Addendum #2

Project Information	
Project Name:	North Greeley Sewer
Bid Number:	F24-11-096
Date:	November 27, 2024
Project Manager:	John Goin, P.E.

Addendum Questions	
Question #1	What is the City's estimated project start date and duration?
Answer	The City would like to award the project in December 2024 after bids are opened. The City will issue a NTP either ASAP (for those that think they can complete before May when river comes up), or in August/September 2025 for construction next fall. Anticipated construction duration is 300 days. A Contractor's timeline should be provided in the Qualifications submittal document with Part 2 - Project Team.
Question #2	RFI No. 01A: Basis of Award: What will be the basis of award for the project? Will the project be awarded based on the provided weighted scoring system? Or will the project be awarded based on lowest bid with a passing qualification?
Answer	The project will be awarded based on low bid with a passing qualification. An updated scoring table is provided as part of this Addendum in Question #3.
Question #3	RFI No. 01B: Because this project is assumed to be awarded based on low bid, can the qualifications be limited to relevant company experience, and approach to dewatering?
Answer	Project will be awarded based on low bid with acceptable company experience. Qualifications have been updated to include only relevant company experience, and eliminate project approach descriptions. Part 4-Project Approach on page 7 of SOQ is not longer required, and Part 5-Project Dewatering and Water Control Approach requires only the experience outlined in the approach.

Comparative Evaluation Requirements:

	Points Available
Part 1 – Contractor Profile	10
Part 2 – Project Team (Use Appendix C to fill out relevant project information)	30
Part 3 – Contractor Relevant Projects (Use Appendix D to fill out relevant project information)	40
Part 4 – Project Approach (Eliminated)	0
Part 5 – Contractor Relevant Dewatering Projects (Use Appendix E to fill out relevant project information)	20
Total	**100**

Question #4	Have you tested the ground water for contaminants? If contaminates show up what's your plan to treat it? Would we be able to discharge in the river or sanitary MH?
Answer	Groundwater testing has not been completed. The Contractor is responsible for obtaining the dewatering and stormwater discharge permit from the State of Colorado per Specification 02315 and City Specification 02240. Contractor is responsible for the Dewatering Plan including sampling, proposing methods and locations for disposing of removed water, including a treatment system if required by the State of Colorado. For purposes of bid, Contractor shall assume that dewatering to the River will be acceptable, and treatment beyond TSS removal is not anticipated. If additional treatment is required, a Change Order will be negotiated between the Contractor and City.
Question #5	Do all manholes need to be coated both interior and exterior? Or is it just the manholes in groundwater?
Answer	All interior and exterior manhole lining, coating, and wrapping shall be completed per Project Specifications 02535, 03400, 02957A, and 02957B. The interior and exterior manhole lining, coating, and wrapping shall be completed to grade for all manholes.
Question #6	Sheet 3.3 the 308' of casing and sheet 3.4 the 102' of casing has no line item. Is this incidental to the sewer? Also, do the casings call for concrete on both top and bottom of the casing or just the bottom? Please clarify.
Answer	The Bid Tab has been revised and attached to this addenda. The revision includes Item 42 for Segement 2 to include the steel casing and concrete cap from STA 103+91.51 to STA 108+01.51. Concrete cap shall be per the detail on Sheet C5.1 with stabilization gravel on the bottom of the pipe. Specification 00620, Special Provisions has been revised and attached to this addenda to include Item 42.
Question #7	Who is in charge of soil testing?
Answer	The Contractor is responsible for soil compaction testing.
Question #8	Will each joint need to be surveyed?
Answer	No, individual joints will not be required to be surveyed. Contractor shall complete survey per Project Specifications.
Question #9	Sheet S1 how high does the waterproofing need to be for the structure?
Answer	Given the presence of shallow groundwater at the time of geotechnical exploration, structure waterproofing shall extend to grade.
Question #10	I had one question about striping as it is a LS for Segment 2 and Segment 3. What are the quantities for this? Is it striping with paint or thermoplastic? How long? Are there any arrows? Are we putting back striping in the parking lot?

Answer	Roadway striping shall be per City of Greeley Specification 02618. It is assumed that striping will be required within the permanent and temporary easements where the existing striping is disturbed. Existing striping in the roadway includes dashed lane line, yellow centerline, crosswalk, and arrows. It is assumed that parking lot striping will have to be replaced within the permanent and temporary easements. It is assumed that striping will need to be replaced for a minimum of 153 parking stalls and two crosswalks within the parking lot.
Question #11	Will the City of Greeley allow ADS Sanitite HP polypropylene pipe per ASTM F2764 (triple wall polypropylene sanitary sewer pipe) to be bid as a value engineer alternate to the PVC sanitary sewer pipe that is specified per plan? Sanitite HP has a minimum pipe stiffness of 46pii and meets all the requirements as listed project specifications.
Answer	ADS Santite HP pipe is not an allowable substitution for this project.
Question #12	Are there any allowable pipe material substitutions?
Answer	FRP is an allowable pipe material substitution. FRP shall be 36" diameter, SN 72, and bedded in AASHTO Grade #8 stone in lieu of 57/67 rock.
Question #13	Can the North 11th Avenue & H Street intersection be closed during construction at the intersection?
Answer	Contractor shall submit detailed traffic control plans to City Traffic Division for approval in accordance with Project Specification 00620 and City Specification 01010.
Question #14	If the N. 11th Ave & H St intersection can be closed, is a defined detour route required, and does the City of Greeley have a preferred detour route?
Answer	Contractor shall submit detailed traffic control plans to City Traffic Division for approval in accordance with Project Specification 00620 and City Specification 01010.
Question #15	During construction on H St., can Eastbound traffic be closed off completely? If not, can Westbound traffic be reduced from two (2) lanes to one (1) lane, and can Eastbound traffic be shifted to the existing Southernmost Westbound lane?
Answer	Contractor shall submit detailed traffic control plans to City Traffic Division for approval in accordance with Project Specification 00620 and City Specification 01010.
Question #16	During construction on H St., will a physical barrier (i.e. concrete barrier rail) be required between construction work activities, especially open cut trench work, and traffic?
Answer	Contractor shall submit detailed traffic control plans to City Traffic Division for approval in accordance with Project Specification 00620 and City Specification 01010.
Question #17	During construction within the JBS parking lot, will a physical barrier (i.e. a concrete barrier rail) be required to separate the construction work activities from the in use parking lot?
Answer	Contractor shall submit a traffic/pedestrian control plan to Project Owner and Engineer in accordance with Project Specification 00620 and City Specification 01010.
Question #18	Can the as-builts for the existing Segment 2 lift station, that is to be removed, be provided?
Answer	Response will be provided with future addendum.
Question #19	Has the City of Greeley obtained all necessary permits specific for the removal of the Segment 2 lift station? Does the Contractor need to obtain any Lift Station specific permits associated with the removal of the lift station?
Answer	No permits associated with the lift station removal are anticipated.
Question #20	Does the existing Segment 2 lift station that is to be removed contain SCADA, if so has the SCADA been decommissioned?
Answer	SCADA decommissioning will be completed by the City, as necessary, prior to removal of the lift station.
Question #21	Can the Poudre River crossing installation of the new sewer main be installed via trenchless construction?
Answer	Based on the line and grade of the sewer line and the elevation of the River, trenchless methods are anticipated to be difficult or not feasible at this crossing.
Question #22	For the Poudre River crossing construction activities, can sheet piling or super bag/sacks be installed and utilized to control river flows?
Answer	As noted on Sheet C1.7, the Contractor shall propose appropriate means and methods of diverting the River and controlling flows.
Question #23	For the area of the Poudre River crossing, is historical year flow data for the planned construction timeframe, approximately January – May, available and can they be provided?
Answer	Historical River flow data is available from the Colorado Department of Natural Resources, CLAGRECO stream gauge rating table.
Question #24	For the area of the Poudre River crossing, can access be provided for the near upstream stream gauge to access historical flow data?
Answer	See response to Question #23.
Question #25	Can the Swift Detention Pond crossing installation of the new sewer be installed via trenchless construction?
Answer	No, concrete cap is required in this section.
Question #26	Can the Swift Detention Pond crossing installation of the new sewer main be installed via trenchless construction?
Answer	See answer to Question #25.
Question #27	Has the City of Greeley obtained all necessary permits for the crossing Swift Detention Pond specific for the installation of the new sewer main? Does the Contractor need to obtain any Swift Detention Pond specific permits associated with the open cut trench installation of the new sewer main?
Answer	No permits associated specifically with the crossing of the Swift Detention Poind are anticipated as this area has been determined to be a non-jurisdictional wetland.
Question #28	Can the alignment of the new sewer main indicated in the drawings be changed? Specifically Segment 2, would a trenchless installation between MH#2A-15 and the vicinity of exiting MH#2A-12 be considered?
Answer	No, due to line and grade, the elevation of the River bottom, and obtained easements, the alignment shall be maintained as shown on the drawings.
Question #29	The bid schedule indicates a total of 302 lf of concrete encasement for the "river crossing". The provided plan set shows a 410 lf long concrete encasement of the new 48" sewer where the new sewer crosses the existing detention pond. Is the 410' of concrete encasement to be incidental or will a bid item be created for this work?
Answer	See the answer to Question #6.
Question #30	Do all new manholes require interior lining and exterior coating?

Answer	See answer to Question #5.
Question #31	How many parking spaces can we take up at one time in the JBS parking lot?
Answer	The Contractor can utilize the permanent and temporary construction easements during construction activities in the parking lot.
Question #32	Will contractor be allowed to discharge groundwater into the Poudre River? If not, can the contractor be allowed to discharge groundwater into the existing storm sewer system?
Answer	See response to Question #4.
Question #33	Will any treatment be required of ground water prior to discharging?
Answer	See response to Question #4.
Question #34	If addition trees, greater than the quantity indicated on the bid schedule, need to be removed for installation of new construction, how will the additional tree removal quantity be paid?
Answer	Bid Form Item 4 on Segment 1 has been updated. Final pay quantity will be actual number of trees, larger than 6" diameter, removed as measured by the City. Bid Form Item 24 for Segment 1 and Item 43 for Segment 2 has been updated to inlcude a Contingency line item. Specification 00620 has been updated to include description of the Contingency line item.
Question #35	Are prairie dogs present withing the construction easement, if so, is the contractor responsible for prairie dog management, what methods are allowable, and how will the prairie dog management be paid?
Answer	Response will be provided with future addendum.
Question #36	Please clarify the expected flow rates to base our bid on concerning the 48” East Greeley Interceptor
Answer	Response will be provided with future addendum.
Question #37	Please clarify if manholes will require special coatings inside to prevent deterioration, if so please define the specific lining type and manufacture.
Answer	See answer to Question #5.
Question #38	Please clarify if an additional bid item can be added to cover the concrete encased pipe in segment two of the project.
Answer	See the answer to Question #6.
Question #39	Please clarify if a spoils waste site may be established for this project.
Answer	Response will be provided with future addendum.
Question #40	Please clarify if a dump site for the trees, root balls and the miscellaneous wood that will need to be removed from this project.
Answer	Response will be provided with future addendum.
Question #41	Solicitation documents call for Section 00130 to be submitted with the bid package; however, this Section 00130 cannot be found within the provided documents. Please advise.
Answer	The Bid Tab has been provided as Section 00131. This was provided as a separate downloadable spreadsheet.
Question #42	Please advise on an acceptable compressive strength for the concrete used for Sewer Manhole abandonment.
Answer	Sewer manholes shall be abandoned with CLSM material with compressive strength per Specification 02315. Sand or gravel are acceptable alternatives for manhole abandonment.
Question #43	Do we need to get any permit for Corp of Engineers for river crossing?
Answer	Army Corps permitting has been completed for the River Crossing.
Question #44	Any permits needed from State or CDOT?
Answer	No permits are anticipated from CDOT. Other anticipated permits are listed in Specification 00620.
Question #45	Survey for river bottom is only to provide information on existing elevation, correct?
Answer	Correct.
Question #46	Does each manhole need waterproofing from bottom to top?
Answer	See answer to Question #5.
Question #47	Can H Street be closed for sewer line work?
Answer	See the answer to Question #13, #14, and #15.
Question #48	Can 40’ easement in Wetlands on large slope area, be expanded?
Answer	The temporary construction and permanent easements have been obtained and cannot be modified.
Question #49	What is the procedure for discharging of ground water?
Answer	See response to Question #4.
Question #50	Will city have a place to take removed trees to?
Answer	See response to Question #40.
Question #51	Is there a designated lay down/staging area?
Answer	Response will be provided with future addendum.
Question #52	Is there flow calcs for the by pass on sewer?
Answer	See the response to Question #36.
Question #53	When building access road over new sanitary, will any culverts need to be placed?
Answer	Response will be provided with future addendum.
Question #54	Is Greeley providing engineering for density and concrete testing?
Answer	See the response to Question #7.
Question #55	Does Greeley have a place to take excess spoils/dirt to?
Answer	See the response to Question #39.
Question #56	Is city providing survey?
Answer	Contractor shall complete survey per Project Specifications.
Question #57	Do we need to have a city approved arborist to remove trees?
Answer	Response will be provided with future addendum.
Question #58	Is material in river suitable for backfill?
Answer	Response will be provided with future addendum.
Question #59	Will the intersection of H Street and 11th be able to be closed for work?
Answer	See the answer to Question #13 and #14.
Question #60	What is the trench stabilization material?
Answer	See Specification 02315.
Question #61	Will geo grid and/or fabric be required for stabilization?
Answer	See Detail WS-2 on Sheet C5.0.

SECTION 00620

SPECIAL PROVISIONS FOR

NORTH GREELEY SEWER – PHASE 2A

OCTOBER, 2024

TABLE OF CONTENTS

1. DESCRIPTION OF PROJECT

This project consists of the construction of approximately 6,150 linear feet of 36" diameter interceptor sewer. The sewer will be constructed in two segments from the existing East Greeley Interceptor (EGI) sewer to the existing manhole MH#2A-8 and from the existing manhole at MH#2A-12 to the east end of the North Greeley Sewer constructed in 2007 as Phase 1. Addition of a 16" gate valve and fire hydrant at the intersection of in H Street and 11th Avenue is also included, listed as Segment 3 below.

The project work includes:

- Construction of a cast-in-place concrete Junction Box on the EGI sewer
- 16 precast concrete manholes
- One crossing of the Cache La Poudre River, one crossing of Swift detention pond, and both encased in a concrete encased 48" diameter steel casing pipe
- Bore and encasement of N 6th Avenue crossing
- Connection to existing 36" PVC North Greeley Sewer Phase 1 at its terminus just west of 11th Ave near H St
- Decommissioning and removal of Lift Station #1
- 6,150 linear feet of 36" diameter interceptor sewer

The work will require dewatering and trench stabilization of the pipe trench for nearly the entire length of pipe, and removing and replacing both east bound lanes of H Street for a distance of approximately 1,200 feet. The work also includes construction of a 10 ft wide gravel access path over the top of the trench where it is not finished with other surface treatment such as pavement. Description of Segment 1, Segment 2, and Segment 3 work:

Segment 1

Station 00+62 to 27+14 including the Junction Box, bore and casing of N 6th Avenue crossing, 7 manholes, and approximately 2,700 feet of sewer and connection to the existing 36" sewer at an existing manhole.

Segment 2

Station 100+00 to 134+19 including 9 manholes, approximately 3,450 feet of sewer, removal of the existing lift station, connection to the existing 36" sewer at an existing manhole, one River crossing and one Pond crossing with casing pipe and concrete encasement, asphalt parking lot and street repair.

Segment 3

An additional valve, a 16" gate valve, is proposed on the existing 16" water line in 11th Avenue to provide needed system isolation.

A wet tap fire hydrant with 12" insertion valve on the main line in H Street is proposed at the southeast corner of the intersection of H Street and 11th Avenue to be used for bypassing for the installation of the 16" gate valve. The JBS facility receives water from the water line in H Street. It is anticipated that no shutdown to the JBS water service will be required for the installation of the fire hydrant and 12" insertion valve. If it is determined that a shutdown is necessary, the contractor shall coordinate a temporary water service shutdown with the City and JBS.

The intent is that the water line in H Street will be a 12" water line from the tee at Station 10+00 to the water meter near the intersection of Highway 85 and H Street. If the contractor finds evidence of differing water line size in H Street, additional work may be required. A contingency of $150,000 shall be included in the Segment 3 bid to cover this possible work.

See the Plans and Bid schedules for a more detailed description of work included in each

Segment.

2. AWARD OF CONTRACT

The City of Greeley will evaluate the Segment 1, Segment 2, and Segment 3 Bids and will award the contract to the responsive bidder who provides the lowest combination bid for all three segments, which best meets the City's needs as determined solely by the City of Greeley. The City of Greeley may also reject any and all bids. The decision whether to proceed with construction of the work will be made solely by the City.

3. PLANS

Construction Plan Sheets C0.0 through C5.1 & S0.0 through S1.2 dated August 2024 prepared by Kimley-Horn and Associates, Inc. are made a part of these contract documents.

4. SPECIFICATIONS

This project is subject to the following specifications, latest edition:	Abbreviated as:
These Special Provisions	SP
City of Greeley General Conditions (Section 00510)	GC
City of Greeley Design Criteria & Construction Specifications	
Volume I - "Streets"	STREETS
Volume II - "Storm Drainage"	DRAIN
Volume III - "Water & Sewer"	W&S
CDOT Standard Specifications for Road & Bridge Construction	SPEC
CDOT M&S Standard Plans	M&S
Manual of Uniform Traffic Control Devices	MUTCD
MGPEC Pavement Design Standards & Construction Specifications	MGPEC
American Society for Testing & Materials	ASTM
American Concrete Institute	ACI
American Traffic Safety Services Association	ATSSA Union
Occupational Safety & Health Administration	OSHA

5. PRIORITY OF DOCUMENTS

See GC Article 2 for priority of documents in case of conflicts.

In case of conflict between or within plans and specifications, the City shall decide which shall govern the issue.

6. PRE-CONSTRUCTION CONFERENCE

After the Contract award and prior to commencing work, the Contractor shall attend a pre-construction conference with the City. The Contractor shall have the following information available and shall promptly submit the same in electronic pdf format after each is approved by the City:

- Bar graph of construction schedule per GC Article 21.1 (and periodic updates as required by changes in schedule) prepared in Microsoft "Project" and furnished in electronic format.
- Sources of materials
- Major subcontractors, e.g. Bore, Bypass pump, Traffic control, Concrete, etc.
- Certificates of insurance

7. CONTRACT TIME, LIQUIDATED DAMAGES, DELAYS

The project shall be completed:

On a schedule mutually agreed upon by the Owner and Contractor.

Work may begin prior to the date called out in the Notice to Proceed by mutual agreement between the City of Greeley and the Contractor. See GC Article 20.

Liquidated damages will be withheld from final payment to the Contractor for each day that the project's substantial completion is delayed beyond the contract completion date.

Liquidated damage amount will be $2,000 (Two Thousand Dollars) per calendar day. See GC Article 41.

Liquidated damages are based on additional costs to the City of Greeley for delay of project completion and are not a "late penalty".

The Contract Time anticipates “normal” weather and climate. The Contractor’s schedule must anticipate normal adverse weather delays for all weather dependent activities. See GC Article 32.1.1.

8. WORK SCHEDULE

Install pipe from the Junction Box upstream for Segment 1 and from the existing manhole MH#2A-12 for Segment 2 upstream. Construction shall be per W&S Section 02530. Segment 1 and Segment 2 construction may be conducted simultaneously. Contractor shall coordinate timing of Segment 3 construction with the City and JBS.

9. SUBCONTRACTORS

The Contractor shall not subcontract more than fifty percent (50%) of the total value of the contract and shall identify the proposed subcontractors in accordance with GC Article 8.

10. QUALIFICATIONS OF PERSONNEL

Contractor’s project personnel must meet City of Greeley’s Requirements outlined in Statement of Qualifications.

11. PERMITS

Conform to GC Article 16.

Conform to STREETS Section 01010. Fees for City permits from Public Works Department will be waived except Permit application, traffic control review and Pavement Impact fees related to street cuts.

Conform to Corps of Engineers 404 Permit for river crossing.

Obtain City of Greeley Land Grading Application and Permit (fees will be waived).

Prepare a Stormwater Management Plan per City of Greeley requirements:

> The contractor shall prepare and submit a SWMP report for approval to the City of Greeley Public Works Stormwater Management Department. The SWMP report shall be in compliance with City of Greeley Design Criteria and Construction Specifications Storm Drainage Volume II, Section 12. Additional guidance in the preparation of the document can be found at the following link Stormwater Management Plan Guidance, https://cdphe.colorado.gov/wq-construction-compliance-assistance-and-guidance.
>
> The SWMP report will be required to be approved prior to the release of the City of Greeley Grading and before the start of any construction activity.

Obtain City of Greeley Public Works Permit and Traffic Control Review form.

Obtain Weld County Right-of-Way Use application for 6th Avenue crossing.

Obtain dewatering discharge permit and storm water discharge permit for area affected by construction activity from State of Colorado, Department of Public Health & Environment, Water Quality Control Division in accordance with W&S Section 02315.

12. SUBMITTALS

The Contractor shall submit manufacturers' information, mix designs, test results and certification that all materials conform to materials specifications for the following items for approval by City before ordering materials for:

Materials submittals

- Gravity sewer pipe and fittings
- Encasement pipe
- Junction Box hardware and fittings shop drawings
- Precast manholes and appurtenances
- Type L riprap
- Trench Stabilization material
- Pipe bedding material
- Concrete mix design
- Aggregate base course
- Hot Mix Asphalt pavement
- Asphalt patch mix
- Erosion Control Blanket
- Seed mix

Plans Submittals

Additional submittals referenced in this Section are required from Contractor prior to carrying out work, including:

- Utility Support Plan
- Traffic Control Plan
- Tunnel Work Plan (including applicable Plans, Calculations, and Schedule)
- Temporary Erosion Control Plan
- Bypass Pumping Plan
- River Crossing Plan
- Junction Box Acceptance Vacuum Test Plan
- Dewatering Plan
- Temporary Water Service Plan, if required

Miscellaneous Submittals

Additional submittals referenced in this Section are required from Contractor prior to carrying out work, including:

- Topographic survey of River bottom along the alignment from 10 feet from outside of high water mark to 10 feet outside of high water mark.
- Provide survey deliverable in .csv/.txt and .xml format.

Transmit "Materials Submittals":

- Within fourteen (14) work days of date of Notice to Proceed

Transmit “Plans Submittals” and “Miscellaneous Submittals”:

- Not less than 30 days before work involved in each “Plan” and River is to begin

Transmit all “Materials”, “Plans”, and “Miscellaneous” submittals:

- Electronically in pdf format (or other format specifically noted)
- With all information for each item segregated into separate files
- Identified by appropriate submittal file name
- Including transmittal letter identifying date of submittal and contents of file
- Provide listing of each component or item in submittal capable of receiving an independent review action.
- Identify for each submittal file:
    - Project Name, Contractor, and Subcontractor
    - Manufacturer and Manufacturer's Drawing or data number.
    - Contract Drawing Section or detail number if appropriate.
    - Specification Article/Paragraph number if appropriate.
    - Unique page numbers for each page of each separate item.
- When submitting "or-equal" items that are not the products of named manufacturers, include the words "or-equal" in the item description.

City will:

- Return if illegible without attempting to read
- Mark up as approved or with changes noted
- Return as marked up pdf file
- With form letter approving or requesting clarification or changes
- Noting date of return
- Will attempt to expedite return but
    - Not take longer than fourteen (14) work days from date of submittal to return “Materials Submittals” documents
    - Not take more than ten (10) work days for each “Plan Submittal” to return the Plan

Items within transmittals will be reviewed for overall design intent and will receive one of the following actions:

- A- NO EXCEPTIONS TAKEN
- B- CORRECTIONS NOTED
- C- REJECTED
- D- VERIFY & MAKE CORRECTIONS
- E- RESUBMIT
- F- FOR INFORMATION ONLY

Final Submittals

After approval by City of each submittal, furnish electronic copy in PDF format of each “Materials” and each “Plans” submittal.

13. SOILS INVESTIGATION & REPORT

Terracon drilled test bores in August 2007 and investigated soils encountered in those test bores. A copy of the Geotechnical Engineering Report is included as part of this Special Provisions. This geotechnical report was updated in 2013 and 2024.

14. RIGHT-OF-WAYS & EASEMENTS

The City has acquired permanent easements or parcels for the installation of the sewers as shown on the construction Plans and has acquired temporary construction easements adjacent to the permanent easements, all as shown on the Plans.

Do not disturb adjacent land or improvements, including asphalt pavement, drainage structures, fences, shrubs, trees, or other plantings outside the easements. Restore any damage to adjacent land or improvements to landowner's satisfaction.

15. STAGING & FIELD OFFICE

Contractor shall make arrangements with adjacent property owners for field office site and staging areas as required.

Provide one separate Class 1 field office for exclusive use by City in accordance with CDOT M&S M-620-11 and CDOT SPEC Section 620, except:

- Delete reference to facsimile machine
- Provide Internet service with WiFi router in or near Field Office sufficient to provide a minimum download speed of 18 mbps and minimum upload speed of 3 mbps
- With adequate sanitary facility per SPECS 620.05 located not more than one hundred feet from City Field Office

16. SURVEY

Reference Points

Owner will provide engineering surveys to establish reference points for construction which in City's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to City whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professional land surveyor licensed in the State of Colorado.

Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work.

Conform to W&S Section 01785 Project Record Documents and W&S Section 02315 Excavation and Fill Article 1.4 Construction Staking.

Contractor shall complete a pre project and post project survey of the ground along the pipe alignment, and where ground has been disturbed, within the limits of the 100-year floodplain. In overbank areas survey points shall be taken at no more than 100' intervals and at changes in grade. At the river crossing survey points shall be taken at no more than 5' intervals and at changes in grade. At the river crossing survey points shall be taken along the centerline of the alignment and the east and west edges of the concrete encasement. At berms/top of embankments survey points shall be taken along the top of the embankment and at both sides of the top of the slope the full limits of disturbance at a 5' interval and at changes in grade.

The final grade should match existing grade, however in no instance shall the final grade be

higher than the existing grade within the 100-year floodplain, with the exception of berm/top of embankments where the final grade shall match the existing grade. The post project survey shall be certified and submitted and approved prior to revegetation should grade adjustments be required.

17. ACCEPTANCE AND QUALITY CONTROL TESTING

Conform to GC Section 00510 Article 15.

Conform to W&S Section 02315, Excavation & Fill for quality control testing.

Conform to W&S Section 01715 Sewer and Manhole Testing.

Conform to STREETS Section 01010 Summary of Work and other relevant sections.

The Contractor is responsible for all required Quality Control testing. Testing shall be performed by independent testing agencies employed by the Contractor.

The City may obtain additional Acceptance testing at its cost. Contractor shall pay for any additional Acceptance tests required after repair or replacement of materials which failed original Acceptance tests.

18. PROTECTION OF EXISTING UTILITIES

Conform to GC Section 00510, Article 5.

Existing utilities shown on the Plans are approximate and presumed incomplete. Before proceeding with construction, notify all local utility companies of intention to do so and request field marking of locations of interferences whether shown on the plans or not. Call UNCC for utility locates at 1-800-922-1987 or 811.

Pothole, at no additional cost to the City, all buried utilities shown on plans or located by utility companies before commencing excavation for sewer or manholes. Pothole in presence of utility company and City. In case of conflict, immediately notify City.

Coordinate with City of Greeley Water and Sewer Department staff for:

- connections to existing sanitary sewer mains,
- removing lift station from service,
- replacement of existing water line,
- protection of existing sewer mains, water mains, and appurtenances.

Submit Utility Support plan to City prior to excavating to expose utility. Backfill each exposed utility to dimensions shown on approved Utility Support plan with FlowFill when in asphalt or concrete.

19. WORKING HOURS

Restrict working hours to between 7:00 am and 5:00 p.m. on normal City of Greeley business days unless prior approval has been obtained from the City.

Costs incurred by the City to inspect work performed outside these hours will be deducted from progress payments to the Contractor through the project's final change order at a rate of $100 per hour.

20. PROPERTY OWNER NOTIFICATION

The City will provide Contractor with sufficient copies of written notices describing project activity and Contractor's proposed schedule of work. The Contractor shall deliver notices to all property owners and/or business operators located within two hundred feet of project limits. Notice shall be given 96 hours prior to start of any construction activity that will restrict access to the affected property or when construction will be within 500 feet of that business or residence.

The Contractor shall re-notify all property owners if previously noticed schedule slips by 5 or more days.

21. TRAFFIC CONTROL

The construction plans include suggested traffic control guidance for the project. Submit detailed Traffic Control Plans to City Traffic Division for approval in accordance with STREETS Section 01010 except as modified herein.

Merge all costs of traffic control work into the appropriate bid item for traffic control.

Prepare and submit additional Traffic Control information including:

- Plans for the method, length and time duration for street closure.
- A written method of handling traffic for each different phase of the project that addresses both vehicular and pedestrian traffic, consistent with the traffic control diagrams and the M.U.T.C.D.
- The name and phone number of the Traffic Control Supervisor. This individual shall be available 24 hours a day to solve traffic control problems, but is not required on-site full time.
- A copy of the Traffic Control Supervisor's ATSSA certification.

Any conditions or changes in project methods shall be submitted to the City for review by City prior to making changes in the field.

Inspect all devices and operations a minimum of every 2 hours during work hours and repair and replace damaged or missing devices immediately. Work sites shall be inspected a minimum of every 24 hours during weekends or during periods when Contractor is not actually working the site.

Access through the JBS parking lot shall be maintained at all times. Traffic control shall be in place and modified as needed during construction to maintain use of the western and eastern portions of the parking lot not directly impacted by the work. Pedestrian access from all available parking shall be maintained in the existing location except for when the work directly impacts the pedestrian walkway and at this time pedestrian access shall be relocated. Once work in the existing pedestrian walkway is complete, contractor shall re-establish existing pedestrian walkway.

22. STREET CLOSURE

Maintain access to all residences, business, and County or State facilities adjacent to project.

Maintain one lane each direction for traffic on H Street and on 11th Avenue as shown on Plans.

Maintain pedestrian access on one side of H Street and one side of 11th Avenue during construction of sewer and subsequent trench repair within H Street corridor.

23. TEMPORARY WATER SERVICE

Water service shall be maintained to JBS at all times. The only exception may be during a temporary shutdown period to install the required bypass infrastructure. It is assumed that a shutdown will not be necessary. However, if a shutdown is required it is likely that the shutdown will be required to occur on a Sunday. The shutdown window must be coordinated and approved by the City and JBS. After the shutdown period, water service shall be restored to JBS. The construction plans show a proposed fire hydrant that can be used to bypass the 16” gate valve construction to maintain service to JBS.

24. TEMPORARY EROSION CONTROL

Contractor is responsible for control and routing of storm water runoff draining onto and from the

construction area to prevent erosion or other damage. Comply with CDOT SPEC Section 107.25 and install silt fence, fiber log (wattle) dams or other erosion control devices per M&S M-208. Bales shall be hay, straw, or other approved material measuring 18" x 18" x 36", weighing not less than 35 pounds, and bound with twine or wire. Bales may be staked with 4' long #4 re-bar instead of the specified wood stakes. Provide protective plastic caps on rebar if rebar is used to stake bales.

Provide completely biodegradable Erosion Control Blanket (ECB) with minimum 30 to 36 month life expectancy on all disturbed or replaced soil on Poudre River and embankments. Provide ECB similar to Western Excelsior's Excel CC-4 (All Natural) Erosion Control Blanket, or approved equivalent.

Submit written schedule identifying erosion control methods and timing at Pre-Construction Conference.

Note requirement to obtain storm water discharge permit from the State of Colorado. (See "Permits" above.)

25. EXCESS MATERIAL

Remove material from the project deemed unusable by the City and legally dispose of off project site at no additional cost to City.

Return removed material deemed re-usable by the City to City of Greeley shops at 1300 A Street, Greeley, Colorado or to other designated storage area. Return any sewer items to 1101 First Ave, Greeley.

The City will not accept removed asphalt. Haul and legally dispose asphalt removed from trench.

26. UNEXPECTED SOLID WASTE

Protect the environment, persons, and property from contaminants that may be encountered on the project. Comply with regulatory and other requirements for hazardous waste site operations established by the Colorado Department of Public Health and Environment (CDPHE).

Monitor the work for potentially contaminated media and wastes.

Report to City the presence of suspected hazardous substances, including but not limited to:

- Drums (buried or on the surface)
- Construction debris (buried or on the surface)
- Household or other wastes (buried or on the surface)
- Soils or groundwater displaying chemical odors or discoloration
- Sheen on groundwater or free product
- Sheen on dewatering flow discharged to streams

If suspected hazardous solid waste is discovered, City will become responsible for retaining specialist contractor to dispose of hazardous waste. Cooperate with City by:

- Continue dewatering operation in area of hazardous solid waste until hazardous waste is completely disposed of and site returned to Contractor for pipe installation
- Probe trench alignment to assist in establishing extent of the buried waste
- Relocate trenching and pipe laying operation beyond the probable extent of the buried solid waste
- Continue pipe installation beyond the limits of hazardous solid waste
- Return to install pipe in area from which hazardous solid waste was removed after completion of disposal work

If solid waste encountered is determined to not be “hazardous” according to the CDPHE

guidelines, excavate and dispose of waste as "Excess Material" at no additional cost to the City.

Costs of additional dewatering and remobilizing pipe laying operation will be paid as Force Account work. See GC Article 36.

27. DEWATERING

The CONTRACTOR shall bear sole responsibility for:

1. Any loss or damage from partial or complete failure of dewatering measures and any settlement or resultant damage caused by groundwater control operations.
2. Design, procurement, installation, maintenance, operation and removal of dewatering systems.
3. Dewatering, depressurizing, draining, and maintaining trench excavations and foundation beds in dry and stable condition, and controlling groundwater conditions for trench, tunnel shaft excavations, and tunneling operations.
4. Protecting work against surface runoff and rising waters
5. Disposing of removed water
6. CONTRACTOR is responsible for obtaining all permits related to dewatering operation

The dewatering operation shall depress water levels and hydrostatic pressures a minimum of 1 foot below the excavation bottom at all times under all conditions. Do not allow levels to rise until foundation concrete has achieved design strength. The CONTRACTOR shall control ground water so as to prevent softening of the bottom of excavations, or formation of "quick" conditions or "boils" during excavation.

Prior to commencement of construction, submit a detailed dewatering plan for review by the City. The Dewatering Plan shall contain the following at a minimum:

- Dewatering schedule, operation, maintenance, and abandonment procedures
- Names of equipment suppliers and installation subcontractors
- Design of proposed systems in regard to well spacing and pumping capacities
- Proposed methods and locations for disposing of removed water
- Standby power and pumps of adequate capacity to continue operations in an emergency
- Method of responding to emergency such as power or equipment failure
- Contact information of an individual responsible for dewatering operation supervision

<u>Dewatering Permit</u>

The CONTRACTOR shall be responsible for submitting applications and obtaining required permits for dewatering from the Colorado Department of Public Health and Environment (CDPHE). Submit copies of the permit to the City when approved by CDPHE.

<u>Groundwater</u>

Contractor shall refer to the geotechnical information collected for the project and provided in the bid documents. Fluctuations of the groundwater level can occur due to seasonal variations in the amount of rainfall, runoff, and other factors not evident at the time the borings were completed. The geotechnical information was prepared for design purposes only and may not be adequate for CONTRACTOR to evaluate construction conditions or design the dewatering system. The CONTRACTOR should independently interpret the soil/groundwater conditions taking into consideration intended means and methods of construction. CONTRACTOR may

perform additional exploration at no additional cost to City as necessary for design of the dewatering system.

Due to possible variations of soil conditions and groundwater levels between soil bore locations the CONTRACTOR shall be responsible for changing or modifying the dewatering system to accommodate such variations at no additional cost to the City.

Dewatering Operation

Dewater pipe trench and structure excavations to

- Effectively provide a dry and stable subgrade sufficient for the performance of subsequent operations and lower groundwater to allow excavation and construction to be performed on dry and stable trench bottom or excavation base
- per approved Dewatering Plan
- until backfilling is complete

If the plan thickness of Trench Stabilization material is insufficient, in the opinion of the City, to provide a stable trench or structure excavation base, it shall be assumed that dewatering is inadequate and additional dewatering wells and equipment are required.

Install additional dewatering equipment as may be required throughout duration of project to lower groundwater level sufficiently below bottom of trench or structure excavation to achieve dry and stable trench or structure base. Place dewatering system into operation prior to excavating below groundwater level to lower the groundwater to achieve dry and stable trench.

Operate dewatering system continuously 24 hours a day, 7 days a week until sewer pipe and structures have been constructed and backfill materials have been placed to the top of the trench and structures.

Dewatering shall at all times be conducted in such a manner as to preserve the undisturbed bearing capacity of subgrade soils at the bottom of the proposed excavation and to minimize pumping of fines. Provide suitable filters on dewatering equipment and well screens of adequate size and screen opening to prevent removal of fines from soils.

Dispose of water in closed conduits in accordance with permits of jurisdictional authorities.

Diversion ditches and dikes shall be used, where necessary, to prevent surface water from entering the excavation.

Conduct dewatering operation in a manner that will protect adjacent structures and facilities.

Cost of repairing any damage to adjacent structures and restoration of facilities shall be sole responsibility of CONTRACTOR.

Adequate control shall be maintained by the CONTRACTOR to ensure that the stability of excavated slopes are not adversely affected by water, that erosion is controlled and that flooding of excavation or damage to structures does not occur. The CONTRACTOR is solely responsible for site excavation safety and compliance with OSHA regulations. The City assumes no responsibility for site safety.

28. EXCAVATION AND FILL

Conform to W&S Section 02315 Excavation and Fill, except as modified herein:
Article 1.3.A.4

Add sentence:

"Submit copy of Dewatering Plan with CDPHE Permit to City prior to beginning installation of pipe."

Article 2.1.A

Add sentence:

"Remove all trash and debris before placing bedding or backfill material. Soda cans, pipe shipping bands, paper, and any other man-made substances are not acceptable backfill material. Also remove any frozen and/or organic material."

Article 2.5.A

Replace sentence with:

"It is deemed necessary by the City that the Trench Stabilization material be placed to a thickness of 12" over the full width of trench for entire length of project. If, in the opinion of the City, the trench bottom is still not stable it will be assumed that the dewatering operation is insufficient, with wells inadequately spaced and pumps too few or too small. Provide additional dewatering capability or additional depth of Trench Stabilization material to achieve a stable trench at no additional cost to the City."

Article 2.7.B

Add the sentence:

"This bedding shall not contain recycled or manufactured materials."

Article 3.1.A

Add sentence:

"Strip topsoil to 6-inch depth and stockpile for replacement to same depth."

29. PIPE

Conform to W&S, SECTION 02533 POLYVINYL CHLORIDE (PVC) NON-PRESSURE PIPE, except as modified herein:

Add the following References:

Article 1.2.B

For 36" diameter pipe:

ASTM F794 for PVC Profile Gravity Sewer pipe

Article 1.2.B

For 36" diameter pipe:

ASTM F1803 for PVC Closed Profile pipe

Article 2.1.B

Add sentence:

All 36" diameter PVC Pipe shall conform to ASTM F679, or ASTM F794, or ASTM F1803 with minimum pipe stiffness of 46 psi.

Article 3.1.A

Following the words "In addition to any deficiencies covered by ASTM D3034…"

Add the following "…or ASTM F679, ASTM F794, or ASTM F1803"

Add the following Articles:

Article 3.1.C

Factory pipe tests required by the appropriate ASTM standard may be witnessed by the City at its discretion. Provide access for the City to witness such tests if the City so chooses.

Article 3.1.D

Submit certification that the material has been sampled, tested, and inspected in

accordance with the provisions of the appropriate ASTM standard. Certification shall be signed by authorized agent of the seller or manufacturer and shall include copies of the manufacturer's test report.

Article 3.1.E

Samples for manufacturer's tests must be taken from pipe destined for this project.

30. MANHOLES

Conform to W&S, SECTION 02535 SANITARY UTILITY SEWERAGE MANHOLES, FRAMES, AND COVERS, except as modified herein:

Add Article 2.2.B.3

All cement for pre-cast or cast-in-place concrete, mortar, and grout must be Type II Portland cement. See Geotechnical Engineering Report.

Add Article 3.2.B

Add sentences:

"Over-excavate 12" deep below bottom of manhole base to two feet (2') outside base. Prepare subgrade and place "Trench stabilization" material per Section 02315, Excavation and Fill."

31. RIVER CROSSINGS

Submit detailed plan for river crossing to City for review and approval one month prior to desired crossing start date.

For the crossing, the plan must contain, at a minimum:

1. Proposed method of channeling river flows to allow pipe installation in the dry.
2. Method of dewatering thru the river crossing length.
3. Means of ensuring that the sewer pipe is on correct grade after installation in the casing pipe and placement in the trench.
4. Expected duration of crossing.
5. Emergency response plan for:
    a. Storm event raising river water level
    b. Protection of downstream sewer pipe from ground or surface water inflow

32. 6TH AVENUE BORE CROSSING

Submit detailed plan including drawings, calculations, and schedule for the 6th Avenue Bored and Cased crossing to City, Engineer, and relevant agencies for review and approval a minimum of one (1) month prior to the desired crossing start date.

Confirm to Weld County requirements for design and construction of the N 6th Avenue bored crossing.

Conform to the additional specifications prepared by Brierly Associates included in the contract documents, specifically:

02355 Geotechnical Instrumentation and Monitoring

02410 Tunnel Excavation and Initial Support

02430 Contact Grout

02444 Construction Shafts

02450 Carrier Pipe Installation and Backfill

Article 2.1.C.3

"Other approved equivalent" shall be non-restrained PVC carrier pipe meeting the same specifications as pipe selected for sewer in this contract. If joint restraint of PVC carrier pipe is necessary for installation of carrier pipe in casing, provide joint restraint as part of encasement item at no additional cost to the City.

Article 3.2.A.3

Change the sentence to read:

"Install casing pipe such that grade and alignment of carrier pipe shall not deviate ore than 0.2 feet horizontally and 0.1feet vertically from that shown on the Construction Drawings.

Article 3.2.A

Add the sub-article:

3.2.A.5

Contractor shall submit detailed written plan of proposed Boring and Casing method to City for approval prior to beginning work. City's approval of Contractor's proposed plan of achieving Bored Casing shall not relieve Contractor of responsibility for achieving carrier pipe elevtion and grade specified.

Add the sub-article:

3.2.A.6

If the contractor selects a carrier pipe supplier whose pipe requires a larger diameter casing pipe that that specified, the additional cost of the larger casing pipe shall be borne by the Contractor with no additional cost to the City.

33. JUNCTION BOX

The intent of the construction documents is to provide a complete and operational junction box structure connecting the proposed North Greeley Sewer (NGS) to the existing East Greeley Interceptor (EGI) sewer at the location and elevations shown on the Plans. Conform to requirements of Plan sheets S0.0 through S1.2 for Junction Box.

Internal equipment and furnishings required to complete the Junction Box are identified by reference to manufacturer and product in the Plans. Equipment and furnishings include:

- A-LOK connectors on all four pipe/wall joints
- Greenstreak #717 Waterstop, 6" ribbed, at each wall to slab and wall to wall joint
- Stop Logs, Fiberglass reinforced plastic, heavy duty by Plasti-Fab supplied with one (1) Plasti-Fab Lifting Beam assembly
- Plasti-Fab Stainless Steel channels for Stop Logs, set in interior concrete walls as shown on plans and embedded per Plasti-Fab installation guide
- Grating: Safe-T-Span Pultruded fiberglass 2" deep x 3' wide, Industrial grade similar to Fibergrate T5020 attached to beams with Fibergrate MI-60 clips
- Grating beams: WF 4x4 x1/4" fiberglass reinforced plastic Fibergrate similar to Grainger Dynaform #4AUT5
- Steps: CDOT standard M-604-20
- Hatches: Aluminum 22"x40" clear opening, hinged bolt-down, similar to Neenah R-6665-1KH
- Manhole ring and frame: Bolt down, gasketed, similar to Neenah 1581A

Submit detailed shop plans for Junction Box for approval before beginning work.

Additional construction requirements:

- Over-excavate 12 inches deep and place Trench Stabilization material to one foot outside of and under Junction Box bottom slab
- Encapsulate exterior of Junction Box with WrapidSeal, or approved equivalent
- Coat interior of Junction Box with SewperCoat, or approved equivalent
- Epoxy grout steps into walls and invert
- Provide surface finish on all exposed interior concrete of SF 2.0 per ACI301-10

Final acceptance testing of Junction Box:

Vacuum Test:

Prior to backfilling, vacuum test Junction Box to demonstrate watertight structure in accordance with W&S 01715, revised as follows:

Add line to **TABLE 3.7-D: Manhole Vacuum Testing Durations**

Junction Box Volume = 2,197 cf Testing Duration = 309 seconds, say 5 minutes

Repair any leaks found and retest.

After final inspection and acceptance of Junction Box by City, backfill and discontinue bypass pumping and dewatering.

34. HOT MIX ASPHALT PAVEMENT (HMAP)

Conform to "STREETS" Bituminous Paving, Section 02575 which references MGPEC Item #9.

All streets in this project are considered other than "local". Repave with a minimum of existing pavement depth Hot Mix Asphalt Grade S on minimum 6" thickness ABC. Asphalt thickness not less than existing street pavement on 11th Avenue and on H Street.

35. ASPHALT PATCH

Conform to "STREETS" Asphalt Patch, Section 02576 which references MGPEC Item #17.

Asphalt Patch will be measured for payment by surface area placed rather than by measurement described in MGPEC 9.16.

Asphalt for patch shall be Grade S, 7" full depth.

36. DUST CONTROL

The Contractor shall control dust in and around the construction site. If, in the opinion of the City, dusty conditions prevail, the site shall be watered at least twice daily. No separate payment will be made for dust control. Merge costs of dust control into bid price of related items.

37. TOPSOIL & RESEED

Replace topsoil to 6" depth specified on Plans and reseed.

Conform to City of Greeley Design Criteria and Construction Specifications Volume III

Potable Water Distribution, Sanitary Sewer Collection, Non-Potable Irrigation Systems, and Landscape and Irrigation, Section 6 Landscape and Irrigation Design Criteria except as modified in this article.

Conform to City of Greeley Design Criteria and Construction Specifications Volume II Storm Drainage.

Submit proposed seed mix to City for approval prior to seeding.

Refer to Detail 1-2 Seed Mixes. Use "Low Grow Mix" for majority of sewer alignment and

"Slope Mix" and "Riparian Mix" for river bank and pond crossings as noted on the Plans.

Prior to commencement of seeding operations, contact City of Greeley Stormwater Division

to witness seeding operations and for collection of seed tags.

Seed all areas within project limits where native ground has been disturbed by construction and is not receiving other treatment, such as replacement of Bluegrass sod or street paving.

Seed only when weather, soil conditions, and planting seasons are suitable as determined by professional horticulturists in accordance with local practice. Planting seasons comprise that period of time in the Spring and Fall favoring healthy growth of grass in locality in which seeding is to be done. Seed in accordance with accepted horticultural practice.

Grade areas where seeding is required to lines and grades shown on plans. The seed bed shall be friable enough to allow the seed to be placed at proper depth. Rocks and other material greater than two inches (2") in diameter shall be removed.

Apply fertilizer prior to seeding. The fertilizer shall contain Nitrogen (N) at 30 pounds per acre and Phosphorus (P205) at 20 pounds per acre.

Drill grass seed to depth dependent on soil and seed type as recommended by professional horticulturists in accordance with local practices. Row spacing shall not exceed 8 inches for the grass drill. If broadcast methods are used, rake soil to cover the seed.

Mulch all seeded areas within 24 hours of seeding. Anchor hay or straw mulch to soil by use of a crimper, netting (properly staked), or tackifier. If crimped, fiber shall be crimped a minimum of four inches (4") into the soil. Place mulch at rate of two (2) tons per acre.

Water seeded areas until there is an adequate stand of grass, as determined by the City. Repair and/or reseed during the warranty period if no adequate stand of grass, as determined by the City, is developed.

38. CLEAN-UP

Clean up all construction materials and debris as sewer installation proceeds within not more than 500 feet behind pipe end and at completion of the contract and prior to submittal of final pay request. Notify City when final cleanup is ready for inspection. Contractor and City Representatives will perform final walk through to create a final punch list.

39. POST CONSTRUCTION INSPECTION AND WARRANTY

Conform to GC Section 00510, Article 11 and Article 23.

Prior to expiration of warranty period, representatives of the City will make visual inspection of the project to determine where correction or work is required. The Contractor shall attend such inspection.

40. DESCRIPTION OF BID ITEMS

It is the intention of the contract documents to describe a complete and operational wastewater interceptor sewer system.

Merge the cost of any and all miscellaneous work items (if not separately identified as bid items) shown on the Plans or implied as standard items of work necessary to achieve a complete and operational system in the unit price contained in the Bid for the related bid item.

Merge all costs of mobilization, labor, materials, supervision and equipment necessary to accomplish each work item into the unit price contained in the Bid for that item.

Certain bid items may be clarified as follows:

SEGMENT 1

Item 1 – Mobilization

Mobilization bid price will be limited to not more than 10% (ten percent) of total bid price.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 2 – Survey

Unit bid price for this item shall include the costs of all labor, materials, supervision, and equipment to complete construction survey.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 3 – Clear & Grub pipeline trench (40’ wide)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove and legally dispose of vegetation, including trees less than 6” trunk diameter at the ground, shrubs, grass, weeds and debris for a forty foot (40’) width centered on the sewer. Protect all trees not marked for removal. Do not disturb banks of Poudre River except at river crossings.

Coordinate with owner(s) of private lands that easements will cross for removal of private property from the sewer easements as required for sewer installation.

Final pay quantity shall be the actual number of square yards or clearing and grubbing as measured by the City.

Item 4 – Remove trees (>6” trunk diam)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove and legally dispose of trees.

Trees marked for preservation at the pre-construction conference shall remain in place.

Final pay quantity shall be the actual number of trees removed as measured by the City.

Item 5 – Trench Dewatering

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to plan, obtain required permits, install, operate, and remove well points, or other method pre-approved by City, to achieve a dry trench for installation of sewer piping.

Final pay quantity shall be the actual number of linear feet of trench to which trench dewatering was applied as measured by the City.

Item 6 – Trench Stabilization, 12" deep

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to over-excavate sanitary sewer trench bottom to 12” depth per specifications and Plans, furnish and place trench stabilization material, and furnish and place geotextile fabric between trench stabilization material and pipe bedding.

Final pay quantity shall be the actual number of linear feet of trench to which trench stabilization was applied as directed and measured by the City.

Item 7 – Bypass pump EGI sewer (MH#13 to MH#14)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to plan, obtain required permits, install, operate, maintain including fuel and required supervision, and remove bypass pumping system in accordance with bypass plan pre-approved by City, to achieve a dry EGI sewer for construction of Junction Box.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 8 – Remove existing 48" RCP EGI sewer

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove the existing 48" RCP sewer where in conflict with the proposed improvements.

Final pay quantity shall be the actual number of linear feet of 48" sewer removed as measured by the City.

Items 9-10 Support (existing utility pipe)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to expose existing utility pipe, strap wide flange steel beam to the pipe (or other approved method of support), excavate under the pipe for installation of sanitary sewer, backfill sanitary sewer from haunch of sanitary sewer to haunch of existing utility pipe with flow fill for length of crossing to two feet (2') each side of existing utility pipe and remove support, all with prior approval by City (and of relevant utility company) for support method proposed by Contractor.

Final pay quantity shall be the actual number of each existing utility pipe supported for installation of sanitary sewer as measured by the City.

Item 11 – Construct Junction Box on EGI sewer

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to dewater, excavate for, install reinforcing steel, form and pour cast-in-place concrete, and furnish all equipment, appurtenances and fittings as shown on the Plans for a complete and operational Junction Box.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 12 –Bore and Case 6th Ave Crossing, 48" casing

Unit bid price for this item shall include the costs of all labor, material, supervision, engineering design and calculations, and equipment to install steel casing pipe under N 6th Avenue as shown on the Plans, including dewatering, excavation and shoring to launch and receive, remove and dispose of material, furnish and install casing pipe, install carrier pipe with casing spacers, seal ends of casing, install corrosion protection materials, and backfill launch and receiving pits.

The Plans show the casing pipe as a 48" steel pipe, however, the Contractor may propose a different casing pipe size for ease of installation if this will benefit the overall cost of the project. Refer to the Geotechnical Baseline Report and Specifications for further information related to the trenchless installation and subsurface conditions.

Final pay quantity shall be the actual number of linear feet of casing pipe installed as measured by the City. Carrier pipe installed through the casing will be paid as separate item #13.

Item 13 – 36" diam PVC Sewer, F679 PS46 solid wall

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install pipe and pipe bedding; backfill, compaction, flow fill, test, connect to existing sewers and place into service new 36” sewer.

Final pay quantity shall be the actual number of linear feet of sewer as measured by the City.

Item 14 – 48" diam PVC Sewer, F679 PS46 solid wall

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install pipe and pipe bedding; backfill, compaction, flow fill, test, connect to the junction box and place into service new 48” sewer.

Final pay quantity shall be the actual number of linear feet of sewer as measured by the City.

Item 15 – 48" diam PVC Pipe Cap

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install the PVC pipe cap on the 48” diameter sewer stub.

Final pay quantity shall be the actual number of sewer pipe caps installed as measured by the City.

Item 16 – 60” diam Manhole 12’ to 16’ depth

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, dewater, furnish and install structure and structure bedding; trench stabilization material, backfill, compaction, flow fill, and test.

Final pay quantity shall be the actual number of sewer manholes as measured by the City.

Item 17 – 60” diam Manhole 16’ to 20’ depth

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, dewater, furnish and install structure and structure bedding; trench stabilization material, backfill, compaction, flow fill, and test.

Final pay quantity shall be the actual number of sewer manholes as measured by the City.

Item 18 – Silt Fence

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install silt fence.

Final pay quantity shall be the actual number of linear feet of silt fence installed per Plans and measured by the City.

Item 19 – Truck Tracking Pad

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install truck tracking pad.

Final pay quantity shall be the actual number of pads installed per Plans and measured by the City.

Item 20 – Concrete Washout

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install concrete washout.

Final pay quantity shall be the actual number washouts installed per Plans and measured by the City.

Item 21 – Aggregate Base Course (10’ Wide x 8” Deep)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, furnish, and install gravel access road over sewer alignment.

Final pay quantity shall be the actual number of tons of ABC delivered and installed on the project as measured by truck weight tickets submitted at end of each day to City.

Item 22 – Strip & Replace Topsoil (40' wide x 6" depth)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to strip and stockpile topsoil to 6” depth over forty foot (40’) width, and to replace after construction of sewer on a thirty foot (30’) width centered on the ten foot (10’) wide aggregate base course access road to be constructed over sewer.

Final pay quantity shall be the actual square yards of topsoil stripped and replaced as measured by the City.

Item 23 – Reseed (80’ width)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install grass seed over entire 80’ width of permanent and temporary construction easements along sewer alignment.

Final pay quantity shall be the actual acres of seeding as measured by the City.

Item 24 – Contingency

Contingency is for miscellaneous sewer line-related work due to unforeseen existing conditions. The scope and associated cost must be coordinated with Owner and Engineering prior to work being performed. Any work being completed without prior approval will not be paid under this item.

SEGMENT 2

Item 1 – Mobilization

Mobilization bid price will be limited to not more than 10% (ten percent) of total bid price.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 2 – Survey

Unit bid price for this item shall include the costs of all labor, materials, supervision, and equipment to complete construction survey.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 3 – Traffic Control

Unit bid price for this item shall include the costs of all labor, material, supervision, permits, and equipment to plan and provide Traffic Control for installation of the proposed sanitary sewer in traveled roadway during the installation of the sewer and during replacement of asphalt surface.

Flaggers will be required for construction traffic entering and leaving traveled roadway. Traffic Control to adhere to City of Greeley and Weld County requirements.

Final pay quantity shall be the actual number of calendar days that Traffic Control was provided for the project as approved and measured by the City.

Item 4 – Clear & Grub pipeline trench (40’ wide)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove and legally dispose of vegetation, including trees less than 6” trunk diameter at the ground, shrubs, grass, weeds and debris for a forty foot (40’) width centered on the sewer. Protect all trees not marked for removal. Do not disturb banks of Poudre River except at river crossings.

Coordinate with owner(s) of private lands that easements will cross for removal of private property from the sewer easements as required for sewer installation.

Final pay quantity shall be the actual number of square yards or clearing and grubbing as measured by the City.

Item 5 – Remove Lift Station

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, dewater, decommission, demolish and remove Lift Station #1 as shown and described on the Plans. Unit bid price for this item shall also include the costs of all labor, material, supervision, and equipment to excavate for; shape and prepare subgrade; furnish and install Asphalt Patch pavement to repair trench surface at existing Lift Station after removal of station. This item shall also include the costs of all labor, material, supervision, and equipment to remove existing manholes, abandon existing manholes, and abandon existing sewer piping as noted on the Plans.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 6 – River Crossing, concrete encasement, 48" steel casing

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for, build temporary dikes to shift river flows out of trench, dewater, and remove temporary dikes. This item shall also include the costs of all label, material, supervision, and equipment to furnish and install steel casing pipe, casing spacers, seal casing ends, and concrete encasement.

Final pay quantity shall be the actual number of linear feet of casing pipe installed as measured by the City. Carrier pipe installed through the casing will be paid as separate item #31.

Item 7 – Type L Soil Riprap

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for, furnish and install Type L Soil Riprap at the banks of the Poudre River at the crossing locations and tied to the existing riprap as shown on the Plans.

Final pay quantity shall be the actual number of cubic yards of soil riprap as measured by the City.

Item 8 – Erosion Control Blanket (Stream Bank Stabilization)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for, furnish and install erosion control blanket at the banks of the Poudre River at disturbed areas as noted on the Plans.

Final pay quantity shall be actual number of square yards of erosion control blanket installed as

measured by the City.

Item 9 – Remove & Replace Curb & Gutter

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove existing curb and gutter and replace to the limits shown on the Plans.

Final pay quantity shall be actual number of linear feet of curb and gutter replaced as measured by the City.

Item 10 – Remove & Replace 4’ Wide Concrete Sidewalk

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove existing sidewalk and replace to the limits shown on the Plans.

Final pay quantity shall be actual number of square feet of sidewalk replaced as measured by the City.

Item 11 – Sawcut asphalt pavement

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to sawcut existing asphalt as noted on the Plans.

Final pay quantity shall be the actual number of linear feet of sawcutting as measured by the City.

Item 12 – Remove asphalt pavement

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate and remove existing asphalt pavement for sewer trenching, not including asphalt removal related to Lift Station #1 demolition, through roadways and parking lot.

Final pay quantity shall be the actual number of square yards of asphalt removed as measured by the City.

Item 13 – Remove trees (>6” trunk diam)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove and legally dispose of trees.

Trees marked for preservation at the pre-construction conference shall remain in place.

Final pay quantity shall be the actual number of trees removed as measured by the City.

Item 14 – Remove & Replace 6’ chain link Fence

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove existing fence and replace to the limits shown on the Plans.

Final pay quantity shall be the actual number of linear feet of fence removed and replaced as measured by the City.

Item 15 – Remove & Replace Riprap at Storm Channel

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for, remove existing, stockpile, and replace using stockpiled riprap material to the limit shown on the Plans.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 16 – Remove & Replace 15” diam CMP culvert

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install pipe and pipe bedding; backfill, compaction, flow fill, test, connect to existing culvert and place into service new 15” culvert.

Final pay quantity shall be the actual number of linear feet of culvert as measured by the City.

Items 17-24 Support (existing utility pipe)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to expose existing utility pipe, strap wide flange steel beam to the pipe (or other approved method of support), excavate under the pipe for installation of sanitary sewer, backfill sanitary sewer from haunch of sanitary sewer to haunch of existing utility pipe with flow fill for length of crossing to two feet (2’) each side of existing utility pipe and remove support, all with prior approval by City (and of relevant utility company) for support method proposed by Contractor.

Final pay quantity shall be the actual number of each existing utility pipe supported for installation of sanitary sewer as measured by the City.

Item 25 – Trench Dewatering

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to plan, obtain required permits, install, operate, and remove well points, or other method pre-approved by City, to achieve a dry trench for installation of sewer piping.

Final pay quantity shall be the actual number of linear feet of trench to which trench dewatering was applied as measured by the City.

Item 26 – Trench Stabilization, 12" deep

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to over-excavate sanitary sewer trench bottom to 12” depth per specifications and Plans, furnish and place trench stabilization material, and furnish and place geotextile fabric between trench stabilization material and pipe bedding.

Final pay quantity shall be the actual number of linear feet of trench to which trench stabilization was applied as directed and measured by the City.

Item 27 – 8" diam PVC Sewer, SDR-35

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install pipe and pipe bedding; backfill, compaction, flow fill, test, connect to existing sewers and place into service new 8” sewer.

Final pay quantity shall be the actual number of linear feet of sewer as measured by the City.

Item 28 – 36" diam PVC Sewer, F679 PS46 solid wall

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install pipe and pipe bedding; backfill, compaction, flow fill, test, connect to existing sewers and place into service new 36” sewer.

Final pay quantity shall be the actual number of linear feet of sewer as measured by the City.

Item 29 – 60” diam Manhole 12’ to 16’ depth

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, dewater, furnish and install structure and structure bedding; trench stabilization

material, backfill, compaction, flow fill, and test.

Final pay quantity shall be the actual number of sewer manholes as measured by the City.

Item 30 – Silt Fence

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install silt fence.

Final pay quantity shall be the actual number of linear feet of silt fence installed per Plans and measured by the City.

Item 31 – Sediment Control Log

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install sediment control log and wooden stakes (or other method to secure log).

Final pay quantity shall be the actual number of sediment control logs installed per Plans and as measured by the City.

Item 32 – Rock Socks

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install rock socks.

Final pay quantity shall be the actual number of rock socks installed per Plans and as measured by the City.

Item 33 – Dandy Inlet Curb Bags

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install inlet bags.

Final pay quantity shall be the actual number of linear feet of inlet bags installed per Plans and as measured by the City.

Item 34 – Truck Tracking Pad

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install truck tracking pad.

Final pay quantity shall be the actual number of pads installed per Plans and as measured by the City.

Item 35 – Concrete Washout (move with sewer)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install concrete washout.

Final pay quantity shall be the actual number of concrete washouts installed per Plans and as measured by the City.

Item 36 – Aggregate Base Course (10’ Wide x 8” Deep)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate, furnish, and install gravel access road over sewer alignment.

Final pay quantity shall be the actual number of tons of ABC delivered and installed on the project as measured by truck weight tickets submitted at end of each day to City.

Item 37 – Pavement Replacement/Trench Repair

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish aggregate base course, shape and prepare base course surface; furnish and install hot bituminous pavement (or hot mix asphalt where required by Weld County) to repair trench surface per City of Greeley or Weld County Requirements.

Final pay quantity shall be the actual number of tons of HBP/HMA delivered and installed on the project as measured by truck weight tickets submitted at end of each day to City.

Item 38 – Strip & Replace Topsoil (40' wide x 6" depth)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to strip and stockpile topsoil to 6” depth over forty foot (40’) width, and to replace after construction of sewer on a thirty foot (30’) width centered on the ten foot (10’) wide aggregate base course access road to be constructed over sewer.

Final pay quantity shall be the actual square yards of topsoil stripped and replaced as measured by the City.

Item 39 – Reseed (80’ width)

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install grass seed over entire 80’ width of permanent and temporary construction easements along sewer alignment. This item shall also include the costs of all labor, material, supervision, and equipment to furnish and install wetland seed over wetland disturbance areas as shown on the Plans.

Final pay quantity shall be the actual acres of seeding as measured by the City.

Item 40 – Replace Blue Grass Sod

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install blue grass sod and repair and replace all irrigation systems damaged during construction over the width of the excavated sewer trench.

Final pay quantity shall be the actual number of square yards of sod replaced as measured by the City.

Item 41 – Roadway Striping

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install all pavement markings including surface preparation, premarking, quality control tests, primer/adhesive, reflective optics materials when required, and warranty. Traffic control will be paid as a separate item.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 42 – Wetland Crossing, concrete encasement, 48" steel casing

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for, furnish and install steel casing pipe, casing spacers, seal casing ends, and concrete encasement.

Final pay quantity shall be the actual number of linear feet of casing pipe installed as measured by the City. Carrier pipe installed through the casing will be paid as separate item #31. Wetland seeding will be paid as separate item #39.

Item 43 – Contingency

Contingency is for miscellaneous sewer line-related work due to unforeseen existing conditions. The scope and associated cost must be coordinated with Owner and Engineering prior to work being performed. Any work being completed without prior approval will not be paid under this item.

SEGMENT 3

Item 1 – Mobilization

Mobilization bid price will be limited to not more than 10% (ten percent) of total bid price.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 2 – Survey

Unit bid price for this item shall include the costs of all labor, materials, supervision, and equipment to complete construction survey.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 3 – Traffic Control

Unit bid price for this item shall include the costs of all labor, material, supervision, permits, and equipment to plan and provide Traffic Control for installation of the proposed sanitary sewer in traveled roadway during the installation of the sewer and during replacement of asphalt surface. Flaggers will be required for construction traffic entering and leaving traveled roadway. Traffic Control to adhere to City of Greeley and Weld County requirements.

Final pay quantity shall be the actual number of calendar days that Traffic Control was provided for the project as approved and measured by the City.

Item 4 – Remove & Replace Curb & Gutter

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove existing curb and gutter and replace to the limits shown on the Plans.

Final pay quantity shall be actual number of linear feet of curb and gutter replaced as measured by the City.

Item 5 – Remove & Replace 4’ Wide Concrete Sidewalk

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to remove existing sidewalk and replace to the limits shown on the Plans.

Final pay quantity shall be actual number of square feet of sidewalk replaced as measured by the City.

Item 6 – Sawcut asphalt pavement

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to sawcut existing asphalt as noted on the Plans.

Final pay quantity shall be the actual number of linear feet of sawcutting as measured by the City.

Item 7 – Remove asphalt pavement

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate and remove existing asphalt pavement for trenching.

Final pay quantity shall be the actual number of square yards of asphalt removed as measured by the City.

Item 8 – Trench Dewatering

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to plan, obtain required permits, install, operate, and remove well points, or other method pre-approved by City, to achieve a dry trench for installation of waterline piping.

Final pay quantity shall be the actual number of linear feet of trench to which trench dewatering was applied as measured by the City.

Item 9 – Trench Stabilization, 12" deep

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to over-excavate waterline trench bottom to 12” depth per specifications and Plans, furnish and place trench stabilization material, and furnish and place geotextile fabric between trench stabilization material and pipe bedding.

Final pay quantity shall be the actual number of linear feet of trench to which trench stabilization was applied as directed and measured by the City.

Item 10 – 16" Gate Valve

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install gate valve, pipe, solid sleeves and pipe bedding; backfill, test, connect to existing water line and place into service.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 11 – 12" Insertion Valve

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install insertion style gate valve, bedding; backfill, test, connect to existing water line and place into service.

Final pay quantity shall be the actual number of valves installed as measured by the City.

Item 12 – Wet Tap and Fire Hydrant Assembly

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish and install wet tap, tapping saddle, isolation valve, 6” DIP hydrant lead from main to hydrant, and fire hydrant assembly, bedding; backfill, test, connect to existing water line and place into service.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 13 – Rock Socks

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install rock socks.

Final pay quantity shall be the actual number of rock socks installed per Plans and as measured by

the City.

Item 14 – Dandy Inlet Curb Bags

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install inlet bags.

Final pay quantity shall be the actual number of linear feet of inlet bags installed per Plans and as measured by the City.

Item 15 – Truck Tracking Pad

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install truck tracking pad.

Final pay quantity shall be the actual number of pads installed per Plans and as measured by the City.

Item 16 – Pavement Replacement/Trench Repair

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to excavate for; furnish aggregate base course, shape and prepare base course surface; furnish and install hot bituminous pavement (or hot mix asphalt where required by Weld County) to repair trench surface per City of Greeley or Weld County Requirements.

Final pay quantity shall be the actual number of tons of HBP delivered and installed on the project as measured by truck weight tickets submitted at end of each day to City.

Item 17 – Replace Blue Grass Sod

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install blue grass sod and repair and replace all irrigation systems damaged during construction over the width of the excavated waterline trench.

Final pay quantity shall be the actual number of square yards of sod replaced as measured by the City.

Item 18 – Roadway Striping

Unit bid price for this item shall include the costs of all labor, material, supervision, and equipment to furnish and install all pavement markings including surface preparation, premarking, quality control tests, primer/adhesive, reflective optics materials when required, and warranty. Traffic control will be paid as a separate item.

No separate measurement will be made for this item. Final pay quantity shall be the lump sum price contained in the Bid for this item.

Item 19 – Water Line Replacement Allowance

Water line replacement allowance is for miscellaneous water line replacement due to unforeseen existing conditions during water line work. The scope and associated cost must be coordinated with Owner and Engineering prior to work being performed. Any work being completed without prior approval will not be paid under this item. Any work included within another pay item will not be paid under this item.

Kimley»Horn

North Greeley Sewer Phase IIA - Bid Tabulation

City of Greeley, Weld County, Colorado
1-Nov-24

Item	Description	Quantity	Units	Unit Price	Total Price
	Segment 1				
1	Mobilization	1	LS		
2	Survey	1	LS		
3	Clear & Grub pipeline trench (40' wide)	11,800	SY		
4	Remove trees (> 6" trunk diam)	30	EA		
5	Trench Dewatering	2,700	LF		
6	Trench Stabilization 12" deep	2,700	LF		
7	Bypass pump EGI sewer (MH#13 to MH#14)	1	LS		
8	Remove existing 48" RCP EGI sewer	14	LF		
9	Support 8” water main	1	EA		
10	Support communications line	1	EA		
11	Construct Junction Box on EGI sewer	1	LS		
12	Bore & Case 6th Ave crossing, 48" casing	100	LF		
13	36" diam PVC Sewer, F679 PS46 solid wall	2,605	LF		
14	48" diam PVC Sewer, F679 PS46 solid wall	40	LF		
15	48" diam PVC Pipe Cap	1	EA		
16	60" diam Manhole 12' to 16' depth	6	EA		
17	60" diam Manhole 16' to 20' depth	1	SF		
18	Silt Fence	760	LF		
19	Truck Tracking Pad	2	EA		
20	Concrete Washout	1	EA		
21	Aggregate Base Course (10’ Wide x 8” Deep)	725	Tons		
22	Strip & Replace Topsoil (40’ Wide x 6” Deep)	11,800	SY		
23	Reseed (80’ Width)	4.9	Acre		
24	Contingency	1	LS	$ 100,000.00	$ 100,000.00
Segment 1 - Sub-total					**$ 100,000.00**

Item	Description	Quantity	Unit	Unit Price	Cost
	Segment 2				
1	Mobilization	1	LS		
2	Survey	1	LS		
3	Traffic Control	30	Days		
4	Clear & Grub pipeline trench (40' wide)	6,400	SY		
5	Remove Lift Station	1	LS		
6	River Crossing, Concrete Encasement, 48" Steel Casing	302	LF		
7	Type L Soil Riprap	75	CY		
8	Erosion Control Blanket (Stream Bank Stabilization)	340	SY		
9	Remove & Replace Curb & Gutter	200	LF		
10	Remove & Replace 4' wide concrete sidewalk	400	SF		
11	Sawcut asphalt pavement	3,900	LF		
12	Remove asphalt pavement	1,300	SY		
13	Remove trees (> 6" trunk diam)	15	EA		
14	Remove & Replace 6' chain link fence	50	LF		
15	Remove & Replace Riprap at Storm Channel	1	LS		

16	Remove & Replace 15" diam CMP culvert	50	LF		
17	Support 2" water main	1	EA		
18	Support gas main	2	EA		
19	Support 8” VCP Sewer Until Abandonment	1	EA		
20	Support 6" water main	3	EA		
21	Support 16" water main	1	EA		
22	Support 15" diam sewer	2	EA		
23	Support 18" diam storm drain	4	EA		
24	Support 36" diam storm drain	1	EA		
25	Trench Dewatering	3,420	LF		
26	Trench Stabilization 12" deep	3,420	LF		
27	8" diam PVC Sewer, SDR-35	20	LF		
28	36" diam PVC Sewer, F679 PS46 solid wall	3,420	LF		
29	60" diam Manhole 12' to 16' depth	9	EA		
30	Silt fence	330	LF		
31	Sediment Control Log	4	EA		
32	Rock Socks	12	EA		
33	Dandy Inlet curb bags	50	LF		
34	Truck Tracking Pad	3	EA		
35	Concrete Washout (move with sewer)	1	EA		
36	Aggregate Base Course (10’ Wide x 8” Deep)	220	Tons		
37	Pavement Replacement/Trench Repair	590	Tons		
38	Strip & Replace Topsoil (40’ wide x 6” deep)	6,400	SY		
39	Reseed (80’ width)	2.7	Acre		
40	Replace Blue Grass Sod	2,290	SY		
41	Roadway Striping	1	LS		
42	Wetland Crossing, Concrete Encasement, 48" Steel Casing	410	LF		
43	Contingency	1	LS	$ 100,000.00	$ 100,000.00
Segment 2 - Sub-total					**$ 100,000.00**

Item	Description	Quantity	Unit	Unit Price	Cost
	Segment 3				
1	Mobilization	1	LS		
2	Survey	1	LS		
3	Traffic Control	10	Days		
4	Remove & Replace Curb & Gutter	10	LF		
5	Remove & Replace 4' wide concrete sidewalk	40	SF		
6	Sawcut asphalt pavement	90	LF		
7	Remove asphalt pavement	30	SY		
8	Trench Dewatering	45	LF		
9	Trench Stabilization 12" deep	45	LF		
10	16” Gate Valve	1	LS		
11	12” Insertion Valve	1	EA		
12	Wet Tap and Fire Hydrant Assembly	1	LS		
13	Rock Socks	2	EA		
14	Dandy Inlet curb bags	2	EA		
15	Truck Tracking Pad	1	EA		
16	Pavement Replacement/Trench Repair	15	Tons		
17	Replace Blue Grass Sod	12	SY		
18	Roadway Striping	1	LS		
19	Water line Replacement Allowance	1	LS	$ 150,000.00	$ 150,000.00
Segment 3 - Sub-total					**$ 150,000.00**
Total Bid - Segment 1 + Segment 2 + Segment 3					**$ 350,000.00**