

ATTACHMENT Y:

ADDENDUM 6



**CHILDREN AND FAMILY JUSTICE CENTER
CONTRACT NUMBER C00863C13**

Addendum Number 6

Proposers are hereby notified that the solicitation documents of said Contract have been amended as hereinafter set forth:

Ref.	Page or Drawing	Location and Description of Change
		PART A – REQUEST FOR PROPOSAL
6.1	Title Page	DELETE “Julia Patterson” and REPLACE with: “Dave Upthegrove”
6.2	6	1.0 G. Anticipated Schedule, Selection Process DELETE items 16 through 20, and REPLACE with: <div> <div>“16. Proposer Comments on Revised Design Build Contract due</div> <div>March 28, 2014</div> </div> <div> <div>17. Submittal of Proposals</div> <div>April 18, 2014</div> </div> <div> <div>18. Final Presentation & Interviews of Proposer’s Conceptual Designs</div> <div>Week of April 28, 2014</div> </div> <div> <div>19. Conforming Contract</div> <div>June 2014</div> </div> <div> <div>20. Contract Execution</div> <div>July 2014</div> </div> <div> <div>21. Notice Proceed (NTP-1)</div> <div>July 2014”</div> </div>
		PART B – FACILITY PERFORMANCE STANDARDS
6.3	43	Section 1 Architecture, Table B1.1 – Interior and Exterior Glazing Types, ADD footnote: “If there are discrepancies between glazing assembly thickness and physical attack performance durations, the durations shall be followed.”
6.4	133	Section 6 Mechanical Engineering Systems, Fuel Oil, DELETE the third bullet, and REPLACE with: <ul style="list-style-type: none"> “• The Fuel Storage tank may be above or below-grade, with proper filling, monitoring and containment systems. <p>Above ground tanks shall meet be double walled steel construction meeting UL 2085 fire resistive requirements. Above ground tanks shall be screened from view and secured from vandalism.</p> <p>Below ground tanks shall be fiberglass wrapped steel tank comparable to an ACE Permatank, with epoxy interior lining. Piping for below ground tanks shall be suction type (no check valve at the intake).</p> <p>Tanks must be sized for actual storage volume (eighty percent [80%] of rated capacity) with sufficient capacity to provide a minimum of 72 hours of system operation under emergency conditions at one-hundred percent</p>

Ref.	Page or Drawing	Location and Description of Change
		<p>(100%) load. A monitored and alarmed liquid and vapor leak detection system must be provided in interstitial space of underground tanks, aboveground tanks, and piping. The installation must comply with local, State, and Federal requirements, as well as with EPA regulations.</p> <ul style="list-style-type: none"> Fuel Oil tanks serving boilers shall be provided with a Fuel Management System that will include day tanks with level controls, duplex fuel-oil transfer (positive displacement) pumps, filters and control system with panel to control pumps and indicate status. Day tanks and panel shall be located inside the Mechanical Room. Interface controls with Building Management System. Emergency power shall be provided to operate the fuel oil system."
6.5	179	<p>Section 7 Electrical Engineering Systems, Generator Set, DELETE the first bullet, and REPLACE with:</p> <p>"• The fuel storage tank may be above or below-grade, with proper filling, monitoring and containment systems. See page 133 of these Performance Standards for additional fuel tank requirements."</p>
6.6	232	<p>Section 10 Electronics Safety and Security Systems, b. Electronic Court Control System Non Detention Closed Circuit Television Surveillance Systems (CCTV) General, 4th paragraph ADD the following:</p> <p>"Recording system shall be capable of archiving 30 days of 24/7 video at 3 fps, 1080p."</p>
6.7	242	<p>Section 10 Electronics Safety and Security Systems, c. Detention Security Electronic System, Detention Closed Circuit Television Surveillance Systems (CDTV), DELETE the 3rd bullet, and REPLACE with:</p> <p>"• The CCTV system shall be laid out utilizing the existing NVRs located offsite at the County's Data Center. Work will include an analysis of the existing NVR recording capacity in light of the removal of the existing 180 YSC cameras from the system, notification to the County if the existing NVRs cannot maintain the required 60 day video retention with the new CFJC cameras, programming and addressing as necessary. If additional NVRs are necessary the County will furnish and the Design Builder shall integrate into the existing NVRs system."</p>
6.8	243	<p>Section 10 Electronics Safety and Security Systems, c. Detention Security Electronic System, Personal Duress Alarm Systems, 4th bullet ADD:</p> <p>"140 body worn alarm transmitters are to be provided by the Design Builder."</p>

Ref.	Page or Drawing	Location and Description of Change
		Part H - Division 1 General Requirements
6.9	01 29 00 - 2	<p>Section 01 29 00 DELETE 1.5.1.1 and REPLACE with:</p> <p>“1.5.1.1 Within the time frame set in Article 6 (Payment Terms) of the General Conditions, Design Builder shall submit a detailed breakdown of the Contract Price by scheduled Work items and/or activities, including design, construction, coordination responsibilities and project record document responsibilities. The Project Schedule (see Section 01 32 26 (Schedules and Reports)) shall serve as the basis for developing the Schedule of Values, which will be used as a basis for reviewing the Design-Builder's Applications for Payment. Each Application for Payment will be reviewed for actual costs and also for consistency based on percentage completion of the Schedule of Values. Design Builder shall furnish such breakdown of the total Contract Price by assigning dollar values (cost estimates) to each applicable Progress Schedule network activity, which cumulative sum equals the total Contract Price. The format and detail of the breakdown shall correspond directly with the Project Schedule and as directed by County to facilitate and clarify future progress payments to Design Builder for direct Work under the Contract Documents.”</p>
6.10	01 29 00 - 3	<p>Section 01 29 00 DELETE 1.5.1.2 and REPLACE with:</p> <p>“1.5.1.2 Not Used.”</p>
6.11	01 32 26	<p>DELETE Section 01 32 26, and REPLACE with:</p> <p>REVISED, Section 01 32 36 Schedules and Reports. See Attached.</p>
6.12	01 35 50 - 5	<p>Section 01 25 50, paragraph 1.10.2 DELETE “...Article 1.13...” and REPLACE with:</p> <p>“...Section 01 35 50 (Project Security)...”</p>
		<p>QUESTIONS AND RESPONSES</p> <p>King County provides the following questions and responses as clarifications of the referenced Request For Proposal provisions.</p>
6.13		<p>Q: Addendum #3 clarified the extent of existing building demolition that may occur as part of the Phase 1A construction. Please confirm that the existing recreation yard located adjacent 14th Street immediately north of the existing detention facility can be utilized for temporary parking during Phase 1A.</p> <p>R: This area is used as a staging area for emergency egress of the existing detention facility; any use for parking must maintain the min. area required for the emergency egress staging consistent with the Seattle Building Code, based on the facility being full, or a reduced number of occupants based on current Average Daily Population negotiated by the Design Build entity with the AHJ.</p>

Ref.	Page or Drawing	Location and Description of Change
6.14		<p>Q: Addendum No. 1 states that “The design and implementation of any of the stormwater flow control facilities shall prevent surface ponding of water.” However, bioretention cell ponding depth must be between 2” and 12”per the following City of Seattle code:</p> <ol style="list-style-type: none"> 1. City of Seattle Director’s Rule 15-2012, “Requirements for Green Stormwater Infrastructure to the Maximum Extent Feasible for Single-Family Residential and Parcel-Based Projects”, page D-3 2. City of Seattle Stormwater Manual, Volume 3, page 4-67: <p>Does the County intend to preclude the use of bioretention cells to meet the Green Stormwater Infrastructure requirement?</p> <p>R: It is not the County's intent to preclude the use of bio retention cells. It is the County's understanding that bio retention cells can be utilized without creating standing water if the permeability rate is high enough, the overflow is at a strategic height, and a large grain substrate is providing the detention storage.</p>
6.15		<p>Q: Section 9c A/V - The program requests that each courtroom suite have a 50sf room per court for A/V equipment. This equipment needs access to IT infrastructure, power, and cooling (note: video court recording requires approximately one-half rack per courtroom, one rack per pair of courtrooms). Can this floor space be consolidated and added to the IDF rooms on each floor.</p> <p>R: No: The disciplines involved are quite different in that the services an IDF provide cross departmental boundaries (much like Security monitoring and access control do), whereas Court specific facilities are only departmental in function. In our experience mixing departmental and infrastructure disciplines within the same physical space is difficult since departmental staff often do not have an “infrastructure” type of experience which can lead to operational and maintenance problems.</p>
6.16		<p>Q: Section 10 Electronic Security - CCTV Recording – Non-Detention: Recording parameters not given by RFP, other than 30 days’ retention. Question 1: At what frame rate and resolution? Example: 210 cameras @ 1080p 10 fps for 12 hours per day for 30 days. This will allow calculation of storage capacity.</p> <p>R: 1080p, 3fps, 24/7, 30 days. See Ref 6.6 above.</p>
6.17		<p>Q: CCTV Clients – Non-Detention: Question 1: What is the Proposer's role in the Emergency Dispatch Center (EDC) CCTV switching and general surveillance clients (CPUs, monitors, etc), including their programming and commissioning with the non-detention CCTV system?</p> <p>R: All programming will be by the Owner. Owner will review the commissioning plan as a submittal, as described in Division 1, and provide staff during commissioning to witness typical systems testing in conjunction with the installer.</p>

Ref.	Page or Drawing	Location and Description of Change
6.18		<p>Q: Access Control Badging/Enrollment: Could you address the intent for badging and enrollment of the two access control systems (non-detention and detention) in the RFP? In particular, no badging or enrollment stations are specified. Does the Proposer not provide a badging/enrollment station within the Courthouse Building? And one within Detention? If so, where? Otherwise, is badging/enrollment off-site?</p> <p>R: The Design Builder does not need to provide badging stations. The County will be continuing the current practice of badging enrollment off site using County equipment / software.</p>
6.19		<p>Q: Access Control Cards: What quantity of cards do Proposers provide for each access control system (non-detention and detention)?</p> <p>R: The Design Builder does not need to provide access control cards; King County issues employee identification cards that also serve as access control cards.</p>
6.20		<p>Q: Is it permissible to revise the shape of the development parcels south of Alder St. if we keep the total area for parcels the same as shown in the RFP and keep the parcels adjacent to 12th and 14th and Spruce streets?</p> <p>R: No, the parcels must stay as noted in Part C: Facility Program, Figure 4-6</p>
6.21		<p>Q: CCTV Recording – Detention: The RFP indicates that “recordings will be conducted at an off-site location via a Virtual Local Area Network (VLAN) at a rate of not less than 15 frames/sec at 1080p and will be retained for 60 calendar days.” Also “the system shall be laid out to facilitate not more than one NVR server for every forty (40) cameras.” For 200 cameras, this means five servers minimum. Question 1: Please verify this means that Proposers include five (5) off-site Pivot3 virtual servers in the RAID-6e array with added storage necessary to achieve the specified recording parameters?</p> <p>R: The intent of Part B Facility Performance Standards, Part B Section 9 is have the Design Build entity connect (provide programming, addressing etc.) the new cameras onto the existing NVRs located offsite at the County's data center.</p> <p>See Ref 6.7 above.</p>
6.22		<p>Q: CCTV Clients – Detention: The RFP provides for CFJC clients at the various control points (Central Control, etc.). Again, while we recognize the client application can be installed on other County workstations meeting a minimum performance; are there no other CCTV clients in offices, or no other client work for the Proposer to perform?</p> <p>R: See Part B Facility Performance Standards page 242 under the "Detention Closed Circuit television Surveillance System (CCTV):" heading, 2nd bullet.</p>
6.23		<p>Q: Detention Personal Alarm System: How many body-worn alarm transmitters should Proposers include in the proposals?</p> <p>R: 140 body worn alarm transmitters are required. See Ref 6.8 above.</p>

Ref.	Page or Drawing	Location and Description of Change
6.24		<p>Q: Access Control Cards: What quantity of cards do Proposers provide for each access control system (non-detention and detention)?</p> <p>R: The Design Builder does not need to provide access control cards; King County issues employee identification cards that also serve as access control cards.</p>
6.25		<p>Q: Room Data Sheets: Is there a difference from the Proposer's standpoint between "DT1 Cable TV" and "DT2 Offender Cable TV"</p> <p>R: DT 1 Cable TV is standard cable that would be provided in areas such as the judge's chambers. DT 2 Offender Cable TV would be limited to approved stations and or videos 'broadcast' on the system by DAJD staff.</p>
6.26		<p>Q: Security glazing types - Reference Part B - Performance Standards, Section 1 - Architecture, Page 43 Table B1.1.</p> <p>Glass Type GL4 calls for 9/16 Security glazing to meet 20-minute physical attack per ASTM F1915. Typical 9/16" thick glass clad polycarbonate security glass meets 10-minute physical attack per ASTM F1915 Security Grade IV. *Note 20-minute attack resistant glass would require 11/16" thick GCP.</p> <p>Glass Type GL5 calls for 11/16 Security glazing to meet 40-minute physical attack per ASTM F1915. Typical 11/16" thick glass clad polycarbonate security glass meets 20-minute physical attack per ASTM F1915 Security Grade III. *Note 40-minute attack resistant glass would require 3/4" thick GCP.</p> <p>Please confirm if glass thickness or physical attack performance is correct.</p> <p>R: The glass physical attack performance is correct.</p> <p>See Ref 6.3 above.</p>
6.27		<p>Q: Please clarify if reclaimed water (rainwater or gray water) is acceptable for use in the detention facility non-potable services, including toilet flushing in the dorms. If so, is there a standard of treatment that is required beyond local code?</p> <p>R: Reclaimed water (rainwater or gray water) is not acceptable for use in the detention facility non-potable services.</p>
6.28		<p>Q: The RFP notes that the interviews will be April 15-17. Can King County identify which team presents on which day and how long the interviews will be? Since this week is Spring Break for Seattle City Schools, knowing the date of the interview will help some team members.</p> <p>R: Final presentations are being re-scheduled to approximately 2 weeks later then the dates published in the RFP. See revised Procurement Schedule.</p>

Ref.	Page or Drawing	Location and Description of Change
6.29		<p>Q: The RFP does not address physical models. Since the proposal due on April 4 does not include a physical model, please confirm that physical models will not be allowed to be presented at the interview</p> <p>R: Models are not a requirement of the RFP and under 4.5: Proposer Final Presentations & Interviews” Item E.</p> <p>“Proposers shall make visual presentations of their “as-submitted” proposals. No new information or materials shall be introduced.”</p>
6.30		<p>Q: When the existing YTS is inactivated, approximately 160 cameras are being removed from recording at 4CIF @ 3 fps at 24 hours per day for 60 days. Do Proposers assume they can include this disused equipment to help achieve the specified recording parameters?</p> <p>R: With the exception of the NVRs located at the County's Data Center no equipment shall be re-used. See Ref 6.7 above.</p>
6.31		<p>Q: Would it be correct to assume that the County will require heating capability for all temperature controls zones?</p> <p>R: The DB Team shall consider all necessary heating/cooling capabilities to control zone temperatures at the indoor design temperatures stated in the RFP.</p>
6.32		<p>Q: Is it acceptable for Main switchboard to say 15% based on 100% breaker capacity (85% of breaker + 15% spare = 100%)?</p> <p>R: No, Table B 7.3 is required as it is written.</p>
6.33		<p>Q: If available, please provide annual energy data from the existing facility. This could be an annual EUI or utility bills over a 12 month period. This information would be extremely helpful as a benchmarking point in the energy analysis</p> <p>R: The County will not provide the information at this time. The existing building is not the benchmark, and the building configuration and systems are not applicable to the new building.</p> <p>After Contract Award County will provide past utility bills.</p>
6.34		<p>Q: The RFP requires an outline specification be provided in CSI Master Format. Please clarify the purpose and extent of this requirement. Is King County expecting just “Part 2 – Products” for each specification section?</p> <p>R: Outline Specifications are required for all products with prescriptive specifications the DB may have introduced utilizing the CSI Master Format. Additionally, all plumbing fixtures throughout the project must have product brand and model information provided.</p>

Ref.	Page or Drawing	Location and Description of Change
6.35		<p>Q: The RFP notes a general requirement to provide Interior and Exterior Lighting plans. It also requires RCP's for only certain areas of the building. Is a conceptual lighting plan required for every space within the building or just those areas that will have RCP's?</p> <p>R: Interior lighting plans must be provided for all typical room layouts in detention, typical detention living/recreation rooms and all courtrooms, chambers, and conference rooms. Additionally, all rooms indicated to have reflected ceiling plans must have lighting plans.</p>
6.36		<p>Q: In part B, section 6, page 130, first bullet, the RFP specifies a "combi" unit for individual and group cells. Is this required for the juvenile room (cell) or is a separate lav and water closet desired?</p> <p>R: The Combi unit is preferred by the County as it appears to be more space efficient, and minimizes the plumbing piping.</p>
6.37		<p>Q: Fuel Storage – please confirm if the fuel oil storage is acceptable below-grade. Part B page 133 – references to buried pipe and interstitial space of underground tanks, but the 3rd bullet of the Fuel Oil section starts with “Above ground tanks shall be used” and page 179 1st bullet under “Generator Set” indicates below-grade is acceptable.</p> <p>R: Either above ground or below ground are acceptable. See Refs 6.4 & 6.5 above.</p>

Attached To This Addendum:

- REVISED, Section 01 32 36 Schedules and Reports.

This Addendum shall be attached to and form a part of the Contract Documents. All Proposers are reminded to acknowledge this Addendum on Form C of the RFP.

Date: March 21, 2014

Darren R. Chernick

Darren R. Chernick
Contract Specialist

REVISED
SECTION 01 32 26

SCHEDULES AND REPORTS

PART 1 - GENERAL

1.1 RELATED SECTIONS

- 1.1.1 Division 1 Section 01 29 00 (Payment Procedures) for submitting the Schedule of Values.
- 1.1.2 Division 1 Section 01 31 00 (Project Management and Coordination) for submitting and distributing meeting and conference minutes.
- 1.1.3 Division 1 Section 01 33 00 (Submittal Procedures) for submitting schedules and reports.
- 1.1.4 Division 1 Section 01 45 00 (Quality Control) for submitting a schedule of tests and inspections

1.2 SUMMARY

- 1.2.1 Design Builder shall perform scheduling of Work under these Contract Documents in accordance with requirements of this Section 01 32 26 and Section 01 33 00 (Submittal Procedures).
 - 1.2.1.1 Development of schedule, cost loading of the Project Schedule, monthly payment requests and project status reporting requirements including Earned Value (EVM) Management requirements of the Contract Documents shall employ scheduling as required in this Section 01 32 26.
 - 1.2.1.2 Project Master Schedule, Design Schedule and Construction Schedules shall be time-scaled and cost-loaded. Monthly Schedule Updates shall be time-scaled and cost loaded. Cost loading shall be the basis of the Schedule of Values as specified in Section 01 29 00 (Payment Procedures).
 - 1.2.1.3 Computer Software: All Schedules shall be in Primavera® (latest edition), Microsoft Project for windows, or other software as approved by the County's Project Representative. All computer software format must be compatible with County's existing computer software format know as Primavera "Unifier".
 - 1.2.1.4 All Schedules shall be submitted prior to the dates identified in Section 01 33 00 (Submittal Procedures).
- 1.2.2 Design Builder's obligations under paragraph 1.1.1 of this Section 01 32 26 are hereby deemed material obligations. Nothing in this paragraph 1.1.2 or the lack of an express statement that any other Contract Document provision is or

is not material shall be considered in determining whether any such other provision is material.

1.2.3 Scheduling Consultant Qualifications: The Design Builder's team shall include a specialist in CPM scheduling and reporting acceptable to the County with experience performing scheduling required herein on at least two prior, similar projects, and with the capability of producing CPM reports and diagrams within 48 hours of County's request.

1.2.4 Transmit each item under form approved by County or following Section 01 33 00 (Submittal Procedures).

1.2.4.1 Identify Project with the County Contract number, and name of Design Builder.

1.2.4.2 Provide space for Design Builder's approval stamp and County's review stamps.

1.2.4.3 Submittals received from sources other than Design Builder will be returned to Design Builder without County's review.

1.3 GENERAL SCHEDULE REQUIREMENTS

1.3.1 Schedules: The Design Builder shall submit an operating electronic version of an original, plus hardcopy versions, of the following schedules to the County:

1.1.2.1 Proposed Schedule as included in the Design Builder's Proposal Package for the Request for Proposals as outlined in the Request for Proposals. The Proposed Schedule shall be in accordance with the requirements outlined in paragraph 1.3 below. The accepted Proposed Schedule shall serve as the basis for preparing the Project Master Schedule.

1.1.2.2 Project Master Schedule as required in paragraph 1.4 below.

1.1.2.3 Design Schedule as required in paragraph 1.5 below.

1.1.2.4 Construction Schedule as required in paragraph 1.6 below.

1.1.2.5 Look Ahead Schedule as required in paragraph 1.6 below.

1.2.2 Acceptance Procedures for Baseline Schedules:

1.2.2.1 Submittal of the Project Master Schedule, Design Schedule, and Construction Schedules shall adhere to the schedule submittal process outlined in Document 01 33 00 (Submittal Procedures), paragraph 1.5.

1.2.2.2 Original Master Project Schedule and Design Schedule shall be reviewed at the Design Conference. Within seven (7) Days after the

Design Conference, the County will review and either accept the Schedules or reject and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the Schedule within seven (7) Days.

1.2.2.3 Within seven (7) Days of receipt of revised Project Master Schedule and Design Schedule, the County will either accept the Schedules or reject and request further information and justification. Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County's request discussing how the baseline resubmittal addresses each of the contract conformance deficiencies noted in the original submittals.

1.2.2.4 Detailed Construction Schedules shall be reviewed at Pre-Construction Conferences for each major phase of work outlined in Section 01 31 19 (Project Meetings). Within seven (7) Days after the Pre-Construction Conference, the County will review and either accept the Schedule or reject and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the Schedule within seven (7) Days.

1.2.2.5 Within seven (7) Days of receipt of revised Detailed Construction Schedule, the County will either accept the Schedule or reject and request further information and justification. Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County's request discussing how the baseline resubmittal addresses each of the contract conformance deficiencies noted in the original submittals.

1.2.3 Time of Completion: Overall time of completion and time of completion for each Milestone shown on Project Master Schedule shall adhere to times in the Contract. Design Builder may otherwise choose to work to an earlier (advanced) schedule, but should it choose to do so:

1.2.3.1 It must first notify the County of its intention to work to an earlier (advanced) schedule and provide a written explanation of how it intends to improve on the Contract Times. County is not required to accept such an earlier (advanced) schedule, i.e., one that shows early completion dates for the Contract Times.

1.2.3.2 Design Builder shall not be entitled to extra compensation in the event Design Builder completes its Work, for whatever reason, beyond completion dates shown in such an earlier (advanced) schedule but within the Contract Times.

1.2.3.3 A schedule showing the work completed in less than the Contract Times shall be considered to have Project Float. The Project Float is

the time between the scheduled completion of the Work and the Contract Time for completion of the Work. Project Float is a resource available to both County and Design Builder.

- 1.2.4 Float Ownership: Neither County nor Design Builder owns float. The Project owns the float. As such, liability for delay to the Work rests with the party whose unexcused delay, last in time, actually causes delay to the Project.

1.2.4.1 For example, if Party A incurs unexcused delay and uses some, but not all of the float and Party B later incurs unexcused delay and uses the remainder of the float as well as additional time beyond the float, Party B shall be liable for the delay that represents a delay to the Work.

1.2.4.2 Party A would not be responsible for the delay since it did not consume all the float and additional float remained; therefore, completion was unaffected by Party A.

- 1.2.5 The Design and Construction Progress Schedules and Earned Value Management (EVM) reporting shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract schedules and monitoring actual progress as compared to Progress Schedule rests with Design Builder.

- 1.2.6 Failure of the Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Design Builder from responsibility for accomplishing the Work in accordance with the Contract Documents. The County's acceptance of the Design and Construction Progress Schedules shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon County, or act to relieve Design Builder of its responsibility for means and methods of design and construction.

- 1.2.7 County Review Requirements: The Design Builder shall consider the County review requirements as specified in Section 01 11 20 (Design Services and Deliverables). The Design Builder shall have the responsibility to package and submit complete and coordinated submittal documents to County.

1.3 PROPOSED SCHEDULE

- 1.3.1 The Design Builder shall submit a Proposed Schedule as part of the response to the requirements specified in Request for Proposals. The Proposed Schedule shall fit within and coordinate with the Contract Times, including any and all design interfaces.

- 1.3.2 Preparation: Indicate each significant Contract activity separately. Activities to be included in the Proposed Schedule will be as follows:

- 1.3.2.1 Detailed activities for Design of all phases of the Work including but not limited to all design deliverables as required by Section 01 11 20 (Design Services and Deliverables), design coordination meetings, other Agency reviews, other third party reviews, and incorporation of comments, through Permit and acceptance of the Construction Documents. All activities described in this paragraph, shall be incorporated into the Proposed Schedule.
- 1.3.2.2 Detailed Submittal, review, and procurement activities for all critical and near-critical submittals for the Work.
- 1.3.2.3 Detailed plan for mobilization, execution of contracts, design as described in Section 01 11 20 (Design Services and Deliverables), submittals, procurement, and all work that must be performed prior to the start of construction of the Project.
- 1.3.2.4 Summarize activities related to construction for the remainder of the Work. The remainder of the Work will include, but shall not be limited to, the following activities in reasonable detail, and indicating the probable critical path:
 - 1.3.1.1.1 Critical lead times
 - 1.3.1.1.2 Building foundation and structure activities
 - 1.3.1.1.3 Building exterior skin and interior finishing activities
 - 1.3.1.1.4 Finish site work
 - 1.3.1.1.5 Building commissioning and move-in activities
 - 1.3.1.1.6 Hazardous materials abatement, demolition, and relocation of utilities associated with construction of the Project.
 - 1.3.1.1.7 Final site work activities

1.4 PROJECT MASTER SCHEDULE

- 1.4.1 The Design Builder shall prepare the Project Master Schedule, which shall adhere to times stated in the Contract (Agreement) and in the accepted Proposed Schedule. The Project Master Schedule will outline all dates and time periods for the delivery of all Design Builder's services and requirements for information from the County necessary for the performance of the Services. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all work within applicable completion dates, regardless of County's approval of the schedule. The Project Master Schedule will include the following items, but not limited to:

Children and Family Justice Center**Schedules and Reports**

- 1.4.1.1 Schedule for completing the project design documents (through release for construction), each required submittal and the times for submitting, reviewing and processing such submittal, as specified in Section 01 11 20 (Design Services and Deliverables).
- 1.4.1.2 Preparation and processing of Construction submittals.
- 1.4.1.3 Critical lead times.
- 1.4.1.4 Significant construction milestones (e.g., groundbreaking, start and completion of hazardous materials abatement, demolition, completion of site utilities, completion of foundation, completion of structural frame, completion of exterior shell, substantial completion, testing & commissioning, move-in, substantial completion project completion dates, etc.).
- 1.4.1.5 Date for decision from County on items affecting the Design Builder's schedule.
- 1.4.1.6 Utility interruptions, relocation, and connections affecting Project operations.
- 1.4.1.7 The Project Master Schedule shall be updated on a monthly basis and submitted along with all Earned Value Management reporting as part of each Progress Payment Application.

1.5 DESIGN SCHEDULE

- 1.5.1 The Design Schedule shall adhere to Contract Times in the Contract (Agreement) and specified in the accepted Proposed Schedule. The Design Schedule shall include all activity detail for completing the design of all phases of the Work. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all work within applicable completion dates, regardless of County's approval of the schedule. The Design Schedule shall include, but not be limited to the following:
 - 1.5.1.1 Preparation and review of Design submittals and other critical design completion dates. Include all design deliverables as required by Document 01 11 20 (Design Services and Deliverables).
 - 1.5.1.2 Design coordination meetings
 - 1.5.1.3 Conference(s) with County and review times.
 - 1.5.1.4 Dates for decision from County on designated items or orders affecting schedule.
 - 1.5.1.5 Dates for reviews by Other Agencies Having Jurisdiction, Utility Companies and third parties.
 - 1.5.1.6 Time for incorporation of comments.

1.5.1.7 Dates for submitting and obtaining Permits (building and land use)

1.5.1.8 Acceptance of the Construction Documents for the Project

1.5.2 Design Builder shall resubmit Original Schedule to address County comments if requested by County. Resubmittal will be delivered no more than 5 Days after receipt of County comments or request.

1.6 CONSTRUCTION SCHEDULE

1.6.1 The Construction Schedule shall adhere to times in the Contract Document (Agreement) and specified in the accepted Proposed Schedule. The Construction Schedule (Original and updates) shall indicate all separate fabrication, procurement and field construction activities required for completion of the Work. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all Work within the Contract Times, regardless of County's approval of the schedule.

1.6.2 Activities: All Design Builder, Subcontractor, and assigned Design Builder work (including engineering and other professional services) shall be shown in a logical sequence that demonstrates a coordinated plan of work. The intent is to provide a common basis of acceptance, understanding, and communication, as well as interface among all parties involved in the Project, including but not limited to Subcontractors. Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Show dependencies and logic between activities so that the effect of progress (or lack of progress) on related activities and the overall schedule can be monitored. The list of activities shall include, but not be limited to, the following:

1.6.2.1 Submittal Preparation and Review: Include review and resubmittal times indicated in Section 01 33 00 (Submittal Procedures), in schedule. Coordinate submittal review times in Design Builder's Contract Schedule with Submittals Schedule. Phase the submittal process to ensure that items are submitted in order of their importance to the construction process. Implement a system that staggers submittals by "start no earlier than" date, complexity and number.

1.6.2.2 Include procurement process activities for long lead items and major items requiring a cycle of more than sixty (60) Days as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery. Delivery dates indicated stipulate the earliest possible delivery date.

1.6.2.3 Significant construction milestones including but not limited to:

1.6.2.3.1 Mobilization.

1.6.2.3.2 Earthwork and underground utility site work completion.

1.6.2.3.3 Foundation completion.

- 1.6.2.3.4 Structural frame completion.
- 1.6.2.3.5 Shell completion.
- 1.6.2.3.6 Plumbing installation.
- 1.6.2.3.7 Fire protection installation.
- 1.6.2.3.8 HVAC installation.
- 1.6.2.3.9 Electrical installation.
- 1.6.2.3.10 Security installation and completion
- 1.6.2.3.11 Substantial Completion
- 1.6.2.3.12 Owner testing and commissioning (shakedown)
- 1.6.2.3.13 Beneficial Occupancy
- 1.6.2.3.14 Final Project Completion & Acceptance
- 1.6.2.3.15 Demobilization.
- 1.6.2.4 Date of request of designated working spaces, storage areas, access, and other facilities to be furnished by the County.
- 1.6.2.5 Dates for decision from County on designated items or orders affecting schedule.
- 1.6.2.6 Mock-up construction.
- 1.6.2.7 Activities related to the delivery of Design Builder and County-furnished equipment to be Design Builder-installed per Contract shall be shown. Equipment requirements including, but not limited to, architecturally significant equipment, communications equipment, and security equipment. Design Builder shall include the latest date that County-furnished products are required to allow completion of the Work on schedule.
 - 1.6.2.7.1 The latest date that installation details must be provided to the Design Builder to avoid schedule delays.
 - 1.6.2.7.2 The latest delivery dates that will allow the project to be completed according to schedule.
- 1.6.2.8 Activities related to the delivery and installation of County or Design Builder furnished and installed furniture to be coordinated by the Design Builder. Furniture requirements include, but are not limited to, electrical and data connections. Design Builder shall include the latest date that County-furnished products are required to allow completion of the Work on schedule.
 - 1.6.2.8.1 The latest date that installation details must be provided to the Design Builder to avoid schedule delays.
 - 1.6.2.8.2 The latest delivery dates that will allow the Work to

be completed according to schedule.

- 1.6.2.9 Utility interruptions, relocation, and connections.
- 1.6.2.10 Show the effect of the following factors on the construction schedule:
 - 1.6.2.10.1 Use of premises restrictions.
 - 1.6.2.10.2 Environmental control.
- 1.6.2.11 Punch list preparation.
- 1.6.2.12 Work by County and/or by other contractors that may affect or be affected by Design Builder's activities. Include a separate activity for each contract, which may include, but are not limited to, utility companies, communications systems providers, equipment providers, and others.
- 1.6.2.13 Testing and commissioning. Include sufficient time to comply with the requirements of the Section 01 91 00 (General Commissioning Requirements); and any regulatory requirements; and assure completion of the Work within the Contract Time.
- 1.6.2.14 Licensing: allow time for administrative procedures necessary for certification of the Project.
- 1.6.2.15 All regulatory agency approvals
- 1.6.2.16 Move-in.
- 1.6.3 All activities shall be identified through codes or other identification to indicate the portion of the Work (i.e. Courthouse Building, Detention Building, Parking Structure, Site Work) and Design Builder/Subcontractor responsibility to which they pertain.
- 1.6.4 Break up the Work schedule into activities of durations of approximately fourteen (14) Days or less each, except for non-field design and activities as otherwise deemed acceptable by County.
- 1.6.5 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. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, total and available float, resources, predecessor and successor activities, planned workday/week for the activity and scheduled/actual progress payments. "Critical path" shall mean all activities with zero float. A path with three (3) work days or less of float shall be considered a "near critical path" and shown in a lighter shade of red. No more than twenty percent (20%) of the schedule activities are to be considered critical or near critical.

- 1.6.6 Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all work. The Design Builder shall adhere to procedures as specified in the Contract Documents for giving notice of delays resulting from adverse weather.
- 1.6.7 Adverse Weather: Weather delays for normal weather conditions will not be considered. Non-compensable delays for adverse weather may be considered if it can be shown that the weather was unusually severe, and the activities affected were on the critical path of the current updated Construction Schedule.
- 1.6.8 Claims for additional time due to adverse weather will be based on Western Regional Climate Center (WRCC) 30-year weather data collected at the Seattle Tacoma Airport, Washington (457473). Weather conditions that could reasonably have been anticipated from the Western Regional Climate Center historical records shall not be construed as adverse.
- 1.6.9 The following table documents normal precipitation and cold temperatures as defined by the 30 year weather data collected at the WRCC, Seattle Tacoma Airport (457473). The number of rainy days exceeding those listed or the number of cold days exceeding those listed in any month are considered abnormally adverse and may impact the contractor's ability to complete the work within the contract time requirements.

Month	Precipitation		Temperature
	# of Rainy Days during the month with over .10"	# of Rainy Days during the month with over 1.0"	# of Cold Days during the month not exceeding 32°F. (High Temp)
January	13	1	1
February	10	0	1
March	11	0	0
April	7	0	0
May	5	0	0
June	4	0	0
July	2	0	0
August	7	0	0
September	3	0	0
October	8	0	0
November	13	1	1
December	13	1	1

- 1.6.10 In addition to weather conditions listed in the above table the following conditions shall be considered severe enough to warrant time extensions if so requested by the contractor.

- A. Daily minimum temperature equal to, or less than, 15 degrees Fahrenheit.
 - B. Daily maximum wind velocity equal to, or greater than, 50 mph at any time.
 - C. Ice, snow and other weather conditions may be considered as abnormal in the sole discretion of the County upon written request by the Contractor.
- 1.6.11 Written requests for time extensions due to adverse weather shall describe in detail the weather condition and identify specific impacts resulting from the weather condition as relates to the critical path of the Construction Schedule. In addition, substantial completion milestone dates that appear to be affected by the weather delay shall be noted in the notice of weather delay. The written notice of weather delay shall be submitted to King County within five days of the onset of the weather condition.
- 1.6.12 Temporary weather protection of the work for normally expected weather conditions is the responsibility of the Contractor as necessary to proceed in accordance with the Contractor's approved Project Schedule and environmental conditions as defined in the Specifications. Weather protection shall include but not be limited to protection of soils, subgrade preparation, exterior concrete, sealants, gypsum sheathing, roofing, and interior finishes. Delays and costs resulting from the contractor's failure to protect the work from damage due to weather are the sole responsibility of the contractor.
- 1.6.13 The Design Builder shall meet with the County to review and discuss each Schedule (i.e., Original Construction Schedule and each monthly update) within seven (7) Days after each Schedule has been submitted to County.
 - 1.6.13.1 County's review and comment on any Schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone
 - 1.6.13.2 Design Builder shall make corrections to Schedule necessary to comply with Contract requirements and shall adjust Schedule to incorporate any missing information requested by County. Design Builder shall resubmit Initial Original Schedule and Monthly Schedules if requested by County.
- 1.6.14 If Design Builder is of the opinion that any of the Work included on its Schedule has been impacted such that there will be a delay in achieving any Milestone, it shall submit to County a written Time Impact Evaluation ("TIE") in accordance with paragraph 1.10 below. The TIE shall be based on the most current update of the Schedule. A six (6) week "Look Ahead Schedule," detailed daily bar chart schedule shall be updated and issued weekly.
 - 1.6.14.1 Look Ahead Schedule shall cover a forty-nine (49) Day period, beginning with the week preceding the 6-week detailed look ahead.

- 1.6.14.2 Use the Contract Schedule as the basis for generating the 6-week detailed schedule.
- 1.6.14.3 Format:
 - 1.6.14.3.1 Provide bar chart using same logic as Contract Schedule, with maximum fourteen (14 Day) construction activity duration. Provide activity identification used on the accepted Contract Schedule.
 - 1.6.14.3.2 Provide daily resource allocation for each trade.
 - 1.6.14.3.3 Provide exact activity location for scheduled Work.
- 1.6.14.4 Provide information for each significant activity, with special care taken to describe scheduling and coordination with other contracts, and Work by the County, including but not limited to utility shutdowns, road closures, etc.
- 1.6.14.5 Show the status of all outstanding and pending submittals including scheduled and actual submittal dates, the durations and expiration of submittal review periods, etc.

1.7 MONTHLY SCHEDULE UPDATE SUBMITTALS

- 1.7.1 Following acceptance of Design Builder's Project Master Schedule, Design Schedule and Construction Schedule, Design Builder shall monitor progress of Work and update Schedules each month to reflect actual progress on each activity and any anticipated changes to planned activities.
- 1.7.2 Updated schedules and all reporting shall be submitted through Unifier
- 1.7.3 Monthly Schedule Updates shall include the following:
 - 1.7.3.1 Design Builder's estimated percentage complete for each activity in progress.
 - 1.7.3.2 Actual start/finish dates for all activities shown on initial Contract Schedule with all subsequent approved additions.
 - 1.7.3.3 List of materials and/or equipment delivered for which Design Builder is requesting payment and original invoice verifying cost.
 - 1.7.3.4 Identification of processing errors, if any, on the previous update reports.
 - 1.7.3.5 Resolution of any conflicts between actual progress and planned progress when out-of-sequence activities arise. Design Builder shall submit revisions to schedule logic to conform to current job status and directions, without changing original activity identification.

- 1.7.3.6 Each update shall include a written narrative report (as specified in Paragraph 1.12.1 below) with the updated progress analysis.
- 1.7.3.7 CPM Reports: Concurrent with CPM schedule updates, submit one (1) electronic and five (5) hardcopies of each of the following computer- generated reports. Format for each activity in reports shall contain activity number, activity description, cost loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, percent complete and total float.
 - 1.7.3.7.1 A Predecessor / Successor Report: List of all activities showing associated predecessor / successor activities, their logical relationships, free float, total float, early start/early finish date.
 - 1.7.3.7.2 Total Float Report: List of all activities sorted in ascending order of total float, and then early start/early finish date.
 - 1.7.3.7.3 Earned Value Reports: Compilation of Design Builder's earnings from Notice to Proceed until the most recent Application for Payment. Show all activities sorted and grouped by project phase and location. For each activity show the Activity ID, description, budgeted cost, percent completed as of the last update, percent completed to-date, cost as of the previous period, cost this period, and cost-to-date.
 - 1.7.3.7.4 The Design Builder shall submit any other type of report as deemed necessary by the County.
 - 1.7.3.7.5 The Design Builder shall input all necessary reports and data into the County's Unifier project management system as directed by the County.
- 1.7.3.8 The updated Contract Schedule shall accurately represent the as-built condition of all completed Work and the percentage remaining of all in- progress Work activities as of the date of the updated Contract Schedule.
- 1.7.3.9 The updated Contract Schedule shall incorporate all changes mutually agreed upon by Design Builder and County during preceding periodic reviews, all changes resulting from Change Orders and Field Orders, and all remaining days of the inclement weather and regulatory review durations.
- 1.7.3.10 Design Builder shall perform the Work in accordance with the updated Contract Schedule. Design Builder may change the Contract Schedule to modify the order or sequence of accomplishing the Work only with the County's prior agreement.

- 1.7.3.11 Within the first (1st) week of each month, the County will administer a monthly schedule update meeting. At or before the monthly schedule update meeting, Design Builder shall submit a monthly updated schedule indicating activity status through the end of the previous month. Design Builder shall include in the monthly updated schedule any proposed schedule revisions as outlined in paragraph 1.8 below.
- 1.7.3.12 Procedures for review and acceptance of the monthly updated schedule are outlined in paragraph 1.8 below.
- 1.7.3.13 No Application for Payment will be processed, nor shall any progress payments become due, until updated Contract Schedules and Earned Value Management Reports (EVM) are uploaded into Unifier and accepted by the County's Representative.
- 1.7.3.14 The accepted, updated Contract Schedule shall be the Contract Schedule of record and EVM reports for the period they are current and shall be the basis for payment during that period.
- 1.7.3.15 The Design Builder shall upload into Unifier complete Primavera Project Planner data for the Contract Schedule update and computer-generated schedule and reports as determined by the County with each Application for Payment in Unifier. A CD ROM containing the complete Primavera Project Planner data for the Contract Schedule update and hard copies of computer-generated schedule and reports as determined by the County will be furnished to the County's Representative if requested. The Design Builder shall provide full access to electronic Primavera schedule files for the County.

1.8 SCHEDULE REVISIONS

- 1.8.1 The Design Builder will administer a monthly schedule update meeting to review and discuss each monthly updated schedule submittal.
 - 1.8.1.1 Included with each monthly updated schedule submittal, the Design Builder shall submit any proposed schedule revisions to the County's Representative, including, but not limited to, the following:
 - 1.8.1.1.1 Actual and anticipated duration changes including revisions due to inclement weather or regulatory agency review delays;
 - 1.8.1.1.2 TIEs for Change Orders and Time Extension Request;

- 1.8.1.1.3 Schedule diagrams showing resolution of conflicts between actual Work progress and schedule logic when out-of-sequence activities develop because of actual construction progress. Design Builder shall submit revisions to schedule logic to conform to current job status and directions, without changing original activity identification;
 - 1.8.1.1.4 Actual and anticipated Design Builder delays;
 - 1.8.1.1.5 A narrative report with the updated progress analysis, which shall include, but shall not be limited to, a description of problem areas, current and anticipated delaying factors and their impacts, and explanations of corrective action taken and any proposed revisions for a Recovery Plan as defined below.
 - 1.8.1.2 These meetings are considered a critical component of overall monthly schedule update submittal; accordingly, Design Builder shall ensure that appropriate personnel from its organization attend. At a minimum, Design Builder's Senior Project Manager, General Superintendent and Lead Scheduler shall attend these meetings in person at the County's offices or as determined by the County..
 - 1.8.1.3 Monthly Schedule update meetings will be scheduled for no less than four hours duration.
- 1.8.2 Within seven (7) Days after the monthly schedule update meeting, the County will either accept the Schedule or reject the Schedule and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the Schedule within seven (7) Days.
- 1.8.3 Neither the updating, changing, or revising of any report, curve, schedule or narrative submitted to County by Design Builder under this Contract, nor County's review or acceptance of any such report, curve, schedule, or narrative, shall have the effect of amending or modifying, in any way, Contract Time or milestone dates or of modifying or limiting, in any way, Design Builder's obligations under this Contract.
- 1.8.4 For rejected schedule update resubmittals, the County may request further information and justification and Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County's request discussing how the resubmittal addresses each of the remaining deficiencies noted in the schedule update resubmittal.
- 1.8.5 If the County does not accept Design Builder's schedule update resubmittal, and Design Builder disagrees with County's position, Design Builder has seven (7) Days from receipt of County's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision.

Design Builder's failure to respond in writing within seven (7) Days of County's written rejection of a schedule revision shall constitute Design Builder's acceptance of County's position, and Design Builder thereby waives its rights to subsequently dispute or file a claim regarding the County's position. If Design Builder files a timely response as provided in this paragraph, and the parties are still unable to agree, Design Builder's sole right shall be to file a

Claim as provided in Article 11 (Claims and Dispute Resolution) of the Design-Build Agreement

1.9 RECOVERY SCHEDULE

- 1.9.1 If the Schedule Update or Look Ahead Schedule shows Milestone completion more than fourteen (14) Days beyond the Contract Time, or any individual milestone completion dates, Design Builder shall within seven (7) Days, submit to County a Recovery Plan to recover the lost time. As part of this submittal, Design Builder shall provide a written narrative and a Recovery Schedule to recapture the lost time. The Recovery Plan shall propose revisions to the Contract Schedule for the next 60-day period to show how the Design Builder intends to bring the Work back on schedule. If the Recovery Schedule includes sequence changes, Design Builder shall provide a schedule diagram comparing the original Design Builder sequence to the revised sequence of the Work. The Recovery Schedule shall show the intended critical path; Design Builder shall secure and document appropriate Subcontractor and supplier consent to the Recovery Schedule; the narrative shall explain trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and resource loading assumptions for major Subcontractors. The Recovery Plan shall also describe how the measures that the Design Builder intends to take to regain schedule compliance will be accomplished without additional cost to the County.
- 1.9.2 The Recovery Schedule shall not be incorporated into any Schedule update until County has reviewed the Recovery Schedule.
- 1.9.3 If County does not accept Design Builder's Recovery Schedule, County and Design Builder shall follow the procedures in paragraphs 1.8.4 and 1.8.5 above.
- 1.9.4 At County's discretion, Design Builder can be required to provide Subcontractor certifications for any Recovery Schedule affecting said Subcontractors.
- 1.9.5 Design Builder shall provide supervision, labor, equipment and materials, as necessary, to recover the lost time.
- 1.9.6 If Design Builder believes that any portion of the delay addressed in the Recovery Schedule is due to circumstances entitling Design Builder to additional time or money, it may seek a modification of the Contract Documents under Article 8 (Changes) of the Design-Build Agreement, or

make a Claim for the same pursuant to Article 11 (Claims and Dispute Resolution) of the Design-Build Agreement and other applicable provisions of the Contract Documents.

1.10 TIME IMPACT EVALUATION FOR CHANGE ORDERS, AND OTHER DELAYS

- 1.10.1 Any request for an adjustment of the Contract Time(s) submitted by Design Builder for changes or alleged delays shall be accompanied by a complete Time Impact Evaluation ("TIE") which includes both a written narrative and a hard and fully operational electronic copy of a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Design Builder proposes to incorporate the changed work in the schedule, and how it impacts the critical path on the current schedule update. Design Builder is responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable County to evaluate the impact of changed work to the scheduled critical path.
- 1.10.2 Design Builder shall comply with the requirements of Paragraph 1.10.1 for all types of delays such as, but not limited to, Design Builder/Subcontractor delays, claimed County or third party caused delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- 1.10.3 Design Builder shall be responsible for all costs associated with the preparation of TIEs, and the process of incorporating them into the current schedule update. Design Builder shall provide County with an operational electronic copy and five (5) hardcopies of each TIE. Design Builder's TIEs must be based on the as-built critical path as of the date of the alleged delay. The TIE shall also show the as-planned critical path at that time.
- 1.10.4 Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount County allows, and Design Builder may submit a Claim for additional time claimed by Design Builder as provided in the Design-Build Agreement

1.11 TIME EXTENSIONS

- 1.11.1 Design Builder is responsible for requesting Contract Time extensions for events that, in the opinion of Design Builder, affect the critical path as shown on the then-current schedule update. Notice of time impacts shall be given in accord with the Design-Build Agreement.
- 1.11.2 Where an event for which either Design Builder or County is responsible affects the projected Contract Time, Design Builder shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact will be mitigated. Design Builder shall also include a detailed cost breakdown of the labor, equipment and material Design Builder would expend to mitigate the delay. Design Builder shall submit its mitigation plan to County within seven (7) Days from the date of discovery of the impact. Design Builder is responsible for the cost

to prepare the mitigation plan.

- 1.11.3 Design Builder's failure to give notice of a delay, request time, provide TIE, or provide the required mitigation plan will result in Design Builder waiving its right to a time extension and recovery of cost to mitigate the delay.
- 1.11.4 Design Builder shall be responsible to provide timely and proper notice to the County of all events that could result in Contract Time extensions and shall comply with requirements as specified within the Design-Build Agreement.
- 1.11.5 No time will be granted under the Contract Documents for cumulative effect of impacts or changes.
- 1.11.6 County will not be obligated to consider any time extension request unless all requirements of Contract Documents are complied with.
- 1.11.7 Failure of Design Builder to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.

1.12 PROJECT STATUS REPORTING

- 1.12.1 Monthly. In addition to submittal requirements for scheduling identified in this Section 01 32 26, provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each Schedule as specified herein in electronic and hard copy. Written status reports shall include:
 - 1.12.1.1 Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
 - 1.12.1.2 Progress made on critical activities indicated on each Schedule, including inspections.
 - 1.12.1.3 Explanations for any lack of work on critical path activities planned to be performed during last month.
 - 1.12.1.4 Explanations for any schedule changes, including changes to logic or to activity durations.
 - 1.12.1.5 List of critical activities scheduled to be performed during the next month.
 - 1.12.1.6 Status of major material and equipment procurement.
 - 1.12.1.7 Description of problem areas, current and anticipated delaying factors and their impacts, and an explanation of corrective action taken.

- 1.12.1.8 Any proposed revisions for a recovery plan.
 - 1.12.1.9 Design Builder may include any other information pertinent to status of Project.
 - 1.12.1.10 Design Builder shall produce additional status reports as requested by County at no additional cost.
 - 1.12.1.11 Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.
- 1.12.2 Daily Construction Reports: At the close of each workday provide County with report (on Design Builder's County-approved form) of a description of work activities by location for the previous work-day including the following:
- 1.12.2.1 Daily photograph
 - 1.12.2.2 List of subcontractors at Project site.
 - 1.12.2.3 List of separate contractors at Project site.
 - 1.12.2.4 Count of personnel at Project site.
 - 1.12.2.5 Equipment at Project site.
 - 1.12.2.6 Material deliveries.
 - 1.12.2.7 High and low temperatures and general weather conditions.
 - 1.12.2.8 Rainfall, if any
 - 1.12.2.9 Total number of inclement weather days to date
 - 1.12.2.10 Accidents.
 - 1.12.2.11 Meetings and significant decisions.
 - 1.12.2.12 Unusual events (refer to special reports).
 - 1.12.2.13 Stoppages, delays, shortages, and losses.
 - 1.12.2.14 Meter readings and similar recordings.
 - 1.12.2.15 Inspections
 - 1.12.2.16 Emergency procedures.
 - 1.12.2.17 Orders, visits and requests of authorities having jurisdiction.
 - 1.12.2.18 Change Orders received and implemented.
 - 1.12.2.19 Services connected and disconnected.
 - 1.12.2.20 Equipment or system tests and startups.
 - 1.12.2.21 Partial Completions and occupancies.
 - 1.12.2.22 Substantial Completions authorized.
 - 1.12.2.23 Results of construction monitoring activities including, at a minimum:

1.12.2.24 Noise control

1.12.2.25 Dust control

1.12.3 Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.

1.12.4 Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Include a detailed description of the differing conditions, together with recommendations for changing or proposed changes to the Construction Documents.

1.12.5 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 Builder's personnel, evaluation of results or effects, and similar pertinent information. Advise County in advance when these events are known or predictable.

1.13 EARNED VALUE MANAGEMENT

1.13.1 Earned Value Management (EVM) is a project management technique for measuring project performance and progress in an objective manner. EVM has the ability to combine measurements of scope, schedule, and cost in a single integrated system. Earned Value Management is notable for its ability to provide accurate forecasts of project performance problems.

1.13.2 For Design-Build projects, EV will be utilized from concept to the delivery of design-build packages, during the construction phase (s) and through substantial completion of the entire project.

1.13.3 Create an earned value (EV) and cash flow tool based upon industry best practices (e.g. Project Management Institute) and utilize it for the duration of the project.

1.13.4 Earned Value Analysis: Each month, the Design Builder's Lead Scheduler shall perform an Earned Value Analysis (EVA) using the cost and schedule software (e.g. MS Excel and/or MS Project) and in a format acceptable to the County. The Lead Scheduler shall include the results of the EVA in the Progress Monitoring Report as described later in this section.

1.13.5 The EVA shall be based on the following data in the Project Schedule at the data date.

1. Actual start and finish for each activity as of the data date.
2. The progress of the activities that started, but are not finished on the data

- date.
3. Percent complete of the work for each activity from the start date to the data date.
 4. Actual cost expended for each activity as of the data date.
- 1.13.6 The Lead Scheduler shall provide an "Engineer's Cost Accounting Standard Disclosure Statement" with the monthly EVM report that includes the procedures used to ensure the actual value of each cost account in the PS Update was properly represented and timely recorded in the general cost accounting system for the design work and construction completed by the DB Contractor, sub-consultants and sub-contractors. If the sub-consultant and/or sub-contractor actual cost data is not available prior to the submission of the Project Schedule (PS) Update, the Lead Scheduler shall estimate the sub-consultant's and/or sub-contractor's actual cost as of the data date for PS Update. The Lead scheduler shall confirm the actual cost from the sub-consultants prior to the submission of the next PS Update.
- 1.13.7 The Lead Scheduler shall use the cost accounts and scheduling data in the Project Schedule Update (SPU) to calculate and show the results of each data item in Table No. 1

Table No. 1 – Data Item for Earned Value Analysis	
Data Item	Definition
Budgeted Cost of Work Scheduled (BCWS)	The budgeted cost of work scheduled for completion at the data date. (BCWS = Budget Cost x Target Percent Complete)
Budgeted Cost of Work Performed (BCWP)	The value of completed work expressed in terms of the budget assigned to that work. BCWP is also known as the "earned value" of the work completed to date. (BCWP = Budget Cost x Percent Complete of the Work)
Actual Cost of Work Performed (ACWP)	The actual cost-to-date for work performed during a specific time period or duration. [The actual cost incurred shall correspond to the cumulative amount shown in payment application for the month.]
Schedule Variance (SV)	The Schedule Variance indicates if the project is ahead or behind schedule. (SV = BCWP – BCWS)
Cost Variance (CV)	The Cost Variance indicates if the project is over or under budget. (CV = BCWP – ACWP)
Estimate To Complete (ETC)	The Engineer's estimated cost to complete the design work from the data date to the forecast completion date.
Estimate At Completion (EAC)	The Engineer's projected final cost of the design work at the data date. (EAC = ACWPCumulative + ETC)

- 1.13.8 The Lead Scheduler shall determine and record the progress of work based on the results of the Schedule Performance Index and Cost Performance Index shown in Table No. 2

Table No. 2 – Earn Value Indexes		
Description	Formula	Results of EVA Analysis
Schedule Performance Index (SPI)	BCWP/BCWS	A SPI greater than 1.0 indicates no delays to the PDS
		A SPI less than 1.0 indicates that there are delays to the PDS
Cost Performance Index (CPI)	BCWP/ACWP	A CPI greater than 1.0 indicates the project design is within design budget.
		A CPI less than 1.0 indicates that the project design budget is over budget.
Variance At Completion (VAC)	BAC-EAC	Projected final cost over/under the total budgeted cost based on the difference between the value of the Budget at Completion (BAC) and the Estimate at Completion (EAC).

- 1.13.9 The Lead Scheduler shall use Microsoft Excel or equivalent software to provide and summarize the total values for earned valued data shown in Tables No. 1 and Table No. 2 for all activities in the Project Schedule Update.
- 1.13.10 The Lead Scheduler shall provide a cost curve graphic based on the cumulative total values of the BCWS, BCWP, ACWP, BAC, EAC and VAC for each PS Update. The Lead Scheduler shall also show the planned BCWS from each update period to the forecast completion date. The Lead Scheduler shall submit a cost curve graphic format example to the County for prior approval as to format and information to be displayed.
- 1.13.11 The Lead Scheduler shall prepare a project analysis report along with a summary of each update period that compares the earned value data on the data date to the cumulative total values for the EVA categories. The Lead Scheduler shall submit an example to the County for prior approval as to format and information to be displayed.
- 1.13.12 Progress Monitoring Report: The Lead Scheduler shall submit each month a Progress Monitoring Report (PMR) for the County's review and approval. The PMR shall contain the following information regarding the progress of work performed by the Lead scheduler along with the earned value data specified in this EVM Section.
- a. Schedule Tabular Reports and Cost Control Reports, which at a minimum shall include the following:
 - i. Predecessor/successor report sorted by Activity ID.
 - ii. Early Start/Total Float sort report.
 - iii. Total Float/Early Start sort report.
 - iv. Critical Path of Work sort report.
 - v. Summary by Cost Account sort report

- b. A description of the design work completed during the reporting period; Work items and paths that are critical to the timely completion of the design phase;
 - c. Anticipated work to start and finish during the next reporting phase;
 - d. Additional design scope items;
 - e. Explanations of schedule delays;
 - f. Anticipated problems and recommended possible solutions;
 - g. Critical action items (listing person/agency/company responsible and date needed);
 - h. Explanation of the SPI and CPI results in the PS Update submitted by The Lead scheduler;
 - i. Explanation of the variances between the previous PDS Update's SPI and CPI results to the current results (See Sample Variance Analysis Report, Figure 8);
 - j. Statement of the adequacy of the remaining design budget and time;
 - k. EVA cost curve graph; summary analysis and
 - l. Project analysis report for WBS Level 4 categories; and
 - m. EVA summary analysis.
- 1.13.13 Revisions to Project Schedules that Impact Earned Value Analysis: The Lead Scheduler shall incorporate the cost of the proposed change(s) into the EVA, which corresponds to the proposed Project Schedule with the fragnet. The EVA with the cost of the proposed changes shall be identified as the revised EVA for the Project Schedule with Proposed Revisions. The Lead Scheduler shall perform the revised EVA in accordance with this EVM Section. The Lead Scheduler shall submit a detailed report to the County for review. The detailed report shall include the results of the EVA, the cost curve graph, and discuss the effects of the proposed change on the Engineer's Estimate-To-Complete (ETC) and Estimate-At-Completion (EAC) along with the earned value indexes. Upon issuance of an amendment for the change, the EVA that includes the cost for approved change(s) shall become the EVA for Revised Progress Schedule of Record. Design changes shall be in accordance with the Change Order described in Division 01. All schedule changes shall be in accordance with this Section for the Project Schedule (Section 01 32 26).
- 1.13.14 The EV system to be used by the DB Contractor must, at a minimum, meet the following 10 criteria:**
- 1.13.15 EVMS Criterion 1 - ANSI/EIA-748-B, 2.1(a) Organization: Define authorized work elements for the program. A work breakdown structure (WBS), tailored for effective internal management control, is commonly used in this process.
- 1.13.16 EVMS Criterion 2 - ANSI/EIA-748-B, 2.1(b) Organization: Identify the program organizational structure, including the major subcontractors responsible for accomplishing the authorized work, and define the organizational elements in which work will be planned and controlled.

- 1.13.17 EVMS Criterion 3 - ANSI/EIA-748-B, 2.1(c) Organization: Provide for integration of the company's planning, scheduling, budgeting, work authorization and cost accumulation processes and, as appropriate, the program WBS and organizational structure.
- 1.13.18 EVMS Criterion 4 - ANSI/EIA-748-B, 2.2(a) Planning, Scheduling and Budgeting: Schedule the authorized work in a manner that describes the sequence of work and identifies the significant task interdependencies required to meet the requirements of the program.
- 1.13.19 EVMS Criterion 5 - ANSI/EIA-748-B, 2.2(b) Planning, Scheduling and Budgeting: Identify physical products, milestones, technical performance goals or other indicators used to measure progress.
- 1.13.20 EVMS Criterion 6 - ANSI/EIA-748-B, 2.2(c) Planning, Scheduling and Budgeting: Establish and maintain a time-phased budget baseline at the control account level against which program performance can be measured. Initial budgets established for performance measurement will be based on either internal management goals or the external customer-negotiated target cost, including estimates for authorized (but incomplete) work. Budget for long-term efforts may be held in higher level accounts until it is appropriate for allocation at the control account level.
- 1.13.21 EVMS Criterion 7 - ANSI/EIA-748-B 2.3(a) Accounting Considerations: Record direct costs consistently with the budgets in a formal system controlled by the general books of account.
- 1.13.22 EVMS Criterion 8 - ANSI/EIA-748-B, 2.4(a) Analysis and Management Reports: At least monthly, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system:
1. Comparison of the amount of planned budget and the budget earned for work accomplished. This comparison provides the schedule variance.
 2. Comparison of the amount of the budget earned and the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance.
- 1.13.23 EVMS Criterion 9 - ANSI/EIA-748-B, 2.4(f) Analysis and Management Reports: Develop revised cost estimates at completion based on performance to date, commitment values for material and estimates of future conditions. Compare this information with the performance measurement baseline to identify variances at completion important to company management and any applicable customer reporting requirements, including statements of funding requirements.

- 1.13.24 EVMS Criterion 10 - ANSI/EIA-748-B, 2.5(a) Revisions and Data Maintenance: Incorporate authorized changes in a timely manner, recording the effects in budgets and schedules. Base changes on the amount estimated and budgeted to the program organizations.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION