



**CONSTRUCTION AND DESIGN SERVICES AGREEMENT S-LINE EXTENSION AND  
DOUBLE TRACKING (PDB)**

**UTA CONTRACT #24-03849**

**PHASE 1 PRE-CONSTRUCTION CONTRACT**

This Services Agreement (“**Agreement**”) is hereby entered into by and between Utah Transit Authority, a public transit district organized under the laws of the State of Utah (“**UTA**”), and KIEWIT INFRASTRUCTURE WEST CO, LOCATED AT 9815 South Monroe Street, Suite 100, Sandy, UT 84070, a Corporation (“**Design-Builder**”).

**RECITALS**

UTA is constructing an extension of the S-line between Fairmont Station and Highland Drive and adding a siding track to provide double tracking between 500 East and 700 East in the Sugarhouse Neighborhood of Salt Lake City, Utah.

A. This is known as the S-Line Extension and Double Tracking Project. (the “**Project**”).

B. On April 25, 2024, UTA issued Request for Proposals No. 24-03849 (“**RFP**”), seeking interested parties to submit proposals to perform the work required by the Project.

C. UTA evaluated the responses and determined the Design-Builder’s response to be the most advantageous to UTA.

D. UTA and Design-Builder desire to enter into this Agreement to define their respective roles and responsibilities with respect to the Project.

E. Any capitalized terms not otherwise defined herein shall have the meanings set forth in the design and construction general conditions appended as an exhibit to this Agreement.

**AGREEMENT**

Therefore, the parties agree as follows:

**1. Type of Contract:** The contractual agreement that is being awarded is a Time and Material, subject to the fixed labor rates and design milestone requirements contained in Exhibit B.

**2. Scope of Work; Standard of Care.** (a) Design-Builder shall perform the Phase 1 Work as described in Exhibit A. In the Contract Documents, “Phase 1 Work” means all the pre-final design and pre-construction Services necessary to assist the Parties in reaching agreement on the GMP Price Proposal and scope of the Phase 2 elements of the Program (final design and construction).

(b) Design-Builder shall perform the Work in accordance with the Contract Documents (including any attached or incorporated construction drawings, plans, specifications and standards or other descriptions of the Work) and applicable industry standards, and in full compliance with all applicable laws, regulations and permits.

**3. Schedule.** (a) Design-Builder shall commence the Phase 1 Work within seven (7) days of Design-Builder's receipt of a Notice to Proceed ("NTP") from UTA. UTA is not required to issue a NTP until all insurance and other required documentation is submitted and deemed acceptable by UTA. UTA may issue a limited Notice to Proceed ("NTP") on a portion of the Work and may issue a series of limited NTPs to provide for progression of the Work in phases. Issuance of a limited NTP will not be deemed to require UTA to issue any subsequent NTPs and will not be deemed to obligate UTA to complete the Project or to pay Design-Builder for any portion of the Work not encompassed by an NTP issued by UTA.

(b) This Agreement will expire 268 days after UTA issues an NTP (that date, the "**Phase 1 Completion Date**"), unless (i) UTA and Design-Builder mutually agree to extend the term of the Agreement through a written Change Order in accordance with Section 10, or (ii) UTA and Design-Builder execute the Phase 2 Final Design and Construction Services Amendment, as set forth in Section 10 below. Design-Builder shall diligently prosecute the Phase 1 Work and complete the Phase 1 Work prior to the Phase 1 Completion Date.

(c) Time is of the essence with respect to the dates set forth in this section.

**4. Price and Payment.** (a) As full compensation for completing the Work in accordance with the Contract Documents, UTA shall pay Design-Builder the amounts set forth in Exhibit B (the "**Contract Price**"). The procedures for invoicing and payment are set forth in Section 9 below.

**5. Contract Documents.** (a) The Contract Documents consist of the following:

- (1) This Agreement, including its exhibits;
- (2) All written amendments and Change Orders to this Agreement executed in accordance with Section 10 below;
- (3) Design-Builder's Proposal in response to the RFP; and
- (4) The RFP including, without limitation, all attached or incorporated terms, conditions, drawings, plans, specifications and standards or other descriptions of the Work.

(b) The parties intend that the Contract Documents include and provide for all aspects of the Work that are necessary for the proper initiation, performance, and completion of the Project. The parties intend that the Contract Documents be interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

(c) If any terms of the Contract Documents contradict any other terms, the terms contained in the more recent Contract Document will govern.

(d) Design-Builder acknowledges that, prior to the execution of this Agreement, it has carefully reviewed the Contract Documents for errors, omissions, conflicts or ambiguities (each, a "**Discrepancy**"), and is not aware of any Discrepancies as of the execution of this Agreement. If the Design-Builder becomes aware of a Discrepancy, the Design-Builder shall immediately notify UTA's Project Manager of that Discrepancy in writing. UTA's Project Manager shall promptly resolve the Discrepancy in writing. Design-Builder's failure to promptly notify UTA of an apparent discrepancy will be deemed a waiver of Design-Builder's right to seek an equitable adjustment to the Agreement.

(e) The Contract Documents form the entire contract between UTA and the Design-Builder and by incorporation in this Agreement are as fully binding on the parties as if repeated in this Agreement. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

**6. Representatives of the Parties.** (a) UTA designates Marcus Bennett as its Project Manager, and Jared Scarborough as its Senior Representative. UTA's Contract Administrator for this Agreement is Pat Postell. Questions or correspondence regarding the contractual aspects of this Agreement should be directed to Pat Postell, at the address set forth in Section 13 below. UTA's Project Manager, Senior Representative, and Contract Administrator are referred to collectively as the "**UTA Representatives**."

(b) Design-Builder designates Chris Geiger as its Project Manager and Ken Hanna as its Management Representative (collectively, the "**Design-Builder Representatives**").

**7. Key Personnel.** Design-Builder's Proposal specified certain individuals as key personnel with respect to the Work to be performed under this Agreement. This Agreement was awarded based on Design-Builder's representation that such key personnel would be engaged in their respective capacities, at the commitment levels indicated, for the full duration of the Project. Design-Builder shall not make changes in the Key Personnel staffing without the written approval of UTA, such approval not to be withheld unreasonably. Any replacements of key personnel must have the same substantive and qualitative experience as the individuals identified in Design-Builder's Proposal.

**8. Phase 2 Final Design and Construction Services Amendment.** Once UTA and Design-Builder agree on a scope of construction services and a GMP Price Proposal for those services UTA and Design-Builder will execute an amendment to this Agreement (the "Phase 2 Final Design and Construction Services Amendment"). The Phase 2 Final Design and Construction Services Amendment will detail the scope, schedule, and price of the Phase 2 construction work, and will include other terms and conditions applicable to construction work. Execution of this Agreement in no way obligates UTA to execute the Phase 2 Final Design and Construction Services Amendment. The process for negotiating a Phase 2 Final Design and Construction Services Amendment is described in the RFP.

**9. Invoicing and Payment.** (a) To receive payment, Design-Builder shall submit to UTA an Application for Payment requesting payment for all Phase 1 Work performed as of the date of the Application for Payment. Design-Builder shall not submit Applications for Payment more often than once per month. The Application for Payment must be accompanied by supporting documentation sufficient to establish, to UTA's reasonable satisfaction, Design-Builder's entitlement to receive payment.

(b) The Application for Payment will constitute Design-Builder's representation that the Phase 1 Work described therein has been performed consistent with the Contract Documents and has progressed to the point indicated in the Application for Payment.

(c) UTA shall pay Design-Builder all amounts properly requested and documented within thirty (30) days of receipt of an Application for Payment. Notwithstanding the preceding sentence, if UTA determines that Design-Builder is not entitled to all or part of an Application for Payment as a result of Design-Builder's failure to meet its obligations hereunder, UTA will notify Design-Builder in writing at least five (5) days prior to the date payment is due. The notice must indicate

the specific amounts UTA intends to withhold, the reasons and contractual basis for the withholding, and the specific measures Design-Builder must take to rectify UTA's concerns. Design-Builder and UTA will attempt to resolve UTA's concerns prior to the date payment is due.

If the parties cannot resolve such concerns, Design-Builder may pursue its rights under the Contract Documents. Design-Builder shall continue to perform the Phase 1 Work pending the resolution of any such dispute.

**10. Change Orders.** Design-Builder shall not undertake any activity that materially changes the Phase 1 Work, or materially deviates from the requirements of the Contract Documents, except as authorized by a written Change Order signed by Design-Builder and UTA

**11. Indemnity.** Design-Builder, to the fullest extent permitted by law, shall indemnify, hold harmless and defend UTA, its officers, directors, and employees from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction to the extent resulting from the negligence or willful misconduct of Design-Builder, Design-Builder's consultants and subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable.

**12. Insurance.** Design-Builder shall obtain and maintain the insurance coverages set forth in Exhibit C, and comply with the obligations set forth in Exhibit A.

**13. Notices.** (a) To be deemed valid, all notices, requests, claims, demands and other communications between the parties ("**Notices**") must be in writing and addressed as follows:

If to Utah Transit Authority:  
Utah Transit Authority  
Attn: Pat Postell  
669 West 200 South  
Salt Lake City, UT 84101

With a required copy to:  
Utah Transit Authority  
Attn: General Counsel  
669 West 200 South  
Salt Lake City, UT 84101.

If to the Design-Builder:  
Kiewit Infrastructure West Co.  
Attn: Senior Vice President  
3888 E. Broadway Rd.,  
Phoenix, AZ 85040-2924

(b) To be deemed valid, Notices must be given by one of the following methods: (i) by delivery in person (ii) by a nationally recognized next day courier service, (iii) by first class, registered or certified mail, postage prepaid.

(c) Either party may change the address at which that party desires to receive written notice by delivery of Notice of such change to the party as set forth above. Notices will be deemed effective on delivery to the notice address then applicable for the party to which the Notice is directed, provided, however, that refusal to accept delivery of a Notice or the inability to deliver a

Notice because of an address change that was not properly communicated shall not defeat or delay the effectiveness of a Notice.

**14. Audit Rights.** Design-Builder shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit A (or any other provision of the Agreement). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Design-Builder shall also retain other books and records related to the performance, quality or management of this Agreement and/or Design-Builder's compliance with this Agreement. Records shall be retained by Design-Builder for a period of at least six (6) years, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Design-Builder agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of this Agreement at any tier.

**15. Termination.** (a) Upon ten (10) days' written notice to Design-Builder, UTA may, for its convenience and without cause, elect to terminate this Agreement. If UTA terminates the Agreement for its convenience, UTA shall pay Design-Builder for Phase 1 Work performed up to the date of the notice of termination, plus Design-Builder's reasonable costs attributable to the termination.

(b) If Design-Builder materially fails to perform any of its obligations under this Agreement, and such failure is not cured within ten (10) days of written notice from UTA identifying the breach, then UTA may terminate the Agreement for default. If UTA terminates the Agreement for default, UTA shall pay Design-Builder for Phase 1 Work satisfactorily performed up to the date of the notice of termination, less costs and expenses incurred by UTA as a result of the default.

**15.1 Completion of Final Design.** If the Design-Builder does not proceed with Phase 2 but UTA elects to develop and implement the Project with other contractors and service providers, UTA may, in its sole discretion, proceed to negotiate an amendment to this Phase I Agreement or separate professional services agreement(s) for the completion of the design by the Design-Builder's Engineer(s) of Record and/or design consultants to a 100% design level suitable for UTA to use to bid out a construction contract to a separate contractor for construction of the Project. Design-Builder will negotiate in good faith with UTA for this amendment or separate agreement. Design-Builder agrees to assign any design subcontract(s) to UTA upon request from UTA, and to contractually require its Engineer(s) of Record and/or design consultants to negotiate in good faith with UTA for a separate professional services agreement with UTA for the completion of the 100% design.

**15.2 Unintended Use of Work Product.** In the event that UTA utilizes work product produced by Kiewit, outside of the intended setting, then UTA will limit the associated claims including professional liability claims to a maximum of 10 million dollars for work product that fails to meet the Standard of Care as defined in Section 2.(b). Outside the intended setting would include UTA's:

(i) Use of work product, not stamped as complete, without appropriate subsequent finalization efforts by Design-Builder; or

(ii) Use of work product that is accurately marked for a particular contractors means and methods, without appropriate subsequent efforts by Design-Builder to generalize or broaden the assumed work practices to a larger contracting community

**16. Counterparts.** The parties may execute this Agreement in any number of counterparts, each of which when executed and delivered will constitute a duplicate original, but all counterparts together will constitute a single agreement.

**17. Work Product.** (a) All drawings, specifications, reports, calculations, and other documents furnished by Design-Builder to UTA pursuant to this Agreement (those documents, the “Work Product”) are deemed to be instruments of service and Design-Builder shall retain the ownership and intellectual property rights therein.

(b) Upon UTA’s payment in full for the Phase 1 Work required for Design-Builder to prepare any Work Product, Design-Builder will be deemed to have granted to UTA a license to use that Work Product in connection with the design, construction, occupancy, and maintenance of the Project, or any other UTA project or facility.

**18. Prohibited Interest.** No member, officer, agent, or employee of UTA during his or her tenure or for one year thereafter shall have any interest in, direct or indirect, including prospective employment by, Design-Builder or the proceeds under this Agreement without specific written authorization by UTA.

**19. Assignment.** Design-Builder acknowledges that the Work to be performed by Design-Builder is considered personal by UTA. Design-Builder shall not assign or transfer its interest in this Agreement without prior written approval by UTA.

**20. Successorship.** Design-Builder and UTA intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and permitted assigns.

**21. Governing Law.** The Agreement is governed by the laws of the State of Utah, without giving effect to its conflict of law principles. Actions to enforce the terms of this Agreement may only be brought in the Third District Court for Salt Lake County, Utah.

**22. Severability.** If any provision or any part of a provision of the Contract Documents is finally determined to be superseded, invalid, illegal, or otherwise unenforceable, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which will remain in full force and effect as if the unenforceable provision or part were deleted.

**23. No Waiver.** The failure of either Design-Builder or UTA to insist, in any one or more instances, on the performance of any of the obligations required by the other under the Contract Documents shall not be construed as a waiver or relinquishment of such obligation or right with respect to future performance.

**24. Headings.** The headings used in this Agreement, or any other Contract Document, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

**25. Amendments.** The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

**26. Effectiveness; Date.** This Agreement will become effective when all parties have fully signed it. The date of this Agreement will be the date it is signed by the last individual to sign it (as indicated by the date associated with that individual's signature).

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be executed by officers duly authorized to execute the same as of the date of last signature below.

**KIEWIT INFRASTRUCTURE  
WEST CO**

DocuSigned by:  
By: Darron Rolle 8/26/2024  
Name: C8E0C79DE4B6...  
Title:

**UTAH TRANSIT AUTHORITY**

By: \_\_\_\_\_  
Jay Fox  
Executive Director

By: \_\_\_\_\_  
Dan Hancock  
Chief Service Development Officer

DocuSigned by:  
Mike Bell  
70E3...  
Mike Bell  
UTA Counsel

Design-Builder's Federal ID Number: 47-0647803

## EXHIBIT A – SCOPE OF PHASE I

### General

#### A. Scope of Work

1. The intent of this document is to describe a complete work effort for Phase 1 and Phase 2 and related tasks as described below:
2. The scope of work is organized by tasks to provide a basis for describing the work activities, products and deliverables, assumptions and exclusions, a format for negotiating contract price, and a format for invoicing.
3. Major design elements include:
  - a. An extension of approximately 1000 foot of new single-track from current Fairmont Station to Highland Drive, and related appurtenances.
  - b. A new side platform on Simpson Ave at Highland Drive, and related appurtenances.
  - c. A new second track between 500 East and 700 East (new track limits do not enter 500 East or 700 East).
  - d. Signal and crosswalk modifications at 600 East,
  - e. A new signal and crosswalk modifications at McClelland Street.
  - f. New curb\gutter, sidewalk and relocated catch basin on north side of Simpson Ave between McClelland and Highland, grind and overlay of Simpson Ave between McClelland and Highland.

#### B. Design Milestones

1. 30% Configuration Design Milestone (Phase 1)
2. 60% Interim Design Milestone (Phase 1)
3. 90% Pre-Final Design Milestone (Phase 1)
4. 100% Final Design Milestone (IFC) (Phase 2)

#### C. GMP and Phase 2 Expectations

1. Agreement on a Guaranteed Maximum Price (GMP) for Phase 2 is expected to be achieved between 60% and 90% design.
2. Design hours\costs to complete the 100% design submittal deliverables, as defined in this Phase 1 Scope document, are intended to be modified to be post GMP and part of a Phase 2 contract.

#### D. UTA Project Documents

1. Preliminary Hazard and Threat Analysis Report
2. Safety and Security Management Plan
3. Safety and Security Certification Plan

4. Guidance Technical Specifications
5. Simpson Ave. Water Line Relocation Drawings
6. S-Line Extension Concept Drawings

E. Project Specific Controls

1. Kiewit may reallocate time within a task, between subtasks, without written approval from UTA, except for between design milestones (30%/60%/90%).
2. Any re-allocation of time between tasks at the highest level of reporting (ie. 1 Project Management, 2 Cost Estimating and Scheduling, etc.), between milestones (30%/60%/90%) and to/from subcontracts/ODC's, must be approved in writing from the UTA Project Manager, in response to a budget reallocation written request.
3. The hours associated with the 60/90/100% deliverables may only be utilized upon written approval of the UTA Project Manager specific to the proceeding milestone. This approval will occur as follows:
  - a. Within 1 week of a complete 30/60/90% deliverable, an hours expended by staff member report, for the period between the most recent invoice period end date and the deliverable date, will be provided to the UTA PM.
  - b. Within 2 weeks of a complete 30/60/90% deliverable, the UTA PM will provide either:
    - 1) written approval to access 60/90/100% contract time,
    - 2) written notice that they intend to collaborate on how to improve delivery efficiency, and/or
    - 3) Other direction
  - c. The UTA PM at their discretion may choose to accelerate their approval, but the design schedule will not assume that is the case.
  - d. The cost estimate submittals are understood to be lagging the primary 30%/60% deliverables, and it is intended that there is an independent reporting of the cost estimating task hours spent, and independent approvals of those 60% and 90% cost estimating hours.

F. UTA Manuals and Standards

1. Streetcar Design Criteria Manual
2. LRT Design Criteria Manual

G. Furnished at the Time of Project Start-up

1. Digital topographical data, including field surveys and monumentation performed to date and proposed alignment geometry for the extension.
2. Available digital CAD files for the as-built drawings of previous S-Line and S-Line Double-Track projects.

H. Product and Submittal Format

1. Software
  - a. MicroStation or AutoCAD
  - b. Word and Excel for text/data-based documents and calculations.
  - c. Primavera Project Planner P6 (version 8) for scheduling.
  - d. Design Milestone Deliverable Content Review – BlueBeam session, according to UTA style preferences, hosted by Kiewit (all content to be provided to UTA once complete).
  - e. Design Collaboration Content, In-Progress Content, Meeting content – SharePoint hosted by Kiewit (all content to be provided to Uta when complete and as requested).
  - f. Construction Content and Deliverables Management – Procore hosted by UTA.
2. Design Deliverables
  - a. Drawings in MicroStation or AutoCAD and PDF format at full size (22"x34"), at the noted scale, 300 dpi; provided in PDF "Books" matching the amount and order of the provided 11x17 hardcopy drawings.
  - b. Specifications and other text-based documents in Word and PDF format at the original size, 300 dpi, with OCR recognized text.

## **Task 1: Project Management**

### **1.1 Project Management**

1. Project Management Plan
  - a. Prepare a PMP in accordance with UTA's Quality Management Plan and Design Quality Procedures manual.
2. Contract Administration
  - a. Prepare and maintain a summary of hours by person and job title and summary of dollars by task, pending and executed change orders, current budget, previous incurred to date, spent this period, cumulative incurred to date, estimate to complete, estimate at completion, percent complete, earned value, budget variance by task, and subcontractor invoices as backup.
  - b. Submit comprehensive, up-to-date monthly progress reports covering the work performed/completed containing; Work or deliverables accomplished the prior month and work planned for the upcoming month by Task; important meetings; current issues relating to the work, including interfaces, budgets, and schedules; proposed actions to resolve or mitigate issues; updated schedule and planned-versus-actual narrative, which includes proposed resolutions to schedule slippages if actual progress lags baseline schedule; and review of budget-versus-actual expenditures—hours and dollars.
  - c. Submit monthly Primavera P6 schedule updates with a narrative to explain logic changes, explanations of any schedule delays, and proposals for bringing the project back on schedule.
  - d. Submit an invoice for payment with the monthly progress reports the 15th day of the following month in a format provided/approved by UTA.
3. Schedule Management
  - a. Prepare a detailed Work Breakdown Structure (WBS) based on the approved scope of work. These elements will be incorporated into the project schedule.
  - b. Prepare a Critical Path Method project schedule that provides a detailed sequence of all activities required to complete this project within the contract duration, using the WBS specified in the detailed work plan.
  - c. The project schedule will include all known constraints, task dependencies (logic), deliverables, UTA reviews, third-party reviews, Design Quality Program Plan reviews, and applicable deliverables and milestones. The schedule will distinguish the critical path from other non-critical activities.
  - d. Schedule and conduct a pre-scheduling conference with UTA to begin the development of the baseline contract schedule. The CPM baseline

schedule and the methodology for schedule development and sequence of operations, WBS, and cost loading will be reviewed at this meeting.

- e. The approved baseline schedule will be saved as a target to compare updates against to show current performance. Update the schedule each month to indicate actual start and finish dates, remaining project duration, and percent of work completed.
4. Document Control
- a. Utilize an internet-based document management system (SharePoint) for collaboration and delivery of project records, including, but not limited to, correspondence, deliverables, meetings, photographs, CADD files, and quality records.
  - b. Submit design milestone packages in accordance with UTA contract administration requirements.
5. Project Team Meetings
- a. Hold formal coordination meetings with UTA weekly, shifting to bi-weekly after the first month. The primary purpose of these meetings is to interface the work between pre-construction team, outside agencies, and ongoing UTA activities. Document required actions, due dates, and responsible parties.
  - b. Prepare meeting agendas, meeting summaries or minutes, and the meeting action item log for the formal coordination meetings with UTA. Action items shall be tracked to monitor progress and interfaces. Other, less formal, meetings shall be held on an as-needed basis to coordinate the work or disseminate new information or direction.
  - c. Develop and maintain a Design Issues Log on SharePoint which tracks critical design issues that can impact budget or schedule.
6. Permits
- a. Provide support to UTA to identify and process permits including meeting attendance or conference calls as requested by UTA.
  - b. Prepare permit applications, drawings, specifications, or any other necessary supplementary data (exhibits, calculations, etc.) for the project permits and approvals.

***Task 1.1 Deliverables***

- 1. *Project Management Plan*
- 2. *Monthly Progress Report and Invoice*
- 3. *Contract Baseline Schedule*
- 4. *Monthly Schedule Updates*
- 5. *Formal Coordination Meeting Minutes*
- 6. *Action Item and Design Issues Logs*

7. *Permit Application Packages*

***Assumptions***

1. *UTA will provide a sample invoice template and format requirements and instructions for submitting contract deliverables.*
2. *Project team meetings will alternate between UTA and Kiewit offices. Meetings at UTA will be in-person others may be held virtually.*
3. *Kiewit will be responsible for obtaining all permits with Kiewit as the name holder for Phase 1. Assume two (2) roadway cut permits by Kiewit and one (1) by UTA. The permit task is to support design efforts and coordination for permits not obtained during Phase 2.*
4. *Permit fees will be paid directly by Kiewit through a project allowance.*
5. *Kiewit will be the lead for all contact with regulatory agencies.*
6. *Kiewit will complete permit application packages for permits necessary to build the project including SWPPP, minor utility relocation, electrical, plumbing, temporary noise variances and similar permits.*

**1.2 Design Management**

1. Design Coordination
  - a. Manage and direct the efforts of the design team in accordance with the PMP and complete all engineering tasks and produce drawing packages at the milestones indicated in the baseline schedule.
2. Design Integration
  - a. Coordinate design with UTA Operations, Capital Design and Construction, Systems Engineering, and Service Planning to minimize impacts on existing operations. Construction sequence scenarios and supporting design shall be developed to retain current operations.
  - b. Coordinate design with SLC Transportation, Engineering and Redevelopment Agency, SLCPU, Rocky Mountain Power and private property owners and developers. In coordination with UTA, work with UDOT oversight (UDOT has a funding role on the project but does not own/operate facilities within the work footprint, but MOT coordination will likely include UDOT roadways).
  - c. Coordinate design and manage the integration of work with the planning, design, and construction work by other project consultants and contractors working on adjacent projects.
3. Design Quality Management
  - a. Manage quality control checks of design submittal documents prior to design milestone submittals. Quality checking procedures will be performed in accordance with the project-specific DQMP manual developed in Task 19 – Quality Management Plan.

- b. Provide QC checking documentation in accordance with the design quality checking procedures from the DQMP manual to UTA for each Milestone Design Submittal, in the project SharePoint site.
  - c. Coordinate Inter-disciplinary and construction review (IR\CR) sessions of design document submittals with the Quality Assurance Manager.
  - d. Utilize UTA's BlueBeam protocol for design review comment tracking and resolution.
4. CAD Management\Drawing Production
- a. Establish, document, and maintain an up-to-date CAD Management Plan that contains, at a minimum, an outline of the file names, structure, and content for all CAD-related files provided to UTA.
  - b. Ensure all contract drawings and source CAD data adhere to UTA CAD Standards
  - c. Create CAD files for all contract drawings. CAD files shall be developed using AutoCAD Civil 3D or Microstation.
  - d. Produce drawing packages and quantity take-offs for the 30%\60%\90%\100% design submittals, formatted as required by UTA CAD Standards.
  - e. Design Milestone Submittal Definitions
    - 1) 30% Configuration Submittal: Ensures that the deliverable meets the baseline criteria, and the horizontal alignments and station platform placement are consistent with the owner intent.
    - 2) 60% Submittal: Design interfaces have been coordinated and reflected in refined sections and plans. Track and roadway plan and profiles, typical sections, and initial details are included.
    - 3) 90% Submittal: Plans and profiles, typical sections, details, and track chart sheets are complete. Full specifications included. All design necessary for a complete cost estimate.
    - 4) 100% Submittal: All prior input from the Owner is incorporated or otherwise resolved. Plans are stamped.
5. Environmental Clearance Area & Property Access Confirmation
- a. As part of the configuration design, review environmentally cleared area documentation to confirm that the proposed concept design can stay within the operational right-of-way. Secure permission from SLC, SLCo or RDA if additional property access is needed. Through all stages of design ensure Design stays within Environmental Clearance area, and area cleared for property access.

***Task 1.2 Deliverables***

- 1. *QC Documentation*

2. *Project CAD Management Plan.*
3. *Drawing Packages and Quantity Take-offs for 30%\60%\90%\100% Design Milestones*

***Assumptions***

1. *Kiewit will host BlueBeam Studio sessions for design review comments. UTA will provide the BlueBeam procedure and tools for managing the design review comments.*
2. *UTA will provide digital GIS boundary defining the environmental clearance area. Current assumption is that no additional area will need environmental clearance.*

## **Task 2: Construction Cost Estimating and Scheduling**

### **2.1 Construction Cost Estimating**

1. Develop bottoms-up, crew-based construction cost estimates for each contract segment.
2. Develop quantities in a format (level of detail and unit of measure) consistent with the project WBS.
3. Develop crews for each type of work, and relevant union wage rates shall be applied and updated as labor agreements change. Productivity rates shall also be developed for each crew.
4. Other cost references (i.e., equipment operating cost from equipment watch, RS Means cost reference guide for heavy civil projects) may also be used to confirm crew setups, production rates, material pricing, and equipment operating costs for the Salt Lake area. Material costs for major commodities shall be monitored regularly and updated accordingly.
5. Submit construction cost estimates four weeks after the 30%, 60% and 90% design submittals. The initial design submittal will include quantities, The construction cost estimates will include quantities reconciled with the ICE, and costs that have not been reconciled with the ICE.
6. Estimate detail for contract estimates shall be structured consistently in a manner that permits application and review of estimate contingencies, mark-ups, and inflation. Contract estimates shall generally be developed using a crew-based cost estimating methodology that details the productivity, hours, and cost of labor, cost of material, equipment, supplies, and subcontracts for individual scope elements, and details cost of general conditions.

### **2.2 Construction Schedule**

1. Prepare and submit detailed construction schedules for each contract segment with the 30%, 60% and 90% cost estimate submittals.
2. Develop these schedules, including underlying construction productivity rates, to be fully integrated with the development of the construction cost estimates.
3. At these submittal milestones, within two weeks of the cost estimate submittals, also develop a comprehensive, cost-loaded and resource loaded schedule for the Project that integrates the construction schedules and cost estimates developed.
4. Construction schedules will be developed in sufficient detail to provide for an adequate constructability review of the submittal package. Utilize Primavera P6, version 8.2 or above to prepare the schedule.
5. Prepare a Critical Path Method (CPM) Schedule in Precedence Diagram Method (PDM).
6. Develop all schedules utilizing industry standards “best practices.”

7. The detailed construction schedules shall include the following:
  - a. Breakdown shall utilize WBS structure for the Contract Package. Task detail is to utilize activity coding structure that would permit the schedule to be filtered and organized in various forms.
  - b. Include with the schedule submittal a detailed written narrative describing approach and methods for completion of the work. Include all assumptions and specific schedule risks identified in development of the schedule.
  - c. Show the activity, description, duration, start, finish and logical relationships.
  - d. Critical path shall be distinguishable from other non-critical activities.
8. The 30% detailed construction schedule will be saved as a target schedule and updates shall be compared to the target to show/indicate changes to the baseline or target.

***Task 2 Deliverables***

1. *Construction Cost Estimates (30%, 60% and 90% Milestones)*
  - a. *WBS Pricing sheet*
  - b. *Pricing narrative*
  - c. *Project Org Chart*
  - d. *Risk Register*
  - e. *Estimate Coordination Letter*
2. *Construction Schedules (30%, 60% and 90% Milestones)*
  - a. *Primavera P6 Export for Microsoft Project*

***Assumptions***

1. *Coordination with one ICE team*

### **Task 3: Station Platform**

#### **3.1 Platform Design**

1. Reproduce platform plans, elevations, and sections to match existing platforms as shown on as-builts from previous S-Line projects.

#### **3.2 Landscape Design**

1. Reproduce landscaping and irrigation drawings from the original S-Line as necessary to integrate the double-track segment into the existing Greenway landscaping and meet a similar plant composition as the as-built design.

#### **3.3 Mechanical\Plumbing Design**

1. Reproduce plumbing plans and details for freeze-proof hose bib.
2. Prepare plans for hydronic snow melter system. Snow melter system design will be reproduced from design plans provided by UTA and used on other UTA platforms. Plans will include layout for gas and water service for the hydronic system.

#### **3.4 Electrical\Lighting Design (See Task 12.2 – Systemwide Electricals)**

#### **3.5 Platform Signage Design Elements**

1. Coordinate signage details with UTA Customer Experience Office and provide design details for mounting standard UTA customer signs and brackets to platform structures. Review/comment on UTA provided signage details and incorporate into plans.

#### ***Task 3 Deliverables***

1. *Platform Plans and Specifications*
2. *Landscape Plans and Specifications for Double-Track Segment*
3. *Mechanical and Plumbing Plans and Specifications*
4. *Signage Details*

#### ***Assumptions***

1. *UTA will provide available CAD files for as-built plans from the previous S-Line streetcar projects for use as standard details for platform canopies and structures, mechanical equipment, and electrical panels.*
2. *UTA will provide digital design files for the hydronic system currently being used on other UTA platforms.*
3. *UTA will provide plans for current and proposed Customer Experience signage details.*

## **Task 4: Civil, Roadway, Traffic**

### **4.1 Civil Design**

1. Prepare plans and specifications for demolition activities.
2. Prepare ADA ramp design details for crossings as required.
3. Prepare site grading and hardscape plans and specifications for platform and at-grade crossings.

### **4.2 Roadway Design**

1. Prepare plans and specifications for roadway and sidewalk layout, grading, and drainage.
2. Prepare paving plans for overlay of Simpson Ave including areas of paving, sawcut locations, sidewalk panel layouts, and joint locations.

### **4.3 Traffic Engineering**

1. Prepare plans and specifications to add streetcar detector loops at the 600 East intersection and to install a new permanent traffic signal at McClelland Street.
2. Prepare permanent signing and pavement striping plans.
3. Coordinate with UTA Systems and UTA's signal consultant (PineTop or similar) to establish Transit signal priority (TSP) requirements at signalized intersections and determine detector loop locations and ATMS connections.
4. Prepare signal circuit diagram plans for new signalized intersection at McClelland Street in coordination with Salt Lake City Transportation.
5. Prepare Maintenance of Traffic (MOT)/Traffic control plans.
6. Prepare final Traffic Management Plan that includes proposed lane and sidewalk closures, time frames, phasing, and S-Line service interruptions.

### ***Task 4 Deliverables***

1. *Demolition Plans and Specifications*
2. *Station and At-Grade Crossing Grading and Improvement Plans and Specifications*
3. *Roadway Layout, and Grading and Drainage Plans and Specifications*
4. *Roadway Paving Plans and Specifications*
5. *Pavement Signage and Striping Plans and Specifications*
6. *MOT Plans and Specifications*
7. *Traffic Signal Plans and Specifications*
8. *Final Traffic Management Plans*

### ***Assumptions***

1. *No separate drainage drawings will be required; drainage improvements for the extension will be included on the roadway plans.*
2. *No drainage analysis and/or report is required; drainage improvements are adjustments to existing catch basins and conveyance pipes with track drainage being added to that existing system.*
3. *Any traffic modeling required will be performed by others (Salt Lake City).*
4. *Traffic signal operations and programming will be by others (UTA Systems, PineTop or other UTA contractor)*

## **Task 5: Track and Guideway**

### **5.1 Guideway Alignment Design**

1. Develop track alignment geometric design and prepare alignment geometry drawings, typical sections, cross sections, and track charts.
2. Prepare track plan and profile drawings including track drainage.
3. Perform vehicle clearance calculations to wayside elements including OCS poles and platform canopy.

### **5.2 Special Trackwork Design**

1. Prepare trackwork and special trackwork plans, sections, details and specifications. Special trackwork design will match existing as-built special trackwork for consistency of maintenance and operations.

### ***Task 5 Deliverables***

1. *Alignment Geometry Drawings*
2. *Track Plan and Profile and Drainage Drawings*
3. *Track Typical Sections and Cross Sections*
4. *Special Trackwork Plans and Specifications.*
5. *Clearance Calculations.*

### ***Assumptions***

1. *No separate drainage drawings are required; track drainage improvements will be shown on the track plan and profile sheets. No drainage analysis and/or report is required for the double-track segment. All existing and new track drainage will be contained by new dry wells near the existing dry wells and the existing dry wells decommissioned and abandoned.*
2. *All tracks will be embedded, except turnouts where a direct fixation (DF) solution will be provided.*
3. *Turnouts will be encapsulated for electric isolation unless directed by UTA to use DF.*
4. *As-built plans from the previous streetcar projects will be utilized to provide standard details for special trackwork elements.*

## **Task 6: Structural**

### **6.1 Structural Design**

1. Provide design support including vehicle envelope clearance for OCS and traffic signal pole foundations including plans, specifications, and calculations.
2. Provide design support including vehicle envelope clearance for station platform canopy and structure foundations including plans, specifications, and calculations.

### ***Task 6 Deliverables***

1. *OCS and Traffic Signal Pole Foundation Plans and Specifications*
2. *Station Platform Canopy Structural Plans and Specifications*

### ***Assumptions***

1. *As-built plans from the previous S-Line projects will be utilized to reproduce standard details for OCS and traffic signal pole foundations and the station platform canopy.*
2. *Traffic signal poles, mast arms, and foundation designs will be per Salt Lake City Transportation\Engineering Standard Plans and Specifications.*
3. *OCS foundation schedules from the original S-Line project may be used as the basis of design for OCS pole foundations where similar OCS poles are used.*

## **Task 7: Standard Drawings**

### **7.1 Standard Drawings**

1. Use as-built plans from the previous S-Line projects as the basis of design for station platform features including canopy and furnishings, lighting, electrical, plumbing, signage, and structural elements; special trackwork components; OCS poles, foundations, and assemblies; and communications devices.
2. Create a Standard Drawing Package

### ***Task 7 Deliverables***

1. *Standard Drawing Package*

### ***Assumptions***

1. *UTA will provide all available digital CAD files for previous S-Line Projects.*

## **Task 8: Geotechnical**

### **8.1 Geotechnical Investigation**

1. Collect and review existing geotechnical data.
2. Establish geotechnical design criteria.
3. Determine if geotechnical site investigations are needed and develop a Geotechnical Site Investigation Plan, including in-field and laboratory testing.

### ***Task 8 Deliverables***

1. *Geotechnical Site Investigation Plan*

### ***Assumptions***

1. *UTA will provide all available geotechnical investigation and analysis reports from previous S-Line Streetcar projects and will request from the city and state relevant investigations.*
2. *No geotechnical borings are currently anticipated to support design efforts. If the review of the existing geotechnical data indicates borings are necessary, a Geotechnical Site Investigation Plan would be developed and implemented*

## **Task 9: Contract Specifications**

### **9.1 Contract Specifications**

1. Develop contract technical specifications using previous S-Line project technical specifications as a basis for design.
2. Compile specification sections into a package for each milestone submittal requiring specifications.

### ***Task 9 Deliverables***

1. *30% Technical Specifications*
2. *60% Technical Specifications*
3. *90% Technical Specifications*
4. *100% Technical Specifications*

### ***Assumptions***

1. *UTA specifications from the previous S-Line projects will serve as guide specifications for this project.*
2. *UTA will provide available Word files for any guide specifications to be used as a basis of design.*
3. *All contract specifications will follow the CSI format that was used in the previous S- Line projects. No conversion to current CSI MasterFormat will be performed.*
4. *Specifications for work within SLC right-of-way will follow SLC APWA specifications and can be provided as notes on the plans for this work.*
5. *Contract specifications will be submitted at the 30%, 60%, 90% and 100% milestones in electronic format. Textual changes made since a previous submittal will be in “track changes” mode. Formatting changes can be “accepted” prior to submitting the document. After submission of this document, all approved changes shall be “accepted” and the accepted version used as the base document for further development or changes.*

## **Task 10: Surveying and Mapping**

### **10.1 Surveying and Mapping**

1. Mapping
  - a. Verify, integrate, and update existing UTA provided survey and digital terrain model data to create existing conditions base maps and digital terrain models for final design.
  - b. Verify, integrate, and update existing UTA provided utility surveying and mapping.
2. Field Surveying
  - a. Perform field surveys to supplement existing survey data.
  - b. Establish survey controls for the project, as necessary to be consistent with the previously established project datum for the S-Line system.
  - c. Prepare horizontal and vertical control plan sheets.
3. Surveying and Mapping Support
  - a. Provide surveying and mapping support necessary to complete final design.
  - b. Updating base maps with new or existing survey data from any third-party, AHJ, or field survey tasks.
  - c. Update and maintain digital terrain model data.
  - d. Review utility records, providing documentation of records reviewed and indicating findings on the base map.
  - e. Document monuments for right-of-way control.
4. Existing Utility Mapping
  - a. Obtain and review as-built utility records, providing documentation of records reviewed.
  - b. Prepare an existing utility map and utilize the Blue Stakes process to mark utility locations in the field and compare to as-built records.
  - c. Determine if additional investigation is needed to confirm utility locations and/or depth.
  - d. If potholes are required, coordinate with surveying to obtain accurate utility depths and locations.
  - e. Update utility map as needed and resolve any conflicts with other design disciplines.

### ***Task 10 Deliverables***

1. *Digital Base Mapping*
2. *Horizontal and Vertical Control Plans*

3. *Existing Utility Map*

***Assumptions***

1. *UTA will provide all available existing digital base mapping for project.*
2. *UTA can facilitate obtaining mapping data from third-party or AHJ sources.*
3. *UTA will provide all available utility investigations from previous S-Line projects and current concept design.*
4. *If needed, up to five (5) utility potholes five (5) feet deep will be performed prior to construction.*

## **Task 11: Third-Party Coordination**

### **11.1 Utility Conflict Resolution Plan and Matrix**

1. Develop and implement a comprehensive third-party conflict resolution plan and matrix containing the following:
  - a. The status of all Subsurface Utility Engineering (SUE) work.
  - b. Identify all known conflicts and corresponding resolutions.
  - c. Establish strategies to avoid, mitigate, or design to address potential point(s) of conflict.
  - d. Coordinate with Salt Lake City and other known utility companies, and log correspondence records.
  - e. Coordination efforts for any potential betterments to ensure the relocation design(s), estimate(s), and agreement(s) accurately reflect the required relocation or betterment work.
  - f. Coordination efforts to establish relocation costs for utilities needing relocation by other parties, including any costs for relocation(s) identified during the pre- construction phase.
  - g. Management of the plan from survey through design and execution of agreements, relocation(s), and final billing(s).

### **11.2 Electrical Power Line Relocation**

1. Coordinate locations of systems ductbank and conduit design with Rocky Mountain Power and SLC RDA undergrounding of the overhead power lines.

### ***Task 11 Deliverables***

1. *Power Line Relocation Coordination Correspondence*
2. *Utility Conflict Resolution Plan and Matrix*

### ***Assumptions***

1. *Kiewit will lead all coordination efforts with third-party stakeholders including, but not limited to SLC Transportation, SLC Engineering, SLC Public Utilities, SLC RDA, Rocky Mountain Power, design and technical review with agencies having jurisdiction (AHJ). Two utility owners have been identified as needing coordination at this time, Salt Lake City water and Rocky Mountain Power.*
2. *UTA will lead all coordination efforts and outreach with community groups.*
3. *UTA will provide any available existing utility investigations from the previous S-Line project and the current concept design.*
4. *UTA will be responsible for completing any utility or third-party agreements required for the project.*

## **Task 12: Systems**

### **12.1 Traction Electrification System**

1. Prepare design plans and specifications for modifying the existing traction power system and OCS for cut-over to the existing system while minimizing revenue interruptions.
2. Develop plans and specifications for OCS poles\foundations and wiring layouts. OCS layout design will be by a subconsultant. Kiewit will manage the and produce the CAD drawings, details, and specifications.

### **12.2 Systemwide Electrical Design**

1. Prepare plans and specifications for systemwide electrical and communications ductbanks, conduits, and vault locations and connections with civil/platform/utility elements.
2. Prepare plans and specifications for powered switch machine and switch heater electrical systems in coordination with track designers.
3. Prepare electrical and lighting plans and specifications for Highland Drive station platform, including snow melting system; TVM power, conduit, and foundation base.

### **12.3 Signaling Design**

1. Coordinate with UTA Operations and Systems Engineering Team to confirm signals system design and operational considerations.
2. Prepare designs and requirements for modifications to the existing signals system for cut-over with minimal revenue interruptions.
3. Prepare systemwide plans and specifications for the signals system including typical layout drawings for wayside signal, switch machine and heater, bonding, proposed double tracking and future extension house installation and LRT detector loops.
4. Prepare plans and specifications for signaling interface with traffic signals. Coordinate design with civil\roadway\traffic\track designers and AHJ, including the location of detector loops, ductbanks, conduits, vaults, handholds, and equipment houses.

### **12.4 Communications System**

1. Confirm with UTA Operations and Systems Engineering Team communication system and subsystem equipment needs and requirements.
2. Prepare plans and specifications for communications cable, SCADA, and equipment for station platforms and proposed double tracking and future extension signal houses.
3. Coordinate ductbank and conduit needs with Systemwide Electrical design.

### **12.5 Stray Current Analysis**

1. Meet and coordinate with SLCPU, UTA Systems Engineering Team, and Stray Current Mitigation Consultant to determine extent of any stray current analysis and protection required for the relocated Simpson Avenue water line.
2. Prepare plans and specifications for cathodic protection if needed and as agreed with SLCPU.

## **12.6 Systems Integration**

1. Develop a Systems Integration Plan and execute for traffic signals, train control signals, communications systems, and all applicable interfaces.
2. Perform design integration during inter-disciplinary and construction reviews (IR\CR). Verify interfaces and requirements against design outputs to confirm no clashes or gaps in design.
3. Coordinate with System Safety and Security task.
4. Coordinate with UTA Operations and Systems Engineering Team to avoid or minimize impacts on existing operations and develop construction sequencing and supporting design to retain current operations.
5. Through UTA, coordinate with Salt Lake City and utility providers (public and private), and private property owners and developers.
6. Identify safety critical items and develop a matrix for tracking and verifying compliance.

### ***Task 12 Deliverables***

1. *OCS Plans and Specifications*
2. *Systemwide Electrical Plans and Specifications*
3. *Signaling Plans and Specifications*
4. *Communications Systems Plans and Specifications*
5. *Cathodic Protection Plans and Specifications*
6. *Systems Integration Plan*

### ***Assumptions***

1. *A Traction Power study is not required. Existing traction power system has the capacity to power the new extension and double-track segment without upgrading the existing system.*
2. *Existing OCS poles and foundations in the proposed double-track section have the capacity to support the additional assemblies and wires required for the new track. New OCS poles will be required at the new turnout locations.*
3. *No new systemwide ductbank is required in the double-track section.*
4. *No stray current analysis is required in the double-track segment.*

5. *A baseline existing stray current study is not anticipated for the Extension segment, only standard cathodic protection of the water line is being designed. However, if discussions with SLC PU conclude that one is required and additional protection is required, a scope and fee would be developed and submitted for review and approval to complete that effort.*
6. *As-built plans from the previous S-Line projects will be utilized to reproduce standard details for OCS poles and assemblies, wayside signal\comm devices, and systemwide electrical elements.*
7. *Any signage for train operations will be determined and installed by UTA.*
8. *Vital and non-vital wayside application development and back-office updates, integration, and coordination will be part of Phase 2.*
9. *Test Plan will be developed in Phase 2.*
10. *Systems equipment configuration files and manuals will be produced in Phase 2.*

## **Task 13: Safety and Security**

### **13.1 Safety and Security Certification**

1. Review, update and implement the project-specific Safety and Security Management Plan (SSMP) and the project-specific Safety and Security Certification Plan (SSCP) as provided by UTA.
2. Review existing UTA PHA log and Certifiable Element and Item (CE&I) list. Identify any new hazards as design progresses and update the PHA log and CE&I list. At the 90% milestone, submit documentation confirming that all the safety mitigations identified in the CE&I list were incorporated into the design via a Design Criteria Conformance Checklist (DCCC).
3. Review existing UTA Security Threat and Vulnerability (TVA), proposed mitigations and scope specific CILs. Identify any new security vulnerabilities identified as design progresses and update the TVA Log and CIL. At the 100% milestone, submit documentation confirming that all security elements identified in the CIL were incorporated into the design as a component of the DCCC.
4. All identified safety and security requirements, inclusive of design, procedural or training shall be included in Design Criteria Conformance Checklists.

### ***Task 13 Deliverables***

1. *Update and Implement Project-specific SSMP*
2. *Update and Implement Project-specific SSCP*
3. *Update PHA Log and CIL*
4. *Update Security TVA Log and CIL*
5. *Design Conformance Checklists*

### ***Assumptions***

1. *UTA will provide Project Specific SSMP and SSCP for review and comment.*
2. *UTA will provide Project Specific Certifiable Elements and Items List*
3. *No PHA or TVA workshops required. UTA will provide PHA Log and CI&E and Security Vulnerability Log and CIL.*
4. *UTA may choose to not share the TVA log for security reasons but will provide direction for any design mitigations required by the TVA assessment.*

## **Task 14: Right-of-Way**

### **14.1 Right-of-Way Definition**

1. Define any temporary construction easement that need to be acquired for construction of the S-Line extension. Construction easements will be defined based on plat prepared for the project and provided digitally by UTA.
2. Coordinate with UTA to obtain any Right-of-Entry needed for field surveys.

### **14.2 Right-of-Way Support**

1. Prepare parcel maps, legal descriptions, and exhibits as required for any temporary construction easements.

### ***Task 14 Deliverables***

1. *Parcel Maps and Legal Descriptions for Construction Easements*

### ***Assumptions***

1. *UTA can provide digital right-of-way\property lines for the existing S-Line.*
2. *UTA will acquire any rights-of-entry required for completion of this task.*
3. *UTA can provide examples of parcel maps and legal descriptions.*
4. *UTA will be responsible for any temporary construction easement acquisition services.*

## **Task 15: Public Involvement Support**

### **15.1 Public Outreach**

1. Assist UTA PI team by providing project data for use by UTA in pre-construction public outreach and stakeholder meetings.
2. Attend public outreach and stakeholder meetings as requested by UTA.

### ***Task 15 Deliverables***

1. Materials for Public Outreach and Stakeholder Meetings

### ***Assumptions***

1. Presentation format for design review meetings shall be per UTA direction.
2. UTA PI Consultant will be the point of contact for public involvement.

## **Task 16: Quality Management Plan (QMP)**

### **16.1 Quality Management Program**

1. Assign a QA Manager (QAM) to the project. QAM will review UTA's Quality Management Plan and Quality Design Procedures and provide any suggested revisions or updates as applicable to the S-Line project.
2. Develop a project-specific Design Quality Management Plan (DQMP).
3. Prepare a quality checking procedure guide and flow chart outlining the steps in the quality processes based on the DQMP for use by the project design team.
4. Provide training to all project team members performing design work activities in the application of design checking procedures and track completion dates of training by individual.
5. Perform internal quality audits at the 60%, 90%, 100% design milestones. Quality audits will be performed by the QAM.
6. Submit quality audit reports with the Milestone Design Submittal package to UTA.
7. Facilitate internal inter-disciplinary and construction review sessions. Provide documentation and/or traceability regarding resolution of design issues.

### ***Task 16 Deliverables***

1. *Project-Specific Design Quality Management Plan*
2. *Design Quality Checking Procedure Guide*
3. *QA Audit Reports*
4. *QC Checking Procedure Training*
5. *IR/CR Session Documentation*

### ***Assumptions***

1. *UTA will provide QMP and QDP for review and comment.*
2. *QC checking will be performed on the 30% Configuration Design submittal, but a quality audit is not required.*

## **Task 17: Storm Water and Utilities**

### **17.1 Storm Water Management**

1. Prepare erosion and sediment control plans referencing standard details for SWPPP permitting.

### **17.2 Water Relocation Design**

1. Complete UTA provided water line relocation plans and specifications per SLC Public Utility standards (APWA). Specifications will be incorporated as notes on the plans.
2. Coordinate Simpson Ave water line relocation with SLC Public Utilities. Establish cathodic protection requirements if needed.

### ***Task 17 Deliverables***

1. *SWPPP Plans for Permitting*
2. *Water Relocation Plans and Specifications*

### ***Assumptions***

1. *Except for Simpson Ave, coordination of other utility betterments is not included in this task. If UTA adds betterments to this task, design and estimating will be an extra service.*
2. *Task 11.1 includes coordination efforts for any potential betterments to ensure the relocation design(s), estimate(s), and agreement(s) accurately reflect the required relocation or betterment work.*

## **Task 18: Risk Assessment and Management Support**

### **18.1 Risk Management Plan**

1. Prepare and update the RCMP detailing the approaches and tools that shall be used to verify that the design or design decisions made during final design take potential project risks into account. The risk items from the proposal will form the basis of the risk management plan and will be added to as the project progresses.
2. Consideration shall be given to eliminating or reducing project risks and enhancing identified opportunities. Addressing risks or including opportunities in the final design shall only be considered where these risks or opportunities do not change the basis of design. Any element that would revise the basis of design shall be subject to additional negotiation prior to incorporation.

### **18.2 Risk Assessment Workshops**

1. Kiewit will manage preparation and execution of risk assessment workshops.
2. Participate in the workshops as subject matter experts.
3. Provide quantitative risk analysis inputs that include cost estimate and schedule impact analysis for risks on the register, as well as cost estimate and schedule variability assessments, for modeling purposes.
4. Risk workshops will be held following the 30%, 60% and 90% design, cost estimate, and schedule submittals.

### ***Task 18 Deliverables***

1. *RMP Input*
2. *Risk Workshops*

## **Task 19: Early Procurement**

### **19.1 Early Procurement**

1. RFP development and quote solicitation.
2. Price comparison and analysis.
3. Draft and negotiate permanent material agreement with vendor.

### ***Task 19 Deliverables***

1. *Vendor Price Comparison*
2. *Vendor Quotes*

## **Task 20: Constructability Review**

### **20.1 Constructability Review**

1. Provide construction reviews of the S-Line Double-track and Extension project.
2. CR review and presentation meetings.
3. Report and comment on CR results.
4. Incorporate any accepted CR comments.

### ***Task 20 Deliverables***

1. *Report and comments on CR results.*

### ***Assumptions***

1. *Constructability Review will be led by KIE.*

### Project Schedule

#	Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2025												2026											
							Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
1	<b>UTA S-Line Doubletrack Prelim Design Schedule - LIVE</b>		445.00	23-Aug-24	28-May-26	0.00	28-M																							
2	<b>Project Milestones</b>		445.00	23-Aug-24	28-May-26	0.00	28-M																							
3	M0001	NTP Phase 1 - Pre-Construction	0.00	23-Aug-24*		0.00	◆ NTP Phase 1 - Pre-Construction																							
4	ES01DP1DP	Start-Up / Data Collection	15.00	23-Aug-24	13-Sep-24	0.00	■ Start-Up / Data Collection																							
5	MS01DT1PS	30% Segment 1 Submittal	0.00		27-Sep-24	0.00	◆ 30% Segment 1 Submittal																							
6	MS02DT1PS	30% Segment 2 Submittal	0.00		27-Sep-24	0.00	◆ 30% Segment 2 Submittal																							
7	MS01DT1IS	60% Segment 1 Submittal	0.00		03-Dec-24	35.00	◆ 60% Segment 1 Submittal																							
8	MS02DT1IS	60% Segment 2 Submittal	0.00		03-Dec-24	35.00	◆ 60% Segment 2 Submittal																							
9	MS01DT1RS	90% Segment 1 Submittal	0.00		21-Feb-25	0.00	◆ 90% Segment 1 Submittal																							
10	MS02DT1RS	90% Segment 2 Submittal	0.00		21-Feb-25	0.00	◆ 90% Segment 2 Submittal																							
11	MS01DT1CS	100% Segment 1 Submittal	0.00		09-May-25	245.00	◆ 100% Segment 1 Submittal																							
12	MS02DT1CS	100% Segment 2 Submittal	0.00		09-May-25	245.00	◆ 100% Segment 2 Submittal																							
13	M0003	Design Completion	0.00		09-Jun-25	225.00	◆ Design Completion																							
14	M0004	Anticipated Project Substantial Completion	0.00		29-Apr-26*	0.00	◆ Anticipated																							
15	M0005	Final Completion	0.00		28-May-26	0.00	◆ Final																							
16	<b>Cost Estimating and GMP</b>		160.00	30-Sep-24	16-May-25	0.00	16-May-25, Cost Estimating and GMP																							
17	EPWD30CE	30% Cost estimating	20.00	30-Sep-24	25-Oct-24	60.00	■ 30% Cost estimating																							
18	EPWD60CE	60% Cost estimating	20.00	04-Dec-24	03-Jan-25	35.00	■ 60% Cost estimating																							
19	EPWD90CE	90% Cost estimating	20.00	24-Feb-25	21-Mar-25	0.00	■ 90% Cost estimating																							
20	EPWDNGMP	Negotiating GMP	10.00	24-Mar-25	04-Apr-25	0.00	■ Negotiating GMP																							
21	MPWDGMP	Final GMP	0.00		04-Apr-25	0.00	◆ Final GMP																							
22	EPWDUTA	UTA Board Approval for Final GMP	30.00	07-Apr-25	16-May-25	0.00	■ UTA Board Approval for Final GMP																							
23	<b>Projectwide</b>		200.00	23-Aug-24	09-Jun-25	225.00	09-Jun-25, Projectwide																							
24	EA01PWDMQADMGEN	Projectwide - Design Management & Discipline Lead	200.00	23-Aug-24	09-Jun-25	225.00	Projectwide - Design Management & Discipline Lead																							
25	EA02SG2OYWDMGEN	A02 Disc Management Digital Engineering Segment 2 - Extension	180.00	23-Aug-24	09-May-25	245.00	A02 Disc Management Digital Engineering Segment 2 - Extension																							
26	EA02SG1OYWDMGEN	A02 Disc Management Digital Engineering Segment 1 - Double Track	180.00	23-Aug-24	09-May-25	245.00	A02 Disc Management Digital Engineering Segment 1 - Double Track																							
27	EA01PWDNLEDMGEN	A01 Disc Management Lead Rsp - Eng Project Wide	200.00	23-Aug-24	09-Jun-25	225.00	A01 Disc Management Lead Rsp - Eng Project Wide																							
28	EA01PWDMQLDMGEN	A01 Disc Management Ind - Quality Team Project Wide	200.00	23-Aug-24	09-Jun-25	225.00	A01 Disc Management Ind - Quality Team Project Wide																							
29	<b>Procurement</b>		240.00	04-Dec-24	12-Nov-25	115.00	12-Nov-25, Procurement																							
30	PS01DT1TR	Special Track Early Procurement	240.00	04-Dec-24	12-Nov-25	115.00	Special Track Early Procurement																							
31	PS01DT1SY	Systems Early Procurement	240.00	04-Dec-24	12-Nov-25	115.00	Systems Early Procurement																							
32	<b>Design Package</b>		200.00	23-Aug-24	09-Jun-25	225.00	09-Jun-25, Design Package																							
33	<b>Segment 1 - Double Track</b>		185.00	16-Sep-24	09-Jun-25	225.00	09-Jun-25, Segment 1 - Double Track																							
34	<b>30% Design</b>		30.00	16-Sep-24	25-Oct-24	10.00	25-Oct-24, 30% Design																							
35	EA02SG1PD	Prelim (30%) Design Development	5.00	16-Sep-24	20-Sep-24	0.00	■ Prelim (30%) Design Development																							
36	EA02SG1PQ	Prelim (30%) QC/IDR/CR/QA/Ready to Submit	5.00	23-Sep-24	27-Sep-24	0.00	■ Prelim (30%) QC/IDR/CR/QA/Ready to Submit																							
37	ES01DT1PS	Submit Prelim (30%) Package	0.00		27-Sep-24	0.00	◆ Submit Prelim (30%) Package																							
38	ES01DT1PO	Prelim (30%) Review	20.00	30-Sep-24	25-Oct-24	10.00	■ Prelim (30%) Review																							
39	<b>60% Design</b>		65.00	30-Sep-24	03-Jan-25	0.00	03-Jan-25, 60% Design																							
40	EA02SG1ID	Interim (60%) Design Development	30.00	30-Sep-24	08-Nov-24	0.00	■ Interim (60%) Design Development																							
41	EA02SG1IQ	Interim (60%) QC/IDR/CR/QA/Ready to Submit	15.00	11-Nov-24	03-Dec-24	0.00	■ Interim (60%) QC/IDR/CR/QA/Ready to Submit																							
42	ES01DT1IS	Submit Interim (60%) Package	0.00		03-Dec-24	0.00	◆ Submit Interim (60%) Package																							
43	ES01DT1IO	Interim (60%) Review	20.00	04-Dec-24	03-Jan-25	0.00	■ Interim (60%) Review																							
44	<b>90% Design</b>		65.00	18-Dec-24	21-Mar-25	225.00	21-Mar-25, 90% Design																							

■ Remaining Level of Effort   
 ■ Actual Work   
 ■ Critical Remaining Work  
■ Actual Level of Effort   
 ■ Remaining Work   
 ◆ Milestone



### Project Schedule

#	Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2025												2026											
							Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
91	<b>Track and Guideway Design</b>		180.00	23-Aug-24	09-May-25	245.00	09-May-25, Track and Guideway Design																							
92	ETGD001	Alignment Design	180.00	23-Aug-24	09-May-25	245.00	Alignment Design																							
93	ETGD002	Special Trackwork Design	180.00	23-Aug-24	09-May-25	245.00	Special Trackwork Design																							
94	<b>Utility Design</b>		165.00	30-Sep-24	23-May-25	235.00	23-May-25, Utility Design																							
95	EUTD001	Third-Party Utility Design Coordination	165.00	30-Sep-24	23-May-25	235.00	Third-Party Utility Design Coordination																							
96	EUTD002	Drainage Design	165.00	30-Sep-24	23-May-25	235.00	Drainage Design																							
97	EUTD003	Utility Design	165.00	30-Sep-24	23-May-25	235.00	Utility Design																							
98	<b>Systems Design</b>		165.00	30-Sep-24	23-May-25	235.00	23-May-25, Systems Design																							
99	ESYD001	Traction Electrification Design	165.00	30-Sep-24	23-May-25	235.00	Traction Electrification Design																							
100	ESYD002	Systemwide Electrical Design	165.00	30-Sep-24	23-May-25	235.00	Systemwide Electrical Design																							
101	ESYD003	Signaling Design	165.00	30-Sep-24	23-May-25	235.00	Signaling Design																							
102	ESYD004	Communications Systems Design	165.00	30-Sep-24	23-May-25	235.00	Communications Systems Design																							
103	ESYD005	Stray Current Control Design	165.00	30-Sep-24	23-May-25	235.00	Stray Current Control Design																							
104	<b>Geotechnical Engineering</b>		175.00	16-Sep-24	23-May-25	235.00	23-May-25, Geotechnical Engineering																							
105	EGEO001	Geotechnical Engineering	175.00	16-Sep-24	23-May-25	235.00	Geotechnical Engineering																							
106	<b>Structural Design</b>		170.00	23-Sep-24	23-May-25	235.00	23-May-25, Structural Design																							
107	ESTR001	Structural and Foundation Engineering	170.00	23-Sep-24	23-May-25	235.00	Structural and Foundation Engineering																							
108	<b>Surveying and Mapping</b>		50.00	09-Sep-24	15-Nov-24	45.00	15-Nov-24, Surveying and Mapping																							
109	ESUR001	Surveying and Mapping	50.00	09-Sep-24	15-Nov-24	45.00	Surveying and Mapping																							
110	<b>Construction Cost Estimating and Scheduling</b>		130.00	04-Dec-24	09-Jun-25	225.00	09-Jun-25, Construction Cost Estimating and Scheduling																							
111	ECCE001	Construction Cost Estimating	130.00	04-Dec-24	09-Jun-25	225.00	Construction Cost Estimating																							
112	ECCE002	Construction Scheduling	130.00	04-Dec-24	09-Jun-25	225.00	Construction Scheduling																							
113	<b>Safety and Security Certification</b>		130.00	04-Dec-24	09-Jun-25	225.00	09-Jun-25, Safety and Security Certification																							
114	ESSC001	Safety Certification	130.00	04-Dec-24	09-Jun-25	225.00	Safety Certification																							
115	ESSC002	Security Certification	130.00	04-Dec-24	09-Jun-25	225.00	Security Certification																							
116	<b>Construction</b>		425.00	23-Aug-24	29-Apr-26	0.00	29-Apr-26, Construction																							
117	<b>Projectwide</b>		185.00	23-Aug-24	16-May-25	70.00	16-May-25, Projectwide																							
118	EPWDPTR	Property Transfer RDA to SLC&UTA	90.00	23-Aug-24	03-Jan-25	165.00	Property Transfer RDA to SLC&UTA																							
119	EPWDWPA	City of Salt Lake Approval of Waterline Plans	20.00	04-Dec-24	03-Jan-25	35.00	City of Salt Lake Approval of Waterline Plans																							
120	EPWD PSP	Project Set up & Planning	30.00	07-Apr-25	16-May-25	0.00	Project Set up & Planning																							
121	<b>Segment 1</b>		160.00	19-May-25	07-Jan-26	80.00	07-Jan-26, Segment 1																							
122	CSEG1091	S1- Roadway Worker Protection & SWPPP Setup	10.00	19-May-25	02-Jun-25	0.00	S1- Roadway Worker Protection & SWPPP Setup																							
123	CSEG1001	S1- Removals & Cleaning	10.00	03-Jun-25	16-Jun-25	0.00	S1- Removals & Cleaning																							
124	CSEG1011	S1- Excavation and Subgrade Preparation	10.00	17-Jun-25	30-Jun-25	0.00	S1- Excavation and Subgrade Preparation																							
125	CSEG1101	S1- OCS Foundations	10.00	01-Jul-25	15-Jul-25	0.00	S1- OCS Foundations																							
126	CSEG1021	S1- E/L/B Ductbanks and Utilities	20.00	16-Jul-25	12-Aug-25	0.00	S1- E/L/B Ductbanks and Utilities																							
127	CSEG1031	S1- Place Finish Agg Base	10.00	13-Aug-25	26-Aug-25	0.00	S1- Place Finish Agg Base																							
128	CSEG1041	S1- F/P/S Track	20.00	27-Aug-25	24-Sep-25	80.00	S1- F/P/S Track																							
129	CSEG1081	S1- Weekend Track Tie In's (500 East & 700 East)	10.00	25-Sep-25	08-Oct-25	80.00	S1- Weekend Track Tie In's (500 East & 700 East)																							
130	CSEG1051	S1- OCS Poles, Cantilevers & Wire	20.00	09-Oct-25	05-Nov-25	100.00	S1- OCS Poles, Cantilevers & Wire																							
131	CSEG1111	S1- Signal Device and Cable Installation	20.00	09-Oct-25	05-Nov-25	100.00	S1- Signal Device and Cable Installation																							
132	CSEG1106	S1- Traffic Singal Device and Cable Installation	20.00	09-Oct-25	05-Nov-25	100.00	S1- Traffic Singal Device and Cable Installation																							
133	CSEG1121	S1- Local System Testing	10.00	09-Oct-25	22-Oct-25	80.00	S1- Local System Testing																							
134	CSEG1122	S1- SCADA Headed Upgrade - By others	10.00	09-Oct-25	22-Oct-25	80.00	S1- SCADA Headed Upgrade - By others																							
135	CSEG1061	S1- Systems Integration Testng	30.00	23-Oct-25	05-Dec-25	80.00	S1- Systems Integration Testing																							
136	CSEG1071	S1- Pre-revenue Testing	20.00	08-Dec-25	07-Jan-26	80.00	S1- Pre-revenue Testing																							

█ Remaining Level of Effort   
 █ Actual Work   
 █ Critical Remaining Work  
█ Actual Level of Effort   
 █ Remaining Work   
 ◆ Milestone

#	Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2025												2026											
							Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
137	<b>Segment 2</b>		240.00	19-May-25	29-Apr-26	0.00	29-Apr-26,																							
138	CSEG2001	S2 - Waterline Relocation	20.00	19-May-25	16-Jun-25	60.00	S2 - Waterline Relocation																							
139	CSEG2111	S2 - Roadway Worker Protection & SWPPP Setup	10.00	27-Aug-25	10-Sep-25	0.00	S2 - Roadway Worker Protection & SWPPP Setup																							
140	CSEG2011	S2 - Removals & Cleaning	10.00	11-Sep-25	24-Sep-25	0.00	S2 - Removals & Cleaning																							
141	CSEG2021	S2 - Excavation and Subgrade Preparation	10.00	25-Sep-25	08-Oct-25	0.00	S2 - Excavation and Subgrade Preparation																							
142	CSEG2114	S2 - OCS Foundations	10.00	09-Oct-25	22-Oct-25	0.00	S2 - OCS Foundations																							
143	CSEG2041	S2 - E/L/B Ductbanks and Utilities	20.00	23-Oct-25	19-Nov-25	0.00	S2 - E/L/B Ductbanks and Utilities																							
144	CSEG2031	S2 - Station Construction	40.00	20-Nov-25	21-Jan-26	0.00	S2 - Station Construction																							
145	CSEG2051	S2 - Place Finish Agg Base	20.00	20-Nov-25	19-Dec-25	0.00	S2 - Place Finish Agg Base																							
146	CSEG2061	S2 - F/P/S Track	20.00	22-Dec-25	21-Jan-26	0.00	S2 - F/P/S Track																							
147	CSEG2101	S2 - Weekend Track Tie In (McClelland Street)	10.00	22-Jan-26	04-Feb-26	0.00	S2 - Weekend Track Tie In (M																							
148	CSEG2115	S2 - Platform Foundation and Canopy Installation	10.00	22-Jan-26	04-Feb-26	0.00	S2 - Platform Foundation and																							
149	CSEG2119	S2 - Platform Devices and Cable Installation	10.00	22-Jan-26	04-Feb-26	0.00	S2 - Platform Devices and Ca																							
150	CSEG2071	S2 - OCS Poles, Cantilevers & Wire	20.00	05-Feb-26	04-Mar-26	20.00	S2 - OCS Poles, Cantile																							
151	CSEG2901	S2 - SCADA Headed Upgrade - By others	10.00	05-Feb-26	18-Feb-26	0.00	S2 - SCADA Headed Upgr																							
152	CSEG2121	S2 - Local System Testing	10.00	05-Feb-26	18-Feb-26	0.00	S2 - Local System Testing																							
153	CSEG2116	S2 - Traffic Singal Device and Cable Installation	20.00	05-Feb-26	04-Mar-26	20.00	S2 - Traffic Singal Devic																							
154	CSEG2113	S2 - Signal Device and Cable Installation	20.00	05-Feb-26	04-Mar-26	20.00	S2 - Signal Device and																							
155	CSEG2081	S2 - Systems Integration Testing	30.00	19-Feb-26	01-Apr-26	0.00	S2 - Systems Inte																							
156	CSEG2091	S2 - Pre-revenue Testing	20.00	02-Apr-26	29-Apr-26	0.00	S2 - Pre-rev																							

Kiewit Leadership has informed UTA Leadership that with a delayed NTP date of Mid-September, the above completion dates will not be delayed.

### EXHIBIT B – PRICING FOR PHASE I

**Total Not-To-Exceed Amount:** The total aggregate amount payable by UTA under this contract for Phase I shall not exceed \$1,937,772 (the "Total Not-To-Exceed Amount") over the entire period of performance. If awarded, the Phase II Not-To-Exceed Amount will be determined during Phase I.

Kiewit may reallocate time within a task, between subtasks, without written approval from UTA, except for between design milestones (30%/60%/90%). Any re-allocation of time between tasks at the highest level of reporting (ie. 1 Project Management, 2 Cost Estimating and Scheduling, etc.), between milestones (30%/60%/90%) and to/from subcontracts/ODC's, must be approved in writing from the UTA Project Manager, in response to a budget reallocation written request. The hours associated with the 60/90/100% deliverables may only be utilized upon written approval of the UTA Project Manager specific to the proceeding milestone. (See E. Project Specific Controls in the Scope of Work for more detail)

		Project Wide		Segment 1 Double-Track		Segment 2 Extension		Total	
Task #	Task Name	Total Labor Hours	Total Labor Cost	Total Labor Hours	Total Labor Cost	Total Labor Hours	Total Labor Cost	Total Labor Hours	Total Labor Cost
1	Project Management	1,265	\$298,367					1,265	\$298,367
2	Construction Cost Estimating and Scheduling	1,800	\$278,826					1,800	\$278,826
3	Station Platform					384	\$51,986	384	\$51,986
4	Civil\Roadway\Traffic			128	\$24,009	960	\$146,043	1,088	\$170,052
5	Track and Guideway			376	\$96,767	568	\$78,015	944	\$174,782
6	Structural					280	\$38,041	280	\$38,041
7	Standard Drawings	518	\$100,754					518	\$100,754
8	Geotechnical					80	\$15,850	80	\$15,850
9	Contract Specifications	80	\$11,450					80	\$11,450
10	Surveying and Mapping					80	\$12,381	80	\$12,381
11	Third-Party Coordination					80	\$12,381	80	\$12,381
12	Systems	836	\$192,835	38	\$8,341	976	\$214,284	1,850	\$415,461
13	Safety and Security Certification	200	\$62,970					200	\$62,970
14	Right-of-Way Support							-	\$0
15	Public Involvement	20	\$3,619					20	\$3,619
16	Quality Management Plan (QMP)	240	\$48,305					240	\$48,305
17	Storm Water and Utilities					320	\$69,806	320	\$69,806
18	Risk Assessment and Management Support	60	\$10,835					60	\$10,835
19	Early Procurement	50	\$7,278					50	\$7,278
20	Constructability Reviews	99	\$18,628					99	\$18,628
		<b>5,168</b>	<b>\$ 1,033,868</b>	<b>542</b>	<b>\$ 129,118</b>	<b>3,728</b>	<b>\$ 638,786</b>	<b>9,438</b>	<b>\$ 1,801,772</b>
30% Design Submittal		720	\$ 167,650	88	\$ 20,670	710	\$ 128,086	1,518	\$ 316,406
60% Design Submittal		1,136	\$ 265,858	254	\$ 60,222	1,536	\$ 256,817	2,926	\$ 582,896
90% Design Submittal		640	\$ 149,821	152	\$ 36,583	1,010	\$ 170,496	1,802	\$ 356,899
100% Design Submittal		269	\$ 63,160	48	\$ 11,644	312	\$ 55,156	629	\$ 129,960

Non-Labor	
ODC (Utility Investigation)	\$10,000
Subconsultants	
Surveying	\$25,000
Landscape Designer	\$25,000
OCS Engineer	\$24,000
<b>Total Non-Labor</b>	<b>\$84,000</b>

Allowances	
Travel Allowance	\$50,000
Permit Allowance	\$2,000
<b>Total Allowances</b>	<b>\$52,000</b>

<b>Total Phase One Cost With Non-Labor and Allowances</b>	<b>\$1,937,772</b>
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**Exhibit C to Construction Services Contract  
Utah Transit Authority Project Minimum  
Insurance Requirements**

Design-Builder shall procure and maintain for the duration of the contract, and for 6 years thereafter, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Design-Builder, his agents, representatives, employees, or subcontractors.

**MINIMUM SCOPE AND LIMIT OF INSURANCE**

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Commercial general liability (“CGL”) insurance for all operations in a form providing coverage not less than that of standard commercial general liability insurance. The CGL insurance shall be on an occurrence form and cover all operations of the Design-Builder and its subcontractors, including independent Design-Builders. The CGL insurance shall, at a minimum, provide coverage for bodily injury, products and completed operations coverage, contractual liability and personal injury liability with limits not less than:
  - a. \$10 million per occurrence for bodily injury and property damage, with a maximum deductible or self-insured retention of \$100,000.
  - b. \$10 million per occurrence for products/completed operation coverage.
  - c. \$2 million per occurrence for personal and advertising injury and contractual liability.

The CGL insurance shall not have any coverages that delete or deny coverage including, but not limited to, ISO Form 2294. The Design-Builder shall obtain approval of the CGL policy from UTA prior to executing the contract.

2. **Automobile Liability:** Automobile liability insurance covering bodily injury and property liability exposures relating to all owned, hired or non-owned autos used in conjunction with the contract work. Such insurance shall have a combined single limit of not less than \$5 Million.
3. **Workers’ Compensation:** Worker’s compensation insurance as required by the State of Utah, with statutory limits, and employers’ liability insurance with a limit of no less than \$500,000 each accident, \$500,000 disease-policy limit and \$500,000 disease-each employee.
4. **Builder’s Risk:** Builder’s risk (course of construction) insurance, covering the risk of loss for any damage or loss to the building or structure by any means or occurrence until the final completion of the contract work. Coverage shall utilize an “All Risk” (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions. The coverage shall include mechanical breakdown, property in transit, property at temporary storage locations, earthquake

damage and flood damage ensuring the interests of UTA, SLCDA and their respective subcontractors of any tier providing equipment, materials or services for the project.

5. **Professional Liability:** Professional liability insurance with limits no less than \$5 million per occurrence or claim, and \$1,000,000 with a maximum deductible or self insured retention of \$100,000.
6. **Pollution Legal Liability:** Design-Builder's pollution legal liability and/or asbestos legal liability and/or errors and omissions (if project involves environmental hazards) with limits no less than \$2,000,000 per occurrence or claim, and \$4,000,000 policy aggregate.
7. **Railroad Protective Liability:** Railroad protective liability insurance naming the affected railroad(s) as insured(s) with minimum limits for bodily injury and property damage of \$2,000,000 per occurrence, \$6,000,000 aggregate and property damage of 2,000,000 per occurrence, \$6,000,000 aggregate, or such other limits as required by the affected railroad.

If the Design-Builder maintains higher limits than the minimums shown above, UTA requires and shall be entitled to coverage for the higher limits maintained by the Design-Builder. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to UTA.

### **Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by UTA. At the option of UTA, either: the Design-Builder shall cause the insurer to reduce or eliminate such deductibles or self-insured retentions as respects UTA, its officers, officials, employees, and volunteers; or the Design-Builder shall provide a financial guarantee satisfactory to UTA guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

### **Other Insurance Provisions**

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. Excepting the worker's compensation and professional liability policies, UTA and their respective officers, officials, employees, and volunteers are to be covered as additional insureds with respect to liability arising out of with respect to liability arising out of work or operations performed by or on behalf of the Design-Builder including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Design-Builder. General liability coverage can be provided in the form of an endorsement to the Design-Builder's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).
2. For any claims related to this project, the Design-Builder's insurance coverage shall be primary insurance as respects UTA, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by UTA, its officers, officials, employees,

or volunteers shall be excess of the Design-Builder's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to UTA.

### **Builder's Risk (Course of Construction) Insurance**

Design-Builder may submit evidence of Builder's Risk insurance in the form of Course of Construction coverage. Such coverage shall name UTA as a loss payee as their interest may appear.

If the project does not involve new or major reconstruction, at the option of UTA, an Installation Floater may be acceptable. For such projects, a Property Installation Floater shall be obtained that provides for the improvement, remodel, modification, alteration, conversion or adjustment to existing buildings, structures, processes, machinery and equipment. The Property Installation Floater shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken, or destroyed during the performance of the Work, including during transit, installation, and testing at UTA's site.

### **Claims Made Policies**

If any coverage must be written on a claims-made coverage form:

1. The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.
2. Insurance must be maintained, and evidence of insurance must be provided for at least five (5) years after completion of contract work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Design-Builder must purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements must be submitted to UTA for review.

### **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to UTA.

### **Waiver of Subrogation**

Design-Builder hereby agrees to waive rights of subrogation which any insurer of Design-Builder may acquire from Design-Builder by virtue of the payment of any loss. Design-Builder agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers'

Compensation policy shall be endorsed with a waiver of subrogation in favor of UTA for all work performed by the Design-Builder, its employees, agents and subcontractors.

### **Verification of Coverage**

Design-Builder shall furnish UTA with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by UTA before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Design-Builder's obligation to provide them. UTA reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

### **Subcontractors**

Design-Builder shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Design-Builder shall ensure that UTA is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13. Design-Builder may adopt a Design-Builder controlled insurance program to meet this requirement.

### **Special Risks or Circumstances**

UTA reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.