RESOLUTION NO. 26-59

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO, APPROVING A FIRST AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF CASTLE PINES AND JACOBS ENGINEERING GROUP INC. FOR I-25 AND HAPPY CANYON INTERCHANGE DESIGN SERVICES

WHEREAS, the City of Castle Pines (the "City") is authorized to enter into contracts for the performance of general municipal governance and services; and

WHEREAS, the City entered into a professional services agreement with Jacobs Engineering Group Inc. (the "Contractor") dated June 12, 2024, pursuant to which Contractor provides design development and engineering services for the I-25 and Happy Canyon Interchange Project (the "Agreement"); and

WHEREAS, the City desires to amend the Agreement to extend its term to July 31, 2028, add additional services for the construction-phase design and engineering services for the I-25 and Happy Canyon Interchange Project, adding the amendment of $700,000 and increasing the total not-to-exceed compensation amount to $4,120,359.00 to the Contractor for the provision of the additional services (the "First Amendment"); and

WHEREAS, the City Council desires to approve the First Amendment and further desires to authorize the City Manager to execute the First Amendment once in final form.

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CASTLE PINES, COLORADO, THAT:

Section 1. The recitals contained above are incorporated herein by reference and are adopted as findings and determinations of the City Council.

Section 2. The City Council hereby: (a) approves the First Amendment in substantially the same form as attached hereto and incorporated herein as **Exhibit A**; (b) authorizes the City Attorney, in consultation with the City Manager, to make such changes to the First Amendment as may be necessary to correct any non-material errors or provisions that do not increase the obligations of the City; and (c) authorizes the City Manager to execute the First Amendment on behalf of the City once in final form.

Section 3. If any section, paragraph, clause, or provision of this Resolution is held to be invalid or unenforceable by a court of competent jurisdiction, the invalidity or unenforceability of such section, paragraph, clause, or provision shall not affect any of the remaining sections, paragraphs, clauses, or provisions of this Resolution.

Section 4. This Resolution shall take effect upon its approval by the City Council.

[Signature page follows]

INTRODUCED, READ, AND ADOPTED AT A REGULAR MEETING OF THE CITY COUNCIL OF THE CITY OF CASTLE PINES BY A VOTE OF 6 IN FAVOR, 0 AGAINST, AND 1 ABSENT THIS 22nd DAY OF SEPTEMBER, 2026.

CITY OF CASTLE PINES CORPORATE SEAL 2008 COLORADO

Tracy Engerman (Sep 24, 2026 19:11:01 MDT)

Tracy Engerman, Mayor

ATTEST:

Tobi Duffey

Tobi Duffey, MMC, City Clerk

APPROVED AS TO FORM:

Linda Michow
Linda Michow (Sep 24, 2026 10:31:51 MDT)

Linda C. Michow, City Attorney

EXHIBIT A
FIRST AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF CASTLE PINES AND JACOBS ENGINEERING GROUP INC.

I-25/Happy Canyon Addendum

Scope of Work

8/3/26

The Scope of Work for this addendum includes additional services performed during the design development of the project which were not scoped in the original contract. Design Services During Construction was not part of the initial contract and is being added to this addendum. Listed below are the additional services and the activities for the Design Services During Construction.

Additional Services

1. Additional Traffic Modeling to Determine Feasibility of the Interim Diamond Interchange

2. 2025 Raise Grant Application

3. 2026 BUILD Grant Application

4. Traffic Control on I-25 for Survey not included originally in our Scope

5. Additional Geotech Boring at the West Roundabout and at the Pier Footings

6. South Bridge Design

Design Services During Construction*

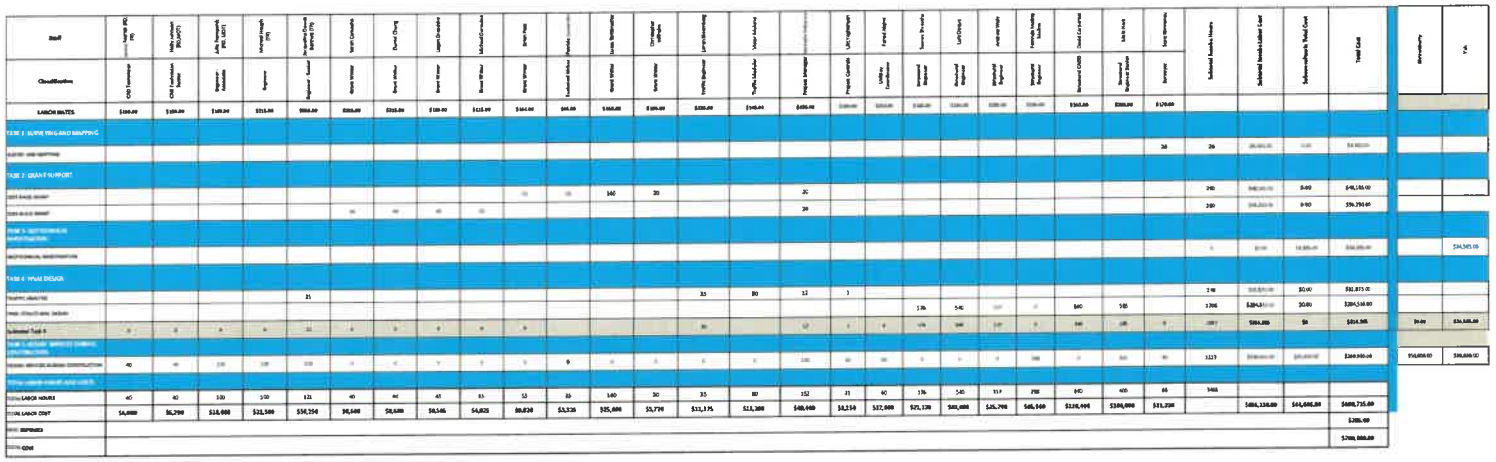
1. Review Construction Submittals
2. Respond to RFIs
3. Technical Assistance as needed
4. Project Management

*Note that the hours and respective costs for DSDC are estimated only. This will be time and materials on an as needed basis.

I-25 and Happy Canyon Road Interchange Amendment

Cost Proposal

August 6, 2026



Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

2000 Clay Street, Ste 200
Denver, CO 80211
303-781-9590 • www.yeh-eng.com

January 9, 2026

Project No. 224-113

Michelle C. Pinkerton, PE
Jacobs Engineering Group Inc.
6312 S. Fiddler's Green Circle Ste. 300N
Greenwood Village, CO 80111

Re: Additional Geotechnical Engineering Services – Scope of Work
I-25 and Happy Canyon Road Interchange
Castle Pines, Colorado

Dear Ms. Pinkerton:

This letter presents Yeh and Associates, Inc.'s (Yeh) proposed scope of work and fee for an additional geotechnical investigation for the I-25 and Happy Canyon Road Interchange project. The work is intended to verify sandstone bedrock levels near the proposed bridge center piers for shallow foundation design and to collect additional geotechnical data for the proposed monuments and associated walls.

Scope of Work

Based on the information provided and our understanding of the project, we propose the following scope of work:

- **Geotechnical Investigation**
  - Conduct geotechnical reconnaissance, including site visit to verify appropriate drilling access and methods, existing field conditions, and pre-mark boring locations as appropriate prior to utility clearances.
  - Procure third-party geotechnical drilling subcontractor services.
  - Contact UNCC 811 for utility locates and acquire appropriate permits from CDOT and prior to drilling. The boring locations will be marked in the field by Yeh personnel and surveyed by others if desired.
  - Conduct a supplemental geotechnical investigation consisting of a total of three borings. Two borings will be advanced to characterize soil and rock conditions for the bridge's shallow foundations. In addition, one boring is proposed for the monuments, as one of the previously installed borings is considered sufficiently close to the other proposed monument location. All borings will be advanced using auger methods to a maximum depth of 40 feet below the existing grade of I-25.
  - Collect samples, as needed, for laboratory testing. Borings will be logged and samples collected by a representative of Yeh. The borings will be backfilled with the cuttings.
  - Groundwater conditions will be observed and recorded at the time of drilling.
  - Laboratory testing will be conducted on collected soil and rock samples to evaluate engineering properties. The testing program may include, but is not limited to, USCS

and AASHTO soil classification tests; corrosivity testing (pH, soluble sulfate, soluble chloride, and electrical resistivity); and bedrock unconfined compressive strength testing.

- **Geotechnical Engineering Report Addendum**
  - Prepare and issue a draft geotechnical addendum that will include the following:
    - Boring logs and results of the subsurface investigation.
    - Engineering geology plan sheets summarizing the results of the geotechnical investigation.
    - Laboratory test results.
    - Geotechnical recommendations and design parameters to support bridge foundation and retaining wall design.
    - Embankment recommendations including consolidation and moisture/density recommendations
    - Sub-excavation and structure backfill recommendations
    - Incorporate the findings and recommendations of this addendum into the final geotechnical report to be issued under the original scope of services. The final report will address the City's and design team review comments.

- **Assumptions and Exclusions**
  - Design standards for this project will be based on AASHTO LRFD Bridge Design Specifications (9th Edition) and appropriate CDOT bridge and geotechnical design manuals.
  - Drilling can be completed during nighttime hours with a single lane or shoulder closure.
  - Independent design checks for the retaining wall, as requested by the City of Castle Pines, Douglas County, or CDOT, can be provided.
  - Yeh will provide geotechnical recommendations and design parameters to support the design of the proposed monuments, retaining walls, and bridge foundations. This will include subsurface characterization and applicable geotechnical criteria for foundation and wall systems. Final wall system selection, geometry, and structural design will be performed by others.
  - Environmental sampling and testing are excluded. If potentially hazardous materials are encountered, drilling operations will be stopped and the project team will be notified.

Fee

The cost for our services will be billed on a time and materials basis with a not to exceed amount of $24,585. We will not exceed the estimated budget without prior notice and authorization from Jacobs. The table below is a breakdown of our estimated costs:

Item	Estimated Cost
Yeh Labor	$10,560
Field Investigation (Subcontractors)	$11,115
Laboratory Testing	$2,840
Total	**$24,585**

Closing

Yeh will perform its services in a manner consistent with the standard of care and skill ordinarily exercised by members of the profession practicing under similar conditions in the geographic vicinity and at the time the services will be performed. Therefore, no warranty or guarantee expressed or implied is part of the services offered by this proposal.

If you have any questions, please contact me at (303) 781-9590.

Sincerely,
Yeh and Associates, Inc.

Thomas Bishop, PE
Sr. Project Engineer

Reviewed by:

Masoud Ghaeli, PE
Senior Project Manager

COST ESTIMATION WORKSHEET (CEW)

FIRM NAME: Jacobs | PREPARED BY: T. Bishop | DATE: 01/09/26

PROPOSAL NUMBER: 224-113 | PROJECT NAME: I-25 and Happy Canyon Interchange | CONTRACT/TASK ORDER NUMBER:

WORK ACTIVITY	Principal	Sr. Project Manager	Sr. Project Engineer	Project Engineer	Staff Engineer	Lab Supervisor	Technician 1	CAD Designer	TOTAL HOURS	TOTAL COST
1.0 Project Management										
1.1 Contract Administration		2							2	
1.2 Prepare and submit invoices for payment		2							2	
SUBTOTALS	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**$920.00**
2.0 Geotechnical Investigation										
2.1 Field locate of borings, UNCC utility locates			4						4	
2.2 Obtain traffic control plans and permits			4						4	
2.3 Health & Safety Plan (HASP)									0	
2.4 Conduct a subsurface exploration program			10						10	
2.5 Perform soil tests									0	
SUBTOTALS	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**18**	**$3,240.00**
3.0 Geotechnical Design										
3.1 Develop recommendations for foundations			20						20	
3.2 Develop site grading recommendations									0	
3.3 Pavement design analysis									0	
3.4 Recommend surface and subsurface drainage									0	
SUBTOTALS	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**20**	**$3,600.00**
4.0 Geotechnical Report										
4.1 Provide recommendations									0	
4.2 Compile boring logs, test result			4						4	
4.3 Prepare and issue *Draft Geotechnical Investigation Report*									0	
4.4 Prepare and issue *Final Geotechnical Investigation Report*			8					4	12	
SUBTOTALS	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**4**	**16**	**$2,800.00**
SUBTOTALS - HOURS	0	4	50	0	0	0	0	4	58	
SALARY RATE, $ PER HOUR	$240.00	$230.00	$180.00	$155.00	$140.00	$155.00	$105.00	$160.00		
SUBTOTALS - LABOR COSTS	$ -	$ 920.00	$ 9,000.00	$ -	$ -	$ -	$ -	$ 640.00		$ 10,560.00
TOTAL LABOR COST	**$**	**10,560.00**								

TRAVEL & PER DIEM COST	Estimated Units	Unit Rate	Units	TOTAL COST
Vehicle Mileage	100	$ 0.70	mile	$ 70.00
Lodging			night	$ -
Per Diem			day	$ -
Airfare			each	$ -
TOTAL TRAVEL AND PER DIEM COST	**$**	**70.00**		

DRILLING & OTHER SUBSURFACE INVESTIGATION COST	Estimated Units	Unit Rate	Units		TOTAL COST
Support Truck	1	$ 315.00	day		$ 315.00
Compressor		$ 600.00	day		$ -
Core Boxes		$ 15.00	each		$ -
Exploration (CME 75, Auger)	10	$ 275.00	hour	1 night of drilling for ~3 shallow foundation borings	$ 2,750.00
Traffic Control - DAY WORK		$ 375.00	hour		$ -
Traffic Control - NIGHT WORK	10	$ 625.00	hour		$ 6,250.00
Third Party Inspection Services	1	$ 1,800.00	day		$ 1,800.00
Instrumentation			each		$ -
Geophysics		$ 6,000.00	day		$ -
Other -			hour		$ -
TOTAL DRILLING & OTHER INVESTIGATION COST	$ 11,115.00				

LABORATORY & FIELD TEST COST	Estimated Units	Unit Rate	Units		TOTAL COST
Atterberg Limits		$ 120.00	each		$ -
Classification	8	$ 200.00	each		$ 1,600.00
Hydrometer Analysis		$ 200.00	each		$ -
Moisture Content	8	$ 25.00	each		$ 200.00
Dry Density (CA liner)	8	$ 45.00	each		$ 360.00
pH	2	$ 50.00	each		$ 100.00
Sulfate Content	2	$ 50.00	each		$ 100.00
Chloride Content	2	$ 50.00	each		$ 100.00
Resistivity (laboratory)	2	$ 80.00	each		$ 160.00
Standard Proctor		$ 230.00	each		$ -
Modified Proctor		$ 250.00	each		$ -
Swell-Consolidation (Method A)	1	$ 220.00	each		$ 220.00
R-Value (outside lab = $) (internal hours = $)		$ 400.00	each	reminder: list outside lab as vendor on CDOT PCW's ($???/R-Value)	$ -
UC Rock Testing (outside lab)			each	reminder: list outside lab as vendor on CDOT PCW's	$ -
Other			each		$ -
TOTAL LABORATORY & FIELD TEST COST	$ 2,840.00				

TOTAL PROJECT COST	$ 24,585.00