



**TOWN OF CASTLE ROCK
EQUIPMENT AND SERVICES ACQUISITION AGREEMENT
(Design Services for Industrial Tributary Trail)**

DATE: _____

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

WILSON & COMPANY, INC., ENGINEERS & ARCHITECTS, a Kansas corporation, 990 S. Broadway, Suite 220, Denver, Colorado 80209 (“Consultant”).

RECITALS:

- I. The Town issued a Request for Proposals from qualified consultants with expertise in engineering services.
- II. Consultant timely submitted its Proposal.
- III. The Town wishes to engage Consultant to provide the services more fully described in the following Agreement and Exhibits.

TERMS:

1. **Scope of Services.** Consultant shall perform all of the services and provide all materials as set forth on *Exhibit I* (“Services”). Consultant shall complete the Services consistent with Standards of Care. Consultant shall abide by the CDOT Professional Services Local Agency Civil Rights and DBE Program Requirements located at <https://www.codot.gov/business/civilrights/la-compliance/ps/2022-local-agency-professional-services-contract-requirements.pdf>.

2. **Payment.** The Town’s total obligation to Consultant under this Agreement for the Services shall not exceed \$1,089,121.00, unless authorized in writing by the Town. Consultant shall invoice Town upon completion of the Services. Town may withhold payment in whole, or in part for the Services found by the Town to be defective, untimely, unsatisfactory, or otherwise not conforming to this Agreement, not in conformance with all applicable federal, state, and local laws, ordinances, rules and regulations, (provided that with respect to the performance of professional services, it is understood and agreed that Consultant’s obligation is to exercise the Standard of Care to comply with laws, codes, regulations and other such requirements and the requirements of any authority having jurisdiction over the project specifically applicable to the performance of such services or the preparation of any documents), or if Consultant is in default of the Inspection and Warranty Section herein, below. Town shall remit payment, whether whole or in part within fifteen (15) days of receipt of such invoice.

3. **Term/Completion.** The term of this Agreement shall commence on September 20, 2023 and expire on December 31, 2024 (the “Term”). The Parties may mutually agree to extend the Term of this Agreement for no more than two (2) years under the same terms and conditions by a written amendment to this Agreement prior to the expiration of this Agreement. Nothing in this paragraph prohibits the parties from amending the payment section should the Parties elect to extend the term of the Agreement. Consultant shall complete any Services in progress as of the expiration date. Consultant shall devote adequate resources to assure timely completion of the Services in accordance with the standards specified in this Agreement. 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 in the same or similar



locality (the “Standard of Care”). Consultant expressly disclaims all express or implied warranties and guarantees with respect to quality of performance of professional services.

4. **Termination.** Town shall have the right to terminate this Agreement with or without cause at any time with ten (10) 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. Upon termination, Consultant shall immediately turn over all work product, materials, deliverables created up to the point of termination subject to Town’s payment obligations.

5. **Subconsultants.** Consultant may utilize subconsultants to assist with specialized Services as necessary to complete the Services. Consultant will submit any proposed subconsultant and the description of subconsultant services to the Town for its prior approval.

6. **Inspection and Warranty.** Town reserves the right to inspect the Services provided under this Agreement at all reasonable times and places during the term of this Agreement. Alternatively, the Town may refuse the Services and cancel all or any part of this Agreement if Consultant fails to deliver all or any part of the Services in accordance with the terms and conditions of this Agreement. Failure by the Town to inspect and test the Services shall not relieve Consultant of such responsibility. Any acceptance by the Town shall not be deemed a waiver or settlement of any defect or nonconformity in such Services. If Town elects to accept nonconforming or defective Services, Town, in addition to its other remedies, shall be entitled to deduct a reasonable amount from the price thereof to compensate Town for the nonconformity or defect. Consultant expressly warrants that all materials and/or equipment furnished under this Agreement shall be free from defects in materials or workmanship, are installed properly and in accordance with the manufacturer recommendations or other industry standards, and will function in a failure-free manner for a period of one (1) year from the date of delivery or installation. Consultant, shall, at its option, repair or replace any material and/or equipment that fail to satisfy this warranty during the warranty period. Additionally, Consultant agrees to assign to the Town all written manufacturer warranties relating to the supplies and to deliver such written warranties to the Town.

7. **Risk of Loss.** With respect to any goods or equipment provided under this Agreement, risk of loss shall not pass to the Town until such equipment has been received and accepted by the Town, pursuant to the Inspection and Warrant Section herein, above, at the destination specified by the Town. Consultant assumes full responsibility for packing, crating, marking, transporting, and liability for loss or damage in transit, notwithstanding any agreement by the Town to pay freight, express or other transportation charges. Notwithstanding any other provision of this Agreement, as it relates to the performance of Services, references in this Agreement to errors, omissions, defects, deficiencies, fault or the like shall mean a failure of Consultant to exercise the Standard of Care in the performance of its Services.

8. **Annual Appropriation.** The continuance of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement by the Town. If the Town fails to appropriate sufficient monies to provide for the continuance of the Agreement, the Agreement shall terminate on the final day preceding the date of the beginning of the first fiscal year for which funds are not appropriated. 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.

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



10. **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.

11. **Insurance.**

A. **General Conditions:** Consultant agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Consultant shall keep the required insurance coverage in force at all times during the term of the Agreement, including any extension thereof, and during any warranty period. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-VII" or better. Each policy shall require notification to the Town in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the Town. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, Consultant shall provide written notice of cancellation, non-renewal to the Town by mail within three (3) business days of such notice by its insurer(s). Consultant shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Consultant. The Consultant shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement. All general and automobile liability policies shall have the following additional provisions:

- Severability of interests or separation of insureds provision;
- Provision that coverage is primary and non-contributory with other coverage maintained by the Town;
- The underlying Agreement is an "insured contract" under the policy; subject to standard ISO CA/CG0001 coverage terms and conditions
- Defense costs shall be outside the policy limits for liability coverage.

B. **Proof of Insurance:** Consultant may not commence services or work relating to this Agreement prior to placement of coverages required under this Agreement. Consultant certifies that the certificate of insurance attached as *Exhibit 2*, preferably an ACORD form, complies with all insurance requirements of this Agreement. The Town's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Consultant's breach of this Agreement or of any of the Town's rights or remedies under this Agreement. 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 (10 days in the event of non-payment premium). 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 may require additional proof of insurance.

C. **Additional Insureds:** For Commercial General Liability and Automobile Liability, Consultant and subconsultant's insurer(s) shall include the Town, its elected and appointed officials,



officers, employees and volunteers acting within the course and scope of their duties for the Town as additional insured.

D. **Waiver of Subrogation:** For all coverages required under this Agreement, Consultant's insurer shall waive subrogation rights against the Town, its elected and appointed officials, officers, employees, agents and volunteers acting within the course and scope of their duties for the Town.

E. **Subconsultants:** Consultant shall confirm and document that all subconsultants (including independent Consultants, suppliers or other entities providing goods or services required by this Agreement) procure and maintain coverage as approved by the Consultant and appropriate to their respective primary business risks considering the nature and scope of services provided.

F. **Workers' Compensation and Employer's Liability Insurance:** Consultant shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims.

G. **Commercial General Liability:** Consultant shall maintain a Commercial General Liability insurance policy with minimum limits of \$1,000,000 for each occurrence and \$2,000,000 products and completed operations aggregate, and \$2,000,000 general aggregate (per project). The policy shall provide coverage for all claims for bodily injury, property damage (including loss of use), products and completed operations, and contractual liability, subject to ISO form CG 00 01 coverage terms and conditions..

H. **Automobile Liability:** Consultant shall maintain Automobile Liability with minimum limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.

I. **Professional Liability (Errors & Omissions):** Consultant shall maintain minimum limits of \$1,000,000 per claim and \$1,000,000 policy aggregate limit. The policy shall be kept in force, or a Tail policy placed, for three (3) years after the completion of the services.

12. **Colorado Governmental Immunity Act.** 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 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.

13. **Indemnification.** Consultant expressly agrees to defend, indemnify and hold harmless Town or any of its agents, 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 Services 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. These defense and indemnification obligations shall survive the expiration or termination of this Agreement.

14. **Delays.** Any delays in or failure of performance by any party of the 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 reasonable control of such party.

15. **Additional Documents & Entire Agreement.** The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement. Further, 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.

16. **Time 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.

17. **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 ten (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.

18. **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.

19. **Venue, Choice of Law and Disputes.** Venue for all legal actions shall lie in the District Court in and for the County of Douglas, State of Colorado, and shall be governed by the laws of the State of Colorado as well as the Charter and Municipal Code, rules, regulations, Executive Orders, and fiscal rules of the Town.

20. **Americans with Disabilities Act.** Consultant agrees to exercise the Standard of Care to prepare or perform any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement, to include website design services, in compliance with all requirements of Title II of the Americans with Disabilities Act and, where applicable, Section 504 of the Rehabilitation Act, the Architectural Barriers Act, and the Colorado Anti-Discrimination Act. To the extent any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement fail to comply with the requirements of this Section, Consultant shall indemnify the Town in accordance with the terms of this Agreement and, at the Town's option, shall re-vise, re-construct, or similar, the non-compliant deliverable, work, service, or equipment, or reimburse the Town for the cost associated with bringing the non-compliance deliverable, work, service or equipment into compliance.

21. **No Discrimination in Employment.** The Town is a governmental agency and, therefore, in connection with the performance of Work or Services under this Agreement, Consultant shall not refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability, or any other protected class under Federal or State law; and Consultant shall insert the foregoing provision in any subcontracts hereunder.



22. **Advertising and Public Disclosure.** Consultant shall not include any reference to this Agreement or goods or services provided pursuant to this Agreement in any of Consultant's advertising or public relations materials without first obtaining the written approval of the Town. Nothing herein, however, shall preclude the transmittal of any information to officials of the Town, including without limitation, the Town Attorney, Town Manager, and the Town Council.

23. **Ownership of Documents, Open Records, and Copyright.** Any work product, materials, and documents ("Materials") produced by the Consultant pursuant to this Agreement shall become property of the Town upon delivery and shall not be made subject to any copyright or made confidential or protected in any manner unless authorized by the Town. Other materials, methodology and proprietary work used or provided by the Consultant to the Town not specifically created and delivered pursuant to the Services outlined in this Agreement may be protected by a copyright held by the Consultant and the Consultant reserves all rights granted to it by any copyright. However, Consultant acknowledges and understands that the Town is subject to the Colorado Open Records Act, C.R.S. § 24-72-201, et seq. The Town shall not reproduce, sell, or otherwise make copies of any copyrighted, confidential or protected material, subject to the following exceptions: (1) for exclusive use internally by Town staff and/or employees; or (2) pursuant to a request under the Colorado Open Records Act, C.R.S. § 24-72-201, et seq., to the extent that such statute applies; or (3) pursuant to law, regulation, or court order. The Consultant waives any right to prevent its name from being used in connection with the Services. Notwithstanding the foregoing or any other provision of this Agreement, Town's rights in and Consultant's obligations with respect to such Materials as provided in this Section 23 are conditioned on Consultant's receipt of all undisputed amounts due to it under this Agreement. Consultant shall have no liability for the use of any such Materials on any project other than the project which is the subject of this Agreement or modifications made to such Materials without its consent.

Consultant warrants that all Services or Work performed under this Agreement shall comply with all applicable patent, trademark and copyright laws, rules, regulations and codes of the United States. Consultant shall not utilize any protected patent, trademark or copyright in performance of the Work or Services unless Consultant has obtained proper permission and all licenses, releases and other necessary documents. Consultant releases, defends, indemnifies and holds harmless the Town, its officers, agents, and employees from any and all third party claims, suits, liabilities actions or proceedings and the resulting damages, costs and expenses of any kind or nature whatsoever, of or by anyone whomsoever, in any way resulting from, or arising out of, directly or indirectly, the performance of the Work or Services under this Agreement to the extent caused by infringement upon any patent, trademark or copyright protected by law.

24. **Authority.** The individuals executing this Agreement represent that they are expressly authorized to enter into this Agreement on behalf of the Town and the Consultant and bind their respective entities. This Agreement is executed and made effective as provided above.

25. **Independent Consultant.** Consultant has completed the Affidavit of Independent Consultant Status, attached as *Exhibit 3*, and submitted same at the time of execution of this Agreement. In addition to the Affidavit, Consultant and the Town hereby represent that Consultant is an independent Consultant for all purposes hereunder. 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.

26. **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.

27. **Counterparts & Electronic Signatures.** This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall be deemed to constitute one and the same instrument. Each of the parties hereto shall be entitled to rely upon a counterpart of the instrument executed by the other party and sent by electronic mail. Each party agrees that this Agreement and any other documents to be delivered in connection herewith may be electronically signed, and that any electronic signatures appearing on this Agreement or such other documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.

28. **Licenses/Taxes.** Consultant affirms it is licensed to do business in the State of Colorado and is in good standing. Further, Consultant shall be solely responsible for paying all applicable taxes associated with or rising out of this Agreement.

29. **Confidentiality.** Consultant agrees that it shall treat as confidential all information provided by the Town regarding the Town's business and operations. All confidential information provided by the Town hereto shall be used by Consultant solely for the purposes of rendering services or work pursuant to this Agreement and, except as may be required in carrying out the terms of this Agreement, shall not be disclosed to any third party without the prior consent of the Town. The foregoing shall not be applicable to any information that is publicly available when provided or which thereafter becomes publicly available or which is required to be disclosed by any regulatory authority in the lawful and appropriate exercise of its jurisdiction over a party, any auditor of the parties hereto, by judicial or administrative process or otherwise by applicable law or regulation.

30. **Priority of Provisions.** In the event that any terms of this Agreement and any Exhibit, attachment, or other referenced document are inconsistent, the following order of priority shall control: (1) this Agreement; (2) Exhibit containing Certificate of Insurance; (3) Exhibit containing the Scope of Services and Fee Schedule; and (4) Exhibit containing the Town of Castle Rock Affidavit of Independent Consultant Status.

ATTACHED EXHIBITS:

EXHIBIT 1 – SCOPE OF SERVICES AND FEE SCHEDULE

EXHIBIT 2 – CONSULTANT'S CERTIFICATE OF INSURANCE

EXHIBIT 3 – TOWN OF CASTLE ROCK AFFIDAVIT OF INDEPENDENT CONSULTANT STATUS

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK



ATTEST:

TOWN OF CASTLE ROCK

Lisa Anderson, Town Clerk

Jason Gray, Mayor

Approved as to form:

Approved as to content:

Michael J. Hyman, Town Attorney

Jeff Brauer, Director of Parks and Recreation

CONSULTANT:

WILSON & COMPANY, INC., ENGINEERS & ARCHITECTS

By: Michael W. King, PE

Digitally signed by Michael W. King, PE
DN: c=US, E=michael.king@wilson.com, O=Wilson
& Company, Inc., Engineers & Architects, OU=Denver
Area President, Transported, CN=Michael W. King,
PE,
Date: 2022.05.14 10:12:10-0600

Its: _____



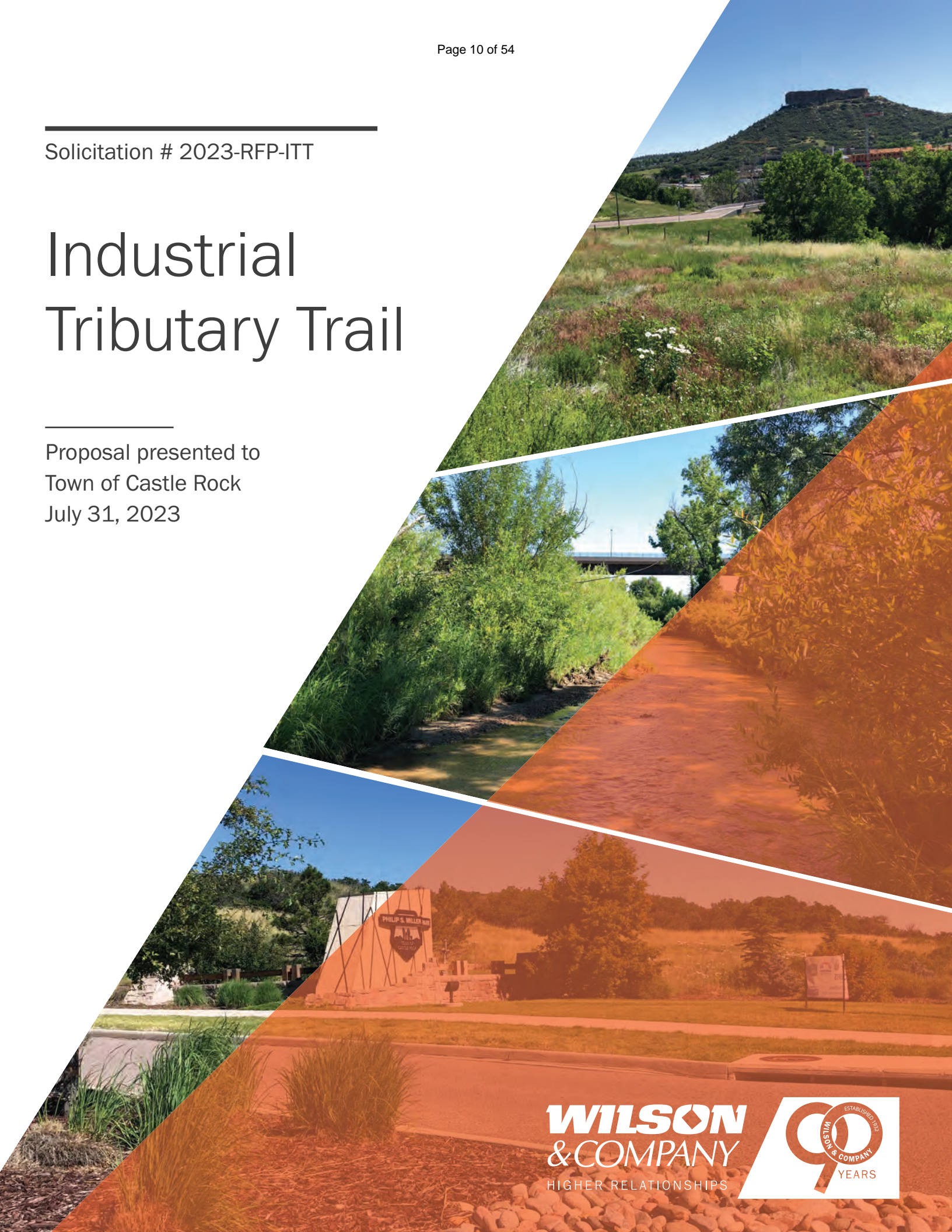
EXHIBIT 1

SCOPE OF SERVICES AND FEE SCHEDULE

Solicitation # 2023-RFP-ITT

Industrial Tributary Trail

Proposal presented to
Town of Castle Rock
July 31, 2023



WILSON
& COMPANY
HIGHER RELATIONSHIPS



July 31, 2023

Town of Castle Rock
Attn: Rich Havel, Trail Planner
100 N. Wilcox St., Castle Rock, CO 80104



8990 South Broadway, Suite 220
Denver, CO 80209
303 297 2976 (phone)
303 297 2693 (fax)
wilsonco.com

**RE: Request for Proposal (RFP)
Parks and Recreation - Design Consultant for Industrial Tributary Trail, Solicitation # 2023-RFP-ITT**

Dear Mr. Havel and Members of the Selection Committee,

The Industrial Tributary Trail connection is poised to make a lasting positive impact to the Town of Castle Rock (Town) by completing a link that provides a dedicated regional connection between downtown and western Castle Rock, and connectivity to the Philip S. Miller Park Complex, a great multi-function civic amenity. The Town needs a design consultant with expertise in engineering design, permitting services, and agency coordination to help accomplish the goals of this project as part of your local commitment to providing high quality parks and recreation facilities for your community.

Wilson & Company, Inc., Engineers & Architects (Wilson & Company) offers you a teaming partner who provides strong project management backed by in-house, multidisciplinary technical expertise. From our Denver office, we are well-positioned to serve the Town quickly and efficiently, with additional resources available from our Colorado Springs and Loveland, CO offices. Wilson & Company's local, in-house services are supplemented with specialty consultants, Fox Tuttle Transportation Group (Fox Tuttle); Lithos Engineering (Lithos); Pinyon Environmental (Pinyon); and Triunity, Inc. (Triunity) to deliver the comprehensive services required for this project. This team is tried and true, having delivered similar projects across the Front Range. By selecting the Wilson & Company team, the Town will receive:

- A proven project manager with in-depth experience delivering multimodal projects and projects requiring railroad interaction. Project manager Marc Devos' recent experience delivering several of the most complex multimodal projects in the Front Range is unparalleled and includes Brighton Boulevard 44th to Race Court; the National Western Center (NWC) Rail Consolidation project; Connecting Auraria multimodal improvements; and multiple bicycle/pedestrian improvement projects. Marc's experience coordinating with the BNSF Railway Company (BNSF) will help expedite approvals for this project.
- A multidisciplinary design team that has worked together on countless projects similar to yours including those requiring Colorado Department of Transportation (CDOT) local agency oversight and approvals, and grade separated crossings of railroads and waterways requiring Federal Emergency Management Agency (FEMA) approval. We will incorporate our recent lessons learned to impart the most value to the implementation of the project.
- A responsive and available team primed to deliver on schedule once notice to proceed (NTP) is received. Wilson & Company understands that unforeseen challenges can cause delays. Our solution is a well-developed schedule that offers time for design reviews, utility coordination, and public engagement.

Wilson & Company's team is committed to being a trusted partner of the Town where we share your goals and contribute to your success. Should you desire additional information or have any questions, please contact me by email, at Marc.Devos@wilsonco.com or by phone at 303 501 1211. We acknowledge receipt of Addendum 1, dated July 11, 2023; Addendum 2, dated July 17, 2023; and Addendum 3, dated July 19, 2023.

Sincerely,

Marc Devos, PE
Project Manager

Scott Waterman, PE
Principal-in-Charge/Authorized Officer

Section 2

Response to Scope of Work



Response to **scope of work**

This project encompasses many challenging elements with three grade separated crossings involving improvements in a floodplain, a railroad corridor, and a drainage channel while changing elevation by at least 40 feet. The Wilson & Company team's experience designing pedestrian bridges, tunnels, and the approaches to them allows us to quickly develop alignment options that meet horizontal and vertical alignment criteria, and identify the potential impacts and permitting requirements early in the concept stage.

A key permitting component will be evaluating impacts on the 100-year floodplain and determining potential mitigations. This is an involved process that our team is well versed in and requires a collaborative effort between the drainage and structures team like we recently performed for the Jewell Pedestrian bridge.

Our team will keep a constant focus on the elements (environmental, utilities, right-of-way (ROW), and construction documents) required to obtain approval from CDOT local agency branch as we have recently done on projects with Denver and Arapahoe County.

Railroad coordination

One key element of the project will be the need to be on BNSF ROW. Our team is very experienced developing public projects that impact BNSF and other railroad ROW and tracks. The key elements of the BNSF process are:

- Coordination meetings and design reviews. BNSF requires 30 days for all submittal reviews which lengthens the design schedule.
- Obtaining ROW licenses to be within or cross BNSF ROW. This is likely a revokable easement. Linear ROW impacts are less likely to be approved/agreed to by BNSF, compared to 90 degree crossings.
- Completing a construction and maintenance agreement that defines the Town and BNSF obligations for construction and long-term maintenance of the proposed improvements.

BNSF prefers overpasses and discourages the implementation of underpasses because of the disruption to their service due to the construction process. Tunneling does provide the advantage of not disrupting the track for a long period of time, being able to be implemented during track windows when there is no train traffic.

Wilson & Company staff worked for BNSF when the Fossil Creek Underpass in Fort Collins was constructed and will support the team with recommendations for getting BNSF approval of the concept.

Jeff Kay with Triunity provides this support to the City of Denver on nearly every public project that involves BNSF and has been involved in obtaining more than ten project agreements in the last two years.

Joey Holste with Wilson & Company regularly works with the local BNSF public projects group for this area, reviewing designs and overseeing construction on behalf of BNSF. For this project, he will support Jeff in coordinating with BNSF and providing input on design requirements and plan presentation to the design team to verify that the plans have everything that BNSF reviewers would want to see.

Trail design

On our opportunities and issues map (**Figure 3** on page 12), we show in grey the concept alignment previously provided. This concept required a switch back in order to make up the approximately 40-foot grade difference between the existing trail and the estimated elevation of the undercrossing of BNSF at an acceptable trail profile grade. Fill will be required in the Town ROW in order to minimize/avoid grading on BNSF ROW up to the trail location. Overall, the trail needs to be at least 800 feet long to attain a continuous 5% grade, which is 300 feet longer than a straight connection.

Our team has looked at several options to meet design standards for floodplain clearance, path geometrics, connectivity to Park St, minimizing maintenance and impacts on BNSF ROW, and needed ROW/easements from BNSF. On the issues map, we have identified the orange alignment as achieving all of these goals. Overall, the alignment is the same length but uses all that length to get to the BNSF crossing and therefore is flatter for bicyclists and trail users, while eliminating unsafe tight turns and the challenging configuration between BNSF and Prairie Hawk Drive.

Our biggest concern is the segment of trail that parallels and is between BNSF and Prairie Hawk Drive. This segment will impact BNSF ROW its entire length, and have impacts on existing drainage. Due to the depth below the road and railroad, retaining walls will be required to provide a widened impact area that includes shy distance from the wall(s) and an area for drainage collection and conveyance. **Figure 2** on the following page, presents two cross section alternatives for the trail location on the alignment shown in the RFP for the BNSF undercrossing. These show the relative location of the trail to Prairie Hawk Drive and BNSF's maintenance road and the walls and treatments that should be included. The third section shows the crossing under Prairie Hawk Drive into the Tributary corridor at the north. Further evaluations of the relative costs and impacts of each option will be completed during the trail alignment phase of the project. Guardrail should be included to protect traffic on roads on either side of the trail, increasing project cost and long-term maintenance.

The estimated trail elevation at the BNSF crossing is within a few feet of the trail elevation at the crossing under Prairie Hawk Drive. Because the area between the track and road is a drainage path, the trail should rise from the BNSF crossing going north and then breakover and go downhill to the Tributary crossing under Prairie Hawk rather than trying to stay low the entire way which would have a higher wall cost and make parallel drainage conveyance more challenging.



Ditch between BNSF and Prairie Hawk Drive.

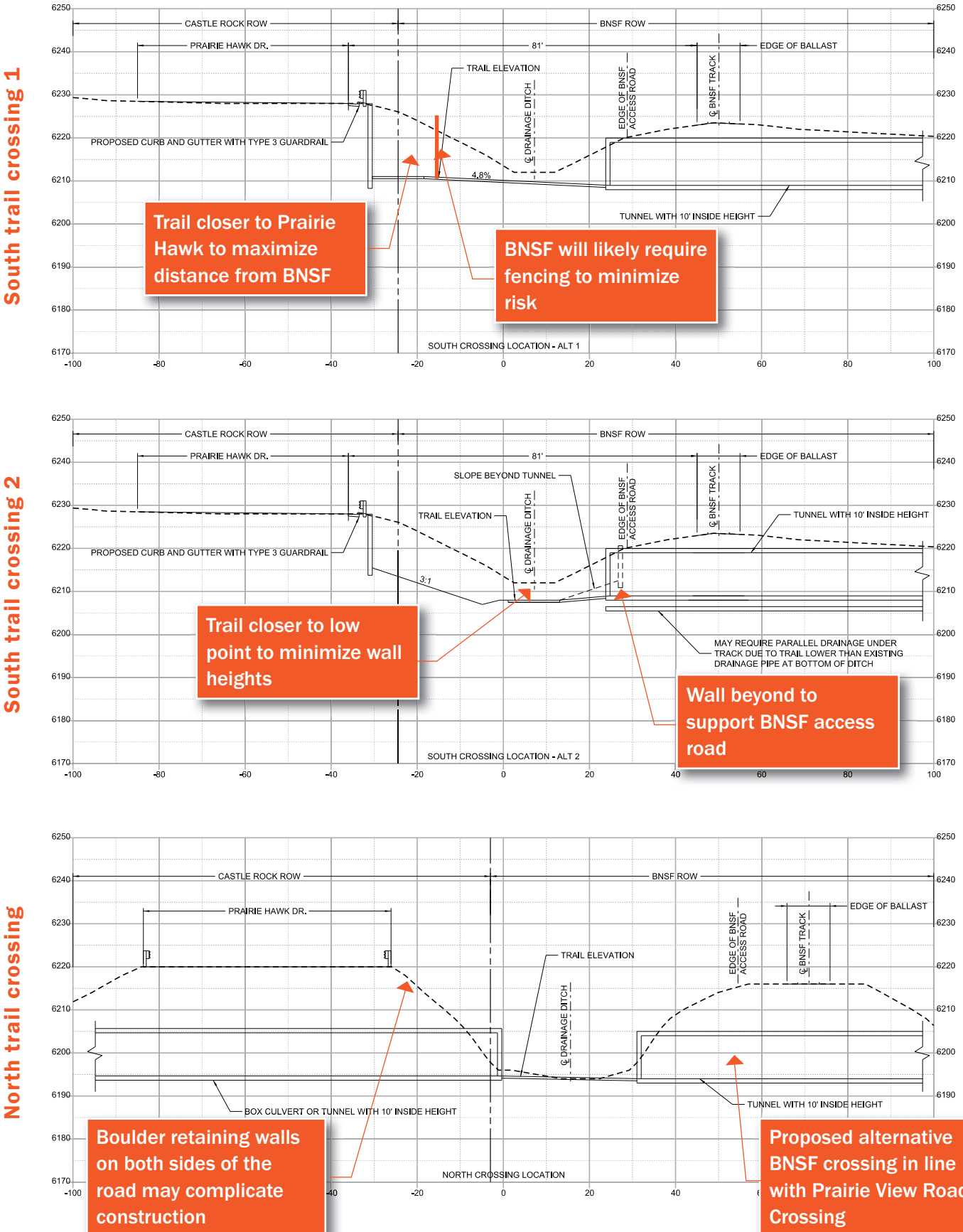


Boulder retaining wall adjacent to Prairie Hawk Drive.

Hydraulics

East Plum Creek is one of Castle Rock's most valuable features. A sustainable approach to this project is a must in order to protect all the aspects that this stream provides. As the stream is a Zone AE floodplain with a designated floodway, any improvements within the stream corridor will need to be cognizant of the floodplain

Figure 2. Cross sections of the BNSF undercrossing



impacts and environmental impacts. Most of the tie-in locations are within the 100-year floodplain. While a no-rise may reduce the amount of permitting, it is likely to increase the complexity of the design. The design team will attempt to reduce impacts on the floodplain to avoid a CLOMR; however, it is assumed that a CLOMR will be required. Both approaches discussed in the structural approach will require placing fill in the floodplain and will likely result in a CLOMR being required. These impacts will be examined to determine the amount of rise upstream and to verify that the impacts on the floodplain are minimized. There is an existing retaining wall upstream of the I-25 bridge which should not be overtopped by any rise caused by the project. In both approaches the trail will be installed above the 10-year water surface elevation (WSEL). This elevation will be determined initially by the 10-year WSEL shown in the flood insurance study and then verified by the modifications to the effective model for the CLOMR.

A floodplain modification study will be prepared and then used as the basis for the CLOMR application. A drainage report will be prepared to demonstrate compliance with the various criteria. The design team plans to work closely with the Stormwater Manager and CDOT regarding the drainage design. As this project is a dedicated bike/pedestrian trail, it is classified as exempt in the Town's Municipal Separate Storm Sewer System (MS4) general permit under Section E.4.a.i.(I). While this section eliminates the need for this project to install permanent stormwater best management practices (BMP) measures, it does not exempt it from still following the provisions of the construction sites program during construction and all other floodplain and other environmental regulations and requirements. A Summary of Water Quality Conformance to MS4 Permit form will still be filled out and submitted with the plans. While no permanent water-quality BMPs will be included, the project will still confirm that any disturbed area is revegetated and returned to pre-construction conditions. A Standard Temporary Erosion and Sediment Control (TESC) Permit will be obtained following the Town's TESC Manual requirements.

Surrounding the proposed boring under the railroad, there are drainage channels running along the tracks which convey flow from a moderate upstream tributary area. The proposed design will avoid conveying these flows to the pedestrian crossing where they could leak along the trail and cause a nuisance. The project design will verify that these flows are conveyed to their existing downstream culverts and that the proposed trail crossing does not serve as a primary drainage conveyance structure.

There is an existing stormwater outfall near the project area discharging from I-25 and into the ditch on the eastern side of the trail. Should the final alignment of the trail structure be close to this outfall, resolving this drainage issue by pointing the flows toward the creek rather than running parallel to the trail will be included in the design.

The East Plum Creek Stormwater Master Plan shows several water-quality ponds and a drop structure within the project area. These improvements can be incorporated into the design or the project can be designed such that future incorporation of these features can be easily brought in without impacting the proposed trail crossing.



Existing retaining wall upstream of I-25 Bridge over East Plum Creek.



An eroded and ponded channel adjacent to the trail leading from an outfall from I-25. If practical, a remedy to this drainage issue to get the flows under the trail will be incorporated into the design.

Structures

The fundamental issue to be solved regarding the bridge across East Plum Creek is minimizing the hydraulic impacts. A LOMR/CLOMR will be required if the flood water elevations rise and will be approved if no insurable structures are negatively impacted. The existing trail west of I-25 is below the 100-year water surface elevation, and within the floodway. It is, however, above the 10-yr WSEL, which is consistent with Town criteria. Any new embankment or structure will increase the backwater elevations. We have looked into two preliminary strategies to keep the impact of the structure on the flood water elevations to within tolerable limits.

The first strategy is to use a prefabricated steel truss for the bridge structure (see picture to the right) to place the bridge above the 10-year and preferably the 25-year water surface elevations. The structure would impact the 100-year event and to mitigate these impacts, the bridge could be allowed to “break-away” during these large events. This is accomplished by simply omitting the nuts on the anchor bolts.

This allows the superstructure to be lifted off the anchor bolts in a large flood event. A lanyard cable would be installed at one abutment to prevent the bridge from being transported too far and being damaged by tumbling in the flood. Once the floodwaters recede, the superstructure can be raised with a crane and reset to its original location. Boulder County has used this strategy to provide structures within the floodway of several of their streams, allowing a more natural and intimate trail experience for users. Mark Hildahl was involved in 2013 with the successful re-setting of the Coal Creek Trail Bridge over Coal Creek in Flagg Park.

The second strategy is to use a low-profile bridge with short spans near the normal flow levels but below the 10-year water surface of the creek. This will be similar to the existing trail bridge over E. Plum Creek north of Park Street (see picture at bottom right). The bridge would consist of a concrete slab (12”-18” thick) and, if needed, would incorporate a safety railing for fall protection (the existing bridge does not include a railing). The advantages of this approach include 1) a minimal obstruction in the flood plain; 2) reduced structure cost; 3) reduced structure area requiring maintenance; and 4) the minimal visual impact fits well within the natural context. The primary disadvantage of this approach is that the trail will be inundated more frequently, approximately every 2 to 10 years, depending upon the trail profile.

During conceptual design, we will explore each of these options to determine which best fits with the Town’s goals. Benefits and drawbacks will be examined and summarized in the structure selection report, along with cost estimates and a recommended structure type.



Pre-fabricated bridge to span at least 10-year floodplain provides greater resiliency.



Low profile structure with decreased footprint but more frequent inundation.

Tunneling

Trenchless design involves balancing constraints imposed from three primary sources: geological, layout, and third parties. The geology and layout primarily affect which tunneling excavation and support techniques may be used. Third parties primarily affect design deliverables.

As a first step for any trenchless design, geotechnical data must be reviewed and collected. Existing geotechnical literature is available for nearby developments; however, we anticipate additional geotechnical data to be collected using geotechnical test boreholes (“borings”) and a test pit. One test borehole is recommended to be conducted on BNSF property with a flagger to aid in exploring for adverse fill materials, including construction rubble associated with the railroad fill. The test pit will aid in assessing over-sized material that would hinder certain excavation techniques.

After the geotechnical data is obtained, risks and risk mitigation strategies will be presented in a workshop to obtain design team input and consent on key design aspects impacting the alignment. The results will manifest in design deliverables, which may include:

- Technical design memorandum analyzing trenchless techniques, settlement/heave, major risks and risk mitigation strategies, steel casing design, and portal design. This deliverable will be provided to BNSF for review.
- Geotechnical baseline report to aid the contractor in bidding the project, help allocate risk between owner and contractor, and provide consistency in bids.
- Trenchless specifications and drawing details including modifications to CDOT specifications to account for:
 - Tunnel excavation and initial support
 - Construction shafts
 - Carrier pipe installation and backfill
 - Tunnel instrumentation and monitoring
 - Contact grouting



The Fossil Creek Pedestrian Tunnel (Lithos staff experience) spans 70 linear feet underneath BNSF.

Lithos has experience with all likely tunnel excavation methods, use of jacked steel casing for initial and final support, and with risk mitigation strategies to prevent damage to the railway, including but not limited to canopy tubes, ground improvement, and closed-face tunneling.

Environmental clearance and permitting

The Wilson & Company team has significant experience navigating the environmental process and delivering clearances/permits for local agency projects seeking to use federal funds. Our environmental lead, Jon Chesser, worked as an environmental program and project manager for CDOT Region 1 and headquarters for 11 years, leading numerous teams to successfully deliver a wide range of environmental services for CDOT and local agencies. We would expect to clear this project with a CE (CDOT Form 128) under category C3 for construction of bicycle and pedestrian lanes, paths, and facilities. Based on our understanding of the work and experience on similar projects, the following resources are critical to successful completion of CDOT Form 128 clearance:

Biological resources | Our team will conduct a desktop review and field visit of the project area to assess potential impacts to biological resources. A biological resources report (BRR) will be developed addressing wetlands, waters of the U.S., vegetation, noxious weeds, threatened and endangered species, and migratory birds. Collaboration with the design team will be key in avoiding and/or minimizing impacts to biological resources.

Section 404 permitting | The project includes a proposed crossing of Bridge Creek, a USACE jurisdictional waterway. If impacts are unavoidable, a Section 404 permit will be required through the USACE, likely a Nationwide Permit 14 for Linear Transportation Projects. As required based on the nature of project impacts, our team will prepare and submit a pre-construction notification (PCN) and all supporting materials.

Archaeology resources | A permitted archaeologist from Pinyon will conduct a Class III cultural resources inventory within the established area of potential effects (APE). No cultural resources are anticipated within the project APE that will require documentation. Results of the Class III inventory will be documented to agency and Colorado Office of Archaeology & Historic Preservation (OAHP) reporting standards and guidelines using appropriate reports and forms as necessary.

Historic resources | In coordination with CDOT, Pinyon will develop an APE and will assess the presence of potential historic resources. Our team will provide documentation for compliance with Section 106 and historic Section 4(f), including historic site evaluation forms; eligibility and effects letter; APE map; and historic Section 4(f) de minimis form(s). Preliminary review indicates that several potentially eligible resources may be present including Phillip S. Miller Park, Fifth Street, and BNSF.

Hazardous materials | Our team will complete an initial site assessment (ISA) technical report including an agency database review. Based on results of the analysis, project specifications and general notes regarding construction will be prepared and included in the project plans.

Our team will work with Town staff to verify that all applicable requirements from local guidelines and ordinances are met through project design and construction.

Utilities












Another key element of the project will be defining utilities throughout the trail alignment, notably along the BNSF corridor where there are communication lines and the Black Hills gas line.

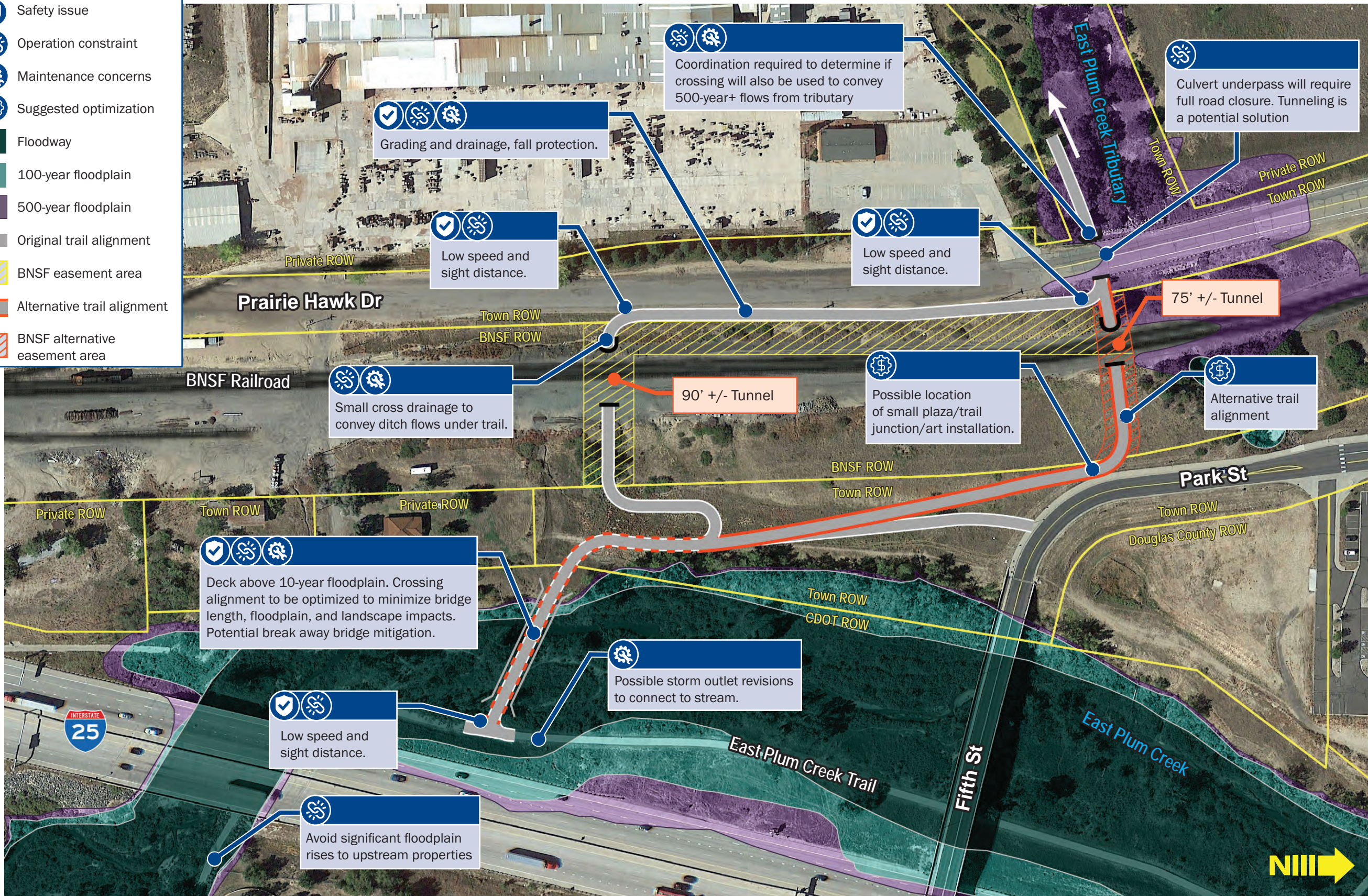
Triunity has established themselves as the best SUE firm in Colorado. Their great relationships with private utility companies improves the utility coordination process, resulting in an easier clearance process to satisfy CDOT local agency requirements.

Triunity will obtain utility location maps from the utility owners (Quality Level D), develop utility base plans, and evaluate potential utility conflicts. Subsurface designating (Quality Level B) will be performed to further define the location of conflicting utilities and SUE plans will be developed. As the design advances and coordination with utility companies determines more information is needed, a test hole plan (currently estimated to be ten locations) will be developed for review by the project team. Data from the test holes (Quality Level A) will be incorporated into the drawings to further inform design and protections. Adjustments or mitigations will be defined on the plans. A SUE report will be provided to document the process and findings including a utility matrix that defines all utilities, their level of investigation, impacts, and final resolution. Additional deliverables include coordinating utility company activities, preparing a utility specification, obtaining estimates of project-related costs, developing agreements with each affected utility company, and drafting the utility clearance letter for the Town to submit to CDOT.

Figure 3. Opportunities and issues map

LEGEND

-  Safety issue
-  Operation constraint
-  Maintenance concerns
-  Suggested optimization
-  Floodway
-  100-year floodplain
-  500-year floodplain
-  Original trail alignment
-  BNSF easement area
-  Alternative trail alignment
-  BNSF alternative easement area

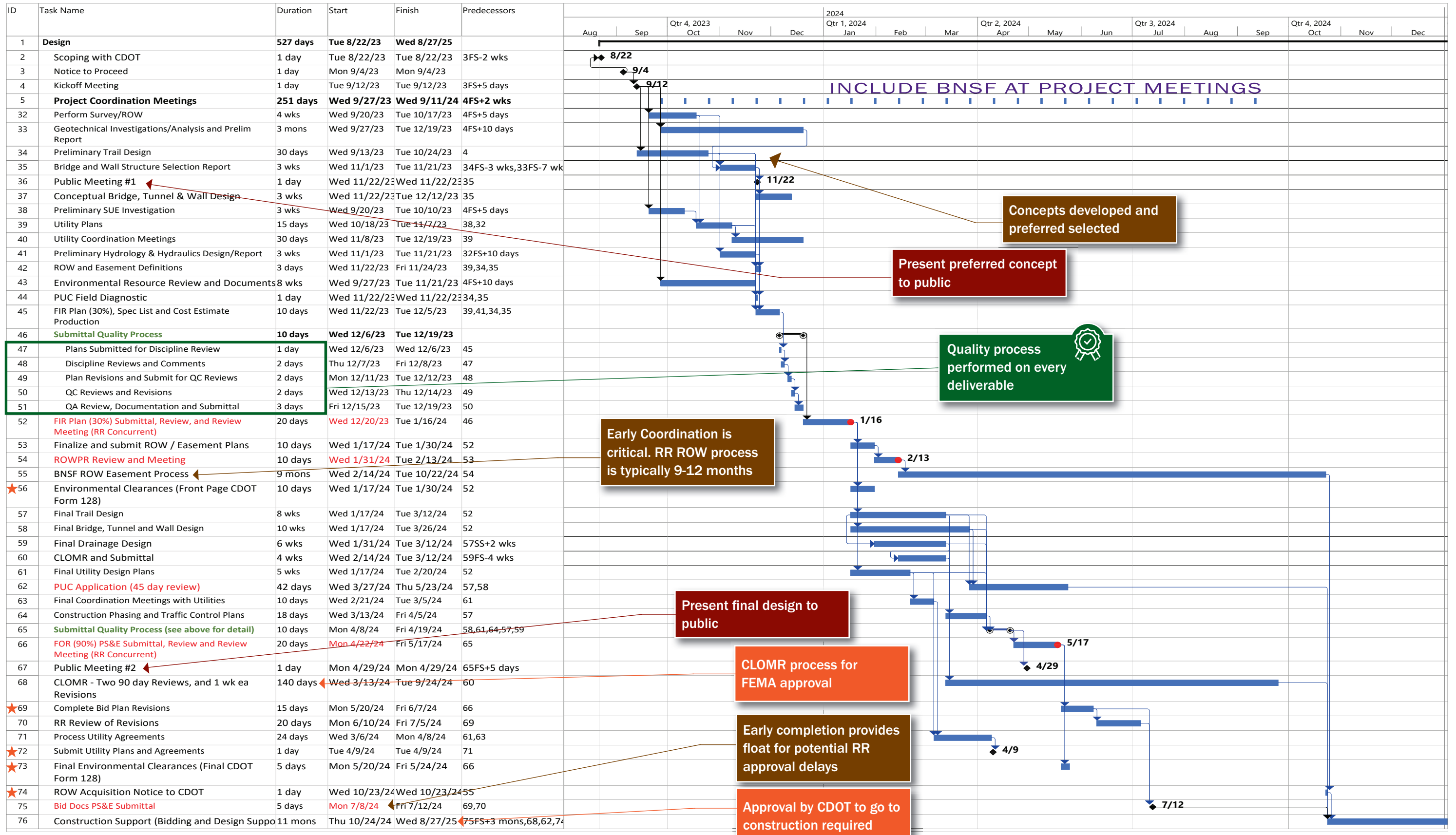


Section 3

Action Plan and Schedule



Figure 4. Schedule



★ CDOT clearance item

Draft list of **deliverables**

The following sections describes at a minimum what the Town will receive for formal submittals. Formal submittals shall be subject to review and comment periods by Town staff, BNSF, CDOT, project partners, and other stakeholders prior to acceptance. Other deliverables to support meetings or stakeholder coordination may also be required.

Reports, memorandums, and permits (all submitted with or prior to 60% submittal)

- Public outreach plan – coordinate, schedule, and lead/support two public meetings
- Trail design criteria table
- Hydraulics/drainage and GESC reports
- Structure selection report (bridge and retaining walls)
- Geotechnical design report (preliminary and final)
- Environmental resource reports
- PUC field diagnostic meeting minutes

FIR plan submittal

- Plan package
 - Title sheet
 - Typical sections
 - General notes
 - Survey control diagram and tabulation
 - Geometric control layout
 - Utility/SUE plans
 - Utility opinion of probable cost
 - Removal plans
 - Trail plan and profiles
 - Retaining wall plans
 - Pedestrian bridge plans (including engineering geology plans)
 - Pedestrian tunnel plans (including engineering geology plans)
 - Pedestrian culvert plans (including engineering geology plans)
 - Trail cross sections (20 feet interval)
- Specification list
- Engineer’s opinion of probable ,cost
- CE (CDOT Form 128) – top half
- Comment resolution
- ROW plans following FIR review to initiate acquisition process

FOR PS&E submittal

- Plan package
 - Title sheet
 - Standard plans list
 - Typical sections
 - General notes
 - Summary of approximate quantities
 - Tabulation of quantities
 - Survey control diagram and tabulation
 - Geometric control layout
 - Removal plans
 - Trail plans and profiles (including necessary details)
 - Stormwater management plan template and plans retaining wall plans
 - Pedestrian bridge plans (including engineering geology plans)
 - ROW plans
 - Utility/SUE plans
 - Utility opinion of probable cost
 - Utility specifications
 - Trail cross sections (20 feet interval)
- Specification package
- Engineer’s opinion of probable cost
- CE (CDOT Form 128) – complete
- Comment resolution
- BNSF construction and maintenance agreement
- PUC application support
- ROW clearance

Bid Documents PS&E Submittal

- Same as 90% deliverables
- Utility/SUE plans
 - Utility opinion of probable cost
 - Utility specifications
 - Utility clearance letter(s)

Section 5

**Request for Proposal
Confidentiality**



Request for **proposal confidentiality**

Wilson & Company's proposal does not contain any confidential information.

Appendix

Appendix B – Affidavit of Small Business Participation

Rate sheet

References

Resumes



Affidavit of small business participation

Colorado Department of Transportation AFFIDAVIT OF SMALL BUSINESS PARTICIPATION

Project Description Trail design	Contract NTE \$
	DBE Contract Goal % 4 %

SECTION 1. CONSULTANT INFORMATION

Prime Consultant Wilson & Company, Inc., Engineers & Architects	Consultant is an ESB <input type="checkbox"/>
Compliance Contact Name Mark Scholfield, PE, DBIA	Consultant is a DBE <input type="checkbox"/>
Email mark.scholfield@wilsonco.com	Address 8990 South Broadway, Suite 220 Denver, CO 80209
	Phone 303 501 1226
	B2GNow Vendor # 20063921

SECTION 2. DBE PARTICIPATION PLAN

Fill in All Lines:

- * The consultant is committing to 0 # of DBE firm(s) not teamed with in the past 2 years (as of ad date of RFP, firms with unsuccessful bids allowed, each firm must be listed in this section).
- * The consultant is committing to **approximately** \$ \$50,000 of DBE participation based on NTE \$.
- * The consultant is committing to **approximately** 4 % DBE goal based on the NTE \$.

The Prime Consultant shall submit a Professional Services Commercially Useful Function Questionnaire for every DBE on this contract that provides work or provides supplies whose participation counts toward the DBE contract goal for this contract.

All DBE firms (Subconsultants, Supplier/Vendors, Prime if self performing)	Vendor	Work Descriptor (i.e. survey, testing)	NEW DBE Teaming Partner?	ONLY for <i>Project/Program Specific</i> RFP/SOIs Approximate % of Participation
Triunity, Inc.	<input type="checkbox"/>	SUE, rail support	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more DBE subs/suppliers vendors, add additional sheet

Colorado Department of Transportation AFFIDAVIT OF SMALL BUSINESS PARTICIPATION

SECTION 3. ESB PARTICIPATION PLAN

Fill in **All** Lines:

- * The consultant is committing to 0 # of ESB firm(s) not teamed with in the past 2 years (as of ad date of RFP, firms with unsuccessful bids allowed, each firm must be listed in this section).
- * The consultant is committing to **approximately** \$ 0 of ESB participation on this RFP/SOI.
- * The consultant is committing to **approximately** 0 % ESB goal based on the NTE \$.

All ESB firms (Subconsultants, Suppliers/Vendors, Prime if self performing) and Level	Work Areas (i.e. survey, testing)	New ESB Teaming Partner?	ONLY for <i>Project/Program Specific</i> RFP/SOIs Approximate % of Participation
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Vendor		<input type="checkbox"/> Yes <input type="checkbox"/> No	

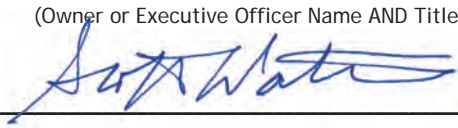
If more ESB subs/suppliers/vendors, add additional sheet

SECTION 4. DECLARATION OF AFFIDAVIT

By signing below the Consultant affirms the statements made in this document are true and complete:

The Consultant shall make good faith efforts to meet the contract goal for each task order under the overall contract. The Consultant understands that making good faith efforts to achieve the contract goal is a condition of contract award. The Consultant understands that promised participation is a binding obligation of the contract if awarded. The Consultant attests that the information above is true and understands that a fraudulent misrepresentation or failure to make good faith efforts to meet the contract commitments or promised participation may result in the withholding of progress payments, reduction of prequalification status, referral of the matter to the Office of Inspector General of the USDOT and/or other contractual remedies.

I, **Scott Waterman, PE, Vice President** of **Wilson & Company, Inc., Engineers & Architects**
(Owner or Executive Officer Name AND Title) (Consultant Company Name)



 July 31, 2023
(Tracked Signature Accepted) (Date)

Rate sheet

The rates listed below are consistent with what we charge for all governmental entities and do not represent a discounted rate.

Wilson & Company, Inc., Engineers and Architects		
<u>Rate Table</u>		
CLASSIFICATION	RATE*	DESCRIPTION
Engineer/Technical Specialist XXV	\$300.00	Principal III
Engineer/Technical Specialist XXIV	\$290.00	Principal II
Engineer/Technical Specialist XXIII	\$280.00	Principal I
Engineer/Technical Specialist XXII	\$270.00	Project Manager IV
Engineer/Technical Specialist XXI	\$260.00	Contract Manager, Project Manager III, Sr. Engineer III
Engineer/Technical Specialist XX	\$250.00	Project Manager II, Senior Engineer III
Engineer/Technical Specialist XIX	\$240.00	Project Manager I, Senior Engineer III
Engineer/Technical Specialist XVIII	\$230.00	Project Manager II, Senior Engineer II, Senior Engineer III
Engineer/Technical Specialist XVII	\$220.00	Project Manager I, Sr. Engineer II, Construction Manager
Engineer/Technical Specialist XVI	\$210.00	Sr. Engineer II, Project Manager I, Environmental Lead
Engineer/Technical Specialist XV	\$200.00	Project Manager I, Sr. Engineer I, Survey Manager
Engineer/Technical Specialist XIV	\$190.00	Sr. Engineer I, Engineer III, Construction Manager
Engineer/Technical Specialist XIII	\$180.00	Sr. Engineer I, Engineer III, Professional Surveyor III
Engineer/Technical Specialist XII	\$170.00	Professional Surveyor II, Senior Engineer I, Engineer III, Senior Architect
Engineer/Technical Specialist XI	\$160.00	Engineer II, Professional Surveyor I
Engineer/Technical Specialist X	\$150.00	Engineer II, Sr. Graphics Designer
Engineer/Technical Specialist IX	\$140.00	Biologist, Engineer I, Engineer II, Project Accounting
Engineer/Technical Specialist VIII	\$130.00	Hazardous Materials Specialist, Engineer I, Architect, Sr. CADD Tech
Engineer/Technical Specialist VII	\$120.00	Engineer I, Jr Engineer III, CADD Tech II
Engineer/Technical Specialist VI	\$110.00	Jr Engineer III, Construction Observer II, Party Chief III, Project Accounting
Engineer/Technical Specialist V	\$100.00	Jr Engineer II, Construction Observer I, Party Chief II
Engineer/Technical Specialist IV	\$90.00	Jr Engineer I, Party Chief I, Construction Observer I, Social Media Specialist
Engineer/Technical Specialist III	\$80.00	CADD Tech I
Engineer/Technical Specialist II	\$70.00	Office Administration, Instrument Person
Engineer/Technical Specialist I	\$60.00	Instrument Person, Intern

*Rates based on a 3.0 Multiplier



8990 South Broadway
Suite 220
Denver, CO 80209
303 297 2976 (phone)
303 297 2693 (fax)
wilsonco.com

WILSON
& COMPANY

Industrial Tributary Trail

Master Plan



Legend

-  Parks
-  Open Space
-  HOA Open Space
-  Paved Trails
-  Unpaved Trails
-  Proposed Town Built Trail
-  Proposed Development Built Trail
-  Drainages



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product to the public the Town of Castle Rock assumes no liability for its use or accuracy. For questions or comments regarding omissions, corrections, or updates please visit CRgov.com/directory for contact information. Copyright 2023, Town of Castle Rock

Coordinate System: SPCS Colorado Central (0502)
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US
 Creation Date: 8/1/2023



Philip S. Miller Park



August 3, 2023
Project Number 22240

Wilson & Company
990 S Broadway # 220
Denver, CO 80209

2750 S Wadsworth Blvd, Suite D-200
Denver, Colorado 80227
303.625.9502
www.LithosEng.com

Attention: Marc Devos, PE
Senior Project Manager

Regarding: Proposal for Geotechnical and Tunnel Engineering Services
Alternative Proposal for Open Trenched Crossing of Prairie Hawk Drive
Industrial Tributary Trail
Castle Rock, Colorado

Mr. Devos,

Lithos Engineering (Lithos), a CDOT-registered Emerging Small Business, is pleased to provide this proposal to Wilson & Company (Wilson) for the subject project.

In addition, Lithos intends to contribute approximately \$9,500 towards the Disadvantaged Business Enterprise (DBE) goal with drilling, testing, and traffic control subcontractors.

Project Understanding

The Town of Castle Rock (Town) is seeking a full-service engineering design team to execute a multi-use 10-foot-wide and 0.5-mile-long concrete trail from the Industrial Tributary Drainage Way, under Prairie Hawk Drive and the Burlington Northern and Santa Fe Railroad (BNSF), and over East Plum Creek to connect to the existing East Plum Creek Trail.

Wilson has requested Lithos provide a geotechnical and tunnel design package in support of the project. This scope is prepared based on:

- The Town's Request for Proposals dated July 10, 2023, and Addendums 1 and 2.
- Communications with Wilson from July 3-10, 2023.
- Lithos' understanding of the project based on a site visit and communications with the Town in January and February 2023.

In general, the Town wishes to construct the BNSF crossing in a manner similar to Lithos' Fossil Creek Pedestrian Trail project. Based on communications with Wilson, we anticipate the tunnel to be a 10-foot-minimum inside finished diameter, and approximately 120LF +/- 20 LF beneath BNSF and the crossing of Prairie Hawk Drive to be open trenched with box-culvert sections as the final ground support.

Proposed Scope of Services

Based on our understanding of the project, Lithos proposes the following scope of services:

Task – 1: Project Coordination

This task includes coordination with drilling and laboratory testing subcontractors on scope, fee and schedule, cost estimating services, and all project management tasks associated with this scope.

Specifically, Lithos will:

1. Attend up to 1 in-person and 3 virtual full-team workshops lasting no more than 2 hours each (kick-off, 30%, 60%, and 90%).
2. Attend up to 3 virtual design-team meetings lasting no more than 1 hour each.
3. Submit monthly invoicing and project status update.
4. Provide an Engineer's Opinion of Probable Construction Cost (EOPCC) for tunnel construction. EOPCC Class level will be updated for each design milestone.

Task 1 Deliverables(s):

1. Monthly invoices/ status reports – submitted in electronic PDF.
2. EOPCCs at 30, 60, 90, and 100% design milestones – submitted via email.

Task – 2: Geotechnical Investigation and Reporting

Lithos will perform a geotechnical investigation for the full alignment using CDOT-registered DBE subconsultants. For this task, Lithos will:

1. Research readily available geologic and geotechnical information for the proposed project area.
2. Make a site visit to determine drill rig accessibility and mark the location for up to 6 geotechnical borings generally located:
 - a. 2 borings – Launch and receiving at the tunnel location in Town and BNSF property.
 - b. 1 boring – near the western end of the open trenched Prairie Hawk Drive crossing.
 - c. 2 borings – planned bridge abutments in Town and CDOT property.
 - d. 1 boring – planned in Town property between bridge and tunnel for pavement design.
3. Call Utility Notification Center of Colorado to locate utilities at the boring locations.
4. Provide Traffic Control for 2 borings along Prairie Hawk Drive. Shoulder closures with associated signage, safety cones, and traffic control supervisor are assumed to be sufficient. Costs for 1 day of shoulder closure traffic control are included.
5. Obtain right-of-way permits from CDOT, and the Town. Per Addendum 2, the Town will coordinate BNSF access (Temporary Occupancy Permit).
6. Implement the following boring plan:
 - a. Use standard auger drilling and subcontract the drilling work to a qualified local DBE subcontractor,
 - b. Drill 5 borings to depths between 20 - 30 feet and one boring to 10 feet,
 - c. Collect samples at maximum 5-foot intervals,
 - d. Record groundwater level during drilling.
 - e. Collect split spoon, modified California barrel, triple wireline core, and/or bulk samples from the borings for classification and lab testing.
 - f. Backfill borings with drill cuttings and evenly distribute leftover cuttings on the ground.
7. Provide full time oversight of drilling operations, assumed as 2 days.
 - a. Log boreholes in general accordance with ASTM standards for soil or rock as applicable.

8. Submit selected samples to a qualified local DBE laboratory for geotechnical testing. Testing may include but is not limited to R-value, corrosion, moisture and density, unconfined compressive strength, swell/consolidation, sieve analysis, and Atterberg limit tests.
9. Engage a subcontractor to perform Seismic Refraction Tomography (SRT) Geophysical Survey as close to BNSF rail as permitting allows (likely 25 feet).
 - a. SRT geophones will be collected at 10-foot-minimum intervals with surface-based energy source.
 - b. Lane-closure traffic control will be provided for Prairie Hawk Drive.
 - c. The purpose of SRT is to explore for bedrock contact, anomalous fill (e.g. boulders and timbers) associated with rail or roadway construction, and better define tunneling subsurface risks.

Task 2 Deliverables(s):

Lithos will provide a Geotechnical Engineering Report (GER) to summarize the findings from 2. Lithos will include the following in the report:

- Detailed boring logs and the results of the geotechnical investigation, laboratory testing, and geophysical survey (Appendix).
- A site vicinity and boring location plan map.
- Project design criteria (as necessary) including but not limited to:
 - Lateral earth pressures,
 - Surface and subsurface drainage,
 - Water soluble sulfates,
 - Pavement design recommendations, including recommended K-values
- Construction recommendations including:
 - Temporary excavations, including temporary shored excavations
 - Unstable subgrade mitigation
 - Bedrock or oversize material excavation
 - Compaction requirements
 - Foundation recommendations for bridge and retaining walls
- Pavement design recommendations including:
 - Design coefficient used for pavement, base course, and subbase.
 - Pavement design computer printouts from software utilizing the 1993 AASHTO Guide for Design of Pavement Structures.
 - Considerations for subgrade suitability and treatment (if necessary) for pavement placement.

Lithos will submit a draft version of the GER (in electronic format) for review and revision as necessary to address Wilson's comments. We will submit an electronic copy of our final report once comments have been addressed.

Task – 3: Tunnel Design Package

Lithos will implement a full tunnel design package for the project, including:

1. BNSF Tunnel Design Memorandum addressing:
 - a. Tunnel initial and final support under BNSF loading conditions
 - b. Settlement and settlement mitigation, instrumentation, and monitoring strategy
 - c. Portal/ shaft design subject to AREMA shoring requirements

- i. A permanent portal (e.g. soil nail wall) will be designed on the east side of the tracks within AREMA Zone B to limit the length of the casing pipe/tunnel.
 - d. General accordance with BNSF design criteria
 - e. Geotechnical data, tunneling means and methods, and recommended design contingencies.
 - f. The intended audience is BNSF to aid in the permitting/approval process. We assume the design package will be appended to an overall permitting package prepared by others.
 2. Geotechnical Baseline Report in general accordance with the 2022 guidelines published by ASCE;
 - a. Lithos will prepare a Geotechnical Baseline Report (GBR) for the tunnel crossing(s). The GBR differs from typical geotechnical data reports in several ways. The intended reader of the report is the tunnel contractor rather than the design engineer. The report provides interpretation of the ground conditions and sets baselines of those conditions to aid the contractor during bidding and to resolve differing site condition (DSC) claims during construction. As a risk mitigation tool, the GBR allows the owner of the asset to decide what ground conditions the contractor must account for in its bid price. If ground conditions prove to be more adverse than the GBR describes, then the contractor is legitimately owed the additional costs of construction in the adverse conditions. For the GBR to be effective, the contract documents between the owner and contractor must address the DSC clause. A DSC may be defined as subsurface or latent physical conditions at the site which differ materially from those indicated in the contract. The GBR is how subsurface geologic conditions (soil, rock and ground water) are indicated in the contract.
 3. Tunnel drawing details (7 sheets) as required, for inclusion into the overall construction drawing set prepared by Wilson.
 - a. Drawings will consist of detail sheets discussing instrumentation and monitoring (1 sheet), pipe weld/connections and grout port details for contact grouting (1 sheet), pre-excavation support to mitigate track settlement (1 sheet), and portals/ shafts (4 sheets).
 - b. Additionally, Lithos will redline Wilson drawings relevant to foundations and final portal support.
 4. Technical specifications as required, for inclusion into the overall specifications prepared by Wilson. Redlines may be required to CDOT Special Provisions.
 - a. Tunnel Excavation and Initial Support, including feasible tunneling techniques for the crossing and steel casing properties to accommodate for short-term and long-term loading.
 - b. Shaft Construction
 - c. Contact Grouting
 - d. Geotechnical Instrumentation and Monitoring
 - e. Ground Improvement
 - f. Redline review of Wilson's bridge foundation and final portal design specifications.

Task 3 Deliverable(s):

1. BNSF Tunnel Design Memorandum - draft and final versions will be submitted in electronic PDF.
2. GBR - draft and final versions will be submitted in electronic PDF.
3. Drawing Details – submitted electronically in AutoCAD format.
4. Specifications - draft and final versions will be submitted in electronic Microsoft Word format.

Task – 4: Alternative Tunnel Design - Prairie Hawk Drive

We understand tunneling may be required under Prairie Hawk Drive due to lack of available detour options and potential difficulties in supporting the ground for construction of a box culvert underpass at this location. If a tunnel design is required under Prairie Hawk, Lithos will amend Task 3 deliverables to include tunnels both under BNSF and under Prairie Hawk drive as appropriate.

Assumptions and Exclusions

Lithos has assumed the following in preparing our scope and fee for the project. If any of the assumptions below are incorrect, a change in scope and fee may result.

- Assumptions as per Amendment 2, including permitting coordination with BNSF provided by the Town.
- Prompt communication/ data transmission between Wilson and Lithos. Deliverables incorporate data provided by others, including but not limited to alignment plan and profile, subsurface utilities, and survey. Deliverables will require at least 5 weeks from receipt of data to provide a draft.
- Base maps and/or aerial photographs in paper and/or electronic format showing the proposed site layout, property lines, and landmarks will be provided by Wilson.
- Proposed alignment, in both horizontal and vertical planes, will be provided by Wilson.
- Survey of the boring location will be completed by The Client or Owner after drilling. Lithos will report boring locations as determined by handheld GPS with 15-foot-minimum accuracy.
- Contaminated soils, bedrock, and/or groundwater will not be encountered during our subsurface exploration. Environmental testing and contaminated cuttings handling/ disposal are not included in this scope.
- Significant weather will not impact the schedule of the proposed field studies.
- Soil and/or rock samples collected during the exploratory drilling will remain at Lithos' office for a period of 60 days after completion of the final report and will then be disposed after discussion with Wilson.
- Electrical design (including permanent lighting) of the tunnel is omitted.

Fee Estimate

Based on our proposed Scope of Services outlined above, we estimate the total fee for our services in accordance with the attached fee estimate. Lithos proposes to provide these services on a time and expense basis under terms and conditions to be negotiated upon award. Additional work beyond the scope of this proposal will be billed on a time and expense basis upon receipt of written approval by Wilson to perform additional scope.

Closing

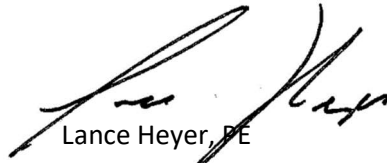
We appreciate the opportunity to submit a proposal for this project and look forward to the opportunity to work with you and your team on this project. For this project, Ryan Marsters will be the Project Manager and key contact. If you have any questions regarding the contents of this proposal, please contact the undersigned.

Sincerely,

Lithos Engineering



Ryan Masters, PE, PG
Project Manager



Lance Heyer, PE
Senior Engineer

Attachments: Fee Estimate
Fee Schedule

Project - Tributary Trail Pedestrian Crossing – Geotechnical and Tunnel Design Support
 Project Number - 22240
 Date - 8/3/2023

FEE ESTIMATE

No.	Phase	Labor	Subconsultants	Direct Costs	Total
1	Project Coordination	\$ 10,060		\$ 48	\$ 10,108
2	Geotechnical Investigation and Reporting	\$ 14,400	\$ 16,100	\$ 144	\$ 30,644
3	Tunnel Design Package - BNSF Crossing	\$ 54,150	\$ 2,500		\$ 56,650
4	Alternative Tunnel Design - Prairie Hawk Drive	\$ 7,150			\$ 7,150
	Markup 12%		\$ 2,232	\$ -	\$ 2,232
	Base Total	\$ 85,760	\$ 18,600	\$ 192	\$ 106,784

*Supplementary services subconsultant costs include 12% markup

**FEE SCHEDULE
2023**

1. Services will be billed on the time worked by staff personnel as follows unless noted otherwise in the proposal or contract. Overtime hours will be charged at straight time rates.

Principal	\$250
Senior Consultant	\$245
Senior Professional II	\$225
Senior Professional I	\$210
Professional II	\$170
Professional I	\$160
Staff Professional III	\$150
Staff Professional II	\$135
Staff Professional I	\$120
Administrative	\$85

2. Direct non-salary expenses will be billed at Lithos Engineering's cost plus a twelve (12) percent markup for the following:
 - a. Reproduction and printing costs for project-related documents
 - b. Transportation and subsistence costs for travel including rental cars, truck, boats, trains, and other public carriers.
 - c. Express delivers such as UPS.
3. Mileage for use of personal or company vehicles will be billed at \$0.80/mile.
4. Subcontractors retained by Lithos Engineering for project-related services will be billed at our cost plus 12 (twelve) percent.
5. Payment: Invoices will be submitted about once a month unless otherwise noted in the proposal or contract for services performed. Payment is due upon receipt of the invoice. Interest of two (2) percent per month may be added to the outstanding balance on invoices older than 30 days. If Lithos Engineering must engage collection services to receive payment, Client will reimburse Lithos Engineering for all reasonable collection, attorneys, and court fees.
6. Billing rates are subject to change at any time unless otherwise noted in the proposal or contract.

SCOPE OF WORK FOR INDUSTRIAL TRIBUTARY TRAIL

TASK 1 – PROJECT MANAGEMENT AND ADMINISTRATION

- **Meetings** – Meetings include one (1) kickoff meeting, and four (4) project design coordination meetings.

TASK 2 – RAILROAD COORDINATION

At a minimum TRIUNITY anticipates the following:

- Six (6) coordination meetings with BNSF during design development to ensure railroad requirements and design parameters are clearly defined for the design team.
- One (1) field site diagnostic meeting with BNSF and PUC.
- General coordination with BNSF including design transmittals, comment resolution and request for final approval.

TASK 2 - SUBSURFACE UTILITY ENGINEERING

At a minimum TRIUNITY anticipates the following:

- Obtain utility location maps from the utility owners (Quality Level D), which identify utility facility locations in the project area.
 - TRIUNITY will perform the following:
 - Submit a notification to Colorado811 for a SUE required project.
 - Contact local utility providers to request records.
 - Collect known data on utilities within project area – (key maps, electronic files, as-built drawings, GIS data, etc.).
- Complete subsurface utility designation by geophysical investigation (Quality Level B).
- Develop SUE plans in appropriate CAD standards depicting the achieved quality level and utility ownership, type, size, and material, where provided.
- Provide an electronic CAD deliverable of the existing utility mapping and survey depicting utilities at their achieved quality levels, including utility ownership information.
- Prepare a test hole location plan where conflicts warrant a Quality Level A investigation for review by the Design Team.
- Complete up to 10 utility test holes as coordinated with the Design Team. Traffic control and permitting are included.
- Prepare a SUE report documenting Utility investigation findings and methods; Quality level definitions; Utility discrepancies, issues and recommendations; Utility owner information; and Test hole information (if applicable).
- Plan and provide basic traffic control for the Designating Field work. Excludes Lane Closures.
- For activities requiring work on land not controlled by Client, attempt to obtain the necessary written permission to enter the premises.

Deliverables:

Utility Database and Base Map, SUE Engineering Plans, 30%, 90% and 100% final Utility submittals.

TASKS 3, 4 & 5 - UTILITY COORDINATION

TRIUNITY will coordinate with utility companies during the design of this project and anticipates the following regarding Utility Coordination and the preparation of the Utility Coordination Plans:

- Prepare SUE/Utility Coordination Plans depicting existing utilities, all relevant proposed project elements, utility ID Nos. corresponding to utility conflict matrix, and conceptual relocations as determined through design development and the utility coordination meetings.
- Coordinate potential utility conflicts between existing utilities and proposed improvements with the design team and utility owners.
 - The design should seek to minimize impacts to utilities, where possible.
 - Utility relocations shall consider costs to the project, franchise agreements, design requirements, etc.
 - Utility relocation design may either be undertaken by the owner or by the project team under a separate task order once the utility disposition is identified.
 - The design for any utility relocation shall conform to the standards of the utility owner.
- Prepare a utility conflict matrix for all known utilities within the project limits whether or not the utility is impacted utilizing the current CDOT utility conflict matrix format.
- Meet with utility companies and jurisdictions, as required, to discuss project scope, utility conflicts, and mitigation strategies.
 - Set up meetings, develop agendas, facilitate meetings, and provide meeting minutes.
 - TRIUNITY to coordinate with 811 and other applicable agencies to locate known utilities.
- Obtain copies of existing easements, license agreements, and relocation agreements from utility companies, as applicable, and provide to the design team.
- After milestone submittals, conduct coordination/comment resolutions meetings with utility owners.
- Incorporate utility mitigation/relocation schematics into the 100% package.
- Prepare the utility specifications, which shall carefully detail the contractor's responsibilities and the utilities' responsibilities.
- Prepare, coordinate, and obtain utility relocations and/or adjustment agreements with the affected utility companies.
- Obtain estimates of probable cost for any utility relocations that are a cost to the project.
- Incorporate utility mitigation/relocation schematics into the FOR package.

Deliverables:

SUE/Utility Coordination Plans, Agreements with utility companies for relocations and/or adjustment that will take place during construction, Documentation of pertinent information including Reports

and memorandums, photographs, mapping, schematics, field notes, as-built plans, and other required information.

Exclusions/Assumptions:

- Field survey (performed by others) will be coordinated to pick up designation marks for base file mapping.
- Survey of QL-A and QL-B utility data will be provided in AutoCAD or Microstation by the project surveyor with supporting survey data.
- Quality Level B designation of non-metallic, untraceable utilities, unmapped and/or abandoned utilities, thrust blocks, traffic loops, sanitary services, septic systems, irrigation/sprinkler systems, underground storage tanks, and drain tiles is excluded.
- Quality Level B designating of Zayo fiber optic facilities is excluded due to facility access restrictions. These facilities will be shown as QL-D. Survey of utility owner provided marks will be incorporated when present.
- Quality Level C field work, including MH measure downs, vault sizes, etc. will be completed by surveyors in conjunction with Triunity field engineering support. Traffic control by project surveyor.
- Ground Penetrating Radar is not included in this scope of work but is available at an additional cost.
- Assumed up to 10 test holes for base fee.
- Cleaning of manholes filled with water or debris is excluded.
- Confined space entry is not included as part of this scope and fee.
- Sanitary and Storm to be represented as Quality Level C; Quality Level B Sanitary Service locations are not included in this scope.
- Sewer services will be shown as QL-D if they are shown on existing maps and records.
- CCTV services to locate sanitary mains and services are excluded from this scope of work.
- Subsurface Utility Plans and Utility Coordination Plans will be combined into one deliverable.
- Traffic Control includes basic signage and MHTs. Excludes: lanes closures, flaggers, and any permitting fees.
- Engineered design of new/relocated utilities is not included.
- Electrical design is not included.
- Utility Specifications are not included as part of the 30% deliverables.
- Assume SUE/UC plans on 5 sheets plus General Notes, Utility Conflict Matrix, and Testhole Log (1" =40' scale).
- 3D modeling/3D pipe networks limited to crossing utilities based on assumed depths and test hole data.

Industrial Tributary Trail
Triunity, Inc.
Fee Estimate: 7/20/23



		Classification	Senior PM	Utility Coordinator Lead	PM III	Project Engineer	CAD Tech V	Admin Support	Subtotal Hours	Subtotal Cost
		Rate	\$205.00	\$188.00	\$165.00	\$125.00	\$130.00	\$100.00		
1	Project Management & Coordination	Notes/Assumptions								
1	Project Startup	File sharing, Project Setup, misc, subcontracts	2	2				2	6	\$ 986.00
2	Kickoff Meeting	Assumes 1 2-hour meeting	2	2					4	\$ 786.00
4	Project Coordination meetings	Up to 4 1-Hour Design Coordination meetings	4	4					8	\$ 1,572.00
5	Contract Administration	Monthly progress reports and invoicing	2	2				2	6	\$ 986.00
		Subtotal	10	10	0	0	0	4	24	\$ 4,330.00
2	Preliminary Engineering (FIR) - Subsurface Utility Engineering Plans									
1	SUE Notification/Utility Map Collection/Review							8	8	\$ 800.00
2	Utility Research and Review	Review available mapping, as-builts			2	2			4	\$ 580.00
3	Utility Designating - Field Support/Coordination	Coordination and oversight of survey and designating crews, including documentation of QL-B Locates and Storm and Sewer Manhole investigations.			24	24			48	\$ 6,960.00
4	SUE Report			2	8	4			14	\$ 2,196.00
5	Quality Level B Base Map	Develop ASCE 38.22 SUE Base Map from Survey Data		1	4	8			13	\$ 1,848.00
6	Prepare SUE Plans - FIR	Assumes 5 sheets plus General Notes, Utility Conflict Matrix, and Testhole Log	1	8		16			25	\$ 3,709.00
7	Prepare Utility Conflict Matrix and Update	Assumes this is a live document and updates will be needed throughout the project.	1	4		8			13	\$ 1,957.00
8	Preliminary Utility Quantities		1	4					5	\$ 957.00
9	Utility Coordination Meetings	Assumes 2 hour meetings with each utility owner (up to 4), meeting agenda, and minutes		8					8	\$ 1,504.00
10	Railroad/PUC Coordination Assistance	Assumes 2 1-hour meetings with BNSF and Site Diagnostic Meeting with PUC	6						6	\$ 1,230.00
		Subtotal	9	27	38	62	0	8	144	\$ 21,741.00
3	Final Engineering (FOR) - Subsurface Utility Engineering Plans									
1	QL-A Locate Plan	Development of a QL-A plan for layout by Survey		2	4				6	\$ 1,036.00
2	Quality Level A Locates - Field Support/Coordination	Coordination and oversight of survey and QL-A utility test holes data collection activities		8	16				24	\$ 4,144.00
3	Incorporate Pothole Data into Final SUE Plans	Incorporate Pothole Log, applicable notes, and base files into plan sheets			2	4			6	\$ 830.00
4	Prepare Final SUE Plans - FOR	Assumes 5 sheets plus General Notes, Utility Conflict Matrix, and Testhole Log	1	8		16			25	\$ 3,709.00
5	Final Utility Quantities		1	8					9	\$ 1,709.00
6	Utility Specifications		1	8					9	\$ 1,709.00
7	Utility Coordination Meetings	Assumes 2 1-hour meetings with each utility owner (up to 4), meeting agenda, and minutes		8					8	\$ 1,504.00
8	Railroad/PUC Coordination Assistance	Assumes 4 1-hour meetings with BNSF and PUC Application (by others) review	10						10	\$ 2,050.00
		Subtotal	13	42	22	20	0	0	97	\$ 16,691.00
4	Bid Package (PS&E) - Subsurface Utility Engineering Plans									
1	Prepare Bid Package SUE Plans	Assumes 5 sheets plus General Notes, Utility Conflict Matrix, and Testhole Log	1	4		16			21	\$ 2,957.00
2	Bid Package Utility Quantities		1	8					9	\$ 1,709.00
3	Bid Package Utility Specifications		1	8					9	\$ 1,709.00
4	Utility Coordination Meetings - Utility Clearance/Notification Agreements	Assumes 2 hour meetings with each utility owner (up to 4), meeting agenda, and minutes		8					8	\$ 1,504.00
5	Railroad/PUC Coordination Assistance	General Coordination with BNSF for final approval	8						8	\$ 1,640.00
		Subtotal	11	28	0	16	0	0	55	\$ 9,519.00
		Total Labor Hours	43	107	60	98	0	12	320	
		Total Base Labor	\$ 8,815.00	\$ 20,116.00	\$ 9,900.00	\$ 12,250.00	\$ -	\$ 1,200.00		\$ 52,281.00
99	Vendor Services	Notes/Assumptions								
99 1	QL-A Utility Test Holes	Assumes 10 Test Holes, Traffic Control, and Permitting.								\$ 12,000.00
99	Traffic Control (Designating)	Traffic Control Signage and MHTs								\$ 2,000.00
99										
99										
99										
		Vendor Services								
		Subtotal - Vendor Cost								\$ 14,000.00
		Total Base Scope Cost (including Vendors)								\$ 66,281.00

Notes/Assumptions:

- Survey of QL-A and QL-B utility data will be provided in AutoCAD or Microstation by the project surveyor with supporting survey data.
- Quality Level C field work, including MH measure downs, vault sizes, OH wire heights, etc. will be completed by surveyors in conjunction with Triunity field engineering support. Traffic control by project surveyor.
- Assume SUE plans on 5 sheets (40 scale) plus General Notes, Utility Conflict Matrix, and Testhole Log
- Sanitary and Storm to be represented as Quality Level C; Quality Level B Sanitary Service locations are not included in this scope
- The use of Ground Penetrating Radar is not anticipated as part of this scope but is available through our vendors if required
- Engineered Design of utility relocations is not included
- Utility Coordination Plans to be combined with SUE Plans
- 3D modeling/3D pipe networks limited to crossing utilities based on assumed depths and test hole data
- Locating of septic systems and leach fields is not included in this scope
- Locating of private electrical, sanitary, and water systems is not included in this scope
- Designating of Abandoned or unknown utilities is excluded
- Traffic Control includes basic signage and MHTs. Excludes lane closures and flaggers. Any permitting fees are not included in this estimate.

Industrial Tributary Trail

Master Plan



Legend

-  Parks
-  Open Space
-  HOA Open Space
-  Paved Trails
-  Unpaved Trails
-  Proposed Town Built Trail
-  Drainages
-  SUE Designating Limits



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product to the public the Town of Castle Rock assumes no liability for its use or accuracy. For questions or comments regarding omissions, corrections, or updates please visit CRgov.com/directory for contact information. Copyright 2023, Town of Castle Rock

Coordinate System: SPCS Colorado Central (0502)
 Projection: Lambert Conformal Conic
 Datum: North American 1983
 Units: Foot US
 Creation Date: 4/5/2023



Philip S. Miller Park



Corporate Headquarters
 3222 South Vance Street, Suite 200, Lakewood, CO 80227
 T: 303.980.5200 F: 303.980.0089
 www.pinyon-env.com

Firm Bio

Since 1993, Pinyon Environmental, Inc. (Pinyon), has provided environmental consulting services to a wide variety of clients in both the private and public sectors. The company employs approximately 80 environmental professionals including Professional Engineers, biologists, National Environmental Policy Act (NEPA) specialists, planners, geologists, environmental scientists and technicians, historians, landscape architects, air and noise quality specialists, and industrial hygiene professionals.

Pinyon has built an environmental practice specializing in transportation—the firm understands the evolving needs related to environmental services throughout the transportation life cycle. Pinyon’s experience on trail and roadway projects includes customized services in National Environmental Policy Act (NEPA)-compliant studies, technical assessments, mitigation planning, permitting, and environmental compliance during project delivery. A key advantage of Pinyon is that the firm employs technical experts across numerous disciplines that know the connections resources have under NEPA, as well as myriad other environmental rules and regulations. Pinyon has completed over 450 Categorical Exclusions per Colorado Department of Transportation (CDOT) protocols and has led or supported multiple Environmental Assessments (EAs), Environmental Impact Statements (EISs), and Planning and Environmental Linkages (PEL) Studies. Pinyon has served as an extension of staff in Region I since 2013, giving Pinyon extraordinary understanding of CDOT and FHWA processes and expectations. Headquartered in Lakewood, Colorado, Pinyon has worked collaboratively with the Town of Castle Rock on numerous projects and has tailored the scope to this project’s specific needs.

Scope of Work

As federal funding is being utilized, National Environmental Policy Act (NEPA) study is required; the level of study required is anticipated to be a Categorical Exclusion (CatEx). For this project, Pinyon will support the project by completing technical studies for hazardous materials and cultural resources; the remaining environmental clearance items will be completed by others (i.e., Wilson and Company, internally by CDOT).

Details regarding Pinyon’s estimated scope of work, assumptions, and deliverables are presented below. The following tasks and assumptions were developed using Pinyon’s professional judgement, given the information presented in the RFP, and Pinyon’s knowledge of the corridor and environmental context. This scope, and associated fee, should be considered preliminary and subject to final scoping with CDOT and Castle Rock. Further, additional revision and/or refinement may be necessary as design advancement and design decisions are made, particularly if design changes result in required revisions of deliverables or additional field studies.

Task	Scope of Work Summary	Deliverables
General Project Management	General project management, contract administration, invoicing, etc. Pinyon will attend up to one project meeting (i.e., kick-off, FIR, or FOR) virtually. Project duration is assumed to be 12 months.	Monthly invoices Progress reports
Project Resources that Pinyon will Provide		
Hazardous Materials	Pinyon will complete an Initial Site Assessment (ISA) Technical Report, which will include an agency database (i.e., ERIS) review. The database will be secured by Pinyon. The Study Area will be the project’s limits of disturbance. Ideally, the design team will have identified the horizontal and vertical limits of disturbance, including all ROW and easement requirements. Pinyon will collect up to 5 paint samples for lead analysis for project components anticipated to be disturbed (e.g., signal poles, concrete).	ISA Lead Based Paint Samples and Results documented in ISA

Task	Scope of Work Summary	Deliverables
	<p>Depending on the substrate, Pinyon will evaluate the lead content for total lead, or by the Toxicity Characteristic Leachate Procedure.</p> <p>No asbestos sampling, soil or water testing is anticipated at this time (if determined necessary, a change order would be required).</p>	
Historic Resources	<p>Pinyon will develop an Area of Potential Effects (APE), in coordination with CDOT. It is assumed that the APE will surround the estimated limits of disturbance, as well as all properties that will be impacted by the project (i.e., new right of way acquisitions or easements). Once the APE is established, Pinyon will research the Office of Archeology and Historic Preservation (OAHP) COMPASS database, the CDOT Historic Bridge Inventory, topographic maps, and local assessor data for the presence of potential historic resources within the APE.</p> <p>Preliminary review of the corridor indicates that several potentially eligible resources may be present including the Phillip S. Miller Park, Fifth Street, and the Burlington Sante Fe (BNSF) Railroad. Pinyon assumes up to three resources will need to be surveyed for compliance with Section 106 of the National Historic Preservation Act (NHPA).</p> <p>Pinyon will coordinate level of effort for evaluation with the CDOT Historian and provide documentation for compliance with Section 106 and historic Section 4(f), including historic site evaluation forms; eligibility and effects letter; APE map; and historic Section 4(f) <i>de minimis</i> form(s).</p> <p>Assumptions:</p> <ul style="list-style-type: none"> • Any Right of Entry will be coordinated and provided by the Wilson/CDOT. • This scope assumes a Section 106 determination of <i>no adverse effect</i>; should the project result in a determination of <i>adverse effect</i>, this scope will need to be revisited and additional fee will be required. • Should more than three resources for historic survey be identified, this scope will need to be revisited. • There will be two virtual coordination meetings with CDOT, the first on the APE and a second on the determinations. 	<p>APE Map</p> <p>Up to 3 Management Data/Linear Component Forms</p> <p>Eligibility and Effects Letter</p> <p>Up to 1 Section 4(f) De Minimis Form</p>
Archaeology Resources	<p>Pinyon will conduct a Class III cultural resources inventory within the approximately 15-acre established Area of Potential Effects (APE or inventory area). Prior to conducting fieldwork a file search will be conducted of the inventory area and a surrounding one-half-mile buffer area for previously documented historic and archaeological resources. The file search will include, at a minimum, a search of the Colorado OAHP COMPASS database, the National Register of Historic Places (NRHP), general land office plats, historic USGS topographic maps, and aerial and topographic maps. A permitted archaeologist will complete a Class III pedestrian survey of the inventory area to identify and document cultural resources. No cultural resources are anticipated within the project APE that will require documentation. The results of the Class III inventory will be documented to agency and Colorado OAHP reporting standards and guidelines using appropriate reports and forms as necessary.</p>	<p>Limited Resource Report</p>

Task	Scope of Work Summary	Deliverables
	<p>Assumptions:</p> <ul style="list-style-type: none"> • Any Right of Entry will be coordinated and provided by the Wilson/CDOT. • Class III inventory of no more than 15 acres. • Agency oversight will be limited to CDOT and Colorado OAHP. • Ground surface visibility requiring snow-free conditions. • No cultural resources requiring documentation will be identified. If cultural resources are identified, they will require documentation, and this scope will need to be revisited and additional fee will be required. 	

Assumptions: Wilson will provide up to a scoping level of plans (e.g., 15% that encompasses the maximum project disturbance footprint) as well as a geospatially referenced file (i.e., Google Earth, shapefile, AutoCAD) of the study area so that Pinyon, Wilson, Castle Rock and CDOT can agree on the study area boundaries prior to any field work being completed. It is assumed that Pinyon will follow CDOT processes unless otherwise noted. Some deliverables are design dependent as an impact evaluation is required and may not be available until or after design plans have been significantly advanced. Pinyon assumes that each deliverable will have two rounds of review/revision/comment: the first by the Castle Rock and second by CDOT. After field work is completed, Pinyon will provide geospatial data of the relevant features to CLIENT for confirmation that all areas of impact are within the study area and ultimately for impact assessment.

Table I. Summary of Estimated Costs

Project Management				
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Project Controller	1.0	hour	\$116.00	\$116.00
Field Specialist / Project Assistant	12.0	hours	\$102.00	\$1,224.00
Project Manager I	10.0	hours	\$187.00	\$1,870.00
Task Subtotal				\$3,210.00
Hazardous Materials				
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Field Engineer/ Scientist I	20.0	hours	\$118.00	\$2,360.00
CAD/GIS Specialist I	2.0	hours	\$133.00	\$266.00
Scientist II	2.0	hours	\$177.00	\$354.00
Scientist III	1.0	hour	\$222.00	\$222.00
Equipment/Material Unit Rates				
Truck/Van Mileage	75.0	miles	\$0.66	\$49.13
Agency Database Report	1.0	each	350.0	\$350.00
Laboratory Rates				
LBP FAA 1 Week TAT (EMSL)	5.0	samples	\$10.67	\$53.35
Task Subtotal				\$3,654.48
Historic Resources				
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Cultural Field Specialist I	8.0	hours	\$102.00	\$816.00
Cultural Resource Specialist	30.0	hours	\$110.00	\$3,300.00
Cultural Resource Specialist II	10.0	hours	\$139.00	\$1,390.00
CAD/GIS Specialist I	6.0	hours	\$133.00	\$798.00
Equipment/Material Unit Rates				
COMPASS Database	1.0	each	200.0	\$200.00
Truck/Van Mileage	75.0	miles	\$0.66	\$49.13
Task Subtotal				\$6,553.13

Archaeological Resources				
Description	Quantity	Unit	Rate	Extension
Labor Rates				
Archaeology Technician	6.0	hours	\$65.00	\$390.00
Cultural Field Specialist	12.0	hours	\$97.00	\$1,164.00
Cultural Resource Specialist III	2.0	hours	\$173.00	\$346.00
CAD/GIS Specialist I	4.0	hours	\$133.00	\$532.00
Equipment/Material Unit Rates				
COMPASS Database	1.0	each	\$200.00	\$200.00
Truck/Van Mileage	75.0	miles	\$0.66	\$49.13
Task Subtotal				\$2,681.13
Project Total				\$16,098.73

Fox Tuttle Transportation Group - Professional Services Fee Estimate
Castle Rock - Industrial Tributary Trail



July 28, 2023

		Staff Hours and Fees						
		Fox Tuttle Transportation						
		Principal II	Principal I - Alicia Zimmerman	Transportation Engineer II	Transportation Planner I	Administrative		Task Subtotal
Task	Description	\$ 220	\$ 200	\$ 170	\$ 120	\$ 90	Direct Costs	
	Project Management							
	Correspondence and Monthly Invoicing		12					\$ 2,400
	Meetings							\$ -
	Kickoff Meeting (1)		2					\$ 400
	Project Coordination Meetings (6 total assumed during concept development and preliminary design)		12					\$ 2,400
	Public Outreach Support (2 meetings)		40					\$ 8,000
								\$ -
	Conceptual Design Development							
	Preliminary Trail Design: geometric design support, multimodal connection details, signing and marking support		36					\$ 7,200
	Design Support		18					\$ 3,600
								\$ -
	Staff Total - Hours	0	120	0	0	0		TOTAL FEE
	Staff Fee by Firm			\$24,000			\$0	\$ 24,000



EXHIBIT 2

CONSULTANT'S CERTIFICATE OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

6/1/2024

DATE (MM/DD/YYYY)

5/17/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 kcasu@lockton.com	CONTACT NAME:	
	PHONE (A/C, No. Ext.):	FAX (A/C, No.):
	E-MAIL ADDRESS:	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Hartford Fire Insurance Company	19682
INSURER B:	Hartford Insurance Co of the Southeast	38261
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
1311321 WILSON & CO., INC.
4401 MASTHEAD STREET NE
SUITE 150
ALBUQUERQUE NM 87109

COVERAGES CERTIFICATE NUMBER: 19171470 REVISION NUMBER: XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSTR LTR	TYPE OF INSURANCE	ADDL INSR	DIR	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
								EACH OCCURRENCE	\$
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR	Y		N	37 UEN OL5652	6/1/2023	6/1/2024	EACH OCCURRENCE	\$ 1,000,000
								DAMAGE TO RENTED PREMISES (ea occurrence)	\$ 1,000,000
								MED EXP (Any one person)	\$ 10,000
								PERSONAL & ADV INJURY	\$ 1,000,000
								GENERAL AGGREGATE	\$ 2,000,000
								PRODUCTS - COMPROP AGS	\$ 2,000,000
									\$
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:								
	AUTOMOBILE LIABILITY ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY				NOT APPLICABLE			COMBINED SINGLE LIMIT (Per accident)	\$ XXXXXXXX
								BOODLY INJURY (Per person)	\$ XXXXXXXX
								BOODLY INJURY (Per accident)	\$ XXXXXXXX
								PROPERTY DAMAGE (Per accident)	\$ XXXXXXXX
									\$ XXXXXXXX
	UMBRELLA LIAB EXCESS LIAB				NOT APPLICABLE			EACH OCCURRENCE	\$ XXXXXXXX
								AGGREGATE	\$ XXXXXXXX
									\$ XXXXXXXX
	DED								\$ XXXXXXXX
	RETENTION \$								\$ XXXXXXXX
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/EMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N		N/A	37 WE OL6H8C	6/1/2023	6/1/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
								E.L. EACH ACCIDENT	\$ 1,000,000
								E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
								E.L. DISEASE - POLICY LIMIT	\$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: PROJECT NUMBER: RFQ NO. 2022-12 PROJECT NAME: ON-CALL PROFESSIONAL SERVICES, THE TOWN OF CASTLE ROCK IS AN ADDITIONAL INSURED AS RESPECTS GENERAL LIABILITY AND THIS COVERAGE IS PRIMARY AND NON-CONTRIBUTORY, IF REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER

CANCELLATION

19171470
TOWN OF CASTLE ROCK
4175 CASTLETON CT.
CASTLE ROCK CO 80109

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Joseph M. Agnello

© 1988-2015 ACORD CORPORATION. All rights reserved.

**EXHIBIT 3****TOWN OF CASTLE ROCK
AFFIDAVIT OF INDEPENDENT CONSULTANT STATUS**

In accordance with Section 8-70-115, C.R.S., I certify the following:

- With respect to the Agreement, **WILSON & COMPANY, INC., ENGINEERS & ARCHITECTS** (“Entity”) represents and warrants that it is the Entity’s express intention to be employed as an independent Consultant of the Town of Castle Rock (the “Town”) for purposes of performing the work or services which are the subject of the Agreement, to include all employees and agents of the above-named entity. Entity understands and confirm that the Town reasonably relied on this intention in entering into the Agreement.
- The Town does not require Entity work exclusively for the Town, except that Entity may choose to work exclusively for the Town for a finite period of time specified in the document.
- The Town does not establish a quality standard for the work or services performed pursuant to the Agreement, except that the Town may provide plans and specifications regarding the work but cannot oversee the actual work or provide instruction as to how the work is performed.
- The Town does not pay a salary or hourly rate but rather a fixed or contract rate, as noted in the terms and conditions of the Agreement, and any Exhibits made part of the Agreement.
- The Town cannot terminate the work or services performed during the contract period unless otherwise agreed to in the terms and conditions of the Agreement.
- Entity is not provided with anything, if at all, more than minimal training from the Town.
- The Town does not provide Entity with tools or benefits for the performance of the work or services which are the subject of the Agreement, except materials and equipment may be supplied.
- The Town does not dictate the time of performance, except that a completion schedule and a range of mutually agreeable work hours may be established in the Agreement.
- The Town does not pay Entity personally but rather makes checks payable to the trade or business name of the Entity, who is a party to the Agreement; and the Town does not combine their business operations in any way with the entity’s business, but instead maintains such operations as separate and distinct.
- Entity understands that if a professional license to practice a particular occupation under the laws of the State of Colorado requires the exercise of a supervisory function with regard to the work of services performed under this Agreement, such supervisory role shall not affect the independent Consultant relationship with the Town.
- **ENTITY UNDERSTANDS THAT NEITHER ENTITY NOR ITS EMPLOYEES ARE ENTITLED TO UNEMPLOYMENT INSURANCE BENEFITS OF THE TOWN. THE**



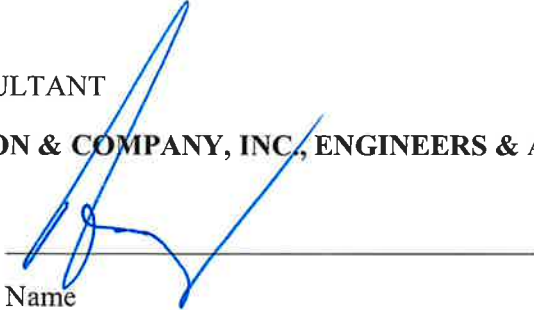
ONLY AVAILABLE UNEMPLOYMENT COMPENSATION COVERAGE IS THAT PROVIDED BY THE ENTITY.

- **ENTITY UNDERSTANDS THAT IT IS OBLIGATED TO PAY FEDERAL AND STATE INCOME TAX ON MONEYS PAID PURSUANT TO THE AGREEMENT.**

CONSULTANT

WILSON & COMPANY, INC., ENGINEERS & ARCHITECTS

By:



Name

STATE OF COLORADO)

) ss.

COUNTY OF DENVER)

The foregoing instrument as acknowledged before me this 18 day of SEPTEMBER 2023 by ANDREW LEIFHEIT Sr. VICE PRES the above-mentioned Consultant.

Witness my official hand and seal.

My commission expires:

SEPT 25, 2023



Notary Public

<p>Todd Riddle NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20034030525 MY COMMISSION EXPIRES September 25, 2023</p>
