



Purchasing Division

Invitation for Bid

IFB-4321-17-DH

1st Street Reconstruction (Ouray Ave to North Ave.)

Responses Due:

February 1, 2017 prior to 3:30 PM

Accepting Electronic Responses Only

Responses Only Submitted Through the Rocky Mountain E-Purchasing System (RMEPS)

<https://www.rockymountainbidsystem.com/default.asp>

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

Purchasing Representative:

Duane Hoff Jr., Senior Buyer

duaneh@gjcity.org

970-244-1545

This document has been developed specifically to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction solicitations. All vendors are urged to thoroughly review this solicitation prior to responding. Submittal by **FAX, EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

Invitation for Bids

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1. Instructions to Bidders

- 1.1. **Purpose:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required, as scoped in the attached bid documents and plan set for the reconstruction of 1st Street from Ouray Avenue to North Avenue. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

IFB Questions:

Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org

- 1.2. **Mandatory Site Visit/Briefing:** **Prospective bidders are required to attend a site visit/briefing on January 19, 2017 at 10:00am.** Meeting location shall be at City Hall Auditorium, 250 N. 5th Street, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).
- 1.3. **The Owner:** The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.
- 1.4. **Submission:** **Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (<https://www.rockymountainbidsystem.com/default.asp>).** *This site offers both “free” and “paying” registration options that allow for full access of the Owner’s documents and for electronic submission of proposals. (Note: “free” registration may take up to 24 hours to process. Please Plan accordingly.)* Please view our “**Electronic Vendor Registration Guide**” at <http://www.gjcity.org/BidOpenings.aspx> for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline. **800-835-4603**)
- 1.5. **Printed Form for Price Bid:** All Price Bids must be made upon the Contractor’s Bid Form attached, and should give the amounts both in words and in figures, and must be signed and acknowledged by the bidder.
- 1.6. **Exclusions:** No oral, telephonic, emailed, or facsimile bid will be considered
- 1.7. **Contract Documents:** The complete IFB and bidder’s response compose the Contract Documents. Copies of these documents can be obtained from the City Purchasing website, <http://www.gjcity.org/BidOpenings.aspx>.
- 1.8. **Examination of Specifications:** Bidders shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Offeror to receive or examine any form, addendum, or other document shall in no way relieve any

Offeror from any obligation with respect to his bid. The submission of a bid shall be taken as evidence of compliance with this section.

- 1.9. **Questions Regarding Statement of Work:** Any information relative to interpretation of Scope of Work or specifications shall be requested of the Purchasing Representative, in writing, in ample time prior to the response time.
- 1.10. **Addenda & Interpretations:** If it becomes necessary to revise any part of this solicitation, a written addendum will be posted electronically on the City's website at <http://www.gjcity.org/BidOpenings.aspx>. The Owner is not bound by any oral representations, clarifications, or changes made in the written specifications by Owner, unless such clarification or change is provided in written addendum form from the City Purchasing Representative.
- 1.11. **Taxes:** The Owner is exempt from State retail and Federal tax. The bid price must be net, exclusive of taxes.
- 1.12. **Offers Binding 60 Days:** Unless otherwise specified, all formal offers submitted shall be binding for sixty (60) calendar days following opening date, unless the Bidder, upon request of the Purchasing Representative, agrees to an extension.
- 1.13. **Collusion Clause:** Each bidder by submitting a bid certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all bids shall be rejected if there is evidence or reason for believing that collusion exists among bidders. The Owner may, or may not, accept future bids for the same services or commodities from participants in such collusion.
- 1.14. **Public Disclosure Record:** If the bidder has knowledge of their employee(s) or sub-contractors having an immediate family relationship with a City/County employee or elected official, the bidder must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the City/County.

2. General Contract Conditions for Construction Projects

- 2.1. **The Contract:** This Invitation for Bid, submitted documents, and any negotiations, when properly accepted by the City/County, shall constitute a contract equally binding between the City/County and Contractor. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may be amended or modified with Change Orders, Field Orders, or Addendums.
- 2.2. **The Work:** The term Work includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

- 2.3. Execution, Correlation, Intent, and Interpretations:** The Contract Documents shall be signed in not less than triplicate by the Owner (City/County) and Contractor. City/County will provide the contract. By executing the contract, the Contractor represents that he/she has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by any one, shall be as binding as if required by all. The intention of the documents is to include all labor, materials, equipment and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the City/County are, and shall remain, City/County property. They are not to be used on any other project, and with the exception of one contract set for each party to the contract, are to be returned to the owner on request at the completion of the work.
- 2.4. The Owner:** The Owner is the City of Grand Junction and/or Mesa County, Colorado and is referred to throughout the Contract Documents. The term Owner means the Owner or his authorized representative. The Owner shall, at all times, have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize himself generally with the progress and quality of work and to determine, in general, if the work is proceeding in accordance with the contract documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in the contract. The Owner will have authority to reject work which does not conform to the Contract documents. Whenever, in his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will have authority to require the Contractor to stop the work or any portion, or to require special inspection or testing of the work, whether or not such work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of their agents or employees, or any other persons performing any of the work.
- 2.5. Contractor:** The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.
- 2.6. Sub-Contractors:** A sub-contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.

- 2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work:** As soon as practicable after bids are received and prior to the award of the contract, the successful Contractor shall furnish to the Owner, in writing for acceptance, a list of the names of the sub-contractors or other persons or organizations proposed for such portions of the work as may be designated in the proposal requirements, or, if none is so designated, the names of the sub-contractors proposed for the principal portions of the work. Prior to the award of the contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the contract, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw their proposal without forfeiture of proposal security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at their discretion, accept the increased proposal or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the contract sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. However, no increase in the contract sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.
- 2.8. Supervision and Construction Procedures:** The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.
- 2.9. Warranty:** The Contractor warrants to the Owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all work of others destroyed or damaged by the correction, removal or replacement of his defective work.
- 2.10. Permits, Fees, & Notices:** The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance in any respect, he shall promptly notify the Owner in

writing, and any necessary changes shall be adjusted by approximate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility and shall bear all costs attributable.

2.11. Responsibility for Those Performing the Work: The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all sub-contractors, their agents and employees, and all other persons performing any of the work under a contract with the Contractor.

2.12. Use of the Site: The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.

2.13. Cleanup: The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of work he shall remove all his waste materials and rubbish from and about the project, as well as all his tools, construction equipment, machinery and surplus materials.

2.14. Insurance Requirements: The selected Bidder agrees to procure and maintain, at its own cost, policy(s) of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the Bidder pursuant to this Section. Such insurance shall be in addition to any other insurance requirements imposed by this Contract or by law. The Bidder shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Section by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. Bidder shall procure and maintain and, if applicable, shall cause any Subcontractor of the Bidder to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to the Owner. All coverage shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Bidder pursuant to this Section. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise in the Special Conditions:

(a) Worker Compensation: Contractor shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum combined single limits of:

One Million Dollars (\$1,000,000) each occurrence and
One Million Dollars (\$1,000,000) per job aggregate.

The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts),

blanket contractual, products, and completed operations. The policy shall include coverage for explosion, collapse, and underground hazards. The policy shall contain a severability of interests provision.

(c) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than:

One Million Dollars (\$1,000,000) each occurrence and
One Million Dollars (\$1,000,000) aggregate

This policy shall provide coverage to protect the contractor against liability incurred as a result of the professional services performed as a result of responding to this Solicitation.

With respect to each of Bidder's owned, hired, or non-owned vehicles assigned to be used in performance of the Work. The policy shall contain a severability of interests provision. The policies required by paragraphs (b), and (c) above shall be endorsed to include the City and/or County, and the City's and/or County's officers and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by Bidder. No additional insured endorsement to any required policy shall contain any exclusion for bodily injury or property damage arising from completed operations. The Bidder shall be solely responsible for any deductible losses under any policy required above.

2.15. Indemnification: The Contractor shall defend, indemnify and save harmless the Owner, and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Contractor, or of any Contractor's agent, employee, sub-contractor or supplier in the execution of, or performance under, any contract which may result from proposal award. Contractor shall pay any judgment with cost which may be obtained against the Owner growing out of such injury or damages.

2.16. Miscellaneous Conditions: Material Availability: Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. OSHA Standards: All bidders agree and warrant that services performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA standards, the Owner may require the services to be redone at no additional expense to the Owner.

- 2.17. Time:** The Contract Time is the period of time allotted in the Contract Documents for completion of the work. The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein, or as established as entered on the Bid Form. The Date of Substantial Completion of the work or designated portions thereof is the date certified by the Owner when construction is sufficiently complete, in accordance with the Contract Documents.
- 2.18. Progress & Completion:** The Contractor shall begin work on the date of commencement as defined in the Contract, and shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.
- 2.19. Payment & Completion:** The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the work under the Contract Documents. Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when he finds the work acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents.
- 2.20. Quantities of Work and Unit Price:** Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work. The City does not expressly or by implication agree that the actual amount of Work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price. The City also reserves the right to make changes in the Work including the right to delete any bid item in its entirety or add additional bid items.
- 2.21. Bid Bond:** Each Bid shall as a guaranty of good faith on the part of the Bidder be accompanied by a Bid Guaranty consisting of: a certified or cashier's check drawn on an approved national bank or trust company in the state of Colorado, and made payable without condition to the City; or a **Bid Bond** written by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount. Once a Bid is accepted and a Contract is awarded, the apparent successful bidder has ten calendar days to enter into a contractor in the form prescribed and to furnish the bonds with a legally responsible and approved surety. Failure to do so will result in forfeiture of the Bid Guaranty to the City as Liquidated Damages.
- 2.22. Performance & Payment Bonds:** Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). Contractor shall also furnish other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates

of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.

- 2.23. Retention:** The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire contract. The amount to be retained from partial payments will be five (5) percent of the value of the completed work, and not greater than five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.
- 2.24. Liquidated Damages for Failure to Enter Into Contract:** Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.
- 2.25. Liquidated Damages for Failure to Meet Project Completion Schedule:** If the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of **\$5000.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives its written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is substantially complete. In addition to the Work being substantially complete, Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Substantial or Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

- 2.26. Contingency/Force Account:** Contingency/Force Account work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account Authorization will be directed by the Owner through an approved form. Contingency/Force Account funds are the property of the Owner and any Contingency/Force Account funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account funds, that are not authorized by Owner or Owner's Project Manager.
- 2.27. Protection of Persons & Property:** The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards

for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the work, or in consequence of the non-execution thereof by the Contractor, he shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.

- 2.28. Changes in the Work:** The Owner, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.
- 2.29. Claims for Additional Cost or Time:** If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, he shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall precede in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.
- 2.30. Minor Changes in the Work:** The Owner shall have authority to order minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the contract documents.
- 2.31. Field Orders:** The Owner may issue written Field Orders which interpret the Contract Documents in accordance with the specifications, or which order minor changes in the work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.
- 2.32. Uncovering & Correction of Work:** The Contractor shall promptly correct all work rejected by the Owner as defective or as failing to conform to the contract documents whether observed before or after substantial completion and whether or not fabricated installed or completed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the contract documents, any of the work found to be defective or not in accordance with the contract documents, the Contractor shall

correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discover of condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the contract documents without cost to the Owner. The Contractor shall bear the cost of making good all work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

- 2.30. Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner.
- 2.31. Assignment:** The Contractor shall not sell, assign, transfer or convey any contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.
- 2.32. Compliance with Laws:** Bids must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements.
- 2.33. Confidentiality:** All information disclosed by the Owner to the Contractor for the purpose of the work to be done or information that comes to the attention of the Contractor during the course of performing such work is to be kept strictly confidential.
- 2.34. Conflict of Interest:** No public official and/or City/County employee shall have interest in any contract resulting from this IFB.
- 2.35. Contract Termination:** This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation.
- 2.36. Employment Discrimination:** During the performance of any services per agreement with the Owner, the Contractor, by submitting a Bid, agrees to the following conditions:
- 2.36.1.** The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Contractor. The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

- 2.36.2.** The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an Equal Opportunity Employer.
- 2.36.3.** Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 2.37. Immigration Reform and Control Act of 1986 and Immigration Compliance:** The Offeror certifies that it does not and will not during the performance of the contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, *et.seq.* (House Bill 06-1343).
- 2.38. Ethics:** The Contractor shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.
- 2.39. Failure to Deliver:** In the event of failure of the Contractor to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Contractor responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.
- 2.40. Failure to Enforce:** Failure by the Owner at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Owner to enforce any provision at any time in accordance with its terms.
- 2.41. Force Majeure:** The Contractor shall not be held responsible for failure to perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Contractor, unless otherwise specified in the contract.
- 2.42. Independent Contractor:** The Contractor shall be legally considered an Independent Contractor and neither the Contractor nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, or agents. The Owner shall not withhold from the contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security Tax or any other amounts for benefits to the Contractor. Further, the Owner shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- 2.43. Nonconforming Terms and Conditions:** A bid that includes terms and conditions that do not conform to the terms and conditions of this Invitation for Bid is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its bid prior to a determination

by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

- 2.44. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.
- 2.45. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.
- 2.46. Patents/Copyrights:** The Contractor agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Contractor for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this IFB.
- 2.47. Remedies:** The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- 2.48. Venue:** Any agreement as a result of responding to this IFB shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.
- 2.49. Expenses:** Expenses incurred in preparation, submission and presentation of this IFB are the responsibility of the company and cannot be charged to the Owner.
- 2.50. Sovereign Immunity:** The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.
- 2.51. Non-Appropriation of Funds:** The contractual obligation of the Owner under this contract is contingent upon the availability of appropriated funds from this fiscal year budget as approved by the City Council or Board of County Commissioners from this fiscal year only. State of Colorado Statutes prohibit obligation of public funds beyond the fiscal year for which the budget was approved. Anticipated expenditures/obligations beyond the end of the current Owner's fiscal year budget shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.
- 2.52. Cooperative Purchasing:** Purchases as a result of this solicitation are primarily for the City/County. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions and pricings established in this Bid. The quantities furnished in this bid document are for only the City/County. It does not include quantities for any other jurisdiction. The City or County will be responsible only for the award for its jurisdiction. Other participating entities will place their own awards

on their respective Purchase Orders through their purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The City/County accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation. Orders placed by participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.

- 2.53. Keep Jobs in Colorado Act:** Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion, and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

2.53.1. "Public project" is defined as:

- (a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects
- (b) for which appropriate or expenditure of moneys may be reasonably expected to be \$500,000.00 or more in the aggregate for any fiscal year
- (c) except any project that receives federal moneys.

3. Statement of Work/Specifications

- 3.1. General:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required, as scoped in the attached bid documents and plan set for the reconstruction of 1st Street from Ouray Avenue to North Avenue. All dimensions and scope of work should be verified by Contractors prior to submission of bids. All work shall be in accordance with the City of Grand Junction Standard Specifications for road and Bridge Construction and what is modified or supplemented for this project by the following modifications to the Standard Specifications for road and bridge construction, state department of highways division of highways, state of Colorado.

3.2. Project Description: The project consists of a complete road reconstruction of 6 city blocks. The project generally consists of removal of the existing roadway, subgrade excavation, the installation of 10,700 SY of pit run material, class 6 aggregate base course, and a new asphalt mat, 1250 SY of asphalt patching, 1190 SY Colored concrete paving, 250 SY of concrete alley improvements, 250 LF of concrete V-pan. 4410 LF of curb and Gutter, 2676 SY of 4" concrete sidewalk, 325 SY of monolithic curb gutter and sidewalk, 1945 SY driveway and curb ramps, 410 LF of concrete median, 2500 LF of electrical trenching, irrigation and landscape improvements, 406 LF of 42" RCP storm drain pipe, 360 LF of 12" RCP storm drain pipe, 4 manholes, and 11 storm drain inlets.

3.3. Special Conditions & Provisions:

3.3.1 Mandatory Site Visit/Briefing: Prospective bidders are required to attend a site visit/briefing on January 19, 2017 at 10:00am. Meeting location shall be at City Hall Auditorium, 250 N. 5th Street, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

3.3.2 Questions Regarding Solicitation Process/Scope of Work:

Duane Hoff Jr., Senior Buyer
City of Grand Junction
duaneh@gjcity.org

3.3.3 Project Manager: The Project Manager for the Project is Justin Vensel, Project Engineer, who can be reached at (970)256-4017. During Construction, all notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction
Department of Public Works
Attn: Justin Vensel, Project Engineer
333 West Ave Building A
Grand Junction, CO 81501

3.3.4 Affirmative Action: The Contractor is not required to submit a written Affirmative Action Program for the Project.

3.3.5 Pricing: Pricing shall be all inclusive to include but not be limited to: all labor, equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related to the successful completion of the project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

3.3.6 Freight/Shipping: All freight/shipping shall be F.O.B. Destination – Freight Pre-Paid and Allowed to the project site(s), Grand Junction, CO.

Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such services.

3.3.7 Contract: A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) the bidder's response (bid) to the IFB, (3) clarification of the bid, if any, and (4) the City's Purchasing Department's acceptance of the bid by "Notice of Award" or by "Purchase Order". All Exhibits and Attachments included In the IFB shall be incorporated into the contract by reference.

A. The contract expresses the complete agreement of the parties and, performance shall be governed solely by the specifications and requirements contained therein.

B. Any change to the contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the bidder and the City Purchasing Division or by a modified Purchase Order prior to the effective date of such modification. The bidder expressly and explicitly understands and agrees that no other method and/or no other document, including acts and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.

3.3.8 Time of Completion: The scheduled time of Completion for the Project is **143 Calendar** Days from the starting date specified in the Notice to Proceed.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed. Completion shall have the meaning set forth in Article I, Section 3 (Definitions and Terms) of the General Contract Conditions.

3.3.9 Clean-Up: The Contractor is responsible for cleaning up all loose materials that have been deposited or swept into gutters, and onto sidewalks and driveways as a result of sidewalk operations. The costs for all clean-up work shall be considered incidental and will not be paid for separately.

3.3.10 Excess Material: All excess materials shall be disposed in accordance with General Contract Condition Section 50. All millings shall be delivered to City Shops, Riverside Yard, and become the property of the City of Grand Junction.

3.3.11 Incidental Items: Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items.

3.3.12 Early Completion Incentive Payment: If the Contractor completes ALL of the Work, achieves Milestones and Final Completion prior to the Contract time (as stated in the Notice to proceed plus any City approved extensions) in addition to other amounts owing to the contractor, less any offsets, the Owner shall pay the Contractor \$2,500 for each Calendar Day that Final Completion is earlier than specified in the Notice to Proceed. Incentive payments will be paid up to a maximum amount of \$75,000.

3.3.13 Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such services.

3.3.14 Licenses and Permits: Contractor is responsible for obtaining all necessary licenses and permits required for Construction, at Contractors expense. See Section 2.10. Contractor shall supply to Owner all copies of finalized permits.

3.3.15 Working Days and Hours: The working days and hours shall be as stated in the General Contract Conditions, Section VI, or as stated below:

Weekdays

6:00 am to 8:00 pm February 20th to July 14th 2017

Weekends

6:00 am to 8:00 pm February 20th to July 14th 2017

The Contractor may opt to perform many tasks as night work to assist with traffic and business flows.

3.3.16 Permits: The following permits are required for the Project and will be obtained by the City at no cost to the Contractor:

- CDPH Storm Water Permit
- 521 Drainage Authority Storm Water Permit

The following permits are required for the Project and shall be obtained and paid for by the Contractor, with the costs included in the total bid price for the Project:

- CDOT Work in the ROW Permit for the intersection work and the Storm line upgrade

3.3.17 Project Newsletters: The first newsletter for the Project will be prepared and distributed by the City of Grand Junction. It will include general information about the Project including interruptions in utility services, street closures, parking restrictions, project schedule and the names and telephone numbers of the contacts for the City and Contractor. The first newsletter will be mailed approximately one weeks before the Contractor commences work.

The Contractor shall prepare the information for the weekly newsletter until the project is completed. The newsletters will be email and mail the information to the business owners.

The contractor shall supply the following information in the weekly newsletters:

1. Description of work completed during the previous week
2. Description of work scheduled for the upcoming two weeks
3. Information about any road closures, detours, parking restrictions and other activities that may cause delay or inconvenience to the businesses or the general public
4. Scheduled or planned interruption changes in any utility services, trash pickup, mail delivery or other services
5. Project schedule changes or other information that may be useful or of interest
6. The project schedule shall contain a one week look behind and a three week look ahead to be included in the news letter.

3.3.18 Project Sign: Project signs, if any, will be furnished and installed by the City.

3.3.19 Authorized Representatives of the City: Those authorized to represent the City shall include engineers and inspectors employed by the City, and Independent 3rd Party Testing Firm only.

3.3.20 Uranium Mill Tailings: It is anticipated that radioactive mill tailings will be encountered on this project.

3.3.21 Stockpiling Materials and Equipment: All stockpiling/storage shall be in accordance with General Contract Condition Section 51.

When approved by the Project Engineer, the Contractor may stockpile and store materials and equipment within public right-of-way. The Contractor shall be responsible for obtaining written permission to use private property for storage of materials and equipment. Copies of the above-mentioned agreements shall be submitted to the Project Engineer prior to use of the property.

3.3.22 Fugitive Petroleum or Other Contamination: It is anticipated that soil contamination from fugitive petroleum or other contaminants will not be encountered with the Project.

3.3.23 Traffic Control: The following street and lane closures will be allowed for construction of this project:

All available public parking is reserved for the public. Contractor and subcontractor employee personal vehicle parking is prohibited in these locations. Parking of Contractor or subcontractor vehicles or construction equipment in existing public parking space is allowed only in the zones that are closed for construction. Parking of Contractor, subcontractor or employee construction or personal vehicles (or construction equipment) in private residential or business parking space is also strictly prohibited. Suitable transportation to the work site for personnel whose vehicles are parked off site shall be provided by the Contractor.

Access Maintenance Plan

Unless otherwise included in the plans or directed by the Engineer, the Contractor shall maintain continuous access to all roadways, side streets, walkways, alleyways, driveways, and other sidewalks and pathways at all times. Sidewalks shall remain open to pedestrians to the greatest extent practicable. If a sidewalk has to be closed, an alternate access shall be provided with appropriate signage. To the greatest extent possible, driveways shall be re-constructed when the access is closed for concrete pavement placement.

At least 7 calendar days prior to beginning work on any driveway or private access, the Contractor shall notify each business or resident of the expected construction schedule.

The Contractor shall develop an Access Maintenance Plan (AMP) in coordination with all affected owners and tenants. A sample form of the AMP shall be developed for this purpose by the Contractor and submitted to the Engineer for review and approval. The AMP shall address any special needs any business or residence has for Americans with Disabilities Act (ADA) access or any other special needs. A place on the AMP form shall address special needs and ADA issues.

The AMP shall detail the effects to the accesses including closing dates, time and duration, and, if applicable, barricades, fencing and temporary means of access with all affected owners and tenants in a work area. The AMP shall include the address, the station location, the work periods affected, and show documentation of coordination, including the appropriate property owner signatures, and the date of the contact. Contact information regarding the companies that make frequent deliveries to the affected businesses shall be obtained and details of access changes shall be provided to these companies by the Public Information Manager along with other routine public information.

The signed AMP shall be submitted, as part of the corresponding method of handling traffic, to the Project Engineer for approval one week prior to the start of any work which will affect the signatory properties. If the Contractor is unable to obtain approval and signatures, documentation of "good faith efforts" to obtain said approval and signatures shall be submitted.

The Contractor will not be allowed to begin work until the plan is accepted. If Contractor does not have approved AMP forms completed for all accesses within a work area, the Engineer may delay progress of work for the affected accesses. Such delay shall not be the basis for a claim for additional contract time or compensation.

Other Special Traffic Control Requirements

Signs and stands shall not be permitted to be left on sidewalks or landscaped areas overnight.

Equipment shall not be stored within 20 feet of the currently traveled roadway lanes on the interstate and ramps; and within 10 feet of the currently traveled roadway lanes on city streets.

Traffic Control Management shall include all Traffic Control Supervisors and helpers necessary to perform the work. There shall be a minimum of one helper for each Traffic Control Supervisor required for the project. At least one Traffic Control Supervisor and one Helper shall be on site at all times when construction activities are underway.

Although Traffic Control items such as Variable Message Sign Panels, Traffic Control Management or Traffic Control Inspection, and construction traffic control signs may be required and used prior to the beginning of contract time, no payment will be made for the use of any item prior to the beginning of contract time. All work performed prior to commencement of Contract time shall be considered subsidiary to mobilization.

Helpers for the Traffic Control Management item may give flagger breaks. However, the time shall be included in the item for Traffic Control Management, and shall not be paid as additional flagging hours.

The Contractor shall provide Traffic Control Supervisor(s) (TCS) with at least one year of experience, as accepted by the Engineer. A copy of the certification of the Traffic Control Supervisor(s) shall be provided to the Engineer at least two days prior to the project preconstruction conference.

A meeting will be scheduled each working day with the Contractor’s superintendent, the Traffic Control Supervisor(s), and the Project Engineer for discussion, submittal and approval of the MHT(s) for the next day’s scheduled work. Work that has not been scheduled and requires a MHT that has not been approved shall not be allowed. Work which does not require a MHT may proceed if approved by the Engineer.

The required TCS Diary shall be submitted to the Engineer by 10:00 a.m. each following day and shall include a listing of all flagging hours.

All Construction Zone Traffic Control Devices shall be continuously maintained in accordance with Section 630 of the Standard Specifications. The TCS shall establish a set maintenance and cleaning schedule. A copy of the maintenance and cleaning schedule shall be provided to the Engineer.

All costs incidental to the foregoing requirements shall be included in the original contract prices for the project.

3.3.24 Right of Way Restrictions:

The contractor is hereby made aware that at the time of bidding on this project, the City of Grand Junction does not have possession of all necessary Right of Way required to complete the following portion of this project and has identified the following areas as a “**No Work Zone**”, until the Restriction Date shown below. Please reference TE PE and Right of Way Plans.

| Address | Ownership Name | Restriction Date |
|------------------------------|-----------------|------------------|
| 535 N 1 st Street | Vera Pearce | February 15,2017 |
| 537 N 1 st Street | Brad Stewart | February 15,2017 |
| 539 N 1 st Street | Kenneth Risky | February 15,2017 |
| 827 N 1 st Street | Scott Howard | February 15,2017 |
| 841 N 1 st Street | Ralph Belcastro | February 15,2017 |
| 901 N 1 st Street | Larry Badini | February 15,2017 |
| 931 N 1 st Street | Larry Badini | February 15,2017 |

When bidding, the contractor is advised that the Contractor shall not enter the listed right of way parcels identified above, prior to the dates indicated above, unless otherwise directed in writing by the Project Engineer.

The City anticipates no delay toward completion of the project due to the restrictions imposed herein. No additional time or mobilization costs shall be granted to the Contractor for delays associated with not having possession of the above mentioned locations prior to the dates specified above.

3.3.25 Stormwater Management Plan:

Existing curbside storm drain inlet basins are located throughout the project and each inlet basin as shown on the construction plans shall receive stormwater protection in the form of a “Silt Sack” or “Filter Sock.” The inlet basin stormwater protection devices shall remain in place until the Contractor has completed the asphalt paving operations and the street has been swept clean. The Contractor shall also be responsible for maintaining the inlet basin protection device throughout construction and periodically inspecting the inlet basin protection device during construction. In addition, after every rainfall and/or snowmelt event the Contractor shall inspect all inlet basin protection devices on the project. The Contractor shall be responsible for either cleaning or replacing the inlet basin protection device when the capacity of the protection device has reached 50% of its full capacity. The Contractor shall take into account the associated maintenance cost in the specific pay item.

Street sweeping shall be periodically completed along the streets adjacent to the project to contain tracking of soil. The street sweeping machine shall be capable of both sweeping and vacuuming up the roadway dirt. A machine that only sweeps will not be accepted and will not be paid for. The Contractor shall submit for approval a description of the street cleaning machine to be used prior to cleaning the street. Street sweeping will be paid for by the hour as shown in the Bid Schedule.

The Contractor shall keep on site gravel filter socks (gravel wattles) for placing around the base of excavated soil piles in the event of a rainstorm and/or snow melt event. The Contractor will only be required to use the gravel filter socks when it is likely that a rainstorm and/or snowstorm event is going to occur. The Contractor should contact the NOAA National Weather Service Forecast Office in Grand Junction to obtain extended weather forecast information to help in deciding whether gravel filter socks will need to be used. The NOAA Forecast Office of Grand Junction can be reached at 970-243-7007. Gravel filter socks will be measured and paid for by the lineal foot as shown in the Bid Schedule.

If groundwater within the new water line or storm drain line trenches is encountered and requires dewatering, the dewatering pump shall have a filter sock attached to the end of the discharge hose. This will prevent sediment in the discharge water from entering into the City’s storm drainage system. The contractor will be responsible for monitoring the levels of sediment within the filter sock and replacing the filter sock when it reaches 50% of its holding capacity. It will also be the responsibility of the contractor to obtain the Dewatering Permit from the Colorado Department of Public Health and Environment if necessary.

Any of the materials to be installed or used for the installation of the water line and storm drain line shall be stored within the construction area where the Contractor is working unless permission is granted to store materials elsewhere. Any glues and/or adhesives necessary shall be contained at all times within a spill proof and waterproof container when not being used.

All vehicle and equipment maintenance and fueling shall be performed in a designated area within the construction area that will not interfere with roadway traffic operations unless traffic control is provided. The fueling area shall exhibit Best Management Practices in order to minimize and/or eliminate the potential of fuel spillage. Any spillage of fuel onto the ground shall be immediately cleaned up and any contaminated soil disposed of properly at the Mesa County Landfill. Documentation of spills, leaks and overflows that result in the discharge of pollutants, including logging and reporting of the spill is required to the Water Quality Control Division at their toll-free 24-hour environmental emergency spill reporting line – 1-877-518-5608.

The Contractor shall clear the site of all on-site waste daily, including scrap from construction materials.

Concrete trucks will be required to wash out in a portable concrete washout pool supplied by the Contractor or the concrete truck can wait to washout back at the concrete batching facility. The Contractor will be responsible for maintaining the washout pool. The washout pool shall be cleaned out and/or replaced when the washout pool reaches 50% of total capacity. The concrete washout pool needs to be dynamic and durable in its ability to be moved with the progress of construction.

The Contractor shall clear the site of all trash and litter daily. Portable toilets will be maintained (cleaned and emptied) by a local supplier.

3.3.26 Schedule of Submittals:

The Contractor shall provide these specific submittals at the preconstruction meeting:

- Hourly rate table for labor and equipment to be used on this project.
- Traffic Control Plan
- Construction Schedule
- Storm line Pipe
- Irrigation including Valves, pipe drip emitters etc.
- Manholes
- Inlet Basin Protection
- Concrete Washout Facility
- Street Sweeping/Vacuum Machine
- Bedding Gradation, Type A
- Pit run
- Base course gradation, Proctor Curve (Class 6)
- Asphalt
- Concrete mix design, 4500 PSI

3.3.27 Discrepancy between Bid Schedule and Construction Notes: In the event of a discrepancy between a Pay Item description in the Bid Schedule and the description for the same Pay Item in the drawings/construction notes; the language in the Bid Schedule shall govern or supersede that found elsewhere.

3.3.28 Existing Utilities and Structures: The location of existing utilities and structures shown on the Plans are approximate. It is the responsibility of the Contractor to locate and protect all structures and utilities in accordance with General Contract

Condition Section 37. The Contractor shall coordinate with the utility companies any necessary relocation of utilities and schedule his work accordingly. A pay item is included in the bid tabulations for investigation of potential conflicts and clearances.

3.3.29 Quality Control Testing: The contractor shall be responsible for Quality Control Testing as part of this project. All testing frequencies shall be followed as **part time inspection frequencies** as depicted in the charts within the City of Grand Junction Standard Specifications for Road and Bridge Construction and the Standard specifications for the construction of Underground Utilities

3.3.30 Incidental Items: Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items.

3.4 Scope of Work/Specifications:

3.4.1 SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS: Section 202 of the Standard Specifications is hereby revised for this project as follows:

Subsection 202.12, add the following:

Locations of saw cuts shall be determined and directed by the Construction Inspector or the Engineer. Saw cuts shall be incidental to work.

901 N 1st St (Simpson Auto):

All concrete associated with the sign foundation shall be removed a minimum of 1' below the final grade of the project.

935 N 1st St (Intermountain Auto):

All concrete associated with the sign foundation shall be removed a minimum of 1' below the final grade of the project.

2582 HWY 6 & 50 (Fuoco Motor):

All concrete associated with the sign foundation shall be removed a minimum of 1' below the final grade of the project.

Pay Item

Pay Unit

Removal Business sign base (901,
935 N 1st St and 2582 HWY 6 & 50)

EA

3.4.2 SECTION 203 – PROOF ROLLING: Section 203 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 203.13(f), add the following:

In subsection 203.14, delete the pay item Proof Rolling, delete the last paragraph

and add the following:

Proof Rolling will not be measured and paid for separately, but shall be included in the work.

3.4.3 **SECTION 208 – EROSION CONTROL**

For inlet protection along Major Arterial or Collector Street sections the only approved inlet protections shall be a filter sock.

Add the following to this subsection:

208.05(n) Add the Following:

Concrete Washout Structure:

Water for clean-up of equipment used in the mixing or distribution of concrete shall not be discharged to any storm water facilities, drain ways, or deposited into any open fields. The waste water used shall either be wasted on an open excavation area or in an onsite detention facility for future disposal.

Subsection 208.08 Payment for Best Management Practices.

The disposal of wash water shall be considered incidental to the concrete and will not be measured for or paid for separately.

Add the following to this subsection:

Pay Item

Erosion Control (Complete In Place)

Pay Unit

Lump Sum

The lump sum price for Erosion Control (complete in place) shall be in full compensation for the Erosion Control Supervisor and all materials, labor and equipment required to furnish, install, maintain, remove and dispose of erosion and settlement control features and Best Management Practices (BMP's) in accordance with the Stormwater Management Plan (SWMP), State and local permits, and the contract documents.

Erosion Control (Complete in Place) shall include storm drain inlet protection and the concrete washout structure.

3.4.4 **Section 210- Reset Structure:**

Section 210 of the Standard Specifications is hereby revised for this project as follows:

Subsection 210, Basis of Payment, shall include the following:

935 N 1st St (Intermountain Auto):

The base for the post shall be a minimum of 36" diameter with a minimum depth on the foundation of 5' below the finished grade. #6 rebar hoops spaced 12" apart with Quantity 8, #8 longitudinal bars. The contractor shall submit shop drawings prior to installations. All concrete shall be a minimum of 4500 PSI compressive strength and a maximum of 6% air.

901 N 1st St (Simpson Auto):

Installation of one 36" diameter caisson matching the description above. In addition, the contractor will be required to pour a 6' X 4.5' X 2' foundation at finished elevation at the new location, with the following rebar schedule. #4 verticals with 18" spacing and #4 horizontal with 10" spacing. a 1 ½" schedule 80 conduit from the center of the caisson extended out to the perimeter of the footer.

Pay Item

Reset Business (Sign)

(Price to Include new base)

Lump Sum

3.4.5 SECTION 601 – STRUCTURAL CONCRETE:

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air ±1.5%
- Slump 4", Loads exceeding 4 ½" shall be rejected
- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and course aggregates
9. Moisture of fine and course aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of

placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

3.4.6 **SECTION 613 – REVISION OF SECTION 613:**

ELECTRICAL CONDUIT AND PULL BOXES

Section 613 of the Colorado Department of Transportation Standard Specifications is hereby revised for this project as follows:

MATERIALS

Subsection 613.02 shall include the following:

All materials furnished, assembled, fabricated, or installed under this item shall be new, corrosion resistant and in strict accordance with the Plans and these Special Provisions.

CONDUIT

The conduit shall be fully compatible with the proposed fiber optic cable types and compatible for use with directional boring applications. Conduit shall be Schedule 40, as called out for in the Plans, with a nominal diameter of 2" and 6". The conduit shall be constructed out of either RNC (i.e., PVC) or HDPE. The coefficient of friction and cut-through rating of the conduit shall meet or exceed the requirements stated in Bellcore/Telcordia GR-356-CORE *Generic Requirements for Optical Cable Innerduct and Accessories*.

All empty conduit runs shall have a #10 A.W.G. solid copper conductor placed inside for locating purposes. In addition, a pull rope should be left in each conduit after installation. Locating conductor, pull rope, and tape will not be measured and paid separately, but shall be included in the unit price for conduit.

Conduit shall always enter a pull box, hand-hole, or any other type structure from the direction of the run only.

PVC conduit shall be listed as approved for use by the RUS. PVC conduit shall be manufactured in accordance with the following industry standards:

- NEMA TC-2 *Electrical Polyvinyl Chloride (PVC) Conduit*
- UL 651 *Schedule 40 and 80 Rigid PVC Conduit and Fittings*

PVC fittings shall be manufactured in accordance with the following industry standards:

- NEMA TC-3 *PVC Fittings for Use with Rigid PVC Conduit and Tubing*
- UL 514B *Conduit, Tubing, and Cable Fittings*

HDPE conduit shall be listed as approved for use by the RUS. HDPE conduit shall be manufactured in accordance with the following industry standards:

- ASTM D-2447 *Standard Specification for PE Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter*
- ASTM F-2160 *Standard Specification for Solid Wall HDPE Conduit Based on Controlled Outside Diameter*
- NEMA TC-7 *Smooth-Wall Coilable Electrical PE Conduit*
- EPEC-80 for Schedule 80 HDPE

HDPE conduit shall be capable of being coiled or placed on reels in continuous lengths, transported, stored outdoors and subsequently uncoiled for installation without affecting its properties or performance.

The Contractor shall utilize either all PVC or HDPE conduit for underground installations on this Contract. The mixing of PVC and HDPE conduit types for underground installations shall not occur without prior written approval from the Engineer.

All underground-to-aboveground and aboveground conduit installations shall utilize RMC as indicated on the Plans.

Where RMC is used, the uncoupled end shall be covered by industry color-coded thread protectors to aid in trade size recognition and protect the threads. Since 2" and 6" diameter conduit are called out throughout the entire project, the thread protectors should be color-coded blue. Threads shall conform to ANSI B1.20.1 *Pipe Threads, General Purpose (inch)*. RMC, including factory manufactured threads, shall be hot-dipped galvanized inside and out. It shall also be top-coated with a compatible organic layer to inhibit white rust and increase corrosion resistance. RMC shall meet UL safety standard UL 6 *Electrical Rigid Metal Conduit - Steel* and be manufactured to ANSI C80.1 *Electrical Rigid Steel Conduit (ERSC)*.

All conduit transitions shall be constructed in a smooth and gradual manner as directed by the Engineer. Conduit sweeps into pull boxes and splice vaults shall be installed to facilitate pulling fiber optic cable directly through the pull box or splice vault. PVC conduits shall utilize 45° elbows with a minimum radius of 36". Similarly, HDPE conduits shall be installed with a 45° bend with a minimum radius of 36". The sum of the individual conduit bends, both horizontal and vertical, on a single conduit run between two pull boxes or a pull box and splice vault shall not exceed 270°. No individual bend shall be greater than 45°, unless indicated on the Plans for building access and pole-mounted

cabinets where conduits transition from underground to above ground installations.

When conduits are coupled, the coupling technology shall allow the conduit to plug together without the need for special tools, and shall form both an airtight and watertight seal. Breaking force between segments shall exceed 250 lbs. The couplings shall be specifically designed for use with the size and type of conduits to be joined. Where toneable conduits are to be joined, the couplings shall be specifically designed for that purpose to ensure continuous conduit run detectability. If the Contractor intends to employ air-assisted fiber optic cable installation techniques, the couplings shall be pressure tight to internal conduit pressures not less than 200 psi when unrestrained.

The Contractor shall use conduit plugs and sealing plugs for sealing all empty conduits and conduits occupied with cabling, respectively, installed under this Contract. Conduit plugs shall be utilized in conduit ends (for all empty conduits shown on the Plans) as soon as the conduit is installed. End caps, appropriately sized for the installed conduit, shall be utilized on conduit ends (for all conduits to be occupied with cabling as shown on the Plans) as soon as the conduit is installed and sealed with electrical tape. The end caps shall be replaced with the appropriate sealing plugs as soon as cabling is installed within the conduit. Conduits shall be plugged or capped at all termination points such as pull boxes, splice vaults, junction boxes and building entries.

- Conduit plugs shall be manufactured from high-impact plastic components, combined with durable elastic gaskets. They shall be corrosion proof and appropriate for use as either a long-term or temporary seal. Conduit plugs shall be removable and reusable. They shall be both watertight and airtight to prevent the flow of water and buildup of sedimentation within the conduit. Each conduit plug shall be equipped with a rope tie device to allow the securing of pull rope to the plug's back compression plate. The Contractor shall attach the pull rope to the back compression plate of the plug and store excess slack pull rope behind the plug within the conduit for future use.
- Sealing plugs shall be simplex, bplex or triplex depending on the number of cables within a single conduit. They shall be removable and reusable. All sealing plugs shall be of the split type design, manufactured without metallic parts and easily removable and reinstallable around in-place cables without damaging the outer cable jacket. Sealing plugs shall provide a minimum watertight and airtight seal of 20 psi. They shall be installable by hand without using special tools and have no sharp corners that could damage the outer cable jacket.

Pull rope shall be a prelubricated, woven polyester tape made from low friction, high abrasion resistant yarns providing a low coefficient of friction. It shall be printed with sequential footage markings. The pull rope shall not be less than ½" with a minimum tensile strength of 1,250 lbs.

Warning tape shall be of the non-detectable variety. It shall be fabricated using a pigmented polyolefin film that has been specially treated so as not to degrade when exposed to acids or other destructive chemicals. The warning tape thickness shall be at least 4 mil and have a width not less than 3". The color of the warning tape shall be an APWA-approved orange color with black letters of approximately 3/4" printed on one side with the wording "CAUTION FIBER OPTIC CABLE BURIED BELOW". The wording shall be repeated at approximately 3' intervals. Fiber optic warning tape shall be installed above the conduit in all open trenches for short conduit runs where directional boring methods are not feasible. A 1/2" diameter by 8' long ground rod shall be installed in each vault. The cost of the ground rod shall be included in the price of the vault or manhole.

Prior to installation, the specifications for all conduit types, couplings, fittings, elbows, L-bends, mounting hardware, conduit plugs, sealing plugs, pull tape, warning tape and curb markers shall be submitted to the Engineer for written approval.

BASIS OF PAYMENT

Subsection 613.11 shall include the following:

Accepted quantities of electrical conduit will be paid as measured above which price includes all items as listed above including full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing electrical conduit as shown on the Plans, as specified in the Standard Plans and Standard Specifications, as specified in these Special Provisions, and as directed by the Engineer

Accepted quantities of pull boxes and junction boxes will be paid as measured above which price includes all items as listed above including full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing each pull box and junction box as shown on the Plans, as specified in the Standard Plans and Standard Specifications, as specified in these Special Provisions, and as directed by the Engineer.

Payment will be made under:

| Pay Item | Pay Unit |
|-------------------------------------|-----------------|
| 2" Electrical Conduit (Schedule 40) | Linear Feet |
| 6" Electrical Conduit (Schedule 40) | Linear Feet |

3.2.28 SECTION 630 - CONSTRUCTION ZONE TRAFFIC CONTROL:

Subsection 630.09, Traffic Control Plan, shall include the following:

The following guidelines and limitations shall apply to the traffic control:

1. Two way traffic shall be maintained on all streets (unless otherwise approved).
2. Concrete activities shall be coordinated so that concrete trucks and other vehicles do not block the traffic lanes.
3. All incidental costs shall be included in the original contract price for the project. This is to include any assistant to the traffic control supervisor.
4. Sidewalks that are obstructed or under construction shall be barricaded, as required for pedestrian safety.
5. Refer to 3.2.14 for handling traffic flows.

3.4.7 Section Landscaping Work:

1.0 General

1.1 Scope of Landscape Work

Includes labor, equipment, material and incidentals for the completion of planting, topsoil, soil amendment, boulders and mulch work shown on the drawings as stated in the Specifications or otherwise required.

1.2 Stake Out Location of Landscape Work

The Contractor shall completely stake out the location of all trees, shrubs and other plantings limits on the site for the approval of the Owner's Representative, making modifications as required.

1.3 Applicable Standards

U. S. Department of Agriculture Rules and Regulations under the Federal Seed Act, American Association of Nurserymen, current edition of "American Standard for Nursery Stock." Published by the American Association of Nurserymen, Inc., 635-636 Southern Building, Washington D.C. and/or Colorado State Law, whichever is greater.

1.4 Quality Control Submittals

Certificates of Inspection for Plants: All necessary State, Federal and other inspection certificates shall accompany the invoice for each shipment of plant materials as may be required by law. Certificates must show source of origin. Certificates shall be filed with the Owners Representative prior to his acceptance of the material.

1.5 Plant List

A list of plants to be provided is shown on the Drawings.

1.6 Plant Sizes

Requirements for the measurement follow the code for standards currently recommended by the American Association of Nurserymen, Inc. in the American Standard for Nursery Stock.

1.7 Plant Material Labeling

Durable, legible labels stating in weather-resistant ink the correct plant name and size, as specified on the plant list, shall be securely attached to all plants, bundles or packages of plants of a single species and size, or plant container delivered to the planting site. Plants not properly labeled at time of inspection shall be subject to rejection by the Owners Representative.

1.8 Shipment and Delivery

No plant materials shall be delivered to the site more than three (3) days before planting. Plants left unplanted for more than three (3) days shall be subject to rejection by the Owners Representative. A suitable method of handling shall be employed to insure the careful, workmanlike delivery of all plants, especially heavy balled trees. The Contractor shall protect the stock in a temporary nursery at the contractor's yard, protected from sun, drying winds and shaded and kept moist and protected with damp soil, moss or other acceptable material. Contractors' nursery to be accessible for inspection of plants.

1.9 Notification of Delivery

The Landscape Contractor shall notify the General Contractor and Owners Representative a minimum of two (2) days in advance of the delivery of the plant materials. Notification shall include the time and method of delivery.

1.10 Plant Material Inspection

The Owners Representative reserves the right to reject at any time or place prior to acceptance, any and all materials which in their opinion fail to meet specifications. Inspection of materials is primarily for quality, size and variety, but other requirements are not waived even though visual inspection results in approval. Plants may be inspected where available, but inspected at the places of supply shall not preclude the right of rejection at the site. Rejected materials shall be promptly removed from the site. No installation shall occur prior to inspection and acceptance of all plant material.

1.11 Planting Commencement

No planting work shall commence until the adjacent site improvements, drainage improvements, pavements, irrigation installation and finish grading is completed. No heavy trucking or moving of plant materials or equipment shall be permitted on newly completed pavements, sod or seeded areas. Further, the irrigation system shall have been tested in the presence of the Operator's Representative and be in operating order prior to any planting, seeding or sodding.

1.12 Weather Restrictions

No planting work shall take place during inclement weather or when the ground conditions are, in the opinion of the Owner's Representative, not in a condition to be properly worked.

1.13 Irrigation & Establishment Restrictions

Plantings occurring prior to April 15 or later than September 30 will require approval by the Owner's Representative.

1.14 Substitute Products

Requests for substitution of products named in this section must be approved by the Owner's Representative one week prior to bid opening.

2.0 Products

2.1 Guy Wire

10 or 12 gauge, double strand, pliable galvanized steel wire twisted to remove slack to each stake.

2.2 Tree Wrapping Material

Tree wrapping material shall be first quality 4" wide, bituminous impregnated tape, corrugated or crepe paper, brown in color, specifically manufactured for tree wrapping and having qualities to resist insect infestation.

2.3 Tree Stakes

Standard "T" six feet (6') high steel fence posts dark green in color. Stakes for guying pines and spruce shall be 30" long (5' steel "T" posts cut in half.)

2.4 Protective Nylon Loops

One and one-half inch (1 ½") wide (min.) for restraining tree in guying operations. Lengths as required.

2.5 Insecticide Spray

Methoxychlor or similar insecticide.

3.0 Materials

3.1 Imported Topsoil

Imported friable sandy loam; reasonably free of roots, rocks larger than ½ inch, subsoil, debris, large weeds, and foreign matter; electro-conductivity range 0 to 4 mmohs; containing a minimum of 4 percent and a maximum of 25 percent organic matter; Limit decaying matter to 2% of total content by volume.

3.2 Soil Amendment

50% Ground well-aged cow or chicken manure, or ground sheep manure, 50% finely ground and aged wood chip, with a proven analysis to verify organic

content, PH, electro-conductivity, nitrogen, potassium, and phosphorus content. A sample of the material will be supplied to the Owner's Representative with an analysis.

3.3 Balled Plants

Plants delivered as "B&B", balled and burlapped shall be adequately balled with firm, natural ball wrapped tightly with burlap. No plant shall be planted if the ball is cracked or broken either before or during the planting process. Any plant which is loose in the ball shall be removed from the site and another plant conforming to the specifications of the plant removed shall be planted in its place at the expense of the Contractor.

3.4 Container Grown Plants

Plants designated in various size and type containers in the plant list shall be of a reasonable age and state of development for the size container in which they are specified. They shall have been growing in their containers sufficiently long enough to develop a good sound root system capable of holding the soil intact after removal from the container, but not so long as to have become root bound.

3.5 Tree Quality

All tree specimens shall have lower branch structures five feet (5'-8") minimum height above root ball. Tree specimens shall be a well-developed branch structure with a vigorous root system typical of the size and species and be sound, healthy and vigorous plants free from visual defects, plant diseases and all forms of insect infestation until Final Acceptance. All trees shall be nursery-grown, meaning plants that have been growing in a nursery either lined out or containerized for a minimum of two (2) growing seasons have been root pruned according to acceptable nursery practice. All shall be freshly dug at the time of delivery, and shall have been grown under similar climatic conditions as that of the project's location prior to planting. (Plants healed in or placed in cold storage for more than nine (9) months will not be accepted.)

3.6 Specifics for the Selection of Shade Trees

1. Trees greater than one and one-half inches (1½ ") caliper shall be able to stand erect without a supporting stake.
2. Trees shall have straight trunks with less than a five percent (5%) bow.
3. Branches shall be less than two-thirds (2/3) the trunk diameter.
4. Trees shall be healthy and have had adequate annual growth the previous two (2) growing seasons for that species. (See fact sheets on growth rates).
5. Trees shall be rooted into the root ball so that soil or media remains intact and trunk and root ball move as one when lifted, but not root bound. The trunk should bend when gently pushed and should not be loose so it pivots at or below soil line.

6. Trees shall have no roots larger than one-fifth (1/5) the diameter of the trunk protruding from the grow bag or container.
7. Trees shall have one dominant leader for the top of the tree with a viable terminal bud or shoot.
8. Trees shall have no vertical branches except for those cultivars reported to be fastigiated.
9. Trees shall have branches evenly distributed around the trunk and no branches shall be directly above another.
10. The largest branches shall be spaced at least six inches (6") apart except for those cultivars with characteristic multiple tops.
11. The tree canopy shall be mostly symmetrical and free of large voids. Clear trunk should be no more than 40% of tree height unless otherwise specified in the planting specifications.
12. If any of the above conditions are not met, trees may be rejected by the Owner.

3.7 General Considerations

1. Trees and shrubs will be inspected by the Owner prior to planting and rejected if damage or imperfections in development are noted to include:
 - a. Flush cuts or open injuries on the main trunk;
 - b. Trunk cankers;
 - c. Loose or torn bark in excess of 10% of the circumference of the trunk or branch;
 - d. Borer holes or boring dust in trunks or main branches;
 - e. Branch attachments with the included bark;
 - f. Co-dominate stems – trees only;
 - g. Trees and shrubs in violation of Rules and Regulations pertaining to Title 34, Article 26 of the Colorado Nursery Act;
 - h. Damaged or incomplete graft unions;
 - i. When in leaf, with more than five percent (5%) chlorotic leaves;
 - j. When any root is greater than one-tenth (1/10th) the diameter of the trunk, circles more than one-third (1/3rd) the trunk and is in the top half of the root ball;
2. Plants infested with colonies of other insect pests will be rejected or properly treated at the discretion of the Owner.

3.8 Granite Boulders

Landscape Boulders to be of minimum dimensions as shown on drawings. Boulders are to be tan/gold granite. Exposed surface of installed landscape boulders shall not show machine caused scarring or breakage. Contractor to submit sample to Owner'.

3.9 Rock Mulch

Rock mulch shall be 1/2" tan granite covering shrub beds. Rock mulch shall be free of trash, sticks, and rocks. Place to a depth of three inches (3") over landscape areas.

4.0 Execution

4.1 Stockpiling Imported Topsoil

Stockpile materials on site at locations indicated. Stockpile in sufficient quantities to meet project schedule and requirements. Separate differing materials with dividers or stockpile apart to prevent mixing. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

4.2 Landscape area excavation/Preparation for Topsoil Procedure

Excavate areas to be planted (as per drawings) to the depth as per drawings or specifications to receive topsoil and to remove unsatisfactory material (including road base, asphalt, concrete and trash) and remove from site.

4.3 Layout of Tree Locations

The Contractor shall locate and stake all tree locations. All planting stake locations shall be observed and approved by the City Project Engineer, prior to planting operations.

4.4 Layout of Plant Locations

Contractor shall stake out the location of all trees, shrubs, perennials, and lawn area limits, or place containerized shrubs and perennials for approval by City Project Engineer prior to planting. All planting stake locations shall be observed and approved by the City Project Engineer, prior to planting operations.

4.5 Topsoil Backfill

Contractor shall backfill excavated shrub beds with specified topsoil. Soil is to be compacted to 85% modified proctor (wheel rolled) to minimize settling. Shrub bed perimeter is to be finished with 4:1 slopes to form mounded planting areas, from 2" below adjacent concrete to finish grade to form shallow trench to hold mulch. Scarify all areas to receive topsoil to a depth of 6".

4.6 Tree Location Conflicts with Underground Lines

The Contractor shall be responsible for damage to any underground utility, irrigation line or other improvements. In the event a pipe or line obstructs a plant location, the Contractor will notify the Owner's Representative/City Project Engineer to receive a new plant location.

4.7 Plant Pit Backfill

On-site backfill soil (imported topsoil) shall be used for backfill (unless excavated soil is gravel) after being mixed with one-third (1/3rd) part specified soil amendment. Gravel shall be replaced with topsoil.

4.8 Planting Techniques

1. Trees, shrubs and perennial flowers shall be in planting areas separate from turf areas.
 - a. In those instances where the Owner requires trees or shrubs planted in turf areas, the turf will be established prior to installation of trees or shrubs.
 - b. Trees and shrubs shall be planted a minimum of four inches (4") above the finished grade of the turf or mulched area based on their upper-most structural roots.
 - c. If the planting hole is inadvertently dug too deep, soil shall be added and compacted.
 - d. The width of the planting hole shall be a minimum of at least one and one-half times the diameter of the root ball, two times the diameter of the rootball where possible.
2. Trees and shrubs shall be planted with two (2) or more of the upper-most structural roots no more than two inches (2") below the surface of the root ball measured three to four inches (3- 4") from the trunk (except as noted below). Soil shall be removed from the top of the root ball prior to planting to determine the actual depth of the structural roots.
 - a. Hackberry (*Celtis occidentalis*), green ash (*Fraxinus americana*), red maple (*Acer rubrum*), little leaf linden (*Tilia cordata*), crabapples (*Malus spp.*) and poplars (*Populus spp.*) shall be planted with no more than one inch (1") of soil over the uppermost structural roots.
 - b. Adventitious roots above the structural roots shall be removed.
 - c. The presence of encircling roots shall be checked for and treated as in 9. below.
 - d. The planting hole shall be dug two to four inches (2-4") shallower than the depth of the root ball (based on the location of the structural roots.)
 - e. Soil shall be graded from the surrounding soil to near the top of the root ball to cover the exposed sides of the root ball.
 - f. There shall be no landscape soil placed on top of the root ball.
3. The top 12 to 18 inches (two or three levels) of wire basket shall be removed from the root ball. The bottom half of baskets more than about 40 inches in diameter can be left intact.
4. All twine and wire at the base of the trunk shall be removed and disposed of offsite.
5. All synthetic and plastic burlap shall be cut as far down the root ball as possible so soil along the side of the root ball is in direct contact with backfill soil. All synthetic and plastic burlap shall be removed from the site.
6. Natural burlap shall be removed from the top of the ball and at least one-half (1/2) way down the side of the root ball. Burlap shall be removed from the site.
7. Fertilizer shall not be added to the back-fill soil.
8. Containers shall be removed from the root ball prior to planting. Containers shall be removed from the site and properly disposed of.

9. Pot bound (root bound) trees and shrubs shall be avoided.
 - a. There shall be no roots greater than 1/10 diameter of the trunk circling more than one-third the way around the top half of the root ball. There shall be no kinked roots greater than 1/5 the trunk diameter. Roots in violation can be cut and the tree accepted at the option of the Owner.
 - b. If it is necessary to plant a pot bound tree or shrub, encircling roots shall be cut to prevent them from girdling the plant in the future. Three (3) or four (4) slices one inch (1") or two inches (2") deep shall be made from the bottom to the top of the root ball.
10. Mulch shall be placed on the root ball to within 6 to 8 inches of the trunk or main stem(s), and no closer.
11. The planting of clump aspen and other trees (i.e. two or more stems in one root ball) shall be avoided.
 - a. If a clump effect is desired, separate trees shall be planted with their root balls touching.
12. Trees and shrubs shall be moved by their root balls, not their trunks, in such a manner that trunk and branch damage shall be avoided.
13. Trees and shrubs planted on slopes shall be set so the to-most root in the ball on the uphill side is even with the soil. The side of the root ball on the downhill side shall be well above the surrounding soil and a basin formed to retain water. Sufficient soil shall be applied to cover the sides of the root ball.
14. A three inch (3") layer of mulch shall be applied around trees and shrubs to within six to eight (6-8") inches of the trunk or stem (s). A mulched area two feet (2') in diameter for each one inch (1") of tree trunk DBH (with a minimum diameter of eight feet (8') for trees), shall be maintained during the establishment period.
15. If staking is necessary it shall be accomplished using one of the following methods:
 - a. Two or three wood dowels shall be driven through the edge of the root ball into the underlying soil for three gallon and smaller trees.
 - b. One horizontal 2X2 shall be screwed or nailed to two 2X2's driven 12 inches into undisturbed soil on each side of the root ball. Two sets shall be needed for each root ball.
 - c. Two or three (2-3) t-posts driven into a minimum of 12 inches of undisturbed soil.
 - i. When two (2) posts are specified, these shall be placed on either side of the tree parallel to the prevalent wind direction.
 - ii. When three (3) posts are specified these shall be placed equidistant (120 degrees) around the tree.
 - iii. Stakes will be kept clear of branches to prevent rub damage.
 - iv. Guys shall be flagged with a conspicuous material and replaced as required by the Owner.
16. Feather growth on the lower portion of the trunk shall remain in place for one (1) year after planting.

17. Pruning other than to correct structural problems or remove broken branches shall be avoided.
18. The trunks and large branches and foliage of all pines shall be sprayed with a pyrethrum (organic product), pyrethroid or similar insecticide prior to or within a day of planting by a qualified applicator.
 - a. A wettable powder formulation shall be used if available.
 - b. Phytotoxicity resulting from this treatment shall be the responsibility of the applicator.

4.9 Watering

All trees and shrubs shall be watered-in using a deep-watering device, immediately after planting, staking and guying. All planting shall be watered the same day it is planted.

4.10 Insecticide Spray

All deciduous tree trunks shall be thoroughly sprayed with a Methoxychlor or similar insecticide prior to application of tree wrap.

4.11 Tree Wrapping Material

All deciduous tree trunks shall be wrapped after October 1, with wrapping material overlapping one and one-half (1-1/2") inches wound from ground line to the second branch, and securely taped at five places, including the top, middle and bottom. Wrap is to be removed the following spring.

4.12 Staking and Guying

Deciduous trees – place two (2) six foot (6') long steel fence posts at 180° driven vertically into firm soil with blade on tree side. Run double strand of wire securely through nylon strap around trunk at minimum one-third (1/3) height of tree and back to post, twist to remove slack. Evergreen trees six feet (6') high and larger; place three (3) 30" long steel post stakes at 120° around tree, drive into firm soil at angle toward tree. Run double strand of wire securely through nylon strap around trunk and guy twist to remove slack. Trees in tree grates are not to be staked.

4.13 Fine Grading for Landscape Areas

Remove any dikes used to facilitate watering. Smooth surface, contour to distribute irrigation to root ball. Form trench at all landscape edgers or pavements to accommodate mulch at depth specified. See details.

4.14 Preparation for Mulch

Perimeter of Shrub Beds shall be graded two inches (2") below top of curbs, walks, edger (see detail), or any other grade level improvements for receiving mulch. Planted area of shrub bed shall remain at the same grade or higher than adjacent pavements or lawn areas to insure adequate drainage of shrub beds.

4.15 Boulders

Boulders are to be placed where indicated on drawings, and buried such that exposed rock surface depicts natural exposure of outcrop formation . Backfill following placement, compact.

4.16 Installation of Rock Mulch

Rock mulch shall be placed in all shrub beds where shown on the Drawings, spread carefully and evenly to a minimum depth of three-inches (3") over topsoil in planted areas.

4.17 Clean-up

Materials brought into area shall be neatly stockpiled upon completion of each planting day. Debris shall be removed from the project area at completion of this Contract.

4.18 Cleanup of Topsoil Stockpile

Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.

5.0 Warranty

5.1 Protection and Maintenance of Plant Materials

All planting shall be protected and maintained until final acceptance of all work. Maintenance shall include watering, weeding, cultivating, mulching, insect control (through spraying, biological control, or whatever method is recommended by the Tri River Extension Service), tightening and repairs of guys, removal of dead branches, resetting plants to proper grade or upright position, and other necessary operations.

5.2 Vandalism

Vandalism or other damage to the plantings or related work shall be the responsibility of the Contractor until all work receives Final Acceptance.

5.3 Final Inspection and Acceptance

Inspection of the work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner's Representative at the conclusion of construction operations. The condition of all planting will be noted and a determination made by the Owner's Representative whether maintenance shall continue in any part. Contractor will be notified of acceptance of the work or any deficiencies in the requirements for completion. Plants must be in excellent and vigorous condition. Excessively pruned trees and shrubs which, in the opinion of the Owner's Representative, are no longer excellent representatives of their species shall be replaced prior to Final Acceptance.

5.4 Guarantee Period

For a period of one (1) year after final acceptance of all work and at no additional cost to the Owner, the Contractor is to reset any trees that have settled beyond the tolerances noted in this Section and replace any trees or shrubs that are dead, or that, in the opinion of the Owners Representative, are in unhealthy or unsightly condition, or that have lost their natural shape due to dead branches or excessive pruning of dead branches. Inadequate or improper maintenance by the Operator shall not be cause for replacement provided the Contractor shall have submitted throughout the guarantee period a bimonthly letter of report to the owner on improper or inadequate maintenance practices and observations, report copies to the Owners Representative.

5.5 Replacement

All replacement planting is to be executed within ten (10) days of notice to replace such plants. Replacement of planting is to be in accordance with the original specifications and its cost considered to be included in the bid price. All areas damaged by tree or shrub planting or replacement operations are to be fully restored to their original condition as specified.

6.0 Payment

6.1 Payment for Landscaping

Method of payment is specified with the Contract Documents General Conditions.

3.4.8 Section Landscaping Work:

1.0 General

1.1 Scope of Landscape Irrigation Work

Furnish all labor, equipment, appliances, materials and perform all operations required to complete irrigation system installation and other work as shown on the applicable drawings and as specified herein, guarantee and meet conditions of this Contract.

1.2 Job Supervision - Irrigation

All work specified herein shall be performed under the direct supervision of a superintendent thoroughly familiar with the work of this Section and who shall be at the Project site for the duration of the work of this Section.

1.3 Job Conditions - Non-Interruption of existing irrigated areas

Adjacent landscape served by existing mainlines that are slated for connection to this project shall have continuous use. Construction of new and relocated mainlines shall be coordinated to not interfere with existing watering schedules. Adjacent landscape irrigation will continue in operation during construction.

1.4 Job Conditions and Provisions-Irrigation

No irrigation system construction shall take place during freezing or wet weather or when temperatures are less than 40 degrees Fahrenheit, and no trenches shall be backfilled with frozen material. Installation of the system shall not take place until all earthwork has been substantially completed, compacted. Errors, conflicts or omissions from the Drawings or Specifications, or the mis-description of details of work which are manifestly necessary to carry out the intent of the Drawings or Specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or mis-described details or work, but they shall be performed as if fully and clearly set forth and described in the Drawings and Specifications.

1.5 Substitute Products

Requests for substitution of products named in this section must be approved by the Owner's Representative one week prior to bid opening.

1.6 Tolerances

Depths of mains shall be twenty-four inches (24") bury, and laterals eighteen inches (18"), and pitch of pipes as specified shall be minimums. Coverage achieved on site shall be guaranteed according to plan; any unwatered areas due to poor placement of or insufficient heads shall be corrected by the Contractor.

1.7 Layout of Lines & Levels

Before any installation operations are started, the site shall be completely staked out for the work of this Section by the Contractor. Pipes are not to be installed through tree root ball locations. All mains and valve locations shall be staked out for approval before installation by the Owners Representative.

2.0 Products

2.1 Automatic Drip Control Valve Assembly

Automatic Control Valves are to be Rainbird X CZ-PRB-100-COM Control Valve Zone Kit, including XBV-075 Ball valve, Pressure Regulating Quick-Check Basket filter with green/red indicator, PESB Remote Control Valve, and 3/4" x 1-1/2" Sched. 80 Nipples, or equal.

2.2 Quick Coupler Valves

Quick coupler valves are to be Rainbird #33-D two piece assembly with 3/4" schedule. 80 PVC nipple of length to bring head 1" above finish grade. Marlex Street Ells are to be used for a swing joint assembly to main line.

2.3 Manual Drain Valves

Manual Drain Valves shall be 3/4" Mueller curb stop or equal. Valves shall be of bronze construction with threaded connections, cross handle and operating key.

- 2.4 Valve Boxes
Super Jumbo box (2 valves), or 10" Circular Box (1 valve) or equal.
- 2.5 Manual Drain Valve Boxes
Manual drain valve boxes shall be 10" circular box with lid.
- 2.6 Irrigation Pipe – Main
Main Pressure Line pipe less than 4" in size shall be Class 200, solvent weld PVC, with PVC schedule 40 fittings, sized as shown on plans.
- 2.7 Irrigation Pipe - Lateral Lines
Pipe shall be PVC Class 160 with PVC Schedule 40 fittings, solvent weld, as detailed, sized as shown on the plan.
- 2.8 Isolation Gate Valve
Isolation valves (3" or less) are to be a Spears PVC gate valve, same size as main line, manufactured of PVC type 1, Cell Classification 12454-B, with polypropylene wedge and handle, and BUNA-N "O" Rings, and shall be listed by NSF for use in potable water service.
- 2.9 Drip Distribution Tubing
To be Salco polyethylene micro 1/4" tubing (or approved equal) used with necessary couplings, stakes and end plugs to provide the system shown on the drawing
- 2.10 Drip Irrigation Pipe laterals - Polyethylene 1/2"
Pipe shall be flexible polyethylene pipe rated at 100 psi and of size indicated on drawings.
- 2.11 In Line Drip Emitter Tubing
to be Netafim Techline CV, Emitter flow rate and spacing are to be as of shown on drawing
- 2.12 Drip Emitter - Netafim Woodpecker/PC Emitter
Netafim Woodpecker/PC Emitter, connected directly to 1/2" poly tubing or 1/4" distribution tubing and 1/4" barbed transfer fitting between 1/4" poly tubing and 1/2" poly tubing as shown on drawing. Emitter is to be of flow rate shown on Valve Schedule.
- 2.13 Blank (No Emitter) Tubing - Netafim
Drip Tubing with no emitters to be Netafim Techline with no emitters.
- 2.14 Flush Cap Assembly – shrub zones

Where landscape areas require more than 15 ft. length of ½" tubing, Netafim Techline CV Manual Line Flush Valve to be installed at the end of all polyethylene laterals in Ametek 6" or 10" circular box with tan/brown C.V. lid Part #181108. Contractor is to include one 1804 Rainbird pop-up head w/closed spray nozzle (black) connected with swing pipe to one 1/2" irrigation lateral.

2.15 Flush Cap Assembly – tree zones

Netafim Techline CV Manual Line Flush Valve to be installed at the end of tree zone polyethylene laterals in Ametek 6 or 10" circular box with tan/brown C.V. lid Part #181108. Contractor is to include one 1804 Rainbird pop-up spray head with PA 80 threaded adapter and PVC cap (white) connected with swing pipe to one 1/2" irrigation lateral.

2.16 Figure 8 End Closure: Polyethylene line less than 15' length

Where landscape areas require less than 15 ft. length of ½" tubing, figure 8 end closures are to be installed at the end of polyethylene drip lines.

2.17 Wire Connectors

Wire connectors at electric control valves and all splices of irrigation controller wire in the field shall be made using DS-400 by Spears wire connectors, or equal.

3.0 Materials

3.1 CL 200 PVC sleeving

Pipe for sleeve shall be class 200 PVC, sized as shown on drawings, of length to protrude from under concrete and/or asphalt a minimum 8".

3.2 Irrigation Valve Control Wires

Electrical control wires from valves to controller shall be 14 gauge PVC - insulated copper U.L. approved for direct burial. White Common (Ground), and wire more than 7,000' in length shall be 12 gauge PVC insulated copper U.L. approved for direct burial. All other wiring materials shall be per applicable codes.

4.0 Execution

4.1 Water Service Connection

The Contractor shall tie into existing service(s) where shown on drawing.

4.2 Trench Excavation

Trenches shall be cut to true line and grade. Over-excavation of trenches for piping shall require compacted backfill to bring bottom of trench up to grade. Provide for surface drainage during construction. De-water all excavations immediately.

4.3 Quick Coupler Valves

Quick coupler valves are to be installed on swing pipe swing joint at location and grade as indicated on drawings and as per details. Installation in soft soils may require staking and tying quick coupler to stake. Drive stake to 4" below grade and tie with nylon tie.

4.4 Manual Drain Valves

Manual drain valve shall be located at all low points on irrigation main. A drain sump of not less than 4.0 cu. ft. of 3/4" washed gravel shall be installed surrounding each drain valve.

4.5 Valve Boxes

Install valve box at locations shown on drawings. Extensions and adjustments shall be made to establish the valve box and cover flush with the final grade level, and provide 4" layer of washed gravel as sump.

4.6 Manual Drain Valve Boxes

All manual drain valves are to be installed with 6" round valve box and cover and 4" PVC sleeve of length to allow hand access to valve.

4.7 Valve Boxes

All automatic control valve assemblies are to be installed in valve boxes. Extensions and adjustments shall be made to establish the valve box and cover flush with the final grade level, and provide 4" layer of washed gravel as sump.

4.8 Piping- general

Manufacturer's specifications covering installation of their material shall be followed. Underground lines up to 2" shall have minimum horizontal clearance of 3" of each other. Sprinkler lines may be stacked vertically in a common trench. Lines shall have minimum horizontal clearance of 12" from the lines of other trades, and minimum 3" vertical clearance between lines crossing at 45° - 90° and 6" minimum vertical clearance when lines do not cross. Trenches for irrigation mainline shall be excavated so that the pipe shall drain uniformly toward drain valves deemed necessary to properly drain the system. Minimum grade of piping to drains shall be 3"/100'. When pipe laying is not in progress, or at end of each day, pipe ends shall be closed with tight plug or cap.

4.9 Boring for Irrigation Lines

Where the pipe must pass under any obstructions which cannot be removed (ie. existing side walk) Contractor shall bore, insert a tight fitting schedule 40 or heavier sleeve at least 1" larger than irrigation pipe passing through sleeve. Water cannot be used in the boring process. If more than one irrigation line passes through the sleeve, sleeve size is to be one inch (1") larger than the combined diameters of the irrigation lines. Excessive boring, loose fitting sleeves shall be cause for rejection, and may be cause for replacement of affected

sidewalk, footing, or other existing site improvement. Tunneling will not be permitted. Contractor is responsible for utility locations.

4.10 PVC sleeving

Sleeving shall be installed in locations noted on drawings and at a depth to accommodate irrigation lines at their required depth. No changes in direction are allowed in sleeves. Ends are to be taped to prevent filling by backfill. Mark locations with lath and notation indicating "sleeve".

4.11 Isolation Gate Valve

Isolation valves are to be installed in mainline at locations shown on drawings. Contractor is to provide extension sleeving from valve box to valve location.

4.12 Automatic Control Valves

All control valves shall be installed as close as possible to the locations shown on the plan; any variances must be approved by the Owners Representative. Install valves, unions, reducers, pipes, wiring, etc. per detail. Control valves shall be installed in accordance with the manufacturer's recommendations. All valves shall have sufficient clearance from adjacent obstructions to provide accessibility for maintenance, including complete removal without removal of valve box. Valves are not to be located in flow line of swales or drainages.

4.13 Connection to Existing Controller

Connect valve wires to existing irrigation controller, mounted where shown on the drawing. Provide and install all conduit, connectors, etc. necessary.

4.14 Wire Connectors

Wire connectors are to be installed as per manufacturer's recommendation.

4.15 Pipe Backfilling

Trenches for piping shall be carefully backfilled with non-swelling on-site soils exclusive of any organic materials, construction debris or other deleterious materials, free from clods of earth or stones larger than two inches (2") in maximum dimension, by depositing the backfill materials equally on both sides of the pipe in loose 8" layers and thoroughly compacting the backfill to a minimum 90% of the maximum dry density determined in accordance with ASHTO T180, Modified Proctor.

4.16 Drip Irrigation Pipe laterals - 1/2" Polyethylene

Pipe shall installed in lengths no longer than 200', max 200 gph. Pipe is to be staked a minimum of every 5'. Pipe is to be installed below weed control fabric if/where fabric occurs, and below mulch where mulch occurs. Pipe is to terminate with either flush valve in 6" round valve box (laterals longer than 15') or figure 8 end closure.

4.17 Drip Distribution Tubing-1/4"

Tubing to be installed as shown on detail. Tubing is to be laid beneath weed control fabric and mulch, stake at plant and every 2.5'.

4.18 In Line Drip Emitter Tubing - Netafim Techline CV Tree Rings

Techline CV tubing to be installed in concentric rings as shown in detail and according to manufacturer, connected directly to poly lateral and spaced according to drawings.

4.19 Drip Emitter - Woodpecker /PC Emitter

Install NetaFim Woodpecker/PC Emitter 2.2 gph (8lph) emitters in quantities shown on detail, connected directly to 1/2" poly tubing or 1/4" distribution tubing and 1/4" barbed transfer fitting between 1/4" poly tubing and 1/2" poly tubing as shown on drawing. Emitters & tube is to be staked at root ball of plant. Install beneath fabric and/or mulch where mulches are used. Emitter is to be a flow rate as noted in Valve Schedule.

4.20 Flush Cap Assembly

Netafim Techline CV Manual Line Flush Valve (#TLSOV) to be installed at the end of polyethylene laterals 15' in length or longer in Ametek 10" circular box with tan/brown C.V. lid Part #181108. Contractor is to include one 1806 Rainbird pop-up spray head with swing pipe to one 1/2" irrigation lateral per zone with flush cap assembly. Shrub zones are to include a spray nozzle adjusted to be closed. Tree zones to have PA-80 Adapter and 1/2" PVC Female cap (white). Flush Cap Assemblies are to be located adjacent to walks or lawn areas where possible for maintenance access. Polyethylene laterals less than 15' in length shall be terminated with Figure 8 End Closures.

4.21 Irrigation Valve Control Wires

All control wires shall be placed carefully alongside and slightly below the water main where it will receive the greatest possible protection. Control wires not protected by the water main shall be laid in a suitable sized PVC conduit unless otherwise noted on the plans. Control wire shall have an eighteen (18") inch expansion loop at each valve and every 200' of wire. Where more than one control wire is located in the trench, the wires shall be taped together at 20' intervals to maintain orderly and efficient installation. Contractor shall provide an extra control wire at all manifolded valves. Contractor to avoid mid-line splices, but where necessary will adequately note location on the "as-builts".

5.0 Warranty

5.1 As-Built Submittals

Contractor shall submit an as-built or record plan upon completion of work showing precise location of control valves, mains, drain valves, etc., and any changes in location of heads, piping, etc. to the Owner and their representative

before final application for payment. Provide one reproducible and three prints. Format shall be an electronic .dwf file.

5.2 Vandalism

Minor vandalism or other damage shall be the responsibility of the Contractor until all work receives Final Acceptance. Major vandalism or damage caused by others through no fault of the Contractor or his subcontractors shall be immediately brought to the attention of the Owners Representative who will be the sole judge as to the extent of such damage. Major damage is typically any damage over \$500.00 worth of materials and/or labor required to repair the damage. For the Contractor to be awarded additional monies under the provisions of "extra work" stated in the General Conditions, he shall have fully protected his work as specified herein. Any failure, however slight, of the Contractor to have protected his work shall be grounds to nullify any request for additional remuneration.

6.0 Payment

6.1 Payment for Landscape Irrigation System

Payment for Landscape Irrigation System work shall be paid for at the lump sum contract price bid for "Landscape Irrigation System". This payment shall be full compensation for all equipment, tools, and labor required for these operations within the construction limits of this contract.

3.4. IFB Tentative Time Schedule:

| | |
|---|-------------------|
| Invitation For Bids available | December 28, 2016 |
| Mandatory Pre-bid meeting | January 19, 2017 |
| Inquiry deadline, no questions after this date | January 26, 2017 |
| Submittal deadline for proposals | February 1, 2017 |
| Letter of Intent | February 3, 2017 |
| City Council Approval | February 15, 2017 |
| Contract execution (unless Council approval required) | February 16, 2017 |
| Bonding & Insurance Cert due | February 21, 2016 |
| Work begins no later than | February 21, 2016 |
| Substantial Completion | June 14, 2017 |
| Final Completion | July 14, 2017 |

3.5. Questions Regarding Scope of Services:

Duane Hoff Jr., Senior Buyer
City of Grand Junction
duaneh@gjcity.org

4. Contractor's Bid Form

Bid Date: _____

Project: IFB-4321-17-DH "1st Street Reconstruction (Ouray Ave to North Ave.)"

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ **Address** _____

City _____ **State** _____ **Zip** _____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Bid Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Bidders, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Bidder to ensure all Addenda have been received and acknowledged.

The undersigned Bidder proposes to subcontract the following portion of Work:

| <u>Name & address of Sub-Contractor</u> | <u>Description of work to be performed</u> | <u>% of Contract</u> |
|---|--|--------------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 1 | 108.2 | 8" Storm Drain Pipe (RCP) | 10. | LF | \$ _____ | \$ _____ |
| 2 | 108.2 | 12" Storm Drain Pipe (RCP) | 358. | LF | \$ _____ | \$ _____ |
| 3 | 108.2 | 30" Storm Drain Pipe (RCP) | 5. | LF | \$ _____ | \$ _____ |
| 4 | 108.2 | 42" Storm Drain Pipe (RCP) | 406. | LF | \$ _____ | \$ _____ |
| 5 | 108.5 | Connect to Existing Manhole | 4. | EA | \$ _____ | \$ _____ |
| 6 | 108.5 | Adjust storm Manhole Rim to Finish Grade (Replace ring and cover with Watertight) | 2. | EA | \$ _____ | \$ _____ |
| 7 | 108.6 | Storm Sewer Basic Manhole (48" I.D.) | 1. | EA | \$ _____ | \$ _____ |
| 8 | 108.6 | Tee Manhole Special (42" X 48") | 2. | EA | \$ _____ | \$ _____ |
| 9 | 108.6 | Tee Manhole Special (48" X 60") | 1. | EA | \$ _____ | \$ _____ |
| 10 | 108.6 | Single Storm Drain Inlet (Large Area Inlet) | 9. | EA | \$ _____ | \$ _____ |
| 11 | 108.6 | Single Storm Drain Inlet (Vertical Curb) | 3. | EA | \$ _____ | \$ _____ |
| 12 | 202 | Removal of Asphalt Mat (Milling)(1"-8") | 18,150. | SY | \$ _____ | \$ _____ |
| 13 | 202 | Removal of concrete. Remove concrete as shown* indicated by cross hatch pattern(includes but not limited to Saw Cutting, curb, gutter, sidewalks, driveways slabs v-pans, curb ramps, intersection corners and aprons) | 2,711. | SY | \$ _____ | \$ _____ |
| 14 | 202 | Remove Tree | 9. | EA | \$ _____ | \$ _____ |
| 15 | 202 | Removal of Bush | 43. | EA | \$ _____ | \$ _____ |
| 16 | 202 | Removal of Sod | 4,900. | SF | \$ _____ | \$ _____ |
| 17 | 202 | Removal of Manhole (Storm) | 2. | EA | \$ _____ | \$ _____ |
| 18 | 202 | Removal of Inlet | 8. | EA | \$ _____ | \$ _____ |
| 19 | 202 | Removal of Ground Sign | 1. | EA | \$ _____ | \$ _____ |

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 20 | 202 | Removal of Pipe (12" and Smaller) | 305. | LF | \$ _____ | \$ _____ |
| 21 | 202 | Removal of Pipe (18" and Larger) | 75. | LF | \$ _____ | \$ _____ |
| 22 | 202 | Abandon Pipe by plugging Open end | 2. | EA | \$ _____ | \$ _____ |
| 23 | 202 | Removal of wood boarder | 171. | LF | \$ _____ | \$ _____ |
| 24 | 202 | Removal of Parking Chalks | 4. | EA | \$ _____ | \$ _____ |
| 25 | 202 | Removal of Fence | 64. | LF | \$ _____ | \$ _____ |
| 26 | 202 | Remove post | 7. | EA | \$ _____ | \$ _____ |
| 27 | 202 | Remove buisness sign base (901 and 935 N 1st St and 2582 HWY 6 & 50) | 5. | EA | \$ _____ | \$ _____ |
| 28 | 202 | Remove Pole Foundation | 1. | EA | \$ _____ | \$ _____ |
| 29 | 202 | Remove Light Pole | 2. | EA | \$ _____ | \$ _____ |
| 30 | 203 | Potholing | Lump sum | | --- | \$ _____ |
| 31 | 203 | Unclassified Excavation | 13,658. | CY | \$ _____ | \$ _____ |
| 32 | 203 | Sweeping with Pick-up Broom | 70. | HR | \$ _____ | \$ _____ |
| 33 | 203 | Disposal of Radioactive Materials | 250. | CY | \$ _____ | \$ _____ |
| 34 | 206 | Structural Backfill (Flowfill)(as Required) | 100. | CY | \$ _____ | \$ _____ |
| 35 | 208 | Storm Drain Inlet Protection | 14. | EA | \$ _____ | \$ _____ |
| 36 | 208 | Concrete Washout Facility | 4. | EA | \$ _____ | \$ _____ |
| 37 | 208 | Vehical track Pad | 4. | EA | \$ _____ | \$ _____ |
| 38 | 208 | Erosion Control (Complete In Place) | Lump sum | | --- | \$ _____ |
| 39 | 209 | Dust Abatement | 120. | Day | \$ _____ | \$ _____ |
| 40 | 210 | Reset Sprinkler System (Complete in Place) | 6. | EA | \$ _____ | \$ _____ |
| 41 | 210 | Reset Sign Panel | 21. | EA | \$ _____ | \$ _____ |
| 42 | 210 | Adjust Water Valve to Finish Grade | 20. | EA | \$ _____ | \$ _____ |

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 43 | 210 | Reset Fire Hydrant | 1. | EA | \$ _____ | \$ _____ |
| 44 | 210 | Adjust Water meter to Finished Grade | 27. | EA | \$ _____ | \$ _____ |
| 45 | 210 | Rest Backflow Preventor | 3. | EA | \$ _____ | \$ _____ |
| 46 | 210 | Temporary Sidewalk | 100. | LF | \$ _____ | \$ _____ |
| 47 | 210 | Adjust Manhole to Finished Grade | 10. | EA | \$ _____ | \$ _____ |
| 48 | 210 | Adjust SSCO to Finished Grade | 23. | EA | \$ _____ | \$ _____ |
| 49 | 210 | Reset Parking Blocks | 6. | EA | \$ _____ | \$ _____ |
| 50 | 210 | Reset Business (Sign) (Price to include new Base) | 2. | EA | \$ _____ | \$ _____ |
| 51 | 210 | Reference and Reset Monitoring Well Covers(Protect Monitoring Well in Place) | 9. | EA | \$ _____ | \$ _____ |
| 52 | 212 | Sod (Behind BOW to restore sodded areas | 2,205. | SF | \$ _____ | \$ _____ |
| 53 | 213 | Inorganic mulch (behind BOW to restore Xeriscape or gravel driveway)(4" Deep) | 17. | CY | \$ _____ | \$ _____ |
| 54 | 304 | Subgrade Stabilization (Class 3 ABC)20" Thick(Road Prism)(1st Street) | 10,400. | SY | \$ _____ | \$ _____ |
| 55 | 304 | Aggregate Base Course (Class 6)(12" Thick)(1st St and North Ave) | 10,700. | SY | \$ _____ | \$ _____ |
| 56 | 304 | Aggregate Base Course (Class 6)(6" thick) (Paving behind BOW to Restore Driveways and parking)(FOR HMA ONLY) | 1,150. | SY | \$ _____ | \$ _____ |
| 57 | 304 | Aggregate Base Course (Class 6)(12" Thick)(Connector Roads) | 1,250. | SY | \$ _____ | \$ _____ |
| 58 | 401 | Hot Mix Asphalt (3" Thick)(Gradin SX-75)(Binder 64-22)(Bottom Mat Connector Roads) | 1,250. | SY | \$ _____ | \$ _____ |

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 59 | 401 | Hot Mix Asphalt (2" Thick)(Gradin SX-75)(Binder 76-28)(Top Mat Connector Roads) | 1,250. | SY | ₹ _____ | ₹ _____ |
| 60 | 401 | Hot Mix Asphalt (2" Thick) (Overlay Fuoco DWY) | 800. | SY | ₹ _____ | ₹ _____ |
| 61 | 401 | Hot Mix Asphalt Grade Transition from Back of Curb to Existing Pavement Grade (Grading SX-75)(Binder 64-22)(Fuoco Driveway) | 35. | TON | ₹ _____ | ₹ _____ |
| 62 | 401 | Hot Mix Asphalt (4" Thick) (Grading SX-75)(Binder 64-22)(2ea 2"Lifts)(Paving Behind Back of Walk to restore Drives and Parking) | 1,150. | SY | ₹ _____ | ₹ _____ |
| 63 | 412 | Colored Concrete Pavement (Parking)(Class D)(8" Thick) (Omaha Tan)(Davis Color 5084)(Price to Include 4" Class 6 Aggregate Base Course) | 1,190. | SY | ₹ _____ | ₹ _____ |
| 64 | 412 | Concrete Pavement (Alley)(Class D)(8" Thick)(Price to Include 4" Class 6 Aggregate Base Course) | 250. | SY | ₹ _____ | ₹ _____ |
| 65 | 412 | Concrete Pavement (Paving Behind Back of Walk to restore Drives and Parking)(Class D)(6" Thick)(Price to Include 4" Class 6 Aggregate Base Course) | 65. | SY | ₹ _____ | ₹ _____ |
| 66 | 420 | Geogrid (TriAxial) | 1,000. | SY | ₹ _____ | ₹ _____ |
| 67 | 608 | Concrete Drainage Pan (1.5' Wide) | 5. | LF | ₹ _____ | ₹ _____ |
| 68 | 608 | Concrete Drainage Pan (3' Wide) | 35. | LF | ₹ _____ | ₹ _____ |
| 69 | 608 | Concrete Drainage Pan (6' Wide) | 180. | LF | ₹ _____ | ₹ _____ |
| 70 | 608 | Concrete Curb (6" wide) | 2,090. | LF | ₹ _____ | ₹ _____ |
| 71 | 608 | Concrete Curb with Spill Gutter (1.5' Wide) | 510. | LF | ₹ _____ | ₹ _____ |
| 72 | 608 | Concrete Curb and Gutter (2' Wide) | 1,350. | LF | ₹ _____ | ₹ _____ |

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|----------|-----------------|--|----------|-------|------------|-------------|
| 73 | 608 | Concrete Curb and Gutter (2.5' Wide) | 25. | LF | \$ _____ | \$ _____ |
| 74 | 608 | Concrete Drive Over Curb and Gutter (3' Wide) | 470. | LF | \$ _____ | \$ _____ |
| 75 | 608 | Concrete Sidewalk (4" Thick) | 2,710. | SY | \$ _____ | \$ _____ |
| 76 | 608 | Monolithic Curb Gutter and Sidewalk (7' Wide) | 25. | SY | \$ _____ | \$ _____ |
| 77 | 608 | Monolithic Curb Gutter and Sidewalk (10' Wide) | 300. | SY | \$ _____ | \$ _____ |
| 78 | 608 | Concrete Curb Ramp (8" thick) | 255. | SY | \$ _____ | \$ _____ |
| 79 | 608 | Concrete Driveway Section (8" Thick) | 1,690. | SY | \$ _____ | \$ _____ |
| 80 | 608 | Concrete Intersection Corner | 340. | SY | \$ _____ | \$ _____ |
| 81 | 608 | Concrete Median Edgeing 1.5' Wide(Sunset Rose)(Davis Color 160) | 410. | LF | \$ _____ | \$ _____ |
| 82 | 608 | Detectable Warning (Wet Set) (2'X2") | 65. | EA | \$ _____ | \$ _____ |
| 83 | 613 | Large Splice Box (Quasite 24X36)(Labled "FIBER") | 8. | EA | \$ _____ | \$ _____ |
| 84 | 613 | Splice Box (Quasite 13X24X15)(Labled "Fiber") | 8. | EA | \$ _____ | \$ _____ |
| 85 | 613 | Large Splice Box (48" Manhole Cone Section on Blocks)(Price to include Manhole Ring and Cover labled "TRAFFIC") | 7. | EA | \$ _____ | \$ _____ |
| 86 | 613 | 6" Diameter SCH 80 PVC Conduit Duct (With a standard 8KN pull rope pre installed and #10 tracing wire)(to be installed in common trench) | 2,500. | LF | \$ _____ | \$ _____ |
| 87 | 613 | 2" Diameter SCH 80 PVC Conduit Duct (With a standard 8KN pull rope pre installed and #10 tracing wire)(to be installed in common trench) | 4,300. | LF | \$ _____ | \$ _____ |
| 88 | 613 | Electrical Utility Trech (24" Wide X 30" Deep) (Including Backfill Material Per Special Provisions) | 2,500. | LF | \$ _____ | \$ _____ |

Bid Schedule: 1st Street Reconstruction

Company Name: _____

| Item No. | CDOT, City Ref. | Description | Quantity | Units | Unit Price | Total Price |
|--------------------|-----------------|---|----------|----------|------------|----------------------|
| 89 | 620 | Sanitary Facility | | Lump sum | --- | \$ _____ |
| 90 | 625 | Construction Surveying | | Lump sum | --- | \$ _____ |
| 91 | 626 | Mobilization | | Lump sum | --- | \$ _____ |
| 92 | 627 | Preformed Thermoplastic Pavement Markings (Word Symbol) | 360. | SF | \$ _____ | \$ _____ |
| 93 | 627 | Preformed Thermoplastic Pavement Markings (X-Walk/Stop Bar) | 2,200. | SF | \$ _____ | \$ _____ |
| 94 | 629 | Reference and Reset Survey Monuments | 7. | EA | \$ _____ | \$ _____ |
| 95 | 629 | Set Property Pin Per Legal Description | 19. | EA | \$ _____ | \$ _____ |
| 96 | 630 | Traffic Control Plan | | Lump Sum | --- | \$ _____ |
| 97 | 630 | Traffic Control (Complete In Place) | | Lump Sum | --- | \$ _____ |
| 98 | 630 | Flagging | 1,000. | HR | \$ _____ | \$ _____ |
| 99 | | Landscaping (per Summary of Approximate Quantities in Drawing Package) | | Lump sum | --- | \$ _____ |
| 100 | | Irrigation (per Summary of Approximate Quantities in Drawing Package) | | Lump sum | --- | \$ _____ |
| 101 | INC | Incentive (Maximum 30 Days @ \$2500/Day) | --- | --- | --- | \$ <u>75,000.00</u> |
| MCR | | Minor Contract Revisions | --- | --- | --- | \$ <u>100,000.00</u> |
| Bid Amount: | | | | | | \$ _____ |

Bid Amount:

dollars