



**J-U-B ENGINEERS, Inc.  
AGREEMENT FOR PROFESSIONAL SERVICES**

**Attachment 1 – Scope of Services, Basis of Fee, and Schedule**

**PROJECT NAME:** SH60 Waterline Replacement

**CLIENT:** Town of Johnstown

**J-U-B PROJECT NUMBER:** 87-22-XXX

**CLIENT PROJECT NUMBER:** Click or tap here to enter text.

**ATTACHMENT TO:**

☒ **AGREEMENT DATED:** 1/18/2023; or

☐ **AUTHORIZATION FOR ADDITIONAL SERVICES #X; DATED:** Click or tap to enter a date.

The referenced Agreement for Professional Services executed between J-U-B ENGINEERS, Inc. (J-U-B) and the CLIENT is amended and supplemented to include the following provisions regarding the Scope of Services, Basis of Fee, and/or Schedule:

**PART 1 - PROJECT UNDERSTANDING**

J-U-B's understanding of this project's history and CLIENT's general intent and scope of the project are described as follows:

The Town of Johnstown would like to replace and extend the existing 8" waterline in SH60 from Parish Avenue to the central wastewater treatment plant. The existing line is believed to be an old cast iron line and is prone to leakage.

This project will replace and extend approximately 1.3 miles of waterline along SH60 from Parish Avenue to the Town's Central wastewater treatment plant.

- The Concept design phase will include evaluation of required pipeline sizing, preliminary traffic control options, utility locating, survey, and preliminary alignment of the proposed line including potential connection points at Parish Avenue and impacts to existing utilities. The preliminary alignment(s) will be used for utility coordination including identifying requirements for crossing agreements with Tom Binder (irrigation), Colorado Department of Transportation, and Great Western Railroad.
- Once the alignment is selected, final design will include 60% design and final construction plans for approximately 7000 feet of waterline from Parish Avenue to Central WWTP. Work completed during this phase will include final connection details, potholing to determine the location of conflicting utilities, and utility crossing agreements for affected utilities.

The overall project duration is expected to be 6-8 months. The detailed scope of services is provided below.

**PART 2 - SCOPE OF SERVICES BY J-U-B**

J-U-B's Services under this Agreement are limited to the following tasks. Any other items necessary to plan and implement the project, including but not limited to those specifically listed in PART 3, are the responsibility of CLIENT.

**A. Task 000: Project Management**

1. Set up project into J-U-B's financial and record keeping systems for document retention and project controls.
2. Coordinate quality assurance / quality control (QA/QC) processes.

3. Communicate and coordinate J-U-B team activities with kickoff and progress meetings as required.
4. Communicate and coordinate subconsultant activities under J-U-B, if necessary.
5. Regularly monitor project status, budget and schedule.
6. Attend 20 bi-weekly client meetings to report project status.
7. During periods of project activity, provide a regular report to CLIENT on project status, budget and schedule.
8. Provide a monthly invoice including budget status.
9. Provide ongoing document handling and filing.
10. Assumptions:

Project duration is 6-8 months from notice to proceed

#### **B. Task 100: SH60 WATERLINE REPLACEMENT DESIGN**

1. For this task, J-U-B will develop concept and final design for 1.3 mi of waterline as noted in the following tasks:
2. Subtask 001: Pre-Design (This task is intended to identify design criteria, identify utilities to QLB, select a preliminary alignment, and develop base drawings.)
  - a. Conduct a kick-off meeting with client to determine project goals, objectives, milestones, and list of potential reaches for the project. Meeting will also include a review of preliminary design criteria. Note: This meeting may be combined with Phase I kick-off.
  - b. Recommend pipe size based on Town Water Master Plan and existing system model, currently assumed to be 12" diameter.
  - c. Identify preliminary utility locations via Subsurface Utility Engineering (SUE) for records and onsite utility locating (QLB).
  - d. Develop a topographic survey including one call utility locating, sanitary and storm sewer locations and depths to inverts; utilities as marked by the utility owners; utilities as marked by CLIENT (water and storm water utilities); results of QLB SUE; and any readily discoverable property pins within the project area. Property boundary will be approximated using the Town's GIS database and the County Assessor's Map; a boundary survey will not be conducted unless specifically requested by the client and authorized under Task 300: Management Reserve
  - e. Develop base map including survey and utility information
  - f. Evaluate potential utility locations and identify 1-2 potential alignments. Current alignment is expected to be South side of Hwy60 with crossing at CR19.
  - g. Conduct a site visit to verify alignments and utilities (as needed).
  - h. Review the base map of preliminary utilities and select preferred alignment with the client.
  - i. Identify affected agencies and develop outreach plan
  - j. Deliverables:
    - i. Plan sheets showing known utilities and selected preliminary alignment
3. Subtask 002: Concept Design (This task is intended to confirm utility locations and develop 60% plan and profile plan sheets.)
  - a. Coordinate potholing of affected utilities. Field potholing is addressed on a time and materials basis in Task 300.
  - b. Identify service line connections and locations
  - c. Evaluate alternatives for traffic control in accordance with CDOT/MUTCD standards.
  - d. Coordinate with the following utilities for encroachment/crossing requirements including:
    - i. Colorado Department of Transportation for water line location and traffic control requirements.
    - ii. Great Western railroad for crossing requirements
    - iii. Tom Binder for irrigation line location and crossing requirements.
  - e. Develop plan and profile sheets to identify existing utilities and potential conflicts.
  - f. Identify any needed easements for Town coordination.

- g. Submit draft plans to dry utilities including fiber optic, gas, telephone, and power to notify them of upcoming construction and coordinate conflicts.
  - h. Review draft connection details and potential construction sequencing for connections at Parish Avenue and the WWTP.
  - i. Develop preliminary opinion of cost
  - j. Deliverables:
    - i. Concept level plan and profile sheets showing known utilities, potential crossing conflicts, and preliminary connection details for selected alternative.
4. Subtask 003: Final Design (This task is intended to complete final design contract documents)
- a. Develop preliminary traffic control plan
  - b. Develop and submit applications for encroachment/crossing agreements to Tom Binder irrigation company, Great Western Railroad, and CDOT Hwy 60 (5 crossings). This task includes up to 10 legal descriptions.
  - c. Develop and submit application to Colorado Department of Transportation for utility/special use permit including: Letter of Request, final plan/profile, and traffic control plan. Any environmental evaluation will be addressed as an additional service.
  - d. Develop 90% design drawings showing existing utilities, potential conflicts, connection points, detailed notes, and applicable Town engineering standard details.
  - e. Develop 90% project contract documents and technical specifications based on Town of Johnstown Standards, 2020 EJCDC and 16 Division CSI format.
  - f. Prepare a final opinion of probable cost based on historical construction costs adjusted for construction year prices per the Construction Cost Index with 20% construction contingency.
  - g. Conduct an internal Quality Control/ Quality Assurance review of the Final Design.
  - h. Submit 90% design drawings to CLIENT. CLIENT shall conduct a review of the design and identify issues to address.
  - i. Review CLIENT comments to the 90% Design and prepare final design drawings and technical specifications for bidding purposes. CLIENT comments are expected to be minor in nature due to the previous review step; consequently, substantial revisions, separate bidding schedules, or development of additive alternates requested by the CLIENT will be completed under Task 400: Management Reserve upon specific authorization by the CLIENT.
  - j. Conduct an internal Quality Control/ Quality Assurance review of the Bid Documents.
  - k. Send final design sheets to impacted utility companies including fiber optic, gas, telephone, and power. It is assumed these will be for informational purposes and will not require any design changes.
  - l. Provide 4 printed sets of the Bid Documents, including half-sized drawings (11x17), bid forms, contract forms, and technical specifications, for use by the Town. A \*.pdf of the bid documents will be provided for distribution to Town departments, regulatory agencies, plan agencies, and affected utilities, and interested bidders.
  - m. Assumptions:
    - i. CLIENT will negotiate and pay for any required easements
    - ii. Railroad crossings are included under master agreement
    - iii. CLIENT will pay all application and legal fees separate from this agreement
  - n. Deliverables:
    - i. Final bid-able plans and specifications and opinion of probable cost

### **C. Task 200: BIDDING AND CONSTRUCTION SUPPORT SERVICES**

- 1. Bidding support will include the following services:
  - a. Prepare the 100% Plans and Contract Documents for use in electronic bidding.
  - b. Conduct one pre-bid meeting.
  - c. Respond to Contractor questions.
  - d. Issue up to 2 addenda based on contractor questions, if required.
  - e. Provide assistance during review of bids, including:

- i. Review of bids received for general conformance with the bid requirements.
  - ii. Prepare a bid summary letter summarizing bid results for review by CLIENT and CLIENT'S legal counsel.
- f. Prepare contract award documents and construction agreements and facilitate execution of the documents, if CLIENT decides to award a contract for project construction.
- g. Assumptions
  - i. CLIENT will upload contract documents to electronic bidding platform.
  - ii. CLIENT and CLIENT's legal counsel will make the final determination regarding whether Bids are responsible and responsive and whether CLIENT should proceed with project award.
  - iii. In the event all bids are rejected and CLIENT decides to rebid the project in whole or in part, the work associated with redesigning, repacking, and/or rebidding shall be considered an Additional Service.
- h. Deliverables
  - i. Digital contract documents (PDF) for electronic bidding
  - ii. Pre-bid meeting notes and attendance sheet.
  - iii. Addenda, if necessary
  - iv. Bid summary letter.
  - v. Construction agreement and project award documents for execution by CLIENT and contractor, if project is awarded.
- 2. This task includes construction support but is not scoped at this time. An additional scope/fee will be developed as requested by the CLIENT

**D. Task 300: Management Reserve Fund**

- 1. The Management Reserve Fund establishes a pre-authorized budget for additional tasks that may be requested by the CLIENT's Authorized Representative and performed by J-U-B upon mutual agreement of scope, budget, and schedule.
- 2. J-U-B will not exceed the pre-authorized amount without CLIENT approval.
- 3. When authorized, the ENGINEER will assist with the following:
  - a. Conduct potholing along State Highway 60. Assumes up to 18 potholes
  - b. Conduct geotechnical investigation for pipeline installation and bored crossings.
  - c. Design bored tunnel crossings.

**PART 3 - Other additional services specifically requested by CLIENTCLIENT-PROVIDED WORK AND ADDITIONAL SERVICES**

- A. **CLIENT-Provided Work** - CLIENT is responsible for completing, or authorizing others to complete, all tasks not specifically included above in PART 2 that may be required for the project including, but not limited to:
  - 1. Volunteer coordination for CDBG income survey if needed
  - 2. Timely reviews of design submittals
  - 3. Assistance with utility coordination as needed
- B. **Additional Services** - CLIENT reserves the right to add future tasks for subsequent phases or related work to the scope of services upon mutual agreement of scope, additional fees, and schedule. These future tasks, to be added by amendment at a later date as Additional Services, may include:

- i. Additional meetings or public outreach as requested by CLIENT
- ii. Bidding and construction support services
- iii. Additional utility coordination
- iv. Environmental evaluation/clearances
- v. Other additional services specifically requested by CLIENT

#### **PART 4 - BASIS OF FEE AND SCHEDULE OF SERVICES**

A. CLIENT shall pay J-U-B for the identified Services in PART 2 as follows:

1. For Lump Sum fees:
  - a. The portion of the Lump Sum amount billed for J-U-B's services will be based upon J-U-B's estimate of the percentage of the total services actually completed during the billing period.
2. For Time and Materials fees:
  - a. For all services performed on the project, Client shall pay J-U-B an amount equal to the cumulative hours charged to the Project by each class of J-U-B's personnel times J-U-B's standard billing rates.
  - b. Client shall pay J-U-B for J-U-B's Consultants' charges times a multiplier of 1.1.
3. For Cost Plus Fixed Fees:
  - a. Client shall pay J-U-B an amount equal to the cumulative hours charged to the Project by each class of J-U-B's personnel times their hourly salary rate times J-U-B's audited overhead multiplier for all services performed on the Project.
  - b. Client shall pay J-U-B a lump sum fixed fee.
  - c. Client shall pay J-U-B for Reimbursable Expenses times a multiplier of 1.1.
  - d. Client shall pay J-U-B for J-U-B's Consultants' charges times a multiplier of 1.1.
4. J-U-B may alter the distribution of compensation between individual tasks to be consistent with services rendered while not exceeding the total project amount.

#### **B. Period of Services**

1. If the planned period of service for the Tasks identified above extend more than one year, J-U-B's billing rates and/or fees for remaining Tasks may be increased to account for direct labor cost, rate table adjustments, or other inflationary increases. If that occurs, an adjustment to the billing rates and/or Fee will be computed based on remaining scope amount times the specific rate increase.
2. If the period of service for the Tasks identified above is extended beyond 6 months or if the Project has stop/start iterations, the compensation amount for J-U-B's services may be appropriately adjusted to account for salary adjustments, extended duration of project management and administrative services, and/or costs related to stop/start cycles including necessary monitoring and communication efforts during inactive periods.

C. CLIENT acknowledges that J-U-B will not be responsible for impacts to the schedule by actions of others over which J-U-B has no control.

D. The following table summarizes the fees and anticipated schedule for the services identified in PART 2.

<b>Task Number</b>	<b>Task Name</b>	<b>Fee Type</b>	<b>Amount</b>	<b>Anticipated Schedule</b>
000	Project Management	Time and Materials (Estimated Amount Shown)	\$27,800	Concurrent with work progress

100-001	Preliminary Design (including SUE QLD/B and survey)	Lump Sum	\$62,600	Draft for CLIENT review on a mutually agreed schedule after executed contract, notice to proceed, and receipt of all required data
100-002	Concept Design	Lump Sum	\$32,600	As mutually agreed to by CLIENT and J-U-B
100-003	Final Design	Lump Sum	\$67,900	As mutually agreed to by CLIENT and J-U-B
200	CONSTRUCTION SUPPORT SERVICES	Time and Materials (Estimated Amount Shown)	\$TBD	As mutually agreed to by CLIENT and J-U-B
300	Management Reserve Fund (including potholing, geotechnical evaluation, and tunnel design specifications)	Time and Materials (Estimated Amount Shown)	\$75,600	As mutually agreed to by CLIENT and J-U-B
400	Bidding Support	Time and Materials (Estimated Amount Shown)	\$20,000	As mutually agreed to by CLIENT and J-U-B
<b>Total:</b>			<b>\$286,600</b>	

<sup>A</sup> From Notice to Proceed.

<sup>B</sup> At standard JUB billing rates

**NOTE on Coronavirus and Schedule:** J-U-B is committed to meeting your project schedule commitments as delineated above. As our response to the COVID-19 pandemic, J-U-B is engaging in safety procedures in help to protect clients, staff, their families, and the public. Our staff or offices may be subject to quarantine or other interruptions. Since COVID-19 impacts are beyond J-U-B's control, we are not responsible for the force majeure impacts to delivery timelines, or subsequent project delays and related claims, costs, or damages. Should circumstances related to the COVID-19 issue arise with J-U-B staff or in a J-U-B office that will impact our delivery schedule, we will notify you of the circumstances and mutually agree to a schedule adjustment.

**Exhibit(s):**

- None

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*For internal J-U-B use only:*

PROJECT LOCATION (STATE): Colorado

TYPE OF WORK: City

R&D: Yes

GROUP: Choose an item.

**PROJECT DESCRIPTION(S):**

1. Water Supply/Distribution (W03)
2. Highway/Interstate/Roadway (H07)