negotiation Phase.

5. An honorarium shall not be paid to the Finalist Proposer who successfully executes a Design-Build Contract with DES.

6. The Honorarium Agreement noted in Appendix 3.f. Proposal Stage Memorandum of Understanding (Honorarium Agreement), must be executed to receive the honorarium.

5.0 Submission Details

A. Proposal Evaluation Process
The Evaluation Committee will evaluate Proposals in accordance with the criteria listed below and the best interest of the state. The Evaluation Committee may consider all factors relevant to its decision including but not limited to Proposal content, the skills of proposed team members, references, personal knowledge, and design solution.

The information provided in response to the Evaluation Section of the RFP will be scored based on the following:

a. The Proposed Design-Build Team's understanding of the delivery method;
b. The degree to which the Proposed Design-Build Team understands the Owner's/DES' goals and objectives with respect to the Project; and
c. The strength of the Proposed Design-Build Team's management plan for the Project, including not only the specific topics and specialized components outlined in the RFP or discussed in the Interactive Meeting but also any other component or element that the Proposed Design-Build Team deems essential to the success of the Project.

The evaluation factors, with the relevant weight, are listed below.

1. Proposal and Design Solution — 30 points
How well does the proposal and design solution meet the program and technical approach to the Design solution? How

well does the design solution demonstrate long term value and low life cycle costs to the State of Washington, DES, and the WMD?

2. Overall Management Approach; Ability to Meet Time and Budget Requirements — 10 points
   Describe the Finalist's overall management approach to the Project. In responding to this evaluation factor, Finalists shall identify three (3) key issues, risks, and challenges to the Project, and, for each issue or challenge identified, describe how to mitigate its potential negative impacts (i.e., risk mitigation strategy) and any unique approaches or strengths the Finalist may have to implement such mitigation strategies.

3. Operations, Maintenance, Energy Performance, Sustainability — 20 points
   How well does the proposed design solution demonstrate sustainable design strategies, operations / maintenance / energy efficiency, and innovation?

4. Ability of Professional Personnel: — 20 points
   a) How well does the proposed design and construction team demonstrate the skills and competence in high-performance design and construction and its understanding of DES's overall goals for the project?
   b) Confirm that the Proposed Design-Build Team and Key Team Members are available to perform the Project. To verify this availability, provide the following information in the form of a table
      -Recent, current and projected workloads of Proposed Design-Build Team Members;
      - Recent, current and projected workloads of Key Team Members;
      - Location of home office of Proposed Design-Build Team Members and whether they have an office in the Tri-Cities area; and
      - Home office location of Key Team Members and proposed location during the performance of the Project

5. Past Performance on Similar Projects — 20 Points

6. Financial Capacity – Bonding and Insurance Statements — Pass/Fail
   Ability to provide a performance and payment bond for the project. Submit one copy of bonding and insurance statements (none of which are included in the page count), in a sealed envelope marked "Confidential Financial Material in Response to the RFQ." This financial information will not be copied or distributed except as needed in the financial review process and will not be provided for other firms to review, except as required by law.

7. Total Possible Score — 100 points
   Each evaluation criterion has an assigned maximum number of points that demonstrates its relative importance. Each Evaluation Committee Member scores all Proposals. All Evaluation Committee Members' scoring will be totaled for each Proposal for a combined summary score. The selection of the

Finalist will be made on the basis of which Proposal has the highest combined score.

Diverse Business Inclusion Plan **Not Scored**
Reference Diverse Business Inclusion in Section 10.D

B. Due Date, Time and Location

The RFP must be delivered to, and date/time stamped by E&AS prior to the date and time indicated in Section 2.B, Milestone Schedule. If you have delivery questions, please contact David Hickman at 360.407.7950

Address Submittals to:
DES/Engineering Services
1500 Jefferson Street
Olympia, WA

or
Mailing Address:
PO Box 41476
Olympia, WA 98504-1476

Neither fax nor email submissions will be accepted. Proposers are responsible for effecting delivery by the deadline above, and late submissions will be rejected without opening, consideration, or evaluation, and will be returned unopened to the sender. DES accepts no responsibility for misdirected or lost proposals.

C. Questions and Clarifications

All questions and requests for clarification regarding this RFP are to be submitted to the DES Point of Contract, David Hickman, DES Project Manager, via email to david.hickman@des.wa.gov. DES's responses to questions or requests for clarification shall be in writing and will be accomplished by an Addendum to this RFP. DES will not be bound by any oral communications, or written interpretations or clarifications that are not set forth in an Addendum.

DES, in its sole discretion, shall have the right to seek clarifications from any Proposer to fully understand information contained in the Proposal and to help evaluate and score the Proposals.

6.0 Negotiation and Award

Pursuant to RCW 39.10.330(5)(a), DES may initiate negotiations with the Proposer submitting the highest-scored Proposal, which negotiations may include, in the sole discretion of DES, minor modifications to Proposer's design or pricing terms. If DES is unable to execute a Design-Build Contract with such Proposer, negotiations with that

Proposer may be suspended or terminated and DES may proceed to negotiate with the next highest-scored Proposer.

A. Award without Negotiations

DES reserves the right to award the Design-Build Contract without negotiations.

B. Notice of Intent to Award

A Notice of Intent to Award will be issued upon the successful conclusion of the negotiation process or upon a decision to award without negotiations.

C. Proposal Validity

Proposal terms shall remain in full force and effect for one hundred twenty (120) days after the Proposal Due Date. If award has not been made within one hundred twenty (120) days after the Proposal Due Date, each Proposer who has not previously agreed to an extension of such deadline shall have the right to withdraw its Proposal.

D. Award and Contract Execution

Promptly following award, DES will deliver an execution copy of the Design-Build Contract to the selected Proposer, who shall execute and deliver such copy to DES within seven (7) days of receipt, together with: (a) performance and payment bonds executed by a surety acceptable to DES, which bonds shall be issued on AIA Document A312; and (b) certificates of insurance acceptable to DES.

7.0 Negotiation and Award

A. In connection with this procurement, DES reserves to itself all rights (which rights shall be exercisable by DES in its sole discretion) available to it under applicable law, including without limitation, the following, with or without cause and with or without notice:

1. The right to cancel, withdraw, postpone, or extend this RFP in whole or in part at any time prior to the execution by DES of the Design-Build Contract, without incurring any obligations or liabilities.

2. The right to issue a new RFP.

3. The right to reject any and all submittals, responses, and Proposals received at any time.

4. The right to modify all dates set or projected in this RFP.

5. The right to terminate evaluations of responses received at any time.

6. The right to suspend and terminate the procurement process for the Project, at any time.

7. The right to revise and modify, at any time prior to the RFP Proposal submittal date, factors it will consider in evaluating responses to this RFP and to otherwise revise its evaluation methodology.

8. The right to issue addenda, supplements, and modifications to this RFP, including but not limited to modifications of evaluation criteria or methodology and weighting of evaluation criteria.

9. The right to permit submittal of addenda and supplements to data previously provided with any response to this RFP until such time as DES declares in writing that a particular stage or phase of its review of the responses to this RFP has been completed and closed.

10. The right to hold meetings and conduct discussions and correspondence with one or more of the Proposers responding to this RFP to seek an improved understanding and evaluation of the responses to this RFP.

11. The right to seek or obtain data from any source that has the potential to improve the understanding and evaluation of the responses to the RFP, including the right to seek clarifications from Proposers.

12. The right to permit Proposers to add or delete firms and/or key personnel until such time as DES declares in writing that a particular stage or phase of its review has been completed and closed.

13. The right to add or delete Proposer responsibilities from the information contained in this RFP.

14. The right to appoint and change appointees of the Evaluation Committee.

15. The right to use assistance of outside technical and legal experts and consultants in the evaluation process.

16. The right to waive deficiencies, informalities and irregularities in a RFP Proposal, accept and review a non-conforming RFP Proposal or seek clarifications or supplements to a RFP Proposal.

17. The right to disqualify any Proposer who changes its submittal without DES's approval.

B. DES Not Obligated for Costs of Proposing

Except for Honorariums paid in accordance with the terms of this RFP, DES assumes no obligations, responsibilities, and liabilities, fiscal or otherwise, to reimburse all or part of any costs incurred or alleged to have been incurred by anyone considering a response to and/or responding to this RFP. All such costs shall be borne solely by each Proposer and its team members.

8.0 Protests

This article sets forth the exclusive protest remedies available with respect to this RFP. Each Proposer, by submitting its RFP Proposal, expressly recognizes the limitation on its rights to protest contained herein, expressly waives all other rights and remedies and agrees that the decision on any protest, as provided herein, shall be final and conclusive unless wholly arbitrary. These provisions are included in this RFP expressly in consideration for such waiver and agreement by the Proposers. Such waiver and agreement by each Proposer are also consideration to each other Proposer for making the same waiver and agreement.

A. Protests Prior to Submission of RFP Proposals

1. The Proposer may protest the terms of this RFP prior to the time for submission of RFP Proposals on the grounds that: (a) a material provision in this RFP is wholly ambiguous; (b) any aspect of the procurement process described herein is contrary to legal requirements applicable to this procurement; or (c) this RFP in whole or in part exceeds the authority of DES. Protests regarding this RFP shall be filed only after the Proposer has informally discussed the nature and basis of the protest with DES's Point of Contact or his designee in an effort to remove the grounds for protest.

2. Protests regarding this RFP shall completely and succinctly state the grounds for protest and shall include all factual and legal documentation in sufficient detail to establish the merits of the protest. Evidentiary statements, if any, shall be submitted under penalty of perjury.

3. Protests regarding this RFP shall be filed by hand delivery or courier to DES's Point of Contact as soon as the basis for protest is known to the Proposer, but in any event it must be actually received no later than ten (10) days before the Proposal Due Date, provided that protests regarding an Addendum to the RFP shall be filed and actually received no later than five (5) business days after the Addendum to the RFP is issued.

4. DES will distribute copies of the protest to the other Proposers and may, but need not, request other Proposers to submit statements or arguments regarding the protest and may, in its sole discretion, discuss the protest with the protesting Proposer. If other Proposers are requested to submit statements or arguments, they

may file a statement in support of or in opposition to the protest within seven (7) calendar days of the request.

5. The protesting Proposer shall have the burden of proving its protest by clear and convincing evidence. No hearing will be held on the protest. DES shall decide the protest on the basis of the written submissions. DES shall issue the decision in writing to each Proposer. The decision shall be final and conclusive. If necessary to address the issues raised in the protest, DES will make appropriate revisions to this RFP by issuing Addenda. DES may extend the Proposal Due Date, if necessary, to address any protest issues.

6. The failure of a Proposer to raise a ground for a protest regarding this RFP shall preclude consideration of that ground in any protest by a Proposer unless such ground was not and could not have been known to the Proposer in time to protest prior to the final date for such protests.

B. Protests after Submission of Proposals

1. A Proposer may protest any determination regarding the evaluation of the Proposals or the proposed award of a Contract by filing a notice of protest by hand delivery or courier to DES's Point of Contact. Such notice shall be provided: (a) no earlier than the day of DES's issuance of the Notice of Intent to Award; and (b) no later than five (5) business days after DES's issuance of the Notice of Intent to Award. The protesting Proposer shall concurrently file a copy of its notice of protest with the other Proposers. The notice of protest shall specifically state the grounds of the protest.

2. Within seven (7) calendar days of the notice of protest the protesting Proposer must file with DES's Point of Contact a detailed statement of the grounds, legal authorities and facts, including all documents and evidentiary statements, in support of the protest. The protesting Proposer shall concurrently deliver a copy of the detailed statement to all other Proposers. Evidentiary statements, if any, shall be submitted under penalty of perjury. The protesting Proposer shall have the burden of proving its protest by clear and convincing evidence.

3. Failure to file a notice of protest or a detailed statement within the applicable period shall constitute an unconditional waiver of the right to protest the evaluation or qualified process and decisions thereunder, other than any protest based on facts not reasonably ascertainable as of such date.

4. Other Proposers may file by hand delivery to DES's Point of Contact a statement in support of or in opposition to the protest. Such statement must be filed within seven (7) calendar days after the protesting Proposer files its detailed statement of protest. DES will promptly forward copies of any such statements to the protesting Proposer.

5. Unless otherwise required by law, no evidentiary hearing or oral argument shall be provided, except, in the sole discretion of DES, a hearing or argument may be

permitted if necessary for protection of the public interest or an expressed, legally recognized interest of a Proposer or DES. DES shall issue a written decision regarding the protest within thirty (30) calendar days after DES receives the detailed statement of protest. Such decision shall be final and conclusive. DES shall provide copies of the written decision to the protesting Proposer and the other Proposers. Unless necessary for the successful completion of the Project, as determined in the sole discretion of DES, Design-Build Contract award will not be issued until DES issues its written decision on the protest.

6. If DES or his designee concludes that the Proposer filing the protest has established a basis for protest, DES or his designee will determine what remedial steps, if any, are necessary or appropriate to address the issues raised in the protest. Such steps may include, without limitation, withdrawing or revising the decisions, issuing a new RFP or taking other appropriate actions.

9.0 Miscellaneous

A. Public Records Act

All proceedings, records, contracts, and other public records relating to this RFP shall be open to the inspection of any interested person, firm, or corporation in accordance with the chapter 42.56 RCW, the Public Records Act, and RCW 39.10.470, except as provided in paragraph B.

B. Confidential Records

The term “confidential record” includes trade secrets, as defined in RCW 19.108.010, or other proprietary information submitted by Proposer in connection with an alternative public works transaction authorized by RCW 39.10. Such confidential records shall not be subject to chapter 42.56 RCW if the Proposer specifically states in writing the reasons why protection is necessary and identifies the data or materials to be protected. RCW 39.10.470(2).

DES will respond to any public records request for identified confidential records by notifying Proposer of the request and of the date that DES will disclose such confidential records unless Proposer obtains a court order directing DES to withhold such confidential records pursuant to RCW 42.56.540.

Proposals submitted by design-build finalists are exempt from disclosure until the notification of the highest scoring finalist is made in accordance with RCW 39.10.330(5) or the selection process is terminated.

C. Conflict of Interest

DES may, in its sole discretion, disqualify any Proposer from further consideration for the award of the Design-Build Contract if it is found after due notice and examination by DES that there is a violation of the Ethics in Public Service Act, Chapter 42.52 RCW, or any similar statute involving the Proposer in the procurement of the Design-Build Contract.

D. Requirement to Keep Team Intact

The team proposed by Proposer, including but not limited to the lead contractor, the designer-of record, Key Personnel, and other individuals identified pursuant to Article 4.A.3, Team Identification hereof, shall remain on Proposer's team for the duration of the procurement process and, if the Proposer is awarded the Design-Build Contract, the duration of the Design-Build Contract. If extraordinary circumstances require a team member change, the proposed change must be submitted in writing to DES's Point of Contact, who, in her sole discretion, will determine whether to authorize a change. Unauthorized changes to the Proposer's team at any time during the procurement process may result in the elimination of the Proposer from further consideration.

E. Diverse Business Participation

1. In accordance with the legislative findings and policies set forth in RCW Chapter 39.19, the State of Washington encourages participation in all of its contracts by firms certified by the Office of Minority and Women's Business Enterprises ("OMWBE"), and set forth in RCW 43.60A.200 for firms certified by the Washington State Department of Veterans Affairs, and set forth in RCW 39.26.005 for firms that are Washington Small Businesses. Participation may be either on a direct basis or on a Subcontractor basis. However, no preference is included in the evaluation of Proposals submitted in response to the RFP, and no minimum level of minority and women-owned business enterprise, Washington Small Business, or Washington State certified Veteran Business participation is required as a condition for receiving an award of the Design-Build Contract. Any affirmative action requirements set forth in any federal Governmental Rules included or referenced in the Contract Documents will apply.

2. If Proposer wishes to be considered a diverse business, then the Proposer shall submit evidence of certification by the Office of Minority and Women's Business Enterprises, the Washington State Department of Veterans Affairs, or by self-certification as a Washington Small Business in the Washington Electronic Business Solution ("WEBS"). Firms must be certified at the time of submittal of the RFP Proposal to qualify for consideration. Interested firms may contact OMWBE at http://www.omwbe.wa.gov/ or (360) 664-9750 or toll free (866) 208-1064, or DVA at http://www.dva.wa.gov/BusinessRegistry/Search.aspx or (800) 562-0132 option '1', or for Washington Small Business self-certification visit WEBS at http://www.des.wa.gov/services/ContractingPurchasing/Business/Pages/WEBSRegistration.aspx or contact WEBS Customer Service at WEBSCustomerService@des.wa.gov or call (360) 902-7400

3. With respect to agency expenditure, the agency aspirational goals are: 10% Minority Owned Business certified by the Office of Minority and Women Business Enterprises, 6%, Women Owned Business certified by the Office of Minority and Women Business Enterprises, 5% Veteran Owned Business certified by the Washington State Department of Veterans Affairs. 5% Washington Small Businesses self-identified in the WEBS http://www.des.wa.gov/services/ContractingPurchasing/Business/Pages/WEBSRegistration.aspx (WEBS). These goals are voluntary. Proposers shall pursue targeted outreach to Diverse Businesses as defined herein (a.). Further, Proposers shall advertise opportunities for Subcontractors in a manner reasonably designed to provide Diverse Businesses capable of performing the work with timely notice of such opportunities, and all advertisements shall include a provision encouraging participation by Diverse Businesses. Advertising may be done through general advertisements (e.g. newspapers, journals, etc.) or by soliciting bids directly from Diverse Businesses. Design-Builder shall provide Diverse Businesses that express interest with adequate and timely information about plans, specifications, and requirements of the Project.

4. Proposers shall not create barriers to open and fair opportunities for all businesses, including Diverse Businesses, to participate in on this Project and to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subcontractors and suppliers, the Proposer shall not discriminate on the basis of race, color, creed, religion, sex, age, nationality, marital status, or the presence of any mental or physical disability in an otherwise qualified disabled person.

F. Apprenticeship Participation

If awarded the Design-Build Contract, Proposer must comply with statutory requirements in accordance with Chapters 39.04 and 49.04 RCW. See Design-Build Contract Article 23 for specific requirements.

G. Military Construction Cooperative Agreement (MCCA)

Master Cooperation Agreement (MCA) between the National Guard Bureau and the State of Washington

Included is Article VII of the MCA and MCAA which describes the applicable law and regulations to the project.

The Design-Builder must comply and satisfy the Grantee's obligations described herein.

SECTION 00 74 00 - FEDERAL SPECIAL CONDITIONS

PART A - MILITARY CONSTRUCTION COOPERATIVE AGREEMENT (MCCA)

This Project is partially funded by the United States (federal) government. National Guard Bureau (NGB) and the State of Washington (Grantee) have entered into a Military Construction Cooperative Agreement (MCCA) to establish terms and conditions applicable to reimbursement of federal funds or contribution of In-Kind Assistance for design and construction of the Thurston County Readiness Center. Both NGB and the State of Washington desire design and construction of this facility. The design and construction process links the State of Washington's obligation to design with the state's obligation to construct a facility using a single MCCA. Any reference to Contractor applies to the Design-Builder. References to "Agreement" apply to the Design-Build Contract.

In accordance with Section 902 - "State Contract Flow-down" of the MCCA, the provisions of the following MCCA Article VIII are in effect for this Contract and apply to the Contractor [Design-Builder] to the identical extent they apply to the Grantee, unless state laws or regulations offer more protection. Contractor [Design-Builder] shall provide all documentation of compliance with MCCA Article VIII, both as described in Part B of these Federal Special Conditions and as further required by law. Contractor [Design-Builder] shall include the provisions of these Federal Special Conditions in all subcontracts and purchase orders, thus obligating flow-down compliance with MCCA Article VIII including all documentation requirements.

ARTICLE VIII - APPLICABLE LAWS AND REGULATIONS

Section 801. Applicable Law.

This MCCA is incidental to implementation of a Federal program. Accordingly, this MCCA shall be governed by and construed according to Federal law as it may affect rights, remedies, and obligations of the United States.

Section 802. Governing Regulations.

To the extent not inconsistent with express terms of this Agreement, the provisions of 32 CFR Part 33, Uniform Administrative Requirements for Grants and Cooperative Agreements, DoD Grant and Agreement Regulations (DoDGARS) (DoD 3210.6R) as amended, Title 2 Code of Federal Regulations (CFR) Part 225, and NGR 5-1, are hereby incorporated into this MCCA by reference as if fully set forth herein, shall govern this Agreement.

Section 803. Officials Not to Benefit.

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this agreement, or to any benefit arising from it, in accordance with 41 U.S.C. 22.

Section 803-A. Nondiscrimination. *(from MCA Section 803)*

The Grantee covenants and agrees that no person shall be subject to discrimination or denied benefits in connection with the State's performance under the MCA and this MCCA. Accordingly, and to the extent applicable, the Grantee covenants and agrees to comply with

the following national policies prohibiting discrimination:

a. On the basis of race, color or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. Section 2000d et seq.), as implemented by DoD regulations at 32 CFR Part 195.

b. On the basis of race, color, religion, sex, or national origin, in Executive Order 11246, as implemented by Department of Labor regulations at 41 CFR Chapter 60.

Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the **equal opportunity clause** provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

Required equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

1. *The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.*

2. *The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.*

3. *The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.*

4. ***The contractor will send** to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, **a notice, to be provided by the agency contracting officer**, advising the labor union or workers' representative of the **contractor's commitments under Section** 202 of Executive Order No. 11246 of September 24, 1965, and **shall post copies of the notice** in conspicuous places available to employees and applicants for employment.*

5. *The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.*

6. *The contractor will **furnish all information and reports required by Executive Order No. 11246** of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of*

investigation to ascertain compliance with such rules, regulations, and orders.

7. *In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.*

8. ***The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted** by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States. [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966–1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230, EO 13665 of April 8, 2014, 79 FR 20749, EO 13672 of July 21, 2014, 79 FR 42971]*

SEC. 203

a. ***Each contractor** having a contract containing the provisions prescribed in Section 202 **shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency** or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.*

b. *Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract. [see below]*

c. *Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, that to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.*

d. *The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall*

be in accordance with the purposes and provisions of the order. In the event that the union or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require. [see below]

The Contractor and every subcontractor shall provide a statement to DES for either paragraph b. for previous contracts or d. for policies and practices prior to each contract award.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966–1970 Comp., p. 684;

EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230, EO 13672 of July 21, 2104, 79 FR 42971]

c. On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et seq.), as implemented by DoD regulations at 32 CFR Part 196.

d. On the basis of age, in The Age Discrimination Act of 1975 (42 U.S.C. Section 6101 et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR Part 90.

e. On the basis of handicap, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR Part 41 and DoD regulations at 32 CFR Part 56.

Section 804. Lobbying. *(from MCA Section 804)*

a. The Grantee covenants and agrees that it will not expend any funds appropriated by Congress to pay any person for influencing or attempting to influence an officer or employee of any agency, or a member of Congress in connection with any of the following covered federal actions: The awarding of any federal contract; the making of any federal grant; the making of any federal loan; the entering into of any cooperative agreement (CA); and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or CA.

b. The Final Rule, New Restrictions on Lobbying, issued by the Office of Management and Budget and the Department of Defense (32 CFR Part 28) to implement provisions of Section 319 of Public Law 101-121 (31 U.S.C. § 1352) is incorporated by reference and the Grantee agrees to comply with all the provisions thereof, including any amendments to the Interim Final Rule that may hereafter be issued.

Section 805. Drug-Free Work Place. *(from MCA Section 805)*

The Grantee covenants and agrees to comply with the requirements regarding drug-free workplace in 32 CFR Part 26, which implements sec. 5151-5160 of the Drug-Free Workplace Act of 1988 (Public Law 100-690,Title V, Subtitle D; 41 U.S.C. 701 , et seq .).

Section 806. Environmental Standards. *(from MCA Section 806)*

a. The Grantee covenants and agrees that its performance under this Agreement shall comply with :
   (1) The requirements of Section 114 of the Clean Air Act (42 U.S.C. Section 7414);
   (2) Section 308 of the Federal Water Pollution Control Act (33 U.S.C. Section 1318), that relates generally to inspection, monitoring, entry reports, and information, and with all regulations and guidelines issued thereunder;
   (3) The Resources Conservation and Recovery Act (RCRA);
   (4) The Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA);
   (5) The National Environmental Policy Act (NEPA);
   (6) The Solid Waste Disposal Act (SWDA);
   (7) The applicable provisions of the Clean Air Act (42 U.S.C. 7401, et seq.) and Clean Water Act (33 U.S.C. 1251, et seq .), as implemented by Executive Order 11738 and

Environmental Protection Agency (EPA) rules at 40 CFR Part 31 ;

(8) To identify any impact this award may have on the quality of the human environment and provide help as needed to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321, et seq.) and any applicable federal, state or local environmental regulation.

b. In accordance with the EPA rules, the parties further agree that the Grantee shall also identify to the awarding agency (NGB) any impact this award may have on:

(1) The quality of the human environment and provide help the agency may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C 4321, et seq.) and to prepare Environment Impact Statements or other required environmental documentation. In such cases, the recipient agrees to take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) until the agency provides written notification of compliance with the environmental impact analysis process.

(2) Flood-prone areas, and provide help the agency may need to comply with the National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 , et seq .), which require flood insurance, when available, for federally assisted construction or acquisition in flood-prone areas.

(3) Coastal zones, and provide help the agency may need to comply with the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 , et seq .), concerning protection of U.S. coastal resources.

(4) Coastal barriers and provide help the agency may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501 et seq.), concerning preservation of barrier resources.

(5) Any existing or proposed component of the National Wild and Scenic Rivers System and provide help the agency may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.).

(6) Underground sources of drinking water in areas that have an aquifer that is the sole or principal drinking water source and provide help the agency may need to comply with the Safe Drinking Water Act (42 U.S.C 300H-3).

Section 807. Preference for U.S. Flag Air Carriers. *(from MCA Section 807)*

(Any agreement under which international air travel may be supported by U.S. Government funds)

a. Travel supported by U.S. Government funds under this agreement shall use U.S. flag air carriers (air carriers holding certificates under 49 U.S.C. 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) and the inter-operative guidelines issued by the Comptroller General of the United States in the March 31, 1981 , amendment to Comptroller General Decision B 138942.

b. The state (Grantee) agrees that it will comply with the Cargo Preference Act of 1954 (46 U.S.C. Chapter 553), as implemented by Department of Transportation regulation at 46 CFR 381.7, and 46 CFR 381.7 (b).

Section 808. Debarment and Suspension. *(from MCA Section 808)*

The Grantee covenants and agrees to comply with the requirements regarding debarment and suspension in Subpart C of the OMB guidance in 2 CFR Part 180, as implemented by the DoD in 2 CFR Part 1125. The Grantee agrees to communicate the requirement to comply with Subpart C to persons at the next lower tier (the subrecipient) with whom it enters into transactions that are "covered transactions" under Subpart B of 2 CFR Part 180 and the DoD implementation in 2 CFR Part 1125. The Grantee and Subrecipient shall comply with 2 CFR Part 1125 by checking the Excluded Parties list System (EPLS) at www.sam.gov to verify contractor eligibility to receive contracts and subcontracts resulting from this Agreement. The Grantee and Subrecipients shall not solicit offers from, nor award contracts to contractors listed in EPLS. This verification shall be documented in the Grantee and Subrecipient contract files,

and shall be subject to audit by the Grantor and federal/State audit agencies.

Section 809. Buy American Act. *(from MCA Section 809)*

The Grantee covenants and agrees that it will not expend any funds appropriated by Congress without complying with the Buy American Act (41 U.S.C. 10a, et seq./41 U.S.C. Ch.83). The Buy American Act gives preference to domestic end products and domestic construction material. In addition, the Memorandum of Understanding between the United States of America and the European Economic Community (EEC) on Government Procurement, and the North American Free Trade Agreement (NAFTA), provide that EEC and NAFTA end products and construction materials are exempted from application of the Buy American Act.

Section 810. Relocation Assistance and Real Property Acquisition. *(from MCA Section 810)*

The Grantee covenants and assures that it will comply with 49 CFR Part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601 et seq.) and provides for fair and equitable treatment of persons displaced by Federally assisted programs or persons whose property is acquired as a result of such programs.

Section 811. Copeland "Anti-Kickback" Act. *(All contracts and sub-grants for construction or repair.) (from MCA Section 811)*

The Grantee covenants and agrees that it will comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874), as supplemented in Department of Labor regulations (29 CFR Part 3). As applied to this MCCA, the Copeland "Anti-Kickback" Act makes it unlawful to induce, by force, intimidation, threat of procuring dismissal from employment, or otherwise, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled under a contract of employment.

Section 812. Contract Work Hours and Safety Standards Act.

The Grantee covenants and agrees that it will comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. Sections 3701-3708) as supplemented by Department of Labor regulations (29 CFR Part 5). As applied to this Agreement, the Contract Work Hours and Safety Standards Act specifies that no laborer or mechanic doing any part of the work contemplated by this Agreement on a contract for an amount greater than $100,000 shall be required or permitted to work more than 40 hours in any workweek unless paid for all additional hours at not less than 1.5 times the basic rate of pay.

Section 813. Davis-Bacon Act.

IF THIS AWARD TERM IS NOT AUTHORIZED BY NGB-ILI-C, IT REQUIRES STRIKETHROUGH.

~~The Grantee covenants and agrees that it will comply with the Davis-Bacon Act (40 U.S.C. Sections 3141-3148) as supplemented by U.S. Department of Labor regulations (29 CFR Part 5). (Construction contracts in excess of $2,000 awarded by grantees and subgrantees when required by federal grant program legislation). All rulings and interpretations of the Davis Bacon Act contained in 29 CFR Part 5 are incorporated by reference in this MCCA. As applied to this MCCA, the Davis Bacon Act (40 U.S.C. Sections 3141-3148) provides that contracts in excess of $2000 to which the federal Government provides assistance funding for construction, alteration, or repair (including painting and decorating) of public buildings in the United States, shall contain a provision that no laborer or mechanic employed directly upon the site of the work shall receive less than the prevailing wage rates as determined by the U.S. Secretary of Labor.~~

Section 814. National Historic Preservation.

(Any construction, acquisition, modernization, or other activity that may impact a historic property.)

The Grantee covenants and agrees to identify to the awarding agency any property listed or eligible for listing on the National Register of Historic Places that will be affected by this award, and to provide any help the awarding agency may need, with respect to this award, to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470, et seq.), as implemented by the Advisory Council on Historic Preservation regulations at 36 CFR Part 800 and Executive Order 11593.

(36 CFR Part 800 requires Grants Officers to get comments from the Advisory Council on Historic Preservation before proceeding with Federally assisted projects that may affect properties listed on or eligible for listing on the National Register of Historic Places.)

Section 815. Hatch Act.

The Grantee covenants and agrees to comply with the Hatch Act (5 U.S.C. 1501 - 1508 and 7324 - 7326), as implemented by the Office of Personnel Management at 5 CFR Part 151, which limits political activity of employees or officers of state or local governments whose employment is connected to an activity financed in whole or part with federal funds.

Section 816. Equal Employment Opportunity.

(All construction contracts awarded in excess of $10, 000 by grantees and their contractors or subgrantees.)

The Grantee covenants and agrees to comply with Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFR Chapter 60). *[also see requirements in Section 803.]*

Section 817. Cargo Preference. (Any agreement under which international air travel may be supported by U.S. Government funds.)

The Grantee covenants and agrees that it will comply with the Cargo Preference Act of 1954 (46 USC Chapter 553), as implemented by Department of Transportation regulations at 46 CFR 381.7, which require that at least 50 percent of equipment, materials or commodities procured or otherwise obtained with U.S. Government funds under this Agreement, and which may be transported by ocean vessel, shall be transported on privately owned U.S. flag commercial vessels, if available.

Section 818. Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects.

The Grantee covenants and agrees that it will comply with Executive Order 13202 of February 17, 2001, Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects, as amended on April 6, 2001.

Section 820. System for Award Management and Universal Identifier Requirements. *(from MCA Section 813.)*

The Grantee covenants and agrees to comply with the System for Award Management (SAM) and Data Universal Numbering Requirements (DUNS) as indicated below:

a. Requirement for SAM
   You as the recipient must maintain the currency of your information in the SAM until you submit the final financial report required under this Agreement or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

b. Requirement for Data Universal
   Numbering System (DUNS) Numbers If
   you are authorized to make subawards
   under this award, you:

(1) Must notify potential subrecipients that no entity (see definition in paragraph (c) of this Agreement term) may receive a subaward from you unless the entity has provided its DUNS number to you; and

(2) May not make a subaward to an entity unless the entity has provided its DUNS number to you.

(3) Definitions. For purposes of this Agreement:

(a) SAM means the official U.S. Government system that consolidated the capabilities of CCR and EPLS. There is NO fee to register in SAM. Entities may register at no cost at www.sam.gov. Additional information about registration procedures, updating your recipient account, searching records, as well as user guides and helpful hints may be found at the SAM website.

1. If you had an active record in CCR, you have an active record in SAM. You do not need to do anything in SAM at this time, unless a change in your business circumstances requires updates to your Entity record(s) in order for you to be paid or to receive an award or you need to renew your Entity(s) prior to its expiration. SAM will send notifications to the registered user via email 60, 30, 15 days prior to expiration of the Entity. To update or renew your Entity record(s) in SAM you will need to create a SAM User Account and link it to your migrated Entity records. You do not need a user account to search for registered entities in SAM by typing the DUNS number or business name in the search box.

(b) Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the internet (currently at http://fedgov.dnb.com/webform).

(c) Entity, as it is used in this award term, means all of the following, as defined at 2 CFR Part 25, Subpart C:

1. A Governmental organization, which is a state, local Government, or Indian Tribe;

2. A foreign public entity;

3. A domestic or foreign nonprofit organization;

4. A domestic or foreign for-profit organization; and

5. A Federal Agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

(4) Subaward:

(a) This term means a legal instrument to provide support for the performance of any portion of the substantive project or Program for which you received this Agreement and that you as the recipient award to an eligible subrecipient.

(b) The term does not include your procurement of property and services needed to carry out the project or Program (for further explanation, see Sec.----.210 of the Attachment to OMB Circular A-133, “Audits of States, eligible subrecipient.

(c) A subaward may be provided through any legal Agreement, including an Agreement that you consider a contract.

(5) Subrecipient means an entity that:

(a) Receives a subaward from you under this Agreement; and is accountable to you for the use of the Federal funds provided by the subawards.

Section 821. Reporting Subawards and Executive Compensation *(from MCA Section 814)*

The Grantee covenants and agrees to comply with the Reporting Subawards and Executive Compensation requirements indicated below:

a. Reporting of first-tier subawards.

1. Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates $25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. Where and when to report.

   i. You must report each obligating action described in paragraph a.1. of this award term to http://www.fsrs.gov.

   ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. What to report. You must report the information about each obligating action that the submission instructions posted at http://www.fsrs.gov specify.

b. Reporting Total Compensation of Recipient Executives.

1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if-

   i. the total Federal funding authorized to date under this award is $25,000 or more;

   ii. in the preceding fiscal year, you received-

      (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

      (B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

   iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:

   i. As part of your registration profile at http://www.ccr.gov.

   ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. Reporting of Total Compensation of Subrecipient Executives.

1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:

   i. In the subrecipient's preceding fiscal year, the subrecipient received-

      (A) 80 percent or more of its annual gross revenues from Federal procurement

contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. Exemptions

If, in the previous tax year, you had gross income, from all sources, under $300,000, you are exempt from the requirements to report:

i. Subawards, and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. Definitions. For purposes of this award term:

1. Entity means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian Tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. Executive means officers, managing partners, or any other employees in management positions.

3. Subaward:

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. ---- .210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. Subrecipient means an entity that

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
   i. Salary and bonus.
   ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
   iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
   iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
   v. Above-market earnings on deferred compensation which is not tax-qualified.
   vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

PART B - DOCUMENTATION REQUIRED TO VERIFY DESIGN BUILDER COMPLIANCE WITH MCCA

A. Contractor shall provide the following information to verify compliance with Article VIII of the Military Construction Cooperative Agreement (MCCA):
   1. MCA Section 803: EEO Notice of Commitment: Post on jobsite and submit to Owner copies of notices sent to applicable labor unions/worker reps. Contractor and every tier subcontractor shall provide a statement to Owner/DES for Sec. 203 either para. b. or para. d prior to each contract award.
   2. MCCA Section 805: Within 15 days of Notice to Proceed submit to Owner Contractor's Drug-Free Work Place Plan demonstrating compliance with Drug-Free Workplace Act of 1988 as described in this Section.
   3. MCCA Section 807: Within 15 days of Notice to Proceed, submit to Owner signed statement that Contractor will use U.S. flag air carriers for international air transportation of people and products for work associated with this Project as described in this Section.
   4. MCCA Section 808: Article VIII of the MCCA Section 808 - Debarment and Suspension prohibits the Washington Military Department from contracting with persons, organizations, or companies who have been excluded from participating in federal contracts or grants. As evidence of compliance with this requirement, Contractor shall complete and submit to Owner RFQ Attachment- A, "Debarment, Suspension, Ineligibility or Voluntary Exclusion Certification" with Statement of Qualifications. Submit completed form to Owner as described in the RFQ. Each sub-tier contractor shall complete and submit the Certification Form to Owner's representative prior to subcontract execution.
   5. MCCA Section 809: Contractor must certify that all products incorporated into the Work are in compliance with the Buy American Act. All new products shall comply with the Buy American Act. Where "Product data" is a submittal, include verification that the submitted product complies with the Buy American Act. For each substitution requested, document with complete data substantiating compliance of proposed substitution, include certification that proposed substitution meets the Buy American Act.
   6. MCCA Section 813: The Davis-Bacon Act does not apply to this Contract. State of Washington Prevailing Wages requirements identified in the RFQ. State of Washington requires reporting of certified payrolls for all tiers of contractors.
   7. MCCA Section 816: Within 15 days of Notice to Proceed submit to Owner

Contractor's Equal Employment Opportunity Plan demonstrating compliance with Executive Orders and Department of Labor regulations identified in this Section.

8. MCCA Section 818: Within 15 days of Notice to Proceed, submit to Owner signed statement that Contractor will comply with the Cargo Preference Act of 1954 for ocean transport as described in this Section.
9. MCCA Section 819: Within 15 days of Notice to Proceed, submit to Owner signed statement that Contractor will comply with Executive Order 13202 as described in this Section.
10. MCCA Section 820: Within 15 days of Notice to Proceed, submit to Owner signed statement that Contractor will comply with the Central Contractor Registration and Universal Identifier Requirements, including notice to subrecipients, described in this Section.
11. MCCA Section 821: Provide Owner a signed statement either (1) certifying Contractor has provided the required information to the listed websites, or (2) identifying which exemption excuses Contractor from reporting.

PART C - WASHINGTON MILITARY DEPARTMENT AMENDMENT TO DESIGN BUILD CONTRACT

Add the following new Subparagraph 3.7.1 - Additional Spill Procedures:

(5) Additional Spill Procedures: Contractor is responsible for following the report procedure outlined in Attachment No. 1, Unified Washington Military Department and National Guard Policy No. 10-03 and Military Department Procedure No. EMS 500-3-01- 10, Spill Response and Reporting Procedure, Section 4, Responsibility

END OF SECTION (Attachment No. 1 - EMS 500-3-01-10; and Attachment No. 2 - "Debarment, Suspension, Ineligibility or Voluntary Exclusion Certification, see Request for Qualifications.)

Washington State
Military Department

Environmental Procedure: EMS_2015_001 (Spill Response and Reporting Procedures)

Title:	Spill Response and Reporting Procedures
Additional References:	Army Regulation 200-1 WAC 173-180 (Facility Oil Handling Standards) WMD_EMS: Legal and Other Requirements WMD_EMS: Communications WMD_EMS: Document Controls WMD_EMS: Emergency Preparedness and Response WMD_EMS: Monitoring, Measuring, & Evaluation WMD_EMS: Non-conformance & Corrective Actions WMD_EMS: Control of Records WMD_EMS: Internal Audits WMD_EMS: Management Reviews WMD Spill Reporting Form WMD Spill Reporting Form (electronic version) WMD Spill Cards (New Cards)
Information Contact:	Environmental Management System (EMS) Manager Building #36 (253) 512-8902
Effective Date:	**01-MARCH-2017**
Mandatory Review Date:	**01-MARCH-2018**
Revised:	**01-MARCH-2016**
EMS Document Owner:	EMS/Programs Manager
Approved By:	Adam M. Iwaszuk ADAM IWASZUK Director, CFMO

IMPORTANT CONTACT INFORMATION:

JOC (on Camp Murray)	253-512-8773
JOC (external)	1-888-276-4362
Environmental Program Manager (office)	253-512-8466
Environmental Program Manager (mobile)	253-255-8031
Environmental Office (Front Desk)	253-512-8717
Department of Ecology (SW region)	1-360-407-6300
Department of Ecology (Central region)	1-509-575-2490
Washington Emergency Management Division	1-800-258-5990 or 1-800-OILS-911

1. PURPOSE

The reason for this guideline is to provide an approved method for responding to and reporting of all spills or releases to include those spills or releases involving any identified dangerous waste, chemicals, or toxic substances. The intent is to ensure actions taken during a spill or releases are in compliance with applicable Federal, State, or Regional laws and regulations.

2. APPLICABILITY

This guideline applies to all federal technicians or federal employees, WMD traditional soldiers (M-Day), Active Guard or Reserve (AGR) employees, full or part time State of Washington employees, contractors or sub-contractors working as representatives of the WMD, and vendors providing services and support to the WMD at all WMD installations, facilities, or armories.

Personnel attached or assigned to other installations, such as Joint Base Lewis-McChord (JBLM), Yakima Training Center (YTC), or Fairchild Air Force Base, are reminded that they are required to comply with the requirements enforced on their respective host installations. The WMD, however, will assist these units as best as possible and within the scope of the host installation's standards.

3. DEFINITIONS

- **Contaminated Environment:** Any navigable waters, surface waters, surface water drainage, ground water, drinking water supply, land surfaces or sub-surfaces, strata, or air which may be contaminated with the spill or release materials.
- **Defense Spill Team:** The on-site crew who have received training and are qualified to perform containment and cleanup operations when conditions exist that do not pose an immediate or serious danger to employee's health or safety in order to prevent further spill or releases to the environment, cause injury to personnel, or damage property.
- **DeMinimus Release(s):** Any release of less than one-gallon of a known hazardous chemical or substance to an impervious surface, provided the release will not come in contact with the environment and can be easily absorbed, neutralized or otherwise controlled at the time of release by properly trained and equipped personnel within the immediate areas.
- **Emergency Coordinator:** The person who is on-site or the on-call representative who can reach the facility within a reasonable period of time who is trained in WAC 173-303-360 requirements and has the responsibility for coordinating all emergency response activities.
- **Emergency Spill Response Personnel:** Personnel who have been trained and are qualified to respond to and clean-up spills or a release that on site personnel are not trained or equipped to respond too. This includes first responders, fire-fighters, and emergency medical services personnel.

- **Environmental Program Supervisor:** The Environmental Program Supervisor is the senior supervisor of the WMD's environmental section and works for the Construction, Facility, & Maintenance Office (CFMO) Deputy. The Environmental Supervisor has the responsibility to facilitate all spills and when required initiate all reports to required agencies.
- **Impervious surface(s):** Any material such as asphalt, concrete, brick, or stone in which water will not easily pass through.
- **Installation Contingency Plan (ICP):** A site specific plan or equivalent plan to be implemented in the event of an emergency or spill. Plan should include contact lists and corrective action/preventative action procedures.
- **Joint Operation Center (JOC):** The JOC is a dedicated 24/7 response dispatcher for emergency incidents, initiating WMD protocols for emergencies, and in the event of spills or releases, notify the EM or designated EM. The JOC is responsible for logging the incident, providing necessary information to the EM or EM's office, and provide additional notification(s) as required.
- **Preventative Corrective Action Request (PCAR):** A request initiated by the site supervisor or manager to identify and track the root cause of the spill or release and to develop the appropriate corrective or preventative actions to prevent a similar event from occurring.
- **Spill Prevention Control & Countermeasures Plan:** A more complex and detailed spill plan required of certain facilities that helps those facilities recognize spill or release dangers and prevent a discharge of oil or other chemicals into the environment.
- **Spill or Release:** Any material that unintentionally is released from a container either by accident or deliberately that if left uncontrolled may cause significant damage or harm to the environment or to personnel.
- **Spill Report:** A written or electronic entry of the information relevant to the spill or release that is submitted to the WMD's Environmental Office. This spill report must be completed and submitted to the WMD's Environmental Office within 24 hours of the spill or release being discovered or occurring.

4. **RESPONSIBILITY (Refer to Appendix A of this guidance on the spill flow chart)**

4.1: The person(s) first discovering or noticing the spill or release is responsible for doing the following in order to prevent further damage:

4.1.1: Protect yourself and others in the immediate area from further harm or danger.

4.1.2: If there is a need for emergency services or there is a need for medical services, call 911 immediately.

4.1.3: If necessary, evacuate personnel to a safe area.

4.1.4: Gather as much information about the spill or release as possible. Questions to consider are:

- Do you know what the material is that was spilled or released?
- Are you able to control, contain, or provide clean-up for this material?
- Do you know how much (approximately) of materials spilled?
- What type of surface was the material spilled on? (Asphalt, concrete, packed dirt, gravel, lose soil, water ways, marshes, etc.)
- Has the spilled materials reached any water systems such as drains, ditches, streams, wet-lands, etc.?
- What is the closest landmark or intersection to the spill (street, building, etc.)?
- Has emergency services (9-1-1) been initiated? If so how long ago?
- Are there any other resources that are necessary?

4.1.5: Call the Joint Operations Center (JOC) immediately to report the spill or release. Provide as much detail on the spill or release as possible. Be prepared to answer additional information that the person receiving the call may ask.

4.1.6: Notify your immediate supervisor or shift supervisor of the spill or release.

4.1.7: If trained or properly equipped, begin the clean up the spill or release.

4.1.8: Complete the **Spill Report Form** (or electronic version found on GKO).

4.1.9: Follow any instructions given to you by the Emergency Coordinator.

4.2: Spills or releases that occurs during transit or convoys

4.2.1: Protect yourself and others in the immediate area from further harm or danger.

4.2.2: Pull off the roadway to a safe area and away from traffic.

4.2.3: Call 911 and report the spill or release. If the spill or release is an emergency or injuries are involved report this to the 911- dispatcher. Be prepared for and follow the instructions given to you by the 911 dispatcher.

4.2.4: Notify (call) the JOC and report the incident. Give as much detail of the spill or release as you have available to the JOC dispatcher.

4.2.5: Notify your immediate supervisor or shop supervisor of the incident as soon as possible so that they can.

4.2.6: Initiate and submit the **Spill Report Form** to environmental as soon as possible. The form may either be written or by using the electronic format found on GKO.

4.3: Discoveries, unknown substances, or illicit discharges intentionally dumped or released into equipment (such as oil-water separators, drains, wells, etc.)

4.3.1: Protect yourself and others in the immediate area from further harm or danger.

4.3.2: Call 911 and report the spill or release. If the spill or release is an Emergency or injuries are involved report this to the 911 dispatcher. Be prepared to and follow the instructions given to you by the 911 dispatcher.

4.3.3: Gather as much information as you possibly can on the spill or release. Questions to consider are:

- Do you know what the material is that was spilled or released?
- Are you able to control, contain, or provide clean-up for this material?
- Do you know how much (approximately) of materials spilled?
- What type of surface was the material spilled on? (Asphalt, dirt, water, etc.)
- Has the spilled materials reached any water (drains, ditches, streams, etc.)?
- What is the closest landmark to the spill (street, building, etc.)?
- Has emergency services (911) been initiated? If so how long ago?
- Are there any other resources that are necessary?

4.3.4: Notify (call) the JOC and report the incident. Provide as much detail as possible. Be prepared to answer additional questions if needed.

4.3.5: Follow the instructions given to you from the Emergency Coordinator.

4.3.6: Complete and submit the agency's **Spill Report Form.**

4.3.7: Coordinate with the WMD's Environmental Office for any help or assistance you may needed.

4.4: Responsibilities of the Defense Spill Team

4.4.1: Be prepared to conduct and start clean-up duties when notified (activated) by the Emergency Coordinator.

4.4.2: Follow the approved clean-up procedures to meet health and safety requirements.

4.4.3: Dispose of spilled or released materials in accordance with applicable laws and regulations.

4.4.4: Follow any additional instructions given to you by the Environmental Coordinator.

4.5: Supervisors Responsibilities

4.5.1: Identify and attend to any injured personnel. Verify that 911 has been called.

4.5.2: Verify the JOC has been notified (called).

4.5.3: Verify the WMD Environmental Office has been notified (called).

4.5.4: Verify appropriate controls, containment, and clean-up measures have been taken and are appropriate. Report to the WMD Environmental Section when they are completed.

4.5.5: Verify the **Spill Report Form** (or electronic version) has been completed for any spill or release within 24 hours.

4.5.6: Follow any additional instructions provided by the Environmental Coordinator.

4.5.7: If required, complete a PCAR and submit to the WMD Environmental Office within 10 calendar days of any spill or release.

4.6: JOC Responsibilities

4.6.1: Log incident event into daily journal and notify WMD Environmental Office.

4.6.2: If spill or release is uncontrollable, verify that 911 has been called.

4.6.3: Determine if personnel at the site of spill or release are trained and equipped to handle the spill or release.

4.6.4: Determine what other actions have been taken.

4.6.5: Notify the WMD's Environmental Program Manager or designee of the incident. If unable to reach either person, the JOC should follow their written guidelines and notify the Emergency Management Division (EMD) and the Department of Ecology.

4.6.6: Remind personnel calling to report the spill or release that they are to complete a **Spill Report Form** (or electronic version) within 24 hours.

4.6.7: Ensure the WMD Environmental Office has been made aware of the incident and has the needed information.

4.7: The Emergency Coordinator's responsibilities

4.7.1: Upon notification from the JOC or from the unit, a representative from the environmental office, who is trained as an Emergency Coordinator and has been appointed by the TAG, will investigate the spill and report the findings.

4.7.2: If the spill or release occurs on public roads or on other property where First Responders are on-scene, the Emergency Coordinator will secure a copy of the response report and document the information on the WMD's **Spill Response Form** (or electronic version).

4.7.3: If the spill or release involved an unknown substance or material, the Emergency Coordinator will follow the standard protocols for identifying the material or waste determination.

4.7.4: Determine whether the spill or release can be cleaned with WMD internal resources or if an outside contractor is required.

4.7.5: If necessary, activate the Defense Spill Team to assist in the clean-up.

4.7.6: Verify actions taken to handle the clean-up materials and waste. are properly controlled and disposed of.

4.7.7: Follows up with the **Spill Report Form** (or electronic version) to ensure it has been filed and completed within the 24-hour time limit.

4.7.8: If required, ensures the PCAR has been completed and has been submitted within the 10-day time limit.

4.7.9: Submit a written report to the Department of Ecology within 15-days after the incident was first reported. Refer to Appendix C: Ecology Spill Information

4.7.10: Follow up on the Corrective Action Log and ensure the information has been entered into the WEBCASS directory (if needed). Validate the Root Cause.

4.8: Training

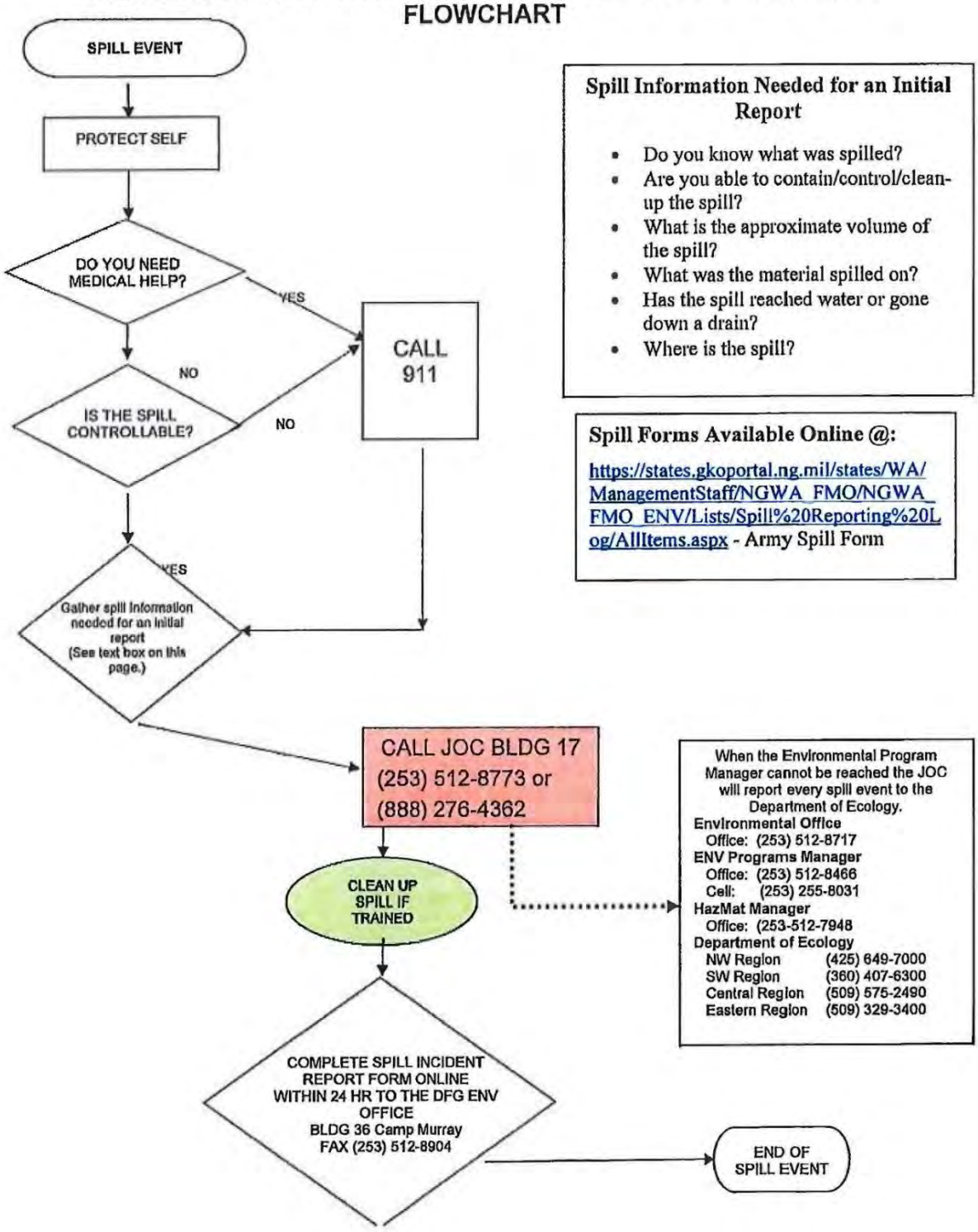
4.8.1: All personnel who may be involved in the recognition or may be involved with a spill or release MUST receive annual training.

4.8.2: Training must be documented and recorded in the unit training binder or training files. This is an inspected item.

4.9.3: After each spill or release incident, training or familiarization on the root causes and after-action results.

Appendix A: Emergency Response Notification and Spill Response Flowchart

EMERGENCY RESPONSE NOTIFICATION AND SPILL RESPONSE FLOWCHART



Spill Information Needed for an Initial Report

- Do you know what was spilled?
- Are you able to contain/control/clean-up the spill?
- What is the approximate volume of the spill?
- What was the material spilled on?
- Has the spill reached water or gone down a drain?
- Where is the spill?

Spill Forms Available Online @:

https://states.gkoportal.ng.mil/states/WA/ManagementStaff/NGWA_FMO/NGWA_FMO_ENV/Lists/Spill%20Reporting%20Log/AllItems.aspx - Army Spill Form

Appendix B: Spill Incident Report
Note: Available on line at the Agency's GKO Environmental Site

SPILL INCIDENT REPORT

Submit spill report to the Environmental Office after initial cleanup has been completed and within 24 hours. Contact information is at the end of this form.

1. **FACILITY NAME:**_____

   ADDRESS:_____

   CITY or TOWN:_____

   NEAREST HIGHWAY or INTERSECTION:_____

2. **DATE AND TIME OF INCIDENT:**_____

3. **NAME AND TEL. NUMBER OF ON-SCENE CONTACT:**_____

4. **SEVERITY OF THE INCIDENT:** ☐Spill ☐Fire ☐ Explosion ☐Other_____

a. Name or Type of Spilled Material: _____
b. Total Amount Spilled (lbs, gal): _____
c. Amount Recovered (lbs, gal): _____
d. Fate of Recovered Materials (i.e., oil, water, soil, absorbents): _____
☐ Facility Evacuated ☐ Injuries:_____ ☐ Spill Team Activated ☐ Photos

5. **SIGNIFICANT AREAS AFFECTED BY THE SPILL:** (Indicate location of any of the following affected areas, and estimate amount spilled in or on each area). **Affected Area (sq ft):**_____

☐ Building Area ☐ Surface Water
☐ Floor Drains ☐ Storm Drains
☐ Drainage Ditches ☐ Soil or Gravel Surfaces

SPECIFICS
_____
_____

6. **LOCAL TERRAIN CONDITIONS:** (Check off most appropriate description).
☐ Flat: (no significant slope) ☐ Somewhat Flat: (1-5% slope) ☐ Gently Rolling: (5-10% slope)
☐ Sharply Rolling: (10-20% slope) ☐ Steep: (>20% slope)

7. **WEATHER CONDITIONS:** (Check off most appropriate condition).
☐ Dry ☐ Fog or Drizzle ☐ Rain ☐ Snow ☐ Other

8. **CAUSE AND SOURCE OF INCIDENT:** (Check off most appropriate choice and give a brief description of the problem): _____
_____
_____
☐ Equipment Failure ☐ Accident ☐ Human Error ☐ Other

9. **OFFICES NOTIFIED:** (Check-off the offices that were notified and the name of the person who took the report over the telephone).

- ☐ WAARNG CFMO/ENV Office
- ☐ Emergency Operations Center
- ☐ National Response Center
- ☐ WA DOE
- ☐ JOC
- ☐ Other

Name: _____
Org: _____
Position: _____
Phone: _____

Name: _____
Org: _____
Position: _____
Phone: _____

10. **FUTURE PREVENTION:** (Note any equipment repairs or other measures taken to prevent reoccurrence):

_____

_____

Submit this form to the Environmental Office within 24 hours.

Phone: (253) 512-8717 (call for an email address)
Fax: (253) 512-8904

Submit in person at Building 36 Environmental Section, on Camp Murray.

Or complete the form online at:
For personnel with access to GKO:

https://states.gkoportal.ng.mil/states/WA/ManagementStaff/NGWA_FMO/NGWA_FMO_ENV/Lists/Spill%20Reporting%20Log/AllItems.aspx

Appendix C: Department of Ecology Report Information

This information is required to be submitted to the Washington State Department of Ecology for any spills or releases:

A. Name, Address, and Phone Number of the owner or operator involved in the incident.
B. Name, Address, and Phone Number of the facility or installation involved in the incident.
C. Date and Time of the incident.
D. Type of incident (Fire, Explosion, Accident, etc.).
E. Name of chemical or material spilled or released.
F. Quantity of chemical or material spilled or released (approximate amount).
G. Any injuries (specify type and extent, if known).
H. An assessment of actual hazards or dangers to human health or to the environment.
I. An assessment of potential hazards or dangers to human health or to the environment.
J. Estimated quantity & disposition of recovered materials (wastes) generated from the incident.
K. Cause of the incident.
L. Any corrective or preventive actions taken or recommended.

Information should be submitted within 15-days and addressed to:

Spills Program Manager (Attention: Dale Jensen)
Department of Ecology
P.O. Box 47775
Olympia, WA 98504-775

II. DESIGN-BUILD CONTRACT

DESIGN-BUILD CONTRACT
2017-814

By and Between

STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES
and
WASHINGTON MILITARY DEPARTMENT
(Owner)

and

(Design-Builder)

For

TRI-CITIES READINESS CENTER

at
Richland, WA

DATE

II. DESIGN-BUILD CONTRACT

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DESIGN-BUILD AGREEMENT

THIS DESIGN-BUILD AGREEMENT is made and entered into as of this Date? by and between the state of Washington Department of Enterprise Services ("Owner") and Contractor, the Design-Builder, with its principal office located in Location ("Design-Builder") (Owner and Design-Builder collectively the "Parties").

RECITALS

WHEREAS, on or about Date? Owner issued a Request for Qualifications ("RFQ") for the design and construction of the Tri-Cities Readiness Center for the Military Department in Richland, WA ("Project"); and

WHEREAS, on or about Date? after evaluating the proposals submitted in response to the RFQ, Owner invited three proposers, to submit Proposals ("Proposals") in response to Owner's Request for Proposals ("RFP"); and

WHEREAS, on or about Date? Owner issued the RFP Documents to the proposers; and

WHEREAS, on or about Date? Design-Builder submitted its Proposal in response to the RFP and

WHEREAS, after evaluating Design-Builder's Proposal in accordance with the processes and criteria set forth in the RFP, Owner determined that its interests would be best-served by negotiating with Design-Builder and attempting to reach agreement on the terms of a design-build contract; and

WHEREAS, Owner and Design-Builder successfully concluded the negotiation process, resulting in Owner issuing a Notice of Intent to Award this Design-Build Agreement to Design-Builder.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, intending to be legally bound, the Parties agree as follows:

ARTICLE 1: AGREEMENT; INTERPRETATION; DEFINITIONS

1.1 Documents Included. The Contract Documents include this Design-Build Contract between Owner and Design-Builder (this "Agreement"), as modified or amended, and the following documents which are attached hereto or shall be attached hereto in accordance with the provisions of this Agreement (collectively, "Appendices"), and which are specifically incorporated and made a part of the Contract Documents by this reference:

- Construction Documents prepared and approved in accordance with Section 3.3.6
- RFP Documents, as defined in Section I, Article II, G of the RFP including amendments thereto.
- Design-Builder's Proposal, including exhibits thereto (as negotiated with Owner)
- Design-Builder's Statement of Qualifications dated May 19, 2020.
- Exhibits referenced in this Agreement

1.2 Entire Agreement. Any Work which was performed or caused to be performed by Design-Builder prior to the Notice to Proceed shall be deemed to have been performed under and governed by this Agreement. Those Contract Documents in existence as of the Agreement Date set forth the full and complete understanding of the Parties relating to the subject matter hereof as of the Agreement Date, and supersede any and all negotiations, agreements and representations made or dated prior thereto. Contract Documents may be supplemented, modified or otherwise amended after the Agreement Date by mutual written agreement or otherwise in accordance with the terms of this Agreement.

1.3 Conflicting Provisions/Order of Precedence. The Contract Documents are intended to be complementary and a requirement shown in one Contract Document is intended to be as binding as if included in all Contract Documents. In the event of any conflict or inconsistency between or among the Contract Documents, such conflict shall be resolved in accordance with the following order of precedence:

1) All written modifications and amendments to this Agreement;
2) This Agreement, exclusive of the Appendices;
3) Approved exceptions to RFP Documents as contained and identified in Design-Builder's Proposal (as negotiated with Owner);
4) RFP Documents
5) Construction Documents prepared and approved in accordance with Section 3.3.6 of this Agreement;
6) Design-Builder's Proposal (as negotiated with Owner);
7) Design-Builder's Statement of Qualifications dated May 19, 2020.
8) All other Appendices to this Agreement.

Either Party, upon becoming aware of any conflict or inconsistency between or among any of the Contract Documents, shall promptly notify the other Party in writing of such conflict or inconsistency, with the resolution of such conflict or inconsistency to be made by Owner and provided to Design-Builder in writing. If Design-Builder disagrees with Owner's means of

resolution of a conflict or inconsistency, it shall have the right to proceed in accordance with the provisions of Section 8.6.

1.4 Rules of Interpretation

1.4.1 Terminology. Unless otherwise required by the context in which any term appears:

1) Capitalized terms used in this Agreement shall have the meanings specified in this Article or defined elsewhere in this Agreement.
2) The singular shall include the plural and the masculine shall include the feminine and neuter.
3) References in this Agreement to “Articles,” “Sections,” or “Appendices” shall be to articles, sections, or appendices of this Agreement, and references to paragraphs shall be to separate paragraphs of the section or subsection in which the reference occurs.
4) The words “herein,” “hereof,” “hereto” and “hereunder” shall refer to this Agreement as a whole and not to any particular section or subsection of this Agreement; the words “include,” “includes” or “including” shall mean “including, but not limited to.”
5) The term “day” shall mean calendar day, the term “month” shall mean a calendar month, and the term “year” shall mean a calendar year. The term “business day” shall mean a weekday on which commercial banks are commonly open in the location where the relevant: (a) payment of funds is to be received; (b) notice is to be received; or (c) performance is to be made; provided, that in the case of (c), if performance is to be made on the Site and if work is normally scheduled to be conducted at the Site on a weekend or holiday, then such day shall be considered a business day. Whenever an event is to be performed by a particular date, or a period ends on a particular date, and the date in question falls on a day that is not a business day, the event shall be performed, or the period shall end, on the next succeeding business day.
6) All accounting terms not specifically defined herein shall be construed in accordance with Generally Accepted Accounting Principles in the United States of America, consistently applied.
7) Use of the word “and” herein shall be construed in the conjunctive form and shall not be construed to mean “or.”
8) Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to any governmental code, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of the Proposal, except as may be otherwise specifically stated. Wherever in the Contract Documents an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings or required to complete the installation.

1.4.2 Headings. The titles of the articles and sections herein have been inserted as a matter of convenience of reference only and shall not control or affect the meaning or construction of any of the terms or provisions hereof.

1.4.3 Joint Responsibility for Drafting. This Agreement was negotiated and prepared by both Parties with advice of counsel to the extent deemed necessary by each Party; the Parties have agreed to the wording of this Agreement; and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this Agreement or any part hereof.

1.5 Definitions. For the purposes of the Contract Documents, the following words and terms shall have the meanings specified below:

1.5.1 Agreement. This executed Design-Build Contract between Owner and Design-Builder, as amended.

1.5.2 Agreement Date. The date first set forth in the Preamble to this Agreement.

1.5.3 Allowance Item. A stated requirement of the Contract Documents whereby a specified sum of money is incorporated, or allowed, into the Contract Sum at time of award in order to sustain the cost of a stipulated material, assembly, piece of equipment, or other part of the construction contract. This allowance may be used in cases where the particular item cannot be fully described in the Contract Documents.

1.5.4 Allowance Value. A stated reasonable estimate of cost to be applied to an Allowance Item.

1.5.5 Appendices. The documents identified as appendices in Section 1.1.

1.5.6 Application for Final Payment. The Application for Payment submitted by Design-Builder after the Certificate of Final Acceptance has been issued and which meets all of the requirements set forth in Section 6.5.1.

1.5.7 Application for Payment. A written request submitted by Design-Builder for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner may require.

1.5.8 Certificate of Final Acceptance. Written certification by Owner that all conditions of Final Acceptance have been met.

1.5.9 Change of Law. Any of the following events, to the extent they materially increase Design-Builder's cost to perform the Work or materially adversely impacts Design-Builder's ability to achieve the Guaranteed Completion Date(s): (a) the enactment, adoption, promulgation, modification or repeal, after the Agreement Date, of any Governmental Rules; or (b) the imposition of any material condition on the issuance

or renewal of any Governmental Approval after the Agreement Date; or (c) the failure to issue or renew any Governmental Approval; provided, however, that none of the following shall be a Change of Law: (i) any Governmental Rules issued, enacted, or adopted before the Agreement Date but which does not become effective until after the Agreement Date; (ii) the general requirements contained in any Governmental Approval at the time of application or issuance to comply with future laws, ordinances, codes, rules, regulations, or similar legislation; (iii) a change in applicable national or any other income or gross receipts tax law, enacted or effective after the Agreement Date; or any event identified in (a) through (c) above that was caused by Design-Builder's negligence, willful misconduct, or failure to comply with its obligations under this Agreement.

1.5.10 Change Order. A written order to Design-Builder signed by Owner and Design-Builder stating their agreement upon all of the following: (a) the scope of the change in the Work; (b) the amount of any adjustment to the Contract Sum; and (c) the extent of any adjustment to the Guaranteed Completion Date(s). A Change Order may authorize an addition, deletion, or revision in the Work, any change to the Contract Sum, and/or any adjustment to the Guaranteed Completion Date(s). Change Orders shall be considered to be a modification to this Agreement.

1.5.11 Change Order Proposal (COP). A written proposal submitted by the Design-Builder to the Owner proposing: (a) Scope definition and costs related to a change in the Work; (b) details regarding the development of costs proposed for any adjustment to the Contract Sum; and (c) the extent of any adjustment to the Guaranteed Completion Date(s) as more fully defined in Articles(s) 9 & 10.

1.5.12 Claim. Design-Builder's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in Section 8.6 and Article 11.

1.5.13 Construction Documents. Documents developed by Design-Builder pursuant to Section 3.3.6 describing the requirements for construction of the Work.

1.5.14 Contingency. The financial sum set forth in Section 5.8.1.2 which is available for Design-Builder's exclusive use for unanticipated costs it has incurred that are not the basis for a Change Order under the Contract Documents.

1.5.15 Contract Documents. This Design-Build Contract between Design-Builder and Owner and the Appendices referenced in Section 1.1.

1.5.16 Contract Sum. The Lump Sum Amount payable to Design-Builder as set forth in Section 5.1; as such amount may be adjusted pursuant to the terms of this Agreement.

1.5.17 Contract Time. The number of calendar days allotted in the Contract Documents for Design-Builder to achieve Substantial Completion of the Work.

1.5.18 Cost of the Work. Means those costs specified in Section 5.5 that are reasonably and actually incurred by Design-Builder in the proper performance of the Work.

1.5.19 Days. Unless otherwise specified, day(s) shall mean calendar day(s).

1.5.20 Design-Builder. Party entering into this Agreement with Owner in which the Party agrees to both design and build the Work as specified in this Agreement.

1.5.21 Design Consultant. A qualified, licensed design professional who is not an employee of Design-Builder, but is retained by Design-Builder, or employed or retained by anyone under contract with Design-Builder or Subcontractor, to furnish design services required under the Contract Documents.

1.5.22 Design Work Product. All drawings, documents, specifications, and other documents and electronic data furnished by or through Design-Builder to Owner under this Agreement.

1.5.23 Environmental Law. Any environmental or health and safety-related Governmental Rule.

1.5.24 Equipment and Materials. All of the equipment, materials, machinery, apparatus, structures, supplies and other goods required by the terms of this Agreement to complete the Work and are incorporated into the Project.

1.5.25 Excusable Delay. Those events defined in Section 10.7.

1.5.26 Fee. Design-Builder's Fee shall be the amount specified in Section 5.4.

1.5.27 Field Authorization. A written directive from Owner to Design-Builder to proceed with changed Work when the processing time for an approved Change Order Proposal and Change Order would impact the Project.

1.5.28 Final Acceptance. The formal written acceptance issued to Design-Builder by Owner after Design-Builder has completed the requirements of the Contract Documents and achieved Final Completion as more fully set forth in Section 7.4.

1.5.29 Final Completion. Satisfaction of the conditions set forth in Section 7.4.1.

1.5.30 Lump Sum Exhibit. All documents utilized to develop the Lump Sum Price Proposal (Exhibit C – Schedule 5.8).

1.5.31 Lump Sum Proposal. The Lump Sum Price proposal set forth in Design-Builder's Base Contract Price Proposal Form (RFP Appendix, Section II) (attached as Exhibit D – Schedule 5.8).

1.5.32 Governmental Approvals. Any authorizations, consents, approvals, licenses, leases, rulings, permits, certifications, exemptions, or registrations by or with any Governmental Unit.

1.5.33 Governmental Rules. Any statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, directives, guidance documents, by-laws or requirements, or any similar form of decision of or determination by, or any interpretation or administration of any of the foregoing by, any Governmental Unit.

1.5.34 Governmental Unit. Any national, state or local government, any political subdivision thereof, or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body or other entity having jurisdiction over the performance of the Work, the Project or the Parties; provided, however, that the term "Governmental Unit" shall not be construed to include Owner.

1.5.35 Guaranteed Completion Date(s). The dates by which Design-Builder guarantees to achieve Substantial Completion and Final Completion, pursuant to Section 7.2.

1.5.36 Lump Sum Price. The sum specified in Section 5.1, which shall be paid to Design-Builder in accordance with Article 6 and shall be complete compensation for all Work to be performed by Design-Builder under the Contract Documents, subject to increases or decreases by Change Order only as specifically provided in this Agreement.

1.5.37 Hazardous Materials. Any hazardous or toxic substance or hazardous or toxic waste, contaminant, or pollutant as defined in or regulated by applicable Environmental Law.

1.5.38 LEED. Leadership in Energy and Environmental Design.

1.5.39 Liquidated Damages. Delay damages payable to Owner pursuant to Section 7.5.

1.5.40 Notice. A written notice delivered to the designated representative of the applicable Party (e.g., Owner's Representative and Design-Builder's Project Manager).

1.5.41 Notice to Proceed. Formal written notice that defines the date on which the Contract Time begins to run provided by Owner to Design-Builder pursuant to Section 7.1.

1.5.42 Notice to Proceed Date. The date that Design-Builder receives the Notice to Proceed.

1.5.43 Owner. State of Washington Department of Enterprise Services and Washington State Military Department.

1.5.44 Owner's Design-Build Consultant. The firm engaged by Owner and identified to Design-Builder in accordance with Section 2.4.

1.5.45 Owner's Representative. The individual designated by Owner pursuant to Section 2.1.2, who shall have the responsibility and authority specifically delegated to such individual by Owner and made known in writing to Design-Builder.

1.5.46 Owner's Separate Contractors. Those contractors identified in Section 2.3.

1.5.47 Party. Owner or Design-Builder.

1.5.48 Parties. Owner and Design-Builder.

1.5.49 Prior Occupancy. Owner's use of all or parts of the Project before Substantial Completion as more fully described in Section 7.3.4.

1.5.50 Project. The Tri-Cities Readiness Center, located in Richland, Washington.

1.5.51 Project Manager. The Project Manager designated by Design-Builder and made known in writing to Owner, who shall be authorized to act on behalf of Design-Builder as more fully set forth in Section 3.2.

1.5.52 Project Schedule. The specified Critical Path Method (CPM) schedule identified in Section 25.1, updated pursuant to Section 25.2.

1.5.53 Proposal. Design-Builder's response to the RFP.

1.5.54 Punchlist. The list of Work, submitted by Design-Builder and approved by Owner, which remains to be completed after Substantial Completion, and updated thereafter as herein provided, which shall be only those items of Work: (a) that do not preclude the Project from operating or functioning as it was designed and intended to operate; (b) the absence of which does not create any occupational hazard or hazard to the Work; and (c) the completion of which will not unreasonably interrupt or interfere with Owner's ability to conduct its operations.

1.5.55 Request for Proposals (RFP). The Design-Build Request for the Tri-Cities Readiness Center located in Richland, Washington, dated May 4, 2020.

1.5.56 Retainage. Funds withheld by Owner pursuant to RCW 60.28.011 and more fully described in Section 6.4.2.

1.5.55 Savings. The difference between the sum of the Design-Builder's Cost of the Work and Fee (and, if applicable, any prices established under Article 5) and the Lump Sum Price, as such the Contract Sum may have been adjusted over the course of the Project.

1.5.57 Schedule of Values. A written breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner.

1.5.58 Scope Validation Period. The time period set forth in Section 3.3.5.1.

1.5.60 Site. The location of the Project for construction and any adjacent occupation of property by the Design-Builder.

1.5.61 Subcontractor. Any person or entity, including any vendor or Design Consultant, with whom Design-Builder has entered into any subcontract to perform any part of the Work, and shall specifically include any person, entity, or subconsultant at any tier with whom any Subcontractor has further contracted any part of the Work.

1.5.62 Substantial Completion. The stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner fully can occupy the Work (or the designated portion thereof) for the use for which it is intended.

1.5.63 Value Engineering Change Proposal ("VECP"). A proposal developed and documented by Design-Builder which: (a) would modify or require a change in a requirement of any Contract Document; and (b) reduces the cost of the Project without impairing essential functions or characteristics of the facility (including service life, economy of operation, ease of maintenance, desirability and safety) as determined by Owner, in its sole discretion, and provided that it is not based solely upon a change in quantities.

1.5.64 Work. All administrative, design, procurement, supply, installation, construction, supervision, management, testing, labor, equipment and materials and other duties and services set forth in this Agreement and, to the extent not covered by this Agreement, in accordance with customarily accepted design, construction, and operations standards for governmental office facilities in the United States necessary to provide a complete, fully functional, and operational project.

ARTICLE 2: RESPONSIBILITIES OF OWNER

2.1 Owner's Responsibilities. Owner shall be responsible for the following matters and actions:

2.1.1 Access to Site. Provide reasonable rights of ingress and egress to and from the Site for Design-Builder and all Subcontractors, subject to Section 3.5.5 below. The Site

shall be available to Design-Builder for all aspects of the Work on the Notice to Proceed Date.

2.1.2 Owner's Representative. Designate, by written notice to Design-Builder on or before the Notice to Proceed, an Owner's Representative, who shall be authorized to act on behalf of Owner, with whom Design-Builder may consult at all reasonable times, and whose written instructions, requests, and decisions will be binding upon Owner as to all matters pertaining to the Contract Documents and the performance of Owner hereunder.

2.1.3 Owner's Governmental Approvals. Owner shall provide, or cause to be provided, reasonable cooperation and assistance to Design-Builder in obtaining Governmental Approvals for which Design-Builder is responsible. Owner's reasonable cooperation and assistance to Design-Builder shall not relieve Design-Builder of its obligations to obtain the Governmental Approvals for which Design-Builder is responsible.

2.1.4 Relevant Information for Design-Builder. Provide, or cause to be provided, to Design-Builder information, within Owner's possession or control, reasonably requested by Design-Builder to enable Design-Builder to fulfill its obligations pursuant to the Contract Documents.

2.1.5 Special Tests and Inspections. Perform, or cause to be performed, such tests and inspections and bear all related costs of tests, inspections, and Government Approvals as are required by Section 1704, Special Inspections, of the Washington State Building Code, provided, however, that Owner may charge Design-Builder any additional cost of inspection or testing when the Work is not ready at the time specified by Design-Builder for inspection or testing, or when prior rejection makes re-inspection or retest necessary.

2.1.6 Other Items of Owner Supply. Provide the other items of equipment, materials, and services specifically identified in the Contract Documents as being the responsibility of Owner.

2.1.7 Payment Obligations to Design-Builder. Pay to Design-Builder the Contract Sum pursuant to the terms of this Agreement.

2.2 Hazardous Materials. Owner shall not be responsible for the Hazardous Materials identified in Section 3.7.4 below, as such Hazardous Materials are the responsibility of Design-Builder.

2.3 Owner's Separate Contractors. Owner is responsible for all work performed on the Project or at the Site by separate contractors under Owner's control. Owner contractually shall require its separate contractors to cooperate with and coordinate their activities so as not to interfere with, Design-Builder in order to enable Design-Builder timely to complete the Work consistent with the Contract Documents.

2.4 Engagement of Owner's Design-Build Consultant. Owner may engage an Owner's Design-Build Consultant to perform some of Owner's duties described in the Contract Documents, in which case Owner shall cause Owner's Design-Build Consultant to perform such duties in accordance with the terms of the Contract Documents. Owner shall notify Design-Builder of: (a) the identity of Owner's Design-Build Consultant; (b) the name and title of the person who shall be authorized to act on behalf of Owner's Design-Build Consultant and serve as the primary contact between Design-Builder and Owner's Design-Build Consultant in connection with the Contract Documents; and (c) the duties to be performed by Owner's Design-Build Consultant. If Owner does not engage an Owner's Design-Build Consultant, or discharges Owner's Design-Build Consultant after written notification to Design-Builder, then all references herein to Owner's Design-Build Consultant shall be deemed to refer to Owner.

ARTICLE 3: RESPONSIBILITIES OF DESIGN-BUILDER

3.1 Design-Builder's General Obligations

3.1.1 Obligation to Perform the Work. Design-Builder shall fully perform all the Work in accordance with and subject to the terms and conditions of the Contract Documents.

3.1.2 Responsibility for Subcontractors, Etc. Design-Builder shall be responsible to Owner for all acts and omissions of Design-Builder, any Subcontractor, and their respective employees, agents and representatives.

3.1.3 Incorporation Into Subcontractor Contracts. Design-Builder shall incorporate all obligations and understandings of the Contract Documents into all subcontracts and require that such obligations and understandings flow down to all subcontracts of any tier.

3.2 Design-Builder's Representative and Key Personnel

3.2.1 Design-Builder's Representative. Design-Builder shall designate, by written notice to Owner on or before the Notice to Proceed, an individual ("Project Manager") who shall be authorized to act on behalf of Design-Builder, with whom Owner may consult at all reasonable times, who shall have full supervision over the completion of the Work, who shall be designated to act as the primary point of contact with Owner regarding all matters relating to the Work, and who shall have full authority to bind Design-Builder except to the extent such authority is limited as described in such notice. If the Project Manager's authority is limited, the notice will identify such persons within Design-Builder's organization who do have full authority to bind Design-Builder for all purposes under the Contract Documents. Design-Builder may, at any time by written notice to Owner, change the persons, if any, previously identified as having authority beyond that of the Project Manager. Any changes in the Project Manager shall require Owner's prior written approval.

3.2.2 Project Management; Key Personnel. Design-Builder shall provide management for the Work in accordance with the organization chart set forth in Exhibit A – Schedule 3.2.2. Design-Builder acknowledges the importance of its Design-Build Project Manager, Design Manager/Coordinator, Energy Performance / Sustainable Design Specialists, Lead Designer and Project Superintendent (collectively, "Key Personnel"). Except in the event that the Key Personnel individual is no longer employed (or otherwise under the direction and control) by the Design-Builder, none of the Key Personnel may be withdrawn from the Project without prior written approval of Owner. Design-Builder will provide Owner with at least thirty (30) days written notice of intent to withdraw any Key Personnel and shall provide Owner a copy of the resume of any proposed replacement Key Personnel for Owner's review and acceptance. Owner shall notify Design-Builder with seven (7) days of any objection to the proposed replacement. In the event a Key Personnel leaves the employment of the Design-Builder unexpectedly and without 30 days' notice, the Design-Builder immediately will notify Owner upon learning of the departure and will comply with the requirements of this section. Design-Builder shall remove or replace, or have removed or replaced, any personnel performing the Work if Owner has a reasonable objection to such person.

3.3 Design Services

3.3.1 General. Design-Builder has full responsibility for the design of the Project in accordance with the Contract Documents. Design-Builder shall, consistent with applicable state licensing laws, provide through qualified, licensed design professionals employed by Design-Builder, or procured from qualified, independently-licensed Design Consultants, those design services necessary for Design-Builder to perform and complete the Work consistent with the Contract Documents. Such design services include, without limitation, those architectural and engineering services required for the preparation of Construction Documents and any other design submittal required under the Contract Documents.

3.3.2 Licenses. Any design professional performing design, engineering, architecture, or landscape architecture services on the Project shall be appropriately licensed as required by the laws of the State of Washington.

3.3.3 Standard of Care. The standard of care for all design services performed by or through Design-Builder on the Project shall be the care and skill ordinarily used by members of the design profession on projects of similar size, nature and complexity, practicing under similar conditions at the same time and locality of the Project.

3.3.4 Design Consultants Not Third-Party Beneficiaries. No Design Consultant is intended to be, nor shall any Design Consultant be deemed to be, a third-party beneficiary of this Agreement. Owner is intended to be and shall be deemed a third-party beneficiary of all contracts between Design-Builder and any Design Consultant.

3.3.5 Scope Validation and Identification of Scope Issues:

3.3.5.1 Scope Validation Period. During the ninety (90) day period following the Notice to Proceed ("Scope Validation Period"), Design-Builder thoroughly shall review and compare all of the then-existing Contract Documents, including the RFP and any incorporated documents and the Proposal, to verify and validate Design-Builder's proposed design concept and identify any errors, omissions, inconsistencies, constructability problems, Site conditions or any other defects or concerns of any kind (collectively referred to as "Scope Issues") that may affect Design-Builder's ability to complete its proposed design concept within the Contract Sum and Guaranteed Completion Date(s). If Design-Builder finds any Scope Issues, it shall notify Owner in writing of such findings within the Scope Validation Period. Upon such notice, the Parties shall promptly meet and confer to discuss the resolution of such issues. If a Scope Issue could not have reasonably been identified by Design-Builder prior to the Agreement Date, and if resolution of the issue materially impacts Design-Builder's price or time to perform the Work, Design-Builder shall be entitled to submit a request for Change Order, and Owner shall have the right to act upon such request, in accordance with Article 8. Notwithstanding anything to the contrary in the Contract Documents or as a matter of law, Design-Builder shall have the burden of proving that the alleged Scope Issue could not have been reasonably identified prior to the Agreement Date and that such Scope Issue materially impacts its price or time to perform the Work.

3.3.5.2 Design-Builder's Assumption of Risk of Scope Issues. The Parties acknowledge that the purpose of the Design Verification Period is to enable Design-Builder to identify those Scope Issues that could not reasonably be identified prior to the Agreement Date. Notwithstanding anything to the contrary in the Contract Documents, the Scope Validation Period has not been established for the purpose of enabling Design-Builder to offer Value Engineering Change Proposals, and the term "Scope Issue" is not to intended to include Value Engineering Change Proposals. Value Engineering Change Proposals are be offered and administered in accordance with Article 26. By executing this Agreement, Design-Builder acknowledges that the Design Verification Period is a reasonable time to enable Design-Builder to identify Scope Issues that will materially impact Design-Builder's price or time to perform the Work. Following completion of the Scope Validation Period, with the sole exception of those Scope Issues identified during the Scope Validation Period and identified to Owner in accordance with Section 3.3.5.1, the Parties agree as follows:

1) Design-Builder shall assume and accept all risks, costs, and responsibilities of any Scope Issue arising from or relating to the Contract Documents, including but not limited to conflicts within or between the RFP Documents and Proposal;

2) Design-Builder shall be deemed to have warranted that the Contract Documents existing as of the end of the Scope Validation Period are sufficient to enable Design-Builder to complete the design and construction of the Project without any increase in the Contract Sum or extension to the Guaranteed Completion Date(s); and
3) Owner disclaims any responsibility for, and Design-Builder waives its right to seek any increase in the Contract Sum or extension to the Guaranteed Completion Date(s) for, any Scope Issue associated with any of the Contract Documents, including the RFP Documents.

3.3.6 Design Development Services

3.3.6.1 Interim Design Submissions. Design-Builder shall submit to Owner interim design submissions for the Work at forty percent (40%), seventy percent (70%), and one hundred percent (100%) design completion. On or about the time of the scheduled design submissions, Design-Builder and Owner shall meet and confer about the submissions, with Design-Builder identifying during such meetings, among other things, the evolution of the design and any significant changes or deviations from the Contract Documents, or, if applicable, previously submitted design submissions. Minutes of the meetings will be maintained by Design-Builder and provided to all attendees for review. Following the design review meeting, Owner shall review and approve the interim design submissions in a time that is consistent with the turnaround times agreed upon by the Parties and set forth in the Project Schedule.

3.3.6.2 Construction Documents. Design-Builder shall submit to Owner Construction Documents setting forth in detail drawings, specifications, and such other materials describing the requirements for construction of the Work. The Construction Documents shall be consistent with the latest set of interim design submissions, as such submissions may have been modified in design review meetings. The Parties shall have design review meetings as needed to discuss, and Owner shall review and approve the Construction Documents in accordance with the procedures set forth Section 3.3.6.1 above. Design-Builder shall proceed with procurement and construction in accordance with the approved Construction Documents for that portion of the Work covered by the Construction Documents. Three (3) sets of approved Construction Documents shall be submitted to Owner prior to commencement of procurement or construction.

3.3.6.3 Owner’s Review. Owner’s review and approval of interim design submissions and the Construction Documents are for the purpose of mutually establishing a conformed set of Construction Documents compatible with the requirements of the Work. Neither Owner’s review nor approval of any interim design submissions and/or Construction Documents shall be deemed

to transfer any design liability from Design-Builder to Owner, and Design-Builder shall remain responsible for meeting all obligations required under the Contract Documents.

3.3.6.4 Design-Builder's Ability to Proceed with Procurement and Construction. Subject to written agreement with Owner and to the extent not prohibited by the Contract Documents, Design-Builder may prepare design submittals and Construction Documents for a portion of the Work to permit procurement and construction to proceed on that portion of the Work prior to completion of the Construction Documents for the entire Work.

3.3.6.5 Electronic Files. All design submissions of Design-Builder shall be forwarded to Owner in electronic format pursuant to the requirements of the Contract Documents. Project drawings shall be developed in CAD format, conforming to Owner's CAD standards. Specifications shall conform to Owner's Master Specifications and programming shall conform to Owner's Programming and Documentations Standards.

3.4 Site Conditions

3.4.1 Inspection of Site Conditions Prior to Agreement Date. Design-Builder has, as of the Agreement Date, ascertained the nature and location of the Work, the character and accessibility of the Site, the existence of obstacles to construction, the availability of facilities and utilities, the location and character of existing or adjacent work or structures, the surface and subsurface ground and soil conditions, and other general and local conditions (including labor) which might affect its performance of the Work or the cost thereof.

3.4.2 Inspection of Site Conditions After the Notice to Proceed. Design-Builder will, after the Notice to Proceed, undertake such testing, inspections and investigations as may be necessary to perform its obligations under the Contract Documents, including additional geotechnical evaluations. If Design-Builder intends to conduct additional geotechnical evaluations to supplement or corroborate the information contained in the RFP Documents, it shall do so during the Scope Validation Period. Any Scope Issues that arise from such evaluations shall be treated in the manner set forth in Section 3.3.5 above. All reports or analyses generated by Design-Builder's testing, inspections and investigations, including additional geotechnical testing, shall be furnished to Owner promptly after such reports or analyses are generated.

3.4.3 Differing Site Conditions. If Design-Builder encounters subsurface or otherwise concealed physical conditions at the Site which differ materially from those indicated (as such conditions may be further described through reports or analyses undertaken during the Design Verification Period), or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the

Contract Documents, then Design-Builder shall give written notice to Owner promptly and in no event later than seven (7) days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice. If such conditions differ materially and cause a change in Design-Builder's cost of, or time required for, performance of any part of the Work, Design-Builder may be entitled to an equitable adjustment in the Guaranteed Completion Date(s) or Contract Sum, or both, provided it makes a request therefor as provided in Section 8.6.

3.5 Construction-Related Services. Except as otherwise expressly set forth in the Contract Documents, Design-Builder shall provide the equipment and materials, personnel and supervision, tools, equipment and materials and the services required, and shall be responsible for completing the Work in accordance with the terms of the Contract Documents. In furtherance of the foregoing (and not as a limitation thereof), Design-Builder shall:

3.5.1 Handling of Equipment and Materials, Etc. Provide for the handling of equipment and materials and construction equipment and materials, including, as necessary, inspection, expediting, shipping, unloading, receiving, customs clearance and transportation to the Site and storage until Substantial Completion, provided, however, that such responsibility shall continue after Substantial Completion as required for Design-Builder to perform its Punchlist and warranty obligations.

3.5.2 Quality of Equipment and Materials, Etc. Ensure that all equipment and materials incorporated into the Work shall be new (unless otherwise agreed by Design-Builder and Owner), of the most suitable grade for the purpose intended, and shall meet the requirements of the Contract Documents and all applicable Governmental Approvals. References in the RFP Documents to equipment and materials, articles or patented processes by trade name, make or catalog number, shall be regarded as establishing a standard of quality expected by Owner. Design-Builder may use equipment and materials, articles, or patented processes that are equal to those named in the RFP Documents, subject to the prior written approval of Owner, which approval shall not be unreasonably withheld. Design-Builder shall use equipment and materials for which spare parts or replacements (or reasonable substitutes) are commercially available and obtainable under normal circumstances without undue delay or difficulty.

3.5.3 Construction Means, Methods, Etc. Be solely responsible for all construction means, methods, techniques, sequences, procedures, safety and security programs in connection with the performance of the Work, irrespective of approval or consent of Owner's Representative, and take full responsibility for the adequacy, stability and safety of all Site operations.

3.5.4 Care, Custody and Control/Risk of Loss of Design-Builder. Have full responsibility for care, custody, and control of the Work (including all equipment and materials in

connection therewith, whether incorporated therein or located on or off the Site) and bear the risk of loss of the Work in each case until Substantial Completion.

3.5.5 Site Security. Procure, supervise, and provide the security measures at the Site set forth in the Contract Documents.

3.5.6 Construction Utilities and Facilities at Site. Provide, or cause to be provided, power, communication system, water (including potable water), waste water lines and sewer lines required for the performance of the Work and provide, within the Site, temporary roads, office furniture, telephone facilities, secretarial services, drinking water and sanitary facilities to be used by Design-Builder and/or Subcontractors in the performance of the Work. Such obligations shall include obtaining and registering all required easements and obtaining all required Governmental Approvals for power lines, telephone lines, gas lines, wastewater lines, sewer lines and lines for other utilities, whether on or off the Site. Design-Builder also shall install and maintain all meters required to measure the amount of each activity used for the purpose of determining charges. Prior to the date of Final Acceptance, Design-Builder shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

3.5.7 Maintenance of Site. Keep the Site free on a daily basis from accumulation of waste materials, rubbish, and other debris resulting from performance of the Work by depositing same in waste receptacles furnished by Design-Builder, which receptacles shall be removed and replaced on an as-needed basis. Design-Builder shall make special provisions, in accordance with applicable Governmental Rules, for storing and removing any Hazardous Materials waste generated during construction. Within thirty (30) days after the date of Substantial Completion, Design-Builder shall remove from the Site, in conformity with applicable Governmental Rules, all such waste materials, rubbish and other debris, as well as all tools, construction equipment and materials, machinery and surplus material (other than surplus material acquired by Owner and other than materials, tools and construction equipment necessary to complete Punchlist items). Before Final Completion, after completion of the Punchlist items, Design-Builder shall remove all remaining waste and rubbish generated during performance of Punchlist work, and all remaining materials, tools and construction equipment, and leave the Site in neat, clean and usable condition. If Design-Builder fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Design-Builder.

3.5.8 Access to Work and Notification of Excavation. Design-Builder shall provide Owner, Owner's Design-Build Consultant, and Owner's Representative access to the Work in progress wherever located. Before commencing any excavation, Design-Builder shall notify Owner and shall provide notice of the scheduled commencement of excavation to all Owners of underground facilities or utilities, through locator services. The term "excavation" for purposes of the preceding sentence means an

operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than twelve (12) inches in depth for landscape purposes.

3.5.9 Protection of Existing Structures, Equipment, Vegetation, Etc. Design-Builder shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation at or near the Site. Design-Builder shall only remove trees when specifically authorized to do so and shall protect vegetation that will remain in place. Design-Builder shall repair any damage, including that to the property of a third-party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Design-Builder fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Design-Builder.

3.5.10 Cooperation with Owner's Separate Contractors. Reasonably cooperate with Owner's Separate Contractors and carefully adapt scheduling and performance of the Work in accordance with these Contract Documents to reasonably accommodate the work performed by Owner's Separate Contractors.

3.5.11 Maintaining Documents at Site. Keep on the Site a copy of all Contract Documents, reviewed shop drawings, Governmental Approvals, and any other document in the control of Design-Builder that pertains to the Project.

3.5.12 Testing and Inspections. Except for those tests, inspections, and Governmental Approvals set forth in Section 2.1.5 above, make arrangements for all such tests, inspections, and Government Approvals as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents, with the testing agency designated by the Owner, or with the appropriate Governmental Unit. Design-Builder shall: (a) give Owner timely notice of when and where tests and inspections are to be made; and (b) maintain complete inspection records and make them available to Owner.

3.6 Responsibility for Health, Safety and First Aid

3.6.1 Responsibility for Safety. Design-Builder shall be fully responsible for the safety (the term "safety" as used in this Section 3.6 being deemed to include working conditions that either are free from known health hazards or provide safeguards against such health hazards) of all persons employed by Design-Builder, Subcontractors, their agents or invitees, or any other person who enters the Site for any purposes relating to Design-Builder's performance of its obligations under the Contract Documents. Design-Builder shall have the right to refuse entry onto the Site by, or to direct removal from the Site of, any employees, agents or invitees of Owner or Owner's Design-Build Consultant who fail to comply with Design-Builder's safety requirements at the Site. Design-Builder promptly shall notify Owner of any incidents in which such refusal or removal occurs.

3.6.2 Compliance with Safety and Health Rules. Design-Builder shall take all measures to ensure that the employees, agents and invitees of itself and all Subcontractors, while engaged in the Work comply with and adhere to: (a) all applicable Governmental Rules, including those promulgated by Washington Industrial Safety and Health Act (WISHA), relating to safety and health; and (b) Design-Builder's accident prevention program and safety procedures and rules for the Work. For these purposes, Design-Builder shall:

1) Follow WISHA regional directives and provide safety programs that will require an accident prevention and hazard analysis plan for Design-Builder and each Subcontractor on the Site. Design-Builder shall submit a Site-specific safety plan to Owner's Representative within ten (10) days of the Notice to Proceed and prior to conducting any Work at the Site.
2) Provide adequate safety devices and measures including but not limited to, the appropriate safety literature, notice, training, permits, placement and use of barricades, signs, signal lights, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction processes, and equipment required by all applicable state, federal, and local laws and regulations. .
3) Post all Governmental Approvals in a conspicuous location at the Site.
4) Provide any additional measures that Owner determines to be reasonable and necessary for ensuring a safe environment in areas open to the public; provided, however, that nothing in this Agreement shall be construed as imposing a duty upon Owner to prescribe safety conditions relating to employees, general public, or agents of Design-Builder, or as constituting any express or implied assumption of control or responsibility over project site safety.

3.6.3 Restriction to Site. Design-Builder shall confine to the Site the activities of its employees, agents and invitees, and those employees, agents and invitees of all Subcontractors and prohibit such personnel from entering upon any other properties or facilities of Owner except as specifically authorized by Owner's Representative.

3.6.4 Preventative Measures. Design-Builder shall take all reasonable measures to prevent injury to persons or damage to any property on the Site, or in the vicinity thereof, as a result of Design-Builder's or Subcontractors' performance of the Work, whether or not a hazardous or potentially hazardous condition exists due to the prosecution of the Work or due to work or activities being performed by Owner or others. Such reasonable measures shall include: (a) prevention of fires; (b) furnishing of temporary construction fences, flagmen, warning signs, and barricades; (c) elimination of excessive dust or smoke emission; (d) protection of overhead utility lines, underground pipes, conduit, or cables; and (e) protection of existing Work or work in progress by Owner or others.

3.6.5 First Aid. Design-Builder shall make its own arrangements to supply first aid to anyone who may be injured in connection with the Work.

3.6.6 Safety Coordinator. Design-Builder shall designate a Safety Coordinator at the Site, which individual shall be designated in the organizational chart set forth in Exhibit A – Schedule 3.2.2. The Safety Coordinator shall be on the Site at all times that any Work is being performed and shall have no additional responsibilities other than safety. The Safety Coordinator shall be responsible for safe working conditions and compliance with all applicable Governmental Rules relating to safety and health.

3.6.7 Breach of Safety Obligations. Failure of Design-Builder to perform the obligations set forth in this Section 3.6 may be deemed by Owner to constitute a material default under Section 15.1.6.

3.7 Hazardous Materials

3.7.1 Design-Builder's Responsibilities. Design-Builder's responsibility for Hazardous Materials shall include the following duties:

1) Design-Builder is responsible for the abatement of the hazardous materials identified in the RFP Documents that exist in Building 22 prior to its demolition.
2) Design-Builder shall not keep, use, dispose, transport, generate, or sell on or about the Site any Hazardous Materials, and in no case shall any Hazardous Material be stored more than ninety (90) days on the Site;
3) Design-Builder shall exclude the use of lead paint and minimize the use of acetone and chlorinated substances at the Site; and
4) Design-Builder promptly shall notify Owner of: (a) all spills or releases of Hazardous Materials; (b) any failure to comply with Environmental Law or Governmental Rules applicable to Hazardous Materials; (c) all inspections of the Site by any Governmental Unit relative to Hazardous Materials; (d) any and all fines imposed by Governmental Units relative to Hazardous Materials; and (e) all responses or interim cleanup actions taken by or proposed to be taken by any Governmental Unit or private entity on the Site.

3.7.2 Information and Training. Design-Builder shall provide all persons working on the Site with information and training on Hazardous Materials in their work at the time of their initial assignment, and whenever a new Hazardous Material is introduced into their work area.

3.7.2.1 Information. At a minimum, Design-Builder shall inform persons working on the Site of:

(1) The requirements of 296-62 WAC, General Occupational Health Standards;
(2) Any operations in their work area where Hazardous Materials are present; and

(3) The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by 296-62 WAC.

3.7.2.2 Training. At a minimum, Design-Builder shall provide training for persons working on the Site which includes:

(1) Methods and observations that may be used to detect the presence or release of a Hazardous Material in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
(2) The physical and health hazards of the chemicals in the work area:
(3) The measures such persons can take to protect themselves from these hazards, including specific procedures Design-Builder or Subcontractors, or others have implemented to protect those on the Site from exposure to Hazardous Materials, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
(4) The details of the hazard communications program developed by Design-Builder, or Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

3.7.3 Discovery of Hazardous Materials. If Design-Builder encounters any Hazardous Material in or on the Site not already identified by the AHERA Survey provided in the RFP Documents which creates an imminent or substantial safety or health hazard for Owner, Design-Builder, any Subcontractor or their employees, agents or representatives, or the general public or the surrounding environment, Design-Builder shall suspend the performance of the Work to the extent required to avoid any such safety or health hazard until action sufficient to protect the interests of such parties is taken. Design-Builder shall notify Owner immediately upon encountering any Hazardous Materials in or on the Site and shall thereafter follow the directions of Owner.

3.7.4 Design-Builder Liability. Notwithstanding anything to the contrary in the Contract Documents, Design-Builder shall be responsible, at its sole cost and expense, for the handling, treatment, storage, removal, remediation, avoidance, or other appropriate action (if any), with respect to any Hazardous Materials present at, on, in or under, or migrating and/or emanating to or from the Site, that: (a) were brought or caused to be brought on the Site by any act or omission of Design-Builder or any Subcontractor pursuant to the performance of the Work; (b) were handled, treated or stored at the Site by Design-Builder or any Subcontractor in violation of any applicable Governmental Rule; or (c) were the result of any negligent, willful, or unlawful act or omission of Design-Builder or any Subcontractor. Owner shall have the sole discretion to approve the action, if any, to be taken by Design-Builder with respect to the handling, treatment, storage, removal, remediation, avoidance, or other appropriate action (if any), with respect to any such Hazardous Materials.

3.8 Labor

3.8.1 Labor Relations Generally. Design-Builder shall use reasonable efforts in the selection and continuing employment of labor and Subcontractors (whether directly or indirectly employed) so as to cause no conflict or interference with or between the various trades, or delay in performance of Design-Builder's obligations. Design-Builder shall be responsible for all labor relations matters relating to the Work and shall at all times use reasonable efforts to maintain harmony among unions and other personnel employed in connection therewith. Design-Builder shall coordinate all Work and the trades of all labor. Design-Builder shall at all times use its best efforts and judgment as an experienced Design-Builder to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes and strikes. Design-Builder shall be solely responsible for any work stoppages, slowdowns, disputes and/or strikes at the Site and such shall not be deemed an Excusable Delay or entitle Design-Builder to a Change Order or an extension of the Guaranteed Completion Date(s), except as specifically provided in Section 10.7(12).

3.8.2 Hours of Labor. Design-Builder shall comply with all applicable provisions of RCW 49.28.

3.8.3 Notice to Owner of Labor Disputes. If Design-Builder has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Design-Builder immediately shall give notice, including all relevant information, to Owner.

3.9 Subcontractors

3.9.1 Responsibility.

A. Subcontractor Responsibility: The Design-Builder shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Design-Builder shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Design-Builder shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;

2. Have a current Washington Unified Business Identifier (UBI) number;

3. If applicable, have:

a. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;

b. A Washington Employment Security Department number, as required in Title 50 RCW;

c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

d. An electrical contractor license, if required by Chapter 19.28 RCW;

e. An elevator contractor license, if required by Chapter 70.87 RCW.

4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.

6. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the L&I or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.

B. Provide names of Subcontractors and use qualified firms: Design-Builder shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Design-Builder shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection and shall obtain Owner's written consent before making any substitutions or additions.

C. Subcontracts in writing and pass through provision: All Subcontracts must be in writing. By appropriate written agreement, Design-Builder shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Design-Builder by terms of the Contract Documents, and to assume toward Design-Builder all the obligations and responsibilities which Design-Builder assumes toward Owner in Design-Builder accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Design-Builder shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Design-Builder and its Subcontractors with respect to insurance or bonds.

D. Coordination of Subcontractors; Design-Builder responsible for Work: Design-Builder shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Design-Builder

from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.

3.9.2 Subcontract Requirements. By written agreement, Design-Builder shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Design-Builder by terms of the Contract Documents. Each subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Each subcontract also shall provide for an assignment by Design-Builder to Owner, provided that:

1) The assignment is effective only after termination by Owner for default pursuant to Article 15 and only for those subcontracts which Owner accepts by notifying the Subcontractor in writing; and
2) After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Design-Builder assumed in the subcontract.
3) The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
4) As to Design Consultants, Design-Builder shall ensure that the contracts of all Design Consultants of any tier are subject to the right of Owner to receive an assignment of such contract, regardless of who is in privy of contract with such Design Consultant.

3.9.3 Subcontractor Identification. Before submitting the first Application for Payment, Design-Builder shall furnish in writing to Owner on Owner-provided form(s) the names, addresses, telephone numbers, and Tax Identification Numbers (TIN) of all Subcontractors, except those supplying materials with a value of less than $2,500, under contract with Design-Builder at such time. Design-Builder shall supplement such form(s) on a monthly basis for those Subcontractors (except those supplying materials with a value of less than $2,500) who are contracted with Design-Builder after the first Application for Payment. Design-Builder shall designate all Subcontractors which they believe to be, or who have identified themselves to Design-Builder as, MBE, WBE, or Washington State OMWBE certified. Design-Builder shall indicate the anticipated dollar value of each MBE, WBE or OMWBE subcontract. Design-Builder shall not use any Subcontractor to whom Owner has a reasonable objection and shall obtain Owner's written consent before making any substitutions or additions to Subcontractors previously identified to Owner.

3.10 Governmental Rules and Governmental Approvals

3.10.1 Governmental Rules. Subject to the terms and conditions of the Contract Documents, Design-Builder shall comply and shall cause all Subcontractors, employees, agents and representatives to comply with all applicable Governmental Rules in connection with the performance of Design-Builder's obligations under the Contract Documents. Design-Builder agrees to indemnify, defend, and hold Owner harmless from and

against all fines, penalties, related costs and expenses attributable to any failure of Design-Builder or any Subcontractors, employees, agents or representatives, to comply with such Governmental Rules in connection with the performance of Design-Builder's obligations under the Contract Documents and to take all reasonable actions to enforce compliance with this provision.

3.10.2 Governmental Approvals. Except for those Governmental Approvals specifically identified in Section 2.1.3 as being Owner's responsibility, Design-Builder shall pay for and obtain all Governmental Approvals required to perform the Work in accordance with the Contract Documents. Design-Builder shall submit copies of each Governmental Approval to Owner's Representative and shall post Governmental Approvals at the Site, as required by Governmental Rules. Prior to Final Acceptance, the approved, signed Governmental Approvals shall be delivered to Owner.

3.11 Assistance to Owner. Provide to Owner information reasonably requested by Owner to enable it to fulfill its obligations under the Contract Documents. This obligation shall include providing such assistance as is reasonably requested by Owner in dealing with any Governmental Unit in matters relating to the Work and the Project.

3.12 LEED Energy & Sustainability Performance Requirements.

1) LEED-v3/2009 Silver Rating Required
2) Energy Performance goal of 20% better than current Washington State Energy Code (WSEC.)
3) Exceed ASHRAE Standard 55-2004: IEQ Prerequisite for Minimum Indoor Air Quality Performance

Design-Builder shall maintain the LEED rating checklist throughout the design-build process and provide all the LEED consulting services required to obtain the targeted LEED rating. The Design-Builder shall submit and coordinate all documentation on LEED to the USGBC for the Project.

3.13 Design-Builder's Performance and Payment Bonds. Concurrently with execution of this Agreement, Design-Builder shall provide Owner the following Surety Bonds: (1) performance bond, and (2) payment bond. The performance and payment bonds shall use the AIA Document A312 form and the principal amount of each bond shall be one hundred percent (100%) of the Contract Sum which includes Washington State Sales Tax. Bonds shall be duly executed by a responsible corporate surety (a) licensed as a surety and qualified to do business in the State of Washington; (b) in good standing on the list maintained by the United States Department of Treasury; and (c) having an A.M. Best rating of "A" or better. The costs for such bonds are included in the Contract Sum. The bonds shall be provided when construction funding is available.

ARTICLE 4: DESIGN-BUILDER'S REPRESENTATIONS AND WARRANTIES; LICENSES

4.1 Representations and Warranties of Design-Builder. Design-Builder makes the following representations and warranties to Owner, each of which is true and correct as of the Agreement Date:

4.1.1 Due Organization, Power and Authority. Design-Builder is a corporation duly organized, existing, and in good standing in the State of Washington. Design-Builder possesses all requisite power and authority to enter into and perform this Agreement. Design-Builder has all legal power and authority to own and use its properties and to transact the business in which it is engaged and holds or expects to obtain in a timely manner all material franchises, licenses, and permits required therefor.

4.1.2 Binding Obligation. Design-Builder's execution, delivery, and performance of this Agreement have been duly authorized by, and are in accordance with, its articles of incorporation and by-laws; this Agreement has been duly executed and delivered for it by the signatories so authorized; and this Agreement constitutes Design-Builder's legal, valid, and binding obligation.

4.1.3 No Existing Breach or Default. Design-Builder is not currently in breach of, in default under, or in violation of, and the execution and delivery of this Agreement and the performance of its obligations hereunder will not constitute or result in any breach of, default under or violation of, any applicable Governmental Rules of any Governmental Unit, or the provisions of Design-Builder' articles of incorporation or by-laws, or any franchise or license, or any provision of any indenture or any evidence of indebtedness or security therefor, lease, contract, license or other agreement by which it is bound, except for such breaches, defaults or violations as will not, either individually or in the aggregate, result in a material adverse effect on the ability of Design-Builder to perform its obligations hereunder.

4.1.4 No Pending Litigation, Etc. No suit, claim, action, arbitration, or legal, administrative or other proceeding is pending or, to the best knowledge of Design-Builder, threatened against Design-Builder that could affect the validity or enforceability of this Agreement, the ability of Design-Builder to fulfill its commitments hereunder in any material respect, or that would result in any material adverse change in the business or financial condition of Design-Builder; and

4.1.5 Design-Builder Qualified to Perform the Work. Design-Builder has full experience and proper qualifications to perform the Work and to construct the Project.

4.1.6 Evaluation of Conditions Affecting the Work. Design-Builder has carefully examined the RFP Documents, including any Addenda issued to such documents, and any and all conditions that could in any way affect its performance of the Work, including:

1) visiting the Site and becoming familiar with and satisfying itself as to the general, local, and Site conditions that may affect the cost, progress, or performance of the Work, including the impact to ingress and egress to the Site required by security measures at the Site;
2) becoming familiar with and satisfying itself as to all Governmental Rules that may affect the cost, progress, or performance of the Work; and
3) determining that the RFP Documents were sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work and sufficient to enable Design-Builder to commit to the Contract Sum and Guaranteed Completion Date(s).

By representing warranting that it has so evaluated the above-referenced conditions, Design- Builder confirms that the Contract Sum and its agreement to complete on or before the Guaranteed Completion Date(s) assume the risk of any and all such conditions set forth above, and that it shall not make a request for a Change Order or equitable adjustment for such conditions, subject to Design-Builder's rights under Section 3.3.5 above.

4.2 Licenses. Design-Builder shall be registered or licensed as required by Governmental Rule.

ARTICLE 5: CONTRACT SUM AND TAXES

5.1 Contract Sum. The initial Contract Sum shall be the amount of [Finalist Proposal Amount], which shall be paid to Design-Builder in accordance with Article 6. The Contract Sum shall be complete compensation for all Work to be performed by Design- Builder under the Contract Documents plus Washington State Sales Tax and is subject to increases or decreases by Change Order only as specifically provided in this Agreement.

5.1.1 In accordance with the Contractor and Designer Design-Build Proposal dated Date?, the scope of the design-build contract includes geotechnical investigations, architectural, engineering, pre-construction, construction, and any other services as required to design and construct a 39,731 square foot Readiness Center.

5.1.2 This project recognizes the Performance Guarantee described in Paragraph 3.14 will be under separate contract for a maximum amount to be determined.

5.2 Taxes. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including: (a) withholding, payroll and any other employee-related taxes on employees of Design-Builder or Subcontractors; (b) taxes based on the income or revenues of Design-Builder or Subcontractors; (c) taxes related to construction consumables; and (d) taxes levied by any Governmental Unit upon the services and labor provided by Design-Builder in connection with the Work, including Washington State Business and Occupation Tax.

5.3 Washington State Sales Tax. The Contract Sum does include Washington State Sales Tax (WSST).

5.4 Cost of the Work. The Cost of the Work shall include only the following:

5.4.1 Wages of direct employees of Design-Builder performing the Work at the Site or, with Owner's agreement, at locations off the Site; provided, however, that the costs for those employees of Design-Builder performing design services shall be those rates set forth in RFP Appendix, Section II, f. Price Proposal Cost Estimate.

5.4.2 Wages or salaries of Design-Builder's supervisory and administrative personnel engaged in the performance of the Work and who are located at the Site or working off-Site to assist in the production or transportation of material and equipment necessary for the Work.

5.4.3 Wages or salaries of Design-Builder's personnel stationed at Design-Builder's principal or branch offices, but only to the extent said personnel are identified in Exhibit E – Schedule 9.2.8e and performing the function set forth in said exhibit. The reimbursable costs of personnel stationed at Design-Builder's principal or branch offices shall include a ten percent (10%) markup to compensate Design-Builder for the Project-related overhead associated with such personnel.

5.4.4 Costs incurred by Design-Builder for employee benefits, premiums, taxes, insurance, contributions and assessments required by law, collective bargaining agreements, or which are customarily paid by Design-Builder, to the extent such costs are based on wages and salaries paid to employees of Design-Builder covered under Sections 5.5.1 through 5.5.3.

5.4.5 The reasonable portion of the cost of travel, accommodations and meals for Design-Builder's personnel necessarily and directly incurred in connection with the performance of the Work.

5.4.6 Payments properly made by Design-Builder to Subcontractors and Design Consultants for performance of portions of the Work, including any insurance and bond premiums incurred by Subcontractors and Design Consultants.

5.4.7 Costs incurred by Design-Builder in repairing or correcting defective, damaged or nonconforming Work (including any warranty or corrective Work performed after Substantial Completion), provided that such Work was beyond the reasonable control of Design-Builder, or caused by the ordinary mistakes or inadvertence, and not the negligence, of Design-Builder or those working by or through Design-Builder.

5.4.8 Costs, including transportation, inspection, testing, storage and handling, of materials, equipment and supplies incorporated or reasonably used in completing the Work.

5.4.9 Costs (less salvage value) of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by the workers that are not fully consumed in the performance of the Work and which remain the property of Design-Builder, including the costs of transporting, inspecting, testing, handling, installing, maintaining, dismantling and removing such items.

5.4.10 Costs of removal of debris and waste from the Site.

5.4.11 The reasonable costs and expenses incurred in establishing, operating and demobilizing the Site office, including the cost of facsimile transmissions, long distance telephone calls, postage and express delivery charges, telephone service, photocopying and reasonable petty cash expenses.

5.4.12 Rental charges and the costs of transportation, installation, minor repairs and replacements, dismantling and removal of temporary facilities, machinery, equipment and hand tools not customarily owned by the workers, which are provided by Design-Builder at the Site, whether rented from Design-Builder or others, and incurred in the performance of the Work.

5.4.13 Premiums for insurance and bonds required by this Agreement or the performance of the Work.

5.4.14 All fuel and utility costs incurred in the performance of the Work.

5.4.15 Sales, use or similar taxes, tariffs or duties incurred in the performance of the Work.

5.4.16 Legal costs, court costs and costs of mediation and arbitration reasonably arising from Design-Builder's performance of the Work, provided such costs do not arise from disputes between Owner and Design-Builder.

5.4.17 Costs for permits, royalties, licenses, tests and inspections incurred by Design-Builder as a requirement of the Contract Documents.

5.4.18 The cost of defending suits or claims for infringement of patent rights arising from the use of a particular design, process, or product required by Owner, paying legal judgments against Design-Builder resulting from such suits or claims, and paying settlements made with Owner's consent.

5.4.19 Deposits which are lost, except to the extent caused by Design-Builder's negligence.

5.4.20 Costs incurred in preventing damage, injury or loss in case of an emergency affecting the safety of persons and property.

5.4.21 Accounting and data processing costs related to the Work.

5.4.22 Other costs reasonably and properly incurred in the performance of the Work to the extent approved in writing by Owner (including 3% of direct labor for small tools).

5.4.23 Costs associated to the Performance Guarantee, including the Financial Guarantee.

5.5 Allowance Items and Allowance Values.

5.5.1 Any and all Allowance Items, as well as their corresponding Allowance Values, are set forth in the Lump Sum Exhibit, which is included within the Lump Sum Price/Contract Sum.

5.5.2 Design-Builder and Owner have worked together to review the Allowance Items and Allowance Values based on design information then available to determine that the Allowance Values constitute reasonable estimates for the Allowance Items. Design-Builder and Owner will continue working closely together during the preparation of the design to develop Construction Documents consistent with the Allowance Values. Nothing herein is intended in any way to constitute a guarantee by Design-Builder that the Allowance Item in question can be performed for the Allowance Value.

5.5.3 No work shall be performed on any Allowance Item without Design-Builder first obtaining in writing advanced authorization to proceed from Owner. Owner agrees that if Design-Builder is not provided written authorization to proceed on an Allowance Item by the date set forth in the Project schedule, due to no fault of Design-Builder, Design-Builder may be entitled to an adjustment of the Contract Time(s) and Contract Sum.

5.5.4 The Allowance Value for an Allowance Item includes the direct cost of labor, materials, equipment, transportation, taxes and insurance associated with the applicable Allowance Item. All other costs, including design fees, Design-Builder's overall project management and general conditions costs, overhead and fee, are deemed to be included in the original Contract Sum, and are not subject to adjustment, regardless of the actual amount of the Allowance Item.

5.5.5 Whenever the actual costs for an Allowance Item is more than or less than the stated Allowance Value, the Contract Sum shall be adjusted accordingly by Change Order, subject to Section 5.4. The amount of the Change Order shall reflect the difference between actual costs incurred by Design-Builder for the particular Allowance Item and the Allowance Value.

5.6 Non-Reimbursable Costs.

5.6.1 The following shall not be deemed as Cost of the Work:

5.6.1.1 Compensation for Design-Builder's personnel stationed at Design-Builder's principal or branch offices, except as provided for in Sections 5.5.

5.6.1.2 Overhead and general expenses, except as provided for in Section 5.5, or which may be recoverable for changes to the Work.

5.6.1.3 The cost of Design-Builder's capital used in the performance of the Work.

5.6.1.4 Any costs that would cause the Lump Sum Price, as adjusted in accordance with the Contract Documents, to be exceeded.

5.7.1 Lump Sum Price.

5.2.1 Lump Sum Price Established Upon Execution of this Agreement.

5.2.1.1 Design-Builder represents, warrants, and guarantees that it shall not exceed the Lump Sum Price. Documents used as a basis for the Lump Sum Price shall be identified in an exhibit to this Agreement (Exhibit C – Schedule 5.8.1.1, "Lump Sum Price Exhibit Documents"). Design-Builder does not guarantee any specific line item provided as part of the Lump Sum Price, and has the sole discretion to apply payment due to overruns in one line item to savings due to under-runs in any other line item. Design-Builder agrees, however, that it shall be responsible for paying all costs of completing the Work which exceed the Lump Sum Price, as adjusted in accordance with the Contract Documents.

5.2.1.2 The Lump Sum Price includes a Contingency in the amount of [from Design-Builder's Proposal, spelled out and $XXX,XXX] which is available for Design-Builder's exclusive use for unanticipated costs it has incurred that are not the basis for a Change Order under the Contract Documents. By way of example, and not as a limitation, such costs may include: (a) trade buy-out differentials; (b) overtime or acceleration; (c) escalation of materials; (d) correction of defective, damaged or nonconforming Work, design errors or omissions, however caused; (e) Sub-contractor defaults; or (f) those events under Article 10 of this Agreement that result in an extension of the Contract Time but do not result in an increase in the Contract Sum. The Contingency is not available to Owner for any reason, including changes in scope or any other item which would enable Design-Builder to increase the Contract Sum under the Contract Documents. Design-Builder shall provide Owner notice of all anticipated charges against the Contingency, and shall provide Owner as part of the monthly status report required by Section 25.7 of the Contract an accounting of the Contingency, including all reasonably foreseen uses or potential uses of the Contingency. Design-Builder agrees that with respect to any expenditure from the Contingency relating to a Subcontractor default or an event for which insurance or bond may provide reimbursement, Design-Builder will in good faith exercise reasonable steps to obtain performance

from the Subcontractor and/or recovery from any surety or insurance company. Design-Builder agrees that if Design-Builder is subsequently reimbursed for said costs, then said recovery will be credited back to the Contingency.

5.2.2 Lump Sum Price Adjustments.

5.2.2.1 Review and Adjustment to Lump Sum Price Proposal. After submission of the Lump Sum Price Proposal, Design-Builder and Owner shall meet to discuss and review the Lump Sum Price Proposal. If Owner has any comments regarding the Lump Sum Price Proposal or finds any inconsistencies or inaccuracies in the information presented, it promptly shall give written notice to Design-Builder of such comments or findings. If appropriate, Design-Builder shall, upon receipt of Owner's notice, make appropriate adjustments to the Lump Sum Price Proposal.

5.2.2.2 Acceptance of Lump Sum Price Proposal. If Owner accepts the Lump Sum Price Proposal, as may be amended by Design-Builder, the Lump Sum Price and its basis shall be set forth in an amendment to this Agreement.

5.2.2.3 Failure to Accept the Lump Sum Price Proposal. If Owner rejects the Lump Sum Price Proposal, or fails to notify Design-Builder in writing on or before the date specified in the Lump Sum Price Proposal that it accepts the Lump Sum Price Proposal, the Lump Sum Price Proposal shall be deemed withdrawn and of no effect. In such event, Owner and Design-Builder shall meet and confer as to how the Project will proceed, with Owner having the following options:

5.2.2.3.1 Owner may suggest modifications to the Lump Sum Price Proposal, whereupon, if such modifications are accepted in writing by Design-Builder, the Lump Sum Price Proposal shall be deemed accepted and the Parties shall proceed in accordance with Section 5.8.2.2; or

5.2.1.1.1 Owner may terminate this Agreement for convenience in accordance with Article 16; provided, however, in this event, Design-Builder shall not be entitled to the payment provided for in Article 16

ARTICLE 6: PAYMENT TERMS

6.1 Initial Invoice. Design-Builder shall be entitled to submit to Owner, on or after the Agreement Date, an initial invoice. This amount is considered part of the Contract Sum and shall be considered full and complete compensation to Design-Builder for the design services performed prior to the Agreement Date and furnished in the Proposal. Payment of the Initial invoice will be processed by Owner and paid in accordance with Section 6.4 below, provided, however, that no retainage will be withheld on such payment.

6.2 Schedule of Values. Before submitting its first Application for Payment, Design-Builder shall submit to Owner for approval a Schedule of Values with breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Owner and

established by Section III, Design-Build Contract Management, Z1010.01A of the RFP Documents. The Schedule of Values will: (a) subdivide the Work into its respective parts; (b) include values for all items comprising the Work (inclusive of the Initial invoice payment amount); (c) contain appropriate amounts for demobilization, record drawings, and any other requirements for Project close-out; and (d) be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

6.3 Applications for Payment

6.3.1 Form of Application. Design-Builder shall, on or before the twenty-fifth (25th) day of each month, submit to Owner an itemized Application for Payment, completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require. When Design-Builder submits its monthly Application for Payment, it shall include, in addition to other requirements of the Contract Documents the following: (a) a completed Statement of Apprentice/Journeyman Participation form and such other requirements as set forth in Article 23; and (b) a waiver and release of claims and mechanic's liens. Payments will not be considered due and payable by Owner unless these forms are properly completed and timely received by Owner.

6.3.2 Certification. By submitting an Application for Payment, Design-Builder: (a) certifies that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.010, as their interests appeared in the last preceding Application for Payment, if payment for the application has been paid to the Design-Builder more than 10-days prior to the current application; and (b) re-certifies that Design-Builder's prior certifications are true and correct, to the best of Design-Builder's knowledge, as of the date of the Application for Payment.

6.3.3 Reconciliation. At the time it submits an Application for Payment, Design-Builder shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Project Schedule.

6.3.4 Stored Materials. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off Site, provided Design-Builder complies with or furnishes satisfactory evidence of the following:

1) The material will be placed in a warehouse that is structurally sound, dry, lighted and suitable for the materials to be stored;
2) The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;
3) Only materials for the Project are stored within the warehouse (or a secure portion of a warehouse set aside for the Project);

4) Design-Builder furnishes Owner a certificate of insurance extending Design-Builder's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
5) The warehouse (or secure portion thereof) is continuously under lock and key, and only Design-Builder's authorized personnel shall have access;
6) Owner shall at all times have the right of access in company of Design-Builder;
7) Design-Builder and its surety assume total responsibility for the stored materials; and
8) Design-Builder furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Site.

6.4 Progress Payments

6.4.1 Payment. Owner shall make progress payments, in such amounts as Owner determines are properly due, within thirty (30) days after receipt of the Initial invoice or a properly executed Application for Payment. Owner shall notify Design-Builder in accordance with RCW 39.76 if an Application for Payment does not comply with the requirements of the Contract Documents or if payment will be withheld.

6.4.2 Retainage. Owner shall retain five percent (5%) of the amount of each progress payment due under an Application for Payment until at least forty-five (45) days after Final Acceptance and receipt of all documents required by Governmental Rule or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage; provided, however, that no amount shall be retained for those portions of the Contract Sum that are for professional services. In accordance with RCW 60.28, Design-Builder may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Design-Builder. Owner may permit Design-Builder to provide an appropriate bond in lieu of the retained funds. Retainage shall be released in accordance with Governmental Rules.

6.4.3 Payment for Punchlist. Design-Builder's right to be paid for the Punchlist is set forth in Section 7.3.2.

6.4.4 Title to Work Covered by Progress Payments. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Design-Builder from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Design-Builder with the Contract Documents.

6.5 Final Payment

6.5.1 Application for Final Payment. Once Owner has issued a Certificate of Final Acceptance, Design-Builder shall be entitled to submit an Application for Final Payment, which application will include the following information:

1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which Owner might in any way be responsible have been paid or otherwise satisfied and that there are no claims, obligations, or liens outstanding or unsatisfied for labor, services, Equipment and Material, taxes, or other items performed, furnished or incurred for or in connection with the Work which will in any way affect Owner's interests;
2) a written notice of any outstanding disputes or claims between Design-Builder and any of its Subcontractors, including the amounts and other details thereof;
3) a general release executed by Design-Builder waiving, upon receipt of final payment by Design-Builder, all claims, except those claims pending in accordance with Article 11;
4) consent of Design-Builder's surety to final payment;
5) certificates of insurance confirming that required coverages will remain in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to Owner, consistent with the requirements of the Contract Documents; and
6) a written statement that Design-Builder knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents.

6.5.2 Payment. Within thirty (30) days after receipt of an acceptable Application for Final Payment, Owner shall pay to Design-Builder the unpaid balance of the Contract Sum (less any Retainage per Article 6), reduced by any amounts owed by Design-Builder to Owner pursuant to this Agreement which have not been paid by Design-Builder. Retainage funds shall be released pursuant to RCW 60.28.

6.5.3 Continuing Obligations. Neither Final Acceptance nor final payment shall release Design-Builder or its sureties from any obligations of these Contract Documents, or any bonds, or constitute a waiver of any claims by Owner arising from Design-Builder's failure to perform the Work in accordance with the Contract Documents.

6.5.4 Waiver and Release. Acceptance of final payment by Design-Builder or any Subcontractor shall constitute a waiver and release to Owner of all claims by Design-Builder, or any such Subcontractor, for an increase in the Contract Sum or Guaranteed Completion Date(s), and for every act or omission of Owner relating to or arising out of the Work, except for those claims made in accordance with Article 11.

6.6 Owner's Right to Withhold Payment and Offset

6.6.1 Withholding of Payment. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including:

1) Work not in accordance with the Contract Documents;
2) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
3) Work by Owner to correct defective Work or to complete the Work;
4) Design-Builder's failure to perform in accordance with the Contract Documents; and
5) Costs, claims, or liability that are the result of Design-Builder's failure to perform in accordance with the Contract Documents, including Liquidated Damages.

6.6.2 Owner's Offset Rights. If, at the time any payment by Owner is due under this Article 6, Design-Builder is liable to Owner for any amounts in accordance with the provisions of the Contract Documents (including Liquidated Damages), Owner may deduct the outstanding amount of such claims against Design-Builder from the amount payable to Design-Builder.

6.6.3 Payment Disputes. If Design-Builder disputes Owner's determination of payments due hereunder, or disputes any offsets or withholding by Owner, Design-Builder shall have the right to submit the dispute for resolution in accordance with Article 11. Pending resolution of any such dispute, Design-Builder shall continue its performance of the Work in accordance with the Contract Documents. Amounts determined by such resolution process to have been properly due shall be payable by Owner within thirty (30) days after (a) the effective date of the Parties' negotiated settlement or (b) absent such settlement, the arbitration award issued pursuant to Section 11.2.

6.7 Interest. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in RCW 39.76.

6.8 Record Keeping and Finance Controls. Design-Builder acknowledges that this Agreement is to be administered on an "open book" arrangement relative to Costs of the Work. Design-Builder shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management, using accounting and control systems in accordance with generally accepted accounting principles and as may be provided in the Contract Documents. During the performance of the Work and for a period of six (6) years after Final Acceptance, Owner and Owner's designee, the Office of the State Auditor and any other governmental entity authorized by law shall be afforded access to, and the right to inspect and audit, upon reasonable notice, Design-Builder's records, books, correspondence, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to the Work, all of which Design-Builder shall preserve for a period of six (6)

years after Final Acceptance. Such inspection shall take place at Design-Builder's offices during normal business hours unless another location and time is agreed to by the parties.

ARTICLE 7: Time for Performance

7.1 Commencement of Work. Design-Builder shall commence the Work upon its receipt of a written notice from Owner ("Notice to Proceed") authorizing Design-Builder to commence the Work, whereupon Design-Builder shall diligently pursue performance of the Work in accordance with the Contract Documents.

7.1.1 This project has been funded in the State's 19-21 biennium and the remaining funding is dependent upon future legislative approval. The Notice to Proceed shall be for design and pre-construction services as described in Section 5.1, limited to the current funding available. Written authorization to proceed on the remaining work will be issued when funding becomes available.

7.2 Guaranteed Completion Date(s).

7.2.1 Guaranteed Substantial Completion. Design-Builder guarantees that it will achieve Substantial Completion 460 calendar days after written Notice to Proceed.

7.2.2 Guaranteed Final Completion. Design-Builder guarantees that it will achieve Final Completion within nineth (90) calendar days of Substantial Completion.

7.2.3 Adjustments to the Guaranteed Completion Date(s). The Guaranteed Completion Date(s) for Substantial Completion and Final Completion shall be subject to adjustment in accordance with Articles 8 & 10.

7.2.4 Performance of the Work. Design-Builder represents that the Work shall be planned, organized and executed in accordance with the Project Schedule to achieve the Guaranteed Completion Date(s). Should Owner have a reasonable belief that the Project Schedule or Guaranteed Completion Date(s) will not be met for causes that do not constitute an Excusable Delay, Owner has the right, but not the obligation, to so notify Design-Builder, and Design-Builder shall then work additional overtime, engage additional personnel and take such other measures as necessary to complete the Work within the Project Schedule and by the Guaranteed Completion Date(s). Design-Builder shall bear all costs related to such overtime, additional personnel, and other measures.

7.3 Substantial Completion.

7.3.1 Conditions of Substantial Completion. Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents,

so Owner can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or Punchlist work shall be completed as of Substantial Completion, and Substantial Completion shall not have been achieved if: (a) any systems and parts are not functioning as required by the Contract Documents; (b) utilities are not connected and operating normally; (c) all required occupancy permits have not been issued; or (d) the Work is not accessible by normal vehicular and pedestrian traffic routes.

7.3.2 Punchlist.

7.3.2.1 Design-Builder's Creation of Punchlist. Design-Builder shall prepare a Punchlist and provide it to Owner together with an estimate of the cost and time to complete and/or correct each Punchlist item.

7.3.2.2 Owner's Action on Punchlist. Owner shall notify Design-Builder within ten (10) business days after receipt of the Punchlist that it accepts such Punchlist and estimate or shall otherwise state its reasons for disagreement therewith in reasonable detail; provided, however, that: (a) Owner shall have no obligation to accept such Punchlist if the aggregate value of the Work to be performed as described in the Punchlist (including labor and equipment) exceeds one half of one percent (0.5%) of the Contract Sum; and (b) acceptance or rejection thereof shall not relieve Design-Builder of its liability to complete or correct the Punchlist items. If the parties fail to agree on any aspect of the Punchlist, then: (a) Design-Builder shall be obligated to proceed in accordance with Owner's instructions and interpretations relative to the Punchlist; and (b) either Party may refer the matter to dispute resolution in accordance with the provisions of Article 11.

7.3.2.3 Condition Precedent to Substantial Completion. Design-Builder's creation of a Punchlist, and Owner's Approval of such Punchlist, shall be a condition precedent to achieving Substantial Completion.

7.3.2.4 Payment of Punchlist Amount. Owner may withhold an amount equal to one hundred fifty percent (150%) of the estimated value of each Punchlist item. Payment of the estimated amount of the Punchlist shall not be due until Design-Builder has completed all Punchlist items. If Design-Builder fails to complete all Punchlist items within sixty (60) days after the date of Substantial Completion, Owner may complete, or cause to be completed, any item which Design-Builder has so failed to complete. In such case, Owner may deduct the related cost of such item from the amount withheld with respect to such item and pay the remaining amount withheld, if any, to Design-Builder.

7.3.3 Substantial Completion Certificate

7.3.3.1 Design-Builder's Issuance of Certificate. When Design-Builder believes that Substantial Completion has occurred, it shall issue a Substantial Completion Certificate, supported by such information required by the Contract Documents.

7.3.3.2 Owner's Review of Certificate. Owner shall review and accept or reject the Substantial Completion Certificate issued by Design-Builder within ten (10) business days of its receipt of such certificate, and, if applicable, will specifically identify its reasons for rejection. If Design-Builder accepts the reasons for such rejection, it shall take corrective action and submit a new certificate to Owner. If Design-Builder disagrees with the reasons for the rejection, it shall promptly notify Owner, whereupon Design-Builder and Owner shall meet to attempt to resolve the disagreement. If the disagreement cannot be resolved within five (5) business days, Design-Builder shall act in accordance with the instructions of Owner without prejudice to its rights under Article 11.

7.3.4 Prior Occupancy. Owner may, upon written notice thereof to Design-Builder, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: (a) be deemed an acceptance of any portion of the Work; (b) accelerate the time for any payment to Design-Builder; (c) prejudice any rights of Owner provided by any insurance, bond, or the Contract Documents; (d) relieve Design-Builder of the risk of loss or any of the obligations established by the Contract Documents; (e) establish a date for termination or partial termination of the assessment of liquidated damages; or (f) constitute a waiver of claims. Notwithstanding the above, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy.

7.4 Final Completion

7.4.1 Conditions for Final Completion. Final Completion shall occur when all of the following have been satisfied:

(1) the Work is fully and finally complete in accordance with the Contract Documents, including: (i) the completion of all Punchlist items; (ii) all as-built information and other documents required by the Contract Documents have been received and accepted by Owner; and (iii) all special tools, spare parts, operating instructions and manuals, and certificates required by the Contract Documents and all other items to be provided by Design-Builder to Owner hereunder shall have been delivered to Owner free and clear of all liens; and
(2) the Design-Builder has completed all of the requirements, up to and including submittal of a proper application for the LEED Certificate.

7.4.2 Issuance of Final Acceptance Certificate. When Design-Builder believes that Final Completion has occurred, Design-Builder shall issue a proposed Final Acceptance Certificate for approval by Owner. The process for Owner's review, acceptance and/or rejection of this certificate shall be in accordance with Section 7.3.3.2.

7.5 Delay Damages

7.5.1 Liquidated Damages for Late Substantial Completion. If Design-Builder fails to achieve Substantial Completion by the Guaranteed Completion Date for Substantial Completion, Design-Builder shall be liable for the payment of liquidated damages to Owner in the amount of Seven Hundred Fifty Dollars ($750) per each calendar day of delay until Substantial Completion is achieved.

7.5.2 Liquidated Damages Not Penalty. The Parties acknowledge, recognize and agree on the following:

(1) that because of the unique nature of the Project, it is difficult or impossible to determine with precision the amount of damages that would or might be incurred by Owner as a result of Design-Builder's failure to achieve Substantial Completion on or before the Guaranteed Completion Date for Substantial Completion; and
(2) that any sums which would be payable under this Article 7 are in the nature of liquidated damages, and not a penalty, and are fair and reasonable and such payment represents a reasonable estimate of fair compensation for the losses that reasonably may be anticipated from such failure.

7.5.3 Actual Damages for Late Final Completion. After Substantial Completion is achieved, actual damages will be assessed for failure to achieve Final Completion by the Guaranteed Completion Date for Final Completion. Actual damages will be calculated on the basis of direct consultant, administrative, and other related costs attributable to the Project as a result of such failure.

7.5.4 Payment of Delay Damages. Delay Damages shall accrue daily, and Owner may offset these costs against any payment due Design-Builder.

ARTICLE 8: CHANGES

8.1 Right to Make Changes. Owner may, at any time and without notice to Design-Builder's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Guaranteed Completion Date(s), an equitable

adjustment shall be made as provided in Articles 8, 9, and 10, and incorporated into a Change Order.

8.2 Owner May Request a Change Order Proposal (COP) From Design-Builder: If Owner desires to order a change in the Work, it may request a written COP from Design-Builder. Design-Builder shall submit a COP within 14 Days of the request from Owner, or within such other period as mutually agreed. Design-Builder's COP shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Guaranteed Completion Date(s), and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

8.2.1 COP Negotiations: Upon receipt of the COP, or a request for equitable adjustment in the Contract Sum or Guaranteed Completion Date(s), or both, as provided in Articles 9 and 10, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Design-Builder. Pending agreement on the terms of the Change Order, Owner may direct Design-Builder to proceed immediately with the Change Order Work. Design-Builder shall not proceed with any change in the Work until it has obtained Owner's approval or Owner's Field Authorization as provided in Section 8.3. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.

8.2.2 Change Order as full payment and final settlement: If Owner and Design-Builder reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Guaranteed Completion Date(s), such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.

8.2.3 Failure to agree upon terms of Change Order; Final offer and Claims: If Owner and Design-Builder are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Guaranteed Completion Date(s), Design-Builder may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 Days of Design-Builder's request. Owner may also provide Design-Builder with a final offer at any time. If Design-Builder rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Design-Builder only remedy shall be to file a Claim as provided in Article 11.

8.3 Field Authorizations. The Owner may direct the Design-Builder to proceed with a change in the work through a written Field Authorization (may also be referred to as a Field Order) when the time required to price and execute a Change Order would impact the Project. The

Field Authorization shall describe and include the following: (1) The scope of work; (2) An agreed upon maximum not-to-exceed amount; (3) Any estimated change to the Guaranteed Completion Date(s); (4) The method of final cost determination in accordance with the requirements of Article 9.; (5) The supporting cost data to be submitted in accordance with the requirements of Article 9.

Upon satisfactory submittal by the Design-Builder and approval by the Owner of supporting cost data, a Change Order will be executed. The Owner will not make payment to the Design-Builder for Field Authorization work until that work has been incorporated into an executed Change Order.

8.4. Owner's Rights to Undertake or Reject Proposed Changes. Owner shall have the right, at any time and in its sole discretion: (a) to direct Design-Builder to proceed immediately with the proposed change under a Field Authorization, pending agreement by the Parties on the terms of a Change Order; or (b) not to undertake any contemplated change, provided, however, that in such event, if Design-Builder was required to prepare a design as part of the proposed change, then Design-Builder shall be paid the reasonable costs it has incurred in preparing such design.

8.5 Changes of Law. If, after the date of this Agreement and prior to Substantial Completion, there shall be any Change of Law that impacts the Work, then Design-Builder shall have the right to submit a request for an equitable adjustment in accordance with Section 8.6.

8.6 Design-Builder's Requests for Equitable Adjustments. If Design-Builder believes that any event arising out of or relating to the Work causes a material increase in its cost of, or time required for the performance of, any part of the Work, and that under the terms of the Contract Documents such event entitles Design-Builder to an adjustment to the Contract Sum or the Guaranteed Completion Date(s), then Design-Builder shall comply with the following processes.

8.6.1 Request for Equitable Adjustment. Design-Builder shall provide Owner with written notice, in accordance with Section 8.6.2, of any event that Design-Builder believes entitles it to an equitable adjustment in the Contract Sum and/or Guaranteed Completion Date(s) within fourteen (14) days of the occurrence of the event giving rise to the request. For purposes of this part, "occurrence" means when Design-Builder knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Design-Builder believes it is entitled to an adjustment in the Contract Sum, Design-Builder shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Design-Builder shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.

8.6.2 Contents of the Initial Notice. Design-Builder shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than fourteen (14) days before Design-Builder's written notice to Owner. The written

notice shall set forth, at a minimum, a description of: (a) the event giving rise to the request for an equitable adjustment in the Contract Sum; (b) the nature of the impacts to Design-Builder; and (c) to the extent possible the amount of the adjustment in Contract Sum requested. Failure properly to give such written notice shall constitute a waiver of Design-Builder's right to an equitable adjustment.

8.6.3 Contents of the Supplemental Notice. Within thirty (30) days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Design-Builder shall supplement the written notice provided in accordance with Section 8.6.2 above with additional supporting data. Such additional data shall include, at a minimum: (a) the amount of compensation requested, itemized in accordance with procedure set forth herein; (b) specific facts, circumstances, and analysis that confirms not only that Design-Builder suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Design-Builder for such act, event, or condition; and (c) documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request relates to a delay or change in the Guaranteed Completion Date(s), Design-Builder shall also be obligated to comply with all of the requirements of Article 10. Failure to provide such additional information and documentation within the time allowed or within the format required shall constitute a waiver of Design-Builder's right to an equitable adjustment.

8.6.4 Combined Requests for Price and Time Adjustments. Any requests by Design-Builder for an equitable adjustment in the Contract Sum and in the Guaranteed Completion Date(s) that arise out of the same event(s) shall be submitted together.

8.6.5 Fault or Negligence of Design-Builder. Design-Builder shall have no right to seek an equitable adjustment to the Contract Sum or Guaranteed Completion Date(s) if the basis for the adjustment arises out of or relates to events, to the extent caused by the fault or negligence of Design-Builder, or anyone for whose acts Design-Builder is responsible.

8.7 Computation of Adjustments

8.7.1 Contract Sum. The computation of the value of any Change Order, Design-Builder request for equitable adjustment under Section 8.6, or any other adjustment to the Contract Sum, shall be determined in accordance with Article 9.

8.7.2 Guaranteed Completion Date(s). The computation of any adjustments to the Guaranteed Completion Date(s) as the result of any Change Order, or of any Design-Builder request for equitable adjustment under Section 8.6, or any other event or reason, shall be as set forth in Article 10.

8.8 Duty to Proceed. No dispute under the Contract Documents, including those relating to the entitlement, cost, or time associated with a contemplated change or Design-Builder request for equitable adjustment under Section 8.6, shall interfere with the progress of the Work and Owner shall continue to satisfy its payment obligations to Design-Builder pending the final resolution of any dispute or disagreement. Design-Builder shall have the duty diligently to proceed with the Work in accordance with Owner's instructions despite any dispute or claim, including those events where the Parties are in disagreement as to whether instructions from Owner constitute a valid claim or change to the Contract Documents and justify adjustments to the Contract Sum or Guaranteed Completion Date(s). Design-Builder's sole recourse in the event of a dispute will be to pursue its rights under Article 11.

8.9 Oral Instructions. Design-Builder shall comply with oral instructions to Key Personnel received from Owner, provided, however, that if Design-Builder believes that any oral instruction may affect the Contract Sum or Guaranteed Completion Date(s), or cause the Work not to be in compliance with the Contract Documents, Design-Builder shall provide written notice to Owner within three (3) days of such oral instruction that it requires that the instruction be given in writing. Any and all costs incurred by Design-Builder to perform oral instructions without having been reduced to writing by Owner shall be for Design-Builder's account and Design-Builder hereby waives any and all rights to claim any relief for such oral instructions.

ARTICLE 9: ADJUSTMENTS TO THE CONTRACT SUM

9.1 Change in the Contract Sum – General Application

9.1.1 Contract Sum Changes Only By Change Order. The Contract Sum shall only be changed by a Change Order. Design-Builder shall include any request for a change in the Contract Sum in its Change Order Proposal.

9.1.2 Owner Fault or Negligence as Basis for Change in Contract Sum. If the cost of Design-Builder's performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Design-Builder shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Design-Builder's changed cost of performance is due to the fault or negligence of Design-Builder, or anyone for whose acts Design-Builder is responsible; or the change is concurrently caused by Design-Builder and Owner.

a. Notice and Record Keeping for Equitable Adjustment. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within fourteen (14) Days of the occurrence of the event giving rise to the request. For purposes of this part, "occurrence" means when Design-Builder knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Design-Builder believes it is entitled to an

adjustment in the Contract Sum, Design-Builder shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Design-Builder shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.

b. Content of Notice for Equitable Adjustment; Failure to Comply. Design-Builder shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than fourteen (14) Days before Design-Builder's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Design-Builder and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Design-Builder's right to an equitable adjustment.

c. Design-Builder to Provide Supplemental Information. Within 30 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Design-Builder shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Design-Builder suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Design-Builder for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Design-Builder shall demonstrate the impact on the critical path, in accordance with Section 10.5. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Design-Builder's right to an equitable adjustment.

d. Design-Builder to Proceed with Work as Directed. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Design-Builder shall proceed diligently with performance of the Work.

e. Design-Builder to Combine Requests for Same Event Together. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Guaranteed Completion Date(s) that arise out of the same event(s) shall be submitted together.

9.1.3 Methods for Calculating Change Order Amount. The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods:

a. Fixed Price: On the basis of a fixed price as determined in Section 9.2.

b. Unit Prices: By application of unit prices to the quantities of the items involved as determined in Section 9.3.

c. Time and Materials: On the basis of time and material as determined in Section 9.4.

9.1.4 Time and Materials Method Is Default; Owner May Direct Otherwise. When Owner has requested Design-Builder to submit a Change Order Proposal, Owner may direct Design-Builder as to which method in Section 9.1.3 to use when submitting its proposal. Otherwise, Design-Builder shall determine the value of the Work, or if a request for an equitable adjustment, on the basis of the fixed price method.

9.2 Change Order Pricing – Fixed Price

9.2.1 Procedures. When the fixed price method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply.

9.2.2 Breakdown and Itemization of Details on COP. Design-Builder's Change Order Proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, equipment, subcontractor, design, and overhead and profit. The costs shall be itemized in the manner set forth below and shall be submitted on breakdown sheets in a form approved by Owner.

9.2.3 Use of Industry Standards in Calculating Costs. All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material quantities, and equipment costs.

9.2.4 Costs Contingent on Owner's Actions. If any of Design-Builder's pricing assumptions are contingent upon anticipated actions of Owner, Design-Builder shall clearly state them in the proposal or request for an equitable adjustment.

9.2.5 Markups on Additive and Deductive Work. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Design-Builder or Subcontractor, small tools, overhead, profit, bond and insurance markups will apply to the net difference.

9.2.6 Breakdown Not Required if Change Less Than $1,000. If the total cost of the change in the Work or request for equitable adjustment does not exceed $1,000, Design-Builder shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.

9.2.7 Breakdown Required if Change Between $1,000 and $2,500. If the total cost of the change in the Work or request for equitable adjustment is between $1,000 and $2,500, Design-Builder may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:

a. Lump sum labor;

b. Lump sum material;

c. Lump sum equipment usage;

d. Overhead and profit; and

e. Insurance and bond costs.

9.2.8 Components of Increased Cost. Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:

a. Craft Labor Costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor, as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:
   1) Basic Wages and Benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved “statement of intent to pay prevailing wages” or a higher amount if approved by the Owner. Direct supervision shall be a reasonable percentage not to exceed 15% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor’s hours.
   2) Worker’s Insurance: Direct contributions to the state of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.
   3) Federal Insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.

4) Travel Allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
5) Safety: Cost incurred due to the Washington Industrial Safety and Health Act, which shall be a reasonable percentage not to exceed 2% of the sum of the amounts calculated in (1), (2), and (3) above.

b. Material Costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs, second from supplier quotations or if these are not available, from standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges or special delivery charges, shall be itemized.

c. Equipment Costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental and transportation costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:
1) The National Electrical Contractors Association for equipment used on electrical work.
2) The Mechanical Contractors Association of America for equipment used on mechanical work.
3) The Equipment Watch Fleet Manager Estimator Package (digital). The maximum rate for standby equipment shall not exceed that shown in the Associated General Contractors Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement, current edition on the Contract execution date.

d. Allowance for Small Tools, Expendables & Consumable Supplies: Small tools consist of tools which cost $250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:
1) 3% for Design-Builder: For Design-Builder, 3% of direct labor costs.
2) 5% for Subcontractors: For Subcontractors, 5% of direct labor costs.
Expendables and consumables supplies directly associated with the change in Work must be itemized.

e. Design Costs: Cost of design incurred in connection with a change. Costs to be enumerated using rates for labor as set forth in the rate sheet attached as Exhibit E – Schedule 9.2.8e.

f. Subcontractor Costs: This is defined as payments Design-Builder makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Design-Builder.

g. Allowance for Overhead: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any change in the Contract Sum. If the Design-Builder is compensated under Section 10.6.2, the amount of such compensation shall be reduced by the amount Design-Builder is otherwise entitled to under this subsection (g). This allowance shall compensate Design-Builder for all non-craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the rates below:
   1) Design-Builder Markup on Design-Builder Work: For Design-Builder, for any Work actually performed by its own forces, 12% of the first $50,000 of the cost, and 4% of the remaining cost, if any.
   2) Subcontractor Markup for Subcontractor Work: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% of the first $50,000 of the cost, and 4% of the remaining cost, if any.
   3) Design-Builder Markup for Subcontractor Work: For Design-Builder, for any Work performed by its Subcontractor(s), 4% of the first $50,000 of the amount due each Subcontractor, and 2% of the remaining amount if any.
   4) Subcontractor Markup for Lower Tier Subcontractor Work: For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first $50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.
   5) Basis of Cost Applicable for Markup: The cost to which overhead is to be applied shall be developed in accordance with Section 9.2.8 a – e.

h. Allowance for Profit: Allowance for profit is an amount to be added to the cost of any change in Contract Sum, but not to the cost of change in Guaranteed Completion Date(s) for which Design-Builder has been compensated pursuant to the conditions set forth in Section 10.6.2. It shall be limited to a reasonable amount, mutually acceptable, or if none can be agreed upon, to an amount not to exceed the rates below:
   1) Design-Builder / Subcontractor Markup for Self-Performed Work: For Design-Builder or Subcontractor of any tier for work performed by their forces, 6% of the cost developed in accordance with Section 9.2.8 a. – e.
   2) Design-Builder / Subcontractor Markup for Work Performed at Lower Tier: For Design-Builder or Subcontractor of any tier for work performed by a

subcontractor of a lower tier, 4% of the subcontract cost developed in accordance with Section 9.2.8 a. – i.

i. Insurance and Bond Premiums: Cost of change in insurance or bond premium: This is defined as:
   1) Design-Builder's Liability Insurance: The cost of any changes in Design-Builder's liability insurance arising directly from execution of the Change Order; and
   2) Payment and Performance Bond: The cost of the additional premium for Design-Builder's bond arising directly from the changed Work.

   The cost of any change in insurance or bond premium shall be added after overhead and allowance for profit are calculated in accordance with subparagraph g. and h above.

9.3 Change Order Pricing – Unit Prices

9.3.1 Content of Owner Authorization. Whenever Owner authorizes Design-Builder to perform Work on a unit-price basis, Owner's authorization shall clearly state:

a. Scope: Scope of work to be performed;

b. Reimbursement Basis: Type of reimbursement including pre-agreed rates for material quantities; and

c. Reimbursement Limit: Cost limit of reimbursement.

9.3.2 Design-Builder Responsibilities. Design-Builder shall:

a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Design-Builder shall identify workers assigned to the Change Order Work and areas in which they are working;

b. Leave access as appropriate for quantity measurement; and

c. Not exceed any cost limit(s) without Owner's prior written approval.

9.3.3 Cost Breakdown Consistent with Fixed Price Requirements. Design-Builder shall submit costs in accordance with Section 9.2 and satisfy the following requirements:

a. Unit prices must include overhead, profit, bond and insurance premiums: Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead, profit, bond, and insurance costs; and

b. Owner verification of quantities: Quantities must be supported by field measurement statements signed by Owner.

9.4 Change Order Pricing – Time and Material Prices

9.4.1 Content of Owner Authorization. Whenever Owner authorizes Design-Builder to perform Work on a time-and-material basis, Owner's authorization shall clearly state:

a. Scope: Scope of Work to be performed;

b. Reimbursement basis: Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and

c. Reimbursement limit: Cost limit of reimbursement.

9.4.2 Design-Builder Responsibilities. Design-Builder shall:

a. Identify workers assigned: Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;

b. Provide daily timesheets: Identify on daily time sheets all labor performed in accordance with this authorization. Submit copies of daily time sheets within 2 working days for Owner's review;

c. Allow Owner to measure quantities: Leave access as appropriate for quantity measurement;

d. Perform Work efficiently: Perform all Work in accordance with this section as efficiently as possible; and

e. Not exceed Owner's cost limit: Not exceed any cost limit(s) without Owner's prior written approval.

9.4.3 Cost Breakdown Consistent with Fixed Price Requirements. Design-Builder shall submit costs in accordance with Section 9.2 and additional verification supported by:

a. Timesheets: Labor detailed on daily time sheets; and

b. Invoices: Invoices for material.

9.5 Compensation for Adjustments to the Guaranteed Completion Date(s). Design- Builder's rights to seek compensation for the cost of an adjustment to the Guaranteed Completion Date(s), and the amount of such compensation, are set forth in Section 10.6.

ARTICLE 10: ADJUSTMENTS TO THE GUARANTEED COMPLETION DATE(S)

10.1 Requests for Contract Time. The Contract Time shall only be changed by a Change Order. Design-Builder shall include any request for a change in the Contract Time in its Change Order Proposal.

10.2 Time Extension Permitted if Not Contractor's Fault. If the time of Design-Builder's performance is changed due to an Excusable Delay, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Design-Builder shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Design-Builder's changed time of performance is due to the fault or negligence of Design-Builder, or anyone for whose acts Design-Builder is responsible.

10.3 Adjustment of Guaranteed Completion Date(s). The Guaranteed Completion Date(s) shall be adjusted by the amount of time Design-Builder actually is delayed by an Excusable Delay in the performance of the Work, provided that: (a) notice is given by Design-Builder as hereinafter provided; (b) the delay impacts the critical path (as reflected on the most recent monthly Project Schedule update) and is outside the reasonable control of Design-Builder; (c) Design-Builder's performance would not have been concurrently delayed or interrupted by any event other than those identified in Section 10.7; and (d) Design-Builder, in view of all the circumstances, has exercised reasonable efforts to avoid the delay and did not cause the delay. Delays of Subcontractors shall be deemed to be within the reasonable control of Design-Builder, unless such delays are themselves excusable in accordance with the provisions of this Agreement.

10.4 Notice and Supporting Documentation. Design-Builder shall not be entitled to an adjustment in the Guaranteed Completion Date(s) for any events that occurred more than fourteen (14) days before Design-Builder's written notice to Owner. The written notice shall set forth, at a minimum, a description of: (a) the event giving rise to the request for an equitable adjustment in the Guaranteed Completion Date(s); (b) the nature of the impacts to Design-Builder and its Subcontractors of any tier, if any; (c) the impact to the critical path; and (d) to the extent possible the amount of the adjustment in the Guaranteed Completion Date(s) requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Design-Builder's right to an equitable adjustment.

10.5 Supplementation. Within thirty (30) days of the occurrence of the event giving rise to the request for an extension to the Guaranteed Completion Date(s), unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Design-Builder shall supplement the written notice provided in accordance with Section 10.4 with additional supporting data. Such additional data shall include, at a minimum: (a) the amount of delay claimed, itemized in accordance with the procedure set forth herein; (b) specific facts, circumstances, and analysis that confirms not only that Design-Builder suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition

complained of, and that the Contract Documents provide entitlement to an equitable adjustment in the Guaranteed Completion Date(s) for such act, event, or condition; and (c) supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Design-Builder is further required to submit to Owner, as part of these supplemental materials, an acceleration schedule on a fragment basis to demonstrate how such delay can be eliminated. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Design-Builder's right to an equitable adjustment.

10.6 Adjustment of Contract Sum for Excusable Delays

10.6.1 Compensable and Non-Compensable Excusable Delays. If Design-Builder encounters an Excusable Delay under Sections 10.7 (1), (2), (3), (4), (5), (10), (11), or (13), for which it is entitled to a time extension pursuant to Section 10.3, Design-Builder also shall be entitled to an adjustment of the Contract Sum. Except as provided in the preceding sentence, Design-Builder expressly waives any and all monetary relief for any delay to the Work, whether or not such delay is an Excusable Delay, and specifically agrees that its sole and exclusive remedy for Excusable Delay, including any loss of productivity or impact costs associated with such Excusable Delays, will be an adjustment to the Guaranteed Completion Date(s).

10.6.2 Adjustments to Contract Sum. The daily cost of any change in the Guaranteed Completion Date(s) shall be limited to the items below, less the amount of any change in the Contract Sum the Design-Builder may otherwise be entitled to pursuant to Section 9.2.8g for any change in the Work that contributed to this change in Guaranteed Completion Date(s):

(1) Cost of nonproductive field supervision or labor extended because of the delay;
(2) Cost of weekly meetings or similar indirect activities extended because of the delay;
(3) Cost of temporary facilities or equipment rental extended because of the delay;
(4) Cost of insurance extended because of the delay;
(5) General and administrative overhead in an amount to be agreed upon, but not to exceed three percent (3%) of the original Contract Sum divided by the originally specified Contract Time for each Day of the delay.

10.7 Events Constituting Excusable Delay. The following events shall constitute Excusable Delay, provided, however, that before any event is deemed to be an Excusable Delay, Design-Builder shall be required to meet the conditions set forth in Section 10.3 for each such event:

1) Owner's suspension of all or part of the Work pursuant to Article 17;
2) Any failure of Owner to act within the times expressly provided in this Agreement;
3) Any unreasonable delay caused by the acts or omissions of Owner or persons acting on Owner's behalf;
4) Owner changes pursuant to Article 8;

5) Hazardous Materials encountered by Design-Builder under Section 2.2, subject to the express conditions of such section;
6) Major earthquakes or floods that directly impact the ability to perform the Work;
7) Unusually severe weather, in excess of weather conditions experienced within the area any time in the preceding ten years, based upon the following events:
   a) Monthly rainfall in excess of the highest monthly rainfall experienced for the same month.
   b) Annual rainfall in excess of the highest annual rainfall experienced.
   c) Monthly snowfall in excess of the highest monthly snowfall experienced for the same month.
   d) Annual snowfall in excess of the highest annual snowfall experienced.
   e) Average high temperatures, for the summer months, in excess of the highest average temperatures experienced.
   f) Average low temperatures for the winter months, lower than the lowest average temperatures experienced.
8) Public disorders, insurrection, rebellion, epidemic, terrorism, acts of war that directly impact the ability to perform the Work;
9) Fire or other casualty for which Design-Builder is not responsible, that directly impact the ability to perform the Work;
10) Actions of Governmental Units enjoining the Project from proceeding or in unreasonably delaying the issuance of a Government Approval;
11) Changes in Laws that impact the ability of Design-Builder to act; and
12) Labor strikes lasting in excess of three (3) consecutive days that affect a specific trade on a national or regional level and such strike was not caused by the acts or omissions of Design-Builder or Subcontractors.
13) Differing Site Conditions as set forth in Section 3.4.3.
14) Supplier delay of sole source products, provided the delay is completely outside the control of the Design-Builder.

10.8 Events Not Considered As Excusable Delay. The following events shall not constitute Excusable Delay, and Design-Builder assumes all risk of such events:
1) Actions or inactions of Government Units except as provided in Section 10.7(10);
2) Delays in obtaining or delivery of goods or services from Design-Builder or any Subcontractor unless such delay is caused by an Excusable Delay encountered by the Subcontractor;
3) Economic conditions, including labor shortages, inexperienced or unqualified labor, material shortages, or increases in the prices of labor or material.
4) Delays of common carriers;
5) Delays or disruptions arising out of or related to security clearances at the Site unless such delays or disruptions are not due to the actions or omissions of the Design-Builder or its subcontractors;
6) Adverse weather conditions, except as provided in Sections 10.7(6) and 10.7(7); and
7) Any other delay not specifically enumerated in Section 10.7.

10.9 Design-Builder To Proceed With Work As Directed. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Design-Builder shall proceed diligently with performance of the Work.

10.10 Disputes; Burden of Proof. In case of a dispute regarding the application of the provisions of this Article 10, including any dispute as to whether an Excusable Delay has occurred, either Party shall have the right to submit the dispute for resolution pursuant to Article 11, and Design-Builder shall bear the burden of proof, by clear and convincing evidence, in establishing its entitlement to adjustments to the Guaranteed Completion Date(s) and its entitlement to relief under this Article 10.

ARTICLE 11: CLAIMS AND DISPUTE RESOLUTION

11.1 Final Offer. If the Parties fail to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Guaranteed Completion Date(s), Design-Builder, at any time, may request in writing a final offer from Owner. Owner shall provide its written response within thirty (30) days of Design-Builder's request. Owner also may provide Design-Builder with a final offer at any time. If Design-Builder rejects Owner's final offer, or the Parties are unable to reach agreement, Design-Builder's only remedy shall be to file a Claim in accordance with this Article 11.

11.2 Claims Process

11.2.1 Claim Filing Deadline for Contractor. Design-Builder shall file its Claim within the earlier of one hundred twenty (120) days from Owner's final offer in accordance with Section 11.1 (if such an offer has been made) or the date of Final Completion.

11.2.2 Claim Must Cover All Costs and Be Documented. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Design-Builder may be entitled. It shall be fully substantiated and documented and, at a minimum, shall contain the following information:

1) A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim;
2) The date on which facts arose which gave rise to the Claim;
3) The name of each employee, agent or representative of Owner knowledgeable about the Claim;
4) The specific provisions of the Contract Documents which support the Claim;
5) The identification of any documents and the substance of any oral communications that support the Claim;
6) Copies of any identified documents, other than the Contract Documents, that support the Claim;
7) If an adjustment in the Guaranteed Completion Date(s) is sought, then: (a) the specific days and dates for which it is sought; (b) the specific reasons Design-

Builder believes an extension in the Guaranteed Completion Date(s) should be granted; and (c) Design-Builder's analysis of its Project Schedule to demonstrate the reason for such an adjustment;

8) If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail required by, Article 9; and
9) A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Design-Builder's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Guaranteed Completion Date(s) for which Design-Builder believes Owner is liable.

11.2.3 Time for Owner's Response to Claim. After Design-Builder has submitted a fully documented Claim that complies with all applicable provisions of Section 11.2.2, Owner shall respond in writing to Design-Builder as follows:

1) If the Claim amount is less than $50,000, Owner shall provide a decision within sixty (60) days from the date the Claim is received; or
2) If the Claim amount is $50,000 or more, Owner shall provide a decision within ninety (90) days from the date the Claim is received, or with notice to Design-Builder of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.

11.2.4 Owner's Review of Claim & Finality of Decision. To assist in the review of any Claim, Design-Builder shall provide any additional information requested by Owner. Design-Builder shall proceed with performance of the Work pending final resolution of any Claim in accordance with Section 8.8. Owner's written decision on a Claim shall be final and conclusive as to all matters set forth in the Claim, unless Design-Builder follows the procedures set forth in Section 11.3.

11.2.5 Waiver of Design-Builder Rights for Failure to Comply with this Section. Any Claim of Design-Builder against Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by Design-Builder unless timely made in accordance with the requirements of this Section 11.2.

11.3 Timing of Design-Builder's Demand for Arbitration. If Design-Builder disagrees with Owner's decision rendered in accordance with Section 11.2, Design-Builder shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than thirty (30) days after the date of Owner's decision on such Claim; failure to demand arbitration within said thirty (30) day period shall result in Owner's decision being final and binding upon Design-Builder and all Subcontractors.

11.3.1 Filing of Notice for Arbitration. Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The

Parties shall negotiate or mediate under the Construction Industry Arbitration Rules & Mediation Procedures of the AAA ("AAA Rules"), or mutually acceptable service, before seeking arbitration in accordance with the then-applicable AAA Rules.

11.3.2 Arbitration Is the Forum for Resolving Claims. All Claims arising out of the Work shall be resolved by binding arbitration in accordance with the then-applicable AAA Rules. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

11.3.3 Owner May Combine Claims Into Same Arbitration. Claims between Owner and Design-Builder and Design-Builder and its Subcontractors shall, upon demand by Owner, be submitted in the same arbitration or mediation.

11.3.4 Resulting Change Order. If the Parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

11.4 Continuation of Work. Design-Builder shall continue to perform the Work and Owner shall continue to satisfy its payment obligations to Design-Builder pending final resolution of any dispute or disagreement.

11.5 Owner May Audit Claims. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Design-Builder, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Design-Builder, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.

11.5.1 Design-Builder to Make Documents Available. In support of Owner audit of any Claim, Design-Builder shall, upon request, promptly make available to Owner the following documents:

1) Daily time sheets and supervisor's daily reports;
2) Collective bargaining agreements;
3) Insurance, welfare, and benefits records;
4) Payroll registers;
5) Earnings records;
6) Payroll tax forms;
7) Material invoices, requisitions, and delivery confirmations;
8) Material cost distribution worksheet;
9) Equipment records (list of company equipment, rates, etc.);
10) Vendors', rental agencies', Subcontractors', and agents' invoices;

11) Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
12) Subcontractors' and agents' payment certificates;
13) Canceled checks (payroll and vendors);
14) Job cost report, including monthly totals;
15) Job payroll ledger;
16) Planned resource loading schedules and summaries;
17) General ledger;
18) Cash disbursements journal;
19) Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;
20) Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
21) If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
22) All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim;
23) Work sheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals; and
24) Work sheets, software, and all other documents used by Contractor to prepare its bid.

11.5.2 Contractor to Provide Facilities for Audit and Shall Cooperate. The audit may be performed by employees of Owner or a representative of Owner. Design-Builder, and its Subcontractors, shall provide adequate facilities acceptable to Owner, for the audit during normal business hours. Design-Builder, and all Subcontractors, shall make a good faith effort to cooperate with Owner's auditors. All records shall be maintained for a period of six (6) years after Final Acceptance under this Agreement.

ARTICLE 12: INSPECTION AND CORRECTION OF WORK

12.1 Periodic Inspections. Owner and its respective agents and representatives, including Owner's Design-Build Consultant, shall have the right to inspect and test the Work at the Site or where the same is being prepared, manufactured, fabricated or assembled (including but not limited to any item of equipment and materials, design, engineering, or other service or the workmanship associated therewith). Such inspections and tests include, but are not limited to, those identified in Section 2.1.5 above. Design-Builder shall, at the request of Owner, arrange for any such inspection and testing at reasonable times and upon

reasonable advance notice. Owner's inspection and testing may include, to the extent Owner deems it appropriate, testing of such Work. Owner shall inform Design-Builder promptly of any defects or deficiencies in the Work it discovers in any inspection or test of the Work. Any inspection or test by Owner, Owner's Design-Build Consultant or any of their representatives of any part of the Work, or any failure to inspect or test, shall in no way: (a) affect Design-Builder's obligations to perform the Work in accordance with the Contract Documents; (b) constitute or imply acceptance; (c) relieve Contractor of responsibility for risk of loss or damage to the Work; or (d) impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled. All such inspections and tests shall be conducted in a manner that does not unreasonably interfere with the normal performance and progress of the Work. Notwithstanding anything to the contrary in the Contract Documents, Owner shall have the right to take photographs of the Work and Site at any time.

12.2 Access to and Dismantling of Work. Design-Builder shall cooperate fully with Owner at any reasonable time that Owner shall determine that inspection of the Work is necessary or appropriate. Such cooperation shall include furnishing Owner with access to the Work whenever and wherever Work is in progress, even to the extent of dismantling finished Work where necessary to permit such inspection. If such dismantling and subsequent inspection reveals defects or deficiencies, such Work and all associated Work shall be corrected at the expense of Design-Builder. If such dismantling and subsequent inspection reveals no defects or deficiencies, such Work shall be restored at the expense of Owner.

12.3 Correction of Work. Design-Builder promptly shall correct, at its own expense, any defects or deficiencies in any part of the Work, regardless of the stage of its completion or the time or place of discovery of such errors. If Design-Builder fails to take corrective actions, Owner may replace, correct, or remove the non-conforming work and charge the cost thereof to Design-Builder.

12.4 Work Affected By Corrective Work. Design-Builder shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Design-Builder's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

12.5 Owner Acceptance of Non-Conforming Work. If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum shall be reduced as appropriate and equitable.

12.6 Removal From Site. Design-Builder shall remove from the Site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Design-Builder nor accepted by Owner.

12.7 Observance of Tests. Owner shall have the right to observe all tests of the Work and the Project performed by Design-Builder pursuant to the Contract Documents.

ARTICLE 13: WARRANTIES AND CORRECTION OF DEFECTS OR DEFICIENCIES

13.1 Design-Builder's Warranty. Design-Builder warrants that: (a) the equipment and materials will be new, free of defects or deficiencies in materials and workmanship, and fit and sufficient for their intended purpose as set forth in the Contract Documents; (b) the Work will be performed in accordance with the standards and requirements specified in the Contract Documents; and (c) the Project shall be designed and constructed to meet the requirements of the Contract Documents and to produce a fully functional facility that is capable of achieving all performance objectives of the Contract Documents and of operating free of major defects in its major components.

13.2 Additional Warranty Obligations. With respect to all warranties for Work, Design-Builder shall:

1) Obtain all warranties that would be given in normal commercial practice and any specific warranties as set forth in the Contract Documents;
2) Require all warranties to be executed, in writing, for the benefit of Owner;
3) Enforce all warranties for the benefit of Owner, if directed by Owner; and
4) Be responsible to enforce any Subcontractor warranties.

13.3 Correction of Defects or Deficiencies

13.3.1 Obligation to Correct. Design-Builder agrees to correct any Work that is found to not be in conformance with the Contract Documents, including those subject to the warranties identified in Sections 13.1 and 13.2 above, within a period of twelve (12) months from the date of Substantial Completion of the Work, or within such longer period to the extent required by the Contract Documents.

13.3.2 Notice. Design-Builder shall, within seven (7) days of receipt of written notice from Owner that the Work is not in conformance with the Contract Documents, take necessary steps to commence correction of such nonconforming Work, including the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If Design-Builder fails to commence the necessary steps within such seven (7) day period, Owner, in addition to any other remedies provided under the Contract Documents, may provide Design-Builder with written notice that Owner will commence correction of such nonconforming Work with its own forces. If Owner does perform such corrective Work, Design-Builder shall be responsible for all reasonable costs incurred by Owner in performing such correction. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) day periods identified herein shall be inapplicable.

13.3.3 No Limitation on Other Obligations. Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Design-Builder might have according to the Contract Documents. Establishment of the time period of twelve (12) months as described in Section 13.3.1 relates only to the specific obligation of Design-Builder to correct the Work, and has no relationship to the time within which Design-Builder's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.

13.4 Warranty Survey. Owner shall schedule a warranty survey to take place nine (9) months after Substantial Completion. Design-Builder will be given an opportunity to attend the warranty survey at its own expense. In accordance with Section 13.3, Owner will provide Design-Builder notice of all defects and deficiencies discovered during the warranty survey.

ARTICLE 14: TITLE AND OWNERSHIP OF WORK PRODUCT

14.1 Clear Title. Design-Builder warrants and guarantees that legal title to and Ownership of the Work shall be free and clear of any and all liens, claims, security interests, or other encumbrances when title thereto passes to Owner. With respect to all computer programs used in connection with the operation and maintenance of the Project, Design-Builder warrants legal title to, or a legal license to use, such programs when title thereto passes to Owner. Title to all Work, equipment and materials, tools, supplies provided by Design-Builder as part of the Work will pass to Owner as and to the extent: (a) payment therefor is made by Owner in accordance with this Agreement; (b) they are incorporated into the Project; or (c) upon termination of this Agreement for an Event of Design-Builder Default pursuant to Article 15, whichever is earlier. Design-Builder shall deliver to Owner such assignments, bills of sale, or other documents as reasonably requested by Owner to evidence such transfer of title.

14.2 Design Work Product

14.2.1 Ownership of Design Work Product. Unless otherwise provided, all Design Work Product ("Materials") produced under this Agreement shall be considered "works for hire" as defined by the U.S. Copyright Act and shall be owned by the Owner. Owner shall be considered the author of such Materials. In the event the Materials are not considered "works for hire," under the U.S. Copyright Laws, Design-Builder hereby irrevocably assigns all right, title, and interest in Materials, including all intellectual property rights, to Owner effective from the moment of creation of such Materials. Materials means all items in any format and includes Construction Documents, specifications, electronic data, CAD files, drawings, data, reports, documents, pamphlets, advertisements, books, magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, register and the ability to transfer these rights.

For Materials that are delivered under the Agreement, but that incorporate preexisting materials not produced under the contract, Design-Builder hereby grants to Owner a nonexclusive, royalty-free, irrevocable license (with rights to sub license others) in such Materials to translate, reproduce, distribute, prepare derivative works, publicly perform, and publicly display. Design-Builder warrants and represents that Design-Builder has all rights and permissions, including intellectual property rights, moral rights and rights of publicity, necessary to grant such a license to Owner. Design-Builder shall exert all reasonable effort to advise Owner, at the time of delivery of data furnished under this Agreement, of all known or potential invasions of privacy contained therein and of any portion of such document which was not produced in the performance of this Agreement. Owner shall receive prompt written notice of each notice or claim of infringement received by the Design-Builder with respect to any data delivered under this Agreement. Owner shall have the right to modify or remove any restrictive markings placed upon the data by the Design-Builder.

14.2.2 Reuse of Design Work Product. The Design Work Product is not intended or represented to be suitable for reuse by Owner or others on expansions of the Project or on any other project. Any reuse without prior written verification or adaptation by Design-Builder or applicable Subcontractors for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Design-Builder or applicable Subcontractors.

ARTICLE 15: DEFAULT OF DESIGN-BUILDER

15.1 Events of Default by Design-Builder. Design-Builder shall be in default hereunder upon the occurrence of any one of the following events, which shall be events of default (each an "Event of Design-Builder Default") if not cured by Design-Builder within fourteen (14) days following delivery to Design-Builder of a notice of such event from Owner:

15.1.1 Failure to Prosecute Work. Design-Builder fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion or Final Completion within the Guaranteed Completion Date(s);

15.1.2 Failure to Correct Work. Design-Builder fails to replace or correct Work not in conformance with the Contract Documents;

15.1.3 Failure to Provide Adequate Labor and Materials. Design-Builder fails to supply skilled workers or proper equipment and materials

15.1.4 Failure to Pay. Design-Builder fails to make prompt payment due to Subcontractors or any other entity or person who provides services or performs any aspect of the Work;

15.1.5 Failure to Comply with Laws. Design-Builder fails to comply with Governmental Rules or Governmental Approvals;

15.1.6 Material Breach. Design-Builder is in material breach of any provision of the Contract Documents.

15.2 Owner's Remedies Against Design-Builder. The provisions of Article 11 notwithstanding, if an Event of Design-Builder Default has occurred and has not been cured after Owner's fourteen (14) day notice pursuant to Section 15.1, Owner shall have the right immediately to terminate this Agreement, in addition to any rights and remedies that may be available at law or in equity or as provided herein. If it is subsequently determined that Owner was not entitled to terminate this Agreement for Design-Builder default, this Agreement shall be deemed terminated under Article 16.

15.3 Additional Owner's Rights Upon Design-Builder Default. If Owner elects to terminate this Agreement pursuant to Section 15.2, Design-Builder shall provide Owner with the right to continue to use any and all Work, including but not limited to any Work developed by Design Consultants, Owner deems necessary. Furthermore, Owner shall have the right to take possession of and Design-Builder shall make available to Owner all equipment and materials, construction equipment and other components of the Work, whether located at the Site or elsewhere, on the date of such termination for the purpose of completing the Work, and Owner may employ any other person or entity (sometimes hereinafter referred to as "Replacement Design-Builder") to finish the Work in accordance with the terms of this Agreement by whatever method Owner may deem expedient. Owner shall make such expenditures as in Owner's sole judgment will best accomplish the timely completion of the Project, provided Owner shall not be required or expected to mitigate any such costs by terminating, repudiating or renegotiating any agreement entered into between Design-Builder and any Subcontractor, including those agreements with Design Consultants.

15.4 General Obligations. If Owner elects to terminate this Agreement pursuant to Section 15.2, Design-Builder shall, at Owner's request and at Design-Builder's expense, perform the following services relative to the Work so affected:

15.4.1 Inventory Equipment, Etc. Assist Owner in preparing an inventory of all equipment and other components of the Work in use or in storage at the Site and elsewhere;

15.4.2 Assign Subcontracts, Etc. Assign to Owner or to any Replacement Design-Builder designated by Owner, without any right to compensation not otherwise provided for herein, title to all Work not already owned by Owner, together with all subcontracts and other contractual agreements (including warranties) and rights thereunder as may be designated by Owner, all of which subcontracts and contractual agreements shall be so assignable, and assign to Owner to the extent assignable all issued permits, licenses, authorizations and approvals then held by Design-Builder pertaining to the Work which have been procured in connection with performance of the Work, including but not limited to those associated with Design Consultants;

15.4.3 Deliver Design Work Product. Deliver to Owner all Design Work Product as may be requested by Owner for the completion and/or operation of the Project; and

15.5 Payment Obligations. If Owner terminates this Agreement, as soon as practicable after Final Completion of the Project, Owner shall determine the total reasonable and necessary expense incurred and accrued in connection with the termination of this Agreement (including all legal fees and expenses) and the completion of the Work including, without limitation, all amounts charged by any Replacement Design-Builder to finish the Work based on the obligations such Replacement Design-Builder assumes under this Agreement and under any of Design-Builder's subcontract(s) or other contractual agreement(s) that Design-Builder has assigned to Owner or to such Replacement Design-Builder pursuant to Section 15.4.2 and additional reasonable and necessary overhead incurred and accrued by Owner to effect such takeover and to complete the Work. Design-Builder shall be entitled to receive the balance due of the Contract Sum minus the sum of: (a) Owner's expenses incurred in connection with the termination of this Agreement and the completion of the Work as determined in accordance with the preceding sentence and (b) all Liquidated Damages owed by Design-Builder. If the sum of such Liquidated Damages and the total expense so incurred by Owner in completing the Work exceeds the balance of the Contract Sum unpaid at the time of Design-Builder's default, then Design-Builder shall be liable for and shall pay to Owner the amount of such excess within twenty (20) business days following receipt of Owner's demand for such payment. Design- Builder obligations for payment shall survive termination.

15.6 No Relief of Responsibility. Termination of the Work in accordance with this Article 15 shall not relieve Design-Builder or its surety of any responsibilities for Work performed.

ARTICLE 16: TERMINATION FOR CONVENIENCE

16.1 Owner's Right to Terminate Agreement for Convenience. Owner has the right, upon written notice, to terminate this Agreement for its convenience if Owner determines that such termination is in Owner's best interests.

16.2 Design-Builder's Responsibility Upon Termination for Convenience. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Design-Builder promptly shall:

1) Stop performing Work on the date and as specified in the notice of termination;
2) Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
3) Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;

4) Assign to Owner all of the right, title, and interest of Design-Builder in all orders and subcontracts;
5) Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Site, and any other property related to this Project in the possession or control of Design-Builder (or Design-Builder's agents) in which Owner has an interest; and
6) Continue performance only to the extent not terminated.

16.3 Equitable Adjustment for Termination for Convenience. If Owner terminates the Work for convenience, Design-Builder shall be entitled to be paid the prorated portion of the Contract Sum for all work properly performed by Design-Builder prior to the effective date of the termination for convenience, plus the reasonable administrative and wind-down expenses associated with such termination. The preceding amount shall be reduced by amounts previously paid by Owner to Design-Builder and any amounts which Owner has the right to offset or withhold by the terms of the Contract Documents. Notwithstanding the above, in no event shall Design-Builder ever be entitled to recover: (a) profit or unabsorbed overhead in connection with work not actually performed or future work; (b) amounts that would result in the Design-Builder receiving payments that it would not have been entitled to receive under the Contract Documents if the Design-Builder was not terminated for convenience; or (c) amounts that would cause the total payments received by the Design-Builder to exceed the Contract Sum.

ARTICLE 17: SUSPENSION OF WORK

17.1 Owner's Suspension of Work for Convenience. Owner may, for its convenience and for any reason, suspend the Work in whole or in part at any time by written notice to Design-Builder, stating the nature, effective date and anticipated duration of such suspension, whereupon Design-Builder shall suspend the Work to the extent specified and shall place no further orders or subcontracts relating thereto. During the period of any such suspension, Design-Builder shall protect and care for all Work, equipment and materials at the Site or at the storage areas under its responsibility. If Design-Builder claims that the suspension has affected either the Contract Sum or Guaranteed Completion Date(s), Design-Builder shall be entitled to submit a request for adjustment in accordance with Articles 8, 9 and/or 10, as applicable. Design-Builder shall use its best efforts to minimize the costs and expenses associated with a suspension of the Work.

17.2 Owner's Suspension of Work for Cause. If Design-Builder fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Design-Builder, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken. Design-Builder shall not be entitled to an equitable adjustment in the Contract Sum or Guaranteed Completion Date(s) for any increased cost or time of performance attributable to Design-Builder's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

ARTICLE 18: INSURANCE

18.1 Insurance Carried by Design-Builder

18.1.1 Coverage. All insurance coverages required in this Article shall cover the interest of Owner, Design-Builder, and any Subcontractors, as their interests may appear.

18.1.2 Owner as Additional Insured. All insurance coverages in this Article shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence Owner as an additional insured.

18.1.3 Design-Builder's Liability Insurance. Prior to commencement of the Work, Design-Builder shall obtain all the insurance required by the Contract Documents and provide copies of the entire policies and all addenda or other attachments to Owner. Review of Design-Builder's insurance by Owner shall not relieve or decrease the liability of Design-Builder. Companies writing the insurance to be obtained by this part shall be licensed to do business in the State of Washington. The Contract Sum includes the cost of all insurance and bond costs required to complete the Work. Insurance carriers providing insurance in accordance with the Contract Documents shall be acceptable to Owner, and its A. M. Best rating shall be indicated on the insurance certificates.

18.1.3.1 Insurance Coverage. Design-Builder shall maintain the following insurance coverage during the Work and for one year after Final Acceptance. Design-Builder shall also maintain the following insurance coverage during the performance of any corrective Work required by Article 13. Coverage shall be in the amounts set forth in –this Article 18 - Schedule 18.1.

a) Commercial General Liability (CGL) on the ISO 1986 New Occurrence Form or its equivalent such as ISO Form CG 00 01 with limits of no less than $5,000,000 per occurrence for bodily injury, personal injury and property damage. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. This coverage shall include:
   1) Completed operations/products liability;
   2) Explosion, collapse, and underground; and
b) Employer's liability coverage - limits no less than One Million dollars $1,000,000 per accident for bodily injury or disease.
c) Automobile Liability – ISO Form Number CA 0001 covering Code 1 (any auto), with limits no less than Five Million dollars ($5,000,000) per accident for bodily injury and property damage (Combined Single Limit).

18.1.3.2 Scope of Coverage. All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Design-Builder or any Subcontractor.

18.1.3.3 Insurance. Design-Builder shall furnish a copy of all insurance policies required in this Agreement, and Certificate of Insurance form SF500A, dated July 2, 1992, or ACORD form, prior to commencement of the Work. All insurance policies and certificates shall name Owner as an additional insured and shall denote the Project by contract number(s) and Project title(s.) All insurance policies and certificates shall specifically require forty-five (45) days prior notice to Owner of cancellation or a material change, except thirty (30) days for surplus line insurance.

18.1.4 Builder's Risk or Installation Floater (Course of Construction) Insurance. Design-Builder shall purchase and maintain builder's risk property insurance in the amount of the Contract Sum on a replacement cost basis until Substantial Completion. There shall be no coinsurance penalty provisions. For projects or portions of project not involving New Building Construction, "Installation Floater" is an acceptable substitute for the Builder's Risk Insurance.

18.1.4.1 Insurance to be "All Risk". Design-Builder's property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Owner's and Owner's consultant's services and expenses required as a result of an insured loss. Design-Builder shall purchase and maintain boiler and machinery insurance covering insured objects during installation and testing until Substantial Completion. Such insurance shall name as additional insured Owner, Design-Builder, and all subcontractors who perform applicable work.

18.1.4.2 Waiver of Subrogation. Owner and Design-Builder waive all subrogation rights against each other, any Subcontractors, Owner's Representative, Owner's Design-Build Consultant and Owner's Design-Build Consultant's subconsultants, and Owner's Separate Contractors, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though

that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

18.1.5 Errors and Omissions Professional Insurance. Design-Builder shall maintain professional liability insurance for design services errors and omissions with minimum limits of no less than Two Million dollars ($2,000,000) per claim, Four Million dollars ($4,000,000) policy aggregate. The professional liability insurance set forth herein shall be renewed by Design-Builder for a period of no less than five (5) years after Final Completion. The insurance policy shall be endorsed to provide vicarious liability coverage.

18.1.6 Contractor's Pollution Legal Liability and/or Asbestos Legal Liability. Insurance involving environmental hazards with limits no less than One Million dollars ($1,000,000) per occurrence or claim and Two Million dollars ($2,000,000) policy aggregate. The Contractor's Pollution Liability policy shall not contain lead-based paint or asbestos exclusions.

18.2 Insurance Carried by Owner. On and after Substantial Completion, Owner will carry insurance covering the Project in the types and amounts as Owner may from time to time deem prudent.

18.3 Additional Insurance Provision. For any claims related to this Project, Design-Builder's insurance coverage shall be primary insurance as respects the Owner, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the Owner, its officers, officials, employees or volunteers shall be excess of Design-Builder's insurance and shall not contribute with it.

ARTICLE 19: INDEMNIFICATION

19.1 Indemnity By Design-Builder. Design-Builder shall defend, indemnify, and hold Owner, Owner's Design-Build Consultant and their employees, agents and representatives harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:

1) The sole negligence of Design-Builder or any of Subcontractor;
2) The concurrent negligence of Design-Builder, or any Subcontractor, but only to the extent of the negligence of Design-Builder or such Subcontractor; and
3) The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret, provided, however, that such indemnity shall not

apply to any design, process or equipment that has been specified by Owner in the RFP Documents.

19.2 No Limitation and Waiver of Immunity. In any action against Owner and any other person or entity indemnified in accordance with this Article 19, by any employee or agent of Design-Builder, any Subcontractor, or anyone directly or indirectly employed by any of them, the indemnification obligation of this Article 19 shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Design-Builder or any Subcontractor under Title 51 RCW (the Industrial Insurance Act) or any other employee benefit acts. In addition, Design-Builder waives immunity as to Owner, in accordance with Title 51 RCW. Owner and Design-Builder acknowledge this provision was mutually negotiated.

ARTICLE 20: NON-DISCLOSURE OF CONFIDENTIAL DOCUMENTS; PUBLIC RECORDS ACT

20.1 Distribution of Records. Design-Builder shall keep records of the distribution of documents, including those to all Subcontractors.

20.1.1 Disposal Methods. Design-Builder shall stipulate the method of disposal (shredding, burning, deletion, etc.) that is required to destroy the retired documents.

20.1.2 Back charges: Instances of improper distribution of documents which create Owner expenses to control and secure the documents and any cost to notify affected third parties, will be charged to Design- Builder.

20.1.3 Security of Documents. All parties having access to documents shall maintain reasonable security control over the premises in which they reside.

20.2 Public Records Act

20.2.1 Public Records. All proceedings, records, contracts, and other public records relating to this Design-Build Contract shall be open to the inspection and copying by any interested person, firm, or corporation in accordance with the Public Records Act, RCW 42.56 and RCW 39.10.470. Further, such records may also be responsive and released pursuant to a discovery request, court order or other legal process.

20.2.2 Confidential Records. The term “confidential record” includes any record specifically marked as confidential by the Design-Builder . Should records specifically marked as confidential be responsive to a public records request, discovery request, court order or other legal proceeding, the Owner shall give the Design-Builder two (2) weeks notice of the records to be released and allow the Design Builder an opportunity to seek a court order preventing the release. If a court order directing the Owner to

withhold the record(s) is not received by the end of the two (2) week period, the records will be released by the Owner.

ARTICLE 21: INDEPENDENT CONTRACTOR

21.1 Independent Contractor. Design-Builder is an independent contractor and nothing contained herein shall be construed as constituting any other relationship with the Owner. Neither Design-Builder nor any of its employees shall be deemed to be employees of Owner.

21.2 Design-Builder's Responsibilities for its Employees. Subject to the provisions of the Contract Documents, Design-Builder shall have sole authority and responsibility to employ, discharge and otherwise control its employees.

21.3 Responsibilities of Design-Builder as Principal for its Subcontractors. Design- Builder has complete and sole responsibility as a principal for its agents, Subcontractors and all other hires to perform or assist in performing the Work.

ARTICLE 22: DIVERSE BUSINESS PARTICIPATION

22.1 Diverse Business Participation. In accordance with the legislative findings and policies, the State of Washington encourages participation in all of its contracts by firms certified by the Office of Minority and Women's Business Enterprises ("OMWBE") (RCW 39.19), the Washington State Department of Veterans Affairs ("DVA") (RCW 43.60A.200), and Washington Small Businesses (RCW 39.26.005.). Participation may be either direct or through a Subcontractor. However, no preference was included in the evaluation of Proposals submitted in response to the RFP, and no minimum level of participation is required as a condition for receiving an award of this Agreement. Any affirmative action requirements set forth in any federal rules included or referenced in the Contract Documents will apply.

22.2 Definition. Diverse Business includes Washington small business, micro business, and mini business (collectively WSB) as defined in RCW 39.26.010, and Veteran-owned businesses (VOB) as defined in RCW 43.60A.010. When referred to in this Agreement, the terms Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) will be as defined by OMWBE, WAC 326-02-030.

22.3 Contact Information. For information on certified firms, Design-Builder may contact: OMWBE (http://omwbe.wa.gov/) at (360) 664-9750 or toll free (866) 208-1064 and DVA (http://www.dva.wa.gov/BusinessRegistry/Search.aspx) at (800) 562-0132 option '1'. For a list of self-certified Washington Small Businesses that downloaded the RFP and selected to allow their contact information to be shared, contact Washington Department of Enterprise Services Public Works Business Diversity Program Manager, Charles Wilson at Charles.wilson@des.wa.gov or (360) 407-8455.

22.4 Eligible Diverse Business. Diverse Business firms utilized for this project may be certified through the OMWBE, DVA, or self-certified in the Washington Electronic Business Solution, "WEBS" (http://www.des.wa.gov/services/ContractingPurchasing/Business/Pages/WEBSRegistration.aspx). If firms self-identify as MBE and/or WBE and/or veteran, and/or WSB firm the Design-Builder will encourage certification with the appropriate Washington state agency.

22.5 Diverse Business Voluntary Goals. Owner's aspirational goals are: 10% MBE certified by OMWBE, 6%, WBE certified by OMWBE, 5% VOB certified by DVA. 5% Washington Small Businesses self-identified in WEBS. These goals are voluntary.

22.6 Intent to Use Diverse Businesses. If any part of the Work, including the supply of equipment and materials, is anticipated to be subcontracted, then prior to receipt of the first payment, Design- Builder shall submit a list of all Subcontractors it intends to use, designate whether any of the Subcontractors are registered as a Washington Small Business, Mini Business, or Micro Business in WEBS or Washington state certified MBE, WBE, MWBE, Veteran Owned and/or Self-identified firms, indicate the anticipated dollar value of each Washington Small Business, Washington Mini Business, Washington Micro business, MBE, WBE, MWBE, or Veteran Owned subcontract, and provide Tax Identification Number (TIN).

22.7 Diverse Business Participation. The Design-Builder is required to register and create an account in the DES Diversity Compliance program (B2Gnow) at https://des.diversitycompliance.com/. If any part of the Work, including the supply of equipment and materials, is actually subcontracted during completion of the Work, then the Design-Builder shall report all participation indicating what Washington Small Business, Washington Mini Business, Washington Micro Business, MBE, WBE, MWBE, or Veteran Owned and/or Self-identified firms were used and the dollar value of their subcontracts.

22.8 Not Exclusive. The provisions of this Article 22 are not intended to replace or otherwise change the requirements of RCW 39.30.060.

22.9 Maintenance of Records. Design-Builder shall maintain, for at least six (6) years after Final Acceptance, relevant records and information necessary to document the level of utilization of Diverse Businesses and other businesses as Subcontractors on this Project, as well as any efforts Design-Builder made to increase the participation of Diverse Businesses as listed in Section 22.10. Design-Builder shall also maintain, for at least six (6) years after Final Acceptance, a record of all quotes, bids, estimates, or proposals submitted to Design-Builder by all businesses seeking to participate as Subcontractors on this Project. Owner shall have the right to inspect and copy such records. If this Agreement involves federal funds, Design-Builder shall comply with all record keeping requirements set forth in any federal Governmental Rules referenced in the Contract Documents.

22.10 Advertisements. Design-Builder shall advertise opportunities for Subcontractors in a manner reasonably designed to provide Diverse Businesses capable of performing the work with

timely notice of such opportunities, and all advertisements shall include a provision encouraging participation by Diverse Businesses. Advertising may be done through general advertisements (e.g. newspapers, journals, etc.) or by soliciting bids directly from Diverse Businesses. Design-Builder shall provide Diverse Businesses that express interest with adequate and timely information about plans, specifications, and requirements of the Project.

22.11 Non-Discrimination. Design-Builder shall not create barriers to open and fair opportunities for all businesses, including Diverse Businesses, to participate in all state contracts and to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services. In considering offers from and doing business with subcontractors and suppliers, Design-Builder shall not discriminate on the basis of race, color, creed, religion, sex, age, nationality, marital status, or the presence of any mental or physical disability in an otherwise qualified disabled person.

22.12 Violations. Any violation of the mandatory requirements of this part of the Agreement shall be a material breach of contract for which Design-Builder may be subject to a requirement of specific performance, or damages and sanctions provided by contract, by RCW 39.19.090, or by other applicable laws.

ARTICLE 23: PREVAILING WAGES AND APPRENTICESHIP

23.1 Prevailing Wages. Design-Builder shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the Governmental Rules of the Washington State Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work is determined by the Industrial Statistician of the Department of Labor and Industries. It is Design- Builder's responsibility to verify the applicable prevailing wage rate at the time of its Proposal.

23.1.1 Wage Rates. Before commencing the Work, Design-Builder shall file a statement under oath with Owner and with the Director of Labor and Industries certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Design-Builder and all Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.

23.1.2 Disputes. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.

23.1.3 Applications for Payment. Each Application for Payment submitted by Design-Builder shall state that prevailing wages have been paid in accordance with the pre-filed statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the Site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.

23.1.4 Fees. Design-Builder shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.

23.1.5 Intent to Pay Prevailing Wages. Copies of approved Intents to Pay Prevailing Wages for Design-Builder and all Subcontractors shall be submitted with Design-Builder's first Application for Payment. As additional Subcontractors perform Work on the Project, their approved Intent forms shall be submitted with Design-Builder's next Application for Payment.

23.1.6 Certified Payrolls: Consistent with RCW 31.12.120, Design-Builder, subcontractors, or employers shall file a copy of its certified payroll records using the L&I' online system at least once per month. If the L&I' online system is not used, a Design-Builder, subcontractor, or employer shall file a copy of its certified payroll records directly with the L&I in a format approved by the L&I at least once per month. A Design-Builder, subcontractor, or employer's noncompliance with this section constitutes a violation of RCW 39.12.050.

23.2 Apprenticeship

23.2.1 The apprentice labor hours required for this project are 15% of the total labor hours. The Design-Builder signing the Proposal agrees to utilize this level of apprentice participation. A monetary incentive of $1,000 will be paid to the Design-Builder meeting the apprentice utilization requirement. A monetary penalty will be applied to the Design-Builder failing to meet the utilization requirement and failing to demonstrate a Good Faith Effort. The penalty will be applied to every hour of short-fall of the minimum number of required apprentice hours using the applicable published wage of a Step 1 apprentice laborer. The penalty will not exceed five percent (5%) of the total Contract Sum. The cost value associated with meeting the apprentice utilization requirement is included in the Proposal Price.

23.2.2 Mandatory apprentice utilization of at least fifteen percent (15%) of the total construction labor hours worked on the Contract is required. Apprentices must be registered as apprentices with the State Apprenticeship and Training Council. Design-Builder shall comply with the requirements of the Contract documents and with statutory requirements in accordance with Chapters 39.04 and 49.04 RCW. related to apprenticeship. Proposers may contact the Department of Labor & Industries, Apprenticeship Program at 360-902-5320 to obtain information on apprenticeship programs.

23.2.3 In accordance with RCW 39.04.320, for all public works estimated to cost one million dollars or more, the State of Washington requires no less than **15% of the labor hours be performed by apprentices.** The design-builder or subcontractor may not be required to exceed the 15% requirement. This is an applicable project and the minimum required percentage of apprentice labor hours compared to the total labor hours.

1. **Incentives** - The Design-Builder who meets or exceeds this utilization requirement on eligible contracts, will be awarded a monetary incentive described in the Apprentice Utilization Requirements section above.

2. **Penalties** - The Design-Builder who fails to meet the utilization requirement and fails to demonstrate a Good Faith Effort, as outlined below, is subject to penalties described in the Apprentice Utilization Requirements section above. Design-Builder will receive an invoice payable to the Owner within 30 days of determination.

3. **Cost Value** - The expected cost value associated with meeting the goal is included in the Proposal Amount as described above.

4. **Utilization Plan** - The Design-Builder shall provide an **Apprentice Utilization Plan** (Plan) demonstrating how and when they intend to achieve the Apprenticeship Utilization Requirement. The Plan shall have enough information to track the Design-Builder's progress in meeting the utilization requirement. The Design-Builder shall submit the Plan on the Apprentice Utilization Plan template (on the DES Public Works Forms website) **within 30 days of Notice to Proceed of the Construction portion of the contract and prior to submitting the first construction invoice**. The Design-Builder shall provide an updated Plan during the course of construction when there are significant changes to the Plan which may affect their ability to meet the requirement.

   (a) The Plan shall be uploaded to the Department of Labor & Industries' (L&I) ***Prevailing Wage Intents and Affidavit (PWIA) system on L&I's website.***

   (b) The Plan is not submitted for approval.

   (c) It is expected that the Design-Builder will actively seek out opportunities to meet the Apprentice Utilization Requirement during construction even if the Plan indicates a shortfall in meeting the requirement.

   (d) If the Plan indicates that the Design-Builder will not attain the Apprentice Utilization Requirement, then Design-Builder must submit "Good Faith Effort" (GFE) documentation with their Plan to L&I's PWIA system.

5. **Good Faith Effort (GFE)**

   (a) Good Faith Effort (GFE) documentation shall describe in detail why the Design-Builder is not or was not able to attain the Apprentice Utilization Requirement.

      1. The Design-Builder may submit Good Faith Effort (GFE) documentation at any time during the construction.

      2. All GFE documentation must be submitted no later than 30 days before substantial completion.

(b) Good Faith Effort (GFE) documentation must be in signed letter format uploaded to the PWIA system and include:

1. The contract number, title and the apprentice utilization requirements.

2. The amount of apprentice labor hours the contract can or did attain along with the percentage of labor hours.

3. Design-Builder may receive a GFE credit for graduated Apprentice hours through the end of the calendar year for all projects worked on as long as the Apprentice remains continuously employed with the same Design-Builder they were working for when they graduated. If an Apprentice graduates during employment on a project of significant duration, they may be counted towards a GFE credit for up to one year after their graduation or until the end of the project (whichever comes first). Determination of whether or not Contract requirements were met in good faith will be made by subtracting the hours from the journeyman total reported hours for the project and adding them to the apprentice hour total. If the new utilization percentage meets the Contract requirement, the Design-Builder will be reported as meeting the requirement in good faith.

4. Anticipated or actual shortfall (in apprentice labor hours and percentage) and the reason(s) for not attaining the required apprentice labor hours.

5. Information from one or more of the following areas:

   (a) Names of any State-Approved Apprentice Training Programs contacted with the name(s) of person(s) contacted and dates of contacts, and a copy of each response from the Training Program(s),
   (b) Reference Contract Specifications or documents that affected the Design-Builder's ability to attain apprentice utilization,
   (c) Discuss efforts the Design-Builder has taken to require Subcontractors to solicit and employ apprentices,

6. Backup documentation to the letter consisting of the following: Letters, emails, phone logs including names dates and outcomes, posters, photos, payrolls, timecards, schedules, copies or references to other contract specifications or documents.

23.3 Violation. Any violation by Design-Builder of the mandatory requirements of this Article 23 shall be a material breach of this Agreement.

<u>Additional Resource Information</u>

(a) For questions regarding how to complete the Apprentice Utilization Plan template or Good Faith Effort documentation, please contact the Project Manager listed in the RFQ.

(b) Step-by-step instructions on how to access and navigate the L&I's PWIA system, including uploading required documents can be found on the L&I website.
(c) Additional information about apprentice utilization on Public Works Project can be found on the L&I website.

ARTICLE 24: NOTICES AND COMMUNICATIONS

24.1 Notices. Any formal notice pursuant to the terms and conditions of the Contract Documents shall be in writing and either: (a) delivered personally; (b) sent by certified mail, return receipt requested; (c) sent by a recognized overnight mail or courier service with delivery receipt required; or (d) sent by email and acknowledged by recipient, to be followed on the same day by either (a), (b) or (c) above:

If to Design-Builder: Design Builder Name Address City/State/Zip	If to Owner: Department of Enterprise Services PO Box 41476 1500 Jefferson St SE Olympia, WA 98504
Phone: ?	Phone: (360) 407-7950 (360) 339-2280 (Cell)
Email: ?	Email: david.hickman@des.wa.gov
Attention: ?	Attention: David Hickman
With a copy to: ?	With a copy to: Selection Administrator

Either Party may change its address or the Party to notify by a notice delivered in accordance with this Section.

24.2 Effectiveness of Notices. Notices shall be effective when received by the Party to whom it is addressed.

ARTICLE 25: PROJECT PLANNING AND CONTROL

25.1 Project Schedule. Exhibit G – Schedule 25.1 sets forth Design-Builder's Level 1 Critical Path Method (CPM) schedule for executing the Work. Within thirty (30) days of Notice to Proceed, Design-Builder shall submit to Owner, for its review and approval, a Level 3 CPM schedule that includes, among other things: (a) the order in which Design-Builder proposes to carry out the Work (including each stage of design, procurement, manufacture, delivery to Site, construction, inspection and testing); and (b) the times when submissions and approvals or consents by Owner are required. If Owner does not approve such submission, Design-Builder shall resubmit a revised schedule to Owner within seven (7) days of its receipt of

Owner's comments on such schedule. This process shall continue until such time as a schedule is so approved by Owner ("Project Schedule").

25.2 Updates. The Project Schedule shall be updated monthly by Design-Builder and provided to Owner to keep it advised of progress and significant changes to Design-Builder's schedule. Failure to provide such updates shall be grounds for Owner to withhold approval for all or part of Design-Builder's invoices until such time Design-Builder furnishes such updates. If any updated schedule shows a change in the logic of the critical path from that established in the preceding schedule, Design-Builder shall provide an explanation for such change. If Owner disagrees with Design-Builder's explanation by notifying Design-Builder to such effect and if such disagreement is not subsequently resolved, then such schedule shall not be considered binding for purposes of computing schedule adjustments under Article 10.

25.3 Schedule Format. Design-Builder shall use a mutually agreed scheduling program as the format for all Project Schedules and shall provide to Owner an electronic copy of the Level 1 CPM schedule, the original Project Schedule and each updated Project Schedule.

25.4 Other Information and Alteration. Design-Builder shall, whenever required by Owner, provide in writing a general description of the arrangements and methods which Design-Builder proposes to adopt for the execution of the Work. No significant alteration to the Project Schedule, or to such arrangements and methods, shall be made without informing Owner and any alterations made shall reflect the requirement for coordination of the Work with the actions and obligations of Owner and the work to be carried out by Owner's Separate Contractors. If any alteration affects any such actions, obligations or Work, it shall not be made without the prior approval of Owner. If the progress of the Work does not conform to the Project Schedule, Owner may instruct Design-Builder to revise the Project Schedule, showing the modifications necessary to achieve completion within the Guaranteed Completion Date(s).

25.5 Owner's Separate Contractors. Design-Builder shall include the activities of Owner's Separate Contractors into the Project Schedule. Design-Builder shall cooperate with Owner's Separate Contractors and coordinate its activities with those of such contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

25.6 Owner's Review and Approval of Project Schedule. Owner's review and approval of the Project Schedule shall not be construed as relieving Design-Builder of its complete and exclusive control and responsibility over the means, methods, sequences and techniques for executing the Work and does not constitute approval or acceptance of Design-Builder's ability to complete the Work within the Guaranteed Completion Date(s).

25.7 Monthly Reports. Monthly reports shall be prepared by Design-Builder and submitted to Owner in six (6) copies. The first report shall cover the period up to the end of the calendar month after that in which the effective date occurred; reports shall be submitted monthly

thereafter, on or before the tenth working day of each month. Reporting shall continue until Owner's Acceptance of the Final Completion Certificate. Each report shall include:

1) Photographs and detailed descriptions of progress, including each stage of design, procurement, manufacture, delivery to Site, construction, erection, testing and commissioning.
2) Charts showing the status of all design documents, purchase orders, manufacturing and construction.
3) For the manufacture of each item of equipment and materials, the name of manufacturer, manufacture location, percentage progress, and the actual or expected dates of commencement of manufacture, Design-Builder's inspections, tests and delivery.
4) Records of personnel and Design-Builder's equipment on Site.
5) Copies of quality assurance documents, test results and certificates of equipment and materials.
6) Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations.
7) Monthly updates to the Project Schedule, including but not limited to: (a) comparisons of actual and planned progress; (b) details of any aspects of the Work which may jeopardize the completion in accordance with the Contract Documents; and (c) measures being (or to be) adopted to overcome such aspects.
8) Unresolved claims or disputes that involve requests for extension to the Guaranteed Completion Date(s) or adjustment to any other date or milestone set forth in the Contract Documents or increases in the Contract Sum.

ARTICLE 26: VALUE ENGINEERING

26.1 Required Information. If Design-Builder is interested in developing and submitting a Value Engineering Change Proposal (VECP), it shall, at its own expense, provide the following information to Owner with each VECP:

1) A statement that the submission is a VECP, and a narrative description of the proposed change.
2) A description of the existing requirements under the Contract Documents that are involved in the proposed change.
3) A discussion of the differences between existing requirements and the proposed change, together with advantages and disadvantages of each changed item.
4) An itemization of the requirements of the Contract Documents (with reference to specific sections) that must be changed if the VECP is approved.
5) The justification for changes in function or characteristics of each item, and the effect of the change on the performance of the end item, as well as on the meeting of requirements contained in the Contract Documents.
6) The date by which a Change Order adopting the VECP must be issued in order to obtain the maximum cost reduction, noting any effect on the Project Schedule or in the Guaranteed Completion Date(s).
7) A complete cost analysis including: (a) a cost estimate for the existing requirements under the Contract Documents compared to Design-Builder's cost estimate of the

proposed changes; and (b) an estimate of any additional costs that will be incurred by Owner.

8) Costs of development and implementation of the VECP by Design-Builder.
9) Any additional information requested by Owner.

26.2 Owner's Action on a VECP

26.2.1 Owner's Processing of VECP. Upon receipt of a VECP, Owner will process it expeditiously, provided, however, that if Owner determines that a VECP requires excessive time or costs for review, evaluation or investigations, or are not consistent with Owner's design policies and basic design criteria, then Owner shall have the right to reject the VECP without any review. Design-Builder may withdraw all or part of any VECP at any time prior to any action by Owner. Owner shall bear its own costs in connection with the review and processing of a VECP.

26.2.2 Owner's Approval or Rejection of a VECP. Owner may approve in whole or in part, by Change Order, any VECP submitted. Until a Change Order is issued on a VECP, Design-Builder shall remain obligated to perform in accordance with the Contract Documents. The decision of Owner as to the rejection or approval of any VECP shall be at the sole discretion of Owner, shall be final and shall not be subject to any further dispute resolution or appeal.

26.2.3 Liability. Owner shall not be liable for any delay in acting upon any proposal submitted pursuant to this Article 26. Design-Builder shall have no claim against Owner for any additional costs or delays resulting from the rejection of a VECP. If a VECP is approved, Design-Builder bears full responsibility for all aspects of the VECP, including the ability of the changed design to meet all requirements of the Contract Documents (as may be modified by the VECP).

ARTICLE 27: MISCELLANEOUS

27.1 Sever-ability. If any provision of this Agreement or the Contract Documents is held to be invalid or unenforceable, such provision shall not affect or invalidate the remainder of this Agreement or the Contract Documents, and to this end the provisions of this Agreement and the Contract Documents are declared to be sever able. If such invalidity becomes known or apparent to the parties, the parties agree to negotiate promptly in good faith in an attempt to amend such provision as nearly as possible to be consistent with the intent of this Agreement of the Contract Documents.

27.2 Governing Law, Jurisdiction, & Venue. The validity, construction, and performance of this Agreement shall be governed by and construed in accordance with the laws of the State of Washington, without regard to its conflict of laws rules. The Parties agree that in any action or dispute resolution process arising out of the terms, enforcement, or breach of this Agreement jurisdiction and venue shall lie in Thurston County Superior Court.

27.3 Waiver. Failure of either Party to insist upon the strict performance of any of the terms and conditions hereof, or failure to exercise any rights or remedies provided herein or by law, or to notify the other Party in the event of breach, shall not release the other Party of any of its obligations under this Agreement, nor shall any purported oral modification or rescission of this Agreement by either Party operate as a waiver of any of the terms hereof. No waiver by either Party of any breach, default, or violation of any term, warranty, representation, agreement, covenant, right, condition, or provision hereof shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, agreement, covenant, right, condition, or provision.

27.4 Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors and assigns. Neither Party shall assign the Work without written consent of the other, except that Design-Builder may assign the Work for security purposes, to a bank or lending institution authorized to do business in the State of Washington. If either Party attempts to make such an assignment without such consent, that Party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

27.5 Ethics in Public Service Act. Design-Builder shall ensure that its Owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act, RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Design-Builder shall remove or cause to be removed, at its sole cost and expense, any of its employees, or the employees of any Subcontractor, if they are in violation of this Act.

27.6 Third-Party Beneficiaries. Except with respect to indemnification obligations contained herein in favor of third parties, the provisions of this Agreement are intended for the sole benefit of Owner and Design-Builder, and there are no third-party beneficiaries other than assignees contemplated by the terms herein; provided, that Design-Builder's Subcontractors shall be entitled to the benefit of, and enforce, the provisions of this Agreement providing for waiver of rights or claims against, and release or limitation of liability of, such Subcontractors.

27.7 Non-Discrimination. Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, 49.60 RCW, and Gubernatorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Design-Builder must meet. Design-Builder shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in 49.60 RCW.

27.8 Time Computations. When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday in the State of Washington, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than seven (7) days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

27.9 Records Retention. The wage, payroll, and cost records of Design-Builder, and its Subcontractors, and all records subject to audit in accordance with Section 11.6.1 above, shall be retained for a period of not less than six (6) years after the date of Final Acceptance.

27.10 Antitrust Assignment. Owner and Design-Builder recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Design-Builder hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Design-Builder shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Design-Builder.

27.11 Time is of the Essence. Time is of the essence for each and every provision of this Agreement.

27.12 No Agency. The parties agree that no agency, partnership, or joint venture of any kind shall be or is intended to be created by or under this Agreement. Neither Party is an agent of the other Party nor authorized to obligate it.

27.13 Survival. All representations, warranties, covenants, agreements, and indemnities set forth in or otherwise made pursuant to this Agreement shall survive and remain in effect following the expiration or termination of this Agreement, provided, however, that nothing herein is intended to extend the survival beyond any applicable statute of limitations periods.

27.14 Integrated Agreement; Modification. This Agreement in combination with the Contract Documents constitutes the entire agreement and understanding of the parties with respect to the subject matter and supersedes all prior negotiations and representations. All appendices, annexes, and exhibits referred to herein are deemed to be incorporated in this Agreement in their entirety. There are no representations or understandings of any kind not set forth herein. This Agreement and the Contract Documents may not be modified except in writing and signed by the Parties.

27.15 Interpretation. Each Party acknowledges that it and its legal counsel have reviewed this Agreement. The Parties agree that the terms and conditions of this Agreement shall not be construed against any Party on the basis of such Party's drafting, in whole or in part, of such terms and conditions.

27.16 Further Assurances. In addition to the actions specifically mentioned in this Agreement, the Parties shall each do whatever may reasonably be necessary to accomplish the transactions contemplated in this Agreement including, without limitation, executing any additional documents reasonably necessary to effectuate the provisions and purposes of this Agreement.

27.17 Headings. The headings in this Agreement are for convenience only and are not intended to, and shall not be construed to, limit, enlarge, or affect the scope or intent of this Agreement nor the meaning of any provisions hereof.

27.18 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which counterparts together shall constitute the same instrument which may be sufficiently evidenced by one counterpart. Execution of this Agreement at different times and places by the parties shall not affect the validity thereof so long as all the parties hereto execute a counterpart of this Agreement.

Signatures

Design-Build Contract
2018-056
Washington Military Department
Tri-Cities Readiness Center

Executed and effective as of the date first above written.

STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

By: _____
Name

_____
Title

DESIGN BUILDER

By: _____
Name

_____
Title

List of Exhibits

Exhibit A	Schedule 3.2.2 – Project Management/Key Personnel Organization Chart
Exhibit B	Schedule 3.13 Surety Bonds
Exhibit C	Schedule 5.8.1.1 – Lump Sum Exhibit Documents
Exhibit D	Schedule 5.8.1 – Lump Sum Design-Build Contract Price Proposal
Exhibit E	Schedule 9.2.8e – Design Cost Rate Sheet for Change Order Cost Breakdown
Exhibit F	Schedule 18.1 – Insurance Coverage shown in Policies and Certificates
Exhibit G	Schedule – 25.1- Design-Builder's Level 1 Critical Path Method

III. DESIGN-BUILD CONTRACT MANAGEMENT

III. DESIGN-BUILD CONTRACT MANAGEMENT

Z1010 Administration

I. Payment Procedures

A. General

1. Schedule of Values: A statement furnished by Design-Build Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Design-Build Contractor's Applications for Payment.

    a. Submit the Schedule of Values to Owner's Representative at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

2. Format and Content: Arrange by subcontractor in accordance with CSI "Masterformat," to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.

    a. Identification: Include the following Project identification on the Schedule of Values:
        i. Project name and location.
        ii. Owner's contract number.
        iii. Design-Build Contractor's name and address.
        iv. Date of submittal.

    b. Submit draft of Schedule of Values in form acceptable to the Owner.

    c. Arrange the Schedule of Values in tabular form to indicate the following for each item listed:
        i. Related Specification Section or Division.
        ii. Description of the Work.
        iii. Name of subcontractor, or
        iv. Name of manufacturer or fabricator, or
        v. Name of supplier.
        vi. Change Orders (numbers) that affect value.
        vii. Dollar value.
            1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

    d. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports.
        i. Design Phase: Coordinate breakdown with submittal requirements. and subsequent elements indicating submittal requirements for all design phases.

ii. Construction Phase: Coordinate with the Design-Build Specifications table of contents. Provide several line items for principal subcontract amounts, where appropriate. Include separate line items under required principal subcontracts for operation and maintenance manuals, punch list activities, Project Record Documents, and demonstration and training in the amount of 5 percent of the Contract Sum.

e. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

f. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

g. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.

h. Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when fully executed Change Orders result in a change in the Contract Sum.

B. Applications for Payment

1. Each Application for Payment shall be consistent with previous applications and payments as certified by Owner's Representative and paid for by Owner.

   a. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

2. Payment Application Times: Progress payments shall be submitted to Owner's Representative by the first day of the month. The period covered by each Application for Payment is one month, ending on the last day of the month. Payment shall be made within time period as stipulated in the terms and conditions of the Contract.

3. Payment Application Forms: Use Washington State Form A19-2AE2 "Invoice Voucher," with associated continuation sheets.

4. Application Preparation: Complete every entry on form. Execute by a person authorized to sign legal documents on behalf of Design-Build Contractor. Owner's Representative will return incomplete applications without action.

   a. Entries shall match data on the Schedule of Values and Design-Builder's construction progress and in line with Schedule. Use updated schedules if revisions were made.

b. Include amounts of Change Orders issued before last day of construction period covered by application.

5. Transmittal: Submit 4 signed original copies of each Application for Payment to Owner's Representative. One copy shall include waivers of lien and similar attachments if required.

   a. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

6. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from first tier subcontractors and suppliers who are lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

   a. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.

   b. When an application shows completion of an item, submit final or full waivers.

   c. Owner reserves the right to designate which entities involved in the Work must submit waivers.

   d. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

   e. Submit final Application for Payment with (or preceded by) conditional waivers from every entity involved with performance of the Work (and covered by the application) and who is lawfully entitled to a lien.

7. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following, when applicable:

   a. List of subcontractors.

   b. Schedule of Values.

   c. Design-Build Contractor's Construction Schedule (Design-Build Technical Proposal Schedule if not final).

   d. Products list.

   e. Submittals Schedule (preliminary if not final).

f. Initial progress report.

g. Data needed to acquire Owner's insurance.

h. Approved Intents to Pay Prevailing Wages for all tiers of contractors and subcontractors performing work on site for whom payment is being requested.

i. Apprenticeship Participation Form and Plan to meet the 15% requirement.

8. Subsequent Applications for Payment: Administrative actions and submittals that must precede or coincide with payment applications subsequent to first Application for Payment include the following, when applicable:

   a. Copies of building permits as occurring and scheduled.

   b. List of Design-Build Contractor's staff assignments including after site mobilization.

   c. Updated list of subcontractors.

   d. Approved Intents to Pay Prevailing Wages for all tiers of contractors and subcontractors performing work on site that have not been submitted before and for whom payment is being requested.

   e. Apprenticeship Participation Form.

9. Application for Payment at Substantial Completion: After the issuance of the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

   a. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

   b. Include status and schedule of documentation of submittal of all final LEED requirements.

   c. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

10. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

    a. Evidence of completion of Project closeout requirements.

b. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.

c. Updated final statement, accounting for final changes to the Contract Sum.

d. Evidence that claims have been settled.

e. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.

f. Final, liquidated damages settlement statement.

g. Final list of all tiers of subcontractors and approved Affidavits of Wages Paid forms.

II. Project Coordination

A. Coordination: Coordinate construction operations included in different Sections of the Design-Build Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation. Utilize 3-D / BIM technology to enhance coordination between design disciplines and construction trades and to reduce or eliminate conflicts.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.

2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.

3. Make adequate provisions to accommodate items scheduled for later installation.

4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Design-Build Drawings and Specifications.

2. Preparation of Design-Build Contractor's Construction Schedule.

3. Preparation of the Schedule of Values.

4. Installation and removal of temporary facilities and controls.

5. Procurement of Permits.

6. Delivery and processing of submittals.

7. Progress meetings.

8. Pre-installation conferences.

9. Project closeout activities.

10. Startup and adjustment of systems.

C. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components; or if coordination is required for installation of products and materials fabricated by separate entities; and for Ceiling Management. Sheet Size: At least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 42 inches (750 by 1000 mm).

1. Number of Copies: Submit one copy of each submittal; provide additional copies to the Design-Build design consultants and subcontractors as required.

   a. Submit one copy where Coordination Drawings are required for operation and maintenance manuals. Owner's Representative will retain one copy. Design-Build Contractor shall provide additional copies for the number of required copies of operation and maintenance manuals.

D. Key Personnel Names during Design and Construction Phases: In addition to names and titles declared in the Request for Proposal Submittal, submit, within 15 days of starting construction operations, a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including – Cellular and office telephone numbers, e-mail addresses and facsimile numbers. Provide names, addresses, e-mail addresses, telephone and facsimile numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

2. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

    a. Include special personnel required for coordination of operations with other contractors.

    b. Identify the Qualified and Practiced Project LEED Coordinator(s) and have them at the appropriate project progress meetings.

E. Project Meetings:

1. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

    a. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner's Representative of scheduled meeting dates and times.

    b. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees; distribute copies to other parties as requested by the owner's representative.

    c. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner's Representative, within three days of the meeting. Items and agreements achieved in the Meeting minutes need not be recorded in any other correspondence.

2. Post-award Design Conference: Schedule a post-award design conference prior to commencement of design and construction documents phase of the Work, at a time convenient to Owner's Representatives, but no later than 15 days after execution of the Agreement.

    a. Attendees: Authorized representatives of Owner; Design-Build Contractor, Architect, Engineers, major subcontractors; suppliers; and other concerned parties as agreed upon by the Owner and Design-Builder shall attend. All participants at the conference shall be familiar with Project and finally accepted proposal and authorized to conclude matters relating to the Work.

    b. Agenda: Discuss items of significance that could affect design, including the following:
        i. Design commentary on Request for Proposal and winning proposal documents.
        ii. Design phase schedule.
        iii. Tentative construction schedule.
        iv. Phasing.

v. Coordination of Owner furnished items
vi. Critical work sequencing and long-lead items.
vii. Designation of key personnel and their duties.
viii. Communication procedures and points of contact.
ix. Procedures for processing Applications for Payment during design phases.
x. Submittal procedures.
xi. LEED requirement and interim submittals by the Design-Build team to demonstrate how they are meeting requirement throughout design and construction.
xii. Preparation of Design and Construction Documents and Permit submittals.
xiii. Owner's occupancy requirements.
xiv. Security.

c. Minutes: Record and distribute meeting minutes.

3. Preconstruction Conference: Schedule preconstruction conferences before starting construction for major permitted portions of the Work, at a time convenient to Owner and Owner's Representatives. Hold the conference at Project site or another location convenient to Owner and Contractor. Conduct the meeting to review responsibilities and personnel assignments.

a. Attendees: Authorized representatives of Owner, Design-Build Contractor and its superintendent; architects, engineers, major subcontractors; suppliers; and other concerned parties as agreed upon by the Owner and Design-Build Contractor shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

b. Agenda: Discuss items of significance that could affect progress, including the following:
i. Construction schedule.
ii. Phasing.
iii. Critical work sequencing and long-lead items, including owner furnished detention furniture.
iv. Designation of key personnel, their duties and authorities.
v. Communication procedures and points of contact.
vi. Procedures for processing field decisions (field reports), Change Order Proposals, Construction Change Directives, Proposal, Field Authorizations, and Change Orders.
1) All forms to be Washington State DES forms, except as approved by the Department.
vii. Procedures for testing and inspecting.
viii. Procedures for processing Applications for Payment during construction phase.
ix. Submittal procedures.
x. LEED requirements.

xi. Preparation of Record Documents.
xii. Use of the premises and existing building
xiii. Work restrictions and coordination with owner requirements.
xiv. Owner's occupancy requirements.
xv. Responsibility for temporary facilities and controls.
xvi. Construction waste management and recycling.
xvii. Parking availability and security procedures related to parking.
xviii. Office, work, and storage areas.
xix. Equipment deliveries and priorities.
xx. First aid.
xxi. Security: refer to requirements indicated in RFP documents.
xxii. Progress cleaning.
xxiii. Working hours.
xxiv. Site-specific safety plan.
xxv. Permits.
xxvi. Discussion of regular meeting days and time, and site visit schedule.

c. Minutes: Record and distribute meeting minutes.

4. Pre-installation Conferences: Conduct a pre-installation conference, with mock-ups as applicable, at Project site before each construction activity that requires coordination with other construction.

a. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Owner's Representative of scheduled meeting dates.

b. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration.

c. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.

d. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

e. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

f. Inform Owner if any discussion of coordination items at the pre-installation meeting is in conflict with the Design-Build Contract Documents. It is assumed, without this notice that the Work, after discussion of the items at the meeting, will be in accordance with the Design-Build Contract Documents.

g. Conduct conferences, at minimum, for all proprietary and prescriptive Work described in the Request for Proposal.

5. Progress Meetings: Conduct progress meetings on the same time and day of the week at weekly intervals. Coordinate dates of meetings with preparation of payment requests.

   a. Attendees: In addition to representatives of Owner, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings when appropriate or requested. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
      i. Conduct weekly subcontractor and general contractor meetings outside of weekly meetings.
      ii. Conduct coordination meetings with Owner, and Subcontractors that are deemed necessary separately from progress meetings, unless agreed upon in advance by all regular attendees.

   b. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
      i. Design-Build Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Design-Build Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
         1) Review schedule for next period. Schedule review should include monthly critical path updates as well as a regular three-week look ahead short-term schedule.
      ii. Review present and future needs of each entity present, including the following:
         1) Interface requirements.
         2) Sequence of operations.
         3) Status of submittals.
         4) Deliveries.
         5) Off-site fabrication.
         6) Access.
         7) Site utilization.
         8) Temporary facilities and controls.
         9) Work hours.
         10) Hazards and risks.

11) Progress cleaning.
12) Quality and work standards.
13) Status of correction of deficient items.
14) Field observations.
15) Requests for Information (RFIs) or Clarification Requests (CR's), whichever is per the Design-Builder's usual practice.
16) Status of proposal requests, Field Authorizations, Design-Builder's Supplemental Instructions, and Construction Change Directives.
17) Pending changes.
18) Status of Change Orders.
19) Pending claims and disputes.
20) Documentation of information for payment requests, and dates of review for pay requests/pay application.
21) Owner issues and community issues.

c. Minutes: Record and distribute to Owner and Owner's Representatives the meeting minutes within three days.
   i. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

F. Reports:

1. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
   a. List of subcontractors at Project site.
   b. List of separate contractors at Project site.
   c. Approximate count of personnel at Project site.
   d. Equipment at Project site.
   e. Material deliveries.
   f. High and low temperatures and general weather conditions.
   g. Accidents.
   h. Unusual events (refer to special reports).
   i. Stoppages, delays, shortages, and losses.
   j. Emergency procedures.
   k. Orders and requests of authorities having jurisdiction.
   l. Services connected and disconnected.
   m. Equipment or system tests and startups.
   n. Partial Completions and occupancies.
   o. Substantial Completions authorized.

2. Material Location Reports: When requested, prepare and submit a list of materials delivered to and stored at Project site. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.

3. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Design-Build Contract Documents, prepare and submit a detailed report. Include a detailed description of the differing conditions, together with recommendations for changing the Design-Build Contract Documents.

G. Special Reports:

1. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

2. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit
   a. Special report. List chain of events, persons participating, response by Design-Build Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

III. Design-Build Design and Construction Schedule:

A. Design-Build Contractor's Construction Schedule, General

1. Reference Design-Build Contract, Article 25 "Project Planning and Control," for additional requirements.

2. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."

3. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion.

   a. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

4. Activities: Treat each building or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:

   a. Activity Duration: Define construction activities so no activity is longer than 30 days.

   b. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.

c. Submittal Review Time: As indicated in the Design-Build Contract. Include review and resubmittal times indicated “Construction Submittals” elsewhere in this Element in schedule. Coordinate submittal review times in Design-Build Contractor’s Construction Schedule with Submittals Schedule.

d. Startup and Testing Time: Include not less than 30 days for startup, commissioning and testing. Include this period prior to substantial completion.

e. Substantial Completion: Allow time prior to Substantial Completion for Owner’s administrative procedures necessary for certification of Substantial Completion.

5. Constraints: Include constraints and work restrictions indicated in the RFP documents and the Design-Build Contract Documents, and as follows in schedule, and show how the sequence of the Work is affected.

   a. Phasing: Arrange list of activities on schedule by phase.

   b. Include a separate activity for each contract or sub-contract.

   c. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.

   d. Work Restrictions: Show the effect of the following items on the schedule if applicable:
      i. Coordination with existing construction.
      ii. Limitations of continued occupancies.
      iii. Uninterruptible services.
      iv. Use of premises restrictions, including security restrictions, including, but not limited to, facility lockdown procedures.
      v. Radio Frequency restrictions and coordination with those of the facility.
      vi. Provisions for future construction.
      vii. Seasonal variations.
      viii. Environmental control.

   e. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
      i. Design submittals.
      ii. Subcontract awards.
      iii. Submittals.
      iv. Purchases.
      v. Mockups, including mockups for long-lead items.
      vi. Fabrication.
      vii. Owner furnished detention equipment.
      viii. Sample testing.
      ix. Deliveries.

x. Installation.
xi. Tests, inspections and commissioning, including oversight tests and inspections of a Department-approved Registered Communications Distribution Designer (RCDD).
xii. Adjusting.
xiii. Curing.
xiv. Startup and placement into final use and operation.

f. Area Separations: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
   i. Structural completion.
   ii. Permanent space enclosure.
   iii. Completion of mechanical installation.
   iv. Completion of electrical installation.

g. Substantial Completion.

h. Milestones: Include milestones indicated in the Design-Build Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Prior Occupancy of designated portions of the Work, Substantial Completion, and Final Completion.

6. Contract Modifications: For each proposed contract modification for which a time extension is requested, prepare a time-impact analysis using fragments to demonstrate the effect of the proposed change on the overall project schedule.

7. Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules that is mutually agreeable to Design-Builder and Owner.

B. Design-Build Contractor’s Construction Schedule (CPM Schedule):

1. CPM Schedule: Prepare Design-Build Contractor’s Construction Schedule using a computerized, time-scaled CPM network analysis diagram for the Work.

a. CPM: Critical path method: a method of planning and scheduling a construction project where activities are arranged based on activity relationships. The Critical Path is the longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

b. Ensure that the CPM schedule graphically clearly delineates the Critical Path by the individual responsible for the CPM

c. Provide an overall CPM Schedule correlating all Work in a single schedule. Provide detailed sub-schedules for each major activity or portion of the work.

d. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 30 days after date established for the Commencement of construction activities at the site.

e. Failure to include any work item required for performance of this Contract shall not excuse Design-Build Contractor from completing all work within time-frame established for completion, regardless of Owner's review of the schedule.

f. Conduct educational workshops or similar methods to assure key Project personnel, including subcontractors' personnel, are trained and informed in proper methods of providing data and using CPM schedule information.

g. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.

h. Use "one workday" as the unit of time. Include list of nonworking days and holidays incorporated into the schedule.

i. Float: The measure of leeway in starting and completing an activity.
   i. Float time is not for the exclusive use or benefit of either Owner or Design-Build Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
   ii. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.

2. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Prepare a skeleton network to identify probable critical paths.

   a. Level 1 Schedule: A CPM schedule containing bulleted construction trade/task items with critical links.

   b. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
      i. Preparation of design submittals.
      ii. Preparation of final construction documents and permit submittals.
      iii. Obtaining of permits.

iv. Preparation and processing of submittals.
v. Mobilization and demobilization.
vi. Purchase of materials.
vii. Delivery.
viii. Fabrication.
ix. Utility interruptions.
x. Installation.
xi. Work by Owner that may affect or be affected by Design-Build Contractor's activities.
xii. Testing and commissioning.

c. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.

d. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
   i. Format: Mark the critical path. Sub-networks on separate sheets are permissible for activities clearly off the critical path.

3. Design-Build Contractor's Construction Schedule Updating: Update schedule to reflect actual construction progress and activities at monthly intervals. Issue schedule one week before regularly scheduled progress meeting.

   a. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

   b. As the Work progresses, indicate Actual Completion percentage for each activity.

   c. Schedule Updating: Concurrent with making revisions to schedule, prepare a report outlining the following:
      i. Changes in the critical path and what drove these changes.
      ii. Changes to milestones and completion dates and what drove these changes.
      iii. Changes in total float.

4. Distribution: Distribute copies of approved schedule to Owner, separate contractors, testing and inspecting agencies, and other parties identified by Design-Build Contractor with a need-to-know schedule responsibility.

   a. Post copies in Project meeting rooms and temporary field offices.

b. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

C. Submittals:

1. Submittals Schedule: Submit three copies of submittals schedule; maintain schedule throughout construction in the form of a log accessible to Owner's Representative, and other consultants or entities of the Owner as designated by the Owner's Representative.

   a. Arrange the following information in a tabular format:
      i. Scheduled date(s) for design submittals to Owner.
      ii. Scheduled date(s) for review and permit document submittals to authorities having jurisdiction.
      iii. Scheduled date for first submittal.
      iv. Specification Section number and title from Design-Build Contractor's project specifications.
      v. Submittal category (action or informational).
      vi. Name of consultant.
      vii. Name of subcontractor when available.
      viii. Description of the Work covered.
      ix. Scheduled date for Owner's Representative's final release or approval.

   b. Indicate on Submittals Schedule whether submittal is an Action submittal or an Informational submittal.

2. Design-Build Contractor's Construction Schedule Submittals: Submit two legible copies of initial schedule. Show logic ties for activities.

   a. Submit two electronic copies of Design-Build Contractor's Construction Schedule, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label. Submit with functions open.

3. Field Condition Reports: Submit two copies at time of discovery of differing conditions.

4. Special Reports: Submit two copies at time of unusual event.

D. Coordination:

1. Coordinate preparation and processing of schedules and reports with performance of design and construction activities and with scheduling and reporting of separate contractors.

2. Coordinate Design-Build Contractor's Construction Schedule with the list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

    a. Secure time commitments for performing critical elements of the Work from parties involved.

    b. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

3. Preparation of Submittals Schedule: Submit a schedule of submittals, including design submittals, arranged in chronological order by dates required by overall construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

    a. Coordinate Submittals Schedule with list of consultant contracts, subcontracts, the Schedule of Values, and Design-Build Contractor's Construction Schedule.

    b. Initial Submittal Schedule: Include submittals required during the design phase, and for the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.

    c. Final Submittal: Submit concurrently with the first complete submittal of Design-Build Contractor's Construction Schedule.

IV. Post Award Design Submittals General

A. Project Design Submittals required are as indicated below. The submittal milestones are characterized by the percentage completion of all design services.

1. Design Submittals required are as follows:

Project Phase	Portion of Work	% Complete
Design-Build Technical Submittal in accord with the Request for Proposal (RFP)		
Forty Percent CD Completion	Building and Site	40% Design

Seventy Percent CD Completion	Building and Site	70% Design
One Hundred Percent CD Completion	Building and Site	100% Design
One Hundred Percent CD Completion – Final	Building and Site	100% Design

B. Interim Submittals and Permit Submittals - Post Award:

1. The Design-Build Contractor may elect to “fast track” elements of the Work to facilitate permitting and construction of the project.

    a. A project element may be extracted from the entirety of the project at the Design-Builder’s discretion.

    b. Portion of the Work that the Design-Build Contractor has separated from the Work as a whole for the purposes of permitting, or scheduling or other reasons must be submitted as interim submittals for the Owner’s records.

    c. Required, 40%, 70%, and 100% submittals to the Owner for review must include all portions of the Work, including all Partial Permit and fast track elements, coordinated in a single document set.
        i. Submit Partial Permit and fast track documents separately as they occur.

2. Back-checks: Correction and resubmittal of 40% and 65% Design submittals, based on submittal review comments from the Owner, is not required; incorporate comments in subsequent submittal. However, Design-Build team shall respond to such review comments in writing within 30 days of receipt. Incorporation of review comments on the 100% construction documents submittal, and resubmittal with comments incorporated shall be made.

3. Review Conferences: Convene a review conference to discuss the progress of the project and the design presented after review by the Owner of the 40 and 65 Percent Submittals. Topics should include:

    a. Performance and LEED, locking systems, special systems, etc.

    b. Design-Builder’s proposed construction sequencing.

    c. Design-Builder’s proposed order of proposed separate “permit packages,” if any.

    d. Value engineering proposals, if any.

e. MEP systems.

4. Design Phase Submittals

   a. Forty and Seventy Percent CD Completions:
      i. Three sets of all drawings, bond copies, loose bound.
      ii. One electronic copy of drawing and specifications.
      iii. Revit model.

   b. One Hundred Percent CD Completion:
      i. Three sets of all drawings on bond paper, bound, signed and sealed.
      ii. Three copies of specifications.
      iii. One electronic copy of 100% drawings and specifications.
      iv. Revit model

5. Time Constraints: Provide document submittal dates and review periods within project scheduling that supports the overall project completion and providing sufficient time for owner to review documents.

V. Design Submittal: Design-Build Technical Proposal

A. Reference Section 1 “Request for Proposals” for Proposal design submission requirements.

VII. Design Submittal: 40 Percent Construction Documents

A. 40 Percent Construction Documents is the initial design submittal after the Award of Contract. 40 Percent Construction Documents shall be a development of the Design-Builder’s Proposal and shall define fully the scope for the project within the agreed construction sum. 40 Percent Construction Documents shall illustrate the relationships of all programmatic requirements within a given building. Submittal shall include forms, sized and appearance of the component structures of the Project by the use of plans, sections elevations, layout of major equipment and systems, and typical details; include specifications for major materials and systems.

   1. Include value engineering proposal list with dollar value saving to the Owner.

   2. Include quality assurance review.

B. 40 Percent Construction Documents – Site / Civil

   1. Site Plan: Development of Master plan concept. Identify:

a. Limits of the Work.

b. Building setbacks and separations.

c. Roof Plans/Footprints of building.

d. Grading and preliminary earthwork calculations.

e. Drainage, addressing conveyance, treatment and disposal.

f. Water distribution and fire protection.

g. Sanitary sewer collection and conveyance.

h. Vehicular and Pedestrian Access and Circulation.

i. Preliminary pavement design.

j. Parking Requirements.

k. Fire Department Access and Circulation.

l. Utility corridors and spatial distribution.

m. Include utility corridors for major lines, grouped together.

n. Site ADA Requirements

o. Landscape areas (existing and new).

p. Expansion and Phasing options (as applicable).

2. Identify existing utility locations.

3. Zoning Information.

4. Coordinated new utility service locations (i.e., utility transformers, exterior generators, etc.).

5. 40 Percent Construction Documents Site/Civil Design Narrative: Update and revision to the Design-Build Technical Proposal narrative, finally describing:

   a. Codes, standards and local Zoning amendments.

   b. Overall site features.

c. Grading.

d. Drainage (storm water runoff, retention, detention).

e. Utilities connections and service.

f. Vehicular circulation and parking areas, including roadwork in State Highway right-of-way, if any.

g. Pedestrian circulation: secure and non-secure.

h. Coordinate site lighting with electrical.

i. Landscaping, including irrigation.

j. Construction access and TESC.

C. 40 Percent Construction Documents - Architectural

1. Floor Plans for the Building. Update Design-Build Technical Proposal plans to include design revisions required per review comments and constructability. Include development of the following:

   a. Add dimensions.

   b. Indicate major equipment.

   c. Indicate any specialty equipment.

   d. Indicate wall types.

   e. Indicate full height wall locations.

2. Develop the following:

   a. Elevations.

   b. Reflected ceiling plans; include types of ceiling construction and security enclosures.

   c. Wall, floor and ceiling treatments.

   d. Roof plans, indicating slopes.

e. Room finish schedule.

f. Wall sections.

g. Minimum one building section

3. Outline specifications.

4. Code Analysis: Update Design-Build Technical Proposal analysis.

5. Colors and Materials: Create design schemes for colors and materials.

   a. Provide color boards and samples, and present to the Owner for review and approval.

6. Update Architectural Design Narrative; include revisions to the narrative based on design review comments, and on requirements necessitated by development of the design.

   a. Confirm comparison with RFP Document
      i. Compare program square footage vs. Design-Build Technical Proposal square footage; note deviations.

   b. Include catalog cut-sheets for all materials and equipment selections.

D. 40 Percent Construction Documents – Structural:

1. Update Design-Build Technical Proposal Structural Design Narrative.

2. Framing plans with preliminary member sizes for main members.

3. Preliminary foundation plans.

4. Special framing for architectural features and large open areas.

5. Outline specifications.

E. 40 Percent Construction Documents – Mechanical:

1. Update Design-Build Technical Proposal Mechanical Design Narrative. Include:

   a. Design Loads, new and remodeled:
      i. Mechanical
      ii. Plumbing

b. Include catalog cut-sheets for materials and equipment selections.

2. Preliminary HVAC drawings, indicating all equipment locations. Include equipment sizes and model numbers and required chase and plenum clearances.

3. Preliminary Plumbing drawings, indicating all equipment locations. Include equipment sizes and model numbers and required chase and plenum clearances.

4. Life cycle cost analysis, as described in Section 1010.

5. Outline specifications.

F. 40 Percent Construction Documents – Electrical:

1. Update Design-Build Technical Proposal Electrical Design Narrative.

a. Include catalog cut-sheets for materials and equipment selections.

2. Preliminary Site electrical plan.

3. Preliminary Site lighting plan.

4. Preliminary power plans.

a. Include electrical room, serving the building and site, including equipment layout.

5. Preliminary lighting plans.

a. Calculations based on light fixture layout.

6. Outline specifications.

G. 40 Percent Construction Documents – Special Systems and Telecommunications:

1. Update of Design-Build Technical Proposal Special Systems Design Narrative.

a. Include update of materials and equipment selections.

2. Preliminary Site special systems drawings.

3. Preliminary special systems drawings.

a. Equipment layouts for all control rooms and equipment rooms.

4. Telecommunications shall adhere to design submittals described within the TDIS standards.

5. Outline specifications.

H. 40 Percent Construction Documents – Energy Performance and Leadership in Environmental Design (LEED) Program Submittal:

1. Energy Performance Verification: Submit the approved DES Energy Program Work Plan and Initial Energy Life Cycle Cost Analysis (ELCCA) Report deliverables, consistent with completion of the schematic and design development phase activities in accordance with the ELCCA Guidelines for Public Agencies in Washington State, 2016 version posted on DES website. and supporting whole building energy modeling results for LEED EAc1 of proposed and baseline building in accordance with ASHRAE 90.1 2007, showing overall percentage improvement and building energy use index (EUI) results as compared with baseline building.

2. LEED Credit Review: Update Design-Build Technical Proposal LEED Program Submittal. Include proposed revisions based on the design as further developed in the 40 Percent design for all disciplines. Provide a brief summary of revisions to the Site/Civil, Landscaping, Architectural, Mechanical Electrical and Special Systems design, if any, that are required resultant to the further development of the Project's design.

3. LEED Measurement and Verification (M&V) Plan: Submit a Draft M&V plan consistent with LEED EAc5.

I. 40 Percent Construction Documents – Life Cycle Cost Analysis Submittal

Provide analysis according to the latest model to defined by the Office of Financial Management.

VIII. Design Submittal: 70 Percent Construction Documents

A. 70 Percent Construction Documents is the further refinement of the 40 percent submittal, addressing all items listed above for the 40 percent submittal and incorporating DES CD review comments and DES ELCCA review comments from the 40 percent submittal.

B. Design Builder submit to Owner copy of set submitted for permit.

VIX. Design Submittal: 100 Percent Construction Documents

A. 100 Percent Construction Documents are the final, comprehensive in-progress design submittals, incorporating Owner's review comments from the 70 percent submittal, for which the final requirements for construction of the Project shall be set forth in detail. 100 Percent Construction Documents is when the project is completed and ready for submittal to reviewing agencies and various reviewing departments of the State; as well as submittal to the Owner for general review, for review for LEED certification pathway review.

1. Permit/Final Construction Documents.

    a. Sealed and signed set of Civil, Architectural, Structural, Mechanical, Electrical and Special Systems drawings.

    b. Sealed and signed Project Manual (specifications).

    c. Calculations, partial drawing sets and other supporting documents as required for permit submittal, and submittal to separate reviewing agencies and departments.

    d. Final submittal to Owner for LEED certification pathway review.

    e. Final submittal to Owner for compliance with standard requirements.
        i. Before construction begins, the Owner's RCDD reviewer shall have reviewed and approved the construction drawings and specifications relating to specialty low-voltage systems, including but not limited to, security, fire alarm, CATV, HVAC-EMCS, intercom, paging, and telecommunications voice and data infrastructures.

2. 100 Percent Construction Documents – Life Cycle Cost Analysis Submittal: Provide analysis according to the model to be defined by the Office of Financial Management in February 2014.

3. Pursuant to review comments by the Owner and the Owner's consultants, revise and resubmit the 100% documents as 100% - Final Documents with comments incorporated.

IX. Construction Submittals

A. Submittals during construction, General: Submittals are required during construction for portions of the Work as follows:

1. Action submittals requiring review by the Owner:

    a. Submittals for products, systems and equipment that deviate from those indicated in the final, approved Design-Build construction documents.

b. Submittals for Work indicated by proprietary or prescriptive means in the “Quality of Materials and Systems” portions of the Phase I RFP.

2. Information submittals:

a. Submittals for all products, systems and equipment in accordance with the approved construction documents, reviewed and approved by the Design-Build Contractor and Design-Build Architect or Engineer of record.
   i. Submittals are to demonstrate a flow-of-work for the project, and to confirm products, systems and equipment being used in the project are in accord with approved Design-Build Contract Documents; and will not be reviewed and returned.

B. Submittal Procedures:

1. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

a. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

b. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
   i. Owner’s Representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

2. Electronic Submittals: Provide an electronic submittal, submittal records and process acceptable by the Owner for all submittals except physical samples.

3. Submittals Schedule: Comply with requirements in Element Z1010 sub-element “Project Coordination.”

4. Review Procedures: The Design-Build Contractor shall review all submittals, and the Design-Build Architects and Engineers of record shall review submittals for products, systems, test results and equipment, prior to forwarding to the Owner.

5. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

a. Initial Review – Action Submittals: Allow 15 days for initial review and processing of each submittal. Allow additional time if coordination with subsequent submittals is required and for complex submittals or for several submittals submitted within a short time frame. Provide a "Priority List" when submitting several submittals in a short time frame.

b. Intermediate Review – Action Submittals: If intermediate submittal is necessary, process it in same manner as initial submittal.

c. Resubmittal Review – Action Submittals: Allow 15 days for review of each resubmittal.

d. Sequential Review: Where sequential review of submittals by either the Owner or other parties is indicated, allow 21 days for initial review of each submittal.

6. Identification: Place a permanent label or title block on each submittal for identification.

   a. Indicate name of firm or entity that prepared each submittal on label or title block.

   b. Provide a space approximately 6 by 8 inches on label or beside title block to record Design-Build Contractor's review and approval markings and action taken by Owner's Representative.

   c. Include the following information on label for processing and recording action taken:
      i. Project name.
      ii. Owner's contract number.
      iii. Date.
      iv. Name and address of Owner's Representative.
      v. Name and address of Design-Build Contractor.
      vi. Name and address of subcontractor.
      vii. Name and address of supplier.
      viii. Name of manufacturer.
      ix. Submittal number or other unique identifier, including revision identifier.
         1) Submittal number shall use Specification Section number from Design-Builder's Project Specifications followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
      x. Number and title of appropriate Specification Section or portion of the Work.
      xi. Drawing number and detail references, as appropriate.
      xii. Location(s) where product is to be installed, as appropriate.
      xiii. Other necessary identification.

7. Deviations: Highlight or encircle, or otherwise specifically identify deviations from the approved, Design-Build Contract Documents on submittals. Submit an Exception Request for Owner's approval.

8. Additional Copies: Unless additional copies are required for final submittal, and unless Owner's Representative observes noncompliance with provisions in the Design-Build Contract Documents, initial submittal may serve as final submittal.

    a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Owner's Representative.

    b. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned for Design-Build Contractor's inclusion in manuals.

9. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Owner's Representative will return submittals received from sources other than the Design-Build Contractor.

    a. Transmittal Form: Use CSI Form 12.1A or similar form:
        i. Project name.
        ii. Owner's contract number
        iii. Date.
        iv. Destination (To:).
        v. Source (From:).
        vi. Names of subcontractor, manufacturer, and supplier.
        vii. Category and type of submittal.
        viii. Submittal purpose and description.
        ix. Specification Section number and title.
        x. Drawing number and detail references, as appropriate.
        xi. Transmittal number, numbered consecutively.
        xii. Submittal and transmittal distribution record.
        xiii. Remarks.
        xiv. Signature of transmitter.

10. On an attached separate sheet, prepared on Design-Build Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Owner's Representative on previous submittals, and deviations from requirements in the Design-Build Contract Documents, including minor variations and limitations. Include same label information as related submittal.

11. Resubmittals – Action Submittals: Make resubmittals in same form and number of copies as initial submittal.

    a. Note date and content of previous submittal.

b. Note date and content of revision in label or title block and clearly indicate extent of revision.

c. Resubmit submittals until they are marked “Reviewed” or “Reviewed as Noted.”

12. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

13. Use for Construction: Use only final submittals with mark indicating “Reviewed” or “Reviewed as Noted” by Design-Build Architect or Engineer of record, and additionally by Owner’s Representative for Action submittals as indicated in paragraph “1010.04.A” above.

C. Action Submittals:

1. Prepare and submit Action Submittals required by the RFP, by individual Design-Build Specification Sections, and by distinct portions of the Work indicated on the Design-Build Contract Documents.

   a. Submit electronic submittals directly to Design-Builder provided and maintained extranet specifically established for Project.

2. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

   a. Submit Product Data before or concurrent with Samples.

   b. Number of Copies: Submit four copies of Product Data, unless otherwise indicated. Owner’s Representative will return two copies. Mark up and retain one returned copy as a Project Record Document.

3. Shop Drawings: Prepare Project-specific information, drawn accurately to scale.

   a. Preparation: Fully illustrate requirements in the Design-Build Construction Drawings and Specifications.

   b. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.

c. Number of Copies: Submit two hard copies of each submittal. Owner's Representative will return one copy. If required, provide additional copies with operation and maintenance manuals at time of project closeout.

4. Samples: Submit Samples for confirmation review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

   a. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

5. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use CSI Form 1.5A, or similar document. Include the following information in tabular form:

   a. Name, address, and telephone number of entity performing subcontract or supplying products.

   b. Number and title of related Specification Section(s) covered by subcontract.

   c. Drawing number and detail references, as appropriate, covered by subcontract.

   d. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Owner's Representative will return two copies.
      i. Mark up and retain one returned copy as a Project Record Document.

6. LEED Submittals: Submit three copies of LEED submittals, identical to and in addition to those made by the Design-Build Contractor directly to the United States Green Building Council.

7. Material Safety Data Sheets (MSDSs) for LEED Certification: Submit information necessary to show compliance with LEED certification requirements with LEED submittal, which will be the limit of the Owner's Representative's review.

D. Informational Submittals:

1. General:

   a. Number of Copies: As requested, submit one electronic copy of each submittal, unless otherwise indicated. Owner's Representative will not return copies.

b. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

c. Test and Inspection Reports: Comply with requirements specified in Design-Builder's Specification Division 1 Section "Quality Requirements."

d. Buy American Act Compliance Submittals

2. Design-Build Contractor's Construction Schedule.

3. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of Owner's Representatives and owners, and other information specified.

4. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Design-Build Contract Documents. Maintain of file on site. Include record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

5. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Design-Build Contract Documents and, where required, is authorized by manufacturer for this specific Project.

6. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Design-Build Contract Documents. Include evidence of manufacturing experience where required.

7. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Design-Build Contract Documents.

8. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Design-Build Contract Documents.

9. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Design-Build Contract Documents.

10. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Design-Build Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

    a. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

11. Schedule of Tests and Inspections.

12. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Design-Build Contract Documents.

13. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

14. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests either performed during installation of product or after product is installed in its final location, for compliance with requirements in the Design-Build Contract Documents.

15. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with all requirements indicated elsewhere in this document.

16. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

17. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:

    a. Preparation of substrates.

    b. Required substrate tolerances.

c. Sequence of installation or erection.

d. Required installation tolerances.

e. Required adjustments.

f. Recommendations for cleaning and protection.

18. Manufacturer's Field Reports: Prepare written information documenting factory authorized service representative's tests and inspections. Include the following, as applicable:

    a. Name, address, and telephone number of factory-authorized service representative making report.

    b. Statement on condition of substrates and their acceptability for installation of product.

    c. Statement that products at Project site comply with requirements.

    d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.

    e. Results of operational and other tests and a statement of whether observed performance complies with requirements.

    f. Statement whether conditions, products, and installation will affect warranty.

    g. Other required items indicated in individual Specification Sections.

19. Waste Management Plan: Prepare and submit Waste Management Plan, and periodic and final reports as indicated in this document.

20. Construction Photographs and CD-Rs:

    a. Digital Images: Submit a complete set of digital image electronic files as a Project Record Document on CD-ROM. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as the sensor, un-cropped.
        i. Provide digital images, produced by a digital camera with minimum sensor size of 8.0 megapixels, and at an image resolution of not less than 1600 x 1200 pixels. Date and Time: Include date and time in filename for each image.

b. Photographs, General: Take digital photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
   i. Maintain key plan with each set of construction photographs that identifies each photographic location.

c. Preconstruction Photographs: Before commencement of excavation, take digital photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points; confer with Owner's representative on vantage points to be used.
   i. Take a minimum of ten photographs to show existing conditions adjacent to Project site before starting the Work.

d. Periodic Construction Photographs: Time digital photos taken each month to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
   i. Exterior: Take four exterior digital photographs weekly until exterior work on the building is complete.
   ii. Interior: Take an additional five interior digital photographs weekly, minimum.

e. Final Completion Construction Photographs: Take digital photographs after date of Prior Occupancy and Substantial Completion for individual portions of the Work for submission with Project Record Documents. Owner's Representative will direct photographer for desired vantage points.

f. Additional Photographs: Owner's Representative or authorized Consultants to the Owner may issue requests for additional photographs, in addition to periodic photographs specified. Additional photographs will be paid for by Change Order and are not included in the Contract Sum.
   i. Three days' notice will be given, where feasible.
   ii. In emergency situations, take additional photographs within 24 hours of request.
   iii. Circumstances that could require additional photographs include, but are not limited to, the following:
      1) Special events planned at Project site.
      2) Immediate follow-up when on-site events result in construction damage or losses.
      3) Prior Occupancy Completion of a major phase or component of the Work.
      4) Extra record photographs at time of final acceptance.
      5) Owner's request for special publicity photographs.

21. Shop Drawings for all other products and systems not covered under Action Submittals above: Prepare project-specific information, drawn accurately to scale.

a. Preparation: Fully illustrate requirements in the Design-Build Construction Drawings and Specifications.

b. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.

E. Delegated Design: Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Design-Build Contractor by the Design-Build Drawings and Specifications, provide products and systems complying with specific performance and design criteria indicated.

F. Design-Build Contractor's Review

1. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Design-Build drawings and specifications. Note corrections and field dimensions. Mark with approval stamp before submitting to Owner's Representative.

2. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Design-Build Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Design-Build Contract Documents.

G. Owner's Representative's Action

1. General: Owner's Representative will not review submittals that do not bear Design-Build Contractor's approval stamp and will return them without action.

2. Action Submittals: Owner's Representative will review each submittal, make marks to indicate corrections or modifications required, and return it. Owner's Representative will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.

3. Informational Submittals: Owner's Representative will generally not review and return submittals, but may return them for further action by the Design-Build Contractor if, in the opinion of the Owner's Representative it does not comply with requirements.

4. Partial submittals are not acceptable, will be considered non-responsive, and will be returned without review.

5. Submittals not required by the RFP or Design-Build Contract Documents will not be reviewed and may be discarded.

6. The Design-Builder schedule shall include sufficient time for Owner's review of action submittals.

Z1020 Quality Requirements

I. Quality Assurance and Control

A. General:

1. The Design-Build Contractor shall include in the Design-Build Construction Documents and Specifications specific quality-assurance and quality-control requirements for individual construction activities usually associated with such activities, required by codes and jurisdictions having authority, and as indicated in Elements of the Request for Proposal documents. Requirements may also cover production of standard products.

2. Tests, inspections, and related actions do not limit Design-Build Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Design-Build Construction Drawings and Specification requirements.

3. Requirements for Design-Build Contractor to provide quality-assurance and quality control services required by Owner or authorities having jurisdiction are not limited by provisions of this Element.

4. The Design-Build Contractor shall have a well-practiced and proven QA/QC Coordinator dedicated to this project – with the necessary staff required to assure proper installation of each building system and monitoring workmanship as necessary to assure installations conform to levels of quality mandated by the industry if not otherwise indicated by the Construction Documents.

B. Definitions:

1. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

2. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Owner's Representative.

3. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to demonstrate aesthetic effects and qualities of materials and execution, and

to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.

4. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

5. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

6. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

7. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

8. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

9. Experienced: When used with an entity, “experienced” means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

C. Conflicting Requirements:

1. General: If compliance with two or more standards is indicated and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement.

2. Minimum Quantity or Quality Levels: The quantity or quality level required or indicated shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits.

D. Submittals:

1. Qualification Data: For testing to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

2. Schedule of Tests and Inspections: Prepare in tabular form and include the following:

a. Specification Section number and title.

b. Description of test and inspection.

c. Identification of applicable standards.

d. Identification of test and inspection methods.

e. Number of tests and inspections required.

f. Time schedule or time span for tests and inspections.

g. Entity responsible for performing tests and inspections.

h. Requirements for obtaining samples.

i. Unique characteristics of each quality-control service.

3. Reports: Prepare and submit certified written reports that include the following:

a. Date of issue.

b. Project title and number.

c. Name, address, and telephone number of testing agency.

d. Dates and locations of samples and tests or inspections.

e. Names of individuals making tests and inspections.

f. Description of the Work and test and inspection method.

g. Identification of product and Specification Section.

h. Complete test or inspection data.

i. Test and inspection results and an interpretation of test results.

j. Record of temperature and weather conditions at time of sample taking and testing and inspecting.

k. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.

l. Name and signature of laboratory inspector.

m. Recommendations on retesting and re-inspecting.

4. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

E. Quality Assurance:

1. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

2. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

3. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

4. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product(s) that are similar to those indicated for this Project in material, design, and extent.

5. Specialists: Certain portions of the Phase I Request for Proposal, and sections of the Design-Build Specifications may require, or usual construction methods may require, that specific construction activities be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

   a. Requirement for specialists shall not supersede building codes and regulations governing the Work.

6. Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting required, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

7. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

8. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

    a. Design-Build Contractor responsibilities include the following:
        i. Provide test specimens representative of proposed products and construction.
        ii. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
        iii. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
        iv. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
        v. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
        vi. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project, except as allowed in this element.

    b. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Owner's Representative, with copy to Design-Build Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Design-Build Contract Documents.

9. Mockups: Before installing portions of the Work requiring mockups, build mockups, physically or virtually for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

    a. Build mockups in location and of size indicated or, if not indicated, as directed by Owner's Representative.

    b. Notify Owner's Representative seven days in advance of dates and times when mockups will be constructed.

    c. Demonstrate the proposed range of aesthetic effects and workmanship.

    d. Obtain Owner's Representative's approval of mockups not incorporated into the work.

i. Allow seven days for initial review and each re-review of each mockup.

e. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.

f. Demolish and remove mockups when directed, unless otherwise indicated.

F. Quality Control:

1. Tests and inspections not explicitly assigned to Owner are Design-Build Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified in Request for Proposal documents, Design-Build Construction Drawings and Specifications, and those required by authorities having jurisdiction. Perform quality control services required of Design-Build Contractor by authorities having jurisdiction, whether specified or not. Engage a qualified testing agency to perform these quality control services.

   a. Notify testing agencies at least 36 hours in advance of time when Work that requires testing or inspecting will be performed.

   b. Where quality-control services are indicated as Design-Build Contractor's responsibility, submit a certified report of each quality-control service.

   c. Testing and inspecting requested by Design-Build Contractor and not required by the codes, jurisdictions having authority or the Request for Proposal documents are Design-Build Contractor's responsibility.

   d. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

2. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Design-Builder's Specification Division 1 Section "Submittal Procedures."

3. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Design-Build Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Design-Build Contract Documents.

4. Testing Agency Responsibilities: Cooperate with Owner's Representative and Design-Build Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

a. Notify Owner's Representative and Design-Build Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

b. Determine the location from which test samples will be taken and in which in-situ tests are conducted.

c. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.

d. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Design-Build Contractor.

e. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.

f. Do not perform any duties of Design-Build Contractor.

5. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

   a. Access to the Work.

   b. Incidental labor and facilities necessary to facilitate tests and inspections.

   c. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.

   d. Facilities for storage and field curing of test samples.

   e. Delivery of samples to testing agencies.

   f. Preliminary design mix proposed for use for material mixes that require control by testing agency.

   g. Security and protection for samples and for testing and inspecting equipment at Project site.

6. Coordination: Coordinate sequence of activities to accommodate required quality assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
   a. Schedule times for tests, inspections, obtaining samples, and similar activities.

7. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Design-Build Contract Documents. Submit schedule within 30 days of date established for commencement of the Work.

    a. Distribution: Distribute schedule to Owner's Representative, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

G. Special Tests and Inspections:

1. Special Tests and Inspections: Conducted by a qualified special inspector as required by authorities having jurisdiction, as indicated the Request for Proposal, in individual Design-Build Specification Sections, and as follows:

    a. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.

    b. Notifying Owner's Representative and Design-Build Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.

    c. Submitting a certified written report of each test, inspection, and similar quality control service to Owner's Representative with copy to Design-Build Contractor and to authorities having jurisdiction.

    d. Submitting a final report of special tests and inspections at Substantial Completion. This includes a list of unresolved deficiencies.

    e. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Design-Build Contract Documents.

    f. Retesting and re-inspecting corrected work.

H. Test and Inspection Log:

1. Prepare a record of tests and inspections. Include the following:

    a. Date test or inspection was conducted.

    b. Description of the Work tested or inspected.

    c. Date test or inspection results were transmitted to Owner's Representative.

d. Identification of testing agency or special inspector conducting test or inspection.

2. Maintain log electronically and make it accessible/provide to project team. Post changes and modifications as they occur. Provide access to test and inspection log for Owner's Representative's reference during normal working hours.

I. Repair and Protection:

1. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

a. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.

b. Comply with the Contract Document requirements for Design-Builder's Specification Division 1 Section "Cutting and Patching."

2. Protect construction exposed by or for quality-control service activities.

3. Repair and protection are Design-Build Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

J. Commissioning of MEP Systems

1. The Owner [Per Addendum #2] shall provide an independent third party Commissioning Authority (CxA) that will perform Fundamental and Enhanced Commissioning (Cx) services in accordance with LEED and WSEC requirements.

a. Coordinate and support all related start up, pre-functional and functional testing activities including regular Cx meetings, incorporate Cx activities into the CPM schedule, and review the Cx plan, field reports, and issues log.

b. Provide a designated point of contact to facilitate support and resolution of Cx issues identified.

c. Track unresolved issues to resolution.

2. Review and approve the final Cx report.

3. Assist the CxA in timely LEED and WSEC closeout documentation.

Z1030 Temporary Facilities

I. Temporary Facilities

A. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Prohibit smoking in construction areas.

2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

B. Operation, Termination, and Removal

1. Maintenance: Maintain facilities in good operating condition until removal.

   a. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

2. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

   a. Materials and facilities that constitute temporary facilities are property of Design-Build Contractor. Owner reserves the right to take possession of Project identification signs.

   b. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

c. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Element Z1040 “Project Closeout.”

II. Temporary Utilities

A. Use Charges

1. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner’s Representatives, testing agencies, and authorities having jurisdiction.

2. Sewer Service: Pay sewer service use charges for sewer usage by all entities for construction operations.

3. Water Service: Water from existing water system is available to the site. Meter and pay water service use charges for water used by all entities for duration of construction. Provide connections and extensions of services as required for construction operations.

4. Electric Power Service: Provide and pay for electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations. Provide connections and extensions of services as required for construction operations.

   a. Install temporary electric power service overhead, unless otherwise indicated.

   b. Coordinate with the local electric utility and State to provide connection to existing electrical service located along the westerly secure perimeter fence lines of the existing facility, to the main power lines on the south side of the facility.

5. Voice/Data Service: Provide and pay for voice and data services.

   a. Provide computer and e-mail accounts for use by general Design-Build Contractor during construction. In addition, provide separate computer connection and e-mail accounts for use by Owner and Owner’s Representative during construction. Refer to .03D below for related requirements.

B. Quality Assurance

1. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

2. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

C. Project Conditions: Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

D. Temporary Utility Installation

1. General: Install temporary service or connect to existing service.

    a. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

2. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.

    a. Connect temporary sewers to existing sewer line as indicated in civil plans.

3. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.

    a. Remove temporary water service lines if not incorporated into the final design solution.

4. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

    a. Toilets: Use of Owner's existing toilet facilities will not be permitted.

5. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

6. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

a. Electric Power Service: Use of Owner's existing electric power service will not be permitted.

7. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

   a. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

   b. At each telephone, post a list of important telephone numbers.
      i. Police and fire departments.
      ii. Ambulance service.
      iii. Numbers for contacts at the DES, Owner, and local jurisdiction.
      iv. Design-Build Contractor's home office.
      v. Architect's office.
      vi. Engineers' offices.
      vii. Owner's office.
      viii. Principal subcontractors' field and home offices.
      ix. All site phone lines.

   c. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

8. Electronic Telecommunications Network: Provide temporary electronic telecommunications network, including electronic mail, in common-use facilities.

   a. Provide Ethernet network connectivity with one data port to each PC workstation in all field offices.

   b. The Design-Build Contractor shall provide an e-mail account for the duration of the project, commencing from the time job site offices are established to post final completion.
      III. Construction Facilities

C. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading. Provide units of similar appearance and finish from single manufacturer.

D. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel. Keep office clean and orderly. Furnish and equip offices as follows:

   1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.

a. All project correspondence shall be located in this area.

2. Conference room of sufficient size to accommodate meetings of 20 individuals, minimum. Provide electrical power service and 120-V ac duplex receptacles, with not less than 1 receptacle on each wall. Furnish room with conference table, chairs, and 4’ x6’ tack board.

3. Drinking water and private portable sanican toilet.

4. Coffee machine and supplies.

5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F (20 to 22 deg C).

6. Lighting fixtures capable of maintaining average illumination of 20fc (215 lx) at desk height.)

E. Provide construction workers with portable toilet facilities on site.

F. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

G. Equipment

1. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

2. Heating Equipment: Unless Owner authorizes use of permanent heating system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

a. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.

b. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

H. Support Facilities Installation

1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet of building lines. Comply with NFPA 241.

2. Maintain support facilities until Final Completion. Remove before Substantial Completion, except as indicated under “Field Offices General” of this article. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

IV. Construction Aids

A. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered “tools and equipment” and not temporary facilities.

B. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

C. Temporary Use of Permanent Stairs: Cover finished, permanent stairs with protective covering of plywood or similar material so finishes will be undamaged at time of acceptance.

V. Temporary Site Access and Parking

A. Materials

1. Pavement: Comply with Washington State Department of Transportation standards for Hot-Mix Asphalt Paving.

2. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust, and as requested by the Owner.

3. Recondition base after temporary use, including removing contaminated material, re-grading, proof rolling, compacting, and testing.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.

2. Maintain access for fire-fighting equipment and access to fire hydrants.

3. Parking: Temporary parking areas for construction personnel to be responsibility of Design-Builder to not impact adjacent operations.

VI. Temporary Barriers and Enclosures

A. Materials

1. Portable Chain-Link Fencing.

B. Security and Protection Facilities Installation:

1. Site Enclosure Fence

   a. Extent of Fence: Install fencing around portions of the site determined by Design-Build Contractor to be sufficient to accommodate construction operations and maintain a secure environment for construction activities.

   b. Maintain security by limiting number of keys and restricting distribution to authorized personnel.

2. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

3. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

4. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.

VII. Temporary Controls

A. Support Facilities Installation

1. De-watering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

   a. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.

   b. Remove snow and ice as required to minimize accumulations.

B. Security and Protection Facilities Installation

1. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

2. Pest Control:

    a. If needed, engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion.

VIII. Construction Waste Management

A. Definitions

1. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

2. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

3. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

4. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

5. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

6. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

B. Performance Goals

1. General: Develop waste management plan in accord with LEED Program that results in end-of-Project reduction in construction waste.

2. Salvage/Recycle Goals: Owner’s goal is for the project to salvage and recycle as much nonhazardous demolition and construction waste as possible. It is not the

intention of this RFP to reuse salvaged or recycled materials unless expressly indicated in the RFP project requirements. All salvaged and recycled materials become the responsibility of the Design-Builder.

C. Submittals

1. Waste Management Plan: Include initial plan with LEED Program submittal at the time of the RFP. Submit (three) 3 copies of updated plan within 14 days of date established for commencement of the Construction Phase of Work.

2. Waste Reduction Progress Reports: When requested, in each monthly report include copy of report. Include separate reports for demolition and construction waste. Include the following information:

   a. Material category.

   b. Generation point of waste.

   c. Total quantities of the following:
      i. Total waste;
      ii. Quantity of waste salvaged and quantity recycled, estimated and actual;
      iii. Total quantity of waste recovered (salvaged plus recycled), both by weight and as a percentage of total waste.
      iv. Indicate quantities in tons.

D. Plan Implementation

1. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

2. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project. This coordinator role may be in addition to other duties the individual may have on site.

3. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.

   a. Communicate waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

Conduct waste management operations to ensure minimum interference with roads, streets and other adjacent occupied and used facilities.

a. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, etc.

E. Recycling Demolition and Construction Waste, General

1. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall belong to the Design-Build Contractor.

2. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.

F. Disposal of Waste

1. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

a. Do not allow waste materials that are to be disposed of accumulate on-site.

b. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

2. Burning: Do not burn waste materials.

3. Disposal: Transport waste materials off Owner's property and legally dispose of them. Do not bury waste or surplus materials on Owner's property.

IX. Protection and Restoration of Property

A. The Contractor shall protect private or public property on or in the vicinity of the work site. The Contractor shall ensure that it is not removed, damaged, destroyed, or prevented from being used. Property includes land, utilities, trees, landscaping, improvements legally on the right of way, markers, monuments, buildings, structures, pipe, conduit, sewer or water lines, signs and other property of all description whether shown on the plans or not.

B. Pursuant to Chapter 19.122 of the Revised Code of Washington (RCW), the Contractor shall call a locator service for location of utilities. Utilities shall be protected from damage resulting from the work. All costs required to protect identified public and private utilities shall be provided at the Contractor's expense.

C. If the Contractor damages, destroys, or interferes with the use of such property, the Contractor shall restore it to the original condition. The Contractor shall also halt any interference with the property's use. If the Contractor refuses or does not respond immediately, the Contracting Agency may have such property restored by other means and subtract the cost from money that will be or is due the Contractor.

D. If the work requires removing or relocating a utility, the contract will assign the task to the Contractor or the utility owner. When assigned to the utility owner, and the work is not complete before the Contractor begins work, the Contractor shall immediately notify the Engineer in writing.

Z1040 Project Closeout

I. Cleaning

A. General: Provide cleaning throughout construction period and final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal, State, and local environmental and antipollution regulations.

1. Except where cleaning agents or methods are a specific requirement by manufacturers of products incorporated into the Work, use only cleaning products approved by the Owner.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

C. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project:

1. Clean Project site, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.

3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.

4. Remove tools, construction equipment, machinery, and surplus material from Project site.

5. Remove snow and ice to provide safe access to building.

6. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.

7. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.

8. Sweep concrete floors broom clean in unoccupied spaces.

9. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.

10. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.

11. Remove labels that are not permanent.

12. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

    a. Do not paint over “UL” and similar labels, including mechanical and electrical nameplates.

13. Wipe surfaces of mechanical and electrical equipment, vertical conveying equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

14. Replace parts subject to unusual operating conditions.

15. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.

    a. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.

16. Clean ducts, blowers, and coils if units were operated without filters during construction.

17. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and

defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

18. Leave Project clean and ready for occupancy.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

II. Completion Inspections

A. Preliminary Procedures for Substantial Completion:

1. Prepare a list of incomplete items (punch list).

2. Advise Owner of pending insurance changeover requirements.

3. Submit to Owner specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.

4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs and photographic negatives, damage or settlement surveys, property surveys, and similar final record information.

6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.

7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

8. Complete startup testing of systems, including all security, fire alarm, and low voltage systems.

9. Submit test/adjust/balance records.

10. Terminate and remove temporary facilities from Project site, along with mockups not incorporated into the Work, construction tools, and similar elements.

11. Advise Owner of changeover in heat and other utilities.

12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

13. Complete final cleaning requirements, including touch-up painting.

14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

15. Any restoration work must be performed prior to project closeout.

B. Inspection: Submit a written request for inspection for Substantial Completion. Upon completion of requirements listed above in Preliminary Procedures, Owner's Representative will either proceed with inspection or notify Design-Build Contractor of unfulfilled requirements. Owner's Representative will prepare the Certificate of Substantial Completion after inspection or will notify Design-Build Contractor of non-compliant items, either on Design-Build Contractor's list or additional items identified by Owner's Representative, which must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the incomplete or incorrect Work identified in previous on-site observation as required for substantial completion is completed or corrected.

2. Results of completed inspection will form the basis of requirements for Final Completion.

C. Preliminary Procedures for Final Completion: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Design-Builder's Specification Division 1 Section "Payment Procedures."

2. Submit certified copy of the list of incomplete items (punch list) from Substantial Completion observations, endorsed and dated by Owner's Representative. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.

D. Inspection: Submit a written request for final inspection for acceptance. Upon completion of all requirements listed above in Preliminary Procedures, Owner's Representative will proceed with inspection or notify Design-Build Contractor of unfulfilled requirements. Owner's Representative will prepare a final Certificate for Payment after inspection or will notify Design-Build Contractor of non-compliant items.

1. Re-inspection: Request re-inspection when the incomplete or incorrect Work identified in previous report is completed or corrected.

E. List of Incomplete Items (Punch List) Preparation: Submit three copies of list. List all incomplete or incorrect items. Include name and identification of each affected space and area including, if necessary, areas disturbed by Design-Build Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, starting with exterior areas first, and proceeding from lowest floor to highest floor to allow a linear route of inspection.

   a. Repeat for each individual building.

2. Organize items applying to each space by major element, including categories for ceiling, individual walls, (with compass directions), floors, equipment, and building systems.

3. Include the value of the items and the reason why the work is incomplete or incorrect.

4. Include the following information at the top of each page:

   a. Project name.

   b. Date.

   c. Owners contract number.

   d. Name of Owner's Representative.

   e. Name of Design-Build Contractor.

   f. Page number.

III. Closeout Submittals: Maintenance Manuals

A. Initial Submittal: Submit 3 draft copies of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and

maintenance directory. Owner's Representative will return original copy of draft and mark whether general scope and content of manual are acceptable.

1. Exception: Submit Mechanical, Electrical, and Special Systems Operation and Maintenance Manuals 30 days prior to the Commissioning Kick-off Meeting as defined in Design-Builder's Specification Division 1 Section "Commissioning".

B. Final Submittal: Submit one hard copy together with a CD-ROM copy of each manual in final form at least 14 days before confirmation for final completion directly to Owner.

C. Coordination: Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

D. Include a section in the directory for each of the following:

1. List of documents.

2. List of systems.

3. List of equipment.

4. Table of contents.

5. List of Warranties.

E. List of Systems and Subsystems: List systems by Specification section number. Include references to operation and maintenance manuals that contain information about each system.

F. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

G. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

H. List of Warranties: List of all warranties within O&M manuals by section number from the Design-Build specifications.

I. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Design-Build Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

J. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title Page.

2. Table of Contents.

3. Manual Contents.

K. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

1. Subject matter included in manual.

2. Name and address of Project.

3. Name and address of Owner.

4. Date of submittal.

5. Name, address, and telephone number of Contractor.

6. Name and address of Architect/Engineer.

7. Cross-reference to related systems in other operation and maintenance manuals.

L. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Design-Build Project Manual.

1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

M. Manual Components: Organize into sets of manageable size. Arrange contents by specification division and section. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.

b. Identify each binder on front and spine, with printed title “OPERATION AND MAINTENANCE MANUAL,” Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.

2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Design-Build Project Manual.

3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.

4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.

5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.

b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

N. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers’ maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

O. Source Information: List each system, subsystem, and piece of equipment included in the manual, identified by product name, and arranged to match the manual’s table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

P. Product Information. Including the following as applicable.

1. Product name and model number. Include equipment tag or other identification of the equipment.

2. Manufacturer's name.

3. Material and chemical composition.

4. Color, pattern, texture.

5. Reordering information, and special instructions.

Q. Manufacturers' Maintenance Documentation and Procedures: Manufacturers maintenance documentation including the following information for each component part or piece of equipment:

1. Standard printed maintenance instructions and bulletins.

2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.

3. Identification and nomenclature of parts and components.

4. List of items recommended to be stocked as spare parts.

R. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

1. Test and inspection instructions.

2. Troubleshooting guide.

3. Precautions against improper maintenance.

4. Disassembly; component removal, repair, and replacement; and reassembly instructions.

5. Aligning, adjusting, and checking instructions.

6. Demonstration and training videotape, if available.

S. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.

2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

T. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

U. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

V. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

W. Operation and Maintenance Manuals: Assemble two (2) complete sets of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system. In addition to the hard copy sets, we require an electronic copy as well.

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.

2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.

X. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Design-Build Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

Y. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.

1. Do not use original Project Record Documents as part of operation and maintenance manuals.

2. Comply with requirements of newly prepared Record Drawings in Design-Builder's Specification Division 1 Section "Project Record Documents."

Z. Energy Performance, assurance, monitoring, and verification documents and closeout requirements:

1. Submit two reviewed and approved (2) Final Commissioning Reports prepared by the Commissioning Authority (CxA) in electronic format and coordinate a Lessons Learned roundtable meeting with CxA, Design-Build Contractor, Owner's Representative, Owners designated operating personnel.

2. As agreed to and priced in Performance Guarantee Agreement, Submit two (2) Final Measurement and Verification (M&V) Plan documents in electronic format in accordance with LEED which includes M&V goals and objectives, updated energy end use description of utility, tenant and sub-metered points / values, metering descriptions, frequency and duration of metered values, management of metered data, automated reporting, post one (1) year calibration methodologies as specified by IPMVP, dashboard tracking tools and annual M&V reporting requirements (first year and subsequent annual reports), benchmarking and measurement metrics.

IV. Closeout Submittals: Project Record Documents

A. General:

1. Record Drawings: Submit to Owner's Representative copies of Record Drawings as follows:

   a. Final Submittal: Submit two bound paper sets of Record Revit Drawings, plus one CD-R copy of Record Revit model files; annotate all contract modifications. Provide in acceptable electronic format to State.

2. Record Specifications: Submit two (2) copies of Project Manual in electronic format. Include Specifications and addenda. Annotate all contract modifications.

3. Record Prints: Maintain one set of blue-line or black-line white prints of the Contract Drawings and Shop Drawings.

   a. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, Subcontractor, or similar entity, to prepare the marked-up Record Prints.
      i. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.

ii. Accurately record information in an understandable drawing technique.
iii. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
iv. Owner's Representative may check for completeness of record documents at any time as condition of acceptance of Pay Application.

b. Content: Types of items requiring marking include, but are not limited to, the following:
   i. Dimensional changes to Drawings.
   ii. Revisions to details shown on Drawings.
   iii. Depths of foundations below first floor. Locations and depths of underground utilities.
   iv. Revisions to routing of piping and conduits.
   v. Revisions to electrical circuitry.
   vi. Actual equipment locations.
   vii. Duct size and routing.
   viii. Locations of concealed internal utilities.
   ix. Any modifications to the Design-Build Contract Documents.
   x. Field records for variable and concealed conditions.
   xi. Record information on the Work that is shown only schematically.

c. Mark the Design-Build Drawings, Specifications and Shop Drawings completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.

d. Mark record sets in a clear, legible manner, using red ink (no pencils); use other colors to distinguish between variations in separate categories of the work. Use 'whiteout' to erase errors.

e. Mark important additional information that was either shown schematically or omitted from original Drawings.

f. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

4. Record CAD Drawings: Immediately before inspection for Substantial Completion, prepare a full set of corrected CAD Drawings of the Contract Drawings, as follows:

   a. Format: Revit or DWG AutoCAD current version operating in Microsoft Windows operating system.

   b. Incorporate changes and additional information previously marked on Record Prints. Delete, redraw, and add details and notations where applicable.

5. Newly Prepared Record Drawings: Where Owner's Representative determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation, prepare additional drawings.

    a. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.

    b. Consult Owner's Representative for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared Record Drawings into Record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.

    c. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
        i. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
        ii. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
        iii. Identification: As follows:
            1) Project name.
            2) Date.
            3) Owner's contract number.
            4) Designation "PROJECT RECORD DRAWINGS."
            5) Name of Architect and Engineers of Record.
            6) Name of Design-Build Contractor.

B. Record Design-Build Specifications: Preparation: Mark Design-Build Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

    1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

    2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.

    3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.

    4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.

5. Note related Change Orders and Record Drawings where applicable.

C. Miscellaneous Record Submittals: Assemble miscellaneous records required by Request for Proposal Elements other Design-Build Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

1. Digital copies of submittals: provide .pdf copies of all of the project submittals

D. Recording and Maintenance

1. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur.

2. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Design-Build Contract Documents used for construction. Do not use Project Record Documents for construction purposes.

E. Warranties

1. Submit properly executed warranties to Owner before Final Completion.

2. Organize warranty documents into an orderly sequence based on the table of contents of the Design-Build Project Manual and submit to Owner in 3-ring binders. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.

a. Identify each binder on the front and spine with the typed or printed title “WARRANTIES,” Project name, and name of Design-Build Contractor.

3. Provide additional copies of each warranty to include in operation and maintenance manuals.

4. Roof warranty shall be at minimum twenty (20) years.

V. Training

A. Instruction Program

1. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system. An initial training session (4-hr) shall be part of the overall commissioning and a second final training session (4hr) prior to final completion. Training modules shall be as required by individual Specification Sections, and as follows:

    a. Motorized doors, including overhead coiling doors and automatic entrance doors.

    b. Equipment, high density file storage equipment, projection screens, loading dock equipment, and the like.

    c. Fire-protection systems, including fire alarm and fire-extinguishing systems.

    d. Food service equipment

    e. Conveying systems, including wheelchair lifts.

    f. Heat generation, including boilers, pumps, heating water distribution, and steam distribution piping.

    g. Refrigeration systems, including chillers, cooling towers, condensers, pumps, and distribution piping.

    h. HVAC systems, including air-handling equipment, air distribution systems, and terminal equipment and devices.

    i. HVAC instrumentation and controls.

    j. Electrical service and distribution, including transformers, switchboards, panel boards, uninterruptible power supplies, and motor controls.

    k. Packaged engine generators, including transfer switches.

    l. Lighting equipment and controls.

    m. Communication systems, infrastructure.

    n. Equipment, high density file storage equipment, projection screens, loading dock equipment, food-service equipment, and the like.

    o. Fire-protection systems, including fire alarm and fire-extinguishing systems.

2. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:

a. Basis of System Design, Operational Requirements, and Criteria: Include the following:
   i. System, subsystem, and equipment descriptions.
   ii. Performance and design criteria if Contractor is delegated design responsibility.
   iii. Operating standards.
   iv. Regulatory requirements.
   v. Equipment function.
   vi. Operating characteristics.
   vii. Limiting conditions.
   viii. Performance curves.

b. Documentation: Review the following items in detail:
   i. Emergency manuals.
   ii. Operations manuals.
   iii. Maintenance manuals.
   iv. Project Record Documents.
   v. Identification systems.
   vi. Warranties and bonds.
   vii. Maintenance service agreements and similar continuing commitments.

c. Emergencies: Include the following, as applicable:
   i. Instructions on meaning of warnings, trouble indications, and error messages.
   ii. Instructions on stopping.
   iii. Shutdown instructions for each type of emergency.
   iv. Operating instructions for conditions outside of normal operating limits.
   v. Sequences for electric or electronic systems.
   vi. Special operating instructions and procedures.

d. Operations: Include the following, as applicable:
   i. Startup procedures.
   ii. Equipment or system break-in procedures.
   iii. Routine and normal operating instructions.
   iv. Regulation and control procedures.
   v. Control sequences.
   vi. Safety procedures.
   vii. Instructions on stopping.
   viii. Normal shutdown instructions.
   ix. Operating procedures for emergencies.
   x. Operating procedures for system, subsystem, or equipment failure.
   xi. Seasonal and weekend operating instructions.
   xii. Required sequences for electric or electronic systems.
   xiii. Special operating instructions and procedures.

e. Adjustments: Include the following:
   i. Alignments.
   ii. Checking adjustments.
   iii. Noise and vibration adjustments.
   iv. Economy and efficiency adjustments.

f. Troubleshooting: Include the following:
   i. Diagnostic instructions.
   ii. Test and inspection procedures.

g. Maintenance: Include the following:
   i. Inspection procedures.
   ii. Types of cleaning agents to be used and methods of cleaning.
   iii. List of cleaning agents and methods of cleaning detrimental to product.
   iv. Procedures for routine cleaning
   v. Procedures for preventive maintenance.
   vi. Procedures for routine maintenance.
   vii. Instruction on use of special tools.

h. Repairs: Include the following:
   i. Diagnosis instructions.
   ii. Repair instructions.
   iii. Disassembly; component removal, repair, and replacement; and reassembly instructions.
   iv. Instructions for identifying parts and components.
   v. Review of spare parts needed for operation and maintenance.

B. Preparation

1. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.

2. Set up instructional equipment at instruction location.

C. Instruction

1. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.

2. Engage qualified instructors to instruct Owner’s personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

a. Design-Builder will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.

b. Owner will furnish an instructor to describe Owner's operational philosophy.

c. Owner will furnish Contractor with names and positions of participants.

3. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.

   a. Schedule training with Owner with at least seven days' advance notice.

4. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.

5. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

D. Electronic Demonstration and Training Videos

1. General: Provide electronic demonstration and training videos. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
   a. At beginning of each training module, record each chart containing learning objective and lesson outline.

2. Electronic Format: Provide high-quality electronic video available to owner on flash drive or downloaded to owner FTP site.

3. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to show area of demonstration and training. Display continuous running time.

4. Narration: Describe scenes on videotape by either audio narration by microphone while videotape is recorded or by dubbing audio narration off-site after videotape is recorded. Include description of items being viewed. Describe vantage point, indicating location, direction (by compass point), and elevation or story of construction.

5. Transcript: Provide a typewritten transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.

IV. DESIGN PROGRAM REQUIREMENTS

1.0 Prior Planning

A. The Problem

The Washington National Guard requires a new facility to provide volunteer troops with support and training required by the National Guard and the Department of Defense. The need became apparent when the Port of Bellingham terminated the lease on the Bellingham Armory in 2014. The Washington National Guard reorganized its Units but the need was still present. The location changed to provide maximum use by locating the new Readiness Center in the center of the state on property purchased in Richland.

B. Identify the Problem

The Washington Army National Guard is in need of a specially designed National Guard Readiness Center. This project will be designed to support training, administrative, and logistical requirements and its mission is to provide spaces for the Guard to achieve proficiency in required training tasks, improve readiness, and maintain soldier morale. The Readiness Center will also provide a space for community activities and a safe haven during emergencies.

Agency Name: Washington State Military Department
Project Number: 18-586
Project Title: Tri-Cities National Guard Readiness Center
Agency Contact: Ron Cross, Project Manager
State Military Department
Building 36-Camp Murray
Tacoma WA 98430-5052
Office: (253) 512-8404
ron.cross@mil.wa.gov

C. Identify the Requirements

This facility will be designed to meet Industry Standards, as well as all local, state, and federal building codes as per Public Law 90-480. Construction will include all utility services, information systems, fire detection and alarm systems, roads, walks, curbs, gutters, storm drainage, parking areas, and site improvements. Facilities will be designed to a minimum life of 50 years in accordance with DoD's Unified Facilities Code (UFC-1-200-02) including energy efficiencies, building envelope, and integrated building system performance as per ASA (IE&E) Sustainable Design and Development Policy. Access for individuals with disabilities will be provided. Anti-terrorism measures in accordance with the DoD Minimum Anti-terrorism for Building Standards will be provided. This project will comply with the Army ISF for ISF Disposal Policy.

The primary mission of this project is to provide a cost-effective and operationally efficient specialized training facility for the assigned units of the Washington Army National Guard and their personnel located in the Washington Military Department's Tri-City area.

The pre-design proposes a replacement of an inadequate leased facility lost to lease expiration, located in Bellingham Washington with a 39,731 sf single story facility located on a 40 acre site in Richland, Washington.

2.0 Basic Code & Regulatory Requirements

A. Design Guides

Facility program standards and requirements for National Guard Readiness Centers are established by the U.S. Army National Guard Bureau and are published in the following Regulations and Guidelines:

Army National Guard DG 415-5 General Facilities Information Design Guide
Army National Guard DG 415-1 Readiness Centers Design Guide
Unified Facilities Criteria (UFC-4-022-03) Security Fences and Gates
Unified Facilities Criteria (UFC-4-010-01) DoD Minimum Anti-Terrorism Standards for Buildings
Unified Facilities Criteria (UFC 3-110-3) Roofing, with Change 4
Unified Facilities Criteria (UFC 3-600-1) Fire Protection Engineering for Facilities, with Change 4
Unified Facilities Criteria (UFC 3-420-01) Plumbing Systems, with Change 11
Unified Facilities Criteria (UFC 3-575-1) Lightning and Static Electricity Protection Systems
Unified Facilities Criteria (UFC 3-210-10) Low Impact Development, with Change 3
Unified Facilities Criteria (UFC 1-300-07A) Design Build Technical Requirements

Significant Components in Excess of Existing Code:
The Tri-Cities Readiness Center is required to follow Department of Defense Guidelines including the "Unified Facilities Criteria - DoD Minimum Anti-Terrorism Standards for Buildings" published February 2012 and updated October 2013 and the "Unified Facilities Criteria - Security Fences and Gates" published October 2013. Other requirements are documented in the Army National Guard DG 415-5 General Facilities Information Design Guide published June 2011 and the Army National Guard DG 415-1 Readiness Centers Design Guide published June 2011.

In turn, these publications reference other publications which regulate specific aspects of the planning, design, and construction of readiness centers [e.g. federal-level anti-terrorism measures, progressive collapse requirements, and information security standards as identified through Unified Facilities Criteria (UFCs),

Department of the Army Technical Instructions (TIs), and Army Regulations (ARs)]. Beyond these secondary publications, specialty disciplines have additional requirements as described elsewhere in this RFP.

B. Codes

The following building codes and regulations apply to this project. The code analysis and summary that are presented in this section are based on the latest adopted versions of these codes at the time of publication. Actual code compliance is based on versions of these codes in effect when building permits are obtained, so some modifications will likely be required.

1. 2018 International Building Code and Washington State Amendment as adopted by the Richland Municipal Code
2. 2018 International Fire Code and Washington State Amendment as adopted by the Richland Municipal Code
3. 2018 International Mechanical Code and Washington State Amendment as adopted by the Richland Municipal Code
4. 2018 Uniform Plumbing Code and Washington State Amendment as adopted by the Richland Municipal Code
5. 2018 National Electrical Code
6. 2018 International Fuel Gas Code
7. ANSI A17.1 - Safety Code for Elevators and Escalators (2010)
8. ICC/ANSI A117.1-2009 Accessible and Usable Buildings and Facilities
9. 2018 Washington State Energy Code (WSEC) WAC 51-11
10. Washington State Ventilation and Indoor Air Quality Code

In addition, National Guard Bureau requires adherence to the following Unified Facilities Criteria:

1. UFC 4-010-01 – United Facilities Criteria, Design: DoD Minimum Anti-terrorism Standards for Buildings, 2 December 2018.
2. and Department of the Army Technical Instructions:
3. TI 809-01: Load Assumptions for Buildings
4. TI 809-02: Structural Design Criteria for Buildings
5. TI 809-04: Seismic Design for Buildings
6. TI 809-29: Structural Considerations for Metal Buildings
7. AR 190-11 - For Arms Vault Construction

Upon request by the Owner or authorities having jurisdiction, the Design-Build team shall provide calculations supporting the design and the adherence to codes, regulations and requirements.

11. Greenhouse Gas Emissions Reduction Policy: The final building design as provided by the design-build team will be required to meet the Greenhouse Gas

Emission Reduction Policy RCW.70.235.070 through efficient heating and cooling design, better insulation, energy star refrigeration, and the LED lighting. Many of these requirements have been identified and quantified through the use of LEED v4 (see Appendix H)

12. Americans with Disabilities Act: The final building design, as provided by the design-build team, will be required to meet the current edition of the ADA.

13. Compliance with RCW 36.70A: The final building design, as provided by the design-build team will be required to meet the City of Richland Growth Management Act.

C. Other Requirements

Archaeological and Cultural Resources: The Army National Guard engaged Northwest Anthropology LLC to investigate the site. They produced a report entitled "Cultural Resource Investigation Report for the Army National Guard Readiness Center Project, Richland, Benton County, Washington." The results of their investigation indicate that there is a low probability that any archaeological resources are located on the parcel and that the consequences of discovery during construction will be low and manageable. The report is available upon request. A letter from the Department of Archaeological and Historic Preservation (DAHP) is included as an Appendix item 2 E.

In the event of inadvertent discovery of archaeological resources such as, but not limit to, human remains, funerary objects, sacred objects, artifacts, or objects of cultural significance, all work will stop. The site in the immediate vicinity of the area of discovery will be secured, and the WAARNG's Cultural Resources Manager or Environmental Programs Manager will be contacted to determine the appropriate response in accordance with the Standard Operating Procedure outlined in the WAARNG's Integrated Cultural Resources Management Plan.

3.0 Site

A. Site Analysis

Site Studies: During the pre-design study, the Washington Army National Guard obtained the following site studies, which are in the appendix:

1. Cultural Resource Investigation Report for the Army National Guard Readiness Center Project, Richland, Benton County, Washington

   Prepared by: James Knobbs, RPA and Darby C. Stapp, PhD, RPA, Northwest Anthropology LLC, March 2, 2107

2. Geotechnical Engineering Report prepared by PBS Engineering and Environmental, October 18, 2016.

3. Preliminary Survey prepared by Permit Surveying NC, February 2, 2017

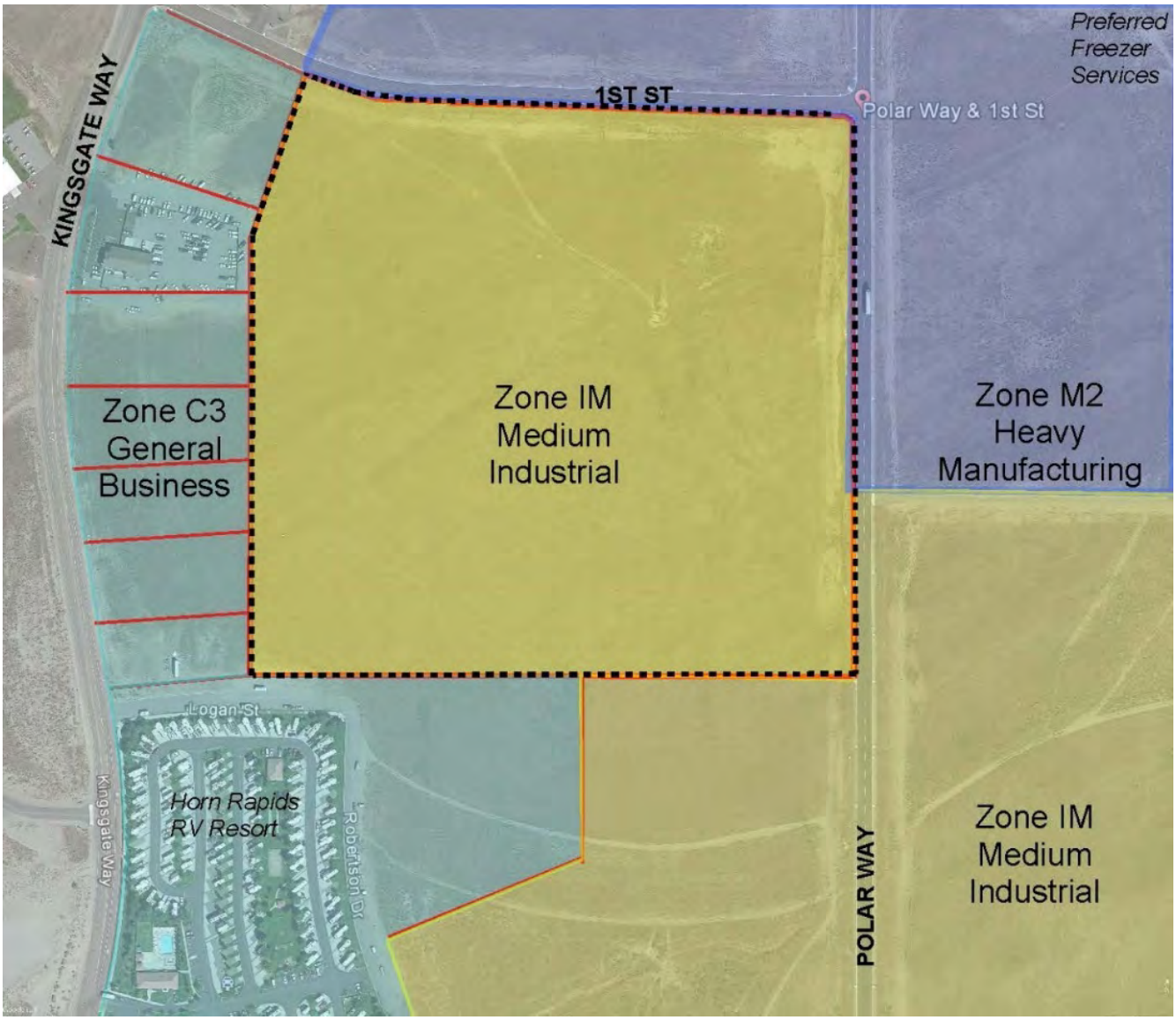
B. After an extensive site selection process, an undeveloped lot was selected in Richland. The lot is 39.93 acres, parcel number 1-2108-400-0006-003. The address for this parcel is 2675 1st Street, Richland, WA 99354. The lot meets all the above State and Federal requirements.

The 40-acre parcel is located on City of Richland land, between the Columbia and Yakima rivers, in northwest Richland, Benton County, Washington. The parcel is located in the SW quarter of the SE quarter of Township 10 N, Range 28 E, Section 21, Willamette Meridian (Richland 7.5' USGS quadrangle, 1992). Specifically, the parcel is located in a rapidly expanding industrial section, just off Highway 240 and Kingsgate Way, between Logan Road to the south, 1st Avenue to the north, and Polar Way to the east; it is bordered by an RV park on the south, and several private parcels of land on the west.

Site Ownership: The Washington Army National Guard purchased the site early spring of 2017 in preparation for the Readiness Center Project.

C. Zoning

The lot is in an industrial area of Richland and is Zoned IM - Medium Industrial with some General Business Zones to the west and some heavy manufacturing to the north and east.

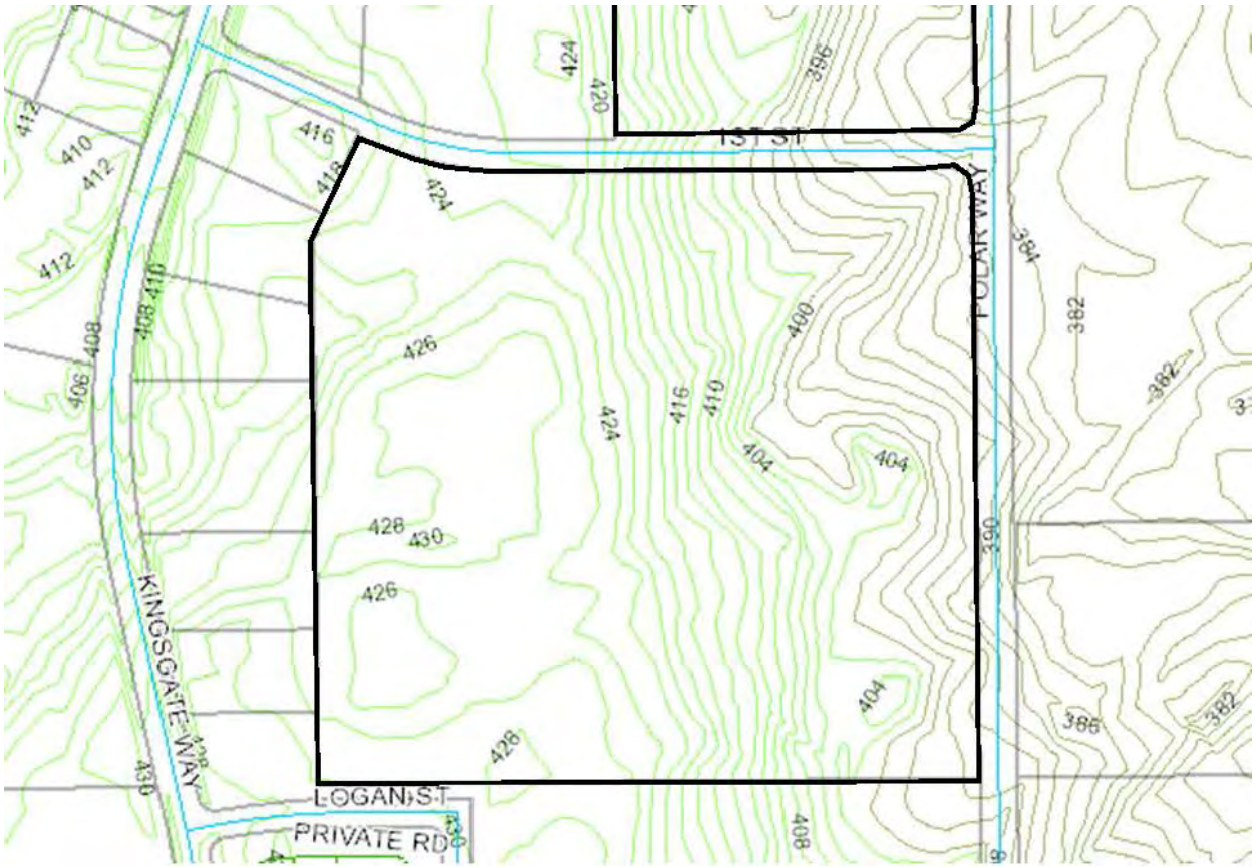


D. Adjacent Facilities

Most of the land around the site remains undeveloped with the exception of a few businesses, as noted below:

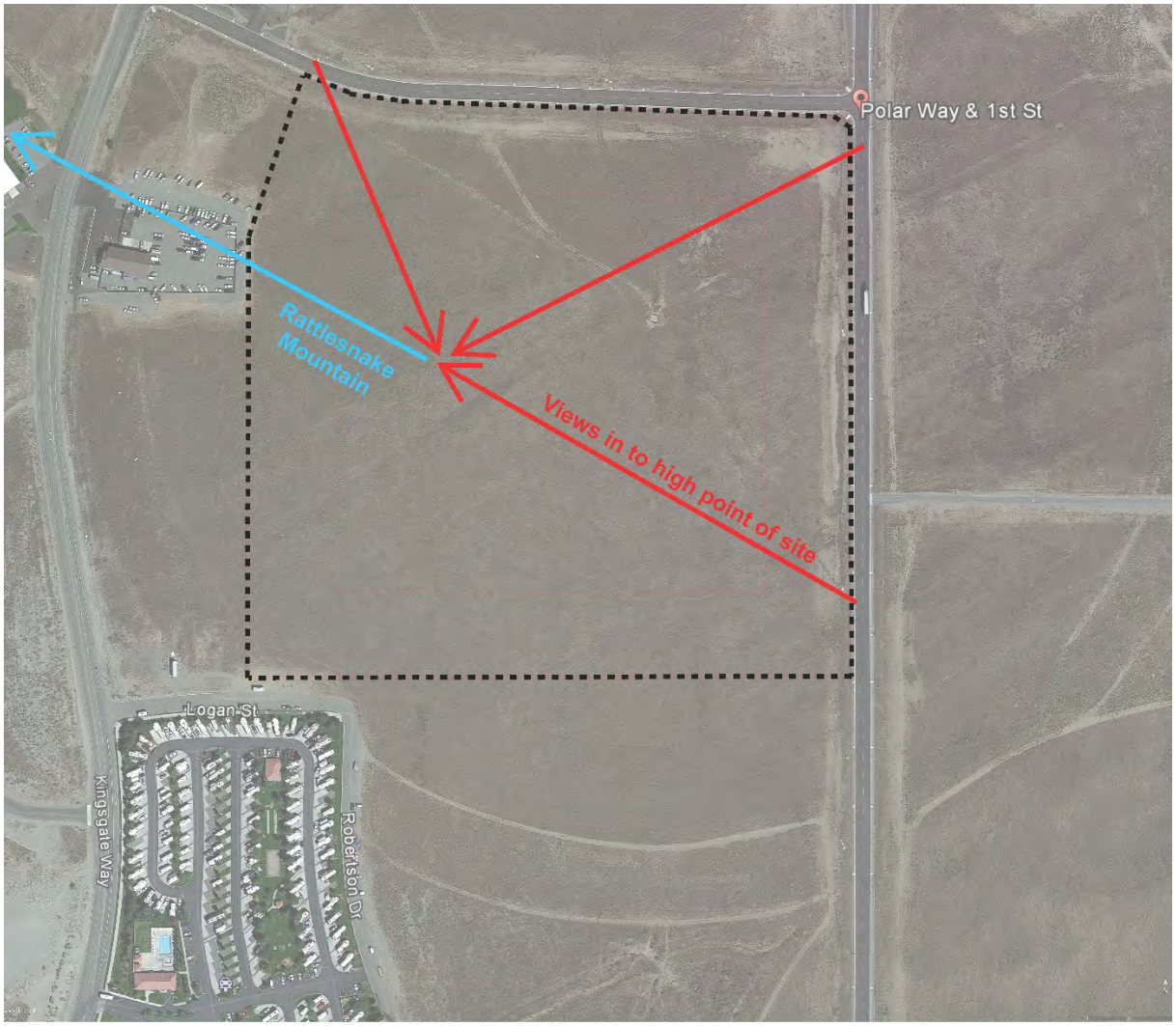
E. Site Features

The site is relatively flat considering its size (see topography drawing below) with a gentle undulation that falls to the east and Polar Way. The generally level grade of the site makes for straight forward development. There are no anticipated difficulties in meeting site ADA accessibility requirements.



F. Views

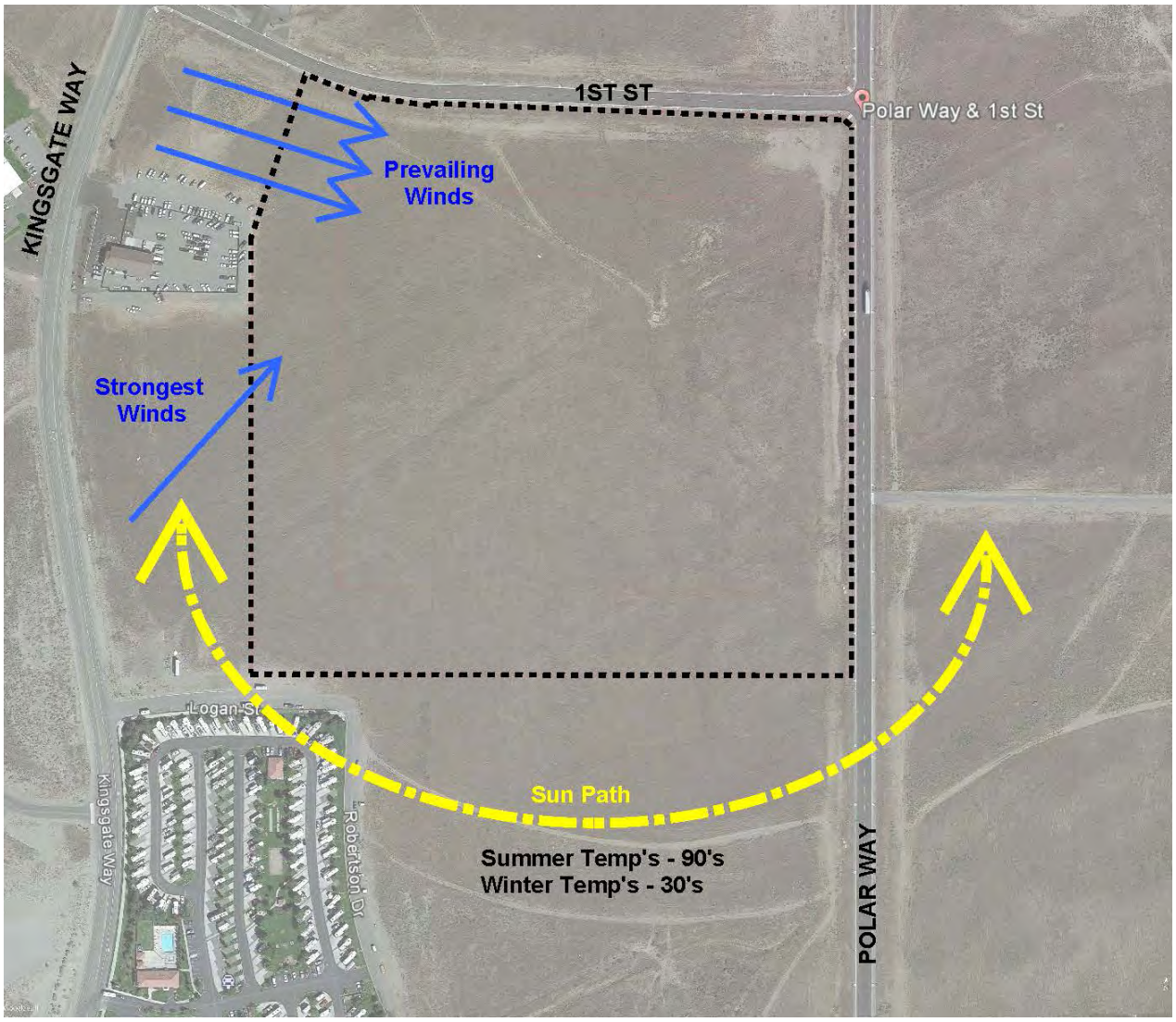
The nicest views are to the northwest towards Rattlesnake Mountain:



View of Rattlesnake Mountain

G. Environmental

Environmental impacts include the following: Prevailing winds are from the northwest with the strongest winds coming from the southwest. Summer temperatures in the Tri-Cities are in the 90's and winter temperatures are in the 30's, typically. There are no natural amenities that need to be preserved. There are no required or potential site mitigation that we are aware of at this time. There are no wetland or shoreline impacts or jurisdiction issues. There are no other environmental requirements that must be met for this site.



H. Traffic

Most weekdays the traffic will be very light as only some of the office staff would be on site. The guardsman would be on site on the weekends and would likely use Kings Gateway and WA State Route 240 to move military vehicles to maneuver locations:

I. Parking and Access Issues

Off-street parking will be required and developed on site. There will be approximately 132 privately owned vehicle spaces and approximately 950 square yards for military vehicle parking. Access would likely come off of 1st Street. In accordance with National Guard Bureau Standards, privately-owned vehicle parking will be 4 inch asphalt paving while military vehicle parking will be 8 inch concrete. There are no anticipated issues with parking or access to the site.

J. Required Site Components

The National Guard Design Guide for Readiness Centers establishes minimum site components that must be provided in a new facility. These include:

POV (privately-owned vehicles) parking.
Expansion noted in Part 5.0

Military vehicle parking (expansion noted in part 5.0)

Vehicle support including a wash platform.

Storage components including a detached controlled waste handling, unheated storage, and flammable materials storage, as well as generator and trash pods.

Flag poles (2) and exterior signage.

Stormwater Requirements: Stormwater will be required to comply with the Stormwater Management Manual for Eastern Washington, the City of Richland Standard & Design Guidelines & Construction Details, as well as the Stormwater Pollution Prevention Plan.

Utility Extension or Relocation: Water, sewer, power and fiber optic utilities are available at the street and will only need to be extended to the buildings on site. Telephone will need to be extended from the south.

Potential Issues: There are no issues foreseen with the surrounding neighborhood during construction or once operational. Currently, there are very few businesses near the site so likely disruption is minor.

Impact on Surroundings: The current plans for the site are developed to occupy the northwest quadrant of a 40 acre site. There is sufficient space available for construction laydown without disruption to neighboring properties. There are no phasing issues.

Landscaping: Landscape areas untouched by development will be left in native condition. New landscaping will follow best practices for low-maintenance planting and the limits established in the LIFC AT/FP requirements, as well as the City of Richland standards. Drought tolerant, native species will be utilized to the greatest extent possible. The

Military Department does not have regular landscape service and seek to minimize landscaping and irrigation for their new buildings.

K. Consistency with Applicable Long-Term Plans

The plans for a new National Guard Readiness Center on this site is consistent with the long-term plans for growth in this area as stated by the City of Richland Comprehensive Plan.

L. Consistency with other Laws and Regulations

High Performance Public Buildings: The final building design as provided by the design-build team will be required to meet a minimum LEED Silver Standard as defined by Chapter 39.35D RCW and LEED V4 for BD&C New Construction.

4.0 Sustainability and LEED

Sustainability was discussed in detail during an eco-charrette held during the pre-design process. Below is a discussion of possible LEED Credits. Also included is a LEED checklist of these possible credits. The design/build team will be required to perform an eco-charrette during Schematic Design to further explode sustainability goals and opportunities. As the building design and construction progresses, additional credits may be identified for possible incorporation into the project.

LEED Narrative

This narrative describes the LEED strategy portion of the Pre-Design phase of the Tri-Cities Readiness Center with regard to the LEED BD+C rating system, version 4. The minimum required level of LEED certification is Silver. The following description aligns with the attached LEED checklist developed in the pre-design process in June 2017 for the project. Please refer to the checklist for indication of credits and points that appear to be a good fit shown as ‘Yes’, those that are listed as ‘Maybe’ and subject to further study as the design progresses, and ‘No’ for credits that are not achievable or are not a good fit for the project program.

Overall Findings

- The minimum number of points to achieve Silver is 50 out of 110. The attached LEED checklist actually shows 64 points as ‘Yes’, so the team has identified a comfortable contingency over the minimum.

- Due to the location of the project, a number of the higher-point credits under Location and Transportation are not achievable.

- As a result, the pre-design process identified a strategy with heavier emphasis on water and energy efficiency, material and resources, indoor environmental quality, innovation and regional categories.

- This Narrative discusses the overall strategy in each of the main LEED v4 categories to explain the status of the LEED checklist. This strategy includes brief summaries of credit requirements. For detailed requirements please refer to the US Green Building Council LEED v4 BD+C Reference Guide.

- The pre-design effort emphasized the desirability of water and energy efficiency, not only to reduce environmental impact, but also to reduce operating costs and to increase resiliency in the case of water or power outages or other emergencies.

Integrative Process

With just one point in this category, the strategy hinges on interdisciplinary teamwork throughout the project, evaluation of options in early design, and documentation via narratives regarding the team's integrative approach.

Location and Transportation

Due to the location of the project and the program/operational imperatives, only one credit – Sensitive Land Protection – appears achievable.

Sustainable Sites

The project fared better in this category, with at least 6 points out of 10 appearing achievable. Achievable credits include:

- Site Assessment.

- Site Development – Protect or Restore Habitat.

- Rainwater Management (note: the highly porous soils and low precipitation make all 3 points appear to be achievable)

- Heat Island Reduction (note: the roof is planned to have a high SRI, and the team discussed the possibility of using concrete in lieu of asphalt on the heavier-use drive lanes).

Water Efficiency

The pre-design effort confirmed the project should be able to meet all 3 prerequisites, including the new building level metering requirement. Credits identified as achievable are:

- Outdoor Water Use Reduction (note: both points are targeted with the strategy of no irrigation)

- Indoor Water Use Reduction (note: 3 of the 6 points appear achievable with strategies of low flush and flow fixtures contributing to a goal of 35% reduction over the baseline.

- Water metering for two or more water subsystems.

Credits Not Allowed:

- Waterless urinals are not allowed

<u>Energy and Atmosphere</u>

The pre-design effort confirmed the project should be able to meet all 4 prerequisites, including the building level metering required in v4. Credits identified as achievable are:

- Enhanced Commissioning (note: all 6 points are targeted which will require all Cx services, including monitoring and envelope Cx).

- Optimize Energy Performance. Strategies discussed included LED lighting, occupancy sensors, automatic shut offs, CO2 sensing technology for demand controlled ventilation, efficiency mechanical system and high performance envelope.

- The team mechanical engineer mentioned a number of potential efficient mechanical systems, including, some of which can be combined together:
  - Direct Outside Air (DOAS).
  - Ground source cooling, either water to water or water to air delivery (note: during pre- design phase, it is not known what this particular site's potential for ground source cooling may be. The team recommends this potential be evaluated early in the next phase of design).
  - Evaporative condensing.
  - VAV.
  - VRF (note: no economizer function and requires additional filters).
  - Chilled beams.
  - Economizer desirable due to Tri-Cities climate.
  - Combined heat and power systems.

- The team discussed the need for the building systems to ramp up quickly for weekends or short-term events and have the ability to be on a standby mode during the week to save energy.

- While renewable energy is desirable to increase energy efficiency and potentially provide resiliency in the event of an emergency, this may be a budget issue. However, this credit and the 3 available points are shown as 'maybe' pending assessment of budget constraints.

- Construction and Demolition Waste Management (for at least 75% by weight diversion from landfill or 2.5#/sf of waste or less).

- Credits not allowed
  - Green power purchase is not allowed.
  - Occupant temperature control.

Materials and Resources

The pre-design confirmed the project will meet both prerequisites and recommend meeting the new LEED v4 material requirements that include a focus on disclosure/transparency, low toxicity, regional sourcing and other environmental choices. Credits identified as achievable are:

- Building Life Cycle Impact Reduction.

- Building Product Disclosure – Environmental Product Declarations (at least 20 products from a least 5 different manufacturers).

- Building Product Disclosure – Sourcing of Raw Materials.

- Building Product Disclosure – Material Ingredients.

- Construction and Demolition Waste Management (for at least 75% by weight diversion from landfill or 2.5#/sf of waste or less).

Indoor Environmental Quality

The pre-design confirmed the project will meet both prerequisites and recommend achieving excellent indoor air quality and emphasis on thermal and lighting comfort. The credits identified as achievable are:

- Enhanced Indoor Air Quality Strategies (Entryway protection, filtration, CO2 systems).

- Low-Emitting Materials (Sealants, adhesives, paints, coatings, flooring, composite wood, ceilings).

- Construction Indoor Air Quality Management Plan.

- Indoor Air quality Assessment (Flush-out or IAQ testing).
- Thermal Comfort.
- Interior Lighting.
- Acoustical Performance (HVAC background limited to 45 dB, and other measures).
- Credits not allowed.
    - Occupant temperature control

Innovation

Up to 6 points are available under the Innovation category, and as many 2 of them can be Exemplary Performance of another credit. Pilot credits are also available:

- 95% Construction Waste Management (based on recent Readiness projects)
- Resiliency
- Green Cleaning

The 6 available credits available to the project based on the location include several that are not a good fit based on the team discussion. The 3 that do appear to be a good fit are:

- Environmental Product Declarations
- Construction IAQ Management
- Sourcing Raw Materials

The others, Renewable energy 5% or more, Demand Response and Indoor Water Use reduction of 40% or more do not appear to be as readily achievable.

LEED v4 for BD+C: New Construction and Major Renovation
Project Checklist

Y	?	N			
1			Credit	Integrative Process	1
1	**1**	**21**		**Location and Transportation**	**16**
		16	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
	1		Credit	High Priority Site	2
		1	Credit	Surrounding Density and Diverse Uses	5
		1	Credit	Access to Quality Transit	5
		1	Credit	Bicycle Facilities	1
		1	Credit	Reduced Parking Footprint	1
		1	Credit	Green Vehicles	1
6	**3**	**0**		**Sustainable Sites**	**10**
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
1			Credit	Site Development - Protect or Restore Habitat	2
	1		Credit	Open Space	1
3			Credit	Rainwater Management	3
1	1		Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1
6	**1**	**4**		**Water Efficiency**	**11**
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
3	1	2	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1
20	**9**	**3**		**Energy and Atmosphere**	**33**
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
13	5		Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
		1	Credit	Demand Response	2
	3		Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
		2	Credit	Green Power and Carbon Offsets	2

11	0	0	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
3			Credit	Building Life-Cycle Impact Reduction	5
2			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
2			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
2			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

12	3	1	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
2			Credit	Interior Lighting	2
	3		Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

4	2	0	**Innovation**		6
3	2		Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

3	0	1	**Regional Priority**		4
1			Credit	Regional Priority: Environmental Product Declarations	1
1			Credit	Regional Priority: Construction IAQ Management Plan	1
		1	Credit	Regional Priority: Renewable Energy 5%, Demand Response, or Indoor Water 40%	1
1			Credit	Regional Priority: Sourcing Raw Materials	1

64	19	30	**TOTALS**	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

5.0 Architectural Narrative

A. Architectural Design: Overarching Criteria

1. WMD prefers that occupied interior spaces receive natural light wherever possible. In spaces not permitted to have traditional window openings, this may include appropriately protected skylight assemblies. In private offices within open administration suites, this may include borrowed lights with views to shared windows. That windows be operable is similarly preferred.

2. WMD expressively prohibits any exterior wall assembly system that relies for its water resistance on the exterior face of the assembly. Examples of prohibited exterior wall assemblies include single wythe masonry and EIFS.

3. Consider that one face of the building have a more refined “public face” and the “back of house” be more utilitarian.

4. Evaluate the opportunity for framing or establishing vistas, axis and views into, through and from the site.

5. Concepts shall reflect a hierarchy of formal/ceremonial to utility functions. This hierarchy shall be addressed in both exterior and interior spaces.

6. Consider the various approach sequences to the project site and building; specifically from the Main Gate and Commercial Gate.

7. Shared use spaces such as conference rooms and elevator lobbies that may be accessed most often by visitors should present a positive, welcoming image.

8. Detailed discussion on tenant needs, access, layout, organization and other functional issues is summarized in Section V. Program Requirements – Space Requirements

B. Building Exterior / Interior Finishes, Materials and Furnishings

1. Materials and finishes should be robust and of good quality, contributing to an overall appearance of strength without extravagance.

2. Materials and finishes should reflect the variety of functions performed in this facility and take into consideration characteristics such as durability, ease of maintenance, appropriateness, and sound transmission.

3. Throughout the facility, materials, finishes and furnishings should reflect project and WMD sustainability goals in terms of material choices, means of assembly, location of manufacturer, etc.

4. Open offices areas will be furnished with both conventional office furniture and a component furniture system. Furnishings will be WMD's responsibility, but coordination with the overall building design, utilities and communications is required.

5. All materials, finishes and furnishings shall meet life-cycle cost analysis standards and established sustainability goals. Building life expectancy is a minimum of 50 years.

C. Architectural

1. Exterior Wall Assembly: Utilize Institutional-grade construction, with robust construction indicative of a significant public building. Exterior wall finish materials set the stand-off distances required by the Department of Defense Anti-Terrorism Requirements. Wall assembly must include infiltration and vapor barriers, drainage pathways to discharge moisture to the outdoors, and insulation required to meet energy code and performance objectives.

2. Window Frames: Extruded aluminum thermally broken frames with over-sized "bite" and laminated glass to meet UFC 4-010-01 blast requirements for glazing retention.

3. Storefront/Curtain Wall: Extruded aluminum thermally broken frames with over-sized "bite" and laminated glass to meet UFC 4-010-01 blast requirements for glazing retention. Main entrance doors at storefront to utilize vestibules and medium-stile standard aluminum with concealed closures and custom pulls. ADA automatic push button operators are required at one leaf at primary entries. Storefront / curtain walls will be designed using dynamic analysis to meet the hazard rating Low and explosive weight 1. Any glazing below 6'-0" AFF will be obscure glazing.

4. Roof System: The roof will likely be low slope single ply membrane installed over rigid insulation attached to non-combustible deck. Most sections will slope to an internal drainage system and will be steel structure with metal decking. Acoustical metal decking will be utilized at the Assembly Hall.

5. Public Art: As a State of Washington project, funds have been reserved for public art at the MBSWR. While the design builder will not participate in the artist selection, the public art process thrives when the objects are genuinely integrated into the facility. To that end, the design builder will be required to work with the selected artist during design, to include inclusion of supplementary structure and or utilities. Successful design builder will also be required to facilitate coordination with the artist during installation.

6. Signage: Exterior signage must be incorporated into the exterior design of the project.

7. Interior Spaces: Interior spaces should have the benefit of natural light wherever possible. In spaces not conducive to traditional window openings, this may include skylight assemblies. In private offices within open administrative suites, this may include borrowed lights with views to shared windows.

8. Partitions: All walls are to be constructed full height to structure above. Provide abuse resistance surface or construction to 8-ft height. For non-bearing walls not requiring abuse resistance, provide 5/8-inch minimum Type X gypsum wallboard on metal studs. This system provides the ability to hold plumbing, electrical systems, acoustical insulation within the wall cavity. Provide fiberglass-mat-faced gypsum wallboard with water-resistant core at wall surfaces receiving ceramic tile walls at vaults will be cast-in-place concrete.

9. Ceilings: Ceilings will be predominantly lay-in acoustical tile with areas of gyp board soffits. Exposed acoustical metal decking will be specified for the Assembly Space. Acoustical clouds may be considered as needed for acoustical control where no ceiling is provided. Paint exposed steel structure, ducts, and conduit.

10. Stairs, Ramp, and Railings: Steel stairs system and ramp, with sealed precast concrete treads/risers with anti-slip insets at loading dock.

11. Casework / Fixtures / Equipment: Casework will be provided to address the needs of storage, supplies, and layout work surfaces, which contain a sink and base cabinet. Whiteboards, tackboards, map rails, overhead projection screens, computer hookups, and other various components are anticipated to be provided as required. Bleachers are anticipated in the Assembly Hall.

12. Acoustics: Primary acoustic attenuation in the building will be provided by acoustic ceilings and carpeting. Noise transmission in the open offices can be mitigated by the use of fabric panels associated with systems furniture. To minimize sound transmission at the offices, full height partitions with an STC rating of 45 will be provided between classrooms where acoustic isolation is desired, double offset studs with sound insulation will be used. In all cases, all walls will be full height to structure.

    The assembly hall constitutes a primary internal noise source when fully occupied. To mitigate reflective noise, an acoustic profile metal deck will be used. Absorptive material on the walls will greatly aid in mitigating noise.

    As mechanical noise in the classrooms degrades the learning environment, all equipment will be isolated on vibration dampening bases and supports. Further, the ducts will have isolation connections.

13. Energy Conservation: The project will make maximum use of available energy through passive design features, conservation, and low-use fixtures and equipment. Passive energy features include the use of entry vestibules at primary entrances, and

orientation of the building to maximize daylight and minimize exposure to prevailing winds.

14. Building Services: All deliveries to the building will be made from the service yard direct to the kitchen or to a loading dock with direct access to the unit storage facility.

6.0 Landscape Narrative

The landscape design includes the selection and placement of plant material on the site, as well as, the design of the irrigation system. Traditional landscape design principles must be pursued while adhering to the ATFP regulations regarding standoff distances and visual continuity around the building perimeter.

The visual image conveyed by the Readiness Center is not defined just by the architectural character and site organization, but also by an attractive, organized landscape design. The presence of plant material on the site greatly enhances the visual character & environmental quality of the building; the irrigation system provides water essential for plant material growth.

A. Landscape Objectives

The overall purpose of plant materials on the site is to improve the physical and psychological well-being of the people who work or visit the building. This is achieved through the following objectives:

1. Security – Landscaping should be integrated with the security requirements of UFC 4-010-01. Any site element or plant material may be larger than 6” in any dimension.

2. Simplicity – Landscape plans are to be broad and simple in form to limit / eliminate maintenance by grouping in beds with simple shapes. Avoid small lawn areas that are difficult to mow. Eliminate the use of annual beds because of the high maintenance involved.

3. Improve the overall visual quality of the site by the use of native and indigenous plant material.

4. Provide scale and comfort to pedestrian environments.

5. Screen unsightly views.

6. Buffer incompatible uses.

7. Minimize water usage by specifying drought tolerant native plant materials that require less maintenance to survive.

B. Sustainable Landscape Development & Irrigation System Design

See Section IV., 4.0 SUSTAINABILITY & LEED NARRATIVE for complete project LEED summary.)

1. The use of plant material on the site promotes the sustainability of the project. The irrigation system shall promote sustainability.

7.0 Site/Civil Design

A. Codes & Standards

The following codes/guidelines must be adhered to:

1. City of Richland Public Works Engineering - Public Infrastructure Construction Plan Requirements and Design Guidelines

2. General Administration Facilities Design Guidelines and Construction Standards.

3. WSDOH Water System connections and work.

4. WSDOE Criteria for Sewage Works Design

5. USGBC LEED Version 2009 BD+C

6. 2014 WSDOT Standard Specifications for Road, bridge, and Municipal construction 2014 and WSDOT standard details (most current versions).

7. 2008 EPA National Pollution Discharge Elimination System (NPDES) / DOE Construction Stormwater Permit

8. DOD Accessibility Standards (ICC/ANSI A117.1 - 2009)

9. UFC 1-200-01 General Building Requirements*

10. UFC 3-200-10N, Civil Engineering*

11. UFC 3-600-01, Fire Protection Engineering for Facilities*

12. UFC 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings*

Asterisks denote a military code.
Where conflicts exist, the stricter code/standard shall govern.

B. Narrative and Systems Overview

1. Existing Site Conditions
   See Section IV 3.0 for Site Description

   No improvements are proposed to the adjacent streets except as necessary to connect to utilities and to restore any street cuts that but the project.

2. Topographic Survey
   A site topographic survey has been completed for the ongoing demolition project. See appendix 2C.

3. Geo-technical Report Findings
   See appendix 2B for geo-technical report.

4. Earthwork
   Comply with the City of Richland Public Works Engineering - Public Infrastructure Construction Plan Requirements and design guidelines.
   The site shall be graded to direct runoff away from the building the proposed storm-water facilities. The walkways shall be graded to meet all necessary accessibility requirements. The design shall balance the earthwork to the max extent feasible.

5. Stormwater
   The stormwater systems shall be designed to the City of Richland Public Works Engineering - Public Infrastructure Construction Plan Requirements and Design Guidelines.

   See the site survey for existing conditions.

   Contact Information:
   City of Richland: Public Services (Water/Sewer)
   Jason Rutherford
   509.942.7741
   jreathaford@ci.richland.wa.us

6. Water
   The water systems shall be designed to the City of Richland Public Works Engineering - Public Infrastructure Construction Plan Requirements and Design Guidelines.

   See the site survey for existing conditions

   Contact Information:
   City of Richland: Public Services (Water/Sewer)

Jason Rutherford
509.942.7741
jreathaford@ci.richland.wa.us

7. Sanitary Sewer
   The sanitary sewer shall be designed to the City of Richland Public Works Engineering - Public Infrastructure Construction Plan Requirements and Design Guidelines.

   See the site survey for existing conditions

   Contact Information:
   City of Richland: Public Services (Water/Sewer)
   Jason Rutherford
   509.942.7741
   jreathaford@ci.richland.wa.us

8. Gas, Telephone, Data and Power Utilities
   Gas shall be extended to the site as necessary to meet the proposed improvement needs.

   Contact Information:
   Cascade Natural Gas
   78113 W Grandridge Blvd.
   Kennewick, WA 99336
   888.522.1130

9. Electrical Power
   Power shall be extended to the site as necessary to meet the proposed improvement needs.

   Contact Information:
   City of Richland, Electrical Services
   Kelly D. Hill, P.E.
   Chief Electrical Engineer
   (509) 942-7416
   khill@ci.richland.wa.us

10. Telephone, Data
    These utilities shall be extended to the site as required to meet the needs of the proposed improvements.

    Contact Information:
    Frontier Communications
    4916 W Clearwater Ave.

Kennewick, WA 99336
509.736.3700

11. Pavement
    Provide asphalt concrete pavement for parking areas (military and POV), roadways as needed for utility patching, sidewalk construction patching, and vehicle access to building.

    Pavement shall be designed for the appropriate design vehicle.

    Permeable pavement is only permitted in POV parking stall areas.

    Cement Concrete is required in fueling and repair areas.

12. Pavement Markings and Signage
    At on-site locations, provide pavement marking for roadway as needed to replace and match existing markings disturbed or damaged during construction including crosswalk striping and lane markings. Off-site paving to comply with City of Richland Standards.

    Street name, parking, regulatory and warning signs shall be installed as require.

13. On-Site Concrete Curb Gutter and Sidewalks
    At on-site locations, provide concrete sidewalks as required for easy pedestrian access. New sidewalk and curb ramps shall be in accordance with WSDOT and meet DOD - ADA requirements. Walks may be permeable asphalt or concrete. Off-site curb and sidewalk to comply with City of Richland Standards.

14. Illumination System
    Site Lighting shall meet standards described in other sections of this document.

D. Special Considerations

Construction Permits: The Design–Builder is responsible for obtaining all required permits as listed below and others as needed for the performance of the work.

E. Site / Civil LEED
(See Section IV. 4.0 SUSTAINABILITY & LEED NARRATIVE for complete project LEED summary.)

8.0 Structural Design Criteria

A. Narrative and Systems Overview

The facility provided shall be suitable for general office use with structural provisions for areas of increased loading for lobbies, meeting areas, computer rooms, egress facilities, light storage, loading docks, and other uses specified in the Section V. Program - Requirements. In addition to a requirement to meet minimum standards included in governing building codes, State of Washington facilities guidelines, and this RFP, the structural system should provide a comfortable working environment, serviceability, minimal maintenance requirements, flexibility to accommodate future expansion and changes in occupancy, and low life cycle costs.

B. Codes and Standards: The following national Codes and Standards will be the criteria for the project:

2015 International Building Code
ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures
UFC 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings
Army National Guard DG 415-1 Readiness Centers Design Guide
Army National Guard DG 415-5 General Facilities Information Design Guide

C. Design Loads

Building Risk Category:	II
Importance Factors:	JE = 1.0, IS =1.0
Minimum Live Loads:	
Floors	100 psf
Mechanical Spaces & Storage	125 psf or actual equipment weight supported
Stairs & Exits	100 psf or 300 lb concentrated live load on stair treads
Wind Loads:	Wind velocity 115mph, 3 second gust, Exposure C
Snow Loads:	Flat Roof Snow Load: 30 psf Include sliding and drifting snow as required per ASCE 7
Photovoltaic System Ready Roof Structure:	Provide capacity in roof structure to support current or future photovoltaic panels
Seismic Design Criteria:	
Ss	0.41g
S1	0.16g
Site Class	D (Per Geo-technical Investigation)

D. Quality of Materials and Systems

1. Any construction type that meets the requirements of applicable building codes and this RFP, and provides standards of serviceability, maintenance requirements, flexibility for future expansion and changes in occupancy, and low life cycle costs may be used.

2. Design and Construction to be as per specified or latest edition of the following:
   a. Foundations, excavation, and subgrade preparation shall be as per Geotechnical Report.
   b. Concrete: ACI 318.
   c. Masonry: TMS 402-08, 602-08/ACI 530-08, 530.1-08/ASCE 5-08, 6-08.
   d. Structural Steel: AISC Specifications for Structural Steel Buildings AISC 360 and Seismic Design Manual AISC 341.
   e. Cold Formed Steel: AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

3. Use of non-standard construction types, materials, or construction methods will require approval by the State based on submitted evidence including testing, reports, calculations, and government and association approvals demonstrating that Code, State, and RFP requirements and intent are being met.

E. Special Considerations

1. Flexibility for Future Expansion and Changes in Occupancy
   For any structural system that will limit the ability for modifications (ie, post-tensioned concrete) for changes in tenants uses such as new plumbing penetrations or block-outs or areas allowing for future penetrations shall be provided and located on record drawings.

2. Compatibility with Non-Structural Elements
   The structure and expected structural movements due to wind, seismic, and temperature fluctuation shall be compatible with non-structural components and their attachments to the structure. Sufficient separations shall be provided to preclude damage to non-structural components or unintended effects on the structure under code specified movements.

3. Anti-terrorism/Force Protection (AT/FP)
   The facility shall be designed to comply with referenced UFC standards. It is anticipated that the risk level for this structure will be categorized as “Low”. This implies that the potential structural damage is repairable. Minor deformations of non-structural elements and secondary structural members and no permanent deformation in primary structural members are permitted. Hazards will be limited such that glazing will break but will remain in the window frame. Doors will stay in frames but will not be reusable.

a. Windows and doors will be designed in accordance with Standards 10 and 12 contained within UFC 4-010-01.

9.0 Plumbing Design Criteria

A. General Code Requirements

Plumbing systems shall be designed and built to meet current codes. Provide for required permits, inspections, construction sequences, quality assurance, and safety practices.

Codes: The following national Codes and Standards will be the criteria for the project:
2015 International Building Code
2015 Uniform Plumbing Code
2015 International Mechanical Code
2014 National Electrical Code
2015 Washington State Energy Code
2015 International Fire Code
Amendments specific to the city of Richland, WA

The following military standards will be criteria for the project:

UFC 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings
Army National Guard DG 415-1 Readiness Centers Design Guide
Army National Guard DG 415-5 General Facilities Information Design Guide

B. Plumbing Fixtures

1. All plumbing fixtures including lavatories, sinks, floor drains, shall be commercial grade low flow fixtures complete with trim. The plumbing contractor will be required to connect to all equipment requiring plumbing connections. All sensor operated fixtures shall be hardwired, battery powered fixtures are not acceptable.

2. Water closets shall be automatic flush ultra low flow, with a manual push button override. Dual flush water closets are not desired. Waterless urinals are not acceptable for this project.

3. Trap Primers shall be electronic type and shall be provided to maintain a water seal for all traps. Standard trap primers that rely on a drop in water pressure to activate are not acceptable. Provide trap seals for traps in areas that are not climate controlled.

4. Emergency fixtures shall be provided where required.

5. Acceptable fixture manufacturers are summarized below. Plumbing fixture types and their minimum performance requirements are shown in Table 1 below.

Plumbing Fixture Types and Minimum Performance Requirements					
Fixture	**Location**	**Type**	**Control**	**Flow**	**Notes**
Water Closet	Restrooms	Wall hung, vitreous china	Sensor Operated flush valve with manual override	1.28 GPF	ADA provided where required
Lavatory	Restrooms	Under Counter mounted, vitreous china	Sensor Operated	0.5 GPM	ADA provided where required
Urinal	Restrooms	Wall Hung, vitreous china	Sensor Operated flush valve with manual override	0.125 GPF	ADA provided where required
Sink	General	Self rimming, counter mounted, Stainless steel	Dual handle faucet, goose neck spout	1.5 GPM	ADA faucet Insta-hot at sink
Sink	Kitchenette	Self rimming, counter mounted, Stainless steel	Dual handle faucet, goose neck spout	1.5 GPM	ADA faucet Insta-hot at sink
Drinking fountain with bottle filler	Varies	Dual height with bottle filling station, stainless steel	Front push pad operation for drinking fountains and sensor operation at bottle filler	1.0 GPM Minimum at bottle filler	Refrigerated
Wall Hydrant	Bldg Exterior	Freezeproof – Recessed Box type	Manual		

Table 1: Plumbing Fixture Types and Minimum Performance Requirements

C. Narrative and Systems Overview

1. Sanitary
   A complete sanitary waste and vent system will be provided. Piping slope will be a minimum of ¼" per 1'. Waste and vent piping shall be no-hub cast iron. Underground piping shall use heavy duty couplers. Provide acid resistant polypropylene where required. Provide a grease interceptor in compliance with code for the appropriate fixtures in the kitchen area. Sand and oil separators shall be provided for the training bay and maintenance areas as required.

2. Storm Water
   A roof and overflow drain system shall be provided as required by code. The overflow storm drain system will daylight utilizing downspout nozzles at the first floor level above grade. Storm piping shall be no-hub cast iron.

3. Natural Gas
   Natural gas service is available to the site from Cascade Natural Gas. Natural gas may be used for building or domestic water heating. If natural gas is used a single utility meter will be provided. Gas piping will be installed per Washington State codes and Cascade Natural Gas requirements.

4. Domestic Cold Water
   Potable water is available from the City of Richland water system.

   The domestic water system shall be provided with positive means to control backflow, with a reduced pressure backflow preventer at the cold water header and appropriate backflow preventers at sources of possible contamination within the building, such as mechanical equipment or industrial cold/hot water systems.

   Cold water will be distributed to the plumbing fixtures. Freeze-proof hose bibs should be distributed around perimeter of building (at a 50' on center minimum), and be provided for the recycle rooms, trash room, near mechanical equipment, and where it may be required for cleaning or servicing of equipment. All distribution piping shall be copper.

   Vertical domestic water risers shall be provided with isolation valves at each floor. Provide ball type isolation valves at all major branches and at all restroom groups and the kitchen.

   Irrigation: A backflow device shall be provided for the irrigation system.

5. Domestic Hot Water
   Domestic hot water can be provided by natural gas hot water heaters, heat pumps, solar hot water with gas backup, or another source that supports the project energy goals and budget. Domestic hot water will be distributed throughout the building with

a water recirculation system or heat maintenance tape system. All distribution piping shall be copper. The domestic hot water system and components shall be controlled by the building management system. Ground water temperature used for domestic water heater sizing shall be based on 40˚F. Water heater shall produce 140˚F temperature water for health purposes and be delivered to the fixtures at a maximum of 110˚F, with the exception of the kitchen fixtures. All public fixtures shall be protected by a device capable of limiting the water temperature to 110˚F for scald prevention.

6. Solar Water Heating
   Solar water heating systems are acceptable but not required. System diagrams, freeze protection methods, controls, and other design considerations should be provided as part of the design-build proposal. The system shall include a backup heating water source. The anticipated energy savings and potential economic incentives available should also be provided with the design-build proposal. If a solar water heating system is not provided the contractor shall provide infrastructure for addition of a future solar hot water heating system.

10.0 Mechanical System General Requirements

A. General

The mechanical systems will be designed based upon the US Green Building Council LEED and in particular for the following elements:

Indoor Water Use Reduction
Water Metering
Enhanced Commissioning
Optimize Energy Performance
Demand Response (potential)
Renewable Energy Production (potential)
Enhanced Refrigerant Management (potential)
Enhanced Indoor Air Quality Strategies
Construction Indoor Air Quality Management Plan
Indoor Air Quality Assessment
Thermal Comfort
Acoustic Performance

Codes: The following national Codes and Standards will be the criteria for the project:

2015 International Building Code
2015 Uniform Plumbing Code
2015 International Mechanical Code
2014 National Electrical Code

2015 Washington State Energy Code
2015 International Fire Code
Amendments specific to the city of Richland, WA

The following military standards will be criteria for the project:

UFC 4-171-05 Design Guide for Army Reserve Facilities (Inactive – For Reference)
UFC 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings
Army National Guard DG 415-1 Readiness Centers Design Guide
Army National Guard DG 415-5 General Facilities Information Design Guide

The following calculations and analysis will be provided for the project:

Heating and Cooling Load Calculations
Energy Modeling for LEED Compliance
Plumbing Load Calculations

B. Design Criteria and Considerations

All systems shall be provided in compliance with all code requirement. At a minimum the following data should also be taken into consideration in the design. Duct sizing shall be in accordance with ASHRAE and SMACNA requirements, taking into account noise considerations. Provisions for thermal expansion shall be provided. Supply diffusers and registers shall be selected for proper throw and noise criteria. Exhaust and return grilles shall be sized at a maximum of 500fpm. Air transfer grilles and louvers shall be sized at a maximum of 250fpm. Every grill, register, and diffuser shall be provided with a means of balancing in the ductwork, OBD's in the grilles are not an acceptable means of balancing for items connected to ductwork. Outside air louvers shall be sized to eliminate the possibility of water entrainment, typical maximum velocity shall be 500fpm.

Design Performance:

Interior Conditions:	Heating	Cooling
Occupied spaces	68°F	78°F
Mechanical/Support areas	68°F	78°F
Data/Communication Rooms	68°F	78°F
Electrical Rooms	55°F	-
	Winter	Summer

Minimum Ventilation (Outdoor Air) Requirements:	
Classrooms	10 cfm/person
Shops	1.5 cfm/sq.ft.
Offices	10 cfm/person
Data/Communications Rooms	10 cfm/person

Conference Rooms	10 cfm/person
Corridors/Unit Storage	3 AC/hr (controlled by occupancy sensors)
Restrooms	50 cfm exhaust per WC or urinal
Showers	1.0 cfm/sq.ft.
Assembly	10 cfm/person
Lockers	0.5 cfm/sq.ft.

C. Heating Systems

The building heating loads shall be calculated as required by the 2015 Washington State Energy Code. Consideration should be given to architectural systems that can reduce building heating load, coordinate with building architect.

D. Cooling Systems

The building heating loads shall be calculated as required by the 2015 Washington State Energy Code. Consideration should be given to architectural systems that can reduce building cooling load, coordinate with building architect.

Provide independent cooling systems for telecom, IDF, and MDF rooms.

E. Air Handling Systems

The building loads shall be calculated as required by the 2015 Washington State Energy Code and Washington State Mechanical Code. Energy recovery should be used where practical.

Specialty systems
Provide all specialty systems as required by code. Some systems are listed below. Provide a vehicle exhaust system, complete with exhaust fan(s) and hose reels to serve the vehicle training work bays. Provide roof mounted indirect fired kitchen makeup air unit with up-blast exhaust fan for the kitchen hood.

F. Controls

See Appendix Item Exhibit Item II-K - Specification Section 23 09 00 Instrumentation and Control For HVAC.

G. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

2. Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

H. Geothermal: Inclusion of a geothermal heat pump system will be a consideration when selecting a Design-Build Proposer. Consider providing a Closed Loop Geothermal Heat Pump System for heating and cooling all or a portion of the facility.

11.0 Fire Protection Design Criteria

A. Design Criteria

The entire building will be totally sprinklered in accordance with NFPA 13. A double detector check assembly will be provided for the fire service.

The fire sprinkler system shall comply with NFPA 13, and local Fire Marshal requirements. In general, the fire sprinkler system shall consist of connection to new water service, including electric fire pumps, jockey pump, controllers, automatic transfer switch, main flow alarm station, zone control valves and flow indicators, alarm bell, fire sprinkler piping and heads, as required. All related fire protection accessories as required will be provided. Coordinate location and type of tamper, flow, and pressure switches with the fire alarm system. All fire sprinkler piping to be concealed. Contractor shall verify water pressures and flows to determine if fire pumps will be required.

B. Quality of Materials and Systems

Sprinkler heads shall typically be concealed head type or sidewall type with polished chrome escutcheons and upright rough brass finish type heads in unfinished areas. Horizontal dry sidewall sprinkler heads shall be provided for overhangs, and other perimeter areas subject to freezing. Quick-Response heads will be provided in all light hazard areas.

C. Fire Alarm and Mass Notification System

An analog addressable fire alarm and mass notification system will consist of manual pull stations, smoke and heat detectors, horns and strobes, speakers, sprinkler flow and tamper switches and HVAC and elevator control functions. A communicator will be

provided to communicate with a Central Station. The system will conform to NFPA 72. The fire alarm system manufacturer shall be Silent Knight. The mass notification system must be installed in all spaces in the building.

D. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

   For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

   The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

2. Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

12.0 Electrical – Power Distribution Design Criteria

A. General Building Description

1. The Design-Build Contractors will use this Request for Proposal (RFP) narrative to prepare their designs for the building electrical systems.

2. The selected electrical subcontractor will be entirely responsible for the design, permitting, building, start-up and testing of all the electrical, emergency power, lighting, lighting controls, fire alarm, telecommunications, audio/visual, and other low-voltage systems as described throughout the RFP document. The design shall be the responsibility of the Electrical Engineer of Record who shall be a registered Professional Engineer in the State of Washington. The electrical contractors shall provide complete and functional systems.

3. General
   The electrical systems will be designed based upon the US Green Building Council LEED and in particular for the following elements:

   Light Pollution Reduction
   Controllability of Systems

4. Codes
   The following national Codes and Standards will be the criteria for the project:

   2015 Washington State Energy Code
   The National Electric Safety Code – 2014
   The National Electric Code – 2017
   The National Fire Alarm Code – 2014
   The National Life Safety Code – 2014
   Other IEEE, IESNA, and NEMA standards as may be applicable.

   The following military standards will be criteria for the project:

   UFC 4-010-01 DoD Minimum Anti-terrorism Standards for Buildings
   UFGS Telecommunication standards (Sections 16710 and 16711)
   Army National Guard DG 415-1 Readiness Centers Design Guide
   Army National Guard DG 415-5 General Facilities Information Design Guide

   The following calculations and analysis will be provided for the project:

   Demand load calculations
   Fault current analysis using SKM software
   Coordination analysis using SKM software
   Voltage drop calculations using IEEE 141 Flicker Index
   Arc flash analysis for appropriate Personal Protection labeling

   Local Contact: Kelly D. Hill, PE | Chief Electrical Engineer
   509.942.7416 khill@ci.richland.wa.us

5. Normal Power

   a. Service voltage will be 480/277 volt three-phase, four-wire with solid grounded neutrals unless loads dictate 208/120 volt. Dry-type 208/120 volt secondary transformers appropriately sized for receptacles, utility and task lighting loads. The step-down transformers will meet TR-1 standards for energy efficiency. Digital metering will be provided. Surge protection devices will be provided at the service entrance equipment and at all panels serving telecommunications or security electronic loads. Minimum twenty-five percent spare capacity and devices will be provided at all panelboards and for the overall service. The grounding electrode system shall have a resistance of 25 ohms or less for individual ground rods and 5 ohms or less for the overall system. Combination starters with Type 2 protection will be provided for three-phase motors. At least one receptacle will be installed on each wall of rooms with multiple receptacles no greater than 12 feet apart. Receptacles in corridors will be no greater the 30 feet apart. Receptacles will be mounted at 48 inches above finished floor in the maintenance bays.

b. Room Power: Provide power outlets arranged to the final approved plans. Provide floor box outlets where the plan arrangement requires them.

6. Standby Power: A standby power system that consists of a diesel generator and manual transfer switch sized to 38% of the load shall be provided. A second manual transfer switch to break out the Guard and common loads from the reserve loads will be provided.

7. Photovoltaic System: The extent of the Photovoltaic System provided will be a consideration when selecting the Design-Build Proposer. Consider providing design and construction of complete Photovoltaic Utility Grid Connected System (PV), including all AC and DC components. The design and installation shall conform to all requirements as defined by the applicable codes, laws, rules, regulations and standards. The Contractor shall include all items and all work reasonably required to complete the System.

8. Communication Service - See Section IV 16.0

9. Security - See Section IV 14.0

10. Fire Alarm and Mass Notification System - See Section IV 11.0

11. Cable T.V. System - See Section IV 17.0

12. Source Code

    a. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

       For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

       The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

    b. Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

13.0 Electrical – Lighting Design Criteria

A. General Codes and Standards

1. Lighting shall be designed to meet or exceed the Washington State Energy Codes in effect at the time of project permitting.

2. Egress lighting levels shall meet the requirements of the International Building Code and International Fire Code, along with any local amendments.

B. Testing Agencies

1. All fixtures shall be UL and/or ETL listed. LED's shall be tested to LM-80-08 and LM-79-08. All lighting shall comply with NFPA, IBC, and ADA.

C. Light Levels and Maintained Footcandles

1. High Density Open Office and Collaborative spaces: 30-40 footcandles.
2. Executive Offices: 40-50 footcandles.
3. Lobby and Reception Areas: 15-20 footcandles.
4. Conference Rooms: 20-40 footcandles.
5. Support/Supply Rooms and Break Room: 10-30 footcandles.
6. Low Use Storage Rooms and Janitor Closets: 10 footcandles.
7. Electrical/Mechanical, Server, Telecom Rooms: 20 footcandles.
8. Elevator Machine Rooms: 20 footcandles minimum.
9. Elevator Lobbies: 10 footcandles minimum.
10. Corridors, Restrooms and Phone Rooms: 10-15 footcandles.
11. Stairwells: 10 footcandles.
12. Kitchens: 40-50 footcandles.
13. Classrooms: 40-50 footcandles.
14. Assembly Hall: 30-50 footcandles
15. Personal Equipment Storage: 10-30 footcandles

D. Exterior Lighting System

Parking luminaries will utilize LED lamps. Perimeter lighting will be provided on the buildings. Exterior lighting in the life safety path of egress will be on emergency power. Ground rods will be provided at each pole base with #4 bonding conductor to the pole ground lug. An occupancy sensor lighting control will be provided for the exterior lighting.

E. Interior Lighting System

General lighting fixtures would be selected that provide a high efficacy and shield the lamps both to protect them and to reduce glare or reflections. Lighting design will be done using photometric lighting software with an emphasis on LEED and energy saving

requirements. Lighting will also be designed to facilitate occupant comfort and work area flexibility. Large conference rooms will provide dimming controls with the capability for preset scenes. Egress and exit lights will have back-up batteries.

F. Lighting LEED
(See Section IV. 4.0 Sustainability & LEED NARRATIVE for complete project LEED summary.)

G. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

   For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

   The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

2. Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

14.0 Integrated Security System Design Criteria

A. General Scope

1. The National Guard will provide the security system equipment wiring and installation

2. The design builder will provide pathways for the system

3. The National Guard will provide the security system design to the design builder to enable the pathway design work

   The integrated security system consists of CCTV, ACS, ISS and cabling for these systems. The ISS will utilize the structured cabling system present throughout the building in the telecommunications design. The design shall follow the room data sheet requirements for access control. All integrated security systems will utilize an IP based network for CCTV and ACS. Centralized equipment may reside in the MDF or IDF rooms as necessary to accommodate cabling requirements. Security systems may share same pathways as other data networks within building. All cabling routed

through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

4. See Section V for the Vault Security Layout

B. Definitions

1. Closed Circuit Television (CCTV)

2. Integrated Security System (ISS)

3. Access Control System (ACS)

C. Base CCTV / Access Control Design

1. The core system shall have Access Control and CCTV at the below listed locations:
   a. Card reader locations:
      i. All exterior doors
      ii. MDF and IDF's
      iii. Main entry points to tenant spaces
   b. Camera locations should cover
      i. All exterior doors and loading dock
      ii. Lobby area
      iii. All hallways
      iv. MDF

D. Quality of Materials and Systems

1. Monitoring platform will be manufactured by Elk and Pelco.

2. Door control system will be manufactured by Galaxy Access Control. Provide conduit for door control systems for 12 doors. The conduit shall go from the card reader location to the controller; from the request to exit device to the controller and from the controller to network location.

E. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

15.0 Radio System Design Criteria

A. General Scope

1. The National Guard will provide the radio antenna equipment wiring and installation within the building. The antenna will be on the outside of the building. There will be two radio systems, HF support and emergency response.

2. HF Antenna System: The design builder will provide a central mast of 24 foot height above the roof, rigid or guyed, anchors for the antenna ends 100 feet apart and a weather head and conduit path for the cable.

3. The building radio system will be designed to support first responder systems as the minimum requirement.

    a. All DAS cabling will be coax and will follow structured cabling pathways from MDF through IDF's.

    b. All cabling routed through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

    c. The DAS will be designed with the ability to support additional radio systems such as cellular and Wi-Fi.

B. General Codes and Standards Requirements

The radio system shall comply with local codes for emergency responder radio coverage.

C. Radio Communication Systems Coordination

Radio systems to be incorporated include but are not limited to:

1. HF dipole radio antenna

2. The design builder will be responsible to provide and pay for a digital system test which will be coordinated with the local city of Richland requirements. If a digital antenna is required, it will be added by channel order.

16.0 Telecommunication Infrastructure Design Criteria

A. General Scope

This section of the report is intended to define the standards, criteria and assumptions used for the design, documentation and specification of a telecommunications systems infrastructure.

1. The National Guard will provide the telecommunications equipment.

2. The design builder will provide pathways and wiring.

3. The telecommunication Design-Build contractors shall provide a written guarantee for a period of one year from the date of substantial completion that covers the entire system including equipment, materials and workmanship.

4. The telecommunication system shall comply with the following:

    a. National Electrical Code as amended and adopted by the local authority having jurisdiction
    b. National Electrical Safety Code (NESC)
    c. GA Facility Design and Construction Standards, 2008 Edition
    d. Leased Space Requirements, Department of Enterprise Services, Real Estate Services, July 2005
    e. NFPA 72, National Fire Alarm Code
    f. NFPA 70-1996, National Electric Code (NEC)
    g. ANSI/TIA/EIA 568-B.1, Commercial Building Telecommunications Cabling Standard Part 1: General Requirements
    h. ANSI/TIA/EIA 568-B.2, Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling Components
    i. ANSI/TIA/EIA 568-B.3, Optical Fiber Cabling Components Standard
    j. ANSI/TIA/EIA-569-A, Commercial Building Standards for Telecommunications Pathways and Spaces
    k. ANSI/TIA/EIA-606, The Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
    l. ANSI/TIA/EIA-607-B, Commercial Building Grounding and Bonding Requirements for Telecommunications
    m. BICSI TDMM, BICSI Telecommunications Distribution Methods Manual

n. Washington National Guard Telecommunications Planning Guides - Volume 1 (no longer included) Volume 2 (Products and Installations) and Volume 3 (Outside Plant Products and Installation).

B. Telecommunication Systems

The Information Technology (IT) structured cabling design will provide a complete infrastructure to support all network-related services. This includes adequate space planning, security, power, cooling, and a high-quality structured cabling system. The design contractor will be responsible for complying with the room data sheets provided to understand the size and complexity of the telecommunication system. The telecom components will provide the foundation to support the building occupants' IT needs well into the future.

The structured cabling system will be provided as a certified cabling system. The manufacturer or manufacturers of the cable and termination components will qualify and warranty the performance of the entire system.

C. Definitions

1. Building Entrance Facility (EF): Located in MDF. Voice, data and video services are brought into the building in this room.

2. Main Distribution Frame (MDF): Building voice, data and video services are distributed to IDFs on all levels from this room.

3. Intermediate Distribution Frame (IDF): Used to distribute station cabling to workstation outlets and to house communications equipment.

4. Information Technology (IT): the service of providing data to support the business.

5. Backbone Cabling: Cables connecting EF to MDF and MDF to IDFs.

6. Horizontal Cabling: Cables connecting Standard Information Outlets to MDF, IDFs and consolidation points.

7. FO: Fiber Optic.

8. CO: Copper cabling.

9. Cable: Assembly of one or more conductors or optical fibers within enveloping sheath, constructed to permit the use of conductors singly or in groups.

10. Consolidation Point: Interconnection point within the horizontal cabling using ANSI/TIA/EIA-568-B.2 or ANSI/TIA/EIA-568-B.3 compliant connecting hardware

installed in accordance with the requirements of clause 10 and rated for at least 200 cycles of reconnection.

11. Cross–connect: Group of connection points, wall or rack mounted, used to mechanically terminate and administer building wiring.

12. Intra-building: Within a single building

13. Inter-building: Between two or more buildings

14. Shielded Twisted Pair (STP): Balanced, 4-pair cable used for copper station cabling. Each pair is wrapped with a shielding material and the overall cable is also wrapped with a shielding material.

15. Unshielded Twisted Pair (UTP): Balanced, 4-pair cable used for copper station cabling and multi-pair copper backbone cables.

16. Telecommunications: Any transmission, emission, or reception of signs, signals, writings, images, sounds, or information of any nature by wire, radio, visual, optical, or other electromagnetic systems.

17. Local Area Network (LAN): Network or networks typically covering a small geographic area. Typically includes only client-owned cabling and equipment.

18. Wide Area Network (WAN): Network or networks typically covering a large geographic area. Typically includes client-owned and service provider-owned cabling and equipment.

D. Connectivity and Cabling Components

1. All data cabling to workstation areas will be Cat6A.

2. All cabling routed through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

3. Comply with all DES Requirements.

E. Telecommunications Rooms

1. MDF

a. The building will contain one Main Distribution Frame which will act as a central telecom room and entrance facility for the building. Core telecommunications equipment supporting the entire building will be installed in this room.

b. The intra-building backbone fiber and copper cabling runs will be connected from this room to the IDF via conduit. The number of conduits from the MDF to IDF shall be the minimum required plus 100 % spare. Cat6A UTP, SM and OM-3 fiber cabling will be extended to the IDF room from the MDF.

c. This room size will accommodate a minimum of twelve (12) equipment cabinets. In all cases, a 4-foot service zone will be maintained at the front and rear of the equipment cabinets and at the end of each row of equipment cabinets. Space will be reserved in the MDF to add an additional equipment cabinet should this ever be necessary.

d. The walls of the room shall be covered with 3/4 inch fire resistant plywood painted on all sides with light color fire resistant paint. Care should be taken to assure that the fire rating stamp of the plywood be visible for inspection prior to installation. Horizontal cabling termination hardware will mount to the painted 3/4 inch fire-rated plywood backboard on the wall opposite the rear of the equipment cabinet(s) facing the equipment cable connections. Entry door opens out, automatically closes, and is secured by an access-logging keycard entry system. Typical MDF Telecommunications equipment includes:
   i. WAN routers
   ii. Core and Distribution switches
   iii. Access-Server switches
   iv. Access-User switches
   v. File servers
   vi. Terminal servers
   vii. PBX, Voice Gateways and other telephone-related equipment.
   viii. Voice mail System
   ix. Centralized UPS (if not located in an appropriate electrical room)
   x. Copper (UTP) termination hardware
   xi. Fiber Distribution Panel
   xii. Carrier equipment and termination hardware

2. IDF

a. This is the room where telecommunications equipment supporting the horizontal distribution zone is installed. The building will contain IDF spaces such that:
   i. All horizontal cable lengths from outlet to IDF are less than 250 feet.
   ii. Area served by each IDF is less than 25,000 sq. ft.
   iii. Horizontal network equipment fits in IDF racks with 50% spare rack space.

b. The intra-building backbone fiber and copper cabling runs will be connected from this room to the MDF via conduit. The number of conduits from the MDF to IDF shall be the minimum required plus 100% spare. Cat6A UTP, SM and OM-3 fiber cabling will be extended to the MDF room. The SM and OM-3 fiber cabling will be plenum rated The IDF will have 18 inch wide ladder type cable tray installed at 8

feet AFF installed around the perimeter of the room. The electrical distribution for the IDF will be from two panels located in the room, one normal utility and one from the generator system. Connected to each of these panels will be an overhead bus system for electrical distribution to the equipment cabinets. Within the equipment cabinets vertically mounted distributions units will provide the individual outlets for the equipment connections. Quad receptacle normal power convenience outlets will be installed on 6 foot centers along all permitted walls. Two stand-by power quad outlets will be provided on walls expected to support wall mounted active components.

c. A 4-foot service zone will be maintained at the front and rear of the equipment cabinets and at the end of each row of equipment cabinets. Horizontal cabling termination hardware will mount to the painted ¾ inch fire-rated plywood backboard on the wall opposite the rear of the equipment cabinet(s) facing the equipment cable connections. The walls of the room shall be covered with 3/4 inch fire resistant plywood painted on all sides with light color fire resistant paint. Care should be taken to assure that the fire rating stamp of the plywood be visible for inspection prior to installation. Entry door opens out, automatically closes, and is secured by an access-logging keycard entry system

d. Typical IDF equipment includes:
   i. Access-User switches
   ii. Terminal servers
   iii. Copper (UTP) termination hardware
   iv. Fiber Distribution Panel

F. Structured Cabling System

1. The telecommunications cabling system shall be designed to conform to the requirements of EIA/TIA-568B, The Commercial Building Telecommunications Cabling Standard.

2. In conformance with the above referenced standard, the telecommunications cabling system shall be designed in a hierarchical star topology, with all cables meeting or exceed the mechanical and performance requirements of Section 10 of the standard.

3. All cabling routed through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

G. Backbone System Cable

1. Twisted pair
   a. All twisted pair cable shall be UTP Cat6A
   b. All twisted pair cable lengths shall be less than 100m for network equipment connections

2. Single mode optical fiber
   a. Cable shall be capable of a minimum 10 Gb/s transmission over distances of up to 2000m (OS1)
   b. Quantity of fiber to be determined during design.
   c. Cable shall be terminated with LC connectors

3. Multi-mode mode optical fiber
   a. Cable shall be capable of a minimum 10 Gb/s transmission over distances of up to 300m (OM3)
   b. Cable shall be sized to a minimum of 48-strands per IDF space
   c. Cable shall be terminated with LC connectors

4. All cabling routed through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

H. Horizontal Wiring

1. Horizontal system cable shall be Category 6A Unshielded Twisted Pair between the IDF and workstation spaces. Cable shall be run in cable tray pathways throughout the work area.

2. The term “horizontal wiring” refers to a number of cable types that run from a communications closet on a particular floor of a building to workstations, telephones, wireless access points, printers and other devices on that floor. Interconnection cables between closets on the same floor typically include some combination of copper and fiber optic cables. Careful design work on the horizontal cable pathways to minimize total cable length will help to lower wiring costs and in some cases might decrease the total number of wiring closets needed to serve a building.

3. All cables must be marked clearly and legibly at both ends with floor, room and jack number for easy identification.

4. All cabling routed through plenums shall be plenum-rated. Coordinate plenum locations and requirements with the mechanical design-build contractors.

I. Horizontal Pathways

1. Horizontal pathways shall be cable tray. Conduit shall be run from wall outlet and stubbed to ceiling, then j-hooked to cable tray. If copper and fiber share the same cable tray, a barrier shall be installed to separate cable types. Horizontal pathways should consider future use for tenant requirements. Horizontal cabling must be designed to accommodate diverse user applications, including Data communications and Building Automation Systems.

2. Ceilings used as distribution pathways for horizontal cabling shall meet the following conditions:

    a. If a fixed ceiling has to be used as a cable route, or specialized oversized tile, a properly sized conduit or cable tray must be installed as a pass through. Where conduit is used, a pull string will be provided in each conduit. Pull boxes with access doors may be required depending on distance and design. Cables may not make 90 degree turns within the pull box. No direction transition may take place inside pull boxes.

    b. Drop-ceilings of lay-in tiles which allow easy access to a suitable space above are recommended. Suitable space is defined as that which supports the installation and ready use of a 18 inch x 4 inch side wall basket type cable tray. These cable ladders should be installed in all hallways in the areas indicated on the construction drawings. All areas along the cable tray pathway will be accessible. Per NEC code the maximum cable tray fill ratio is 40%.

    c. Pathway shall be sized to 100% spare capacity over initial usage.

    d. Height of the cable ladder/raceway tray above the finished floor shall be no more than 11’. There must be at least 3 inches of clear space above the cable tray for access. At least 12 inches of clearance will be maintained between the cable tray and any lighting fixtures and at least 4 feet of clearance will be maintained between the cable tray and any other sources of electrical interference such as motors and generators.

    e. No conduits, pipes, wires, threaded rod or any other obstruction may penetrate the interior area containing the cables or be mounted below the cable tray. Cable trays must be supported on each edge of the cable ladder; no center supports will be used.

    f. Metal cable ladders/raceways shall be bonded to the building ground per applicable code (using a minimum of 6-guage wire).

    g. Ancillary low-voltage wiring may not be run within the same section of the cable tray or raceway as data cabling. All pathways shall allow for a minimum 3” of clear vertical space above the ceiling tiles and support channels to ensure accessibility. Design will coordinate pathways with mechanical, lighting, and other systems to maintain separation.

3. All horizontal pathways that penetrate fire-rated barriers must be fire stopped in accordance with applicable codes.

J. Entrance Facility

1. This is the area where telecommunications service providers deliver their services to the building. A minimum of eight (8) 4” conduits shall be run into the EF from each of two separate in-ground communications vaults to provide for diverse service entries from at least two separate providers. A provider is defined as a State agency or a telecommunications utility. The in-ground communications vaults shall be located close to the property line and separated by a minimum of 100 feet. Conduits extended from the in-ground communications vaults shall be routed so that maximum separation is maintained prior to entering the EF room. Vaults shall be owned by DES and be made available to all IT Vendors. All copper and fiber cabling for the building will terminate in the EF then be cross connected to backbone cabling to MDF and IDF. The EF shall be located adjacent to the MDF room if space permits. If space is limited, the EF will be located in the MDF. Consideration shall be made for additional telecommunications utility services (T1 lines or similar) to utilize the EF.

2. In ground communications vaults need to be large enough to support large service loops for multiple fiber optic cables.

3. Copper cabling and any metallic elements that are part of the fiber cabling will be terminated onto building protection systems. All carrier equipment and termination hardware shall be located in the EF and these services extended to the MDF/IDF via cabling connections.

K. Outside Plant (OSP) Backbone and Pathways

1. The data system will use fiber optic cabling to bring data service into the building at the EF from either buried vault. The data backbone will be sized at a minimum of 36 total fiber optic strands per service, including 24 single mode strands and 12 multimode strands. All fiber strands will terminate on LC connectors in rack mounted patch panels in the EF.

2. All cabling shall be rated for outside plant use. All outdoor inter-building pathways shall allow for 100% spare capacity over initially installed cabling.

L. Grounding and Bonding

1. A uniform telecommunications grounding and bonding system shall be provided in accordance with TIA Joint Standard-607-B, Grounding and Bonding Requirements for Telecommunications in Commercial Buildings. This system shall be designed in conjunction with the electrical power grounding system. The following guidelines are provided for the design of the system.

2. The telecommunications grounding backbone shall consist of solid copper busbar and copper conductors interconnected in the following manner:
   a. Main electrical ground to the telecommunications main grounding busbar (TMGB) located in the MDF room.

b. The TMGB to individual telecommunications grounding busbars (TGBs) installed in the IDF rooms.
c. The telecommunications grounding busbar in each of these rooms to the nearest point of grounding building steel, if available.
d. Where the electrical power is located within the MDF and IDF rooms, the TGB shall be bonded to the panel board's alternating current equipment ground (ACEG).
e. The TMGB shall be pre-drilled, a minimum of 1/2-inch thick, 4-inch wide solid copper bar, electro-tin plated, and insulated from their supports by a 2-inch separation. The TGBs shall be pre-drilled for double lugs attachment, a minimum of 1/4-inch thick, 2-inches wide solid copper bar, electro-tin plated, and insulated from their supports by a 2-inch separation.
f. The telecommunication bonding backbone shall be sized at 2 kcmil per linear foot of conductor length up to a maximum size of 750 kcmil.
g. All bonding conductors shall be a minimum #6 AWG copper conductors. The conductor jacket shall be green in color or marked appropriately and installed in continuous lengths.
h. All metallic raceways, racks and cabinets entering or located with a room with a TGB shall be bonded to the TGB.

M. Mechanical and Electrical Requirements

1. General
No piping or ductwork will pass over or through any IT support room unless they are used to provide services to the support rooms. Piping and ductwork used to provide services to these rooms will be coordinated with the anticipated IT equipment layout within the rooms.

2. Electrical Requirements
IT support rooms will be connected to the building standby power source. Rack-mounted UPS equipment may be used to maintain system operation while the standby power source comes on-line. IT support rooms will be lit to a minimum of 50 footcandles between the equipment rack rows (measured at three feet above the floor) and will provide adequate vertical surface illumination to the bottom of racks. Access to IT support rooms will be controlled by the building access control system to allow the Owner to track access to the rooms.

3. Mechanical Requirements
IT support rooms will be maintained at between 68 and 80 degrees Fahrenheit with 30% to 50% relative humidity at all times (complying with TIA-569-C). If the building HVAC system cannot provide continuous operation or adequate capacity to meet these criteria, supplemental cooling units will be installed.

N. Special Materials Provisioning

All copper and fiber optic cabling should be manufactured by Corning or equivalent. Racks, cable management, and cable tray should be Corning or equivalent manufacture.

O. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

   For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

   The agency shall have all required information and products to work with the system. This includes, but is not limited to: access codes, passwords, software, hardware locks, instructions and interfaces.

   Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

17.0 Television Distribution Design Criteria

A. General Scope

The design builder will provide the television wiring and pathways.

Television service will be available throughout the building. Television service will terminate in IDF spaces and distributed to the locations noted. Dual coax backbone will be required from EF/MDF to all IDF's to provide redundancy within building. Amplification will be added as necessary on backbone to receive a clear signal at the IDF location.

B. Locations

1. Fitness Room
2. Large and Small Classroom
3. Other Locations to be Determined

18.0 Telephone System

A single PBX (analog/digital) system will feed the building. The PBX will be located in the MDF. PBX system will utilize minimum Cat6A cabling through structured cabling pathways to reach workstations throughout building.

A. Reference Guide: Washington Army National Guard – Telecommunications Guide

B. The Vault IDS and Fire Alarm System Volumes 2 and 3 require analog phone lines.

19.0 Audio/Visual Spaces Design Criteria

Audio/Visual spaces shall be designed to provide presentation and audio technologies to support the operations of the building. Each space shall be designed so that technologies aid in communication within the space and with connected spaces as required by the room. Refer to room data sheet for a listing of spaces and requirements.

A. General Scope

1. The National Guard will provide the audio-visual system equipment wiring and installation.

2. The design builder will provide the audio-visual system pathways and provide electrical power to the devices.

3. Materials shall be new, free from defects and shall be designed to ensure satisfactory operation and operational life in the environmental conditions which will prevail where they are being installed.

4. Accessories, including rack mounting hardware, power supplies, etc., shall be obtained from the original equipment manufacturer. Unless otherwise noted or specified, third party accessories shall not be used.

5. Equality
   a. Other products of equal quality and function may be furnished, subject to approval by the Owner, Architect, and Owner's Representative.
   b. Proof of equality rests with the submitter. The Owner shall be the final judge of equality.

6. Owner Furnished Furniture
   a. Room furniture will be furnished by the Owner.
   b. Free standing computer furniture will be furnished by the Owner. Built in cabinetry at conference rooms is by Design-Builder.

7. Manufacturer
   a. Do not provide an assortment. For each category, provide products of the same manufacturer; for each item, provide the same model for all pieces.

8. Accessories

a. Any standard accessory or item supplied by the manufacturer as part of the system shall be turned over to the Owner as a loose item at the time of project acceptance.

B. Physical Installation

1. Fastenings and supports shall be adequate to support their loads with a safety factor of at least three. Boxes, equipment, etc., shall be secured plumb and square.

2. In the installation of equipment and cable, consideration shall be given not only to operational efficiency, but also to overall aesthetic factors.

3. Equipment requiring power (such as line drivers) located in AV outlet boxes, shall be installed so that power is fed remotely from the main equipment location (i.e. AV Rack). Under no circumstances shall a remote device be powered from an adjacent receptacle unless permission has been granted by the Owner's Representative.

C. General Code Requirements

1. The following code and standards are referenced in the Division 27 specifications. Perform all work and provide materials and equipment in accordance with the latest referenced codes and standards of the following organizations:
   a. American National Standards Institute (ANSI)
   b. National Electrical Manufacturer's Association (NEMA)
   c. National Fire Protection Association (NFPA)
   d. Underwriter's Laboratories (UL)
   e. American Disabilities Act of 2010
   f. Current International Building Code (IBC)

2. Install the AV systems based on the following:
   a. NFPA 70: National Electrical Code as adopted and amended by the Local Jurisdiction.
   b. IBC: International Building Code as adopted and amended by the Local Jurisdiction.

3. The referenced codes establish a minimum level of requirements. Where provision of the various codes conflict with each other, the more stringent provision shall govern. If any conflict occurs between referenced codes and this specification, the codes are to govern. Compliance with code requirements shall not be construed as relieving the Contractor from complying with any requirements of the drawings or specifications which may be in excess of requirements of the governing codes and rules and not contrary to same.

D. Quality of Materials and Systems

1. Materials and equipment supplied by the Contractor shall be new and shall meet or exceed the latest published specification of the manufacturer in all respects.

2. At the time of submittal, the Contractor shall supply the latest model for each piece of equipment.

3. Equipment and enclosures shall be UL listed, or equivalent.

E. Source Code

1. All electronic devices connected to the Washington State Military Department facilities shall be maintainable by the agency. This includes operating, testing, repair, altering the system (additions or deletions), schedule changes, volume changes, temperature changes, etc.

   For this work the agency at its discretion may use the providing contractor or its own maintenance staff or any other available individual or firm.

   The agency shall have all required information and products to work with the system. This includes, but is not limited to access codes, passwords, software, hardware locks, instructions and interfaces.

   Deviation from this section requires system specific signed advance approval from the agency. The request shall describe the system, detail the deviation from this section provide justification why this section cannot be complied with.

F. Room Types and Technology

1. Rooms containing AV systems will follow the room types and technologies laid out in Section V. Design Requirements.

V. PROGRAM REQUIREMENTS

1.0 Introduction & Overview

A. Summary of Requirements

Throughout the programming and planning process, the following assumptions have been made that directly impact the project development function, form, schedule, and costs:

1. The role of the National Guard in the military force structure has changed over the past decade with the Guard playing a more active role in the national defense mission. This is particularly true with the war in Iraq and Afghanistan, where National Guard and Reserve units have made up nearly 28 percent of all deployed troops. Indeed, the recruiting slogan “one weekend a month, two weeks a year” was dropped during the Iraq War as it no longer described service expectations. More and more the National Guard will be relied upon as the Army enters a period of scaling back its full-time personnel.

2. The building will be designed to comply with National Guard Bureau standards.

3. Administrative space authorized by regulation will be apportioned to the units and subordinate organization based upon a count of assigned personnel having a primary command/administrative function.

4. Administrative space allocation will be based upon the Washington State Space Standards published by the Department of Enterprise Services.

5. To maximum extent possible, open-plan workstations will be used for administrative space. Private offices will only be provided to command positions or staff / support positions requiring acoustic privacy for personnel or security reasons.

6. To the maximum extent possible, the facility will make flexible provisions for the use of current and future technology.

7. The building will have internal security zones to facilitate public use and use by other state agencies.

8. The disaster response / shelter mission of the building is an important element in planning and the structure will be designed to the seismic standards for an “essential facility”.

2.0 General Site & Site Security

A. Site Planning Requirements

The National Guard Design Guide for Readiness Centers (DG 415-1) establishes minimum site components that must be provided in any new facility. These include:

1. Parking

    A. POV (privately-owned vehicles) parking based on 80% of authorized strength of the housed units, which equates to 132 spaces.

    B. Military Equipment Parking of 1,325 square yards (with up to 50% expansion).

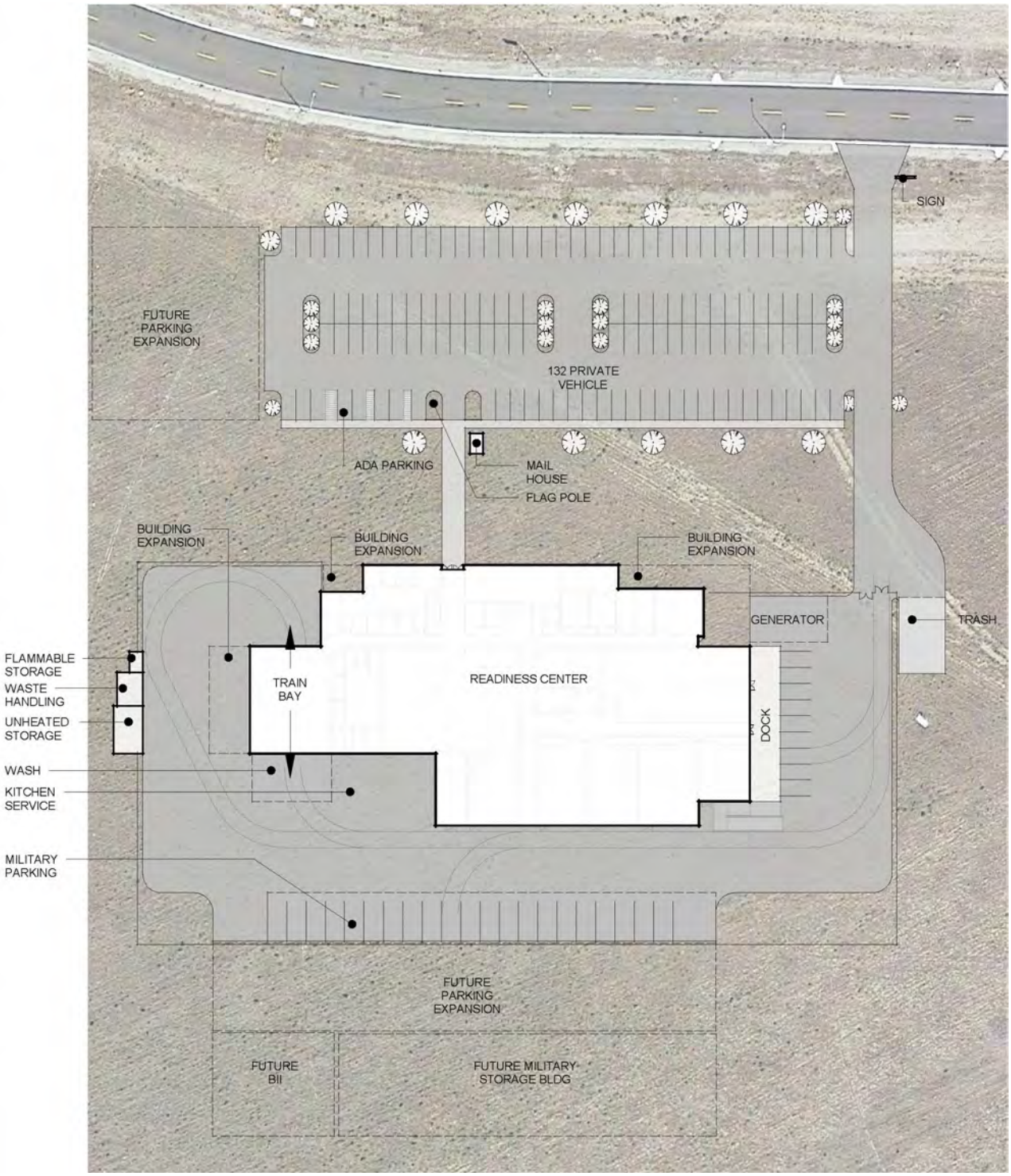
2. Future Building Expansion

    A. Provide space for future building expansion: of 17,575 S.F. - See Section V 7.0 Future Requirements

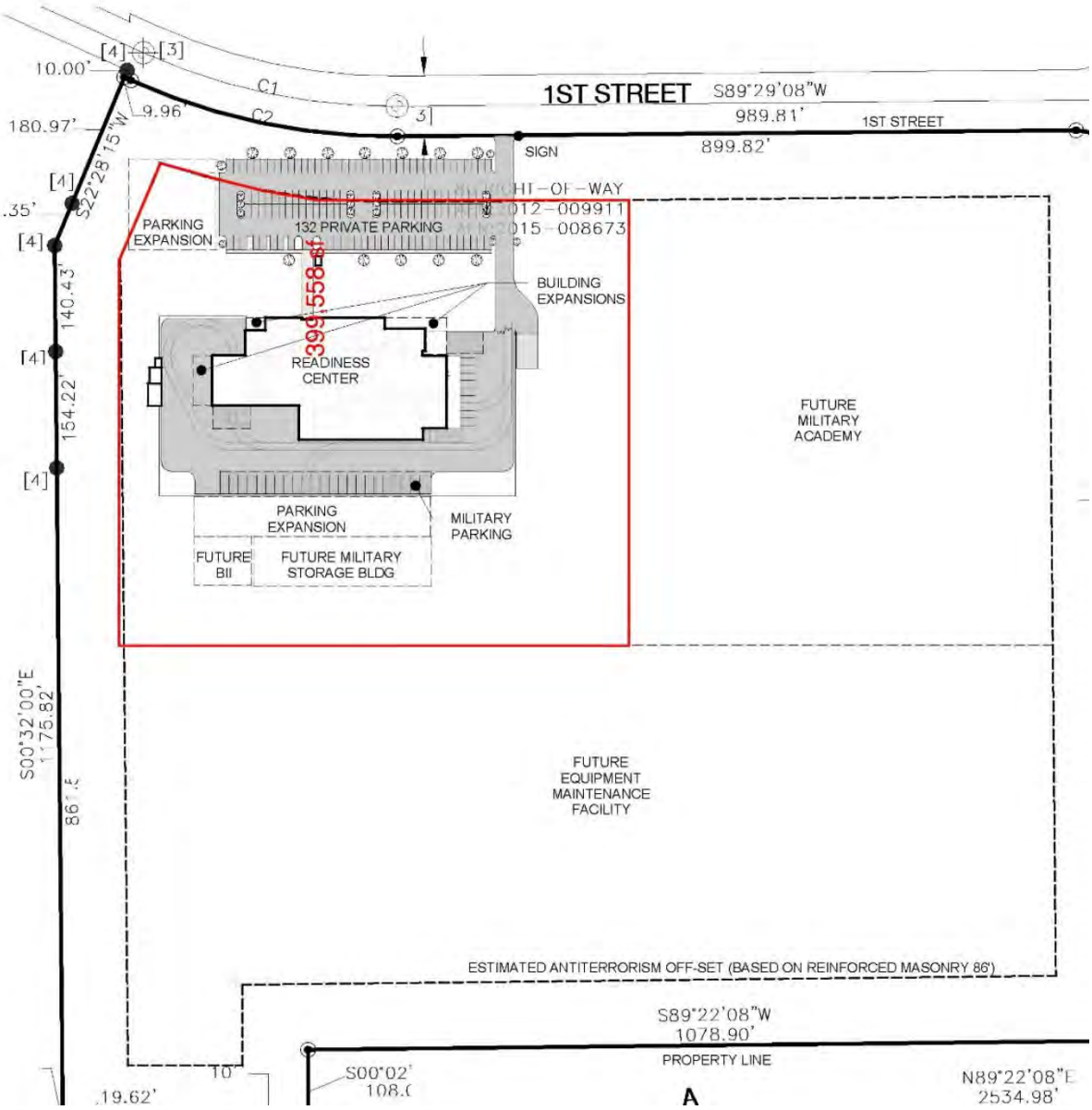
B. General Site Relationships

1. Note that illustrations 132 and B3 below are diagrammatic and is not intended to convey a design solution. These diagrams are intended to show general programmatic relationships approved by the National Guard during the pre-design effort.

2. Site Adjacencies Immediately Around the Building



3. Overall Site Adjacencies



C. Physical Security

In large part due terrorist actions against the Murrah Federal Building in Oklahoma City in 1995, and later the Pentagon and World Trade Center in 2001, the Department of Defense through UFC 4-010-01 established minimum anti-terrorism protection standards for its facilities. UFC 4-010-01 states that the most cost-effective solution for mitigating explosive effects on buildings is to keep explosives as far away as possible. Accordingly, its established minimum clear “standoff” distances which - coupled with building hardening - provide physical security for personnel.

Standoff distance requirements are based on whether the building is housed on a site having a controlled or open perimeter, and by construction materials used in the building envelope. The Tri-Cities Readiness Center must adhere to the following standoff distances (CCSD or Conventional Construction Standoff Distance) illustrated by the following UFC 4-010-01 DoD minimum Anti-terrorism Standards for Buildings, dated December 12, 2018 diagram.

3.0 Space Requirements

A. Space Requirements Summary

Schedule 1 - Common Use Areas

Area	SF EA	Total SF
Assembly Hall (1)	5,400	5,400
Lg Classroom (1)	1,650	1,650
Sm Classroom (1)	860	860
Learning Center (1)	500	500
Multi-Purpose Training Area (1)	1,500	1,500
Kitchen (1)	1,500	1,500
Break / Vending (1)	300	300
Toilet / Shower	varies	1,740
Lactation Area (1)	80	80
Family Readiness Office (1)	250	250
Retention Office (1)	110	110
Table / Chair Storage (1)	300	300
Physical Fitness (1)	700	700

Schedule 2 - Units and Special Space Allowances

Basic Space (1)	1,200	1,200
- Commander Office (1)	120	120
- Executive Officer's Space (1)	120	120
- First Sergeant (1)	110	110
- JSS Office (1)	110	110
- Platoon Office (4)	110	440
- Supply Office (1)	230	230
- Training NCQ (1)	110	110
- Readiness NCQ (1)	110	110
- Open Office (1)	860	860
Arms Vault - Large (1)	900	900
Arms Vault - Small (1)	300	300
Heated Storage Space (1)	4,000	4,000
TA50 Locker Space (1)	2,144	2,144
General Purpose Training Bay (1)	3,168	3,168
- Office (1)	0	0
- Storage (1)	0	0

Schedule 3 - General Building Spaces

Maintenance and Storage (1)	865	865
Mechanical (1)	1,141	1,141
Electrical (1)	300	300
Telecom/IT (1)	289	289
Circulation Allowance (1)	4,712	4,712
Structural Allowance (1)	3,612	3,612
Gross Readiness Center Space		39,731

Schedule 4 - Detached Spaces

S4.1	Detached Controlled Waste Handling	1	300	300
	Circulation/Structural			30
	Total Gross Controlled Waste Handling Space			**330**
S4.2	Detached Unheated Storage Space	1	484	484
	Circulation/Structural			49
	Total Gross Unheated Storage Space			**533**
S4.3	Detached Flammable Material Storage	1	100	100
	Circulation/Structural			10
	Total Gross Detached Flammable Materials Storage			**110**

B. Data Sheets

S1.1 ASSEMBLY HALL

AREA
1 @ 5,400 SF

FUNCTION
The primary function of the Assembly Hall is to provide space for troop formations, inspections, dining and large group assemblies for training. The assembly hall also serves the neighboring community. Flexibility is the key design issue related to the Assembly Hall.

ADJACENCIES
- Direct Access for the public from the lobby
- Direct Access for loading / off-loading supplies and equipment from unit vehicles
- Direct Access to food service for unit, civic, and private use of the Assembly Hall
- Access to heated unit storage to allow efficient organization of equipment for deployment
- Access to public toilet facilities sized to accommodate largest function
- Access to Table Chair Storage

ARCHITECTURAL

Ceiling Height:
- 24’-0” min clear

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: None
- Walls: CMU, painted epoxy wainscot
- Ceiling: Exposed construction, painted

Fenestration:
- None required

Door:
- Hollow metal doors with commercial / keyed hardware.

Training Assemblies:
- Mobile bleachers to accommodate 100 to 150 people
- (2) 12’ x 4’ whiteboards

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and cooling.
- 85% efficiency filter bank
- C02 detection system
- Noise Coefficient Balance - <45
- 10 CFM per person
- 50% R.H.

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- Electric Drinking Fountain
- Handwash station (located prior to obtaining food)

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience Outlets adequate for all anticipated functions; 1 duplex per 10 LF of wall.

Lighting:
- LED 50FC

Voice:
- Telephone and Intercom

Data:
- Internet connection and other data systems should be provided at multiple locations and aligned with sub-area arrangements.

AV:
- Ceiling mounted projection system
- (2) Large tv monitors
- (1) large projection screen
- (1) projection screen

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Movable stacking tables and chairs to be stored in adjacent storage room.

ACCESS TO
HEATED STORAGE
AV
DF
EYE
WASH
BLEACHER SEATING
TABLE &
CHAIR
STORAGE
PUBLIC ACCESS
FROM MAIN BLDG
ENTRANCE
ASSEMBLY
HALL
MARKER BOARD
PROJECTION SCREEN
PROJECTOR
BLEACHER SEATING
TRANSFER OF
EQUIPMENT &
SUPPLIES
FROM UNIT
VEHICLES
SCULLERY
FOOD
SERVICE

S1.2B CLASSROOMS

AREA
1 Lg Classroom @ 1,650 SF EACH
1 Sm Classroom @ 860 SF EACH = 2,510 SF TOTAL

FUNCTION
Classrooms are used for instructional training of unit personnel and for unit meetings. They may also be used by the public.

ADJACENCIES
- Large Classroom to be adjacent to Multi-Purpose Training
- Small Classroom to be adjacent to main entry for public use

ARCHITECTURAL

Ceiling Height:
- 10’-0” AFF
- Provide acoustical treatment above the ceiling to the underside of the roof deck to attain an STC of 40
- Provide acoustical treatment at the floor under acoustically insulated folding partitions to attain an STC of 40

Finishes - Large Classroom:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber base
- Walls: CMU, painted, epoxy wainscot
- Ceiling: Acoustical panel ceiling

Finishes - Small Classroom:
- Floor: VCT
- Base: Rubber base
- Walls: Painted gypsum wallboard with painted epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- Perimeter windows where possible @ small classroom

Door:
- Solid core wood doors with commercial / keyed hardware
- Exterior Access for large classroom

Training Assemblies (At Each Classoom)
- One 12’x4’ markerboard
- Storage space for training aids, AV equipment, and extra chairs at large classroom

- Storage space for sand table at large classroom
- AV Cabinet and cabinetry for training aids at both classrooms

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 50% R.H.
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience Outlets; 1 duplex per 10 LF of wall

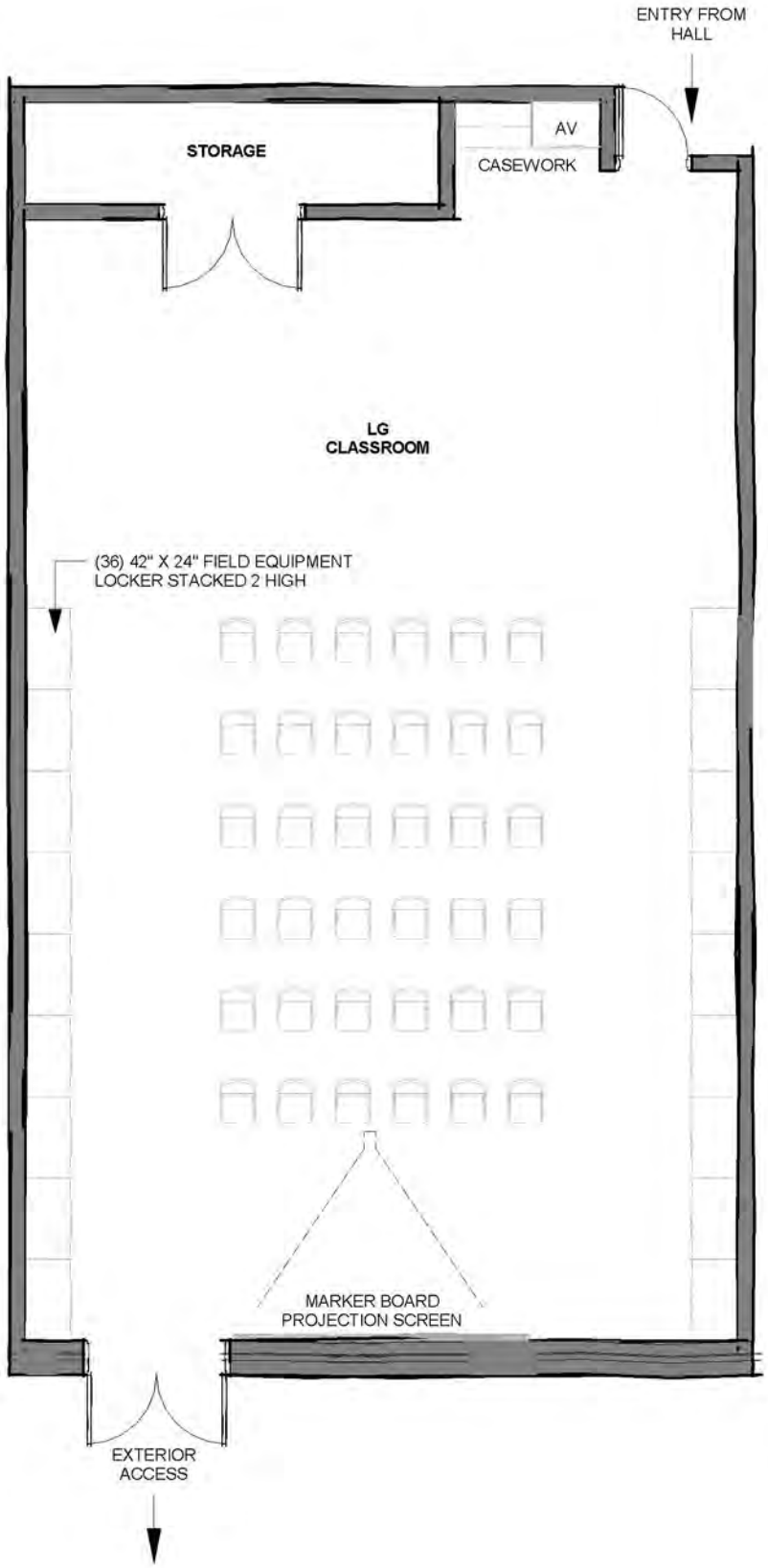
Lighting:
- LED 70FC
- Lighting controls for each classroom area should be located at a point convenient to the speaker and at the door

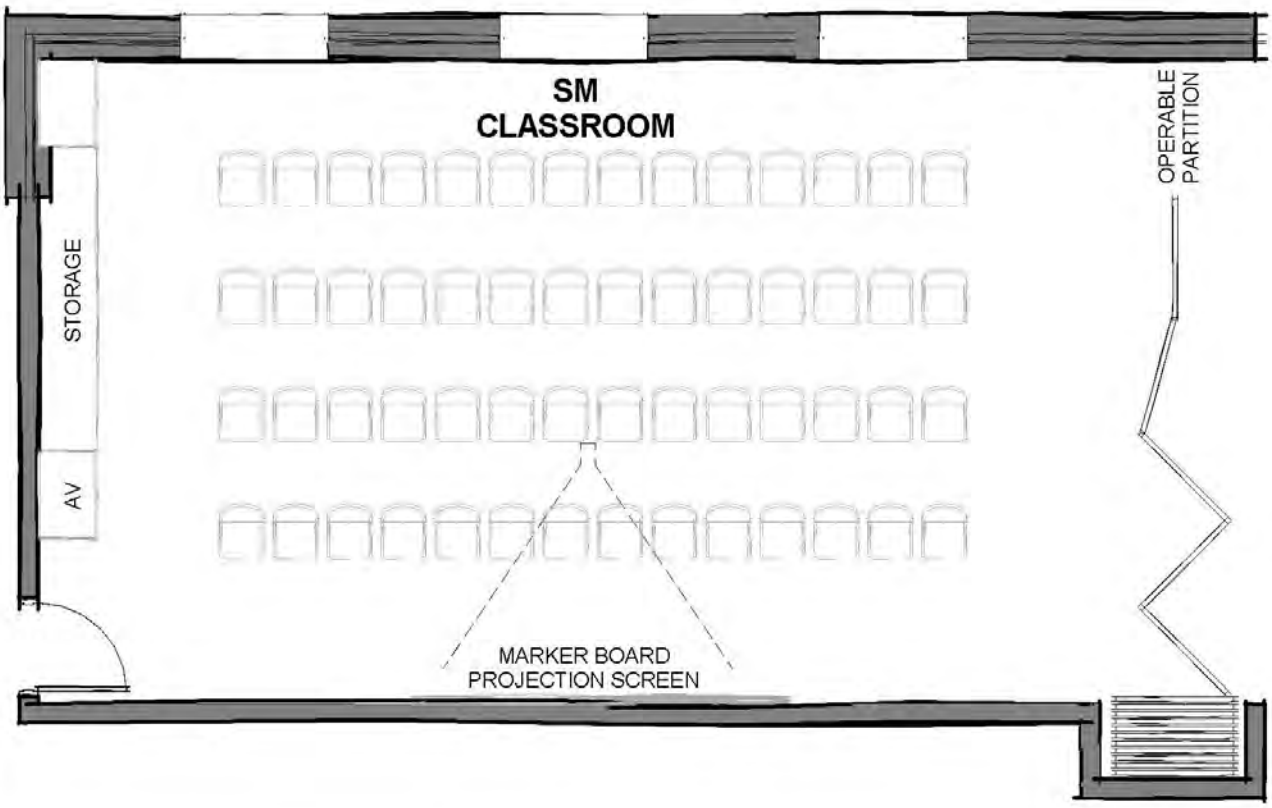
Voice:
- Telephone and Intercom

Data:
- Internet connection and other data systems should be provided at multiple locations

AV (At Each Classroom):
- Ceiling-mounted projection system
- Large Projection screen
- Cable Television
- TV Monitor

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Movable stacking tables and/or chairs for (36)


ENTRY FROM
HALL
STORAGE
AV
CASEWORK
LG
CLASSROOM
(36) 42" X 24" FIELD EQUIPMENT
LOCKER STACKED 2 HIGH
MARKER BOARD
PROJECTION SCREEN
EXTERIOR
ACCESS


SM
CLASSROOM
STORAGE
AV
OPERABLE
PARTITION
MARKER BOARD
PROJECTION SCREEN

S1.3 LEARNING CENTER

AREA
500 SF

FUNCTION
The Learning Center provides space for Military Occupational Skills (MOS) training.

ADJACENCIES
- Access to small classroom
- Access to the main circulation corridor for public use

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: VCT
- Base: Rubber base
- Walls: Painted gyp with painted epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- None

Door:
- Solid core wood doors with commercial / keyed hardware

Training Assemblies:
- Individual pre-wired study carrels
- Marker board with chalk rail
- Shelving / cabinetry for training material and AV equipment

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°

- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience Outlets; 1 duplex per 10 LF of wall
- Power in each of the study carrels

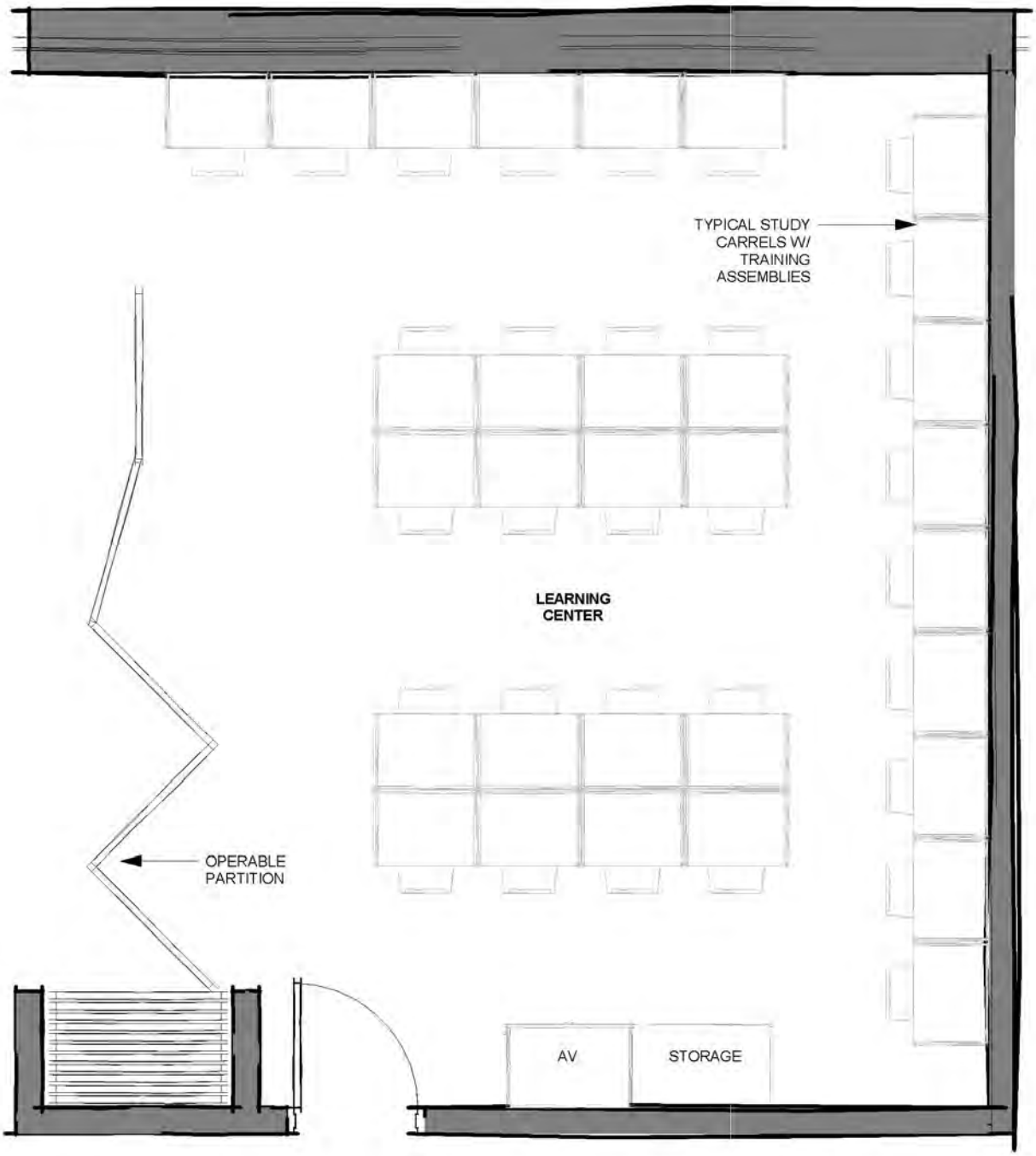
Lighting:
- LED 70FC
- Multi-level switching or dimming required

Voice:
- Telephone and Intercom

Data:
- Internet and Data

AV:
- AV equipment in each of the study carrels

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Study carrels and chairs for 30


TYPICAL STUDY CARRELS W/ TRAINING ASSEMBLIES
LEARNING CENTER
OPERABLE PARTITION
AV
STORAGE

S1.4 MULTI-PURPOSE TRAINING AREA

AREA
1 @ 1,500 SF

FUNCTION

The Multi-Purpose Training Area is used for instructional training of unit personnel and for unit meetings. This room could be utilized with the fire arms training simulators in the future.

ADJACENCIES
- Adjacent to Large Classroom

ARCHITECTURAL

Ceiling Height:
- 14’ AFF (verify with vendor equipment)
- Provide acoustical separation above the ceiling to the underside of the roof deck to attain an STC of 40

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber base
- Walls: CMU, painted epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- None required

Door:
- Solid core wood doors with commercial / keyed hardware
- Exterior access

Training Assemblies:
- Fire arms training simulator (Future)
- One 12’ x 4’ chalk / markerboard with chalk rail
- Storage space for training aids, AV equipment, and extra chairs
- Storage space for sand table
- AV cabinet and cabinetry for training aids

s
MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning.

- Noise Coefficient Balance = <35
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience Outlets; 1 duplex per 10 LF of wall
- Additional power for programmed equipment should be provided

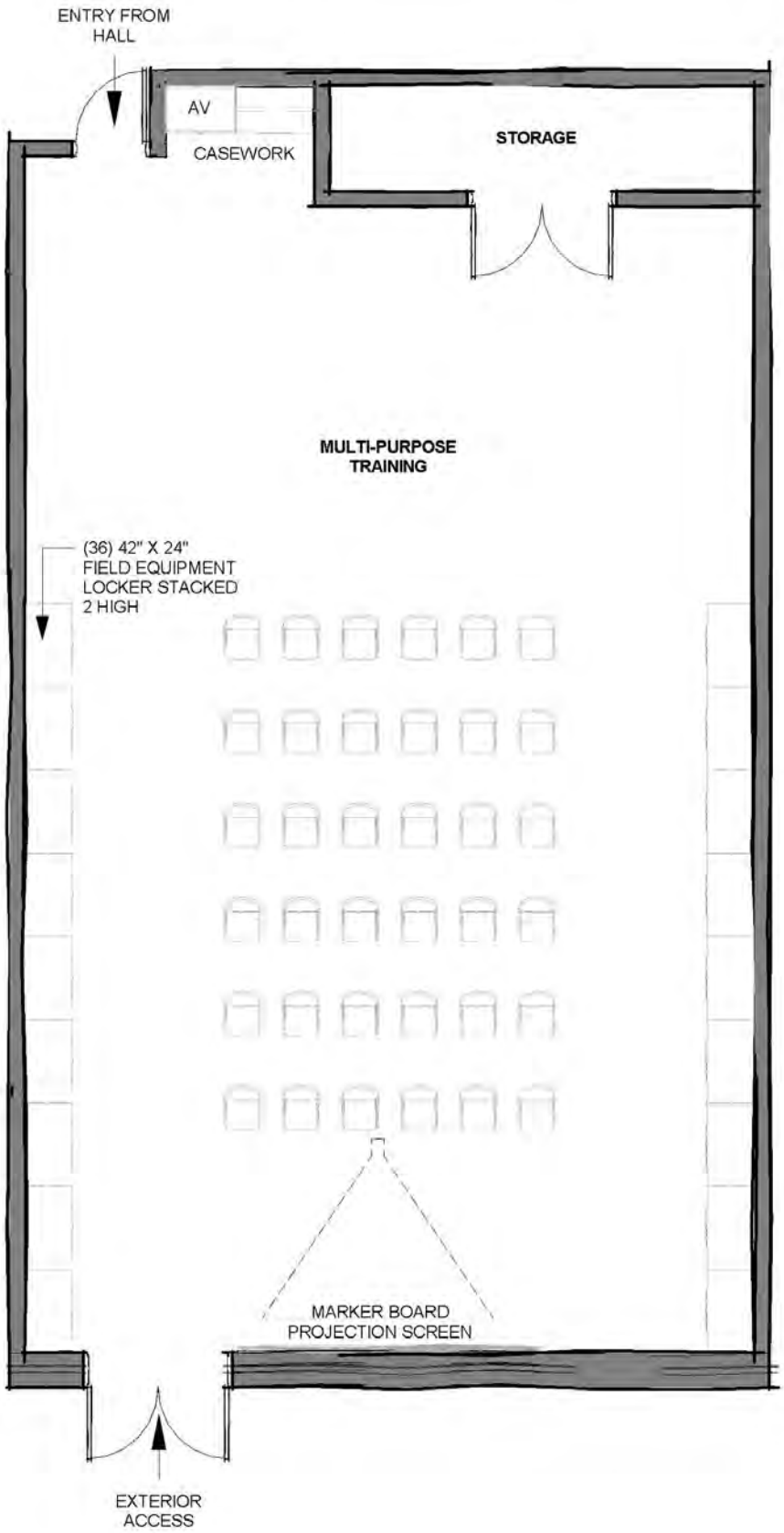
Lighting:
- LED 50FC
- Lighting controls should be located at a point convenient to the speaker and at the door

Voice:
- Telephone and Intercom

Data:
- Internet connection and other data systems should be provided at multiple locations and at locations required by future simulator

AV:
- TV monitor
- Ceiling-mounted projection system
- Projection screen

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT


ENTRY FROM
HALL
AV
CASEWORK
STORAGE
MULTI-PURPOSE
TRAINING
(36) 42" X 24"
FIELD EQUIPMENT
LOCKER STACKED
2 HIGH
MARKER BOARD
PROJECTION SCREEN
EXTERIOR
ACCESS

S1.5 KITCHEN

KITCHEN EQUIPMENT - See Section V 6.0 for Design Requirements

AREA
1 @ 1,500 SF - See Appendix item 2 J per plan

FUNCTION
Area for preparation of food and for cleaning of food prep and dining utensils. This area to include a restroom, office, janitorial, receiving, server, scullery, walk-in freezer, walk-in cooler, dry storage, and food prep areas.

ADJACENCIES

- Adjacent to Assembly Hall
- Adjacent to loading area, as well as trash and garbage removal space

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Fluid Applied Epoxy
- Base: Cove Base
- Walls: Painted gyp with wainscot
- Ceiling: Painted gyp

Fenestration:
- None

Door:
- Hollow metal doors with Commercial / keyed hardware
- Stainless steel roll-up doors to assembly space

Training Assemblies:
- Shelving / Cabinetry for storage
- Mobile storage cabinets that can be assigned to and under the control of the various military units at the Readiness Center

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <45

- 1 CFM / SF with hoods

Design Temperature & Humidity:
- Ref. ACG1H Manual
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- Floor drains, sinks, equipment connections, toilet, and lavatory
- Low-flow aerators in kitchen
- Separate water heater.

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience Outlets; 1 duplex per 10 LF of wall
- Power as required per equipment schedule

Lighting:
- LED 50FC

Voice:
- Telephone and Intercom

Data:
- Computer Ordering System

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Industrial kitchen equipment (see Appendix item 2 J)

S1.6 BREAK / VENDING

AREA
1 @ 300 SF

FUNCTION
The Break / Vending area offers vending options, as well as seating for soldiers and staff.

ADJACENCIES

- The Break / Vending space should be conveniently located for the majority of the building occupants and available to the public

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: VCT
- Base: Rubber Base
- Walls: Painted gyp wall board with painted epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- Not required

Door:
- Not required

Training Assemblies:
- Cabinetry for storage

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <40
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°

- Cooling Unoccupied = 85°

Plumbing Fixtures:
- Hot and Cold Water
- Sink
- Electric Drinking Fountain
- Floor Drain

ELECTRICAL / COMMUNICATIONS / AV

Power:
- 1 duplex per 10 LF of wall and additional power for programmed equipment

Lighting:
- LED 30 FC at vending area and 50 FC at breakroom

Voice:
- Telephone and Intercom

Data:
- Internet

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Tables and chairs
- Vending machines

S1.7 TOILET AND SHOWER SPACES

AREA
Toilets = 1,300 SF
Showers = 440 SF
1,740 TOTAL, Men's and Women's

FUNCTION
Toilets should also be easily accessible to those attending public functions. Shower facilities to be divided 70/30 between Men and Women.

ADJACENCIES
- Direct access to Locker Rooms and Fitness Room
- Access to Public Spaces

ARCHITECTURAL

Ceiling Height:
- 8'-0"

Finishes:
- Floor: Ceramic Tile
- Base: Ceramic Tile
- Walls: Ceramic Tile - in the shower, ceramic tile should extend to the ceiling
- Ceiling: Painted gypsum wall board; green board in showers

Fenestration:
- None

Door:
- Hollow Metal

Training Assemblies:
- Toilet and shower changing compartment partitions
- Benches
- Wall hooks
- Baby changing stations

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning.
- Noise Coefficient Balance = <45
- 50 CFM / WC and UR or ICFM / SF

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- Toilet Fixtures and Urinals per code requirements
- Showers with flow restrictors in shower heads. 9 showers for Men and 4 showers for Women.
- One shower in each room to meet ADA requirements
- Each shower to have a private shower compartment and a private dressing compartment

ELECTRICAL / COMMUNICATIONS / AV

Power:
- 1 duplex GFCI per 2 sinks

Lighting:
- LED 30FC

Voice:
- None required

Data:
- None required

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- (25) 12” w x 12” d x 1/2 height Athletic lockers for change of clothes with lock hasp divided 70/30 between men and women
- 5% of lockers to meet ADA requirements
- Benches

S1.9 LACTATION AREA

AREA
1 @ 80 SF

FUNCTION
Enclosed space for nursing mothers

ADJACENCIES
- Access to Administrative Spaces.

ARCHITECTURAL

Ceiling Height:
- 8'-0”

Finishes:
- Floor: Carpet
- Base: Rubber Base
- Walls: Painted gyp board
- Ceiling: Acoustical panel ceiling

Fenestration:
- None

Door:
- Solid wood core

Training Assemblies:
- None

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <45
- 20 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:

- Sink (16” x 16”)

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 1 duplex per 10 LF

Lighting:
- LED, dimmable, 30FC

Voice:
- Telephone and Intercom

Data:
- None required

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Lounge Chair
- Lockable Storage

S1.10 FAMILY READINESS OFFICE

AREA:
1 @ 250 SF

FUNCTION
The AMNG Readiness Program supports the Soldier's family members through communication, involvement, support, recognition, and assistance during deployments and other times of need.

ADJACENCIES
- Access to Main Lobby

ARCHITECTURAL

Ceiling Height:
- 9'-0"

Finishes:
- Floor: Carpet
- Base: Rubber Base
- Walls: Painted Gyp board with epoxy wainscot
- Ceiling: Acoustical Panel Ceiling

Fenestration:
- Relights

Door:
- Hollow Metal with Commercial / Keyed Hardware

Training Assemblies:
- Storage shelving

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 10 CFM / person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:

- None Required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Convenience outlets @ 1 duplex per wall

Lighting:

- LED 50FC

Voice:

- Telephone and Intercom

Data:

- Internet

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- Shelving
- Office Furniture
- Refrigerator

S1.12 RETENTION OFFICE

AREA
1 @ 110 SF

FUNCTION
Space accessible by the public for recruitment.

ADJACENCIES
- Direct Access to Main Lobby
- Emphasize public accessibility with pass-through window or similar

ARCHITECTURAL

Ceiling Height:
- 9’-0”

Finishes:
- Floor: Carpet
- Base: Rubber Base
- Walls: Painted Gyp board with painted epoxy wainscot
- Ceiling: Acoustical Panel Ceiling

Fenestration:
- Relights to Lobby

Door:
- Hollow Metal with Commercial / Keyed Hardware

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 10 CFM / person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:

- None Required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Convenience outlets @ 1 duplex per wall

Lighting:

- LED 50FC

Voice:

- Telephone and Intercom

Data:

- Internet

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- Shelving
- Office Furniture

S1.13 TABLE AND CHAIR STORAGE

AREA:
1 @ 300 SF

FUNCTION:
Areas for table and chair storage utilized in the Assembly Hall.

ADJACENCIES:
- Direct access to each sub-division of the Assembly Hall and the corridor to promote optimum flexibility in the use and configuration of the Assembly Hall space.

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber Base
- Walls: Painted gyp with painted plywood wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- None required

Door:
- Hollow Metal

Training Assemblies:
- None Required

MECHANICAL

HVAC Requirements:
- Heating and ventilating
- No cooling required
- 0.25 CFM / SF

Design Temperature:
- Heating Occupied = 55°
- Heating Unoccupied = 55°

Plumbing Fixtures:

- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- 1 duplex per 20 LF of wall

Lighting:
- LED 20FC

Voice:
- None required

Data:
- None required

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- None required

S1.14 PHYSICAL FITNESS

AREA
1 @ 700 SF

FUNCTION
The Physical Fitness area is used on a daily or weekly basis for physical training.

ADJACENCIES
- Access to locker rooms
- Requires acoustical separation from administrative and classroom functions.

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: 3/8” Thick vulcanized rubber gym mats
- Base: Rubber Base
- Walls: CMU
- Ceiling: Acoustical panel ceiling/painted gyp board ceiling

Fenestration:
- Exterior windows where possible

Door:
- Hollow Metal

Training Assemblies:
- Storage cabinets for miscellaneous items

MECHANICAL

HVAC Requirements:
- Heating, ventilation, air conditioning, and exhaust
- Noise Coefficient Balance = <45
- 0.20 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- Cold water
- Electric Drinking Fountain

ELECTRICAL / COMMUNICATIONS / AV

Power:
- 2 duplex per 8 LF of wall and at each piece of exercise equipment on a dedicated circuit

Lighting:
- LED 50FC

Voice:
- Telephone and Intercom

Data:
- Internet

AV:
- Cable TV

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Specialized floor matting
- Weight training – machines and free weights (NIC)
- Cardio machines (NIC)

S2.1a ADMINISTRATIVE BASIC SPACE

AREA
1 @ 1,200 SF

FUNCTION
Open office spaces used for instructional training of unit personnel and for unit meetings

ADJACENCIES
- Access to Large Classroom and Multi-Purpose room

ARCHITECTURAL

Ceiling Height:
- 9’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber Base
- Walls: CMU, painted epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- None required

Door:
- Solid core wood doors with Commercial / Keyed Hardware
- Exterior Access

Training Assemblies:
- One 12’ x 4’ markerboard
- Storage space for training aids, AV equipment, and extra chairs
- Storage space for sand table
- AV cabinet and cabinetry for training aids

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°

- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None Required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 2 duplex per 50 SF
- Convenience outlets @ 2 duplex at each office work station

Lighting:
- LED 50FC
- Lighting controls should be located at a point convenient to the speaker and at the door

Voice:
- Telephone and Intercom

Data:
- Internet - 4 data outlets per work station

AV:
- Project screen and projector
- Television Monitor

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Movable stacking tables and / or chairs for (36)
- (36) Field Equipment Lockers (42” W x 24” D x 30” H stacked 2 high)
- (1) Sand table

S2.1b ADMINISTRATIVE OFFICE ALLOWANCE

AREA

(1) Company Commander Office	@ 120 SF EA
(1) Executive Officer's Office	@ 120 SF EA
(1) First Sergeant's Office	@ 110 SF EA
(1) JSS Office	@ 110 SF EA
(4) Platoon Offices	@ 110 SF EA = 440 SF
(1) Supply Offices	@ 230 SF EA
(1) Training NCQ Office	@ 110 SF EA
(1) Readiness NCQ Office	@ 110 SF EA
(1) Open Office	@ 860 SF EA
	= 2,210 SF TOTAL

FUNCTION
Office space.

ADJACENCIES

- Adjacent to other administrative spaces and classrooms

ARCHITECTURAL

Ceiling Height:
- 9'-0"

Finishes:
- Floor: Carpet (VCT in Platoon Offices and Supply Office)
- Base: Rubber Base
- Walls: Painted gyp board
- Ceiling: Acoustical panel ceiling

Fenestration:
- Exterior operable windows where possible

Door:
- Hollow metal with Commercial / Keyed Hardware

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <35
- 10 CFM per person

Design Temperature:
- Heating Occupied = 68°
- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None Required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 2 duplex per 50 SF

Lighting:
- LED 50FC

Voice:
- Telephone and Intercom

Data:
- Internet - 4 Data outlets per work station
- 2 Duplex per 50 SF

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Modular Office Furniture

S2.2a ARMS VAULT

AREA
1 @ 900 SF EA
1 @ 300 SF EA
= 1,200 SF

FUNCTION
Secure area for storage of Arms, Ammunition, and Explosives

ADJACENCIES
- Direct Access to Supply Office
- Access to Heated Unit Storage

ARCHITECTURAL

Ceiling Height:
- 8’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish, 6” min. thick and reinforced
- Base: Concrete
- Walls: Painted Concrete, min. 8” thick and reinforced
- Ceiling: Painted Concrete, min. 6” thick and reinforced

Fenestration:
- None

Door:
- Arms Vault Door Class 5

Training Assemblies
- None

MECHANICAL

HVAC Requirements:
- Heating, ventilation and cooling
- Supply and return diffusers to be security type
- Duct penetrations 36 square inch area
- Include a 35% efficiency filter bank
- “2” type vent
- 0.25 CFM per SF

Design Temperature:
- Heating Occupied = 55°
- Cooling Occupied = 74°

Plumbing Fixtures:
- Dehumidifier
- Dehumidifier drain located outside vault

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 1 duplex per room

Lighting:
- LED 30FC

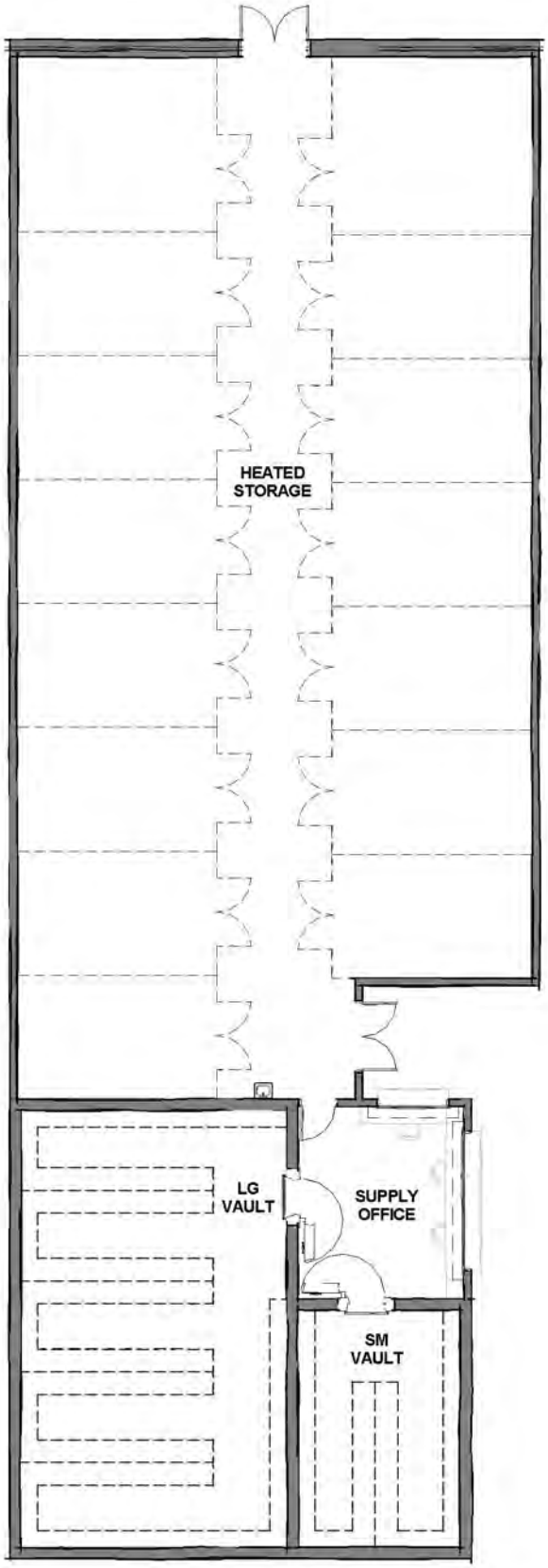
Voice:
- None

Data/Phone:
- Per Security System

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Weapons Racks

Design Standard:
- HR 190-11 should be referenced as the Government Regulation for Arms Vault Construction.


HEATED
STORAGE
LG
VAULT
SUPPLY
OFFICE
SM
VAULT

S2.2c HEATED STORAGE SPACE

AREA
4,000 SF

FUNCTION
Secure area for storing and returning organizational equipment and clothing.

ADJACENCIES
- Adjacent to Supply Office
- Access to Assembly Hall
- Access to Loading Dock
- Access to Arms Vault

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: No base
- Walls: CMU – walls to extend to roof/floor deck above
- Ceiling: Exposed structure, painted

Fenestration:
- None

Door:
- Overhead sectional door or pair of doors for movement of equipment between storage space and assembly hall, and between storage space and the loading dock
- Hollow metal with Commercial / Keyed Hardware
- Dutch door can be an option (solid core) with magnetic switches
- Provide the ability to close off the heated storage space to everyone but the Supply Office for check-in and check-out of individual equipment or open the space up for quick access to equipment.

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating and ventilation.

- Demand control ventilation with minimal air changes.
- Include a 35% efficiency filter bank.
- 3.0 AC changes/hour.

Design Temperature:
- Heating Occupied = 55°
- Heating Unoccupied = 55°

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 1 duplex per 20 LF of wall.

Lighting:
- LED 30FC

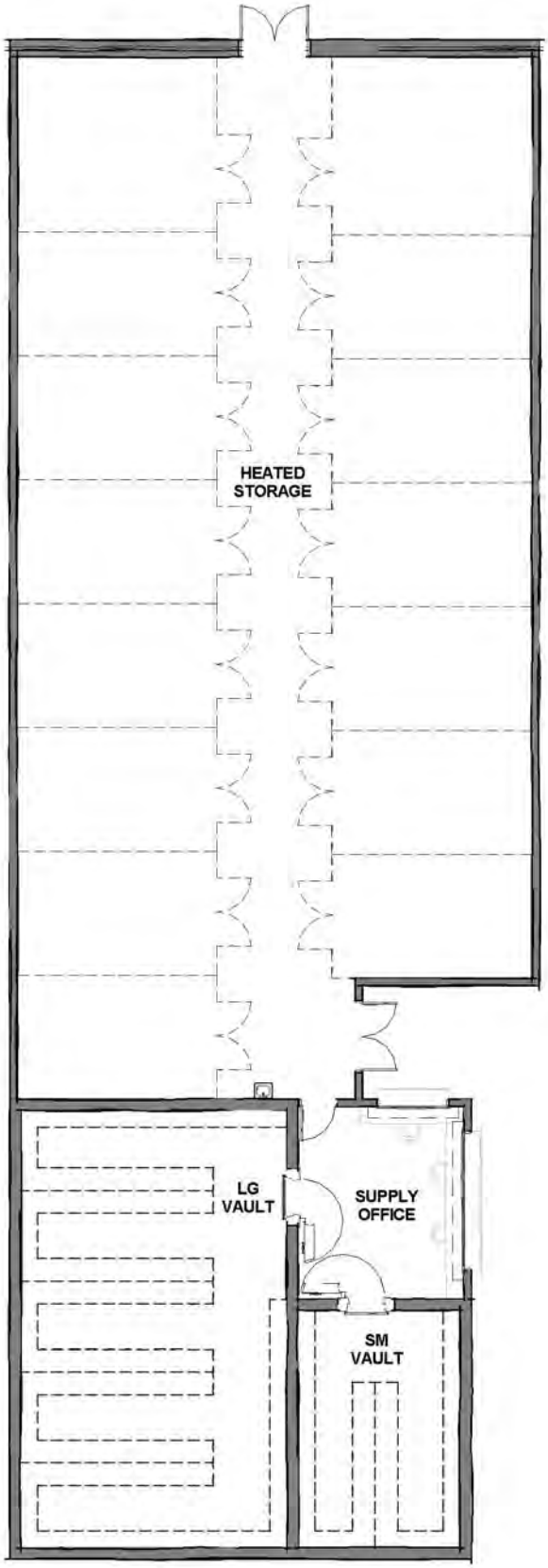
Voice:
- Telephone and Intercom at issue desk.

Data:
- Internet.

AV:
- None required.

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Metal shelving.
- Full-height wire mesh partitions and gates and locks as required to create a minimum of 12 cages.
- Cages to be secured top and bottom with no space to “fish-out” items within.

NON-GOVERNMENT PROVIDED FURNISHINGS AND EQUIPMENT
- None required.


HEATED
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SUPPLY
OFFICE
SM
VAULT

S 2.3 FIELD LOCKER SPACE (TA-50)

AREA
2,144 SF

FUNCTION
- Field Equipment Storage used for instructional training of unit personnel and for unit meetings

ADJACENCIES
- Adjacent to Multi-Purpose Room

ARCHITECTURAL

Ceiling Height:
- 9’-0” AFF

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber Base
- Walls: Painted CMU with epoxy wainscot
- Ceiling: Acoustical panel ceiling

Fenestration:
- None

Door:
- Solid core wood door with Commercial / Keyed hardware
- Exterior Access

Training Assemblies:
- One 12’ x 4’ markerboard
- Storage space for training aids, AV equipment, and extra chairs
- Storage for sand table

MECHANICAL

HVAC Requirements:
- Heating, ventilation, and air conditioning
- Noise Coefficient Balance = <45
- 0.5 CFM per SF

Design Temperature:
- Heating Occupied = 68°

- Cooling Occupied = 74°
- Heating Unoccupied = 55°
- Cooling Unoccupied = 85°

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 1 duplex GFCI

Lighting:
- LED 30FC

Voice:
- Intercom

Data:
- Internet connection and other data systems should be provided at multiple locations

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Movable stacking tables and / or chairs for (36)
- (150) Lockers, Field Equipment Lockers (30) 42” W x 24” D x 30” H with lock hasp stacked 2-high
- (1) Sand table

S2.4L GENERAL PURPOSE TRAINING BAYS

AREA
1 @ 3,168 SF

FUNCTION
This General Purpose Training Bay (GPTD) is used to train mechanics for field level maintenance. Activities include training in removal and replacement of equipment components such as engines and transmissions.

ADJACENCIES
- Adjacent to Military vehicle parking

ARCHITECTURAL

Ceiling Height:
- 24’-0”

Finishes:
- Floor: 6” Concrete slab with clear liquid hardener / sealer finish for vehicles
- Base: None
- Walls: Painted CMU
- Ceiling: Painted exposed structure

Fenestration:
- Natural lighting

Door:
- Overhead coiling bay doors (2) 16’ x 16’
- Hollow Metal

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating and ventilation
- Noise Coefficient Balance = <45
- 1.5 CFM per SF
- Vehicle tailpipe exhaust system
- No cooling

Design Temperature:
- Heating Occupied = 60°
- Heating Unoccupied = 55°

Plumbing Fixtures:
- Hot and cold water tempered
- Emergency shower
- Emergency eye wash
- Trench drains with oil / water separator
- Compressed air
- Sink
- Electric drinking fountain
- Hose bibs

ELECTRICAL / COMMUNICATIONS / AV

Power:
- Convenience outlets @ 1 duplex per 10 LF of wall
- Additional power for programmed equipment

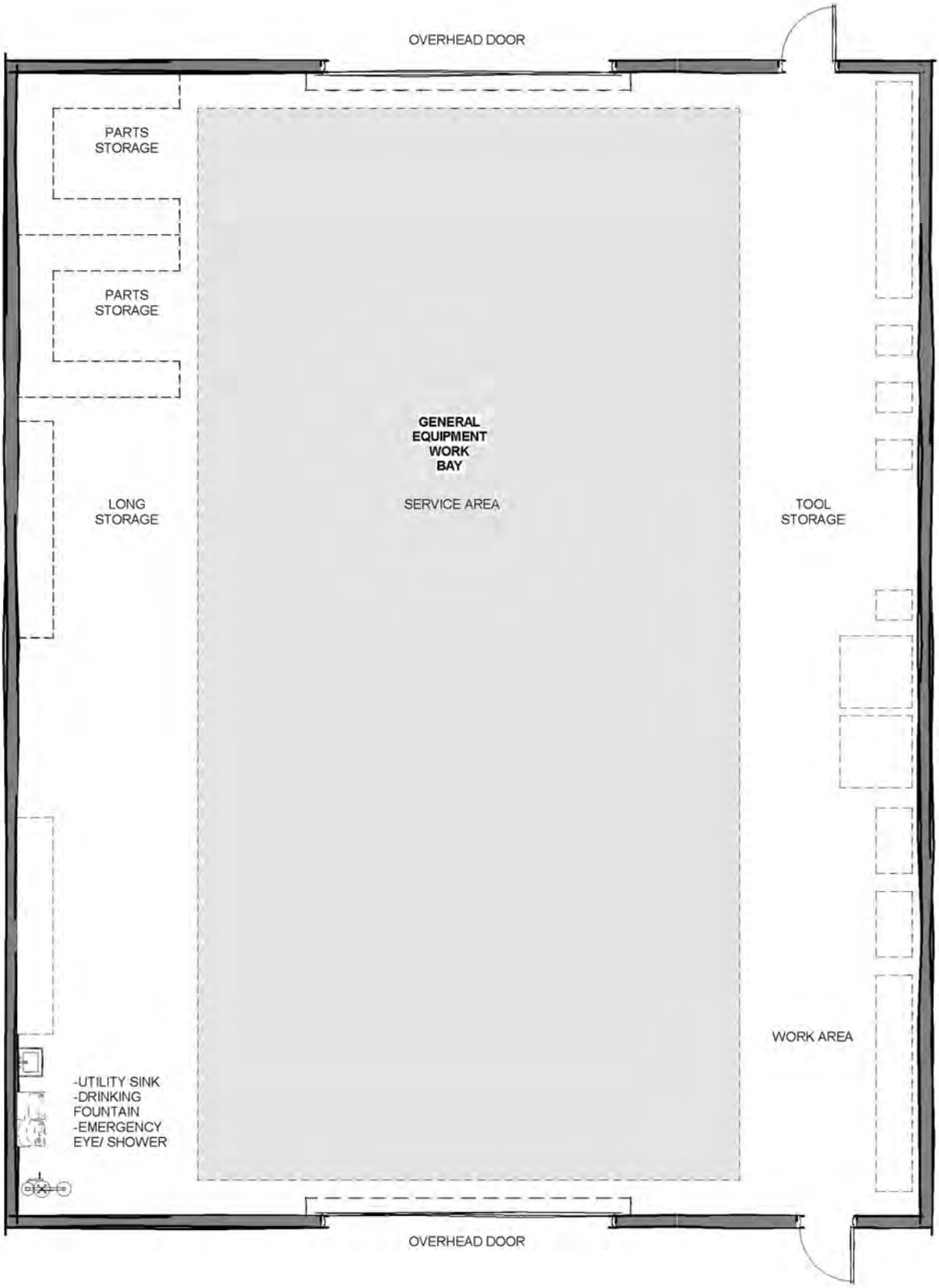
Lighting:
- LED 50FC

Voice:
- Telephone and Intercom

Data:
- Internet

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Engine Lift



S3.1 MAINTENANCE AND STORAGE

AREA
865 SF

FUNCTION
The Facility Maintenance and Storage Area includes space for custodial and general building storage, as well as exterior storage for grounds equipment. One custodial room may be provided per floor.

ADJACENCIES
- Locate on exterior wall

ARCHITECTURAL

Ceiling Height:
- 9’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Walls: Painted gyp with painted epoxy wainscot
- Ceiling: Exposed construction, painted

Fenestration:
- None required

Door:
- Hollow Metal door with Commercial / Keyed Hardware
- Overhead door for equipment

Training Assemblies:
- None required
- Office Space for 1

MECHANICAL

HVAC Requirements:
- Heating and Ventilation

Plumbing Fixtures:
- (1) Mop Sink

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Convenience outlets @ 1 duplex GFC I

Lighting:

- LED 30FC

Voice:

- Telephone and Intercom

Data:

- Internet

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- Shelving along one wall
- (1) Wall-mounted broom and mop rack

S3.2a MECHANICAL ROOM

AREA
1 @ 1,141 SF

FUNCTION
The mechanical room should be designed to house the specific mechanical equipment selected for the facility.

ADJACENCIES
- Locate on exterior wall

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Walls: Painted gyp with painted epoxy wainscot
- Ceiling: Exposed construction, painted

Fenestration:
- None required

Door:
- Hollow Metal door with Commercial / Keyed Hardware

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating and ventilation

Design Temperature
- Heating Unoccupied = 55 °

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Provide power for programmed equipment

Lighting:

- LED 30FC

Voice:

- Telephone and Intercom

Data:

- Internet

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- None required

S3.2b ELECTRICAL ROOM

AREA
1 @ 300 SF

FUNCTION
The electrical room will house the required electrical equipment for the facility

ADJACENCIES
- Locate on exterior wall

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Walls: Painted gyp with painted epoxy wainscot
- Ceiling: Exposed construction, painted

Fenestration:
- None required

Door:
- Hollow Metal door with Commercial / Keyed Hardware

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Heating and ventilation

Design Temperature
- Heating Unoccupied = 55 °

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Provide power as required

Lighting:
- LED 30FC

Voice:
- Telephone and Intercom

Data:
- Internet

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- None required

S3.3 TELECOM / IT

AREA
1 @ 289 SF

FUNCTION
The Telecom / IT room will house the required telephone and information technology equipment for the facility.

ADJACENCIES
- Not required

ARCHITECTURAL

Ceiling Height:
- 10’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Rubber Base
- Walls: Fire treated plywood backer board
- Ceiling: Exposed construction, painted

Fenestration:
- None required

Door:
- Hollow Metal door with Commercial / Keyed Hardware

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Dedicated heating, ventilation, and air conditioning

Design Temperature
- Heating Unoccupied = 55 °
- Cooling Unoccupied = 85 °

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Provide power as required for equipment specified

Lighting:

- LED 30FC

Voice:

- Telephone and Intercom

Data:

- Internet

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- Phone and data switches
- UPS
- Equipment cabinets

S4.1 DETACHED CONTROLLED WASTE HANDLING

AREA
1 @ 300 SF

FUNCTION
Temporary storage of waste materials

ADJACENCIES
- Appropriate distance from other buildings for hazardous materials

ARCHITECTURAL

Ceiling Height:
- As required for forklift traffic

Finishes:
- Floor: Reinforced concrete with chemical and moisture resistant epoxy finish, liquid tight, and chemical resistant sealants at any floor joints, and a spill/leak containment raised edge.
- Base: None
- Walls: CMU or concrete
- Ceiling: Painted exposed

Fenestration:
- None

Door:
- One personnel door
- One 6’-0”W x 10’-0”H overhead coiling door for forklifts
- One 6’-0”W x 8’-0”H overhead coiling door for non-forklift operators

Training Assemblies:
- None required

MECHANICAL

HVAC Requirements:
- Adequate ventilation
- No heating or cooling

Design Temperature:
- No requirements

Plumbing Fixtures:

- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Explosion resistant

Lighting:

- LED, 20 FC

Voice:

- None required

Data:

- Data

AV:

- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT

- None required

S4.2 DETACHED UNHEATED STORAGE SPACE

AREA
484 SF

FUNCTION
Storage of Unit equipment

ADJACENCIES
- Access to Loading Dock

ARCHITECTURAL

Ceiling Height:
- 14’-0” min.

Finishes:
- Floor: Flat reinforced sealed concrete, slab suitable for high stack forklift traffic and load support
- Base: None
- Walls: Durable wainscot, min 6’ high
- Ceiling: Exposed Structure

Fenestration:
- None required

Door:
- One personnel door
- One 6’-0”W x 10’-0”H overhead coiling door for fork lift access
- One 10’-0”W x 10’-0”H overhead coiling door for vehicle operations

Training Assemblies:
- Metal shelving.

MECHANICAL

HVAC Requirements:
- No heating or cooling

Plumbing Fixtures:
- None required

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Convenience outlets at one per wall

Lighting:
- LED, 20 FC

Voice:
- None required

Data:
- None required

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- None required

S4.3 DETACHED FLAMMABLE MATERIAL

AREA
100 SF

FUNCTION
Consolidated storage of bulk solid flammable materials (not fuels). Can be a separate prefabricated metal building or constructed out of CMU.

ADJACENCIES
- Adjacent to controlled waste handling

ARCHITECTURAL

Ceiling Height:
- 8’-0”

Finishes:
- Floor: Concrete with clear liquid hardener / sealer finish
- Base: Liquid tight, 4” high curb
- Walls: Painted CMU
- Ceiling: Exposed structure - painted

Fenestration:
- None

Door:
- Hollow Metal with Commercial / Keyed Hardware

Training Assemblies:
- None

MECHANICAL

HVAC Requirements:
- Ventilation required (exhaust fan and wall/door louver)
- No cooling

Plumbing Fixtures:
- None required
- No floor drain

ELECTRICAL / COMMUNICATIONS / AV

Power:

- Convenience outlets @ 1 duplex Explosion proof

Lighting:
- LED 30FC

Voice:
- None required

Data:
- None required

AV:
- None required

GOVERNMENT FURNISHED/GOVERNMENT INSTALLED EQUIPMENT
- Shelving (industrial wire mesh)

4.0 Functional Planning

A. Training

Unit training is conducted on an individual and small group basis. Dedicated training spaces include classrooms, library/learning center, physical fitness room and vehicle training work bays. The primary large group training area is the assembly hall, a large high-ceiling multipurpose space.

B. Storage

Storage for both unit and individual equipment is required. Individual soldiers have lockers for their personal equipment storage while non-sensitive unit equipment is stored in an open area subdivided by wire mesh partitions. The secure material for each unit such as weapons and classified data is stored in a vault. For equipment that is not temperature sensitive, a separate storage building, provided with minimal heat is authorized and planned.

C. Common Use Space

Common use spaces include the building lobby and circulation, toilets, facilities maintenance, and mechanical/electrical rooms. The readiness center space allowance also includes a commercial-grade kitchen. Toilet spaces will be sized as necessary to meet the IBC with Washington State Amendments plumbing fixture requirements and accessibility codes. As Guard training requires bulky personnel equipment and rapid movement of material and gear, common corridors will be sized to permit unimpeded two-way traffic. This establishes a minimum of 7’-0" clear in major corridors and 5’-0" for minor hallways.

Mechanical and electrical areas will be sized to contain the planned equipment with sufficient area for maintenance and servicing. Adequate clearances to permit removal of large components will also be provided.

The kitchen is intended to exactly meet the NGB “Small Kitchen” standard both in terms of layout and equipment. The standard plan published by NGB includes space for a serving corridor, food preparation, food storage, scullery, office, a unisex toilet, and a small janitor closet.

5.0 Functional Arrangement

The conceptual plans presented in this report were developed in direct response to both the internal functional requirements of the spaces contained in the building and as a response to the AT/FP (anti-terrorism/force-protection) conditions of the site. Initial planning included scaled “bubble diagrams” of all the functional areas. These diagrams were reviewed for operational function by the core planning team and representatives of the assigned units.

Based on review of the diagrams, a number of plan options addressing functional interrelationships were developed and discussed, with the preferred option being presented herein.

These conceptual plans shall be used for a general reference of space relationship only. The design build team is responsible to develop their own design to satisfy the programmatic requirements.

A. Functional Considerations

Some of the functional considerations necessary to arrive at the optimum functional configuration are:

1. Orientation of the main public entry should be towards the adjacent public access in order to maximize the visual presence of the building for recruiting and community awareness. At this location Anti-terrorism/Force Protection features must be effective yet visually subtle.

2. The plan organization shall reinforce Anti-terrorism/Force Protection standards.

3. All areas of potential expansion should be located along the perimeter of the building to permit ease of expansion.

4. As the primary public use space is the assembly hall, it should be centrally located and the circulation from the main entrance lobby must be clear and obvious.

5. Visual observation of the entrance lobby from a gatekeeper office is considered a fundamental reception and security. This gatekeeper must be directly adjacent to both the main entrance vestibule and the lobby.

6. The administrative space areas within the readiness center should maximize unit integrity and control with dedicated spaces.

7. “Industrial” spaces such as the vehicle training work bays, unit storage, and assembly hall should be grouped together to permit easy access from military and service vehicles.

8. Service areas such as toilets, mechanical, electrical, and telecom rooms should be stacked to maximize efficiency and minimize cost.

9. Mechanical rooms should be located to permit effective zoning of like spaces.

10. Rectilinear shapes have been used for the functional spaces within the building and from the building form itself to keep the building as compact as possible.

11. To reduce energy use, the building should maximize the use of daylight. The depth of the building should be optimized for daylight at the interior and opportunities for clerestory lighting of high-volume spaces should be explored. Daylighting should be filtered at the south elevations.

This diagram represents the preferred programmatic relationships by the National Guard during the pre-design. The final design of the building will be done by the Design Team.

6.0 Project Specific Room Criteria

In addition to the general design guidelines given for each type of space in the NG 415-1, the following are project specific design criteria formulated during the pre-design process and in consultation with representatives from the assigned units and shall be incorporated. Additional space specific requirements can be found in Section V. 10 Room Data Sheets.

A. Kitchen

The Tri-Cities Readiness Center will have a standard “Small” kitchen with additional dry storage and one more commercial refrigerator. The Kitchen Equipment Schedule and reference plan of NG 415-1 and NG 415-5 are incorrect. A Kitchen Equipment Schedule, reference plan and equipment catalog cuts are included in Appendix 2 J.

B. Assembly Hall

Contrary to the diagrams and descriptions in the DG 415-1, the Assembly Hall at the will have no operable partitions and no built-in AV equipment.

C. Classrooms / Learning Center

Small format classrooms and learning center shall include a folding partition that is tested and verified to meet a NIC rating of 40 as verified by field testing.

D. Locker Rooms

The space referred to as Lockers or Personal Equipment Storage is not used for dressing and will include the specific lockers (Lyon 2 Tier 1100TA50 or equal).

E. Unit Storage

Wire mesh partitions shall be 9 gage and require gaps between partition and adjacent structure no larger than 4”.

7.0 Future Requirements

As the type and composition of units in the National Guard are subject to change, the readiness center must be designed to accommodate both the change in function of the units housed as well as accommodating expansion. Anticipate the future growth listed below in the building design.

1.	Administrative Space	2,440 sf
2.	Toilets/Shower	1,500 sf
3.	Classrooms	1,720 sf

4.	Unit Storage Space (Incl. Arms Vault)	3,900 sf
5.	Locker Room Space	1,856 sf
	Subtotal:	11,416 sf

The facility can grow for:

Maintenance and Storage	3%
Mechanical and Electrical	5%
Telecom/IT	1%
Circulation	15%
Structural	10%

For a total addition of up to 17,575 square feet.

8.0 Codes & Regulations

A. Building Codes Facilities Criteria

See Section IV 2.0.

B. Building Code Analysis

A full and complete code analysis will be required in the design phase of the project however, an initial code evaluation is critical in pre-design to determine if there are any significant regulatory impediments to the proposed project. All code categories including the occupancy discussion below should be confirmed with the City of Richland authority having jurisdiction.

1. Governing Code:
   International Building Code, 2015 Edition with Washington State Amendments

2. Occupancy Type (Chapter 3):
   The Readiness Center primary building will be a mixed occupancy with the primary use being Business Group B. The assembly hall and adjacent kitchen will be classified Assembly Group A-2 due to its food service component. Personal equipment storage will be classified Assembly Group A-3. Unit storage will be classified as Moderate-Hazard Storage Group S-1 occupancy. Differing occupancies must be separated from adjacent uses per 508.4.4 (see Table 508.4).

   The unheated storage building will be Moderate-Hazard Storage Group S-1 occupancy.

3. Special Use (Chapter 4):
   As the general purpose training bays are used for light maintenance and repair they will be subject to the requirements for Repair Garages (406.8).

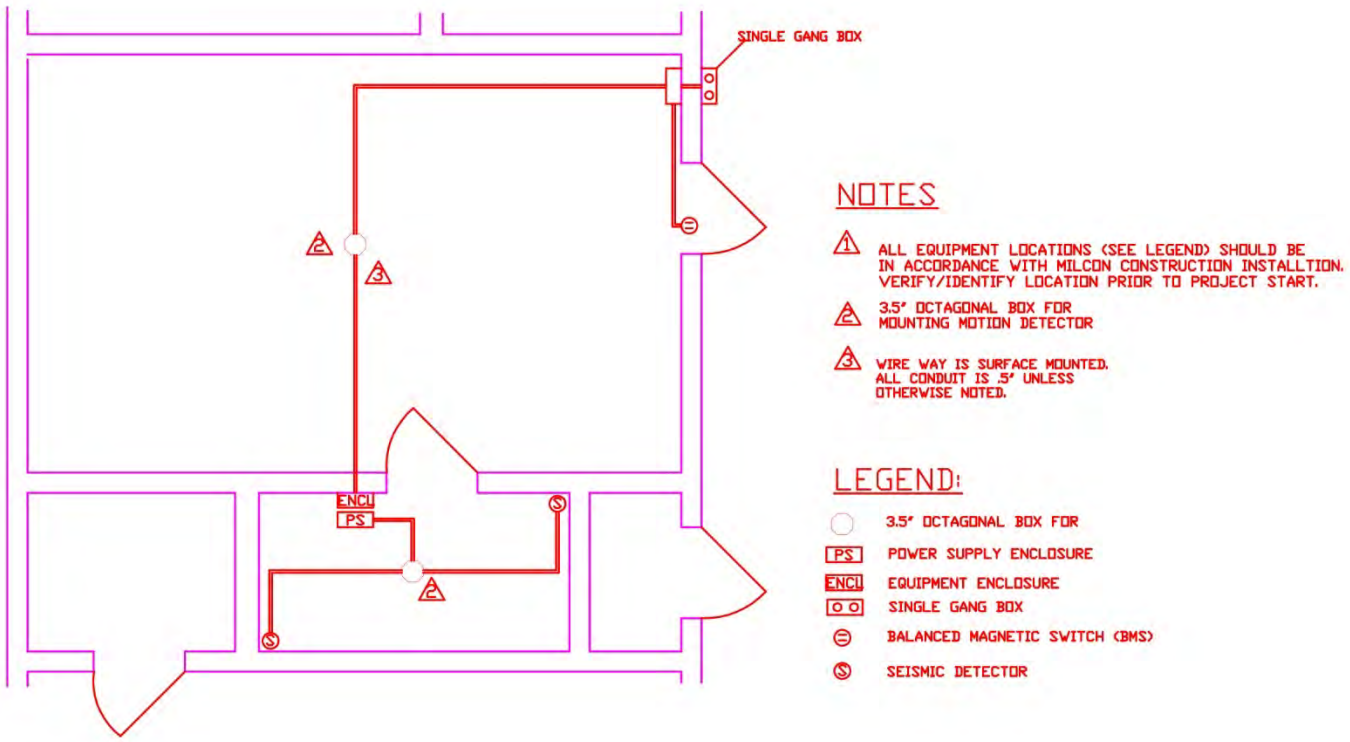
   Building Construction Type (Chapter 6)

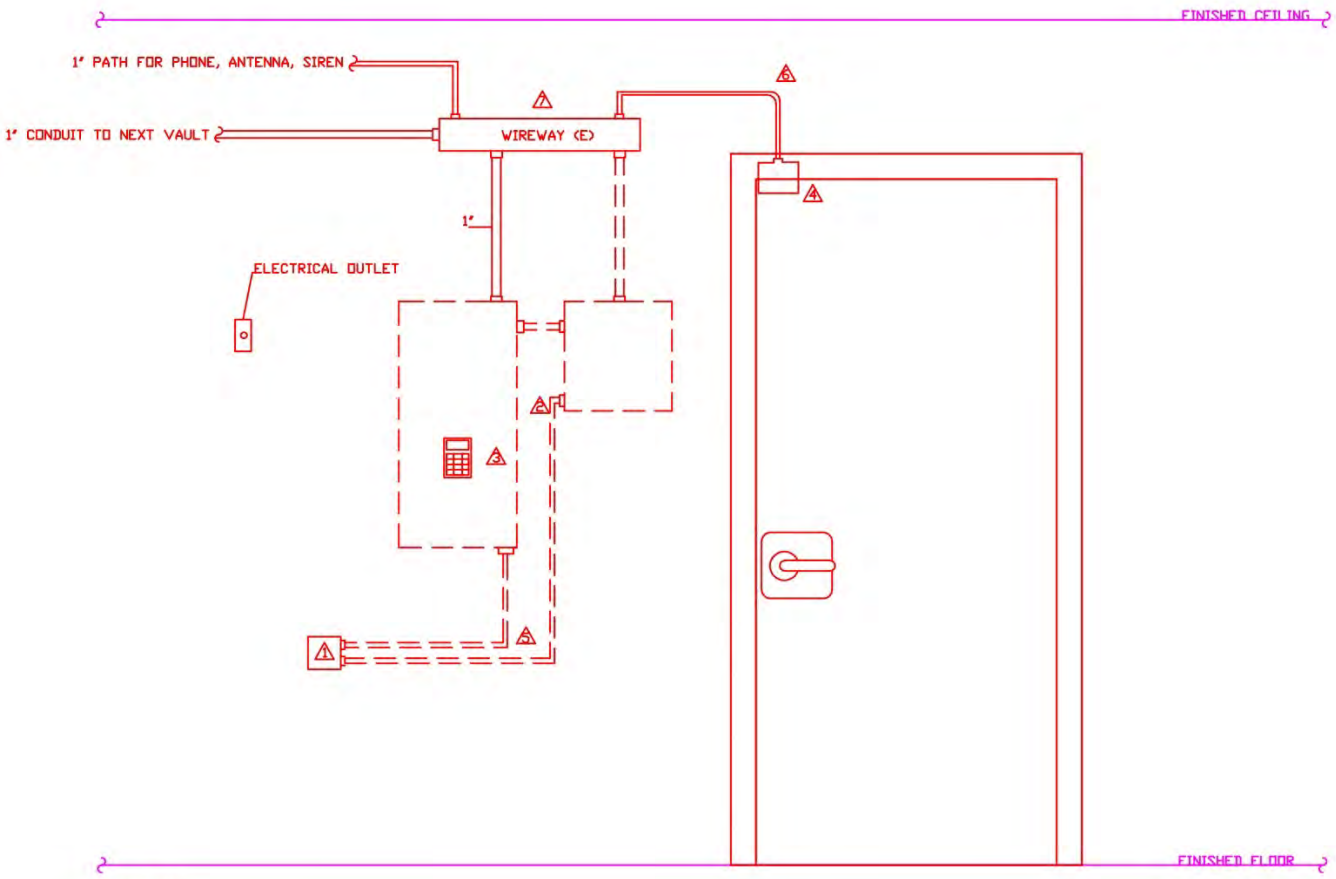
   The readiness center will be constructed of non-combustible materials, fully sprinklered and will be classified as Type-II B construction minimum.

   The unheated storage building will be classified as Type V-B.

9.0 Vault Security Layout

The following diagrams show the vault security equipment layout and wire ways.

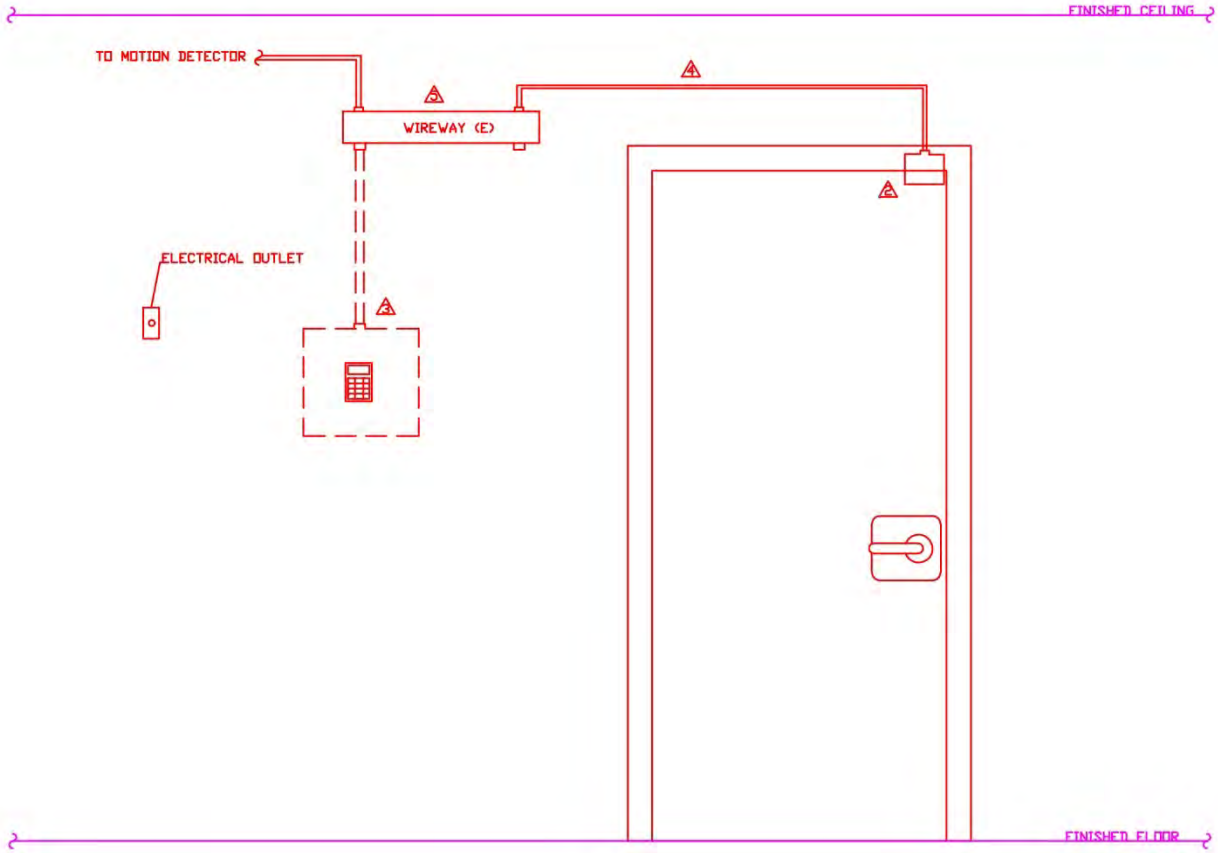




EQUIPMENT ELEVATION
VAULT NO. 1 (SECURE SIDE)

NOTES:

1. SURFACE MOUNTED AC POWER.
2. AC POWER MUST ENTER THROUGH A CONNECTOR WITHIN THE HIGH VOLTAGE QUADRANT.
3. KEYPAD WILL BE MOUNTED ON THE OUTSIDE FRONT COVER OF THE SECURITY PANEL ENCLOSURE.
4. DOOR HARDWARE MUST NOT INTEFERE WITH PROFILE OF DOOR FRAME AND MUST MOUNT AS CLOSE AS POSSIBLE TO THE EDGE OF THE DOOR OPENING. DO NOT COVER EMERGENCY ACCESS PANEL.
5. DASHED LINES USED TO SHOW WORK BY OTHERS.
6. ALL CONDUIT IS .5" UNLESS OTHERWISE NOTED.
7. WIRE WAY IS SURFACE MOUNTED



NOTES:

1. KEYPAD WILL BE MOUNTED ON THE OUTSIDE FRONT COVER OF THE SECURITY PANEL ENCLOSURE. ZONE EXPANDER, OUTPUT EXPANDER AND DATA BUS HUB ARE MOUNTED INSIDE OF EQUIPMENT ENCLOSURE.
2. DOOR HARDVARE MUST NOT INTEFERE WITH PROFILE OF DOOR FRAME AND MUST MOUNT AS CLOSE AS POSSIBLE TO THE EDGE OF THE DOOR OPENING. DO NOT COVER EMERGENCY ACCESS PANEL.
3. DASHED LINES USED TO SHOW WORK BY OTHERS.
4. ALL CONDUIT IS .5" UNLESS OTHERWISE NOTED.
5. WIRE WAY IS SURFACE MOUNTED

EQUIPMENT ELEVATION
TYPICAL SUPPLY ROOM
(SECURE SIDE)

APPENDIX

APPENDICES

I. Military Guide and References Materials:

A Army National Guard DG-415-1 Readiness Center Design Guidelines (01 June 2011)
B National Guard Bureau NG 415-12 Chapter 2 ARNG Facilities Allowances (25 Jan 2015)
C DD – 1390 / 1391
D UFC 4.010.01- DOD Minimum Anti-Terrorism Standards for Buildings (12 Dec 2018)
E Army National Guard DG 415-5 – General Facilities Guide (1 June 2011)

II. Exhibit Materials:

A Request for Qualifications
B Geotechnical Report
C Topographic Survey Report (pre-demo and post demo surveys)
D ARNG Environmental Checklist
E Archaeological Survey
- Letter of Determination Assessment

F Clean Air RONA
G Biological Survey Report
H Environmental Site Assessment
I Soil Sampling for Contamination
J Kitchen Equipment Schedule, Plan & Products Information
K Specification Section 23 09 00 Instrumentation and Control For HVAC

III. Proposal Forms:

A Release of Liability for Use of CAD Drawings
B Acknowledgment of Receipt of RFP and/or Addendum
C Energy Life Cycle Cost Spreadsheet
D Base Contract Price Proposal Form
E Price Proposal Cost Estimate
F Alternates Price Proposal Cost Estimate
G Exceptions/Qualifications to RFP Scope
H Proposal Stage Memorandum of Understanding (Honorarium Agreement)
I Design Builder/ Owner Responsibility Matrix
J Diverse Business Inclusion Plan