

**TOWN OF CASTLE ROCK
SERVICES AGREEMENT
(Craig & Gould North Infrastructure Improvements– Design Engineering, Surveying,
Environmental and Geotechnical Services)**

DATE: _____, 2019.

PARTIES: **TOWN OF CASTLE ROCK**, a Colorado municipal corporation, 100 N. Wilcox Street, Castle Rock, Colorado 80104 (“Town”).

AECOM TECHNICAL SERVICES, INC., a California corporation, 6200 South Quebec Street, Greenwood Village, Colorado 80111 (“Consultant”).

RECITALS:

- A. The Town issued a Request for Proposals from qualified firms with expertise in professional design engineering, surveying, environmental and geotechnical services.
- B. Consultant timely submitted its proposal.
- C. Town wishes to engage Consultant to provide the services more fully described in the following Agreement and Exhibits.

TERMS:

Section 1. Scope of Services. Consultant shall provide design engineering, surveying, environmental and geotechnical services related to the Craig and Gould North Infrastructure Improvement Project, in accordance with the scope of work attached as ***Exhibit 1*** and Consultants Proposal attached as ***Exhibit 2*** (“Services”).

Section 2. Payment. Consultant shall invoice Town for the Services rendered upon the completion of each task in accordance with the rate and fee scheduled identified in ***Exhibit 3***. Town shall pay such invoices within 30 days’ receipt of such invoice. In no event shall the cumulative payment to Consultant exceed \$583,100, unless authorized in writing by Town.

Section 3. Completion. Consultant shall commence the Services upon execution of this Agreement and complete the Services not later than December 31, 2019. Consultant shall devote adequate resources to assure timely completion of the Services. Consultant shall perform the Services under this Agreement using a standard of care, skill and diligence ordinarily used by reputable professionals performing under circumstances similar to those required by this Agreement.

Town shall have the right to terminate this Agreement at any time with 30 days’ written notice to Consultant. The Town’s only obligation in the event of termination shall be payment

of fees and expenses incurred up to and including the effective date of termination. Consultant shall turn over all work product produced up to the date of termination.

Section 4. Subcontractors. Consultant may utilize subcontractors to assist with specialized works as necessary to complete the Services. Consultant will submit any proposed subcontractor and the description of their services to the Town for approval.

Section 5. Assignment. This Agreement shall not be assigned by Consultant without the written consent of the Town.

Section 6. Notice. Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes if sent by certified mail or registered mail, postage and fees prepaid, addressed to the party to whom such notice is to be given at the address set forth on the first page of this Agreement, or at such other address as has been previously furnished in writing to the other party or parties. Such notice shall be deemed given when deposited in the United States mail.

Section 7. Prohibition Against Employing Illegal Aliens. Consultant shall not knowingly employ or contract with an illegal alien to perform work under this contract. Consultant shall not enter into a contract with a subcontractor that fails to certify to the Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services through participation in either the E-verify program or the Department program, as defined in C.R.S. §§ 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively. Consultant is prohibited from using the E-verify program or Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed.

If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement for services knowingly employs or contracts with an illegal alien, Consultant shall:

A. Notify the subcontractor and the Town within three days that the Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

B. Terminate the subcontract with the subcontractor if within three days of receiving notice required pursuant to this paragraph the subcontractor does not stop employee or contracting with the illegal alien; except that the Consultant shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

Consultant shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. §8-17.5-102(5).

If Consultant violates a provision of this Agreement required pursuant to C.R.S. §8-17.5-102, Town may terminate the Agreement for breach of contract. If the Agreement is so terminated, the Consultant shall be liable for actual and consequential damages to the Town.

Section 8. Insurance. Consultant agrees to procure and maintain, at his own cost, the following policy or policies of insurance. Consultant shall not be relieved of any liability, claims, demands or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

A. Consultant shall procure and maintain, and shall cause each subcontractor of the Consultant to procure and maintain a policy with the minimum insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to the Town. All coverage shall be continuously maintained from the date of commencement of services hereunder. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Workers Compensation insurance to cover obligations imposed by the Workers Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of Work under this contract, and Employer's Liability insurance with minimum limits of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each accident, FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-policy limit, and FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-each employee.

2. Comprehensive General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including for contractual and employee acts), blanket contractual, independent contractors, products, and completed operations. The policy shall contain a severability of interests provision.

3. 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 with respect to each of Consultant's owned, hired and/or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests provision.

4. Professional Liability insurance with minimum limits of ONE MILLION DOLLARS (\$1,000,000) per claim and ONE MILLION DOLLARS (\$1,000,000) aggregate.

B. The policies required above, except Workers' Compensation insurance, Employers' Liability insurance and Professional Liability insurance shall be endorsed to include the Town, its officers and employees, as an additional insured. Every policy required

above, except Workers' Compensation and Professional Liability insurance, if applicable, shall be primary insurance, and any insurance carried by the Town, its officers, or its employees, shall be excess and not contributory insurance to that provided by Consultant. The additional insured endorsement for the Comprehensive General Liability insurance required above shall not contain any exclusion for bodily injury or property damage arising from completed operations. The Consultant shall be solely responsible for any deductible losses under each of the policies required above.

C. Certificates of insurance shall be completed by Consultant's insurance agent as evidence that policies providing the required coverage, conditions and minimum limits are in full force and effect, and shall be subject to review and approval by the Town. Each certificate shall identify the Project and shall provide that coverage afforded under the policies shall not be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the Town. If the words "endeavor to" appear in the portion of the certificate addressing cancellation, those words shall be stricken from the certificate by the agent(s) completing the certificate. The Town reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

D. Failure on the part of Consultant to procure or maintain policies providing the required coverage, conditions, and minimum limits shall constitute a material breach of contract upon which at the Town's discretion may procure or renew any such policy or any extended connection therewith, and all monies so paid by the Town shall be repaid by Consultant to the Town upon demand, or the Town may offset the cost of the premiums against any monies due to Consultant from the Town.

E. The parties understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently \$350,000 per person, \$990,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, §24-10-101, *et seq.*, C.R.S., as from time to time amended, or otherwise available to Town, its officers, or its employees.

Section 9. Indemnification. Consultant expressly agrees to indemnify and hold harmless Town or any of its officers or employees from any and all claims, damages, liability, or court awards including attorney's fees that are or may be awarded as a result of any loss, injury or damage sustained or claimed to have been sustained by anyone, including, but not limited to, any person, firm, partnership, or corporation, to the extent caused by the negligent acts, errors or omissions of Consultant or any of their employees or agents in performing work pursuant to this Agreement. In the event that any such suit or action is brought against Town, Town will give notice within ten (10) days thereof to Consultant.

Section 10. Delays. Any delays in or failure of performance by any party of his or its obligations under this Agreement shall be excused if such delays or failure are a result of acts of God, fires, floods, strikes, labor disputes, accidents, regulations or orders of civil or military authorities, shortages of labor or materials, or other causes, similar or dissimilar, which are beyond the control of such party.

Section 11. Additional Documents. The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement.

Section 12. Entire Agreement. This Agreement represents the entire agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties. If any other provision of this Agreement is held invalid or unenforceable, no other provision shall be affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

Section 13. Time of the Essence. Time is of the essence. If any payment or any other condition, obligation, or duty is not timely made, tendered or performed by either party, then this Agreement, at the option of the party who is not in default, may be terminated by the non-defaulting party, in which case, the non-defaulting party may recover such damages as may be proper.

Section 14. Default and Remedies. In the event either party should default in performance of its obligations under this agreement, and such default shall remain uncured for more than 10 days after notice of default is given to the defaulting party, the non-defaulting party shall be entitled to pursue any and all legal remedies and recover its reasonable attorney's fees and costs in such legal action. In addition, no Party will be entitled to lost profits, economic damages, or actual, direct, incidental, consequential, punitive or exemplary damages in the event of a default.

Section 15. Waiver. A waiver by any party to this Agreement of the breach of any term or provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by either party.

Section 16. Governing Law. This Agreement shall be governed by the laws of the State of Colorado.

Section 17. Independent Contractor. Consultant and Town hereby represent that Consultant is an independent contractor for all purposes hereunder. As such, Consultant is not covered by any worker's compensation insurance or any other insurance maintained by Town except as would apply to members of the general public. Consultant shall not create any indebtedness on behalf of the Town.

Section 18. No Third Party Beneficiaries. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to Town and Consultant, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than Town or Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

ATTEST:

Lisa Anderson, Town Clerk

Approved as to form:

Robert J. Slentz, Town Attorney

CONSULTANT:

AECOM TECHNICAL SERVICES, INC.
a California corporation

By: _____

Its: _____

TOWN OF CASTLE ROCK

Jason Gray, Mayor

Approved as to content:

Mark Marlowe, Director of Castle Rock Water

Project Scope

The project scope generally includes project survey/site investigation, identification of existing property lines and easements, preliminary drainage design, pavement design, utility systems modeling and analysis, final project design, drainage calculations, GESC Plans, technical specifications, and traffic control.

Coordination and Meetings

The Consultant shall attend regular monthly progress meetings throughout the duration of the project and supply meeting notes as needed. Review meetings shall occur at the 30% and 90% submittals. Monthly progress meetings and review meetings may be consolidated when applicable.

The Consultant shall coordinate and/or attend meetings with respective agencies for design approval.

PHASE I: SURVEYING & SITE INVESTIGATION

Survey

The consultant shall complete a topographic survey of the design project areas as generally depicted on the site map. The surveying shall include: existing improvements, property pins, underground utility locations, structures, trees, wetland delineation, topography including high and low points (one foot contours), horizontal & vertical project control and any other tasks necessary to complete the scope of work as described herein. The survey limits shall include that area necessary to complete all tasks identified in the scope of services to provide a complete project.

Vertical Datum: All elevations used shall be on the NAVD 88 Datum; no conversion equation is allowed.

Horizontal Benchmark and coordinates: The horizontal benchmark shall be specified. All surveys shall be in the State Plane NAD83, Colorado Central Zone coordinate system and include the coordinates of a known property corner on or adjacent to the site.

The Consultant shall be responsible for obtaining all utility locates, including potholing as required in determining potential conflicts with proposed improvements.

Geotechnical

Include soil borings, asphalt cores and a geotechnical report as needed to support the proposed infrastructure improvements in the Craig and Gould project site area.

Provided Resources & Data from the Town

- Property parcels and right-of-way information (GIS map layer data)
- Town of Castle Rock Utilities base map information (water, sanitary, storm sewer)
- Available drainage reports and construction drawings pertaining to the project site

Deliverables

- Topographic and property boundary survey plan sheets (PDF)
- Geotechnical Report (PDF)

PHASE II: PRELIMINARY DESIGN

Alternatives Analysis

The Consultant shall evaluate up to three alternatives for the storm sewer and outfall system, including minor and major storm capacity, outfall routing, and water quality/flood control facility locations.

The Consultant shall develop a preliminary design for the proposed infrastructure improvements (storm drainage system, street sections, pavement design, sanitary sewer and water distribution systems) that include conceptual level design, drawings, easements and cost estimates for Town consideration.

Support and participation in a public meeting to present the proposed project design improvements.

Deliverables

- Alternatives memorandum with discussion and recommendations for each project objective
- Preliminary cost estimates
- Preliminary Easement locations

PHASE III: FINAL PROJECT DESIGN

The Consultant shall provide 30% and 90% progress submittals and 100% Bid Set submittal for the selected alternatives based on Town standards and comments. The design scope of work and deliverables shall include the following:

Construction Drawings

The Consultant shall provide Construction Drawings in accordance with Town Criteria. Drawings should generally include:

- Cover Sheet
- General Notes Sheet
- Project Control and Survey Sheet
- Overall Site Improvements Sheet, including: street stationing, property boundaries, easements, proposed improvements and floodplain limits
- Storm Sewer Plan & Profile Sheets
- Water Quality/Detention Pond Plans
- Sanitary Sewer Main Plan & Profile Sheets
- Street Plan & Profile Sheets
- Water Main Plan & Profile Sheets
- Detailed Street Cross Sections
- Traffic Control Plan
- Phasing Plan
- Details
- Other sheets as needed

Consultant shall submit a 90% progress set for Town review and 100% Bid Set (22"x34" printable on 11"x17").

Phase III Drainage Report

Consultant shall provide a Phase III Drainage Report and all applicable analysis, calculations, and details to support the final design in accordance with the Castle Rock's Storm Drainage Design and Technical Criteria Manual, to be submitted with 90% and 100% Construction Drawings.

Grading, Erosion, and Sediment Control (GESC)

Consultant shall prepare a GESC Plan and GESC Report for the project in accordance with the Town of Castle Rock GESC/DESC Manual. The GESC Plan and Report shall meet the requirements of a SWMP for use by the contractor in obtaining a Construction Stormwater Discharge Permit with WQCD.

Consultant shall submit a 90% progress set for Town review and 100% Bid Set (22"x34" printable on 11"x17").

Technical Specifications

The Consultant shall prepare technical specifications. Consultant shall work with Town staff to select the appropriate standard specifications for each project area to meet the Town of Castle Rock's objectives. Generally, this will include applicable TOCR, CDOT and UDFCD specifications.

Consultant shall submit a 90% progress set for Town review and 100% Bid Set.

Permitting

The Consultant shall coordinate with Union Pacific Railroad (UPRR) and the Colorado Department of Transportation (CDOT) to obtain necessary permits to construct the proposed improvements within their respective Rights-of-Way.

Utility Coordination

The Consultant shall coordinate with other Utility Companies to develop relocation plans for their facilities that are in conflict with the proposed project improvements.

Traffic Control Plan

The Consultant shall prepare a recommended traffic control plan for approval by the Town.

Engineer's Opinion of Probable Cost Estimate

The Consultant shall provide construction cost estimates to the Town of Castle Rock included with the 90% and 100% submittals.

Easement Descriptions and Exhibits

The Consultant shall prepare written easement descriptions and exhibits for the Town's use in securing necessary property rights for construction of the proposed improvements.

Deliverables

- Construction Drawings (PDF)
- Grading, Erosion & Sediment Control Plan/Report (PDF)
- Technical Specifications (Word Document and PDF)
- Phase III Drainage Report including Hydraulic Calculations (PDF)
- Final Utility Report (PDF)
- Traffic Control Plan (PDF)
- Pavement Design (PDF)
- Engineer's Opinion of Probable Cost (Word Document and PDF)
- Easement descriptions and exhibits (PDF)
- Design CADD Files (AutoCAD 2016 or earlier)
- Survey Control for construction (electronic files and included in CDs)

Milestone Schedule

- Consultant Selection: Nov – Dec 2018
- Preliminary Design – Jan – Mar 2019
- Final Design: Apr – Oct 2019
- Easement Acquisition: Jul – Nov 2019
- Permitting: Apr – Sept 2019
- Bidding: Nov – Dec 2019
- Construction: Jan - Dec 2020

Town Management Team

- David Van Dellen, Stormwater Manager, dvandellen@crgov.com
- Erik Dam, Project Manager, edam@crgov.com
- Jeanne Stevens, Engineering Manager, jstevens@crgov.com
- Shawn Griffith, Operations Manager, SGriffith@crgov.com
- Carl Armijo, Public Works CIP Engineering Manager, carmijo@crgov.com
- Brian Peterson, Parks Planning & Construction Manager, bpeterson@crgov.com

EXHIBIT 2

PROPOSAL TO PROVIDE

ENGINEERING SERVICES FOR THE

Craig & Gould North Infrastructure Improvements Project





December 7, 2018

AECOM
6200 South Quebec Street
Greenwood Village, CO 80111
www.aecom.com

303.694.2770 tel
303.694.3946 fax

Mr. Erik Dam
Project Manager
Castle Rock Water
175 Kellogg Court
Castle Rock, CO 80109

RE: Proposal for Engineering Design Services for the Craig & Gould North Infrastructure Improvements Project

Dear Mr. Dam and Members of the Selection Committee:

Craig & Gould neighborhood is one of the first platted neighborhoods in Castle Rock, and is rich with history and significance. Several historic structures dating back to the late 1800s are within the project limits.

Our team's experience designing and constructing the Craig & Gould South basin will allow us to efficiently determine practical and coordinated cost-effective solutions to improve the streets to meet design criteria, improve and implement a sound and cost-effective drainage design, while improving the aging sanitary and water distribution lines. This project also provides a unique opportunity for enhanced pedestrian and bicycle accessibility, improved safety and enhanced water quality. This will require close interaction with property owners to preserve the rich character of the neighborhood, and coordination with stakeholders including CDOT, UPRR, and Utility companies. AECOM offer's a team and approach that will successfully deliver this project, and enhance the north portion of Craig & Gould, while capitalizing on the project team's success with the South Craig & Gould Project.

AECOM's prior project experience in the Craig & Gould basin offers an in-depth understanding of the neighborhood and its needs. We understand that Craig & Gould North will offer its own set of challenges and opportunities including creating a positive storm drainage outflow to East Plum Creek. Our team specializes in multidisciplinary projects, providing the necessary in-house resources including experts in working with the Union Pacific Railway and CDOT, and using our established relationships with Kumar and Associates, Inc., Diversified Underground, Inc., and Cardno, Inc.. This results in a flexible, multidisciplinary design team that can reduce costs and meet project schedules. We have proven our ability to deliver multidisciplinary projects for the Town and are eager to apply lessons learned and working knowledge to the next phase of the Craig & Gould neighborhood.

Our team will be led by Project Manager, Bill Wemmert, PE, who brings the experience, leadership, and vision needed to successfully complete this project. He has led similar multidisciplinary projects, including South Craig & Gould for the Town of Castle Rock.

We are committed to the successful completion of this project and appreciate your consideration of our proposal. Please direct any questions to Bill Wemmert at 303. 740.3928 or Bill.Wemmert@aecom.com.

Sincerely,
AECOM Technical Services, Inc.

Bill Wemmert, PE
Project Manager

Kevin Klimek, PE
Associate Vice President

Section 1: Project Team Qualifications and Related Experience

Introduction

The Craig & Gould neighborhood is bounded by Rock Park to the north, Gilbert Street to the east, Fifth Street to the south, and Front Street to the west. AECOM completed the Craig & Gould neighborhood south of Fifth Street that was upgraded in the early 2000s to meet roadway and storm drain standards, improve pedestrian access and upgrade water and sanitary utilities. This project seeks to provide similar improvements to Craig & Gould north of 5th street.

AECOM presents a project team and approach that will provide an efficient and effective project to meet the Town's goals for the Craig & Gould neighborhood improvements.

The Team

AECOM's team members have industry leading expertise in Colorado, and will work with Mr. Dam to execute a successful project. AECOM's staff will be augmented by Kumar and Associates, Inc. (Kumar) to support geotechnical investigations, and Diversified Underground, Inc. and Cardno, Inc. to provide utility locating/potholing for compliance with SB18-167.

AECOM

AECOM is a world-class provider of engineering, construction, and technical services for municipalities, state and federal governments, public agencies, and the private sector around the world. We have a proven track record of providing specialized experience and technical competence in planning, feasibility, preliminary and final engineering analyses, inspections, designs, cost estimates, plans, specifications, and construction services for projects involving flood control, infrastructure, and transportation design.

AECOM's local, team is a 30 minute drive from the Town of Castle Rock (Town), and provides the Town with proven design experience providing innovative solutions for stormwater

ENR2018

- TOP 500
- 1 General Building
 - 1 Transportation
 - 2 Top Design Firm
 - 2 International Markets
 - 2 Sewer and Waste
 - 3 Water
 - 3 Power

collection, conveyance and treatment, utility, and environmental design including a large transportation practice that can provide cost effective solutions to the Town for the Craig & Gould Basin. Coordination with the Union Pacific Railroad (UPRR) will be a critical part of this project and our team provides the relationships and expertise to coordinate with this important stakeholder. Our teaming partners



information follows.

Kumar & Associates, Inc. (Kumar)

has been selected for the team based on a long-term, successful working relationship on similar projects. AECOM seeks to leverage Kumar's renowned strengths in geotechnical engineering. Kumar is a consulting engineering firm providing professional and technical services in the areas of geotechnical engineering, environmental sciences, engineering geology, and construction observation and materials testing. The firm was established in 1989, and has more than 150 professional engineers, geologists, environmental scientists, engineering technicians, and support personnel.



Diversified Underground, Inc.

was also selected for the team based on a long-term, successful working relationship with AECOM on similar projects. Diversified offers complete utility locating services for identifying and marking public and privately-owned underground utilities. They offer various methods to fit the job including hydro excavation, hydro jetting, and directional drilling. They utilize electronic designation, simple and complex induction, and meticulous map research to make sure facilities are identified and protected and no loss of service occurs.

Cardno Cardno, Inc. was selected for its expertise in subsurface utility engineering (SUE). Cardno, Inc. was founded in 1945, and is the largest SUE company in the country. As the leader in SUE, nationally and locally, Cardno has the largest fleet of resources and most up-to-date technology to accurately produce high quality utility mapping for design projects. AECOM is currently working with Cardno on the I-25 South project.

Benefits of the Project Team

- ✓ Relevant local design and implementation project experience
- ✓ Local staff committed for the duration of the project
- ✓ Reliable, established, and well-connected project team
- ✓ Unique expertise in multidisciplinary projects
- ✓ Established working relationship with Kumar, Diversified, and Cardno having successfully worked prior projects together

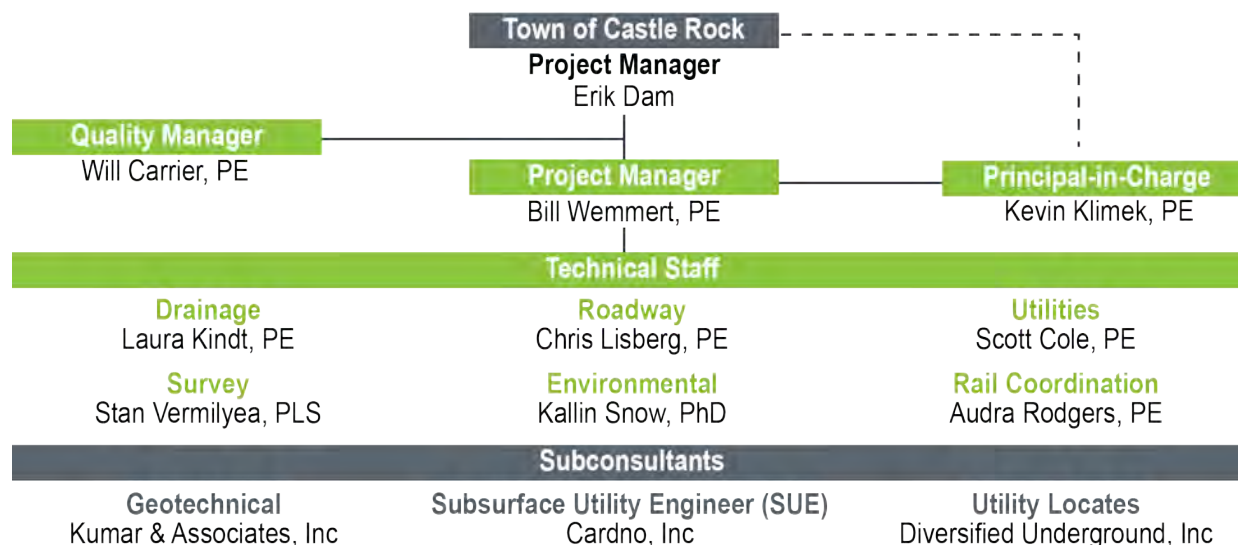


Exhibit 1. Team Organization Chart

Organization Chart and Proposed Staff

The key project leads shown in the organizational chart in Exhibit 1 will work with a core staff to produce project documents and deliverables. Given our vast, accessible resource network between AECOM, Diversified, Kumar and Cardno, the project team will be able to quickly and efficiently adapt to potential challenges during the project, effectively meeting project goals while keeping a consistent core group engaged with the Town.

Key Staff

AECOM leads for this project are as follows. Additional information can be found in the attached resumes.

Bill Wemmert PE| Project Manager, AECOM

35 Years of Experience

BS, Civil Engineering and Environmental Engineering. University of Wisconsin



Responsibilities: As Project Manager (PM), Bill will be responsible for the leading the project planning, design, and coordination with the design team and the Town, and will provide overall management of the project to a successful completion on time and on budget. He has made his career working on similar multidisciplinary municipal projects addressing public infrastructure needs with waterlines, sanitary sewers, storm drainage, roadways, achieving associated permitting objectives, and facilitating public involvement programs to make projects such as this a success.

Why Selected: Bill was a lead design manager on the Craig & Gould South infrastructure improvements project that enhanced 20 square blocks south of Fifth Street. This project has many similar features and requirements, and the North Craig & Gould project will benefit from Bill's experience. He is a strong project manager and communicator whose multi-disciplinary experience and team skills will help facilitate completion of the project for the Town and for the Craig & Gould neighborhood residents.

Background:

As a PM in AECOM's Water Group, Bill has a diverse range of related expertise through 38 years as the District Engineer for the Winter Park Water and Sanitation District, and completing similar waterline and sewer projects in Castle Rock, Westminster, and Telluride. Bill has managed projects ranging in size from small municipal work to multi-million dollar programs.

Relevant Projects:

- Craig & Gould Neighborhood Improvement Project, Town of Castle Rock, CO
- 4 MG Water Storage Tank and Two Water Pump Stations, Town of Castle Rock, CO

Laura Kindt, PE | Drainage, AECOM

11 Years of Experience

MS/BS, Civil Engineering, Lawrence Technological University



Responsibilities: Laura will serve as the technical Lead for storm drain and water quality improvements. She will leverage her skills from similar multidisciplinary projects to apply a custom solution for the project.

Why Selected: Laura has H&H, water quality design, floodplain mapping, and flood hazard mitigation experience, public involvement and stakeholder coordination skills, and local experience. Laura's career has been focused on H&H modeling, low impact development (LID) design, water resources, water quality, sediment and erosion control analysis and design, and research and testing. She has managed and worked on projects from large design builds to local drainage projects.

Relevant Projects:

- Drainage Design Engineer/Lead for City of Colorado Springs projects including: Woodmen Road (I and II), Milton E. Proby Parkway, Filmore Street, Pikes Peak Boulevard, and Vermijo Streetscape Colorado Springs, CO
- Design Engineer responsible for evaluating alternatives and providing design to mitigate impacts downstream of the burn scar for Waldo Canyon, Colorado Springs, CO

Christopher Lisberg, PE | Roadway, AECOM

10 Years of Experience

BS, Civil Engineering, Northern Arizona University



Responsibilities: Chris will be responsible for any roadway, construction phasing, traffic control design and coordination needs, and will lead the design of the proposed improvements while coordinating with all project disciplines.

Why Selected: Chris has pertinent roadway, grading, ADA, phasing, and traffic control design experience along with exceptional coordination skills.

Relevant Projects:

- Deputy Project Manager and Design lead for SH 62 Ridgway Widening, Ridgway, CO
- Quality Reviewer on Sterling S-Curve, Sterling, CO

Scott Cole, PE | Utilities, AECOM

38 Years of Experience

BS, Civil Engineering, University of Colorado at Boulder



Responsibilities: Scott will be responsible for any utility design and coordination.

Why Selected: Scott's experience includes water hydraulic modeling, design and construction of pumping systems; pressurized and gravity pipeline conveyance, pipe bores, and storage tanks. He has completed multiple pipeline projects which have included sizing and selection of pipe materials, large horsepower vertical turbine, centrifugal, submersible pumps, control valves, isolation valves, metering and disinfection systems.

Relevant Projects:

- Craig & Gould Water, Sanitary Sewer Road and Drainage Reconstruction, Castle Rock, CO
- Briargate 30" Steel Waterline, Colorado Springs Utilities, Colorado Springs, CO

Audra Rodgers, PE | Railroad Coordination, AECOM

15 Years of Experience

BS, Civil Engineering, University of Nebraska Lincoln



Responsibilities: Audra will be responsible for rail coordination.

Why Selected: Audra has an extensive experience in the design and management of railroad structures. This experience has led to a close relationship with UPRR drainage and structural staff who will need to be engaged for the Craig & Gould Project. Audra has extensive knowledge of the differing stages of UPRR involvement and review and will help the Town secure a drainage agreement with the UPRR.

Relevant Projects:

- 72nd Street Bridge Replacement, Omaha, NE
- UPRR Milepost 245.87 to 246.26 Roseville Subdivision North Truckee Drainage Improvement Project.

Team Member Title	Relevant Experience and Why Selected
Kevin Klimek, PE Principal-in-Charge 50% Availability 21 Years of Experience	• Relevant Experience: Drainage design engineer for Craig & Gould South. • Why Selected: Due to his experience working with the Town and other similar projects, Kevin will serve as a Principal in Charge. Additionally, Kevin will serve as an alternate conduit into AECOM for the Town for addressing issues that could potentially arise during the project.
Will Carrier, PE Quality 70% Availability 20 Years of Experience	• Relevant Experience: Supported Castle Rock and CDOT on similar projects. • Why Selected: Experienced in multidisciplinary projects and has strong quality management experience.
Stan Vermilyea, PLS Survey 50% Availability 37 Years of Experience	• Relevant Experience: Former CDOT survey and ROW supervisor, now heads AECOM's Colorado survey and ROW operations. Experience in virtually all phases of surveying and ROW. • Why Selected: Led the survey effort on the Craig & Gould South, Vermijo Ave. & Sierra Madre St.; Centennial Blvd Ext; Pikes Peak Ave. Reconstruction, and Powers Blvd Extension
Kallin Snow, PhD Environmental 50% Availability 16 Years of Experience	• Relevant Experience: Served as the environmental lead on many local CO transportation projects over the last five years that involved CDOT CatEx Clearance and Federal/State environmental permitting such as Section 404 for wetlands and waters of the US. • Why Selected: Led environmental permitting for Pikes Peak Avenue Reconstruction and Centennial Blvd Ext.
Audra Rodgers, PE Rail Coordination 20% Availability 15 Years of Experience	• Relevant Experience: Experience in the design, management and coordination of roadway and railroad structures. • Why Selected: Served as project manager or lead engineer for multiple BNSF and UPRR bridge, culvert, and retaining wall design projects, as well as several public agency projects involving the railroads.
Subconsultants	
Arben Kalaveshi, PE Geotechnical (Kumar) 60% Availability 15 Years of Experience	• Relevant Experience: Geotechnical Engineer for significant transportation projects in Colorado, including Founder's Parkway and Crowfoot Valley Road Expansion Project, Sand Creek Lift Station, Powers and I-25 Interchange Project. • Why Selected: AECOM has worked with Kumar on Monument Hill Road Improvements; El Paso County, Colorado, Martin Luther King Boulevard Extension; Denver, Colorado, Denver Water North Systems Renewal Water Treatment Plant; Denver, Colorado and Stapleton Filing: 49 and 54; Denver, Colorado.
Utility Locates (Diversified) 20% Availability 15 Years of Experience	• Relevant Experience: 15 years of utility locate experience in Colorado. • Why Selected: AECOM has worked with Diversified on Pikes Peak Vermijo Streetscape, and Centennial Boulevard.
SUE (Cardno) 20% Availability 70+ Years of Experience	• Relevant Experience: Leading local and national SUE firm with over 75 years of experience. • Why Selected: AECOM is currently working with Cardno on I-25 South.

Section 2: Response to the Scope of Work

Primary Objectives and Project Description

This project seeks to enhance the safety and function of the Craig & Gould North neighborhood by upgrading the roadway, water, and sanitary utilities to current Town standards, while enhancing safety through the inclusion of pedestrian facilities, improved drainage and reduced flooding, and enhanced water quality.

Technical Design Issues and Approach

Our PM, Bill Wemmert, has worked with Town staff on the previous phase of Craig & Gould, and has record of delivering projects on time and within budget during challenging circumstances. We look forward to leveraging our experience from the South Craig & Gould neighborhood, but understand each project has its own opportunities, and will require a fresh approach.

To complete this project, we have reviewed the available information and developed a strategy that will maximize opportunities for the basin, while maintaining a cost-efficient solution the Town can implement. The AECOM Team will focus on providing practical and coordinated solutions benefitting the neighborhood, while respecting the historic identity of the Craig & Gould Neighborhood.

Stake Holder and Public Coordination

Coordination with adjacent residents and businesses, which will be effected by construction, and have valuable insights on the look and feel of the improvements, will be one of the most important aspects of the project. AECOM will complete two public meetings but also provide other opportunities for public interaction.

Close interaction with Town departments, utility providers, CDOT, the UPRR and other stakeholders will be needed for a successful project. Our project team has key relationships with the UPRR and with CDOT that we can leverage, as we determine locations and methodologies for creating utility crossings of the rail lines and I-25. Our team

considers coordination with CDOT and the UPRR as an early action item to understand opportunities and constraints with these stakeholders. Our project team has worked with CDOT and the UPRR on a large number of projects. Utility relocations, drainage, water quality, access, parking, and impacts during construction are among the opportunities that need to be discussed early with the stakeholders. We understand from our previous project experience that early coordination will save the Town time and money.

Practical Solutions

AECOM's Experience in Craig & Gould South will help us identify cost-efficient alternatives quickly, allowing the team to meet project deadlines.

AECOM will evaluate alternatives to reduce costs to the Town. One drainage option is evaluating existing storm sewers in 5th Street and the Craig & Gould south basin. Incorporating the existing storm drain system may reduce or eliminate the need to cross railroad and or add additional conveyance capacity under I-25. Optimizing the roadway cross section to limit pavement, and increase green space will be examined to reduce costs, provide a safer pedestrian area, reduce runoff, and improve water quality. Our team is dedicated to finding cost effective, practical solutions that limit impacts. We know this approach is key to providing a successful solution to the Town.

The major drainage issues of the project relate to conveying drainage under the railroad and under I-25. The majority of the neighborhood drains from the northeast to southwest. This flow is conveyed via the streets in the neighborhood and enters the existing storm drain system at 5th street. The lack of infrastructure, curb and gutter, and storm drains creates nuisance flooding for the neighborhood and overwhelms the system at 5th street. Adding additional collection capacity through the Craig & Gould Neighborhood will help alleviate nuisance flooding but may cause additional flooding along 5th street. To help minimize runoff and optimize existing infrastructure the team will investigate linear storage along Front Street to provide water quality and to reduce peak flows. Detention along Front Street as well as working with CDOT to provide detention along I-25 will help the Town maximize the use of existing infrastructure.

The proposed improvements disturb greater than an acre in area and will require water quality treatment. The project area has limited locations to provide water quality. One location may be along Front Street in a

natural depression. Another may be along the railroad within the existing swale. Another opportunity is within the swale located on the east side of I-25. As mentioned above, this will provide multiple benefits to the Town by also reducing runoff volumes allowing the Town to maximize the use of existing infrastructure.

The roadway improvements will generally follow the existing grades with minor corrections. Currently there is no curb and gutter, the majority of runoff drains to roadside swales, and driveway access is unrestricted. Adding curb and gutter will require restricting driveway access and will impact parking locations. Grading will be required behind the curb and gutter to accommodate the proposed sidewalk and provide positive drainage from the properties to the road.

Project Management Approach

Bill Wemmert will provide proactive and proven management skills to complete a technically sustainable, high quality project, on schedule, and within budget.

Bill will assign budgets, schedules, and work requirements to all team members. He will regularly review progress of the work relative to the plan, and make adjustments in resource allocations as necessary to maintain budgets and schedules while still achieving the work requirements.

Bill will also meet with the Town on a regularly scheduled basis to communicate recent progress, coordinate key decisions, and discuss next steps, as well as to review project submittals at the alternatives, 30%, and 90% design phases. These meetings should occur monthly (or as needed) for the duration of the project. AECOM will provide an agenda and minutes documenting decisions.

Project Management and Meetings

- ✓ Project Management Plan
- ✓ Quality Assurance/Control Program
- ✓ Project Development, Maintenance, and Reporting
- ✓ Budget Monitoring and Reporting
- ✓ Invoicing and Progress Reporting
- ✓ Critical Meeting Attendance

AECOM is ISO 9001 certified and employs a Quality Management System (QMS) designed to promote client satisfaction, manage technical risk, and deliver quality documents. All management and specialty leads will subject deliverables to the Project Delivery System (PDS) under the program, completing a

documented detail check, constructability/bid-ability review, and independent technical review to ensure accuracy and quality up to the Town's and AECOM's strict standards.

Phase I:

Surveying & Site Investigation

Phase I consists mainly of data acquisition and information gathering. Topographic survey, utility locates and geotechnical will be completed in this phase. The following text outlines the key technical subtasks in Phase I.

Utility: We understand portions of the water and sanitary system within the project area have been upgraded in recent years, but these systems still include aged infrastructure with inadequate capacity and increased maintenance costs for the Town. During our initial data gathering and investigation, we will identify the limits of the old and new water and sanitary infrastructure. AECOM will work with the Town to establish the quality level required for utility plans. If SUE standards are not pursued, Diversified will be used to obtain potholes and utility locates. AECOM assumes that approximately 60 potholes are needed for design. Cardno will be used if the Town pursues meeting SUE requirements. Cardno will contact utility owners and collect existing information related to the gas, fiber and electric lines within the project area. This data collection is needed for proper design and is required to meet ASCE 38 compliance and SUE Law.

Drainage: AECOM will collect existing drainage information, including drainage reports, existing storm infrastructure, and floodplain information. Drainage inverts, sizes and materials of drainage infrastructure within limits will be collected to better understand flows paths and the feasibility of using the existing infrastructure.

Topo and Property Survey: A topographic survey is necessary to finalizing alternatives and providing an accurate design. Our team will complete a survey of the project area to establish project controls, existing topography, property lines, structures, utilities, vegetation, and wetlands. Initial survey extents will be limited to the project area and storm infrastructure downstream of the project. Topographic data from 2014, property parcels, and ROW will be provided by the Town or are available on the Town's GIS site.

Environmental: Existing environmental information, including historical resources, hazardous materials,

and environmentally sensitive areas will be identified and collected during this stage.

Geotechnical: Prior to commencing fieldwork, Kumar will coordinate site access in the project area with AECOM and the Town. Site reconnaissance will be performed to observe existing site conditions, field locate boring locations, and perform utility locates through the 811/Colorado one-call system. Additionally, Kumar will submit an appropriate Excavation Permit from the Town of Castle Rock for work within the ROW. Available geologic mapping and geotechnical information for the site will be reviewed, traffic control services will be provided during the field investigation, and subsurface drilling and sampling will be performed at up to 24 accessible locations within the project area. Borings are anticipated to be 10 to 20 feet deep, and are spaced a maximum of 250 feet, per requirements in the Town's Transportation Design Criteria Manual. Kumar will provide a geotechnical engineering report that includes design and construction recommendations for the pipeline installation and pavement section design.

Phase II: Preliminary Design

Phase II uses the data gathered in Phase I to develop design alternatives. The intent is to provide up to three potential alternatives for the drainage facilities and potential road cross sections. Alternatives analysis will not be required for the utilities replacement as the utilities will be replaced in their current locations. The alternatives for drainage will include potential water quality features along I-25 and Front Street, optimizing the use of existing drainage infrastructure, and installation of a new outfall system. These alternatives will allow the project team to identify the most cost efficient solutions, engage the public, and provide a recommended alternative to the Town.

An alternatives matrix will be prepared to compare each alternative based on cost, community values, public impacts, and water quality. The matrix will allow the project team and the Town to determine the recommended alternative.

Utilities: AECOM will evaluate the existing infrastructure to determine needed improvements to meet the Town's infrastructure design criteria and to deliver flows to meet peak design water demands and fire flows. At this time we will coordinate with the Town on utilizing its base water system hydraulic model to model our proposed system improvements, and discuss our approach for integrating new water

system improvements, including new water service connections to existing residences. AECOM has worked with the Town's hydraulic model on previous water projects. Our initial approach for sanitary sewer replacement would generally replace the existing sewer in the same location but at a slightly lower grade to accommodate larger sewer pipe and/or facilitate reconnection of service laterals. This approach will be modified as improvements are needed to address conveyance capacity and sewer maintenance considerations, to better provide for lateral connections or to accommodate planned storm sewer improvements in the neighborhood. The design of the sewer improvements will meet the Town's infrastructure design criteria and allow for capacity changes needed for existing or future needs. Toward this objective, we will coordinate with the Town for modeling proposed sewer improvements and our approach to address any deficiencies in lateral connections. AECOM has evaluated and designed sewer main and sewer lateral lining projects should either of these solutions be deemed appropriate for the sanitary sewer upgrades in the Craig & Gould neighborhood.

In addition, AECOM will evaluate impacts to gas, electric, and fiber. AECOM will coordinate with the appropriate agency as needed to determine costs and schedule for relocation.

Drainage: AECOM will review available information and provide the Town with up to three alternatives. Based on data collected and familiarity with the project area and previous improvements AECOM has identified several alternatives that warrant further evaluation during the alternatives evaluation phase.

#1 - Use as much existing infrastructure as possible. Add storm infrastructure upstream of 5th Street and connect into the existing storm in 5th Street. Use the existing storm in 5th Street, use the railroad swale and culverts and storm infrastructure downstream of the railroad. The benefits to the Town for this alternative are cost savings, reduced coordination effort with CDOT, UPRR and existing utilities, and reduction in required permitting.

#2 – Install parallel storm systems one down 5th and one down 6th to, outfall to existing swale along railroad and use existing infrastructure to the outfall of East Plum Creek. Continue to use the existing storm in 5th Street. The benefits to the Town for this alternative are reduced coordination effort with CDOT and UPRR and reduction in required permitting.

#3 – Install all new storm infrastructure and jack storm drains under UPRR and I-25. The benefit of this alternative is the Town will have upgraded storm infrastructure that meets current storm drain criteria. This alternative will cost more, require additional coordination with CDOT and UPRR, and require more permitting than the other alternatives. If this is the preferred alternative, AECOM will use technical staff to efficiently and effectively coordinate with stakeholders.

Roadway, Sidewalks, and Alleys: The AECOM roadway group will support the alternatives process by examining roadway and sidewalk geometry to accommodate multimodal travelers, creating a comfortable and safe neighborhood for all local traffic. It is anticipated the streets will remain in their current horizontal and vertical configurations but the design team will complete adjustments to meet City and ADA criteria while balancing and limiting impacts to utilities and ROW with the selection of appropriate vertical profiles and Town Standard street cross sections.

Deliverables: Alternatives memorandum, cost estimates, and easement locations will be prepared, for each of the alternatives for Town review.

With all engineering disciplines in house, design coordination is much more efficient. Disciplines include:

- | | |
|------------------|--------------------------------|
| ✓ Roadway | ✓ Detention and Water Quality |
| ✓ Utility Design | ✓ Railroad Coordination |
| ✓ Storm Drainage | ✓ Erosion and Sediment Control |
| ✓ Environmental | |

Phase III: Final Project Design

Following the decisions made during Phase II, the final phase will fully detail the design and provide 30% and 90% progress reviews and the 100% bid set. AECOM will prepare requisite plans and specifications for review by the Town, including the GESC plans and report and the Phase III Drainage Report. Then the team will communicate the project information to Town staff, answer questions, and identify necessary document revisions. We will obtain concurrence on the design features and identify any conflicts or issues that may not be fully addressed.

Construction Drawings: Preliminary design will be refined and advanced to final design and preparation of construction documents. Drawings will include all drawings specified in the RFP.

Drainage: AECOM will finalize the preferred alternative, refining the design to accommodate the roadway and utility improvements. Drainage improvements will be documented within the Phase III Drainage Report.

Grading, Erosion, and Sediment Control: AECOM will propose best management practices that are appropriate and effective for the existing and proposed stormwater infrastructure on the site. We will prepare phased GESC plans and report in accordance with the Town criteria. The GESC plans and report will meet the requirements of a SWMP for use by the contractor in obtaining a Construction Discharge Permit with the CDPHE's Water Quality Control Division if required.

Technical Specifications: AECOM will prepare technical specifications to direct the construction of this project. We will coordinate with Town staff to determine the final content and format of specifications with a main reliance on most current editions from CDOT, UDFCD, and the Town itself. Specifications will be submitted at the 90% and 100% design milestones.

Permitting: Kallin will coordinate the environmental permitting for this project. A 404 permit will be required if we complete work within Plum Creek or impact wetlands. A floodplain permit will also be required for work within the East Plum Creek Floodplain. In addition to the permits, a CATEx Environmental Clearance will be required for work in CDOT ROW. Should the need arise for these or other permits, AECOM is available to assist the Town based on our extensive experience with state and federal permitting.

Utilities: The final design of the water system improvements will include upgrading the water system piping, valves, and appurtenances to meet the Town's material and operations design criteria and will address implementation of the improvements through construction to provide for maintaining water service to customers at all times. Our experience on similar projects, including design of the first Craig & Gould Improvements Project, provides the framework to address the detailed approach and plans necessary for successfully implementing these improvements through a phased process of installation, testing, acceptance, and subsequent abandonment/removal of the old infrastructure.

The final sanitary sewer system design will include upgrade of the sewer pipe, manholes, and services laterals in the right-of-way to meet the Town's material

and operations design criteria. We will address any potential corrosive environment issues with appropriate materials selection. A critical aspect of the final design of the sanitary sewer is to design the final sewer system grades to coordinate existing tie-in points, providing for desired improvements, utility crossings. As with the water system, the final sewer design plans will provide implementation guidance for constructing the improvements while maintaining sewer collection service to customers at all times.

During 30%, 90%, and 100% design the gas, electric, fiber and other utilities will be coordinated with their respective agencies. Utility plans will be created based on guidance from the Town regarding level of detail required. To meet the newly passed Colorado SB 18-167 (SUE Law) requiring utility plans meet ASCE 38, utility plans will need to be created depicting the existing utility location, size, scaled width, and depth. ASCE 38 details four quality levels, A through D, each having specific requirements on data collection AECOM has provided a separate cost estimate from Cardno for providing plans up to quality Level B for the project area defined in the RFP.

Traffic Control/Phasing Plan: Traffic control will be critical to maintain thru and local access in and around the project area. Our Roadway Lead, Chris Lisberg, will examine the existing traffic infrastructure in conjunction with the proposed improvements to develop traffic control and phasing solutions that minimize waste and disruption to the community. Work will be phased as much as possible to avoid disruption to homeowners.

Roadway, Sidewalks and Alleys: During the Final Design phase, AECOM will further define roadway and sidewalk geometry to accommodate multimodal travelers, creating a comfortable and safe neighborhood for all local traffic. The design team will complete adjustments where possible to accommodate current ADA criteria while limiting impacts to utilities and ROW with the selection of appropriate vertical profiles and Town Standard street cross sections. Wider sidewalks will be utilized where mixed use and neighborhood access to Castle Rock is anticipated. All analysis and decisions will be made while maintaining a safe and reliable network as the highest priority.

Landscaping: As roadway, utility and drainage design improvements are advanced the proposed

improvements may impact adjacent properties landscaping. AECOM understands the Town's Recreation Department may want to eliminate irrigated landscape areas. AECOM has available landscape staff that can provide landscape design support as needed.

Engineer's Opinion of Probable Cost: AECOM will prepare Engineer's Opinions of Probable Cost for the final design. AECOM has seasoned construction management professionals on the Front Range with experience on projects throughout the south metro and I-25 corridor; we will leverage that experience to "ground truth" our opinions of cost. The Opinion of Probable Cost will include reasonable contingencies and will account for mobilization and other construction costs as percentages of the total construction cost. In addition to costing data that the Town may project, AECOM will reference costing data from CDOT and UDFCD to set unit rates.

Easement Descriptions and Exhibits: AECOM will prepare written easement descriptions and exhibits for the Town to secure necessary property rights for construction for the proposed improvements.

Public Outreach: Part of this project includes providing information to help local residents understand the need for the project and how it impacts them and to provide them ongoing information as construction progresses. Bill Wemmert has years of experience developing public messaging and can work with the Town to develop appropriate messaging and materials, and will attend the three public meetings to support the Town. The main goal of public outreach is to share possible project impacts, as well as the project's importance, rather than focusing on technical details. Benefits will be highlighted while still informing citizens of potential negative impacts and how they can be offset or mitigated. For example, some homeowners likely enjoy extended driveways and lack of standard curb, gutter, and sidewalks. Our project team will also discuss developing a website that the Town can host that will contain information as the project progresses and can be used during construction to communicate closures, phasing and disruptions.

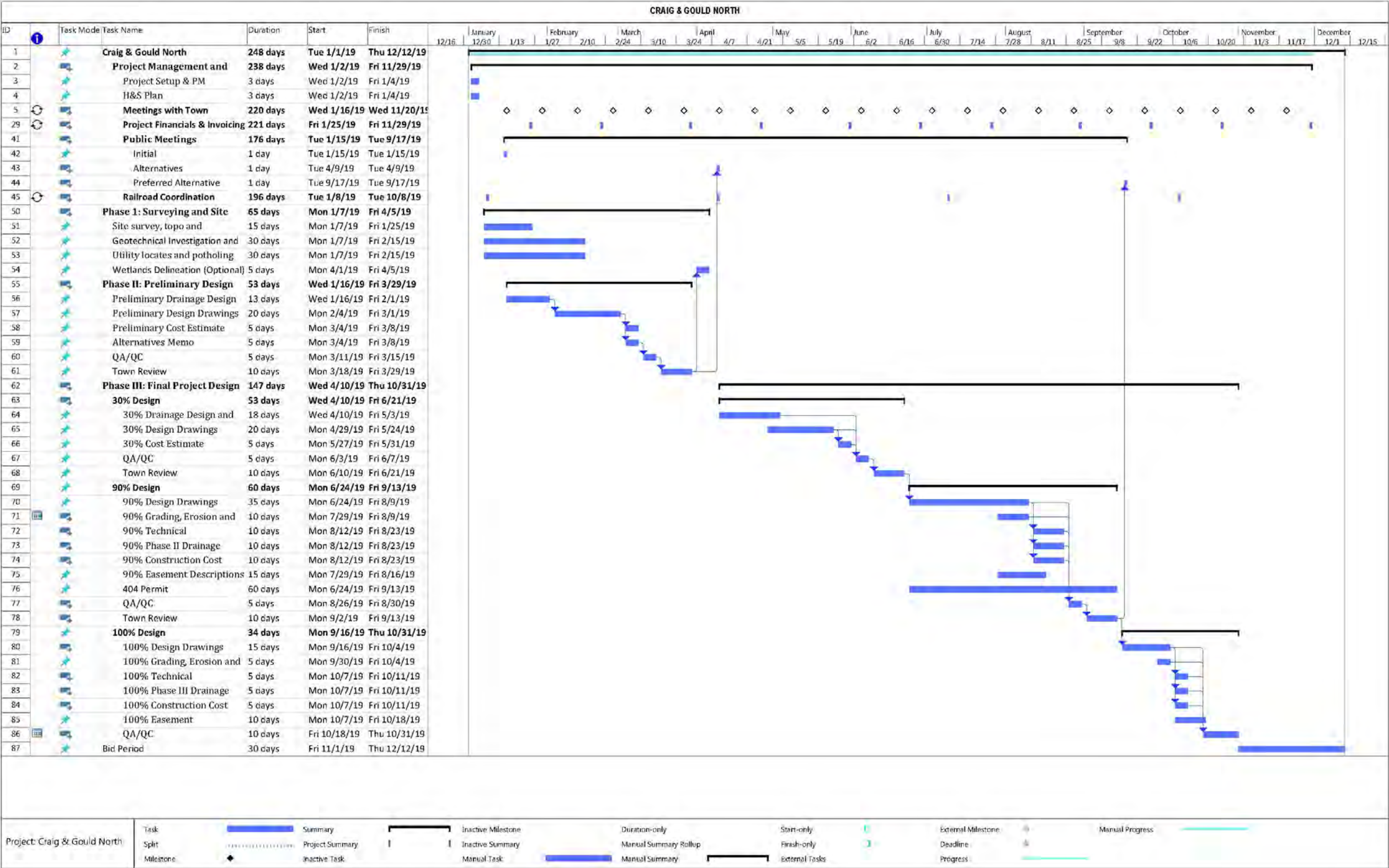
Deliverables: Deliverables will be provided as discussed in RFP.

Section 3: Action Plan and Schedule

The following schedule presents AECOM's approach to completion of the project activities, highlighting the project tasks and subtasks, schedule, and project goals. AECOM will combine the schedule below with the approach identified above to execute an action plan to meet project objectives and deliver a quality project on schedule. Monthly Progress Meetings will keep the Town informed of progress and decisions made.

Schedule

Our proposed schedule identifies the estimated duration of tasks and key milestones for the project.



Section 4: Summary of Similar Projects

Project	Pikes Peak Avenue Reconstruction	Completion Date: Project is ongoing.
Client	City of Colorado Springs, Ryan Phipps, 719.385.5069	Budget/Actual Costs: \$16,800,000
Key Staff	Laura Kindt, Will Carrier, and Kevin Klimek	

Project Description: AECOM completed the design plans for the reconstruction of 1.25 miles of Pikes Peak Avenue within Colorado Springs. Design included practical and cost-effective solutions to improve the driver experience by reducing cross slope and eliminating abrupt grade changes in intersections. The project included removal and replacement of deteriorating pavement, concrete curb and gutter, concrete driveways, as well as sidewalks and pedestrian ramps. Storm drainage design included replacement of the undersized storm sewer under the roadway and installation of water quality treatment facilities. Other elements included underground water and sanitary sewer, stormwater management plans, retaining walls, traffic control and construction phasing. AECOM is currently providing construction management services for this project.

Tasks Performed: Roadway, Traffic, Phasing, Drainage, Water and Sanitary Design, Environmental Permitting, Utility Relocation



Project	Sterling S-Curve	Completion Date: Project is ongoing.
Client	CDOT, Joel McCracken, 970.522.0481	Budget/Actual Costs: \$32,500,000
Key Staff	Chris Lisberg	

Project Description: For many years CDOT and the city of Sterling discussed and studied the concept of alleviating transportation issues within downtown Sterling, which AECOM utilized to create design plans. Central to the project was the "S-Curve" alignment, on abandoned railroad property, directly connecting SH 14 and US 6. This required the redesign of the US 6 and SH 14 intersection, and allowed for the transition of 3rd Avenue and 4th Avenue from one-way to two-way streets. Traffic signals were evaluated along the route and replaced, modified or removed as appropriate. Approximately 1.1 miles of new drainage structures will be placed along West Main, the S-Curve, Poplar and Chestnut, and some inlets will be replaced throughout the project. Also included was the reconstruction of SH 14, mill and overlay of a portion of SH 138, ADA compliant pedestrian ramps and sidewalks, construction phasing, addition of raised medians, and a lighting layout.

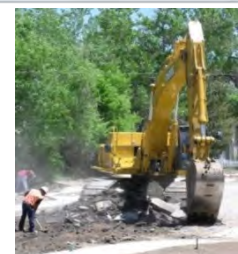
Tasks Performed: Roadway, Traffic, Phasing, Drainage, Water and Sanitary Design, Environmental Permitting, Utility Relocation



Project	Craig & Gould Infrastructure Improvements Project	Completion Date: 2005
Client	Town of Castle Rock Stormwater, David Van Dellen 720.733.2235	Budget/Actual Costs: \$14,000,000
Key Staff	Kevin Klimek, Bill Wemmert, Stan Vermilyea	

Project Description: The Craig & Gould Infrastructure Improvements Project (project) demonstrated the Town of Castle Rock's commitment to upgrade a neighborhood in the heart of its downtown, preserve the historic feel that residents valued and respond to citizen and agency input. In addition to key physical improvements, the project included extensive outreach and information dissemination to the neighborhood and to other Town departments.

Tasks Performed: Roadway, Traffic, Phasing, Drainage, Water and Sanitary Design, Environmental Permitting, Utility Relocation



2018 Castle Rock Design Services for the Craig and Gould North Infrastructure Improvements Project
Castle Rock CO

EXHIBIT 3

Friday, December 07, 2018
RFP
Engineering Fee Estimate

	Role	LABOR HOURS BY CLASSIFICATION																				HOURS	Budget		Geotech Drilling and Report	Utility Locates	COST
		Support Staff 1	Support Staff 2	Support Staff 3	Support Staff 4	Support Staff 5	Support Staff 6	Support Staff 7	Staff 1	Staff 1	Staff 1	Staff 2	Staff 2	Staff 2	Project 1	Project 3	Consultant 2	Consultant 2	Consultant 3	Consultant 3	Consultant 4						
		Name	Shaw	Pharo	Hirst	Stettmisch	Jones	Pryor	Crouch Mulhbrand Todaka	Lavery	Smokeoff	Ako	Jaeger	Phillippi	Lisberg Snow	Roerkohl Kindt Rodgers	Cole	Carrier	Vermileya	Wemmert	Klimek						
Billing Rate	\$48	\$61	\$72	\$82	\$95	\$105	\$115	\$88	\$88	\$88	\$100	\$100	\$100	\$133	\$153	\$199	\$199	\$215	\$217	\$231	TOTAL	LABOR		SUB	SUB	TASK	
Project Management and Meetings																											
Project Setup & PM Documents				16				8												8	1	1	\$230.00				
H&S Plan					8																32	\$3,810.00					
Prepare Project Financials/ Invoicing								24													8	\$660.00					
Meetings with Town													4		24	24				12	36	\$5,360.00					
Public Meetings (3)				24											8	12				44	98	\$17,270.00					
Closeout				8				8	48	8	8									12	120	\$12,860.00					
Sub Total		0	0	48	8	0	0	40	48	8	8	0	4		32	36	0	0	0	78	4	314	\$42,350.00	\$0	\$0	\$0	\$42,350
Phase I: Surveying and Site Investigation																											
Site survey, topo and improvement survey			80			80										2	2		8			172	\$14,900.00				
Goetchnical Investigation and Report																					2	\$430.00		\$22,500			
Utility locates and potholing									16		16	8				2	2		4	2		48	\$5,180.00			\$25,000	
Drainage									40													40	\$3,520.00				
Environmental							60									40						100	\$11,620.00				
Rail Coordination																20						20	\$2,660.00				
Sub Total Phase I		0	80	0	0	80	60	0	56	0	16	8	0		60	4	4	0	12	2	0	382	\$38,310.00	\$0	\$22,500	\$25,000	\$85,810
Phase II: Preliminary Design																											
Conceptual Drainage Design and Calculations									40		12	40				40	4			2		138	\$15,930.00				
Conceptual Design Drawings									40		8	40		16		40	8			4		156	\$18,400.00				
Conceptual Cost Estimate									16	4	8	24	1	16		4	4			2		64	\$6,940.00				
Alternatives Memo				8						30	8	20	30		4	40	4			2		146	\$16,800.00				
QA/QC										2					4			8		4	2	24	\$4,430.00				
Hydraulic Modeling											40											40	\$3,520.00				
Rail Coordination															20							20	\$2,660.00				
Sub Total Phase II		0	0	8	0	0	0	0	96	36	76	124	31	16	29	124	24	8	0	14	2	588	\$68,680.00	\$0	\$0	\$0	\$68,680
Phase III: Final Project Design																											
30% Design																											
30% Design Drawings									120	200	20	80	120	100	40	24	16			8		728	\$73,830.00				
30% Drainage Design and Calculations									80		8	60				24						172	\$17,420.00				
30% Cost Estimate									8	4		8	2		1	4	4			2		33	\$4,030.00				
QA/QC															30		4	8		2		44	\$6,810.00				
90% Design																											
90% Design Drawings									200	220	40	100	160	140	60	24	24			16		984	\$100,380.00				
90% Grading, Erosion and Sediment Control (GESC)									40			24				10						74	\$7,450.00				
90% Technical Specifications				16					16	40	20	8	8		4	4	8			8		132	\$13,910.00				
90% Phase II Drainage Report				8					40			20				8						76	\$7,320.00				
90% Construction Cost Estimate									8	8	8	8	2			4	4			4		46	\$5,390.00				
90% Easement Descriptions and Exhibits						80				4			2		2	4			24			112	\$13,580.00				
Environmental Permitting							40								40	8						88	\$10,740.00				
QA/QC															40	16		8		2	2	68	\$10,260.00				
100% Design																											
100% Design Drawings									120	120	20	40	40	70	16		8			8		442	\$43,340.00				
100% Grading, Erosion and Sediment Control (GESC)									24			12				4						40	\$3,920.00				
100% Technical Specifications									8	8	20				2	4	4			4		50	\$5,710.00				
100% Phase III Drainage Report									20			8				4						32	\$3,170.00				
100% Construction Cost Estimate									8	2	2	4	1			4	4			4		29	\$3,830.00				
100% Easement Descriptions and Exhibits						40				2			1			2	2		16			63	\$8,220.00				
QA/QC															8		8			8	2	34	\$6,450.00				
Sub Total Phase III		0	0	24	0	120	40	0	692	608	138	372	336	310	243	144	86	24	40	66	4	3247	\$345,760.00	\$0	\$0	\$0	\$345,760
Totals		0	80	80	8	200	100	40	892	652	238	504	371	326	364	308	114	32	52	160	10	4531	\$495,100.00	\$0	\$22,500	\$25,000	\$542,600
		Subconsultant Costs																					\$0	\$22,500	\$25,000	\$47,500	
		Project Total																								\$542,600	
		Additional Services																									
		SUE Investigation																								\$40,500	
																										Total = \$583,100	