TOWN OF TIMNATH, COLORADO
RESOLUTION NO. 29, SERIES 2025

A RESOLUTION APPROVING THE WORK ORDER WITH J-U-B ENGINEERS, INC FOR THE CR 5 BRIDGE & WIDENING PROJECT

WHEREAS, the Town Council of the Town of Timnath (the "**Town**") pursuant to C.R.S. § 31-15-103, has the power to pass resolutions; and

WHEREAS, the Town entered into a Independent Contractor Agreement for CR 5 Bridge & Widening Project Design Services dated July 23, 2024 with J-U-B Engineers, Inc; and

WHEREAS attached hereto as **Exhibit A** is the Work Order pursuant to the Independent Contractor Agreement – CR 5 Bridge and Widening Project with J-U-B Engineers, Inc, dated April 22, 2025; and

WHEREAS, the Town Council is familiar with the Work Order pursuant to the Independent Contractor Agreement and finds it to be in the best interest of the Town, its residents, and the general public to enter into the agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF TIMNATH, COLORADO AS FOLLOW:

Section 1. Approval

The required purchase proposal and expenditure of funds up to $1,799,797 for phase 2, Final Design is hereby approved, authorized, and ratified to enter into a Work Order with J-U-B Engineers, Inc for the CR 5 Bridge & Widening Project. The required agreements may be finalized by the Town Manager, in consultation with the Public Works Director, Legal Counsel, and other applicable staff or consultant. Any actions taken prior to the execution of this Resolution, that are within the authority conferred hereby, are ratified, confirmed, and approved by the Town Council.

INTRODUCED, MOVED, AND ADOPTED BY THE TOWN COUNCIL OF THE TOWN OF TIMNATH, ON APRIL 22, 2025.

TOWN OF TIMNATH, COLORADO

TOWN OF TIMNATH SEAL COLORADO

Robert Axmacher, Mayor

ATTEST:

Milissa Peters-Garcia

Milissa Peters-Garcia, MMC
Town Clerk

WORK ORDER NUMBER 1

PURSUANT TO INDEPENDENT CONTRACTOR AGREEMENT BETWEEN
THE TOWN OF TIMNATH
AND
J-U-B ENGINEERS, INC

MASTER AGREEMENT: Independent Contractor Agreement CR 5 Bridge & Widening Project Design Services between the Town of Timnath (the "Town") and J-U-B Engineers, Inc (the "Consultant")

MASTER AGREEMENT EFFECTIVE DATE: July 23, 2024

PROJECT TITLE: CR 5 Bridge & Widening Project

WORK ORDER COMMENCEMENT DATE: April 22, 2025

WORK ORDER COMPLETION DATE: February 1, 2027

NOT-TO-EXCEED FEE FOR THIS WORK ORDER: $1,799,797

PROJECT DESCRIPTION/SCOPE OF SERVICES: _____

Consultant agrees to perform the services identified above and on the attached Scope and Fee Proposal dated April 2025 (the "forms") in accordance with the terms and conditions contained herein and in the Independent Contractor Agreement CR 5 Bridge & Widening Project Design Services (the "Master Agreement") between the parties. In the event of a conflict between or ambiguity in the terms of the Master Agreement and this Work Order (including the attached forms) the Master Agreement shall control.

The attached forms consisting of fifty-six (56) page(s) are hereby accepted and incorporated herein, by this reference, and Notice to Proceed is hereby given after all parties have signed this document.

The Town affirms that it has appropriated sufficient funds to cover the additional work set forth in this Work Order, up to the not to exceed amount set forth above, in addition to any work under Master Agreement or prior Work Orders thereto; and that such funds shall be available prior to performance of the additional work.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, The parties have executed this Work Order as of the date last written below. By the signature of its representative below, each party affirms that it has taken all necessary action to authorize said representative to execute this Work Order.

CONSULTANT:
J-U-B Engineers, Inc

DocuSigned by:
Dan Tuttle
01BC747C24A7441...

Name: Dan Tuttle, PE
Title:
Date: April 24, 2025

TOWN:
Town of Timnath

Name: Robert Axmacher
Title: Mayor
Date: April 22, 2025

ATTEST

Name: Milissa Peters-Garcia
Title: Town Clerk
Date: April, 22, 2025

DEPARTMENT APPROVAL

Signed by:
Justin Stone
C7B6019E06ED401...

Name: Justin Stone
Title: Public Works Director
Date: April 24, 2025

J·U·B ENGINEERS, INC.

J-U-B Engineers, Inc.
AGREEMENT FOR PROFESSIONAL SERVICES

FOR

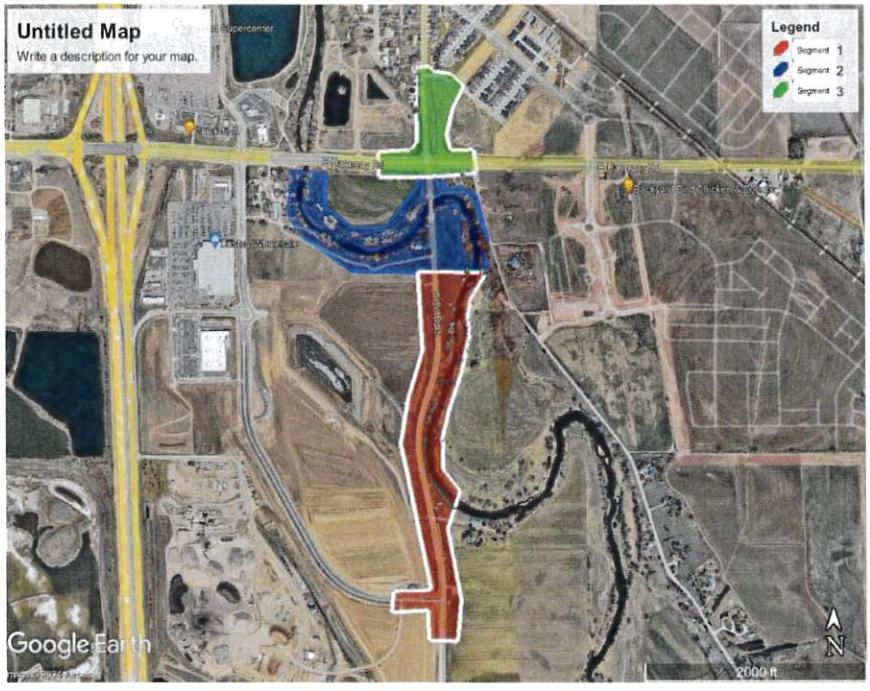
County Road 5 (CR 5) Bridge and Widening Project Design
Town of Timnath Project # TBD
Timnath, CO

Scope of Services, Schedule, and Basis of Fee
April 2025

PROJECT UNDERSTANDING

The Town of Timnath selected J-U-B Engineers, Inc. (J-U-B) to provide professional services for the design of CR 5 from Weitzel Street to Deer Park Avenue. The project consists of designing a 4-lane arterial roadway section following Larimer County Urban Area Street Standards (LCUASS, Loveland). This involves building upon the alternatives analysis that was just completed and moving ahead with the selected alternative to final design. Two designs will be provided. First, J-U-B will provide an interim design that includes interim improvements at the intersection and south of the structure. The bridge will be built out to full width. These plans will be taken to PS&E level with intent to bid and build in 2027. Another set of plans will be provided for the ultimate design to a 90% level that will include enough information to submit for a CLOMR. This includes full build out at the intersection (except for 6 lanes on Harmony), full build out of the bridge and two south bound lanes and one northbound lane on CR 5 south of the structure. Additionally, our team will provide environmental, land acquisition, traffic engineering and SUE services. Refer to the scope items below for additional information.

The town has an agreement with the Ladera Business Improvement District (BID) and thus requested the scope to be split accordingly. The figure below depicts the project segments, which aligns with the associate scope and fee.



The following table summarizes the design costs for the alternative analysis Segment and the proposed cost splits between the town and BID. Additional information and breakdown of all costs are included within this scope and fee document.

Proposed Design Cost Summary						
		Total	Developer Share		Town Share	
All Segments	Task 1 - Project Managment	$34,132.00	33.33%	$11,377	66.67%	$22,754
	Subtotal	$34,132.00		$11,377		$22,754
Segment 1 - Weitzel to North Ladera Property Line	Task 1 - Project Management	$13,550.00	100%	$13,550.00	0%	$0.00
	Task 2 - Preliminary Engineering	$140,890.00	100%	$140,890.00	0%	$0.00
	Task 3 - Final Design	$303,704.00	100%	$303,704.00	0%	$0.00
	Subtotal	$458,144.00		$458,144.00		$0.00
Segment 2 - North Ladera Property Line to North End of Bridge	Task 1 - Project Management	$13,550.00	5%	$677.50	95%	$12,872.50
	Task 2 - Preliminary Engineering	$303,962.00	5%	$15,198.10	95%	$288,763.90
	Task 3 - Final Design	$520,577.50	5%	$26,028.88	95%	$494,548.63
	Task 4 - Final Plans	$50,127.00	5%	$2,506.35	95%	$47,620.65
	Subtotal	$888,216.50		$44,410.83		$843,805.68
Segment 3 - North End of Bridge to Deer Park Ave	Task 1 - Project Management	$11,920.00	0%	$0.00	100%	$11,920.00
	Task 2 - Preliminary Engineering	$183,473.00	0%	$0.00	100%	$183,473.00
	Task 3 - Final Design	$193,389.50	0%	$0.00	100%	$193,389.50
	Task 4 - Final Plans	$30,522.00	0%	$0.00	100%	$30,522.00
	Subtotal	$419,304.50		$0.00		$419,304.50
	Project Total	**$1,799,797.00**		**$513,932**		**$1,285,865**

PROJECT STANDARDS, GUIDELINES AND SPECIFICATIONS:

The following is a list of technical references applicable to the work and are the basis for design criteria, details and specifications for the project. The Consultant will be responsible for complying with the current editions of the listed reference documents as of the Notice to Proceed date. The Consultant should anticipate regular updates to the reference documents over the course of the design schedule. Major design revisions due to newly issued design guide revisions will be reviewed and approved by the Town's project manager as additional work.

- Town of Timnath Design Criteria Manual
- AASHTO Roadside Design Guide ("Green Book")
- Manual on Uniform Traffic Control Devices (MUTCD)
- Public Right-of-Way Accessibility Guidelines (PROWAG)
- Larimer County Urban Area Street Standards (LCUASS, Loveland)
- CDOT Standard Specifications for Road and Bridge Construction
- CDOT M & S Standard Plans

PART 1 – SCOPE OF SERVICES (through Construction Drawings)

A. **Basic Services** – J-U-B's Basic Services under this Agreement are limited to the following tasks. CLIENT reserves the right to add subsequent Segments or related work to the scope of services upon mutual agreement of scope, fees, and schedule. The following abbreviations are used in this scope:

J-U-B – J-U-B Engineers, Inc.
Town – Town of Timnath
King – King Surveyors
Western – Western States Land Services
Next Phase – Next Phase Engineering
SurvWest – SurvWest
Centennial - Centennial Archaeology
EEC – Earth Engineering Consultants
BHA – BHA Design Corporation

ALL SEGMENTS

TASK 1 - *PROJECT MANAGEMENT*

Scope Task	*Scope of Services*	*Deliverables*
1.	Kickoff Meeting	
	The kick-off meeting will be attended by the following J-U-B team members: project manager, deputy project manager, environmental specialist, structure engineer, and a project engineer. In addition, it is anticipated that sub-consultant team leads will attend the kick-off meeting. J-U-B will prepare an agenda and meeting minutes.	Meeting Agenda & Minutes
2.	Monthly Progress Reports & Invoicing (Assuming 20)	
	J-U-B's project manager will prepare monthly progress reports that will be submitted with the invoice.	Progress Report & Invoice
3.	Town Board and Public Open House	
	J-U-B will organize and facilitate one public open house. Mailers and exhibits will be prepared for the event. J-U-B's project manager and project engineer will run the open house with assistance from the Town. Comments will be compiled and provided in a word/excel document.	Project Exhibits, Open House comments document
4.	Website Assistance and Public Outreach Information	
	J-U-B will continue to provide the town with content related to the project design for use on the project website and provide assistance to the town as needed to maintain the website. It is assumed that the town will manage the website and will only require content and graphics. J-U-B will prepare project cards and mailers that will provide details about the project that can be printed and mailed to the public as needed. It is assumed the town will provide the names and addresses of the residents to which it will be mailed to.	Content and Graphics
5.	Project Delivery Coordination	
	J-U-B will coordinate the town on project delivery method. It is assumed that a traditional design-bid-build delivery method will be used however J-U-B will review other methods and coordinate with the town the best approach for the project.	None

SEGMENT 1 – Weitzel Street to North Ladera Property Line

TASK 1 - *Project Management*

Scope Task	*Scope of Services*	*Deliverables*
6.	Design Meetings	
	Periodic progress meetings will be attended by the J-U-B project manager and/or project engineer and other key staff members as needed. These meetings may be a combination of phone conference meetings or in-person meetings, as requested by the town. It is anticipated that meetings will be held bi-weekly. Subconsultants will attend as required. J-U-B will prepare an agenda and meeting minutes.	Meeting Agenda & Minutes
7.	Management & Administration	
	This item includes general coordination efforts by J-U-B's project manager. Scheduling and resource loading are included in this item. Coordination with sub-consultants is included in this task. Coordination with other stakeholders will be	N/A

_Scope Task	Scope of Services	Deliverables
	included in this item. This also includes coordinating with Ladera on the Weitzel St intersection	

TASK 2 – *Preliminary Design*

Scope Task	Scope of Services	Deliverables
8.	Hydraulic Analysis	
	J-U-B will provide hydraulic analysis and modeling for the project. J-U-B hydraulic staff will work closely with J-U-B structural staff on structure alternatives and roadway elevations to ensure each project element is integrated together. ***See J-U-B Hydraulics Scope of Work for more detail information on this task item***	Preliminary Hydraulic Report
9.	Preliminary Drainage Analysis and Report	
	J-U-B will provide drainage analysis on existing and proposed conditions.	Preliminary Drainage Report
10.	Geotechnical Investigation and Pavement Design Report	
	Obtain or perform any required geotechnical work necessary for the design of the roadway improvements. Collect representative soil to perform laboratory testing services and provided pavement design recommendations using the LCUASS Pavement design approach. ***Refer to EEC's scope & fee for additional information.***	Geotechnical Report
11.	Initial Utility Coordination	
	J-U-B will coordinate with 3rd party utilities through preliminary design. This will include submitting design plans to utility companies and developing a utility contact list. J-U-B will evaluate potential conflicts and work with utility companies to determine if relocations are necessary and work with companies on schedule and timing of construction activities.	Utility Coordination Log
12.	Environmental Support	
	J-U-B will provide clearance documentation to support the CLOMR (T&E and cultural), survey the site for MBTA and noxious weeds and provide plans and specs to address both. J-U-B will also provide any coordination with CPW or other regulatory agencies (USFWS for CLOMR assistance) as required. Hazardous materials report will also be provided. ***Refer to Centennial's scope & fee for additional information.***	T&E Biological Assessment, cultural resources summary, MBTA and weeds summary report, coordination summary or notes, hazmat report.
13.	Structure Selection Report (Bridge vs Box Culverts)	
	J-U-B will prepare a structure selection reports for the installation of the overflow bridge or box culverts planned in this segment. The reports will follow CDOT requirements and will include time to respond/update to any comments. The reports will present a discussion of advantages and disadvantages of each alternative. Include an opinion of probable construction cost for each alternative.	Structure Selection Report
14.	Plan Sheets for Ultimate Design (for CLOMR Only) (Includes necessary engineering design time)	
	The following list (Items 15-19) includes sheets that are anticipated for the ultimate design and will be needed for the CLOMR submittal. This is not intended to be a full plan set and only includes the subsets included below. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets	Preliminary Plans

	include time to research, investigate, and apply engineering standards, guidelines, and judgement.	
15.	General Sheets	
	J-U-B will prepare the following preliminary plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for preliminary design) • Summary of approximate quantities	Preliminary Plans
16.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Preliminary Plans
17.	Grading Sheets	
	J-U-B will prepare preliminary plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Preliminary Plans
18.	Structure Sheets (Bridge)	
	J-U-B will prepare structure plan sheets for the Bridge that is designated for the overflow location. These sheets will depict the preferred option chosen from the structure selection report. The sheets will provide preliminary information including horizontal geometry and vertical information. Structure detailing will not be completed at this phase.	Preliminary Plans
19.	Cross sections (25' Intervals)	
	Cross sections will be developed along the horizontal control line of CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Preliminary Plans
20.	QA/QC and Constructability Review	
	Prior to the preliminary submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. At this point the project plans will also undergo an initial constructability review by our construction management staff. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
21.	Public Outreach and Stakeholder Meetings	
	This task includes meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts	Property exhibits, handout
22.	Engineers Opinion of probably construction cost (OPCC)	
	The OPCC will include expected bid items developed during the preliminary design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a	OPCC

	basis for the cost opinion. This OPCC will be broken down in to funding sources per the terms of the agreement between Ladera and the Town	
23.	Complete submittal of necessary documents and plans to the Town for review and comment	
	This item includes preparing all design drawings, reports, and design information in preparation for submittal to the Town of Timnath. This will include reviewing sub-consultants deliverables (i.e. specifications, cost estimates, design drawings, etc.) to ensure a cohesive and accurate submittal.	QA/QC plans (if requested)

TASK 3 – *Final Design*

Scope Task	*Scope of Services*	*Deliverables*
24.	Final Hydraulic Analysis	
	J-U-B will provide hydraulic analysis and modeling for the project. J-U-B hydraulic staff will work closely with J-U-B structural staff on structure alternatives and roadway elevations to ensure each project element is integrated together. ***See J-U-B Hydraulics Scope of Work for more detail information on this task item***	Final Hydraulic Report
25.	Final Drainage Analysis and Report	
	J-U-B will provide drainage analysis on existing and proposed conditions.	Final Drainage Report
26.	Final Utility Coordination	
	J-U-B will coordinate with 3rd party utilities through Final design. This will include submitting design plans to utility companies, coordinating conflicts and developing a plan for relocation.	Utility Coordination Log
27.	Plan Sheets for Ultimate Design (for CLOMR Only) (Includes necessary engineering design time)	
	The following list (Items 28-32) includes sheets that are anticipated for the ultimate design and will be needed for the CLOMR submittal. This is not intended to be a full plan set and only includes the subsets included below. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Final Plans
28.	General Sheets	
	J-U-B will prepare the following Final plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for Final design) • Summary of approximate quantities	Final Plans
29.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Final Plans

30.	Grading Sheets		
		J-U-B will prepare Final plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Final Plans
31.	Structure Sheets (Bridge)		
		J-U-B will prepare structure plan sheets for the potential bridge that is designated overflow location. These sheets will depict the preferred option chosen from the structure selection report. The sheets will provide Final information including horizontal geometry and vertical information. Structure detailing will be completed at this phase.	Final Plans
32.	Cross sections (25' Intervals)		
		Cross sections will be developed along the horizontal control line of CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Final Plans
33.	QA/QC and Constructability Review		
		Prior to the Final submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. Plans will also be reviewed by our construction management group to further look at constructability of the project. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
34.	Prepare ROW Documents and Title Reports		
		J-U-B will determine ROW needs for the project and provide and ROW exhibit for the town to review and for initial discussions with the property owner. Once ROW is agreed upon King will order title reports and create legal descriptions for the easements and/or ROW being pursued for the project. This does not include the Ladera property which is assumed to be handled outside of this scope. ***Refer to King's scope & fee for additional information.***	ROW exhibit and legal descriptions
35.	ROW Value Determination and Acquisition		
		Western States will analyze the proposed easements and/or ROW and prepare a fair market value (FMV) or order an appraisal (if valued over $10,000) for each legal description prepared for the project. Western States will then reach out to impacted property owners and negotiate land acquisition needed for the project. This does not include the Ladera property which is assumed to be handled outside of this scope. ***Refer to Western State's scope & fee for additional information.***	FMV or Appraisal
36.	Public Outreach and Stakeholder Meetings		
		This task includes final meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts	Property exhibits, handout
37.	Engineers Opinion of probably construction cost (OPCC)		
		The OPCC will include expected bid items developed during the Final design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a basis for the cost opinion. This OPCC will be broken down in to funding sources per the terms of the agreement between Ladera and the Town	OPCC
38.	Prepare and Submit CLOMR for Approval		

	J-U-B will prepare a submittal to be submitted for CLOMR approval ***See J-U-B Hydraulics Scope of Work for more detail information on this task item***	CLOMR Documents

SEGMENT 2 – North Ladera Property Line to North End of Bridge

TASK 1 - *Project Management*

Scope Task	*Scope of Services*	*Deliverables*
39. Design Meetings		
	Periodic progress meetings will be attended by the J-U-B project manager and/or project engineer and other key staff members as needed. These meetings may be a combination of phone conference meetings or in-person meetings, as requested by the town. It is anticipated that meetings will be held bi-weekly. Subconsultants will attend as required. J-U-B will prepare an agenda and meeting minutes.	Meeting Agenda & Minutes
40. Management & Administration		
	This item includes general coordination efforts by J-U-B's project manager. Scheduling and resource loading are included in this item. Coordination with sub-consultants is included in this task. Coordination with other stakeholders will be included in this item.	N/A

TASK 2 – *Preliminary Design*

Scope Task	*Scope of Services*	*Deliverables*
41. Hydraulic Analysis		
	J-U-B will provide hydraulic analysis and modeling for the project. J-U-B hydraulic staff will work closely with J-U-B structural staff on structure alternatives and roadway elevations to ensure each project element is integrated together. ***See J-U-B Hydraulics Scope of Work for more detail information on this task item***	Preliminary Hydraulic Report
42. Preliminary Drainage Analysis and Report		
	J-U-B will provide drainage analysis on existing and proposed conditions.	Preliminary Drainage Report
43. Geotechnical Investigation and Pavement Design Report		
	Obtain or perform any required geotechnical work necessary for the design of the roadway improvements. Collect representative soil to perform laboratory testing services and provided pavement design recommendations using the LCUASS Pavement design approach. ***Refer to EEC's scope & fee for additional information.***	Geotechnical Report
44. Initial Utility Coordination		
	J-U-B will coordinate with 3rd party utilities through preliminary design. This will include submitting design plans to utility companies and developing a utility contact list. J-U-B will evaluate potential conflicts and work with utility companies to determine if relocations are necessary and work with companies on schedule and timing of construction activities.	Utility Coordination Log
45. Environmental Support		
	J-U-B will provide clearance documentation to support the CLOMR and 404 permit (T&E and cultural), survey the site for MBTA and noxious weeds and provide plans and specs to address both. J-U-B will also provide any coordination	T&E Biological Assessment, cultural resources summary,

		with CPW or other regulatory agencies (USFWS for CLOMR assistance) as required. Hazardous materials report will also be provided. J-U-B will provide preconstruction notification (PCN) documents for 404 permit but will not submit to USACE until construction funding is secured. ***Refer to Centennial's scope & fee for additional information.***	MBTA and weeds summary report, coordination summary or notes, hazmat report. 404 PCN package.
46.	Structure Selection Report (Bridge)		
		J-U-B will prepare a structure selection reports for the replacement of the bridge over the Poudre River planned in this segment. The reports will follow CDOT requirements and will include time to respond/update to any comments. The reports will present a discussion of advantages and disadvantages of each alternative. Include an opinion of probable construction cost for each alternative.	Structure Selection Report
47.	Plan Sheets for Interim Design (Includes necessary engineering design time)		
		The following list (Items 48-60) includes sheets that are anticipated for this project. This also includes the tie-in limits from the bridge to the existing roadway. As the design progresses, there may be variations to the following plan list. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Preliminary Plans
48.	General Sheets		
		J-U-B will prepare the following preliminary plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for preliminary design) • Summary of approximate quantities	Preliminary Plans
49.	Geometric Sheets		
		These sheets will reference our design to the HARN systems for horizontal location. Alignments for Harmony Road and CR 5 will be referenced. All horizontal geometry points will be identified on these plans. Additional alignments for the proposed trail and underpass extension will be included.	Preliminary Plans
50.	Removal Sheets		
		All removal, resets, adjustments, and relocation items will be shown on this plan. Any required phasing of removal items will be clarified. Removal notes will be added. Removal items will have hatching to ease in readability.	Preliminary Plans
51.	Plan & Profile Sheets		
		The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Preliminary Plans
52.	Utility Sheets		
		Develop plan sheets showing all existing and proposed utilities. Utility owner(s) will be identified on plans. Any potential conflicts will be identified on plans. Proposed waterline plan and profile sheets will be included within the utility sheets.	Preliminary Plans
53.	Lighting Sheets		

		Develop plan sheets showing proposed lighting required for the project. Town and LCUASS standards will used along with photometrics to space lights appropriately which will be shown on these sheets	Preliminary Plans
54.	Grading Sheets		
		J-U-B will prepare preliminary plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Preliminary Plans
55.	Storm Drainage Sheets		
		At the preliminary design phase, drainage sheets will include horizontal design information and some vertical information. Storm profiles will be developed after preliminary design. J-U-B will evaluate the vertical depths of utilities, proposed storm pipes, and other constraints to determine the feasibility of the drainage infrastructure.	Preliminary Plans
56.	Structure Sheets (Bridge)		
		J-U-B will prepare structure plan sheets for the Bridge over the Poudre River with assume dimensions shown in the alternative analysis for the 25 yr storm event. These sheets will depict the preferred configuration chosen from the structure selection report. The sheets will provide preliminary information including horizontal geometry and vertical information. Structure detailing will not be completed at this phase.	Preliminary Plans
57.	SWMP Sheets		
		Proposed structure BMPs will be included at strategic locations and will be called out on the plans. BMPs on plans sheets will be developed for three phases of construction: initial condition, interim condition and final stabilization. Prepare preliminary erosion control plans in accordance with the Town of Timnath standards. The Stormwater Pollution Control Construction Drawings will be used by the contractor to obtain a Town of Timnath Stormwater Construction Activity Permit (SCAP). SPC plans will include: • Cover Sheet • General Notes • Before Grading Sheet (Preliminary) • During Grading Sheet (Interim) • During Construction Sheet • Final Stabilization Sheet • Detail Sheet	Preliminary Plans
58.	Traffic Sheets (Signing/Striping, Concept Phasing)		
		Signing and Striping Sheets will be added to the plans. These sheets will indicate the preliminary signing and striping expected for the project. Construction phasing and traffic control plans will be developed at the final design phase to ensure the preliminary design is solidified before advancing these plans. Conceptual phasing will be evaluated to ensure the project is constructable as designed.	Preliminary Plans
59.	Details		
		Detail sheets will include any pertinent construction details at the preliminary level. Additional details will be added during the final design phase.	Preliminary Plans
60.	Cross sections (25' Intervals)		

	Cross sections will be developed along the horizontal control line of CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Preliminary Plans
61.	Plan Sheets for Ultimate Design (for CLOMR Only) (Includes necessary engineering design time)	
	The following list (Items 62-65) includes sheets that are anticipated for the ultimate design and will be needed for the CLOMR submittal. This is not intended to be a full plan set and only includes the subsets included below. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Preliminary Plans
62.	General Sheets	
	J-U-B will prepare the following preliminary plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for preliminary design) • Summary of approximate quantities	Preliminary Plans
63.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Preliminary Plans
64.	Grading Sheets	
	J-U-B will prepare preliminary plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Preliminary Plans
65.	Cross sections (25' Intervals)	
	Cross sections will be developed along the horizontal control line of CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Preliminary Plans
66.	QA/QC and Constructability	
	Prior to the preliminary submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. At this point the project plans will also undergo an initial constructability review by our construction management staff. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
67.	Preliminary Specifications (Outline of Specs)	
	Preliminary specifications will be provided with this submittal. It is anticipated that only the index of specifications will be provided at this stage. That will include the necessary project special provisions and standard special provisions. The specifications will follow the 2023 CDOT Standard Specifications for Road and Bridge Construction.	Preliminary Technical Specifications
68.	Public Outreach and Stakeholder Meetings	

	This task includes meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts	Property exhibits, handout
69.	Engineers Opinion of probably construction cost (OPCC)	
	The OPCC will include expected bid items developed during the preliminary design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a basis for the cost opinion. This OPCC will be broken down in to funding sources per the terms of the agreement between Ladera and the Town	OPCC
70.	Complete submittal of necessary documents and plans to the Town for review and comment	
	This item includes preparing all design drawings, reports, and design information in preparation for submittal to the Town of Timnath. This will include reviewing sub-consultants deliverables (i.e. specifications, cost estimates, design drawings, etc.) to ensure a cohesive and accurate submittal.	QA/QC plans (if requested)

TASK 3 – *Final Design*

Scope Task	*Scope of Services*	*Deliverables*
71.	Final Hydraulic Analysis	
	J-U-B will provide hydraulic analysis and modeling for the project. J-U-B hydraulic staff will work closely with J-U-B structural staff on structure alternatives and roadway elevations to ensure each project element is integrated together. ***See J-U-B Hydraulics Scope of Work for more detail information on this task item***	Final Hydraulic Report
72.	Final Drainage Analysis and Report	
	J-U-B will provide drainage analysis on existing and proposed conditions.	Final Drainage Report
73.	Quality Level A Test Holes	
	J-U-B will identify test hole locations on the utility plans and provide information to Survwest who will conduct the field operations to identify utilities in the ground and provide size, type and depth of the utility ***Refer to Survwest's scope & fee for additional information.***	Test Hole Logs and Updated SUE Plans
74.	Final Utility Coordination	
	J-U-B will coordinate with 3rd party utilities through Final design. This will include submitting design plans to utility companies, coordinating conflicts and developing a plan for relocation.	Utility Coordination Log
75.	Bridge Enhancements Design	
	J-U-B will work with the BHA team to develop aesthetic enhancements for the bridge over Poudre River. ***Refer to BHA's scope & fee for additional information.***	Renderings of Proposed Enhancements
76.	Plan Sheets for Interim Design (Includes necessary engineering design time)	
	The following list (Items 77-90) includes sheets that are anticipated for this project. As the design progresses, there may be variations to the following plan list. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Final Plans

77.	General Sheets		
		J-U-B will prepare the following Final plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for Final design) • Summary of approximate quantities	Final Plans
78.	Geometric Sheets		
		These sheets will reference our design to the HARN systems for horizontal location. Alignments for Harmony Road and CR 5 will be referenced. All horizontal geometry points will be identified on these plans. Additional alignments for the proposed trail and underpass extension will be included.	Final Plans
79.	Removal Sheets		
		All removal, resets, adjustments, and relocation items will be shown on this plan. Any required phasing of removal items will be clarified. Removal notes will be added. Removal items will have hatching to ease in readability.	Final Plans
80.	Plan & Profile Sheets		
		The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Final Plans
81.	Utility Sheets		
		Develop plan sheets showing all existing and proposed utilities. Utility owner(s) will be identified on plans. Any potential conflicts and relocations (if known) will be identified on plans. Proposed waterline plan and profile sheets will be included within the utility sheets.	Final Plans
82.	Lighting Sheets		
		JUB will further develop the proposed lighting required for the project based on comments from the 30% level. Town and LCUASS standards will used along with photometrics to space lights appropriately which will be shown on these sheets	Final Plans
83.	Grading Sheets		
		J-U-B will prepare Final plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Final Plans
84.	Storm Drainage Sheets		
		At the Final design phase, drainage sheets will include horizontal design information and some vertical information. Storm profiles will be developed after Final design. J-U-B will evaluate the vertical depths of utilities, proposed storm pipes, and other constraints to determine the feasibility of the drainage infrastructure.	Final Plans
85.	Structure Sheets (Bridge)		
		J-U-B will prepare structure plan sheets for the Bridge over the Poudre River with assume dimensions shown in the alternative analysis for the 25 yr storm event. These sheets will depict the preferred configuration chosen from the structure selection report. The sheets will provide Final information including horizontal	Final Plans

		geometry and vertical information. Structure detailing will be completed at this phase.	
86.	SWMP Sheets		
		Proposed structure BMPs will be included at strategic locations and will be called out on the plans. BMPs on plans sheets will be developed for three phases of construction: initial condition, interim condition and final stabilization. Prepare Final erosion control plans in accordance with the Town of Timnath standards. The Stormwater Pollution Control Construction Drawings will be used by the contractor to obtain a Town of Timnath Stormwater Construction Activity Permit (SCAP). SPC plans will include: • Cover Sheet • General Notes • Before Grading Sheet (Final) • During Grading Sheet (Interim) • During Construction Sheet • Final Stabilization Sheet • Detail Sheet	Final Plans
87.	Landscape and Irrigation Plans		
		The following tasks will be included for Final design: - Prepare Final Landscape Plans - Prepare Final Irrigation Plans - Provide Bid Tabs and Opinion of Cost for landscape/irrigation items ***Refer to BHA's scope & fee for additional information.***	Final Plans
88.	Traffic Sheets (Signing/Striping, Concept Phasing)		
		Signing and Striping Sheets will be added to the plans. These sheets will indicate the Final signing and striping expected for the project. Construction phasing and traffic control plans will be developed at the final design phase to ensure the Final design is solidified before advancing these plans. Conceptual phasing will be evaluated to ensure the project is constructable as designed. ***Refer to Next Phase's scope & fee for additional information.***	Final Plans
89.	Details		
		Detail sheets will include any pertinent construction details at the Final level. Additional details will be added during the final design phase.	Final Plans
90.	Cross sections (25' Intervals)		
		Cross sections will be developed along the horizontal control line of CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Final Plans
91.	Plan Sheets for Ultimate Design (for CLOMR Only) (Includes necessary engineering design time)		
		The following list (Items 92-95) includes sheets that are anticipated for the ultimate design and will be needed for the CLOMR submittal. This is not intended to be a full plan set and only includes the subsets included below. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Final Plans
92.	General Sheets		

	J-U-B will prepare the following Final plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for Final design) • Summary of approximate quantities	Final Plans
93.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Final Plans
94.	Grading Sheets	
	J-U-B will prepare Final plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Final Plans
95.	Cross sections (25' Intervals)	
	Cross sections will be developed along the horizontal control line CR 5 and side streets, if applicable. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Final Plans
96.	QA/QC and Constructability Review	
	Prior to the Final submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. Plans will also be reviewed by our construction management group to further look at constructability of the project. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
97.	Final Specifications	
	Final specifications will be provided with this submittal. That will include the necessary project special provisions and standard special provisions. The specifications will follow the 2023 CDOT Standard Specifications for Road and Bridge Construction.	Final Technical Specifications
98.	Prepare ROW Documents and Title Reports	
	J-U-B will determine ROW needs for the project and provide and ROW exhibit for the town to review and for initial discussions with the property owner. Once ROW is agreed upon King will order title reports and create legal descriptions for the easements and/or ROW being pursued for the project ***Refer to King's scope & fee for additional information.***	ROW exhibit and legal descriptions
99.	ROW Value Determination and Acquisition	
	Western States will analyze the proposed easements and/or ROW and prepare a fair market value (FMV) or order an appraisal (if valued over $10,000) for each legal description prepared for the project. Western States will then reach out to impacted property owners and negotiate land acquisition needed for the project. ***Refer to Western State's scope & fee for additional information.***	FMV or Appraisal
100.	Public Outreach and Stakeholder Meetings	

	This task includes final meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts	Property exhibits, handout
101.	Engineers Opinion of probably construction cost (OPCC)	
	The OPCC will include expected bid items developed during the Final design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a basis for the cost opinion. This OPCC will be broken down in to funding sources per the terms of the agreement between Ladera and the Town	OPCC
102.	Prepare and Submit CLOMR for Approval	
	J-U-B will prepare a submittal to be submitted for CLOMR approval	CLOMR Documents

TASK 4 - *FINAL CONSTRUCTION PLANS & BID ADMINISTRATIVE ASSISTANCE*

Scope Task	*Scope of Services*	*Deliverables*
103.	Final Construction Plan Sheets	
	After the 90% design has been complete and reviewed by the Town, J-U-B will begin advancing the design for Construction. Comments received from the final design phase will be incorporated into the construction documents.	Final Plans
104.	Final Specifications for Construction (Project Special Provisions and Standard Special Provisions)	
	J-U-B will revise the project special and standard special provisions to incorporate into the advertisement package.	Final Technical Specifications
105.	Engineer's Opinion of Probable Construction Cost (OPCC)	
	J-U-B will advance the OPCC to a bid-ready estimate. Quantities will be updated/verified. The quantities will be input into the Opinion of Probable Construction Cost with associated unit costs.	Final OPCC
106.	Submittal Package of Complete Documents and Plans for Town Review	
	This item includes preparing all design drawings, reports, and design information in preparation for submittal to the County. This will include reviewing sub-consultants deliverables (i.e. quantities, cost estimates, design drawings, etc.) to ensure a cohesive and accurate submittal.	Complete PS&E package with supporting reports & memos
107.	Bid Administration Assistance to Town	
	J-U-B's Project Manager will attend the pre-bid meeting. J-U-B will coordinate with the Town on any revisions throughout the advertisement period. Plans & Specifications will be updated accordingly. J-U-B will assist the Town in answering any questions throughout the advertisement period. J-U-B will post addendums to contractors.	Design Files and/or updated plans & specifications

SEGMENT 3 – South Side of Harmony Intersection to Deer Park Ave

TASK 1 - *Project Management*

Scope Task	*Scope of Services*	*Deliverables*
108.	Design Meetings	
	Periodic progress meetings will be attended by the J-U-B project manager and/or project engineer and other key staff members as needed. These meetings may be a combination of phone conference meetings or in-person meetings, as requested by the town. It is anticipated that meetings will be held bi-weekly.	Meeting Agenda & Minutes

_Scope Task	Scope of Services	Deliverables
	Subconsultants will attend as required. J-U-B will prepare an agenda and meeting minutes.	
109.	Management & Administration	
	This item includes general coordination efforts by J-U-B's project manager. Scheduling and resource loading are included in this item. Coordination with sub-consultants is included in this task. Coordination with other stakeholders will be included in this item.	N/A

TASK 2 – *Preliminary Design*

Scope Task	Scope of Services	Deliverables
110.	Preliminary Drainage Analysis and Report	
	J-U-B will provide drainage analysis on existing and proposed conditions.	Preliminary Drainage Report
111.	Geotechnical Investigation and Pavement Design Report	
	Obtain or perform any required geotechnical work necessary for the design of the roadway improvements. Collect representative soil to perform laboratory testing services and provided pavement design recommendations using the LCUASS Pavement design approach. ***Refer to EEC's scope & fee for additional information.***	Geotechnical Report
112.	Initial Utility Coordination	
	J-U-B will coordinate with 3rd party utilities through preliminary design. This will include submitting design plans to utility companies and developing a utility contact list. J-U-B will evaluate potential conflicts and work with utility companies to determine if relocations are necessary and work with companies on schedule and timing of construction activities.	Utility Coordination Log
113.	Environmental Support	
	J-U-B will survey the site for MBTA and noxious weeds and provide plans and specs to address both. J-U-B will also provide any coordination with CPW as required. Hazardous materials report will also be provided. ***Refer to Centennial's scope & fee for additional information.***	MBTA and weeds summary report, hazmat report.
114.	Plan Sheets for Interim Design (Includes necessary engineering design time)	
	The following list (Items 115-126) includes sheets that are anticipated for this project. As the design progresses, there may be variations to the following plan list. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2021 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Preliminary Plans
115.	General Sheets	
	J-U-B will prepare the following preliminary plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for preliminary design) • Summary of approximate quantities	Preliminary Plans
116.	Geometric Sheets	

	These sheets will reference our design to the HARN systems for horizontal location. Alignments for Harmony Road and CR 5 will be referenced. All horizontal geometry points will be identified on these plans. Additional alignments for the proposed trail and underpass extension will be included.	Preliminary Plans
117.	Removal Sheets	
	All removal, resets, adjustments, and relocation items will be shown on this plan. Any required phasing of removal items will be clarified. Removal notes will be added. Removal items will have hatching to ease in readability.	Preliminary Plans
118.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Preliminary Plans
119.	Utility Sheets	
	Develop plan sheets showing all existing and proposed utilities. Utility owner(s) will be identified on plans. Any potential conflicts will be identified on plans. Proposed waterline plan and profile sheets will be included within the utility sheets.	Preliminary Plans
120.	Lighting Sheets	
	Develop plan sheets showing proposed lighting required for the project. Town and LCUASS standards will used along with photometrics to space lights appropriately which will be shown on these sheets	Preliminary Plans
121.	Grading Sheets	
	J-U-B will prepare preliminary plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Preliminary Plans
122.	Storm Drainage Sheets	
	At the preliminary design phase, drainage sheets will include horizontal design information and some vertical information. Storm profiles will be developed after preliminary design. J-U-B will evaluate the vertical depths of utilities, proposed storm pipes, and other constraints to determine the feasibility of the drainage infrastructure.	Preliminary Plans
123.	SWMP Sheets	
	Proposed structure BMPs will be included at strategic locations and will be called out on the plans. BMPs on plans sheets will be developed for three phases of construction: initial condition, interim condition and final stabilization. Prepare preliminary erosion control plans in accordance with the Town of Timnath standards. The Stormwater Pollution Control Construction Drawings will be used by the contractor to obtain a Town of Timnath Stormwater Construction Activity Permit (SCAP). SPC plans will include: • Cover Sheet • General Notes • Before Grading Sheet (Preliminary) • During Grading Sheet (Interim) • During Construction Sheet • Final Stabilization Sheet	Preliminary Plans

	• Detail Sheet	
124.	Traffic Sheets (Signing/Striping, Signals, Concept Phasing)	
	Signing and Striping Sheets will be added to the plans. These sheets will indicate the preliminary signing and striping expected for the project. Preliminary signal sheet will be prepared for the intersection of Harmony Rd and CR 5 Construction phasing and traffic control plans will be developed at the final design phase to ensure the preliminary design is solidified before advancing these plans. Conceptual phasing will be evaluated to ensure the project is constructable as designed.	Preliminary Plans
125.	Details	
	Detail sheets will include any pertinent construction details at the preliminary level. Additional details will be added during the final design phase.	Preliminary Plans
126.	Cross sections (25' Intervals)	
	Cross sections will be developed along the horizontal control line of Harmony Rd and CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Preliminary Plans
127.	QA/QC and Constructability Review	
	Prior to the preliminary submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. At this point the project plans will also undergo an initial constructability review by our construction management staff. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
128.	Preliminary Specifications (Outline of Specs)	
	Preliminary specifications will be provided with this submittal. It is anticipated that only the index of specifications will be provided at this stage. That will include the necessary project special provisions and standard special provisions. The specifications will follow the 2023 CDOT Standard Specifications for Road and Bridge Construction.	Preliminary Technical Specifications
129.	Public Outreach and Stakeholder Meetings	
	This task includes meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts.	Property exhibits, handout
130.	Engineers Opinion of probably construction cost (OPCC)	
	The OPCC will include expected bid items developed during the preliminary design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a basis for the cost opinion.	OPCC
131.	Complete submittal of necessary documents and plans to the Town for review and comment	
	This item includes preparing all design drawings, reports, and design information in preparation for submittal to the Town of Timnath. This will include reviewing sub-consultants deliverables (i.e. specifications, cost estimates, design drawings, etc.) to ensure a cohesive and accurate submittal.	QA/QC plans (if requested)

TASK 3 – *Final Design*

Scope Task	*Scope of Services*	*Deliverables*
132.	Final Drainage Analysis and Report	
	J-U-B will provide drainage analysis on existing and proposed conditions.	Final Drainage Report
133.	Quality Level A Test Holes	
	J-U-B will identify test hole locations on the utility plans and provide information to Survwest who will conduct the field operations to identify utilities in the ground and provide size, type and depth of the utility ***Refer to Survwest's scope & fee for additional information.***	Test Hole Logs and Updated SUE Plans
134.	Final Utility Coordination	
	J-U-B will coordinate with 3rd party utilities through Final design. This will include submitting design plans to utility companies, coordinating conflicts and developing a plan for relocation.	Utility Coordination Log
135.	Plan Sheets for Interim Design (Includes necessary engineering design time)	
	The following list (Items 136-148) includes sheets that are anticipated for this project. As the design progresses, there may be variations to the following plan list. J-U-B will discuss any major change with the Town of Timnath before developing plan sheets. The plan sheets will be developed using AutoCAD Civil 3D 2025 and will be setup at a 22"x34" format and printed at half size 11"x17". All design sheets include time to research, investigate, and apply engineering standards, guidelines, and judgement.	Final Plans
136.	General Sheets	
	J-U-B will prepare the following Final plan sheets: • Cover • Standard Note(s) • Legend and symbols • Typical sections • Quantity Tabulations (Some tabulations will be included, but not all for Final design) • Summary of approximate quantities	Final Plans
137.	Geometric Sheets	
	These sheets will reference our design to the HARN systems for horizontal location. Alignments for Harmony Road and CR 5 will be referenced. All horizontal geometry points will be identified on these plans. Additional alignments for the proposed trail and underpass extension will be included.	Final Plans
138.	Removal Sheets	
	All removal, resets, adjustments, and relocation items will be shown on this plan. Any required phasing of removal items will be clarified. Removal notes will be added. Removal items will have hatching to ease in readability.	Final Plans
139.	Plan & Profile Sheets	
	The roadway plan and profile sheets will include a plan view and corresponding profile view (if applicable) that will include existing and proposed improvements. It is anticipated that the centerline plan and profile and any proposed curb flowline plan and profiles will be illustrated on these sheets. The plan views will callout all proposed design elements and references to other sheets will be included. It is anticipated that a 20 scale will be used. Matchlines and a key map will be utilized to clearly identify the horizontal location.	Final Plans
140.	Utility Sheets	
	Develop plan sheets showing all existing and proposed utilities. Utility owner(s) will be identified on plans. Any potential conflicts will be identified on plans.	Final Plans

	Proposed waterline plan and profile sheets will be included within the utility sheets.	
141.	Lighting Sheets	
	JUB will further develop the proposed lighting required for the project based on comments from the 30% level. Town and LCUASS standards will used along with photometrics to space lights appropriately which will be shown on these sheets	Final Plans
142.	Grading Sheets	
	J-U-B will prepare Final plan sheets to include surface grading and proposed contours. Elevations of the roadway corridor, and other intersecting roads will be detailed on these sheets. Matchlines will clearly be represented on these sheets. Grades will be identified. A corridor model will be created in AutoCAD Civil 3D with a proposed surface. Some detailed grading will be shown on these sheets.	Final Plans
143.	Storm Drainage Sheets	
	At the Final design phase, drainage sheets will include horizontal design information and some vertical information. Storm profiles will be developed after Final design. J-U-B will evaluate the vertical depths of utilities, proposed storm pipes, and other constraints to determine the feasibility of the drainage infrastructure.	Final Plans
144.	SWMP Sheets	
	Proposed structure BMPs will be included at strategic locations and will be called out on the plans. BMPs on plans sheets will be developed for three phases of construction: initial condition, interim condition and final stabilization. Prepare Final erosion control plans in accordance with the Town of Timnath standards. The Stormwater Pollution Control Construction Drawings will be used by the contractor to obtain a Town of Timnath Stormwater Construction Activity Permit (SCAP). SPC plans will include: • Cover Sheet • General Notes • Before Grading Sheet (Final) • During Grading Sheet (Interim) • During Construction Sheet • Final Stabilization Sheet • Detail Sheet	Final Plans
145.	Landscape and Irrigation Plans	
	The following tasks will be included for Final design: - Prepare Final Landscape Plans - Provide Bid Tabs and Opinion of Cost for landscape/irrigation items ***Refer to BHA's scope & fee for additional information.***	Final Plans
146.	Traffic Sheets (Signing/Striping, Signals, Concept Phasing)	
	Signing and Striping Sheets will be added to the plans. These sheets will indicate the Final signing and striping expected for the project. Final signal sheet will be prepared for the intersection of Harmony Rd and CR 5. Construction phasing and traffic control plans will be developed at the final design phase to ensure the Final design is solidified before advancing these plans. Conceptual phasing will be evaluated to ensure the project is constructable as designed.	Final Plans
147.	Details	

	Detail sheets will include any pertinent construction details at the Final level. Additional details will be added during the final design phase.	Final Plans
148.	Cross sections (25' Intervals)	
	Cross sections will be developed along the horizontal control line of Harmony Rd and CR 5. Cross sections will be displayed at 25' intervals. Cross sections will display minimal labels at this phase.	Final Plans
149.	QA/QC and Constructability Review	
	Prior to the Final submittal J-U-B will perform a QA/QC process which includes sending drawings to other J-U-B staff members for review and comment. Plans will also be reviewed by our construction management group to further look at constructability of the project. All comments will be reviewed with the design staff and incorporated into the plans if relevant.	QA/QC plans (if requested)
150.	Final Specifications	
	Final specifications will be provided with this submittal. That will include the necessary project special provisions and standard special provisions. The specifications will follow the 2023 CDOT Standard Specifications for Road and Bridge Construction.	Final Technical Specifications
151.	Prepare ROW Documents and Title Reports	
	J-U-B will determine ROW needs for the project and provide and ROW exhibit for the town to review and for initial discussions with the property owner. Once ROW is agreed upon King will order title reports and create legal descriptions for the easements and/or ROW being pursued for the project ***Refer to King's scope & fee for additional information.***	ROW exhibit and legal descriptions
152.	ROW Value Determination and Acquisition	
	Western States will analyze the proposed easements and/or ROW and prepare a fair market value (FMV) or order an appraisal (if valued over $10,000) for each legal description prepared for the project. Western States will then reach out to impacted property owners and negotiate land acquisition needed for the project. ***Refer to Western State's scope & fee for additional information.***	FMV or Appraisal
153.	Public Outreach and Stakeholder Meetings	
	This task includes final meetings with nearby property owners and stakeholders. J-U-B will prepare exhibits and handouts for these public outreach efforts	Property exhibits, handout
154.	Engineers Opinion of probably construction cost (OPCC)	
	The OPCC will include expected bid items developed during the Final design. Quantities will be developed from the design sheets. Items not on the tabulation sheets will be documented in a computation book. Costs will be developed from various sources including past bid tabs. The OPCC will have a contingency added at this point. The contingency will be coordinated with the Town of Timnath, prior to submittal. Standard CDOT pay items will be used as a basis for the cost opinion.	OPCC

TASK 4 - *FINAL CONSTRUCTION PLANS & BID ADMINISTRATIVE ASSISTANCE*

Scope Task	*Scope of Services*	*Deliverables*
155.	Final Construction Plan Sheets	
	After the 90% design has been complete and reviewed by the Town, J-U-B will begin advancing the design for Construction. Comments received from the final design phase will be incorporated into the construction documents.	Final Plans
156.	Final Specifications for Construction (Project Special Provisions and Standard Special Provisions)	

Scope Task	*Scope of Services*	*Deliverables*
	J-U-B will revise the project special and standard special provisions to incorporate into the advertisement package.	Final Technical Specifications
157.	Engineer's Opinion of Probable Construction Cost (OPCC)	
	J-U-B will advance the OPCC to a bid-ready estimate. Quantities will be updated/verified. The quantities will be input into the Opinion of Probable Construction Cost with associated unit costs.	Final OPCC
158.	Submittal Package of Complete Documents and Plans for Town Review	
	This item includes preparing all design drawings, reports, and design information in preparation for submittal to the County. This will include reviewing sub-consultants deliverables (i.e. quantities, cost estimates, design drawings, etc.) to ensure a cohesive and accurate submittal.	Complete PS&E package with supporting reports & memos
159.	Bid Administration Assistance to Town	
	J-U-B's Project Manager will attend the pre-bid meeting. J-U-B will coordinate with the Town on any revisions throughout the advertisement period. Plans & Specifications will be updated accordingly. J-U-B will assist the Town in answering any questions throughout the advertisement period. J-U-B will post addendums to contractors.	Design Files and/or updated plans & specifications

ASSUMPTIONS

The above Scope of Services is based on the following assumptions:

- It is assumed that the town is funding all aspects of the project and no federal, CDOT and/or local agency requirements will be required.
- Electronic CAD files will be supplied to the town in AutoCAD Civil 3D format, if requested.
- Test Holes for SUE services are limited to 25 test holes
- Hydraulic modeling will utilize the Cache la Poudre River Ladera No. 2 LOMR as the effective model.
- Hydraulic modeling alterations will be limited to the study reach, as previously defined.
- All hydraulic analyses will be conducted utilizing the same model version as the regulatory model.
- Completion of a LOMR following construction will be completed under a separate scope and budget.
- Impacts will meet requirements of a Nationwide 404 Permit and no Individual 404 permit actions are included.
- No USFWS Section 7 Consultation.
- No SHPO coordination or submission.
- No Integrated Weed Management Plan included.
- No permit required from CDPHE for dredge and fill in State Waters. Assumes all ditches are exempt per current CDPHE guidance.
- All additional assumptions included in subconsultant proposals

PART 2 – SCHEDULE OF SERVICES

A. The following table summarizes the anticipated schedule for the identified Basic Services predicated upon timely receipt of CLIENT-provided information, typical review periods, and active direction during work. CLIENT acknowledges that J-U-B will not be responsible for impacts to the schedule by events or actions of others over which J-U-B has no control.

o Kick-Off Meeting	- May 5th, 2025
o Anticipated 30% Design	- August 2025
o Anticipated 90% Design	- January 2026
o CLOMR	- Feb - Oct 2026
o Final Submittal	- October 2026
o Advertise and Award	- Oct – Dec 2026
o Construction	- 2027

PART 4 – BASIS OF FEE

The hours and fees for each task are presented on the attached spreadsheet.

CR 5 Roadway and Bridge Improvements - Proposal Cost

Project Number: TBD

Prepared By: J-U-B Engineers

April 11, 2025

CR 5 Roadway and Bridge Improvements

Task Number	Task Description	QA/QC Project Manager ($/HR) $240	Construction Manager Disipline Lead ($/HR) $237	Project Manager ($/HR) $254	Deputy Project Manager ($/HR) $240	PE - Discipline Lead Sr. (Structures) ($/HR) $264	Structure Engineer ($/HR) $239	Environmental Specialists ($/HR) $216	Project Engineer II ($/HR) $211	Project Designer - Lead ($/HR) $163	TLG $170	GIS Analyst - Senior ($/HR) $187	CAD Designer ($/HR) $141	Assistant Designer ($/HR) $91	Project Accountant ($/HR) $123	JUB FEE	Subconsult. Ring / Next Phase / SurvWest / Western States / BHA / Centennial / LCC	Expenses	Task Total	Total
ALL SEGMENTS																				
	TASK 1 - Project Management																			
1	Kickoff Meeting			2	3		2	2	2							$2,560			$2,560	
2	Monthly Progress Reports & Invoicing (Assuming 20)			10											20	$5,000			$5,000	
3	Town Board and Public Open House			8	8				8		12	8				$9,176	$3,000		$12,176	
4	Website Assistance and Public Outreach Information			2	4				4		40	8				$10,608			$10,608	
5	Project Delivery Coordination		4	4	4			6								$3,788			$3,788	
	Sub-Totals	**0**	**4**	**26**	**19**	**0**	**2**	**6**	**14**	**0**	**52**	**16**	**0**	**0**	**20**	**$31,132**	**$3,000**	**$0**		**$34,132**
SEGMENT 1 (Weitzel Street to North Ladera Property Line)																				
	TASK 1 - Project Management																			
6	Design Meetings			24	10			2								$8,928			$8,928	
7	Management & Administration			8	4					10						$4,622			$4,622	
	Sub-Totals	**0**	**0**	**32**	**14**	**0**	**0**	**2**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**$13,550**	**$0**	**$0**		**$13,550**
	TASK 2 - Preliminary Design																			
8	Hydraulic Analysis			1	8				4	24			4			$7,494.00			$7,494.00	
9	Preliminary Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
10	Geotechnical Investigation and Pavement Design Report			1	4											$1,214.00	$5,867.00		$7,081.00	
11	Initial Utility Coordination			2	8				8							$4,116.00			$4,116.00	
12	Environmental Support							55								$11,880.00	$587.00	$84.00	$12,551.00	
13	Structure Selection Report (Box Culverts vs Bridge)			1	2	6	60			109						$32,958.00			$32,958.00	
14	**Plan Sheets for Ultimate Design (for CLOMR Only) (Includes necessary engineering design time)**															$0.00			$0.00	
15	General Sheets			1	2				4	8			8			$4,010.00			$4,010.00	
16	Plan & Profile Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
17	Grading Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
18	Structure Sheets (Bridge)			1	2	6	24		8	80						$22,782.00			$22,782.00	
19	Cross Sections			1	2				8	16			16			$7,286.00			$7,286.00	
20	QA/QC and Constructability Review	4	4	4	6				4							$5,208.00			$5,208.00	
21	Public Outreach and Stakeholder Meetings			4	8				8	8			8			$7,056.00			$7,056.00	
22	Engineers Opinion of Probable Construction Cost (OPCC)			1	6				8	8			8			$5,814.00			$5,814.00	
23	Complete submittal of necessary documents and plans to Town for review and comment			1	2				8	8			8			$4,854.00			$4,854.00	
	Sub-Totals	**4**	**4**	**22**	**56**	**12**	**84**	**55**	**84**	**292**	**0**	**0**	**92**	**0**	**0**	**$134,352**	**$6,454**	**$84**		**$140,890**
	TASK 3 - Final Design																			
24	Final Hydraulic Analysis			1	8				2	24			2			$6,790.00			$6,790.00	
25	Final Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
26	Final Utility Coordination			2	8				8							$4,116.00			$4,116.00	
27	**Plan Sheets for Ultimate Design (for CLOMR Only)(Includes necessary engineering design time)**															$0.00			$0.00	
28	General Sheets			1	2				4	8			8			$4,010.00			$4,010.00	
29	Plan & Profile Sheets			1	2				6	12			16			$6,212.00			$6,212.00	
30	Grading Sheets			1	2				6	12			16			$6,212.00			$6,212.00	
31	Structure Sheets (Bridge)			1	2	24	225		4	700						$175,789.00			$175,789.00	
32	Cross Sections			1	2				6	12			16			$6,212.00			$6,212.00	
33	QA/QC and Constructability Review	8	4	4	4				4							$5,688.00			$5,688.00	
34	Prepare ROW Documents and Title Reports			1	2				4	4			8			$3,358.00	$2,682.00		$6,040.00	
35	ROW Value Determination and Acquisition			2	4											$1,468.00	$11,720.00		$13,188.00	
36	Public Outreach and Stakeholder Meetings			4	8				8	8			8			$7,056.00			$7,056.00	
37	Engineers Opinion of Probable Construction Cost (OPCC)		4	1	6				8	8			8			$6,762.00			$6,762.00	
38	Prepare and Submit CLOMR for Approval			1	56				8	168		14	8	4		$46,876.00		$3,645.00	$50,521.00	
	Sub-Totals	**8**	**8**	**23**	**108**	**24**	**225**	**0**	**76**	**964**	**0**	**14**	**98**	**4**	**0**	**$285,657.00**	**$14,402.00**	**$3,645.00**		**$303,704**
	SEGMENT 1 TOTALS	**12**	**12**	**77**	**178**	**36**	**309**	**57**	**160**	**1266**	**0**	**14**	**190**	**4**	**0**	**$433,559.00**	**$20,856.00**	**$3,729.00**		**$458,144**

Task Number	Task Description	QA/QC Project Manager ($/HR)	Construction Manager Disipline Lead ($/HR)	Project Manager ($/HR)	Deputy Project Manager ($/HR)	PE - Discipline Lead Sr. (Structures) ($/HR)	Structure Engineer ($/HR)	Environmental Specialists ($/HR)	Project Engineer II ($/HR)	Project Designer - Lead ($/HR)	TLG	GIS Analyst - Senior ($/HR)	CAD Designer ($/HR)	Assistant Designer ($/HR)	Project Accountant ($/HR)	JUB FEE	Subconsult. King Nest Phase SurvWest Western States BHA Centennial ECC	Expenses	Task Total	Total
		$240	$237	$254	$240	$264	$239	$216	$211	$163	$170	$187	$141	$91	$123					
SEGMENT 2 (North Ladera Property Line to South Side of Harmony Intersection)																				
	TASK 1 - Project Management																			
39	Design Meetings			24	10			2								$8,928			$8,928	
40	Management & Administration			8	4					10						$4,622			$4,622	
	Sub-Totals	**0**	**0**	**32**	**14**	**0**	**0**	**2**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**$13,550**	**$0**			**$13,550**
	TASK 2 - Preliminary Design																			
41	Hydraulic Analysis			1	8				4	24			4			$7,494.00			$7,494.00	
42	Preliminary Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
43	Geotechnical Investigation and Pavement Design Report			1	4											$1,214.00	$5,867.00		$7,081.00	
44	Initial Utility Coordination			2	8				8							$4,116.00			$4,116.00	
45	Environmental Support							55								$11,880.00	$587.00	$84.00	$12,551.00	
46	Structure Selection Report (Bridge)					4	80			120						$39,736.00			$39,736.00	
47	**Plan Sheets for Interim Design (includes necessary engineering design time)**															$0.00			$0.00	
48	General Sheets			1	2				8	32			18			$6,916.00			$6,916.00	
49	Geometric Sheets			1	2				10	18			18			$8,316.00			$8,316.00	
50	Removal Sheets			1	2				8	18			18			$7,894.00			$7,894.00	
51	Plan & Profile Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
52	Utility Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
53	Lighting Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
54	Grading Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
55	Storm Drainage Sheets			1	2				10	18			16			$8,034.00			$8,034.00	
56	Structure Sheets (Bridge)			1	2	16	40		8	80						$29,246.00			$29,246.00	
57	SWMP Sheets			1	2				8	18			24			$8,740.00			$8,740.00	
58	Traffic Sheets (Signing/Striping, Concept Phasing)			1	2				8	8			24			$7,110.00	$1,200.00		$8,310.00	
59	Details			1	15				8	65			20			$18,957.00			$18,957.00	
60	Cross Sections			1	2				10	20			24			$9,488.00			$9,488.00	
61	**Plan Sheets for Ultimate Design (for CLOMR Only)(includes necessary engineering design time)**															$0.00			$0.00	
62	General Sheets			1	2				4	8			8			$4,010.00			$4,010.00	
63	Plan & Profile Sheets			1	2				8	12			12			$6,070.00			$6,070.00	
64	Grading Sheets			1	2				8	12			16			$6,634.00			$6,634.00	
65	Cross Sections			1	2				8	12			16			$6,634.00			$6,634.00	
66	QA/QC and Constructability Review	8	8	4	6				4							$7,116.00			$7,116.00	
67	Preliminary Specifications (Outline of specs)		4	1	2				2							$2,104.00			$2,104.00	
68	Public Outreach and Stakeholder Meetings			2	2				8	8			8			$5,108.00			$5,108.00	
69	Engineers Opinion of Probable Construction Cost (OPCC)		4	1	6				8	8			8			$6,762.00			$6,762.00	
70	Complete submittal of necessary documents and plans to the Town for review and comment			1	52				8	143		14	8	4		$41,841.00			$41,841.00	
	Sub-Totals	**8**	**16**	**32**	**137**	**20**	**120**	**55**	**196**	**692**	**0**	**14**	**330**	**4**	**0**	**$296,224**	**$7,654**	**$84**		**$303,962.00**
	TASK 3 - Final Design																			
71	Final Hydraulic Analysis			1	8				2	24			2			$6,790.00			$6,790.00	
72	Final Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
73	Quality Level A Test Holes			2	4				2	4						$2,542.00	$25,211.50		$27,753.50	
74	Final Utility Coordination			2	8				8							$4,116.00			$4,116.00	
75	Bridge Aesthetic Enhancements Design			1	2	4	4									$2,746.00	$7,500.00		$10,246.00	
76	**Plan Sheets for Interim Design (includes necessary engineering design time)**															$0.00			$0.00	
77	General Sheets			1	2				6	32			12			$5,648.00			$5,648.00	
78	Geometric Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
79	Removal Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
80	Plan & Profile Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
81	Utility Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
82	Lighting Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
83	Grading Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
84	Storm Drainage Sheets			1	2				8	20						$8,502.00			$8,502.00	
85	Structure Sheets (Bridge)			1	2	24	280		4	900						$221,534.00			$221,534.00	
86	SWMP Sheets			1	2			4	6	20			20			$8,944.00			$8,944.00	
87	Landscape and Irrigation Plans			1	2				4	8			8			$4,010.00	$5,000.00		$9,010.00	
88	Traffic Sheets (Signing/Striping, Concept Phasing)			1	2				6	24			24			$9,296.00	$1,200.00		$10,496.00	
89	Details			1	10				6	80			20			$13,260.00			$13,260.00	
90	Cross Sections			1	2				10	16			16			$7,708.00			$7,708.00	
91	**Plan Sheets for Ultimate Design (for CLOMR Only)(includes necessary engineering design time)**															$0.00			$0.00	
92	General Sheets			1	2				4	8			8			$4,010.00			$4,010.00	
93	Plan & Profile Sheets			1	2				6	32			12			$5,648.00			$5,648.00	
94	Grading Sheets			1	2				6	32			16			$6,212.00			$6,212.00	
95	Cross Sections			1	2				6	32			16			$6,212.00			$6,212.00	
96	QA/QC and Constructability Review	12	8	4	6				4	5						$8,891.00			$8,891.00	
97	Final Specifications		8	1	4			2	2	3						$4,453.00			$4,453.00	
98	Prepare ROW Documents and Title Reports			1	2				4	4			8			$3,358.00	$5,365.00		$8,723.00	
99	ROW Value Determination and Acquisition			2	4											$1,468.00	$23,440.00		$24,908.00	
100	Public Outreach and Stakeholder Meetings			1	2				8	8			8			$4,854.00			$4,854.00	
101	Engineers Opinion of Probable Construction Cost (OPCC)		4	1	6				8	8			8			$6,762.00			$6,762.00	
102	Prepare and Submit CLOMR for Approval			1	56				8	168		14	8	4		$46,876.00		$3,645.00	$50,521.00	
	Sub-Totals	**12**	**20**	**37**	**148**	**28**	**284**	**6**	**182**	**1428**	**0**	**14**	**326**	**4**	**0**	**$449,216**	**$67,717**	**$3,645**		**$520,578**
	TASK 4 - Final Construction Plans and Bid Administrative Assistance																			
103	Final Construction Plan Sheets			1	8	8	35		20	80	24					$34,753.00			$34,753.00	
104	Final Specifications for Construction (Project Special Provisions and Standard Special Provisions)		4	2	4											$2,416.00			$2,416.00	
105	Engineer's Opinion of Probable Construction Cost (OPCC)		4	2	2				4	8	8					$5,444.00			$5,444.00	
106	Submittal Package of Complete Documents and Plans for Town and CDOT Review			1	4				8							$2,902.00			$2,902.00	
107	Bid Administration Assistance to Town		4	4	4				8							$4,612.00			$4,612.00	
	Sub-Totals	**0**	**12**	**13**	**22**	**8**	**35**	**0**	**40**	**88**	**32**	**0**	**0**	**0**	**0**	**$90,127.00**	**$0.00**	**$0.00**		**$90,127**
	SEGMENT 2 TOTALS	**20**	**48**	**114**	**321**	**56**	**439**	**63**	**418**	**2218**	**32**	**28**	**656**	**8**	**0**	**$809,117.00**	**$75,370.50**	**$3,729.00**		**$888,217**

Task Number	Task Description	QA/QC Project Manager ($/HR)	Construction Manager Disipline Lead ($/HR)	Project Manager ($/HR)	Deputy Project Manager ($/HR)	PE - Discipline Lead Sr. (Structures) ($/HR)	Structure Engineer ($/HR)	Environmental Specialists ($/HR)	Project Engineer II ($/HR)	Project Designer - Lead ($/HR)	TLG	GIS Analyst - Senior ($/HR)	CAD Designer ($/HR)	Assistant Designer ($/HR)	Project Accountant ($/HR)	JUB FEE	Subconsult. King Nest Phase SurvWest Western States BHA Centennial ECC	Expenses	Task Total	Total
		$240	$237	$254	$240	$264	$239	$216	$211	$163	$170	$187	$141	$91	$123					
SEGMENT 3 (South Side of Harmony Intersection to Deer Park Ave)																				
	TASK 1 - Project Management																			
108	Design Meetings			24	10			2								$8,928			$8,928	
109	Management & Administration			8	4											$2,992			$2,992	
	Sub-Totals	**0**	**0**	**32**	**14**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$11,920**	**$0**			**$11,920**
	TASK 2 - Preliminary Design																			
110	Preliminary Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
111	Geotechnical Investigation and Pavement Design Report			1	4											$1,214.00	$5,867.00		$7,081.00	
112	Initial Utility Coordination			2	8				8							$4,116.00			$4,116.00	
113	Environmental Support							28								$6,048.00	$587.00	$84.00	$6,719.00	
114	**Plan Sheets for Interim Design (includes necessary engineering design time)**															$0.00			$0.00	
115	General Sheets			1	2				4	8			10			$4,292.00			$4,292.00	
116	Geometric Sheets			1	2				8	12			12			$6,070.00			$6,070.00	
117	Removal Sheets			1	2				8	12			12			$6,070.00			$6,070.00	
118	Plan & Profile Sheets			1	2				12	16			12			$7,566.00			$7,566.00	
119	Utility Sheets			1	2				12	16			12			$7,566.00			$7,566.00	
120	Lighting Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
121	Grading Sheets			1	2				12	16			16			$8,130.00			$8,130.00	
122	Storm Drainage Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
123	SWMP Sheets			1	2				4	16			16			$6,442.00			$6,442.00	
124	Traffic Sheets (Signing/Striping, Signals, Concept Phasing)			1	2				4	8			16			$5,138.00	$5,600.00		$10,738.00	
125	Details			1	15				4	65			12			$16,985.00			$16,985.00	
126	Cross Sections			1	2				8	12			16			$6,634.00			$6,634.00	
127	QA/QC and Constructability Review	8	8	4	6				4	5						$7,931.00			$7,931.00	
128	Preliminary Specifications (Outline of specs)		4	1	2				2							$2,104.00			$2,104.00	
129	Public Outreach and Stakeholder Meetings			2	2				8	8			8			$5,108.00			$5,108.00	
130	Engineers Opinion of Probable Construction Cost (OPCC)		4	1	6				8	8			8			$6,762.00			$6,762.00	
131	Complete submittal of necessary documents and plans to CDOT and Town for review and comment			1	52				8	143		14	8	4		$41,841.00			$41,841.00	
	Sub-Totals	**8**	**16**	**26**	**119**	**0**	**0**	**28**	**140**	**389**	**0**	**14**	**202**	**4**	**0**	**$171,335**	**$12,054**	**$84**		**$183,473**
	TASK 3 - Final Design																			
132	Final Drainage Analysis and Report			2	2				8	8			8			$5,108.00			$5,108.00	
133	Quality Level A Test Holes			2	4				2	4						$2,542.00	$25,211.50		$27,753.50	
134	Final Utility Coordination			2	8				8							$4,116.00			$4,116.00	
135	**Plan Sheets for Interim Design (includes necessary engineering design time)**															$0.00			$0.00	
136	General Sheets			1	2				4	8			10			$4,292.00			$4,292.00	
137	Geometric Sheets			1	2				8	12			12			$6,070.00			$6,070.00	
138	Removal Sheets			1	2				8	12			12			$6,070.00			$6,070.00	
139	Plan & Profile Sheets			1	2				12	16			12			$7,566.00			$7,566.00	
140	Utility Sheets			1	2				12	16			12			$7,566.00			$7,566.00	
141	Lighting Sheets			1	2				10	20			20			$8,924.00			$8,924.00	
142	Grading Sheets			1	2				12	16			16			$8,130.00			$8,130.00	
143	Storm Drainage Sheets			1	2				8	16			16			$7,286.00			$7,286.00	
144	SWMP Sheets			1	2			2	4	16			16			$6,874.00			$6,874.00	
145	Landscape and Irrigation Plans			1	2				2	4			16			$4,064.00	$16,300.00		$20,364.00	
146	Traffic Sheets (Signing/Striping, Signals, Concept Phasing)			1	2				4	8			16			$5,138.00	$5,600.00		$10,738.00	
147	Details			1	10				4	40			12			$11,710.00			$11,710.00	
148	Cross Sections			1	2				8	12			16			$6,634.00			$6,634.00	
149	QA/QC and Constructability Review	12	8	4	6				4	5						$8,891.00			$8,891.00	
150	Final Specifications		8	1	4			2	2	3						$4,453.00			$4,453.00	
151	Prepare ROW Documents and Title Reports			1	2				4	4			8			$3,358.00	$2,682.00		$6,040.00	
152	ROW Value Determination and Acquisition			2	4											$1,468.00	$11,720.00		$13,188.00	
153	Public Outreach and Stakeholder Meetings			1	2				8	8			8			$4,854.00			$4,854.00	
154	Engineers Opinion of Probable Construction Cost (OPCC)		4	1	6				8	8			8			$6,762.00			$6,762.00	
	Sub-Totals	**12**	**20**	**29**	**72**	**0**	**0**	**4**	**140**	**236**	**0**		**218**	**0**	**0**	**$131,876**	**$61,514**	**$0**		**$193,390**
	TASK 4 - Final Construction Plans and Bid Administrative Assistance																			
155	Final Construction Plan Sheets			4	8				20	24	24					$15,148.00			$15,148.00	
156	Final Specifications for Construction (Project Special Provisions and Standard Special Provisions)		4	2	4											$2,416.00			$2,416.00	
157	Engineer's Opinion of Probable Construction Cost (OPCC)		4	2	2				4	8	8					$5,444.00			$5,444.00	
158	Submittal Package of Complete Documents and Plans for Town and CDOT Review			1	4				8							$2,902.00			$2,902.00	
159	Bid Administration Assistance to Town		4	4	4				8							$4,612.00			$4,612.00	
	Sub-Totals	**0**	**12**	**13**	**22**	**0**	**0**	**0**	**40**	**32**	**32**	**0**	**0**	**0**	**0**	**$30,522**	**$0**	**$0**		**$30,522**
	SEGMENT 3 TOTALS	**20**	**48**	**100**	**227**	**0**	**0**	**34**	**320**	**657**	**32**	**14**	**420**	**4**	**0**	**$345,653.00**	**$73,567.50**	**$84.00**		**$419,305**
	Design Total	**52**	**108**	**291**	**726**	**92**	**748**	**154**	**898**	**4141**	**64**	**56**	**1266**	**16**	**0**	**$1,619,461.00**	**$172,794.00**	**$7,542.00**		**$1,799,797**

J-U-B Engineers Hydraulics Scope of Work (Exhibit A)

SCOPE OF WORK & BUDGET
HYDRAULIC ANALYSIS AND FLOODPLAIN MODELING IN SUPPORT OF A CLOMR SUBMITTAL FOR THE LARIMER COUNTY ROAD 5 RECONSTRUCTION PROJECT

At the request of the Town of Timnath, the current scope of work and budget has been developed by J-U-B Engineers, Inc. (J-U-B) to provide the following engineering services:

(a) Analysis of up to four refinements to the Phase I selected alternative;
(b) Design of erosion countermeasures including riprap along bridge abutments and concrete block revetment to protect from roadway overtopping;
(c) detailed hydraulic analyses of the Cache la Poudre River for existing, and proposed conditions to demonstrate that the as-built condition of the Larimer County Road 5 Roadway Reconstruction project complies with all local, state, and federal floodplain regulations;
(d) floodplain mapping along the Cache la Poudre River for existing and proposed conditions in support of the detailed hydraulic analyses;
(e) preparation of a floodplain modeling report;
(f) submittal of a CLOMR application to FEMA;
(g) addressing cursory CLOMR comments generated by FEMA staff; and
(h) coordination with Town of Timnath, Larimer County, CWCB, and FEMA staff regarding all regulatory floodplain issues associated with the project.

The **study reach** is defined as the portion of the hydraulic model that will be utilized and updated to reflect the proposed conditions and evaluated to ensure that any changes to the floodplain do not impact properties and structures upstream and downstream of the project area. The ***study limits*** for this study extends along the Cache la Poudre River from Station 185277 located on the downstream side of Harmony Road Bridge to 175795, located approximately 1.5 river miles downstream of Larimer County Road 5 Bridge. The length of the ***study limits*** is approximately 1.8 miles and corresponds to the limits of revised water surface elevations associated with the study.

The **project reach** is defined as the portion of the hydraulic model that is updated to reflect changes associated with the project. The ***project reach*** extends from Cache la Poudre River Station 185277 to 180228 and includes Larimer County Road 5 Bridge as well as the diverted flow path that was added during the existing condition modelling phase. The length of the ***project reach*** is approximately 1 mile.

Project Assumptions:

1. Hydraulic modeling will utilize the Cache la Poudre River Ladera No. 2 LOMR as the effective model.
2. Hydraulic modeling alterations will be limited to the study reach, as previously defined.
3. Both the 100-, and 500-year Flood Hazard Boundaries will be mapped.
4. Floodway analyses will be conducted.
5. All hydraulic analyses will be conducted utilizing the same model version as the regulatory model.

6. Permits including the 404 Permit, demonstration of compliance with ESA, and SHPO will be completed by others.
7. Completion of a LOMR following construction will be completed under a separate scope and budget.

Task 1. Hydraulic Design

This task includes hydraulic design of the preferred alternative selected from Phase I of the project. An iterative process will be conducted with the roadway design team to refine the selected alternative and ensure that the final design meets all local/state/federal floodplain criteria.

Once the preferred roadway alternative has been identified, requisite scour evaluations and design of erosion countermeasures to protect the selected conveyance system and road embankment from damage due to extreme flood events will be completed.

It is expected that several custom hydraulic design features may be needed to support the final design of this project. If necessary, design drawings (details) for up to three specialty/custom details for non-standard elements will be provided. These elements would likely include riprap to be placed along bridge abutments, riprap placed at culvert outlets, and/or concrete block revetement (primarily to be specified by a third party). In addition, if these custom design features require modification of specific technical specifications, the project team will provide the revised specification language for inclusion with the bid documents.

Task 2. Existing Condition Hydraulic Analysis

Pre-project topography collected as part of Phase I of this project will need to be incorporated into the duplicate effective model to accurately depict the pre-project/existing conditions. In addition, a number of cross sections will be reoriented to more accurately depict flow patterns in the overbanks and flows through hydraulic structures under Larimer County Road 5. Hydraulic analyses associated with the existing condition analyses, for the Cache la Poudre River will include consideration of the 10-, 25-, 50-, 100-, and 500-year events. In addition, an existing condition floodway run will be conducted. Floodplain work maps will be prepared showing the existing condition flood hazard boundaries, cross sections used in the hydraulic models, base flood elevations, and flood hazard designations. Tabular water surface profiles will be compiled, including comparison tables to identify differences in 100-year water surface elevations between the existing and duplicate effective conditions. Finally, a floodway data table will be prepared. This information will be summarized in the floodplain modeling report developed as part of CLOMR submittal.

Task 3. Proposed Condition Hydraulic Analyses (Interim Condition)

Due to the fact that the project construction will be completed in two phases (over a number of years), two proposed conditions will be assessed. First the interim condition, containing the bridge replacement, will be assessed to demonstrate that widening the bridge alone would not create an adverse impact on adjacent landowners.

The existing condition model will be updated to reflect the interim design configuration (replacing the bridge but not widening/realigning the road or installing box culvert) and analyzed hydraulically to ensure compliance with all floodplain criteria. Hydraulic analyses associated with the proposed project condition will include consideration of the 10-, 25-, 50-, 100-, and 500-year events. Floodplain work maps will be prepared showing the proposed project flood hazard boundaries, cross sections used in the hydraulic models, base flood elevations, and flood hazard designations. Graphical flood profiles will be prepared in accordance with FEMA specifications. Tabular water surface profiles will be compiled, including comparison tables to identify differences in 100-year water surface elevations between the existing and interim proposed project conditions. This information will be summarized in the floodplain modeling report developed as part of the CLOMR submittal.

Task 4. Proposed Condition Hydraulic Analyses (Ultimate Condition)

The interim proposed condition model will be updated to reflect the ultimate design configuration and analyzed hydraulically to ensure compliance with all floodplain criteria. Hydraulic analyses associated with the ultimate proposed project condition will include consideration of the 10-, 25-, 50-, 100-, and 500-year events. In addition, a proposed condition floodway run will be conducted. Floodplain work maps will be prepared showing the ultimate proposed project flood hazard boundaries, cross sections used in the hydraulic models, base flood elevations, and flood hazard designations. Graphical flood profiles will be prepared in accordance with FEMA specifications. Tabular water surface profiles will be compiled, including comparison tables to identify differences in 100-year water surface elevations between the existing and ultimate proposed project conditions. Finally a floodway data table will be conducted for the ultimate proposed condition. This information will be summarized in the floodplain modeling report developed as part of the CLOMR submittal.

Task 5. Preparation of Floodplain Modeling Report/CLOMR Application

A hydraulic analysis and floodplain mapping report will be prepared in support of the CLOMR application for the Cache la Poudre River. This report will document hydraulic analyses and floodplain mapping associated with the duplicate effective, existing condition, and revised conditions. The report will include all floodplain work maps, graphical flood profiles, tabular water surface profiles, and water surface profile comparisons. The report will also include floodway data tables. A CLOMR application (MT-2 Forms) will be prepared, including annotated Flood Insurance Rate Maps (FIRM) and Flood Insurance Profiles. It is assumed that property owner notifications will be published in the form of a newspaper notification.

The report will be submitted to the Town of Timnath and Larimer County for review. The accompanying budget identifies sixteen hours of time associated with addressing cursory comments generated by Town and County Staff. If comments from either entity require substantive changes to the analyses or documentation, addressing these comments will be the subject of a change order to this scope and budget.

One round of review comments from Town and County Staff will be addressed, as qualified above, and the revised report will be resubmitted to the Town and County for final approval. ***If additional comments are generated by Town or County staff, addressing these comments will be the subject of a change order to this scope and budget.***

Upon completion of all revisions to the report supporting the CLOMR application pursuant to Town of Timnath and Larimer County comments, the report and application will be submitted to FEMA (CWCB) for

review. The accompanying budget identifies fourty hours of time associated with addressing cursory comments generated by CWCB. ***Addressing review comments generated by CWCB exceeding the anticipated sixteen hours of effort would be the subject of a change order to this scope and budget.*** It is noted that the ***FEMA review fee of $6,500 and the Larimer County Flood Review Board Fee of $79 have been included*** as part of this task.

Task 6. QAQC

This task consists includes independent QAQC to be conducted on hydraulic analyses and hydraulic design of project elements. J-U-B will utilize QA/QC forms and procedures developed in-house for hydraulic analyses and floodplain mapping procedures. This task is included to minimize review comments provided by CWCB/FEMA.

Task 7. Meetings and Coordination

This task includes up to ten meetings between JUB and the Town of Timnath to discuss project design, hydraulic analysis progress, and results. It is assumed that project meetings will be held at J-U-B offices. Additional coordination with Town of Timnath staff will be conducted on an as-needed basis throughout the project. Finally, it is noted that because the project is located in Larimer County, an appearance at the Larimer County Flood Review Board will be required to obtain approval from Larimer County. Therefore, budget has been appropriated to attend one Larimer County Review Board meeting.

KING SURVEYORS

Totals=
Segment 1: $2682
Segment 2: $5365
Segment 3: $2682

March 10, 2025

J-U-B Engineers, Inc.
Attn: Shawn Fetzer, PE

Re: Timnath CR5 Road and Bridge Project-ROW acquisition phase

Shawn:

Here is what I'm estimating the cost to be to perform the following services based on our email correspondence and the included exhibit.

Title Reports

1 parcel

Terra Resource Corp. ~~(2 parcels)~~
~~Connell~~
Swets
Meininger
Salisbury
$540 each
Subtotal = $2,700

Segment 1: $540
Segment 2: $1080
Segment 3: $540

Base Map-Review Title Reports

-Review title reports, draft and add applicable items to base map
Drafter-15 hours @ $114/hour = $1,710
PLS-5 hours @ $145/hour = $725
Subtotal = $2,435

Segment 1: $642
Segment 2: $1285
Segment 3: $642

Existing Right-of-Way

-Meetings, emails, calls and/or other correspondence to discuss and determine what is to be considered existing Right-of-Way
Drafter-3 hours @ $114/hour = $342
PLS-3 hours @ $145/hour = $435
Subtotal = $777

650 EAST GARDEN DRIVE | WINDSOR, COLORADO 80550 | P. 970.686.5011 | F. 970.686.5821
WWW.KINGSURVEYORS.COM

Right-of-way Acquisitions & Easements

Segment 1: $1500
Segment 2: $3000
Segment 3: $1500

-Based on 2 property descriptions and depictions per property owner
-Based on 10 total property descriptions and depictions
$750 each
Subtotal = $7,500

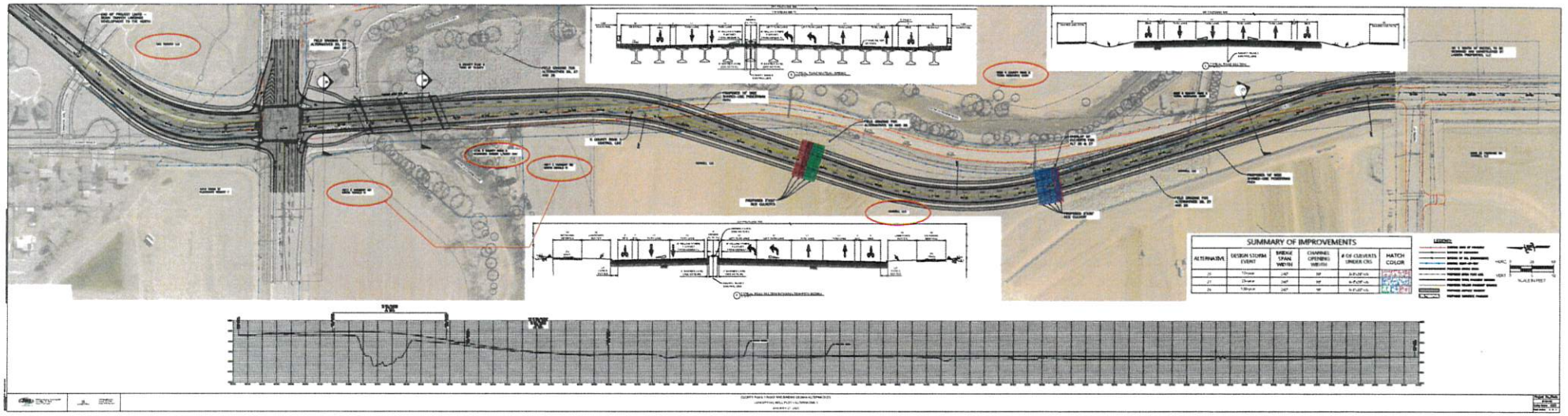
If you have any questions regarding this proposal, please feel free to contact me at my office at (970) 686-5011.

Sincerely,

Chad Dilka

Chad Dilka, PLS/Project Manager

650 EAST GARDEN DRIVE | WINDSOR, COLORADO 80550 | P. 970.686.5011 | F. 970.686.5821
WWW.KINGSURVEYORS.COM


SUMMARY OF IMPROVEMENTS
ALTERNATIVE
DESIGN STORM EVENT
BRIDGE SPAN WIDTH
CHANNEL OPENING WIDTH
OF CULVERTS UNDER CRS
HATCH COLOR
LEGEND:
SCALE IN FEET

Western States Land Services, LLC

Acquisition and Relocation Specialists
505 North Denver Avenue
Loveland, CO 80537
(970) 667-7602
Metro: (303) 938-1414
Wslsrow.com

March 14, 2025

J-U-B Engineers, Inc.
Shawn Fetzer
4745 Boardwalk Dr. Bldg. D. Ste. 200
Fort Collins, CO 80525

Segment 1: $11,720
Segment 2: $23,440
Segment 3: $11,720

RE: Town of Timnath – County Road 5 Widening
ROW Acquisition

Dear Mr. Fetzer,

Please accept the attached proposal to acquire right of way or easement from a total of five (5) landowners. We assume title work, engineered drawings, plans and legal descriptions would be provided by others. Our cost estimate below includes standard right of way acquisition services to negotiate with five (5) landowners through immediate possession hearings, if necessary. I have included the cost of appraisals for each landowner. It is my understanding there will be no federal funds involved.

COST ESTIMATE

In order to perform the services delineated above, Western States provides the following estimate based on pursuing property interests from five (5) individual ownerships:

4

Project Manager/Sr. Agent	200 hours x $115 per hour	$ 23,000.00
Clerical	30 hours x $80 per hour	$ 2,400.00
Waiver Valuations	$500/each	$ TBD
		$ 25,400.00
Expenses: mileage, copies, facsimiles, postage, telecom		$ 3,200.00
	Estimated WSLS Total	$ 28,600.00

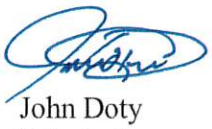
Valuation Costs

Third-party Appraisals	~~5 x $6,000~~	4 x $6000	$ 30,000.00
	Estimated Grand Total		**$ 58,600.00**

The above estimate is for acquisition services through statutory negotiations and is based upon current information. As with all of our work, we note that the fee estimated above is not a fixed bid and we would only charge for the actual time and expenses incurred during the conduct of our acquisition services.

Thank you and should you have any questions regarding this preliminary proposal, please contact me at your earliest convenience.

Sincerely,
WESTERN STATES LAND SERVICES, LLC



John Doty
Principal

Next Phase Engineering

3405 Harbor Way
Fort Collins, CO 80524
www.nextphase-eng.com

Scope and Fee Proposal

Larimer County Road 5 Bridge Project - Traffic Elements
Town of Timnath

June 18, 2024

Attn: Dan Tuttle, P.E.
J-U-B Engineers, Inc.
2809 E Harmony road, Suite 300
Fort Collins, CO 80528

Dear Dan:

Thank you for reaching out to Next Phase Engineering regarding the upcoming CR 5 Bridge replacement project in the Town of Timnath. We're pleased to provide this letter proposal to complete the traffic related elements for the project. Listed below are details of a work plan and proposed fee to complete the effort. It is assumed that Next Phase will be working as a subconsultant to J-U-B on this project.

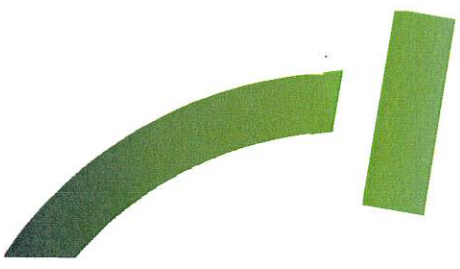
Work Tasks

The work tasks are divided into two phases -

- Phase 1 corresponds with the Alternatives Analysis to determine the bridge location and structure selection expected to occur through October 2024.
- Phase 2 will involve final design of the bridge, as well as additional analysis for the roadway further south and the signal design plans.

Phase 1 includes:

- Project coordination, invoicing and an assumed 3 status meetings.
- New peak hour turning movement counts at the Harmony intersection and at the Weitzel intersection.
- Development of a Synchro model of the entire corridor from Kechter through Harmony. The existing Harmony Synchro model will be used as a starting point.
- Other information including development TIS, TMP information, and Parkway plans will also be reviewed. Future traffic volumes will be determined and reviewed with the Town.
- An analysis and evaluation of the Harmony intersection will be completed to identify recommended geometry. ~~This includes considering elements of a protected intersection.~~
- Additional work in this phase includes a review of the Timnath Parkway plans, phasing options, timing for the construction of the cul-de-sac, and consideration of the impact / options surrounding a full closure of CR 5 during bridge construction.
- Information in this phase will be summarized, documented, and submitted to the project team.



Phase II efforts include:

- Additional evaluation, modeling, analysis as needed.
- Signal design plans.
- Additional review of the intersections at Weitzel and Kechter.

Anticipated Fee

The anticipated fee is shown below. We can refine the work elements and level of effort to precisely meet your needs. Reimbursables are billed at cost. The fee could be contracted as a time and materials with a not to exceed amount of **$ 22,620 for Phase I** so that if efficiencies are realized that time is not charged.

The fee for phase II will be finalized at a later time when more details are known.

Next Phase Engineering

Town of Timnath
CR 5 Bridge Project - Traffic Elements

Date: 17-Jun-24

Item #	Task	Principal Engineer	Technical Work	Clerical Work	TOTAL LABOR HOURS	Labor Cost	Reimburseables / Subconsultant	TOTAL COSTS	Sub Total
	Hourly rate:	$200	$95	$65					
Phase I - Alternatives Analysis Tasks									
110	Project set up, coordination, kickoff mtg and invoicing								
	Kickoff mtg, coordination, invoicing	8		4	12	$1,860		$1,860	
	Status meetings (assume 3)	6			6	$1,200	$50	$1,250	
	Public outreach - assume 1 open house, or Town Board mtg	4			4	$800	$50	$850	$3,960
120	Information and data gathering								
	Location overview, info from previous TISs, Parkway plans, crash data e	4			4	$800		$800	
	New am pm peak hour TMC counts (2 - at Harmony and Weitzel)	4	8		12	$1,560	$700	$2,260	
	Expand existing Synchro model down to Kechter (calibrate for am/pm)	12			12	$2,400		$2,400	
	Determine future traffic volumes to assume	4			4	$800		$800	$6,260
130	Timnath Parkway phasing, access locations, cul de sac planning								
	Review Timnath Parkway plans, TMP, discuss phasing with Town	6			6	$1,200		$1,200	
	Review access locations and Cul de Sac (existing, temp and long term)	8			8	$1,600		$1,600	$2,800
140	Traffic evaluation and analysis, and alternatives								
	Synchro modeling to determine geometrics (Harmony, Weitzel and revi	12			12	$2,400		$2,400	
	Iterative review and geometric refinement, update synchro	8			8	$1,600		$1,600	
	Consider construction phasing and impact of fully closing CR 5	12			12	$2,400		$2,400	$6,400
140	Summary information and project documentation								
	Draft operational, safety, analysis and recommended geometry report	12			12	$2,400		$2,400	
	Final changes and submittal	4			4	$800		$800	$3,200
	Phase 1 Total Hours	**104**	**8**	**4**	**116**				
	Phase 1 Total Cost	**$20,800**	**$760**	**$260**		**$21,820**	**$800**	**$22,620**	
Phase 2 - Final Design									
200	Additional traffic evaluation and analysis, and alternatives								
	Synchro modeling to include Weitzel and Kechter	16			16	$3,200		$3,200	
	Iterative review and geometric refinement, update synchro	8			8	$1,600		$1,600	
	Additional documentation	12			12	$2,400		$2,400	$7,200
210	Signal design plans (Harmony)								
	Signal design concept (no drafting) - 3 sheets - coordinate w J-U-B	16			16	$3,200		$3,200	
	Review, refine	8			8	$1,600		$1,600	
	Input to J-U-B regarding quantities, estimted, general notes, specs	12			12	$2,400		$2,400	
	Final signal plans	8			8	$1,600		$1,600	$8,800
	Phase 2 Total Hours	**80**	**0**	**0**	**80**				
	Phase 2 Total Cost	**$16,000**	**$0**	**$0**		**$16,000**	**$0**	**$16,000**	
	Total Project Hours	**184**	**8**	**4**	**196**				
	Total Project Costs	**$36,800**	**$760**	**$260**		**$37,820**	**$800**	**$38,620**	

Split 3-way $2400 Each Segment

Segment 3

Schedule

Next Phase staff is available and ready to support this project whenever the Town and J-U-B are ready to move forward.

Please let us know if you have questions, or if we can provide additional information. We look forward to working with you and your team.

Sincerely,

Joe Olson, P.E.
Principal
Next Phase Engineering
joe@nextphase-eng.com
970-232-4104

Martina Wilkinson, P.E. PTOE
Principal
Next Phase Engineering
martina@nextphase-eng.com
970-988-0143

SurvWest, LLC
www.survwest.com
6501 East Belleview Avenue, Suite 300,
Englewood, Colorado 80111
Disadvantaged Business Enterprise (DBE)

4/3/2025

Shawn Fetzer
J-U-B Engineers, Inc.
2809 E Harmony Rd, Suite 300
Fort Collins, CO 80525
Sfetzer@jub.com
SurvWest Proposal Number: P240167

Subsurface Utility Engineering services for CR 5 in the Town of Timnath

Dear Shawn:

SurvWest, LLC (SURVWEST) is pleased to submit a cost proposal for Subsurface Utility Engineering (SUE) required for the above referenced project.

S.U.E. Introduction

This proposal is based on information provided via email by J-U-B on 3/24/25. The project involves providing Quality Level A Test Hole services for the CR 5 Widening in the Town of Timnath.

With the intent of achieving Quality Level depiction of subsurface utilities, SURVWEST will perform the work required for this project in general accordance with the recommended practices and procedures described in ASCE/UESI/CI 38-22 (Standard Guideline for Investigating and Documenting Existing Utilities). The following definitions are taken directly from the ASCE 38-22 document for clarification.

- **Quality Level D (QLD):** A value assigned to a Utility Segment or Utility Feature not visible at the ground surface whose estimated position is judged through Utility records, information from others, or from visual clues such as pavement cuts, obvious trenches, or existence of service.
- **Quality Level C (QLC):** A value assigned to a Utility Segment not visible at the ground surface whose estimated position is judged through correlating Utility records or similar evidence to Utility Features, visible aboveground and/or under-ground. The Utility Anchor Point on the Utility Features shall be tied to the Project Survey Datum with an accuracy of 0.2 ft (60 mm) horizontal.
- **Quality Level B (QLB):** A value assigned to a Utility Segment or subsurface Utility Feature whose existence and horizontal position is based on Geophysical Methods combined with professional judgment and whose location is tied to the Project Survey Datum with an accuracy of 0.2 ft (60 mm) horizontal.
- **Quality Level A (QLA):** A value assigned to that portion (x-, y-, and z-geometry) of a Utility Segment or subsurface Utility Feature that is directly exposed and measured and whose location and dimensions are tied to the Project Survey Datum. The Utility Segment or subsurface Utility Feature shall be tied to the Project Survey Datum with an accuracy of 0.1 ft (30mm) vertical and to 0.2 ft (60 mm) horizontal for the measurements of the outside limits of the Utility Feature or Utility Segment that is exposed.

Scope of Work

Based on information provided by J-U-B Engineers ("CLIENT"), SURVWEST has developed a preliminary scope for the work required for this project. The scope of work may be modified with the CLIENT, Owner, or their representative's concurrence during the performance of the work if warranted by actual field findings.

For this project, SURVWEST will provide the following services within the project limits shown in the below figure. The SUE project limits are approximately as shown in Figure 1 below:

Figures 1. Project SUE Investigation Limits. (could differ from other project limits)

SURVWEST will utilize its Standard Operating Procedures and Safety Plan in the performance of the work.

Permits

SURVWEST will work with the CLIENT and applicable jurisdictional entities to obtain the necessary permits to complete the field tasks: Town of Timnath, and Larimer County.

SUE QLA (Test Holes)

SURVWEST will utilize a suite of geophysical equipment to designate buried utilities to the extents needed to perform test holes at locations selected by the CLIENT. The performance of this task provides confirmation of the vertical and horizontal location of the utilities and reduces the risk of being unable to locate the target conflict utility.

SURVWEST will utilize Brand X Hydrovac (Subcontractor) to expose the utilities at specific points which are then tied down by survey. Upon successful utility exposure and visual verification of the utilities, SURVWEST will collect three-dimensional (x, y, z) information at the test hole locations. SURVWEST will also attempt to gather utility attribute information such as type, size, material, and wall thickness.

Despite SURVWEST's due diligence to expose a utility at a specified location, the possibility still exists that the utility cannot be accessed due to reasons beyond SURVWEST's control. Some of these hinderances include the encountering of rock strata, high water table, or excessive buried depth. The CLIENT will be notified should a test hole be found dry, and the efforts spent to locate the utility.

Restoration of in-pavement test holes will be utilizing flow fill and cold patch asphalt. All non pavement test holes will be restored with squeegee material. SurvWest anticipates 10 in-pavement and 15 non-paved test hole locations. All material costs have been considered and added to our estimate.

Traffic Control

Should non-routine traffic control measures be required (barricades, flag person, changeable message board, crash attenuator truck, etc.), these services will be considered extra and invoiced at cost. CLIENT will be notified if such circumstances arise, and CLIENT'S approval will be necessary before commencement. Brand X Hydrovac will be covering Traffic Control, and Traffic Control Plans within their scope of work and estimate.

Exclusions and Assumptions

Exclusions

The scope of work described in this proposal EXCLUDES the following services:

- Collection of data from utility poles and overhead wires, and underground irrigation systems.
- Collection of utility service lines and laterals.
- Utility Coordination Services, including the preparation of the list of utility providers, conflict matrix, participation in coordination meetings, evaluation or coordination of relocations, or the preparation of clearance or removal/relocation documents.
- Project Design Survey.
- Topographic Survey.
- Right-of-way verification or boundary survey.
- Project Design and Engineering.

- Project Construction Services.
- Additional QL-B, QL-C, QL-D SUE services beyond the original scope of work.

Assumptions

- This project will be billed as Lump Sum as Total Percentage completed.
- Site will be accessible during daylight hours.
- In this region, test hole excavation frequently encounters rock strata. SURVWEST will do everything feasible to non-destructively expose utilities at test holes. However, we cannot ensure that vacuum excavation will be successful on all test holes if significant rock layers are encountered. If this becomes an issue, SURVWEST will communicate with the CLIENT immediately to discuss options.
- For PVC lines located under pavement, it may be necessary to excavate additional test holes to expose the line.
- SurvWest assumes 10 in-pavement test holes will require Flow fill and cold patch restoration, and the remaining 15 will be soft test holes and require standard backfill. Any additional in-pavement test holes past 10 will require a change order to cover restoration materials.

Client Responsibilities

- All permitting fees required for SURVWEST to perform the proposed services will be waived or paid by the CLIENT.
- CLIENT will arrange for Right of Entry (ROE), where required, to access work areas. SURVWEST can perform ROE services at an additional fee.

Deliverables

Quality Level A Updated Plan Set (CAD/PDF)

SurvWest will update the existing Quality Level B Plan set with test hole locations and collected data for review by CLIENT.

SurvWest will provide updated AutoCAD Civil 3D DWG base file and signed and sealed final plan set upon approval of the preliminary plans.

Test Hole Summary Spreadsheet (XLSX)

SurvWest will provide Test Hole Summary spreadsheet with all collected data. Pictures are available upon request.

Anticipated Schedule

SURVWEST can commence work within fifteen (15) business days of receiving the notice to proceed (NTP). Anticipated SUE field work through QLA is five (5) business days. Interim preliminary deliverable within ten (10) business days after field work is complete. The estimated time to complete the SUE and SUE Survey for this project is a total of 15 business days, or 3 calendar weeks.

The above estimated schedule is based on information provided by CLIENT and OWNER. This schedule does not reflect delays related to property access, permitting, inclement weather, or any other factors outside of SURVWEST's control.

Estimated Fees

CR 5 QL-A		
SUE Services - Proposal #		BD240167
Task		Task Total
QL-A Field Work (25 Test Holes)	$	46,411
QL-A Office Work	$	4,012
TOTAL:		$50,423.00

The total estimated cost to complete the work described herein is $50,423.00 as a NTE fee without prior written approval by CLIENT.

Split between
Segments 1 and 2

Closing

SurvWest appreciates the opportunity to submit our proposal for this project. Should you have any additional questions regarding this proposal and scope of work, please do not hesitate to contact me by cell phone at (334) 790-0323 / bbelmont@survwest.com.

Sincerely,

Bobby Belmont

Bobby Belmont
Colorado SUE Operations Leader
SurvWest, LLC.

This offer is not binding, and no contract between the parties shall exist unless and until definitive written agreements have been negotiated and executed by the parties. The services and products described herein are subject to change and will only be binding obligations if included in definitive written agreements executed by the parties.

CENTENNIAL ARCHAEOLOGY

300 E. Boardwalk, 4-C, Fort Collins, CO 80525 | Phone 1-970-225-6575 | Fax 1-970-225-6577 | www.centennialarchaeology.com

CLASS I CULTURAL RESOURCE LITERATURE REVIEW FOR THE PROPOSED TIMNATH COUNTY ROAD 5 BRIDGE REPLACEMENT AND ROAD IMPROVEMENT PROJECT FOR THE TOWN OF TIMNATH IN LARIMER COUNTY, COLORADO

Submitted to J-U-B – April 9, 2025

Scope of Work and Assumptions

- J-U-B Engineers, Inc. (J-U-B) is requesting a Class I cultural resource literature review for the Timnath County Road 5 (CR 5) Bridge and Widening project for the Town of Timnath in Larimer County, Colorado.
- The proposed work will intersect jurisdictional waters, specifically the Cache la Poudre River, and permitting from the U.S. Army Corps of Engineers (USACE) will be required under Section 404 of the Clean Water Act. The USACE will serve as the Lead Federal Agency for this project. Due to the role of the USACE in permitting the project, the cultural resource investigation is required for compliance with Section 106 of the National Historic Preservation Act (NHPA). Additionally, a Conditional Letter of Map Revision (CLOMR) will be required from the Federal Emergency Management Agency (FEMA).
    - It is assumed that the file search conducted for the USACE will be sufficient for the FEMA review as well; if FEMA requires a different or more robust study additional costs will be negotiated as part of a change order.
- It is assumed that both the USACE and FEMA will require a Class I literature review and file search for the proposed project area and that no intensive inventory (Class III) will be required. If the USACE, FEMA, or any other reviewing agency requires a Class III investigation, additional costs will be negotiated as part of a change order.
- Centennial Archaeology LLC (Centennial) proposes to conduct the Class I.
- It is assumed that the project area, which will correspond to the 404 permit area, will consist of the footprint of the bridge at CR 5 and the Cache la Poudre River as well as a buffer of 200 ft to either side of the current bridge. Any changes to this project area, particularly those made after work is initiated, may result in a change order.
- The Class I will be conducted for the proposed project area and a surrounding 1-mile buffer extending in all directions. This larger area will form the Class I study area. The file search will be conducted through the Colorado Office of Archaeology and Historic Preservation (OAHP) as well as supplemental sources including (but not limited to) County Assessor records, ditch records, and oil and gas records. Historic maps and aerial/satellite imagery of the Class I study area will also be reviewed to determine if any unrecorded historic cultural resources may be present within, or in close proximity to, the project area.
- No fieldwork including an intensive pedestrian inventory (Class III), reconnaissance field visit, or archival research is included; all work will be conducted from Centennial's office in Fort Collins.
- Deliverables will consist of a short letter report summarizing the Class I results and the sources consulted. Depending on what is present in the file search area, this report may include tables

listing prior projects and cultural resources and/or architectural properties by parcel as well as maps as appropriate to the types of resources found.
    - It should be noted that certain data related to archaeological sites is considered confidential and may be redacted/restricted.
- It is assumed that draft and final deliverables will be submitted electronically, and that no printed copies will be required.
- It is assumed that the USACE and/or FEMA will conduct all consultation with identified stakeholders including the production of consultation letters and effects determinations as well as consultation with the Tribes.

Proposed Costs

Labor				
Position	**No. of Hours**		**Rate per Hour**	**Subtotal**
Principal Investigator	2	@	$110.00	$220.00
Project Director	8	@	$90.00	$720.00
Technical Editor	1	@	$80.00	$80.00
GIS Specialist	4	@	$80.00	$320.00
Historian	4	@	$75.00	$300.00
			Labor Subtotal	**$1,640.00**

Other Direct Costs (ODC)				
Miscellaneous	**Sections**		**Rate Per Section**	**Subtotal**
OAHP File Search Request	4	@	$30.00	$120.00
			ODC Subtotal	**$120.00**

TOTAL COST	**$1,760.00**

Split evenly between segments = $587

April 11, 2025

EARTH ENGINEERING CONSULTANTS, LLC

J-U-B ENGINEERS, Inc.
2809 East Harmony Road – Suite 300
Fort Collins, Colorado 80525

Attn: Mr. Shawn Fetzer (sfetzer@jub.com)

Re: Subsurface Exploration Proposal for Bridge and Drainage Structures along with Pavement Improvements – Larimer County Road (LCR) 5
Proposed LCR 5 Re-Alignment / Improvements – Between Harmony Rd. and Kechter Rd.
Larimer County, Timnath, Colorado

Mr. Fetzer:

We are pleased to submit this proposal to provide subsurface exploration and geotechnical engineering services for the referenced project as per the request for proposal (RFP) submitted to our attention from J-U-B ENGINEERS, Inc., the project's civil engineering consultant on April 9, 2025. This project, as we understand, involves the design and construction of the roadway re-alignment and improvements along Larimer County Road (LCR) 5. The re-alignment / improvements along LCR 5 will be between Harmony Road to the north, and Kechter Road to the south on the eastern portion of the Ladera Development project tin Timnath, Colorado. As part of the roadway re-alignment and improvements a new bridge structure over the Cache La Poudre River and well as two (2) drainage structures will be designed and constructed along with the re-alignment of the roadway as depicted on the enclosed site plans for the project. The enclosed site plans / *"Test Boring Location Diagrams"* illustrates the proposed improvements as well as the proposed test boring locations as pre-determined by the design team. The geotechnical engineering subsurface exploration and subsequent report will be performed in general accordance with the Town of Timnath and Larimer County Urban Area Street Standards (LCUAS) pavement design and construction protocol.

We provide herein a brief introduction of Earth Engineering Consultants, LLC (EEC) to the Town of Timnath, J-U-B ENGINEERS, Inc., and to the project design team. EEC, established in 1993, is a full-service geotechnical engineering consulting firm and an accredited construction material testing company by AASHTO/CCRL in bituminous mixtures, soils, and aggregates. EEC is accredited and complies with laboratories meeting ASTM E329 "Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction" criteria. R18 accreditation documentation is available upon request for your review or can be viewed by visiting their website at http://www.amrl.net for current accreditation status. EEC's direct contact personnel will be Mr. David A. Richer, P.E., a senior geotechnical engineer/managing member, e-mail address of: daver@earth-

engineering.com, and office numbers of (970) 545-3908 main line and (970) 545-3925 direct office line.

EEC has previous subsurface exploration experience within the general vicinity of the proposed roadway re-alignment / improvements having performed a preliminary subsurface exploration for the Ladera Development as well as a backhoe test pit evaluation in close proximity to the two drainage structures. EEC completed a series of preliminary soil borings for the Timnath Annexation Property (AKA Ladera Development) in June of 2021 and prepared a report of our findings. For further information and preliminary geotechnical engineering recommendations from our June 2021 subsurface exploration, please refer to our *"Preliminary Subsurface Exploration Report"* dated July 30, 2021, EEC Project No. 1212049. On February 25, 2025, EEC personnel also conducted a supplemental subsurface exploration as directed by the design team, which consisted of evaluating the subsurface conditions within two (2) backhoe test pits excavated by Connell Resources at the general locations of the two proposed drainage structures. For further information and preliminary geotechnical engineering recommendations from our limited backhoe test pit subsurface exploration, please refer to our *"Preliminary Subsurface Exploration Report"* dated March 4, 2025, EEC Project No. 1252013.

To develop subsurface information for the proposed LCR 5 re-alignment / roadway improvements along with the bridge and drainage structures, as requested, and as detailed herein, EEC personnel would advance a total of twelve (12) total borings, of which four (4) of those borings will be associated with the Cache La Poudre River Bridge (i.e. borings B-4 and B-5) and the two drainage structures, (i.e., boring B-8 and B-10), and eight (8) related pavement borings, which will be completed in general accordance with LCUASS pavement design criteria. The structural related borings would be drilled/completed to depths of 30 to 40 feet below existing site grades; while the pavement related borings would be drilled/completed to depths of approximately 10 feet below existing site grades. The purpose of the soil borings will be to provide an evaluation of the existing subsurface conditions, including depth to bedrock, subgrade soils, and depth of groundwater below existing site grades, and information to provide geotechnical engineering recommendations for the design and construction of the b ridge and drainage structures and proposed roadway improvements.

We expect samples to be obtained from the borings at approximate 2-1/2 to 5-foot intervals to evaluate composition and consistency of the subgrade and underlying materials. We expect laboratory testing on the recovered samples would include moisture content, in-situ dry density, moisture-density relationships of compacted soil (standard Proctor density - ASTM D698), soil classification tests, with Atterberg limits, and minus 200 wash, swell/consolidation tests and water-soluble sulfates performed on select samples. As part of the pavement evaluation and laboratory testing services, we also plan on

performing at least 1 Hveem Stabilometer (R-Value) tests to evaluate the subgrade strength characteristics. After completing the fieldwork and laboratory testing, we would prepare a written report outlining the results of our exploration and provide geotechnical recommendations concerning the design and construction for the bridge and drainage structures, and for the roadway improvements, including any special precautions which may be required due to the underlying subsurface conditions.

Prior to performing field borings on this project, EEC personnel would contact the local one-call utility locating service to request that underground utilities be field located in the drilling areas. If entities not subscribing to the one-call service are known or suspected of having underground utilities in the improvement areas, those entities should be made known to EEC so that contact can be made concerning the location of the underground facilities.

Broken down evenly between segments with extra day of TC assumed = $5,867

EEC would provide the outlined services, (i.e., the subsurface drilling, sampling, laboratory testing, and engineering analyses for the 12 test borings as described herein), for a lump sum fee of $16,600, which also includes the necessary traffic control. The cost breakdown would be approximately $2,000 for each of the four deeper foundation related borings, $850 for the eight shallower pavement related borings and $1,000 for the required traffic control. Due to the roadway layout, traffic control will be necessary for at least seven of the borings, as the borings currently are located within existing travelled roadways. Therefore, in order to perform our field related services, an estimated fee for traffic control and implementation accordingly would be approximately $1,000.00 per day. If the drilling is required to extend into a second day, we would perform all of the traffic control related borings in a single day to minimize the cost. Traffic control would be arranged by EEC and the charge is already included in the overall lump sum fee. The fee assumes the site is accessible to conventional truck-mounted drilling equipment and is based on the specific scope of services outlined above. Should additional services be advisable because of the subsurface conditions encountered, you would be contacted, and authorization obtained prior to expanding the scope of our work.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. Our General Conditions for providing the outlined services are attached and are considered a part of this proposal. If you have any questions concerning this proposal, or if we can be of further service to you in any other way, please do not hesitate to contact us.

Very truly yours,
Earth Engineering Consultants, LLC

David A. Richer, P.E.
Senior Geotechnical Engineer

Attachments: Proposed Test Boring Location Diagrams
EEC's 2024 Hourly Rate and Unit Price Fee Schedules
EEC's General Terms and Conditions

NOTICE TO PROCEED

ACCEPTED BY: _____
(Individual)

FOR: _____
(Company)

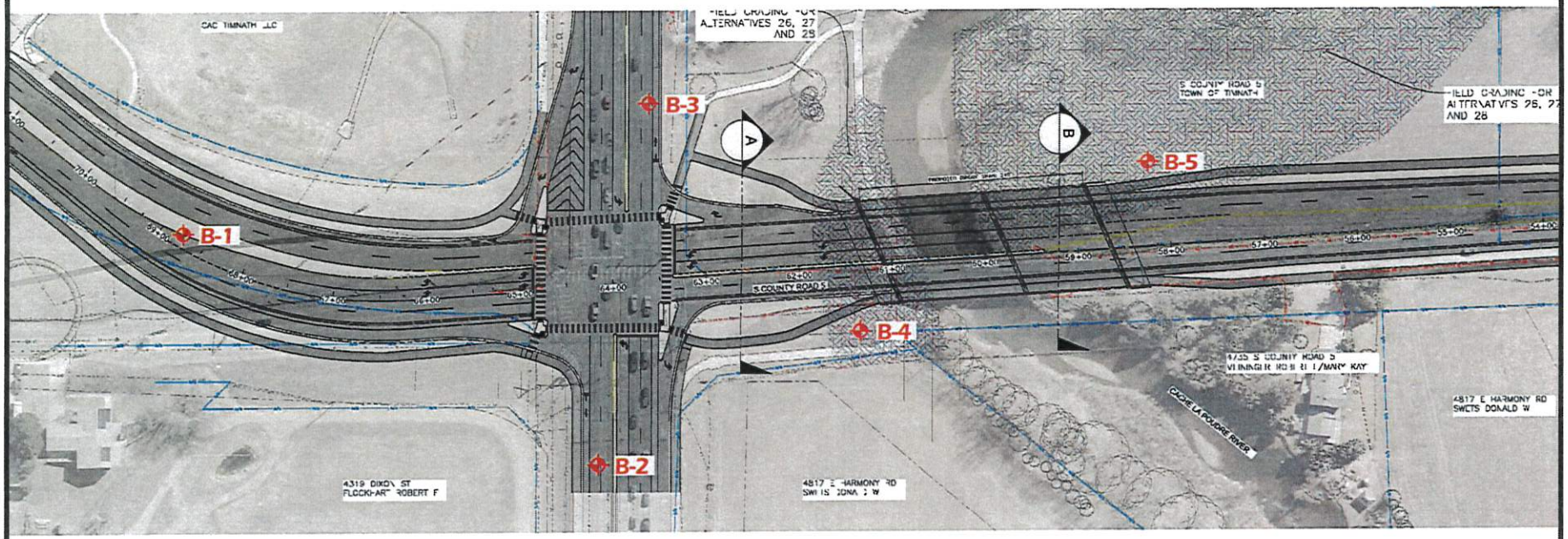
DATE: _____

BILLING INFORMATION

BILLING CONTACT: _____

BILLING ADDRESS: _____

EMAIL FOR INVOICES: _____



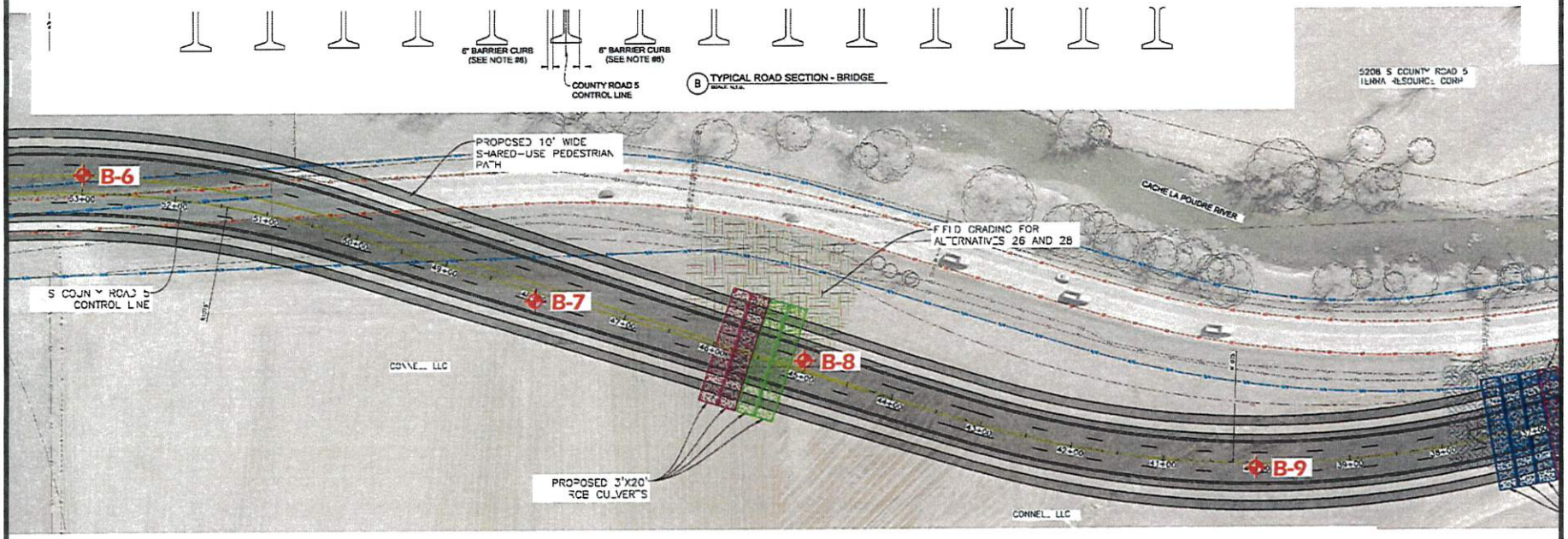
Legend

- B-1, B-2, B-3, B-6, B-7, B-9, B-11, and B-12 Approx. Locations of Pavement Related Borings, 10'
- B-4, B-5, B-8, and B-10 Approx. Locations of Structure Related Borings, 30 - 40'

North
Not to Scale

Proposed Boring Location Diagram
J-U-B Engineers - LCR 5
Timnath, Colorado
April 2025

EARTH ENGINEERING CONSULTANTS, LLC



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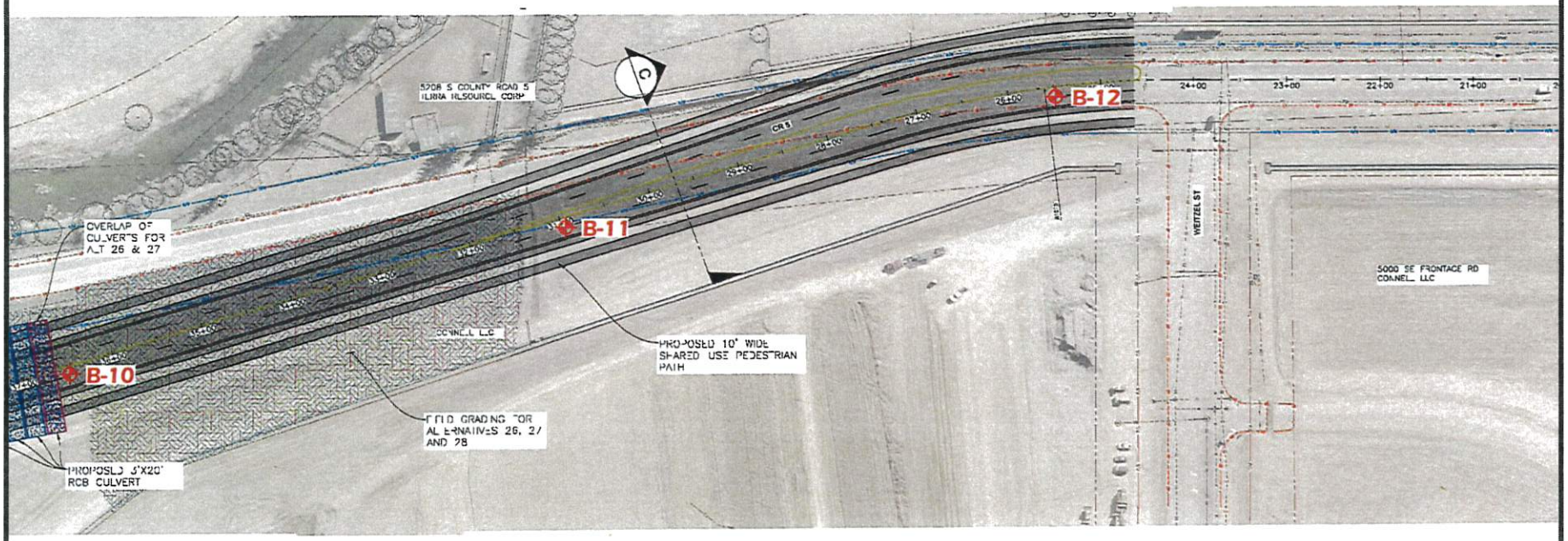
North
Not to Scale

Proposed Boring Location Diagram
J-U-B Engineers - LCR 5
Timnath, Colorado
April 2025

EARTH ENGINEERING CONSULTANTS, LLC



Legend

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- B-4, B-5, B-8, and B-10 Approx. Locations of Structure Related Borings, 30 - 40'

North
Not to Scale

Proposed Boring Location Diagram
J-U-B Engineers - LCR 5
Timnath, Colorado
April 2025

EARTH ENGINEERING CONSULTANTS, LLC

BHA Design Incorporated
111 South Meldrum Street, Suite 110
Fort Collins, CO 80521

March 24, 2025

Mr. Dan Tuttle
J-U-B Engineers, Inc.
2809 E Harmony Road
Fort Collins, CO 80528

RE: TIMNATH COUNTY ROAD 5 IMPROVEMENTS

Dear Dan,

Thank you for asking BHA Design to assist with landscape architecture services for the CR5 project in Timnath, including road widening between Cornhusk Avenue and Weitzel Street and the replacement of the bridge structure over the Cache la Poudre River. Based on our discussions, we will provide landscape and irrigation design services and the design of aesthetic enhancements for the bridge.

SCOPE OF SERVICES

For this effort, we anticipate the following scope based on the Conceptual Plans provided:

- Design plans for roadside planting areas between the road and sidewalk (assumed to be native seed and street trees)
- Design plans for median plantings between East Harmony Road and Cornhusk Avenue (assumed to be trees and shrubs)
- Coordinate with J-U-B structural to design aesthetic enhancements for the Poudre River bridge. These may include railing enhancements, decorative columns or walls, etc.

Based on our discussions, our scope includes the following assumptions:

- Plan reviews anticipated at Preliminary Design (50%) and Final Design (75% and 100%)
- Native seed areas between the sidewalk and roadway will include irrigation for establishment. Trees in these areas will be irrigated with a separate drip and/or bubbler system to allow for continued irrigation after native seed is established.
- A single, potable water tap is anticipated for the irrigation system design
- BHA will provide up to two renderings to be used for public and stakeholder communications (one plan view rendering and one perspective sketch)
- Construction observation services will include review of contractor submittals, two site visits during construction (1 – BHA, 1-Aqua), and a Substantial Completion review including irrigation system operation test.

BHA Design Incorporated
111 South Meldrum Street, Suite 110
Fort Collins, CO 80521

DESIGN FEES

TASK	Fees (labor and expenses)
Landscape and Irrigation Design and Construction Documents *(BHA $12,000, Aqua $9,300)*	$21,300
Bridge Enhancements Design and Construction Documents	$7,500
Renderings/exhibits for public and stakeholder meetings	$3,000
Construction Observation Services *(BHA $3,500, Aqua $2,000)*	$5,500

SCOPE EXCLUSIONS

The following services are not included in the basic scope of services outlined above:

- Irrigation pumping system design/engineering
- Design of interim or phased improvements
- Presentation at neighborhood meetings or public hearings

We request written authorization to work on an hourly basis. Our fees and reimbursable expenses for hourly services will not exceed **$37,300** without written authorization. If these terms are acceptable, returning one signed original to our office will serve as immediate authorization to proceed.

Sincerely,
BHA Design Inc. by

Angela K. Milewski

by

Authorized Signature Date

voice: 970.223.7577
www.bhadesign.com

CR5 Improvements

BHA Design, Inc.

Task Description	Name	Extension	Name	Extension	Name	Extension	Irrig Design	Extension	Task Hours	Task Amount
Name	Principal		PM		Designer		Aqua Eng			
Rate	$180.00		$125.00		$85.00					
Prelim and Final Design										
Prepare preliminary (50%) Urban Design Plans, Landscape Plans, and details for the selected alternative	8	$1,440.00	30	$3,750.00	16	$2,000.00		$0.00	54	$7,190.00
Prepare preliminary Irrigation Plans and details for the selected alternative (includes BHA coord)		$0.00	3	$375.00		$0.00		$5,000.00	3	$5,375.00
Prepare preliminary specifications for urban design/landscape/irrigation items	12	$2,160.00	2	$250.00		$0.00		$0.00	14	$2,410.00
Prepare Final Urban Design, Landscape Plans, details, and specifications	8	$1,440.00	20	$2,500.00	8	$1,000.00		$0.00	36	$4,940.00
Prepare Final Irrigation Plans, details, and specifications (incudes BHA Coord)		$0.00	3	$375.00		$0.00		$3,800.00	3	$4,175.00
In-House Quality Control Review and Documentation	4	$720.00		$0.00		$0.00		$0.00	4	$720.00
Opinion of cost		$0.00	4	$500.00	4	$500.00		$500.00	8	$1,500.00
Prepare illustrative graphics for public meeting - updated 3D SketchUp images		$0.00	20	$2,500.00	4	$500.00		$0.00	24	$3,000.00
Attend 1 coordination meeting with City/Contractor - virtual meeting		$0.00	2	$250.00		$0.00		$0.00	2	$250.00
Design review meetings	4	$720.00	8	$1,000.00		$0.00		$0.00	12	$1,720.00
Construction observation services				$3,500.00				$2,000.00		$5,500.00
Total Hours	**36**		**92**		**32**		**0**		**160**	
Total Amount		**$6,480.00**		**$15,000.00**		**$4,000.00**		**$11,300.00**		$36,780.00
									Estimate of Reimbursable Expenses	$500.00
									Total Fee	**$37,280.00**

Notes:

1 The fee above assumes that the roadway and sidewalk layout from the conceptual plans will not change significantly. Minor changes are expected. If significant changes occur, additional fees may be required.
2 This scope includes urban design, landscape design, and irrigation design services
3 Aqua Engineering, acting as a subconsultant to BHA, will provide irrigation design services
4 Structural design services are excluded (structural engineer will need to include structural design for retaining walls, ped rails, art foundations, ornamental light footings, and other urban design elements)
5 Electric/Lighting design services are excluded.
6 Sign design services are excluded.
7 Design services for areas outside of public ROW are excluded.
8 BHA will design, detail and prepare specifications for aesthetic enhancements for the bridge which may include railing enhancements, decorative columns or walls. Structural design is assumed by others.
9 Sidewalks, cross-walks, splashblocks/double curbs, and median cover will be designed and detailed by others. BHA will assist with selecting finishes for these items, but details will be prepared by others
10 Water tap and meter will be designed by others.
11 Irrigation booster pump design services are excluded