

**Project 2018-254
Clark College, Advanced
Manufacturing Center (AMC)**

Attachment 3:

Attachment B to the Contract

Phase 1 and Phase 2 Scope of DB Services

Attachment 3A: Responsibility Matrix

Attachment 3B: Milestone Delivery

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PHASE 1 SCOPE OF SERVICES

PART 1 PROGRAM VALIDATION PERIOD

1.01 SUMMARY OF WORK

- A. This section sets forth the scope of work, the deliverables, and the execution activities for Phase 1.
- B. Design-Builder shall provide the services set forth in the Responsibilities Matrix, attached as Appendix A. The Responsibilities Matrix shall be reviewed during Phase 1 of the Contract and an updated Responsibilities Matrix will be provided by Design-Builder with the GMP Proposal.

1.02 PHASE 1 SCOPE

- A. Design Builder shall review, analyze, and validate the Owner/DES Project Criteria, the MADCC, the Project Schedule and any other information provided by the Owner/DES regarding the Project.
- B. Design Builder shall conduct such site investigations, environmental assessments, review of regulatory and legal authority and restrictions, and all other actions and review and assess other information as reasonably necessary to verify and validate the Owner/DES Project Criteria.
- C. Design Builder shall review, analyze and validate the concepts for the Project elements as shown in the Owner/DES Project Criteria. In addition, Design Builder shall work collaboratively with the Owner/DES and the Stakeholders to examine whether new concepts will better maximize the Owner/DES Project Goals and achieve Design Excellence, and if approved by the Owner/DES, further develop such new concepts and incorporate them into the Project.
- D. Design-Builder will study the sustainability objectives as stated in the Pre-Design Report and include aspirational goals for on-site renewable generation, energy storage and LEED Gold certification.
- E. Design Builder shall engage and work collaboratively with the Owner/DES and the Project Stakeholders to obtain input regarding the Project design and functionality, as well as other major Project elements and to develop the Basis of Design Documents.
- F. Design Builder shall engage and work collaboratively with the Owner/DES and the Project Stakeholders to progress the design to a sufficient state to develop the Basis of Design Documents, the Guaranteed Maximum Price, and the Project Schedule. The timing of the GMP Proposal and the percentage complete of the designs and specifications will be jointly determined by the Owner/DES and the Design-Builder.
- G. Design Builder shall provide the Deliverables during Phase 1 as set forth in Sections 2.01.A. and B. herein. Deliverables shall be provided in a format acceptable to the Owner/DES. Design Builder must use the specific computer programs or formats, determined by Owner/DES, to be used for submittals.
- H. At the conclusion of Phase 1, Design Builder shall prepare a GMP Proposal, including Phase 2 Deliverables and any modifications and/or clarifications to the Owner/DES Project Criteria as set forth in Section 2.01.B.

1.03 VALIDATION OF INFORMATION

- A. Design builder shall perform such assessments, reviews and investigations of the owner's project criteria, and specifically any prescriptive or design information, as determined by design builder to be reasonably necessary to validate the owner's project criteria, the commercial terms, and the owner's project criteria.
- B. Additional reviews, assessments and investigations of the owner's project criteria shall include, if reasonably necessary, the following:
 - 1. Constructability, including proposed methods of construction, of the proposed structures in the Owner/DES Project Criteria,
 - 2. Verification of the architectural, engineering and other assumptions and calculations in any the Owner/DES Project Criteria,
 - 3. Examination and verification of actual site conditions as set forth below,
 - 4. Verification of any surveys,
 - 5. Review and assessment of all applicable legal and regulatory rules and restrictions on the Project,
 - 6. Verification and validation of assumptions regarding the establishment of the Commercial Terms, including but not limited to the GMP, the Project Schedule, and the Basis of Design Documents.
- C. Design Builder shall perform site investigations as necessary for Design Builder to verify the Owner/DES Project Criteria and to validate the Commercial Terms and the Owner/DES Project Requirements. Design Builder shall visit the Site and examine thoroughly and understand the nature and extent of the Work, site, locality, actual conditions, as-built conditions, and all local conditions and federal, state, and local laws and regulations that in any manner may affect cost, time, progress, performance or furnishing of the Work or which relate to any aspect of the design and the means, methods, techniques, sequences or procedures of construction to be employed by Design Builder and its safety precautions and programs. Such additional investigations shall be conducted to sufficiently identify or characterize utility locations, site conditions, contaminated materials, and observable or concealed conditions in the existing facilities, including but not limited to the following:
 - 1. Develop Owner/DES-provided site survey requirements and submit them to the Owner/DES with adequate time prior to the need for the survey results. If the Design-Builder needs the owner to do a survey, the DB must request the information needed in time to get meaningful information back to provide the final report.
 - 2. Undertake surveys, investigations and analysis to provide necessary data and information for project design including sufficient information to evaluate design alternatives.
 - 3. Review Owner/DES-provided archaeological site survey and literature and data for potentially archaeologically significant sites and conditions and identify any deficiencies. The archaeological documentation consists of communications with local tribes and DAHP and is included in the Pre-Design Report.
 - 4. Perform soils sampling, testing, and analysis to provide necessary data and information for Project design, provide a final Geotechnical Report, test for contamination during this process, and determine best practices for mitigation of contamination (if required).

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5. Subsurface investigation work, including the disturbance of existing vegetation, cannot proceed until all required permits have been obtained.
- D. Design Builder will conduct or obtain and understand all such examinations, investigations, explorations, tests, reports and studies, in addition to or to supplement those referred to above, that pertain to the subsurface conditions, as-built conditions, underground facilities and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, time, progress, performance or furnishing of Work, as Design Builder considers necessary for the performance or furnishing of Work for the Commercial Terms and in accordance with the Owner/DES Project Requirements as well as other terms and conditions of the Contract Documents; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required from the Owner/DES by Design Builder for such purposes.
 - E. All reports or analyses generated by Design Builder's testing, inspections, and investigations, including but not limited to geotechnical evaluations and hazardous materials studies, shall be provided to the Owner/DES promptly, within seven (7) business days, after such reports are analyzed and generated
 - F. Design Builder shall be responsible for ensuring that its design documents and construction work accurately conforms to, and interfaces with, the existing conditions and shall not request a change or claim for unforeseen or concealed conditions except as provided under the provisions of the contract.
- 1.04 DEVELOPMENT OF BASIS OF DESIGN DOCUMENTS
- A. Design Builder shall manage the design process in a collaborative, efficient, and coordinated manner and conduct design workshops as required. The Basis of Design Documents will establish the scope of the Work and provide the basis for the GMP. The Basis of Design Documents must be consistent with the Owner/DES Project Criteria, unless the Owner/DES has consented to modify its requirements in writing through a Change Order, Field Authorization, or other written means allowed by the Contract Documents.
 - B. Design Builder shall provide for an orderly and timely approval process by the Owner/DES and third parties, document review comments from the Owner/DES and third parties, and take appropriate action.
 - C. The Owner/DES will review and comment on the Design Materials in a timely fashion. The Design-Builder will allow adequate time for the Owner/DES to review the Design Materials, which shall not be less than 10 business days.
 - D. Design Builder shall submit a written response to the Owner/DES design review comments, describing the action taken for each comment. Design Builder shall, in a timely fashion, bring to the attention of the Owner/DES areas where new technologies, such as BIM or Design-Build processes, may require modifications to these requirements.
 - E. By submitting Design Materials, Design Builder represents to the Owner/DES that the Design Materials may be designed and constructed within current Commercial Terms and in accordance with the Owner/DES Project Criteria. Notwithstanding the above, Design Builder may propose Designs, Plans or other Submissions that may alter a Commercial Term or the Owner/DES Project Criteria; however, with any such Design Materials, Design Builder must provide notice pursuant to Article 10 of the General Conditions.
 - F. Design Builder shall use the collaboratively established project budget as a design tool and design to the budget rather than estimate the cost of the project after the design has been established. Prior to submitting the Design Materials to the Owner/DES, the Design-Build Team will conduct a process

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that identifies project elements, systems or materials that could be designed and/or constructed more efficiently or less costly in another manner, or that could more effectively achieve the Project Goals if designed and/or constructed in another manner. Design-Builder will not submit Design Materials to the Owner/DES that cannot be constructed as shown in the drawings, are not within the Commercial Terms or the Owner/DES Project Criteria, or are discontinued by the Manufacturer. Therefore, prior to submitting Design Materials to Owner/DES, the Design-Build Team shall evaluate the Design Materials to identify such issues.

1.05 DEVELOPMENT OF GMP

- A. The forecasting and development of accurate project cost estimates throughout each phase of the Project is vital to the Owner/DES financial management strategy. The Owner/DES relies on the Design Builder to provide and validate current and detailed cost estimates and forecasts that will be incorporated into the overall cost controls for the Owner/DES.
- B. Throughout the Project, Design Builder will update estimates and forecasts and provide data to the Owner/DES to reflect real time information. Design Builder will provide all pricing, estimates and other data used to develop the Commercial Terms on an open and transparent basis. The project controls system used by the Design Builder shall be acceptable to the Owner/DES and will be capable of being broken down and reported in a number of different work breakdown structures, including but not limited to organizing the financial data by cost element codes, subcontracts, vendors, Construction Document packages, etc.
- C. The Design Builder will coordinate the development of the GMP with the development of the Basis of Design Documents as well as the Project Schedule so that the Owner/DES may obtain an accurate GMP within the Project Budget.

1.06 DEVELOPMENT OF PROJECT SCHEDULE

- A. The forecasting and development of the Project Schedule, including but not limited to the project phasing and Schedule of Values, is a vital element of the Design Builder's ability to deliver this Project in a timely fashion. The Owner/DES will rely on the Design Builder's scheduling information to coordinate with its Stakeholders, schedule activities in and around the Project, and manage its campus.
- B. Design Builder shall provide the Owner/DES with frequent updates to the project schedule in a format acceptable to the Owner/DES.

PART 2 PHASE 1 DELIVERABLES

2.01 SUBMITTALS

- A. Submittals after Phase 1 Notice to Proceed: Design Builder shall provide the following submittals within 5 days after the notice to proceed with Phase 1, unless otherwise noted in the Phase 1 Schedule.
 - 1. Phase 1 Schedule pursuant to Section 2.02.A.
 - 2. BIM Protocol pursuant to 2.03.A.
 - 3. Preliminary Schedule of Values for the Project Budget pursuant to Section 2.05.A.1 and B.1
 - 4. Subcontractor Procurement Procedure pursuant to Section 2.06.A
 - 5. Project Specific Safety Plan for Phase 1 activities pursuant to Section 2.07.A.

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- B. Submittals During Phase 1: Design Builder shall provide the following submittals during Phase 1.
 - 1. Within 2 weeks of the Notice to Proceed for Phase 1:
 - a. Preliminary Project Schedule pursuant to Section 2.02.B
 - b. In collaboration with the Owner/DES, establish communication for design schedule and collaborative meeting frequency, at a minimum of every week.
 - 2. On a monthly basis:
 - a. Updates to the Phase 1 Schedule, Schedule of Values and Project Schedule pursuant to Section 2.02.B.2.
 - b. Preliminary Design Materials Packages pursuant to Section 2.04.A.
 - c. Preliminary estimating information pursuant to Section 2.05.A.
 - d. Preliminary Permitting Strategy Plan.
- C. GMP Proposal: At the conclusion of Phase 1, Design Builder shall provide a GMP Proposal that includes the following Deliverables.
 - 1. Proposed GMP pursuant to Section 2.05C.
 - a. List of Assumptions and Clarifications (2.05.C.2.a)
 - b. Material Changes (2.05.C.2.b)
 - 2. Basis of Design Documents pursuant to Section 2.04.
 - 3. Project Schedule pursuant to Section 2.02.D.
 - 4. Schedule of Values pursuant to Section 2.05.C
 - 5. BIM Model and Execution Plan pursuant to 2.03.B.
 - 6. Subcontractor Procurement Procedure pursuant to Section 2.06
 - 7. Project Specific Safety Plan pursuant to Section 2.07.B.
 - 8. Project Phasing/Staging Analysis pursuant to 2.08.
 - 9. Permitting Strategy Plan pursuant to Section 2.09
 - 10. Diverse Business Inclusion Plan Update pursuant to 2.10.
 - 11. QA/QC Plans pursuant to 2.11.
 - 12. Contract Close-Out Plan pursuant to Section 2.12.
 - 13. Differing Site Conditions Report pursuant to Section 2.13.
 - 14. Updated Responsibilities Matrix pursuant to Section 2.14.

2.02 SCHEDULES

- A. Phase 1 Schedule. By the date set forth in Section 2.01.A herein, Design Builder shall provide a Phase 1 Schedule.
 - 1. Phase 1 Schedule shall show the activities of the Owner/DES and Design Builder necessary to meet Phase 1 requirements.
 - 2. Phase 1 Schedule shall be updated periodically with the level of detail for each schedule update reflecting the information then available.

Design Builder will establish the timing for schedule updates with acceptance from the Owner/DES.

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3. If an update to Phase 1 Schedule indicates that a previously approved milestone will not be met, Design Builder shall submit a corrective action plan and recovery schedule to the Owner/DES pursuant to the Contract Documents.
- B. Preliminary Project Schedule. Within the timeframe established in Section 2.01.B, Design Builder shall submit a Preliminary Project Schedule that reflects Design Builder's sequence of design, procurement and construction activities including the interrelationships of the Demolition and Construction Packages.
1. The Preliminary Schedule shall show the activities of the Owner/DES and Design Builder necessary to meet the Project completion requirements.
 2. The Preliminary Schedule shall be updated pursuant to the time frame established in Section 2.01.B with the level of detail for each schedule update reflecting the information then available.
 - a. During Phase 1, Design Builder will establish the timing for schedule Updates with acceptance from the Owner/DES.
 - b. Design Builder shall also provide updates during the development of the Basis of Design Documents.
 3. If an update to the Preliminary Schedule indicates that a previously approved milestone will not be met, Design Builder shall submit a corrective action plan and recovery schedule to the Owner/DES pursuant to the Contract Documents.
- C. Design Builder shall meet with the Owner/DES to review the Preliminary Schedule and updates. In the event that the Owner/DES has any comments relative to the Preliminary Schedule or Schedule Updates or finds any inconsistencies or inaccuracies in the information presented, it shall give prompt written notice of such comments or findings to Design Builder, who shall make appropriate adjustments to the Preliminary Schedule, its basis, or both. The parties will work collaboratively to make adjustments in the Basis of Design Document, the Project Schedule, or GMP to fit within the Owner/DES objectives.
- D. With the GMP Proposal, Design Builder shall provide a Project Schedule that will incorporate the Preliminary Schedule developed collaboratively during Phase 1 along with any updates to the schedule.

2.03 BIM MODEL AND EXECUTION PLAN

- A. BIM Protocol
1. Design Builder shall develop an appropriate technology protocol early in the project for BIM and digital information modeling. The protocol shall define the ownership, access and responsibility with respect to project information, in particular with respect to shared BIM. On a more detailed level the protocol shall develop standards for data interfaces, layering and other criteria to be developed during the validation Phase.
 2. Design Builder shall provide the BIM Protocol by the date set forth in Section 2.01.A.
- B. With the GMP Proposal, Design Builder shall submit for the Owner/DES review and approval a BIM Model plus a BIM Execution Plan which shall meet the objectives and requirements set forth in the Owner/DES Project Criteria and will include the elements set forth in Appendix C. Appendix C also sets forth the intended uses for the BIM Model.
- C. The BIM Execution Plan will provide for BIM Reviews where Design Builder will present the BIM model for review. BIM Reviews will occur in the frequency set

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forth in Appendix C during the design period and as necessary during Construction. The BIM review will generally consist of a walkthrough of the 3D model showing all systems both individually and integrated, and an identification of any clashes among disciplines. Design Builder will be responsible for administering this process and resolving any clashes in a timely fashion.

- D. Design Builder shall meet with the Owner/DES to review the proposed BIM Model and BIM Execution Plan.
1. Design Builder shall highlight any material differences between the proposed BIM Model and BIM Execution Plan and the Owner/DES Project Criteria.
 2. In the event that the Owner/DES has any comments relative to the proposed BIM Model and BIM Execution Plan or finds any inconsistencies from the Owner/DES Project Criteria or inaccuracies in the proposed BIM Model and BIM Execution Plan, it shall give prompt written notice of such comments or findings to Design Builder, who shall make appropriate adjustments to the proposed BIM Model and BIM Execution Plan.
 3. The parties will work collaboratively to make adjustments in the proposed BIM Model and BIM Execution Plan, Basis of Design Documents, Project Schedule, or GMP to fit within the Owner/DES objectives.

2.04 BASIS OF DESIGN DOCUMENTS

- A. Preliminary Design Materials. As Design Builder develops the Basis of Design Documents, Design Builder shall collaborate with the Owner/DES to submit and review the Preliminary Design Materials that will be incorporated into the Basis of Design Documents. The Preliminary Design Materials will be submitted pursuant to the Phase 1 Schedule.
1. Design Builder shall coordinate with the Owner/DES to determine the schedule for submission of preliminary Design Materials Packages to review collaboratively with the Owner/DES. Design Builder shall schedule the review of the Design Materials Packages such that the review of each package submitted is of reasonable scope for prompt and thorough review by the Owner/DES.
 2. Design Builder shall highlight any material differences between the Basis of Design Documents as they are being developed and the Owner/DES Project Criteria.
 3. In the event that the Owner/DES has any comments relative to the Design Materials or finds any inconsistencies from the Owner/DES Project Criteria or inaccuracies in the Design Materials, it shall give prompt written notice of such comments or findings to Design Builder, who shall make appropriate adjustments to the proposed Basis of Design Documents.
 4. The parties will work collaboratively to make adjustments in the Design Materials and in the proposed Basis of Design Documents to fit within the Owner/DES Project Criteria and to achieve the Owner/DES Project Goals.
- B. Milestone Deliverables.
1. Unless the parties agree in writing otherwise, Design Builder will provide the following Milestone Design Deliverables to the Owner/DES:
 - a. 20% Design Documents
 - b. 45% Design Documents (With GMP Proposal)Design-Builder must have written approval from the Owner/DES to

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- proceed with the project after submission of each of the Milestone Design Deliverables.
2. The Milestone Deliverables shall include major building elements and components as set forth in Appendix B.
 3. Design-Builder shall schedule the review of the Design Document/ Construction Packages such that the review of each package submitted is of reasonable scope for prompt and thorough review by the Owner/DES.
 4. Design-Builder shall highlight any material differences and developments between the Owner/DES Project Criteria, any interim Design Materials, and the Basis of Design Documents as the Basis of Design Documents are being developed.
 5. In the event that the Owner/DES has any comments relative to the Design Materials or finds any inconsistencies from the Owner/DES Project Criteria or discovers inaccuracies in the Design Materials, the Owner/DES shall give prompt written notice of such comments or findings to Design Builder, who shall make appropriate adjustments to the proposed Basis of Design Documents.
- C. The Owner/DES and Design Builder shall work collaboratively to develop the Basis of Design Documents. The Basis of Design Documents submitted with the GMP Proposal shall include, at a minimum, the following documents and set forth the assumptions and clarifications on which the GMP and Project Schedule are based.
1. Project Manual, which shall set forth both the general objectives for the Owner/DES, as well as specific uses for each of the project elements set forth in the Owner/DES Project Criteria.
 2. Unless the parties agree in writing otherwise, Design Builder will provide the following Milestone Design Deliverables to the Owner/DES in the Basis of Design Documents:
 - a. 20% Design Documents
 - b. 45% Design Development (With GMP Proposal)Design-Builder must have written approval from the Owner/DES to proceed with the project after submission of each of the Milestone Design Deliverables.
 3. The Milestone Deliverables shall include major building elements and components as set forth in Appendix B:
 4. Design Builder shall schedule the review of the Design and Construction Packages such that the review of each package submitted is of reasonable scope for prompt and thorough review by the Owner/DES.
 5. Design Builder shall highlight any material differences and developments between the Owner/DES Project Criteria, any interim Design Materials, and the Basis of Design Documents as the Basis of Design Documents are being developed.
 6. In the event that the Owner/DES has any comments relative to the Design Materials or finds any inconsistencies from the Owner/DES Project Criteria or discovers inaccuracies in the Design Materials, the Owner/DES shall give prompt written notice of such comments or findings to Design

Builder, who shall make appropriate adjustments to the proposed Basis of Design Documents.

7. The parties will work collaboratively to make adjustments in the Design Materials and in the proposed Basis of Design Documents to fit within the Owner/DES Project Goals as well as the MADCC and schedule established in the RFQ/RFP.
8. Performance Specifications, which shall set forth the specific requirements for the project and identification of each major system, including but not limited to the following:
 - a. Mechanical, electrical, plumbing, and fire protection systems
 - b. Structural capacities and requirements
 - c. Warranty obligations
 - d. Operations and maintenance requirements
9. Sustainability Requirements and Plan. Design Builder shall manage environmental issues and implement and document sustainability goals set forth in the GMP Amendment. The Project's Leadership in Energy and Environmental Design (LEED) Plan must include but is not limited to the following requirements:
 - a) outline Subcontractor requirements for Sustainability in the subcontract bid documents;
 - b) monitor the submittal process to ensure compliance with Sustainability goals;
 - c) train Subcontractors in Sustainability requirements;
 - d) review design changes during construction for Sustainability impacts and inform Owner/DES of impacts;
 - e) ensure installed products are compliant with the Sustainability requirements; and
 - f) assemble and maintain records to document Sustainability goals compliance.

2.05 DEVELOPMENT OF THE GMP

A. Preliminary Estimates.

1. Within the time frame established in Section 2.01.A, Design Builder shall submit preliminary estimates for the Project in such a form and supported by such data to substantiate its accuracy in reflecting the breakdown for administrative and payment purposes as the Owner/DES may require.
2. With the submission of Design Materials Packages, Design Builder shall provide preliminary estimates of costs associated with the Design Materials Packages in a format acceptable to the Owner/DES that will be incorporated into the GMP.
3. The preliminary estimates shall be provided on a regular basis and shall be updated with new information as Design Builder develops and finalizes the GMP.

- B. Schedule of Values and Cost Model
1. Schedule of Values. Within the time frame established in Section 2.01.B, Design Builder, in collaboration with the Owner/DES, shall prepare a Schedule of Values for the Work in conformance with the General Conditions and in such a form and supported by such data to substantiate its accuracy in reflecting the breakdown for administrative and payment purposes as the Owner/DES may reasonably require. The Schedule of Values shall be further organized to conform to the Construction Specifications Institute (CSI) standard format for divisions and sections.
 2. Cost Model. Within the time frame established in Section 2.01.B, Design Builder shall provide a Cost Model, for the Owner/DES review and acceptance and shall update the Cost Model in the frequency established in Section 2.01.B.
 - a. The Cost Model shall, at a minimum, provide the following information:
 - (1) List for all Design and Construction Packages, organized by CSI;
 - (2) Estimated base bid amounts for all Construction Packages; and
 - (3) Construction Package Allowances.
 - b. Design Builder shall utilize a project controls management system that will be reviewed for acceptance to the Owner/DES.
 - c. In developing its Construction Packages, Design-Builder shall coordinate with the Owner/DES to determine a packaging strategy deemed advantageous to all parties. The agreed-upon packaging strategy will be incorporated into the Cost Model and Project schedule.
 - d. On a regular basis, Design-Builder shall update estimates and forecasts as data becomes available to reflect real time information. The Owner/DES will rely on this real-time information for accuracy of overall Owner/DES cost forecasts across all Owner/DES projects.
- C. Establishment of the GMP.
1. With the GMP Proposal, Design Builder shall prepare and submit a proposed GMP to the Owner/DES, in a format acceptable to the Owner/DES, reflecting Design Builder's total cost for the Project on an open book basis. The GMP shall include:
 - a. Design Builder's Fee Percentage as defined in Section 6.1 of the Contract;
 - b. The Cost of the Work as defined in Section 6.5 of the General Conditions; and
 - c. Design Builder's Contingency established pursuant to Section 6.7.A of the General Conditions.
 2. In support of the proposed GMP, Design Builder shall provide:

- a. A list of the assumptions and clarifications made by Design Builder in the preparation of the GMP to supplement the information contained in the Basis of Design Documents;
 - b. The General Conditions Amount; and
 - c. All material changes from the Owner/DES Project Criteria and Design Builder's Proposal and the costs associated with such changes.
- D. Design Builder shall meet with the Owner/DES to review the proposed GMP. In the event that the Owner/DES has any comments relative to the proposed GMP or finds any inconsistencies or inaccuracies in the information presented, it shall give prompt written notice of such comments or findings to Design Builder, who shall make appropriate adjustments to the proposed GMP, its basis, or both. The parties will work collaboratively to make adjustments in the Basis of Design Documents, Project Schedule, or GMP to meet the Owner/DES objectives.
- 2.06 SUBCONTRACTOR PROCUREMENT PROCEDURE
- By the date set forth in Section 2.01A herein, Design Builder shall submit for approval the Subcontractor Procurement Procedure as required in Section 2.7.C of the General Conditions.
- 2.07 PROJECT SPECIFIC SAFETY PLAN
- A. By the date set forth in Section 2.01A herein, Design Builder shall submit a Project Specific Safety Plan for the activities associated with Phase 1.
 - B. With GMP Proposal, Design Builder shall submit a Project Specific Safety Plan addressing all phases of the project after Phase 1.
 - C. No field investigation or construction activities will be authorized without receipt of safety plans as required for the Work.
- 2.08 PROJECT PHASING /STAGING ANALYSIS
- With the GMP Proposal, Design Builder shall provide a Project Phasing/Staging analysis for all Demolition and Construction Packages that includes detailed plans for the phasing of the Project, including but not limited to, all modifications and all other construction activities including the staging of construction materials and facilities.
- 2.09 PERMITTING STRATEGY PLAN:
- A. With the GMP Proposal, Design Builder shall provide a Permitting Strategy Plan detailing the process for obtaining the building and site development permits for various phases of the project. During Phase 1, Design Builder must meet with the applicable building officials and develop processes and time lines for plan check approvals.
 - B. Design Builder shall coordinate with all authorities with jurisdiction over the Project for the approval of environmental mitigation measures.
- 2.10 DIVERSE BUSINESS INCLUSION PLAN UPDATE
- Provide an updated status on the Diverse Business Inclusion Plan with current details.

2.11 QA/QC PLANS

A. Design Quality Management Plan.

1. Design Quality Management Plan: shall be developed in accordance with the requirements outlined in the Contract, and submitted with Phase 1 proposal.
2. Design Quality Audits: Design Quality Assurance Manager shall audit all design packages for compliance with the requirements outlined in the Design Quality Management Plan.
3. Independent Technical Reviews: The Design Quality Assurance Manager will appoint appropriate technical staff to conduct Independent Technical Reviews of each design package. These reviews will occur concurrently with the Inter-Disciplinary Reviews and Constructability Reviews.

B. Construction Quality Management Plan.

1. Construction Quality Management Plan: The Plan shall be developed in accordance with the requirements outlined in the Contract.

2.12 CONTRACT CLOSEOUT PLAN

A. With the GMP Proposal, Design Builder shall provide a Project Closeout Plan that integrates all aspects of project closeout proactively over the life of the project. The Closeout Plan will be a living document that will grow and expand as the design and construction progress. The Project Closeout Plan should include, but not be limited to, mechanisms and procedures for:

1. Closeout provisions included in subcontract procurement documents;
2. Phased completions and early subcontract closeouts;
3. Commissioning;
4. Warranties;
5. Training;
6. O&M Documentation;
7. Record Documents;
8. Cost Reconciliations;
9. Permit and Regulatory Requirements;
10. Closeout meetings to commence no later than 60% construction completion; and
11. Diversity and Apprenticeship final reporting.
12. LEED certification.

2.13 DIFFERING SITE CONDITIONS REPORT

A. With the GMP Proposal, Design Builder shall provide a report of all Differing Site Conditions as defined in Section 13.2 of the General Conditions of the Contract that are discovered during Phase 1.

B. The Differing Site Conditions Report shall include the following information for each of the identified Differing Site Conditions identified in the Report.

1. The location of the Differing Site Condition;

2. A description of the Differing Site Condition that explains why it qualifies as a Differing Site Condition pursuant to Section 13.2 of the General Conditions;
3. The date the Differing Site Condition was discovered and date notice was given to the Owner/DES; and
4. The impact of the Differing Site Condition on the Owner/DES Project Criteria, the Basis of Design Documents, and/or any Commercial Term, as applicable.

2.14 RESPONSIBILITIES MATRIX

- A. With the GMP Proposal, Design-Builder shall provide an updated Responsibilities Matrix, noting all changes from the Responsibilities Matrix set forth in Appendix A.
- B. Design-Builder shall not alter the Responsibilities Matrix without first obtaining Owner/DES written consent.

PHASE 2 SCOPE OF SERVICES

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3.01 SUMMARY OF WORK

Unless the parties agree otherwise in writing, this Section sets forth the Scope of Work, the Deliverables, and the execution activities for Phase 2.

3.02 PHASE 2 SCOPE

- A. Design Builder shall complete the design and construction services as set forth in the GMP Amendment.
- B. Design Builder shall provide the deliverables set forth in this Attachment during the course of Phase 2. Deliverables shall be provided in a format acceptable to the Owner/DES. Design Builder must use the programs identified and used in Phase 1, and those listed below, as applicable:
 1. Autodesk, AutoCAD
 2. Autodesk, REVIT
 3. Microsoft Project
 4. Microsoft Office Suite
 5. BlueBeam.

3.03 COMPLETION OF DESIGN

- A. Design Builder shall provide for an orderly and timely approval process by the Owner/DES and third parties, document review comments from the Owner/DES and third parties, and take appropriate action.
- B. The Owner/DES will review and comment on the Construction Documents and other Design Materials in a timely fashion.
- C. Design Builder shall submit a written response to the Owner/DES design review comments, describing the action taken for each comment. Design Builder shall, in a timely fashion, bring to the attention of the Owner/DES areas where new technologies, such as BIM or Design-Build processes, may require modifications to these requirements.

- D. By submitting Design Materials, including but not limited to the Construction Documents, Design Builder represents to the Owner/DES that the Construction Documents may be constructed for the then current Commercial Terms and in accordance with the Owner/DES Project Criteria and the Basis of Design Documents. Notwithstanding the above, Design Builder may propose Designs, Plans or other Submissions that may alter a Commercial Term or the Owner/DES Project Criteria; however, with any such Design Materials, Design Builder must provide notice pursuant to Article 10 of the General Conditions. The Construction Documents must be consistent with the Basis of Design Documents, approved Design Materials and the Design Log, unless the Owner/DES has consented to modify its Requirements in writing through a Change Order, Field Directive, or other written means allowed by the Contract Documents.
- E. Design-Builder shall continue to use the collaboratively established project budget as a design tool and shall design to the budget rather than estimate the cost of the project after the design has been established. Prior to submitting the Design Materials to the Owner/DES, the Design-Build Team will conduct a process that identifies project elements, systems or materials that could be designed and/or constructed more efficiently or less costly in another manner, or that could more effectively achieve the Project Goals if designed and/or constructed in another manner. Design-Builder will not submit Design Materials to the Owner/DES that cannot be constructed as shown in the drawings, are not within the Commercial Terms or the Owner/DES Project Criteria, or are discontinued by the Manufacturer. Therefore, prior to submitting Design Materials to Owner/DES, the Design- Build Team shall evaluate the Design Materials to identify such issues.

3.04 SCHEDULE OF VALUES AND COST MODEL

- A. The forecasting and development of accurate project cost estimates throughout each phase of the Project is vital to the Owner/DES financial management strategy. The Owner/DES relies on the Design Builder to provide and validate current and detailed cost estimates and forecasts that will be incorporated into the overall cost controls for the Owner/DES.
- B. On a regular basis, Design Builder will continue to update estimates and forecasts and provide data to the Owner/DES to reflect real time information. Design Builder will provide all pricing, estimates and other data used to develop the Commercial Terms on an open and transparent basis.
- C. The Schedule of Values and Cost Model must be consistent with the GMP Amendment, unless the parties have agreed on a Change to the terms set forth in the GMP Amendment pursuant to Article 10 of the General Conditions.

3.05 PROJECT SCHEDULE

- A. The forecasting and development of the project schedule, including but not limited to the project phasing and Schedule of Values, is a vital element of the Design Builder's ability to deliver this Project in a timely fashion. The Owner/DES will rely on the Design Builder's scheduling information to coordinate with its Stakeholders, schedule activities in and around the Project, and manage its campus.
- B. Design Builder shall provide the Owner/DES with frequent updates to the project schedule in a format acceptable to the Owner/DES for a scheduled completion within the GMP established in the GMP Amendment.

3.06 CONSTRUCTION SERVICES

Design-Builder shall provide Construction Services and complete the construction of the Project pursuant to the Contract Documents.

3.07 COMMISSIONING, TESTING AND CLOSEOUT

Design Builder shall provide commissioning, testing, and closeout of the Project pursuant to the Contract Documents, including but not limited to the Responsibilities Matrix between Design Builder and Owner/DES (Appendix A).

PART 4 PHASE 2 DELIVERABLES

4.01 MILESTONE DESIGN DELIVERABLES

Design Builder shall provide the following Milestone Design Deliverables pursuant to the Project Schedule:

1. 70% Design Documents for review and approval by the Owner/DES;
and
2. 100% Design Documents for review and approval by the Owner/DES;
and

Design Builder shall not proceed with the project after submission of the 100% Design Documents until it receives the Owner/DES written approval.

4.02 DIVERSE BUSINESS INCLUSION PLAN UPDATE

At 100% Design Documents, provide an updated status on the Diverse Business Inclusion Plan with current details.

4.03 OTHER DELIVERABLES

Design Builder shall provide such other deliverables as set forth in the Contract Documents to successfully complete the Project.

APPENDICES

Appendix A	Responsibilities Matrix
Appendix B	Milestone Deliverables Requirements
Appendix C	BIM Requirements

Attachment B, Appendix A - Responsibilities Matrix

Project: Clark College, Advanced Manufacturing Center (AMC)

Project no.: 2018-254

NOTE: Nothing in this document supersedes or modifies the Contract or the General Conditions

Appendix A - Responsibilities Matrix

Responsibility	By Design Builder	By Owner	Remarks
Site Investigation			
Site Survey	X		
Utility and Construction Access Easements		X	Priority 1 is sewer easement; Priority 2 is construction access road. Owner is coordinating with Clark College Foundation, the owner of adjacent parcels.
Geotechnical Soils Report	X	X	Owner provides prelim site Geotech report; building-specific GeoTech investigation provided by Design Builder.
Soil Borings & Findings	X	X	Owner provides prelim; Design Builder provides project specific.
Asbestos & Hazardous Material Report & Survey		X	The survey has not been initiated as of September 7, 2021.
Survey and locates of existing utilities	X	X	Owner will provide preliminary topographic map and utility locations. Design Builder provide surveys and utility locates for site development and building layout.
Design & Consulting Fees (Including Construction Administration)			
Architectural Design Fees	X		
Structural Engineering Fees	X		
Structural Engineering for Construction Equipment	X		
Shoring Design	X		
Civil Engineering & Existing Conditions Survey	X		
Landscaping & Irrigation	X		
Acoustical Consultant	X		
Industrial Engineer Consultant	X		
Elevator Design	X		
Mechanical Design	X		
Mechanical Design Assist & Engineering	X		
Mechanical Design-Build Engineering	X		
Energy / Life Cycle Costing	X		
Curtainwall Design	X		
Curtainwall Final Design & Engineering	X		
Utility Rebate Coordination	X		
Electrical Design	X		
Electrical Design Assist & Engineering	X		
Street Lighting & Signalization	X		
Temporary Power Design	X		
Waterproofing & Roofing (Envelope) Consultant	X	X	Owner will provide independent testing of waterproofing and air infiltration.
Document Reproduction	X		
Graphics & Wayfinding (Interior and Exterior)	X		
Telecommunications Design	X		
Security Design	X		

Attachment B, Appendix A - Responsibilities Matrix

Project: Clark College, Advanced Manufacturing Center (AMC)

Project no.: 2018-254

NOTE: Nothing in this document supersedes or modifies the Contract or the General Conditions

Sustainability/LEED	X		
Door/Hardware Consultant	X		
Indoor Air Quality	X		
Interior Design	X		
Audio/Visual, Instructional Media Design	X		
Acoustical Consultant	X		
Commissioning	X		

Attachment B, Appendix A - Responsibilities Matrix

Project: Clark College, Advanced Manufacturing Center (AMC)

Project no.: 2018-254

NOTE: Nothing in this document supersedes or modifies the Contract or the General Conditions

Responsibility	By Design Builder	By Owner	Remarks
Renderings, Presentations, Models, etc.	X		
Record Documents	X		
Testing & Balancing	X		
Traffic Consultant	X		
Sustainability Documentation & Registration Fees	X		
Permit Cost			
Development or mitigation fees	X		
Clear and Grading Permit Fees	X		
General Building Permit Fees	X		
Shoring Permit Fees	X		
Street Use Permits & Use Fees	X		
Shoring Permit (as applicable)	X		
Mechanical Plan Check & Permit Fees	X		
Fire Protection Plan Check & Permit Fees	X		
Puget Sound Clean Air Agency Plan Check and Permit Fees	X		
Electrical Plan Check & Permit Fees	X		
Testing and Inspection			
General Comment	X		
Geotechnical Inspection		X	
Hazardous Waste		X	Preliminary Site Assessment performed by Owner. Design Builder responsible to test suspect material identified during construction.
Noise & Vibration Monitoring	X		
Structural Inspection - concrete, steel & fireproofing		X	
Curtainwall Performance Test	X		
On site Curtainwall Testing Fees	X		
Curtainwall "u" value Testing	X		
Air Barrier / Envelope Leakage Testing		X	
Functional and start up testing	X	X	
Inspector overtime	X		
Commissioning Agent		X	
Utility Connection Fees			
Electrical Design & Installation - Building Service	X		
Design & Installation - Temp Power	X		
Temporary Power Monthly Usage Fees (Power Bills)	X		
Street Lighting	X		
Water Department - Fees and connection		X	
Steam Connection			N/A
Telephone Connections		X	
Telephone Equipment		X	
Optical Fiber, Data & Telephone Cabling	X		

Attachment B, Appendix A - Responsibilities Matrix

Project: Clark College, Advanced Manufacturing Center (AMC)

Project no.: 2018-254

NOTE: Nothing in this document supersedes or modifies the Contract or the General Conditions

Responsibility	By Design Builder	By Owner	Remarks
FF&E			
Security System, rough-in	X		
Security System, cabling and devices	X		
Audio visual, rough-in	X		
Audio visual cabling	X		
Audio visual equipment	X	X	Equipment may be owner furnished, contractor installed but Design Builder to provide cabling.
Owner Equipment Relocation		X	
Public address, cabling and equipment	X		
First Responder Radio Relay system	X		
Clock & program, rough-in	X		
Clock & program, cabling and equipment	X		
Building Signage	X		Signage required by the permit
Window Blinds	X		
Parking Equipment		X	
Furnishings		X	
Site Furniture		X	
Trash Compactor/Recycling Equipment		X	
Post Occupancy			
Post Occupancy Permits		X	
Elevator Subcontractors Warranty Maintenance		X	
Maintenance of Building Systems		X	
Contractor's Warranty	X		
Licensed Surveyor - Record Survey	X		
Scope of Work			
Off site improvements	X		
Traffic Signalization			Not Applicable
Asbestos Abatement / Hazardous Material Remediation	X		
Site Work Hazardous Waste / Contaminated Soil Removal & Disposal	X		
Licensed Surveyor - Shoring Monitoring	X		
Monthly Electrical Usage Costs	X		
Project office Job Office / Site Laydown Area	X		
Progress Photos	X	X	
Final Cleaning	X		
Final Window Cleaning	X		
Printing Contract Documents & Approved Shop Drawings	X		
Moving/Relocation of Existing Owner Equipment		X	
Connection of Existing Owner Equipment	X		
Insurance, Bonds & Taxes			
Washington State Sales Tax		X	

Attachment B, Appendix A - Responsibilities Matrix

Project: Clark College, Advanced Manufacturing Center (AMC)

Project no.: 2018-254

NOTE: Nothing in this document supersedes or modifies the Contract or the General Conditions

Responsibility	By Design Builder	By Owner	Remarks
Builder's Risk Insurance	X		
Design Contingency	X		
Owner's Contingency		X	
Payment & Performance Bond - General Contractor	X		
Payment & Performance Subcontractors	X		
All insurance required per contract including E & O Insurance Premiums	X		

AUTHORIZED ACCEPTANCE

Design-Build Contractor

Date

Agency

Date

E&AS Project Manager

Date

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center (AMC)

Project No.: 2018-254

Appendix B – Milestone Deliverables Requirements

The DB team shall provide hardcopy and digital versions (AutoCAD or available application) of each of the following phases to the Owner for review by project team members, Facilities, College user groups, and for reporting to the College administration. The College PM will provide written responses to the DB team from these groups.

PHASE ONE

100 Percent Schematic Design / 20% Design Documents

Schematic Design shall define the general scope, scale and functional relationships of the project. The Schematic Design Submittal shall provide sufficient information for the Owner to understand the main design concepts. The submittal shall reflect approximately 20 percent of the overall design. The list below is not intended to be comprehensive, the Designer Builder shall expand the requirements as required to meet a 20 percent overall design submission.

- A. Provide a preliminary description of the following:
 1. Define the general scope
 2. Building systems (structural, mechanical, HVAC, plumbing, electrical, fire alarm, fire sprinklers, security/access control, etc.)
 3. Interior and exterior finishes
 4. Building site Zoning restrictions if any
 5. Code requirements
 6. Space planning and adjacency requirements
- B. Provide a detailed description of the following:
 1. Site Survey
 2. Geotechnical studies
 3. Hazardous material survey
 4. Preliminary budgeting
 5. Preliminary schedule
- C. Provide strategies for all equipment and systems relating to building services such as security, lighting, safety/alarm, access control, and fire alarms and defines the technical requirements for phones, data, cable and audio-visual needs.
- D. The schematic drawings shall include:
 1. Site plans showing:
 - i. Location of buildings
 - ii. Existing and proposed utilities
 - iii. Proposed circulation
 2. Floor plans showing:
 - i. Key dimensions
 - ii. Circulation
 - iii. Interior partitions, door and window locations
 3. Conceptual roof plan
 4. Conceptual building elevations
- E. All drawings submitted shall be dated, show scale and orientation of drawing, and have the Project name and number: Clark College, Advanced Manufacturing Center 2018-254.

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center

Project No.: 2018-254

100 Percent Design Development / 45% Design Documents

In addition to the requirements in the Schematic Design Submittal, the following shall, as a minimum, be provided as part of the Design Development submittal. Design Development shall further develop the design approved in the Schematic Design Phase. The Design Development Phase should provide definite design conclusions based on the approved Schematic Design framework and represent approximately 45 percent of design completion. The list below is not intended to be comprehensive, the Designer Builder shall expand the requirements as required to meet a 45 percent overall design submission.

A. Site/Civil Plan-

1. Identify the following on the drawings:

- a. Limits of the Work
- b. Building setbacks and separations
- c. Footprints of building
- d. Water distribution and fire protection
- e. Sanitary sewer collection and conveyance
- f. Infrastructure easements (sewer, access road, well/irrigation)
- g. Vehicular and Pedestrian Access and Circulation
- h. Parking Requirements
- i. Include utility corridors for major lines, grouped together
- j. Indicate duct/pathway stubouts for expansion/connection to future campus buildout
- k. Site ADA Requirements
- l. Landscape areas (existing and new)
- m. Expansion and Phasing options (as applicable)
- n. Identify existing utility locations
- o. Zoning Information

2. Site/Civil Design Narrative describing:

- a. Codes, standards and local Zoning amendments
- b. Overall site features
- c. Utilities connections and service
- d. Vehicular circulation and parking areas, including roadwork in State Highway right-of-way, if any.
- e. Pedestrian circulation: secure and non-secure
- f. Landscaping
- g. Construction access and TESC

B. Architectural

1. Floor Plans for the Building-Include development of the following:

- a. Overall building dimensions and vertical and horizontal gridlines
- b. Indicate major equipment, both Design Builder supplied and Owner supplied.
- c. Indicate any specialty equipment, both Design Builder supplied and Owner supplied.
- d. Indicate wall types.
- e. Indicate full height wall locations.

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center

Project No.: 2018-254

2. Develop the following to the appropriate level:
 - a. Elevations, both interior and exterior
 - b. Reflected ceiling plans; include types of ceiling construction
 - c. Wall, floor and ceiling treatments
 - d. Roof plans, indicating slopes
 - e. Room finish schedule
 - f. Wall sections
 - g. Minimum one building section
 3. Code standards
 4. Architectural Design Narrative:
 - a. Confirm comparison with RFP Document; note any deviations.
 - b. Overall building features
 - c. Adjacency requirements
 - d. Program functional space
 - e. Interior and Exterior finishes
- C. Structural
1. Preliminary Framing plans.
 2. Preliminary foundation plans.
 3. Structural Design Narrative
- D. Mechanical and Plumbing
1. Design Loads, new and remodeled:
 - a. Mechanical
 - b. Plumbing
 2. Provide draft ELCCA and work plan.
 3. Preliminary HVAC drawings, indicating proposed equipment locations
 4. Preliminary Plumbing drawings
 5. 100 Percent Design Development Mechanical and Plumbing Design Narrative
- E. Electrical
1. Preliminary Site electrical plan
 2. Preliminary Site lighting plan
 3. Preliminary power plans
 - a. Include electrical room, serving the building and site.
 - b. Preliminary lighting plans
 4. Electrical Design Narrative
- F. Special Systems and Telecommunications
1. Preliminary Site special systems drawings
 2. Preliminary special systems drawings
 3. Special Systems Design Narrative

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center (AMC)

Project No.: 2018-254

PHASE TWO

50% Construction Documents/70% Design Documents

In addition to the required Design Development Submittal in Phase 1, the following shall, as a minimum, be provided as part of the Construction Document Submittal. Construction Documents shall further develop the design approved in the Design Development Phase. This submittal shall reflect 50 percent Construction Document, and shall define fully the scope for the project within the agreed GMP. The 50 percent Construction Document Phase should provide definite design conclusions based on the approved Design Development framework and represent approximately 70 percent of design completion. The list below is not intended to be comprehensive, the Designer Builder shall expand the requirements as required to meet a 70 percent overall design submission.

A. Site/Civil Plan-

1. Identify and update the following on the drawings:
 - a. Limits of the Work
 - b. Building setbacks and separations
 - c. 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)
 - q. Existing utility locations
 - r. Zoning Information
 - s. Coordinated new utility service locations (i.e., utility transformers, exterior generators, etc.)
2. Update Site/Civil Design 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 City of Ridgefield 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

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center (AMC)

Project No.: 2018-254

B. Architectural

1. Floor Plans for the Building. Update Design Development Submittal plans to include design revisions required per review comments and constructability review. Include development of the following:
 - a. Add dimensions for all interior and exterior spaces.
 - b. Call out room numbers and program names.
 - c. Indicate major equipment and location, both Design Builder supplied and Owner supplied.
 - d. Indicate any specialty equipment and location, both Design Builder supplied and Owner supplied.
 - e. Call out wall types and show details
 - f. Indicate full height wall locations
2. Develop the following to the appropriate level:
 - a. Elevations, both interior and exterior
 - b. Reflected ceiling plans; include types of ceiling construction and security enclosures.
 - c. Wall, floor and ceiling treatments
 - d. Detailed room finish schedule
 - e. Wall sections
 - f. Roof plans, indicating slopes and show drainage
 - g. Multiple building section
3. Code analysis: Update Design Development Submittal.
4. Colors and Materials: Create a minimum of three design schemes for colors and materials.
 - a. Provide color boards and samples, and present to the Owner for review and approval.
5. Outline specifications
6. Update Architectural Design Narrative; include revisions to the narrative based on Design Development review comments, and on requirements necessitated by development of the design.
 - i. Confirm comparison with RFP Document and Design Development Submittal; note any deviations.
 - ii. Include catalog cut-sheets for all materials and equipment selections.

C. Structural

1. Update 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

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center (AMC)

Project No.: 2018-254

- D. Mechanical and Plumbing
 - 1. Update 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. Submitted completed Life Cycle Cost Analysis with work plan
 - 5. Outline specifications
 - 6. Update Mechanical Design Narrative. Include:
 - a. Design Loads, new and remodeled:
 - i. Mechanical
 - ii. Plumbing
- E. Fire Protection
 - 1. Preliminary fire protection plan
 - a. Show location of stand pipe, pumps, main sprinkler lines
 - b. Indicate location of wet and dry systems
 - 2. Provide fire flow analysis and confirm the flow meets the local jurisdiction requirements.
 - 3. Outline specifications
- F. Electrical
 - 1. Update Design Development Electrical Design Narrative.
 - 2. Include catalog cut-sheets for materials and equipment selections.
 - 3. Preliminary Site electrical plan
 - 4. Preliminary Site lighting plan
 - 5. Preliminary power plans
 - a. Include electrical room, serving the building and site, including equipment layout.
 - 6. Preliminary lighting plans
 - a. Calculations based on light fixture layout and coordinated with Architectural
 - 7. Outline specifications
- G. Special Systems and Telecommunications
 - 1. Update Design Development Special Systems Design Narrative.
 - a. Include update of materials and equipment selections.
 - b. Include how the Agency standards are being followed.
 - 2. Preliminary Site special systems drawings
 - 3. Preliminary special systems drawings.

ATTACHMENT B, Appendix B – Milestone Deliverables Requirements

Project: Clark College, Advanced Manufacturing Center (AMC)

Project No.: 2018-254

- a. Equipment layouts for all control rooms and equipment rooms.
4. Outline specifications.

Design Submittal: 100 Percent Construction Documents/100% Design Documents

- A. 100 percent construction documents shall be submitted to the Owner for review prior to documents being designated as complete. Design Builder shall address Owner's comments and concerns before documents are considered final. Once 100 percent Construction Documents are the final, a comprehensive design submittal, incorporating Owner's review comments from all previous submittals, for which the final requirements for construction of the Project shall be set forth in detail. The 100 percent Construction Documents is when the design is completed and ready for submittal to the Owner for general review.
- B. The Design Builder shall also submit a comprehensive list of any items missing for the submittal, with an explanation of why they are missing and when they will be submitted.
- C. The 100 Percent Construction Documents are not to be confused with any required permit sets. The Design Builder shall work with all agencies having jurisdiction and submit the appropriate level of design required for permit drawings.
 1. 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), including Division 1.
 - c. Calculations, partial drawing sets and other supporting documents as required for permit submittal to separate reviewing agencies and departments
 2. Pursuant to review comments by the Owner and the Owner's consultants, revise and resubmit the 100 Percent documents as 100 Percent - Final Documents with comments incorporated.

ATTACHMENT B, Appendix C – BIM Requirements

Project: Clark College, Advanced Manufacturing
Center (AMC)

Project No.: 2018-254

Appendix C – BIM Requirements

The College currently has access to the AutoCAD suite of products, including REVIT, and if necessary can add AutoCAD 3D to the suite. The Design-Builder will develop Building Information Modeling (BIM) protocol for use on this project.

1. All Consultants and Contractors shall use compatible software to allow the BIM model to be developed and updated in a timely manner.
2. The BIM model shall be developed and updated throughout the design process and construction.
3. The Design-Builder shall produce a schedule to show the start and finish of BIM model coordination for each discipline and for each Milestone Design Deliverable and Construction.
4. The BIM model shall, at a minimum, include Civil, Architectural, Structural, Mechanical and Plumbing, Fire Suppression and Electrical.
5. The Design-Builder shall schedule monthly meetings to review the BIM model with the Owner/DES, showing progress from the previous month, and reviewing the schedule.
6. The Owner/DES intends to utilize the model in the future for maintenance, remodeling and construction.
 - a. The Owner/DES will have full unrestricted use and ownership of the model.
 - b. The model shall be delivered to the Owner/DES with complete Operating and Maintenance (O&M) instructions and in a format the Owner/DES can utilize.
 - c. The model shall be delivered prior to project close out.