



Engineering Department

DATE: April 23, 2024

FROM: Gabe Schell, City Engineer

ITEM: East Century Ave - Engineering Amendment - HC 165

REQUEST:

Consider approval of amendment to existing agreement for professional services with KLJ for E Century Ave Reconstruction – HC 165.

BACKGROUND INFORMATION:

KLJ is under contract to perform preliminary engineering services relating to the reconstruction of E Century Avenue between Centennial Rd to Kost Dr and the extension of E Century Avenue from Kost Dr to 52nd Street NE and 52nd Street NE from E Century Ave to Gold Dr. This project is funded by ½ cent sales tax, water utility funding, and a to be determined funding source for the 52nd Street NE extension.

This request is for authorization of scope and fee to include the design engineering of the improvements as selected by the Commission on March 26, 2024. This scope would authorize engineering and right of way on the project through final design and bid. This agreement could be amended in the future to include construction engineering at a later date.

The 2024 budget included design engineering but did not include right of way acquisition, wetland mitigation or utility relocation. As some of these items will need to be completed in 2024 prior to bidding and awarding the project, Finance will request a budget amendment of \$2,000,000 if necessary at a later date to move anticipated 2025 costs into 2024 to facilitate the completion of the bid package. Half-cent sales tax would be the funding source for all E Century Ave related costs and a to-be-determined funding source would be used for all 52nd Street NE costs.

RECOMMENDED CITY COMMISSION ACTION:

Approval of amendment to existing agreement for professional services with KLJ for E Century Ave Reconstruction – HC 165.

STAFF CONTACT INFORMATION:

Gabe Schell, City Engineer, 701-355-1507, gschell@bismarcknd.gov

ATTACHMENTS:

1. Amendment 1 - HC165



Amendment to Agreement for Professional Services

City Number: HC 165 Amendment #1 (2304-00414-#1)

Background Data

- a. Effective Date of Agreement for Professional Services August 8, 2023
- b. Engineer KLJ Engineering LLC
- c. Owner City of Bismarck
East Century Avenue Improvements and 52nd street NE Extension - HC 165
(Centennial Road to 52nd Street NE, and 52nd Street NE from East
Century Ave to Gold Drive)
- d. Project Phase II - Final Design and Bidding
- e. This Part of the Project Phase II - Final Design and Bidding

Nature of Amendment (check all that apply)

- Additional services to be performed by Engineer
- Modifications to services of Engineer
- Modifications to responsibilities of Owner
- Modifications to payment to Engineer
- Modifications to time(s) for rendering Services

Description of Modifications

Refer to Attachment "A1", Phase II - Final Design and Bidding Services

Agreement Summary

a. Original Agreement amount	<u>\$598,960.77</u>
b. Net change for prior Amendments	<u>\$0</u>
c. This Amendment amount	<u>\$1,025,248.71</u>
d. Adjusted Agreement amount	<u>\$1,624,209.48</u>

Engineer and Owner hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is April 23, 2024.

Owner City of Bismarck
Signed _____
Name _____
Title President, Board of City Commissioners
Date _____

Attest _____
Name Jason Tomanek
Title City Administrator

Engineer KLJ Engineering LLC
Signed _____
Name Mark Anderson, PE
Title Senior VP, Environment & Public Works
Date _____

Attest _____
Name Erika Lorenz
Title Contract Administrator

This is **EXHIBIT A1**, consisting of 16 pages, referred to in and part of **Amendment 1 to the Engineering Services Agreement** dated August 8, 2023.

Engineer's Services

E Century Avenue Improvements and 52nd Street NE Extension – City Project: HC 165 – Bismarck, ND

The Agreement is supplemented to include the following agreement of the parties.

PART 1 – BASIC SERVICES

Project Location:

The property (Property or Site) for which Engineer's services are being provided includes the E Century Avenue corridor between the Yorktown Drive intersection and the 52nd Street NE intersection. The project will also include 52nd Street NE corridor between the E Century Avenue intersection and approximately 245 feet south of Gold Drive intersection, in Bismarck, ND. Refer to attached **Exhibit A1.1** for the conceptual layout of the improvements approved by the City Commission on 3/26/24.

Project Understanding:

KLJ Engineering LLC (KLJ or Engineer) will provide engineering services for the project in three separate phases, subject to satisfactory performance, funding availability, and subsequent agreement of scope and fees for each phase. The three separate phases include environmental documentation (wetlands and cultural), topographic and boundary survey, public involvement, geotechnical engineering, traffic analysis, preliminary engineering including conceptual design, and right-of-way acquisition in first phase (Phase I - Preliminary Design – previously completed); final design and plan preparation, additional right-of-way acquisition, permitting, and bidding services in the second phase (Phase II - Final Design and Bidding Services); and construction administration, observation, and surveying in the third phase (Phase III - Construction Administration, Observation, Surveying).

The purpose of this document is to describe the scope of work and responsibilities required to complete the Final Design and Bidding Phase.

The project is programmed for 2025 construction using local sales tax funds, utility funds, and local funding. Although NDDOT processes will not be followed, coordination with NDDOT process will occur to a limited degree to maintain federal aid eligibility on this roadway in the future.

Project Schedule:

Preliminary Design: Previously Completed (approx. 8/14/23 – 4/24/24)

Final Design and Bidding: Thirty-one weeks from execution of Agreement (approx. 4/23/24 – 11/26/24) (Bid Opening assumed to be 11/14/24)

Construction Administration, Observation, and Surveying: Not Included (approx. March 2025 – October 2025)

Parties:

Owner – City of Bismarck (City)

Engineer – KLJ Engineering LLC

Geotechnical Engineer - TerraCon

Appraiser – Boulder Appraisals

Review Appraiser – Jorge Pagen Appraisal Consulting

Constructor - Synonymous with Contractor or Construction Manager – To Be Determined

Engineer shall provide Basic Services as set forth below.

A1.01 Preliminary Design Phase (Previously Completed under Original Agreement)

A1.02 Final Design Phase

- A. After acceptance by Owner of the Preliminary Design Phase documents and any other deliverables and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, the Engineer shall provide:
 - B. Design and Plan Preparation
 - 1. Section 1: Title Sheet
 - 2. Section 2: Table of Contents
 - 3. Section 4: Scope of Work
 - 4. Section 6: Plan Notes
 - 5. Section 8: Estimate of Quantities
 - a. The estimate of quantities will be developed by providing up to four (4) different funding sources that will have quantities separated. It is assumed that the different funding sources may include mainline East Century Avenue, mainline 52nd Street, Watermain, and the Shared Use-Path connection.
 - 6. Section 10: Basis of Estimate
 - 7. Section 11: Earthwork
 - a. Engineer will evaluate potential options for a fill source from the majority landowner in the undeveloped area along East Century Ave and 52nd St NE. The Engineer will determine the approximate quantity of fill available. The Engineer will not develop mass grading concepts or plans for the undeveloped land.
 - 8. Section 20: General Details
 - a. Details will include ADA ramps, municipal utilities, erosion control, pipe bedding, and concrete joints.
 - 9. Section 30: Typical Sections
 - a. Typical sections will be designed in accordance with the Preliminary Engineering Report approved by the City Commission 3/26/24.
 - 10. Section 40: Removals
 - 11. Section 50: Storm Water

- a. Evaluate the proposed storm drainage system for approximately 1.0 miles of East Century Avenue and approximately 0.5 miles of 52nd St NE and prepare a final storm water report documenting the design calculations for the project. The report will include an evaluation of the downstream drainage swales for the need of energy dissipation and erosion control. The use of vegetative swales and hydrodynamic separators at discharge locations will be evaluated to determine appropriate measures to meet City water quality requirements. Erosion mitigation measures will be evaluated up to 100-feet downstream of the discharge locations south of East Century Avenue. A draft report will be submitted for review which will include design calculations and preliminary layouts. After comments are received and the drainage system is approved, a final report will be submitted based upon the final storm water system design.
- b. It is assumed that East Century Ave runoff from west of the coulee will be split at a highpoint near Stonewall Drive. Runoff from the west side of the highpoint will continue flowing west and be collected in storm sewer to be connected to the existing City storm sewer system. Runoff from the east side of the highpoint will flow east to the coulee and be collected in proposed storm sewer which will discharge into the coulee.
- c. It is assumed that East Century Ave runoff from east of the coulee will be split at a highpoint approximately 1400-feet east of the coulee. Runoff from the west side of the coulee will flow west to the coulee and be collected in storm sewer which will discharge into the coulee. Runoff from east of the highpoint will flow east to the intersection with 52nd Ave NE and be intercepted in proposed storm sewer which will discharge south into the Silver Ranch coulee.
- d. It is assumed that runoff flows from 52nd St NE will flow south within right-of-way ditches toward the intersection with E Century Ave and be intercepted by storm sewer or culverts which will discharge to the south into the Silver Ranch Coulee.
- e. It is assumed that no stormwater detention will be necessary to mitigate the increase in impervious area. It is assumed that the capacity of the existing downstream receiving waters was previously analyzed in the regional stormwater plans to handle developed conditions runoff from the proposed improvements.
- f. It is assumed that proposed storm sewer improvements along East Century Ave will consist of reinforced concrete inlets, manholes, and proposed storm sewer pipe. The storm sewer improvements along 52nd St NE will come in the form of reinforced concrete culverts.
- g. Coulee crossing culverts will be designed for the mainline of East Century Ave, and the shared use path crossing located north of E Century Ave to be twin 60" pipes in conformance with the Silver Ranch Watershed Stormwater Master Plan.
- h. Scope does not include post-construction or as-constructed stormwater analysis or certification.

12. Section 57: Watermain Plan and Profile

- a. The proposed watermain improvements along East Century Ave are necessary to provide redundant service loops and extend the City distribution system eastward and

northward to serve future development. Separation of the existing networks between Pressure Zone 2 and Zone 3 will be maintained. Plan and profile drawings will be generated showing the new and existing watermain pipe network, Zone 2 and Zone 3 connection points, and watermain detail plan sheets. The following new watermains are expected to be installed:

- 1) Install 16-inch Zone 3 watermain on the north side of East Century Ave from the east side of Stonewall Drive to 52nd St NE.
 - a) Install air release manholes on the 16-inch Zone 3 watermain at the highpoints in East Century Ave approximately 230-feet east of Stonewall Drive and approximately 1400-feet east of the coulee.
- 2) Install 24-inch Zone 2 watermain on south side of East Century Ave from 410 -feet east of Kost Drive to 52nd St NE.
 - a) Install air release manholes on the 24-inch Zone 2 watermain at the highpoints in East Century Ave approximately 230-feet east of Stonewall Drive and approximately 1400-feet east of the coulee.
- 3) Install 16-inch Zone 3 watermain north along 52nd Street NE and connecting to the existing 16-inch PVC watermain located near Hitchcock Drive.
- 4) Connect the 16-inch Zone 3 watermain to existing 8-inch PVC Zone 3 watermains near the intersections of Roosevelt Drive and Kost Drive with East Century Ave.
- 5) It is assumed that no new service connections will be required.
- 6) Hydraulic modeling or other detailed analysis of the water distribution systems is not included and would be provided as Additional Services if requested by the Owner.

b. Sanitary Sewer Plan and Profile

c. Sanitary sewer improvements along East Century Ave are necessary to provide an option for sanitary sewer service for properties north of East Century Ave. and west of 52nd St NE. The Engineer will evaluate the sanitary sewer options necessary to service this property. Engineer's scope of work assumes that the following sanitary sewer installation within the East Century Avenue roadway corridor will be necessary:

- 1) Install 8-inch sanitary sewer from approximately 1500-feet east of Kost Drive to the intersection with 52nd St NE where the sanitary sewer will connect to the existing sanitary sewer trunk line.

13. Section 60: Roadway Plan and Profile

- a. The roadway design will be generally based upon the alignment and typical sections developed in the preliminary design phase (approved by the City Commission on 3/26/24) and include design and plan and profile development per City of Bismarck standards and specifications.
- b. The design assumes a shared-use path on the north side of East Century Avenue and a sidewalk on the south side through the 5-lane section. On-street bicycle accommodations are not anticipated.
- c. The design includes connection of a shared-use path north of East Century Avenue to the existing Sunrise Shared-Use path near Sunrise Park.

14. Section 76 & 77: Sediment and Erosion Control

- a. Develop temporary sediment and erosion control plans.
- b. Develop permanent sediment and erosion control plans.
 - 1) Prepare erosion control plans in accordance with City requirements.
 - 2) Engineer's plans will identify areas to be seeded.
- c. Wetlands and Environmental
 - 1) Wetland impacts will be included in this section.
 - 2) No mitigation site will be included in the plans. It is assumed that all mitigation requirements would be completed through an approved wetland mitigation bank through the purchase of credits.
 - 3) Preparation of a US Army Corps of Engineers (USACE) Individual 404 Permit Application
 - a) It is assumed that all mitigation requirements for impacts to jurisdictional wetlands would be completed using an approved wetland mitigation bank through the purchase of credits.
 - b) It is assumed that a 401 certification will be required. The Engineer will submit this to NDDEQ at the same time the 404 permit application is submitted.
 - c) It is assumed that since SHPO concurrence has already been acquired that there will be no additional Section 106 requirements.
 - d) Engineer's fee includes up to four (4) meetings with the USACE.
 - e) Engineer's fee does not include any Legal testimony; A USFWS Right-of-Way or Conditional Use Permit for impacts to wetland basins under easement; Biological, botanical, or threatened and endangered species; National Environmental Policy Act (NEPA) documentation; Wetland mitigation plan or Mitigation site monitoring.

15. Section 80: Fencing

- a. Engineer will work with the landowners and the Owner on options for private fence replacement where the project construction limits require that existing fences be removed. The Engineer will evaluate two options with the landowner and Owner. One will be for the project Constructor to replace the existing fence with a consistent looking fence for the whole project. The second option will be for the Owner to ask the landowner to provide a quote to replace their fence and the Owner would reimburse the landowner for the cost of replacement.
- b. Engineer will layout the alignment of the replacement fence.
- c. Engineer will generate plan notes to address required fencing material and installation instructions for the replacement fence.

16. Section 81: Survey Data Layouts

17. Section 85: Landscaping Layouts

- a. Engineer will prepare detailed planting plans within the project right of way corridor (median and boulevard areas). Planting plans to include street tree locations, planting details, and notes for installation, warranty, and process of plant establishment period. Tree selections will be based upon current City Forestry approved species listed in the latest version of the "Street Tree Guide". Prior to development of 50% plans, KLJ will facilitate a meeting with the City Forester to determine scope of desired planting levels to be included in the plans.
- b. It is assumed that an irrigation system will not be necessary on this project.

18. Section 90: Paving Layouts

19. Section 100: Work Zone Traffic Control

- a. This activity includes completing the traffic control layouts with the assumption that East Century Avenue will be closed from Stonewall Drive to the east. East Century Avenue between Centennial Road to Stonewall Drive will remain open during construction through temporary widening and surfacing through phased construction.

20. Section 110 Signing & Pavement Marking

21. Section 140: Lighting

- a. Engineer will calculate the optimized pole spacing according to AASHTO illumination and uniformity requirements. The approach will be to provide a continuation of the existing street lighting along East Century Ave. utilizing the City of Bismarck's preferred luminaires. The areas that will be illuminated include the roadway, intersections, and pedestrian walkways. Design will attempt to minimize lighting pollution outside of the subject lighting area. The design will be summarized in a Final Design Lighting Memo to be submitted to the Owner for review and consideration.
- b. The lighting plans will include completed electrical design ready for bidding and construction. Electrical design will meet NEC 2020 requirements, and include utility coordination, panel location, panel layout, overcurrent protection, lighting control, wire sizing, grounding, and conduit routing as well as determining voltage drop and conduit fill requirements as required to design the lighting system.
- c. The plan sheets will be developed according to the City of Bismarck Engineering Department standards. Design will include the location of the poles, conduit, pull boxes, and meter pedestals. Details will be provided on the point of service, lighting control, electrical one-line, pole foundations, poles, and luminaires. Engineer will coordinate with the local electrical service provider to ensure power can be delivered to the proposed feed point locations.

22. Section 150: Flashing Beacons

- a. Complete plans for one (1) Rectangular Rapid Flashing Beacon (RRFB) visible to traffic traveling in each direction at the intersection of Roosevelt Drive. A service drop will be coordinated with Capital Electric for the RRFB.

- b. Traffic Signals are not included.

23. Section 170: Retaining Walls

- a. Develop final geometry of the retaining walls needed in the corridor of the project that satisfy the geometric constraints of the street section, adjacent landowners and other physical constraints at each location. A total of up to five (5) wall sites are assumed.
- b. Engineer will evaluate up to two (2) retaining wall types to be selected for potential use on the project. Engineer will evaluate each site to determine the appropriate wall type with retained soil height and physical constraints of each location as primary influence. Other considerations include Owner preference and historic performance of evaluated wall types.
- c. Develop structural retaining wall designs for each retaining wall. Engineer will coordinate with geotechnical sub-consultant TerraCon to determine the site soil design properties and other design recommendations.

24. Section 200: Cross Sections

C. Roadway Modeling

a. Pedestrian Facilities

- 1) The roadway models will include details for the pedestrian facilities as developed in the preliminary design phase (approved by the City Commission on 3/26/24), including sidewalks, shared-use paths, boulevards, and pedestrian ramps. The pedestrian ramps will include profiles to ensure ADA and PROWAG compliance.

b. Retaining Wall

- 1) The roadway models will include minimal details for retaining walls. The information provided in the roadway models are to provide a graphical representation and to determine grading tie lines. Section 170 information and details will supersede any retaining wall information within the roadway models.

c. Roadway

- 1) The roadway models will include the pavement section as determined by the pavement design recommendation for individual corridors. The roadway models will include tapers, transitions, curb returns, and other geometric changes to the corridor section. Any geometric information not included within the roadway models, such as curb height transitions, curb flow line modifications at inlets, and other unique or special details that cannot be accurately or visually represented in the roadway model will be covered through plan notes, detail sheets, or standard drawings.

D. Permitting

1. Design Permits

- a. Preparation of a Individual (404) Permit (See Section 76 & 77 above)
- b. NuStar Coordination (See Utility Coordination section below)
- c. NDDOT Right-of-Way Drainage Permit – SFN 50909 (*Not Included*)
 - 1) It is assumed that no offsite drainage will flow to NDDOT right-of-way.

2. Construction Permits (*Not Included*)

E. Specifications

1. Technical specifications will refer to the latest City of Bismarck specifications and bid items with plan notes as necessary. Incorporation of the latest edition of the NDDOT Standard Specifications for Road and Bridge Construction may be necessary.
2. Preparation of a Project Manual will include Invitation/solicitation of Bids, Bid Form, Construction Agreement, City of Bismarck General Conditions, and Supplemental Conditions.

F. Engineer's Opinion of Probable Construction Cost

1. Provide one (1) Opinion of Probable Construction Cost with the 50% submittal, one (1) updated Opinion of Probable Cost with the 90% submittal, and one (1) updated Opinion of Probable Construction Cost with the final (100%) Construction Documents.
2. The estimate of quantities will be developed by providing up to 4 (four) different funding sources that will have quantities separated. It is assumed that the different funding sources may include mainline East Century Avenue, mainline 52nd Street, Watermain, and the Shared Use-Path connection.
3. Opinions of construction cost shall only be for the materials covered by the Engineer's design.
4. Revisions to the engineer's opinion of construction cost in excess of the amounts stated herein shall be completed as an Additional Service.

G. Project Management & Owner Coordination

1. Project Management & Coordination
 - a. Manage the project and provide overall coordination of the work completed by the planning and design team. This work shall consist of managing work assignments, internal team coordination, subconsultants, client coordination, project budget and schedule.
2. Progress Reports and Owner Coordination
 - a. Submit a progress report via email to the Owner approximately every three (3) weeks which will summarize the work performed in the current period, upcoming activities in

the next period, summary of project decisions and potential out of scope work activities. The reports shall include percent complete for key project activities. The status report shall also identify deviations from the planned schedule and what actions will be taken to get the project back on schedule.

- b. It is assumed that the Engineer will host or attend up to a total of eleven (11) one-hour progress meetings and six (6) additional item specific meetings with the Owner or other external parties during the final design phase plus one (1) four-hour meeting with the Owner at 90% review. The Engineer will attend those meetings deemed appropriate for their scope of services either in person or through a telephone or video conference.
- c. The Engineer will be available to attend additional meetings as an Additional Service.

3. Project Schedule

- a. Submit and maintain a Final Design schedule. The schedule will include dates for major work items. The schedule will be reviewed and adjusted as necessary to incorporate changes in the work concept and progress to date.

H. Right-of-Way Acquisition and Adjacent Landowner Coordination

1. Landowner Coordination and Negotiations

- a. Coordinate with landowners to acquire temporary construction easements for an estimated 37 parcels and landowner negotiations for the acquisition of four (4) Permanent Fee simple parcels for the alignment of East Century Ave and 52nd Street NE outside of existing platted and statutory right-of-way (ROW).
- b. Coordination will include an initial meeting with the majority landowner and then, if applicable, prepare plat, negotiate documents, and begin negotiations with the landowner to purchase ROW for the corridor at the agreed upon location.
- c. Conduct negotiations for the permanent acquisition of four (4) parcels from the majority landowner, and negotiations for up to 37 Temporary Construction Easement Parcels held by other landowners. It is assumed that up to two (2) in-person meetings will be required per parcel.
- d. Coordination with landowners, other than the majority landowners four (4) parcels, for potential acquisition of permanent ROW is assumed not necessary and is not included in the scope of work.

2. Title Research

- a. Research surface title back two deeds or a chain of title back 20 years for up to 41 affected parcels and prepare surface ownership reports (SORs) for each parcel.

3. ROW Plats and Easement Exhibits

- a. Prepare a preliminary and final plat for the permanent acquisition parcels and easement exhibits for the temporary acquisition parcels. We assume four (4)

permanent acquisition parcels and 37 temporary construction easements will be required. Engineer will utilize standard City of Bismarck temporary easement documents for acquisition of temporary construction easements.

4. Market Analysis

- a. Engineer will complete a market analysis to evaluate raw land values of parcels that require a temporary construction easement and will record recent sale values of similar properties to determine the acquisition cost of the parcel. Engineer will prepare Waiver Valuations off the market analysis.

5. Appraisals

- a. Engineer will hire an appraiser (Boulder Appraisal) and a review appraiser (Jorge Pagan Appraisal Consulting) to determine the fair value of the property acquisition cost of four (4) permanent parcels from the majority landowner.

6. Assemble and Submit Right of Way and Easement Packets

- a. Engineer will assemble complete packages of right of way forms and reports for each parcel and submit to the Owner.

I. Utility Coordination

1. Engineer will develop a utility conflicts special provision to include a list of conflict locations, utility companies, and contacts along with plan sheets documenting the location of the conflicts. Engineer will work with the utility companies to develop a schedule for the relocation of their facilities and document that schedule in the special provision for the Constructor's use in preparing a construction bid and schedule. Engineer will work with the utility companies to identify locations for potholing to determine the actual elevations of the utility. The cost of potholing utilities is not included in the scope of work. A total of eight (8) utility coordination meetings are included for the private utility companies excluding NuStar. Each utility coordination meeting will review conflicts and discuss relocation and/or plans for adjusting the utility. It is assumed that there are no utilities that will conduct potholing, excluding NuStar.
2. Engineer will coordinate with NuStar through meetings and exhibits to avoid having NuStar relocate or reconstruct their utility. However, based on previous discussions with NuStar this scope assumes that NuStar will require that their utility be replaced, relocated, or adjusted. A total of four (4) utility coordination meetings with NuStar are included. Engineer will coordinate with NuStar to provide design information such that their facilities can remain in-place or be relocated without conflict for construction of the proposed roadway improvements. If relocated, Engineer will survey the new facility for accurate as-built information to be included in the design plans.

J. Deliverables

1. Progress reports every three weeks.
2. Agendas and minutes for all project meetings.
3. 50%, 90%, and 100% design plans for project components

4. Final Construction Plans
5. Special provisions and plan notes
6. Engineer's Opinion of Probable Construction Cost at 50%, 90% and 100% submittals.
7. Project Manual and other documents required for bidding
8. Appraisals and Review Appraisals
9. Executed ROW documents
10. Temporary Construction Easements
11. Stormwater report
12. USACE Permit
13. Utility Relocation Agreements
14. Electronic version of plan drawings and base files in Civil 3D format
15. Surface models
16. Supplemental .dwg or .xml alignment, profile, layout, or surface base files and electronic data releases for Bidders

K. Other Items to be Noted

1. It is assumed that the NDDOT does not have any involvement, does not require reviews for submittals, and does not require approval of plans.
2. Engineer's fee does not include submittal, review, recording, permit, system development, or other fees. These fees are to be paid by Owner.
3. Engineer assumes that no major revisions will be made to the general layout after the Owner acceptance of the 50% plan review documents.
4. Engineer shall provide copies of drawings, reports, specifications and other necessary information to the Owner, Constructor(s), or other parties in PDF or paper copy format.
5. The number of prime construction contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is one (1).

- L. Engineer's services under the Final Design phase will be considered complete on the date when the above deliverables have been accepted by the Owner for approval.

A1.03 Bidding Phase

- A. After acceptance by Owner of the construction documents and the most recent opinion of probable construction cost as determined in the Final Design Phase, and upon authorization by Owner to proceed, Engineer shall:
1. Assist the Owner in advertising for and obtaining bids or proposals for the Work, assist Owner in issuing assembled design, contract, and bidding-related documents or other construction procurement documents to prospective Bidders, and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued.
 2. The Owner will receive and process Bidder deposits or charges for the bidding documents.

3. Issue up to two (2) addendum as appropriate to clarify, correct, or change the bidding documents.
4. Provide information or assistance needed by the Owner or Bidder in the course of bidding the components of project included in the Engineer's design.
5. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by prospective Bidders for those portions of the Work as to which such acceptability is required by the bidding documents.
6. If bidding documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by bidders.
7. Attend the Bid opening, assist the Owner in preparing Bid tabulation sheets, and assist Owner in evaluating Bids for the Work.
8. Bidding and Negotiating services shall be provided for the project to be awarded to one (1) Constructor.
9. Prepare conformed Construction Contract Documents which incorporate and integrate the content of all Addenda.
10. Any services provided by Engineer to re-bid or value engineer that project to meet with Owner's budget will be considered Additional Services.
11. The Owner will prepare the Notice of Award (NOA) and the Construction Agreement to be executed with the successful Bidder.

B. The Bidding Phase will be considered complete upon award of contract or commencement of the Construction Phase.

A1.04 Construction Phase - Surveying (Not Included)

A1.05 Construction Phase - Observation (Not Included)

A1.06 Post-Construction Phase (Not Included)

PART 2 – ADDITIONAL SERVICES

A2.01 Additional Services Requiring Owner's Authorization *(This section supersedes Part 2 in the original contract for Preliminary Design Phase services)*

A. If requested or authorized by Owner, Engineer shall furnish or obtain from others Additional Services of the types listed below. Engineer shall proceed with such Additional Services with the understanding that the Engineer will be paid hourly for such services at the Engineer's standard hourly rates unless an agreement has been reached between the parties for other methods of payment. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice from Owner.

1. Services in addition to those defined under Basic Services including but not limited to: study and report phase services, marketing exhibits or graphical renderings, CATEX

documentation, ESA compliance, environmental assessment or environmental impact Statement, floodplain analysis, requests for zoning change or any deviation or variance from local standards or zoning regulations.

2. Design services in addition to those defined under Basic Services including but not limited to: Buildings, offsite earthwork/development concepts, traffic signals, stormwater detention, structural design other than retaining walls, mechanical engineering services or pumping systems, furnishing the services of an environmental and/or abatement companies to determine to specify and mediate contaminated soils or hazardous materials, or design of offsite improvements beyond existing or acquired right of way.
3. Preparation for, and attendance at, a public presentation, meeting or hearing other than specified under Basic Services.
4. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project except as specified under Basic Services.
5. Services to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
6. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer, or the Project's design requirements, including, but not limited to, changes in size, complexity, character of construction, method of financing, or Owner's schedule or coordination causing unreasonable delay in the orderly and sequential progress of the Engineer's services; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.
7. Services associated with administration or observation of work constructed by any Constructor including but not limited to: attendance of pre-construction or construction progress meetings, shop drawing or material test review, review of applications for payment, observance and documentation of Constructor's work, issuance or review of construction change orders, field orders, or work change directives, or making recommendation to Owner regarding acceptability of work performed by any Constructor, except as specified under Basic Services.
8. Redesign or rebidding services requested to meet the Owner's construction budget after approval of the Final Design phase of the Project.
9. Services resulting from Owner's or Constructor's request to modify previously approved deliverables or to evaluate additional alternative solutions beyond those agreed to under Basic Services.

10. Services required as a result of Owner providing incomplete or incorrect Project information to Engineer.
11. Services resulting from conflicting direction from the Owner or from multiple representatives of the Owner.
12. Services provided beyond the dates specified in the Engineer's original schedule.
13. Services required to provide copies of drawings, reports, specifications and other necessary information to the Owner, Constructor, and other consultants in a format other than PDF or paper copy.
14. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of financial feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting Owner in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed or furnished by Owner.
15. Furnishing services of Consultants for other than provided under Basic Services.
16. Providing data or services that were to be provided by the Owner or Constructor.
17. Services attributable to more prime construction Constructors than specified under Basic Services.
18. Services to arrange for performance of construction services for Owner by Constructors other than the principal prime Constructor, and administering Owner's contract for such services.
19. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by Owner, Constructor; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.
20. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents) or Construction Contract Documents for alternate bids or cost estimates requested by Owner or Constructor for the Work or a portion thereof other than provided under Basic Services.
21. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services or making revisions to drawings for "or equal" items or bid negotiations.
22. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Constructor.

23. Modifying final approved design or digital files as may be required for Owner's or Constructor's use during construction.
24. Preparing Record Drawings showing appropriate record information based on Project annotated record documents received from Constructor, and furnishing such Record Drawings to Owner other than provided under Basic Services.
25. Supplementing Record Drawings with information regarding the completed Project, Corridor, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.
26. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Constructor, Owner, utility companies, and other sources.
27. Preparation of operation, maintenance, or staffing manuals.
28. Protracted or extensive assistance in refining and adjusting of Project equipment and systems (such as initial startup, testing, and balancing).
29. Assistance to Owner in training Owner's staff to operate and maintain Project equipment and systems.
30. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Project equipment and systems, and (b) related recordkeeping.
31. Preparing to serve or serving as a consultant or witness for Owner or Constructor in any litigation, arbitration, claim, dispute resolution, or other legal or administrative proceeding involving the Project.
32. Providing construction surveys and staking to enable Constructor to perform its work; any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys (except as agreed to under Basic Services).
33. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner or Constructor.
34. Extensive services required during any correction period, or with respect to monitoring Constructor's compliance with warranties and guarantees called for in the Construction Contract (except as agreed to under Basic Services).
35. Other services performed or furnished by Engineer not otherwise provided for in this Agreement.

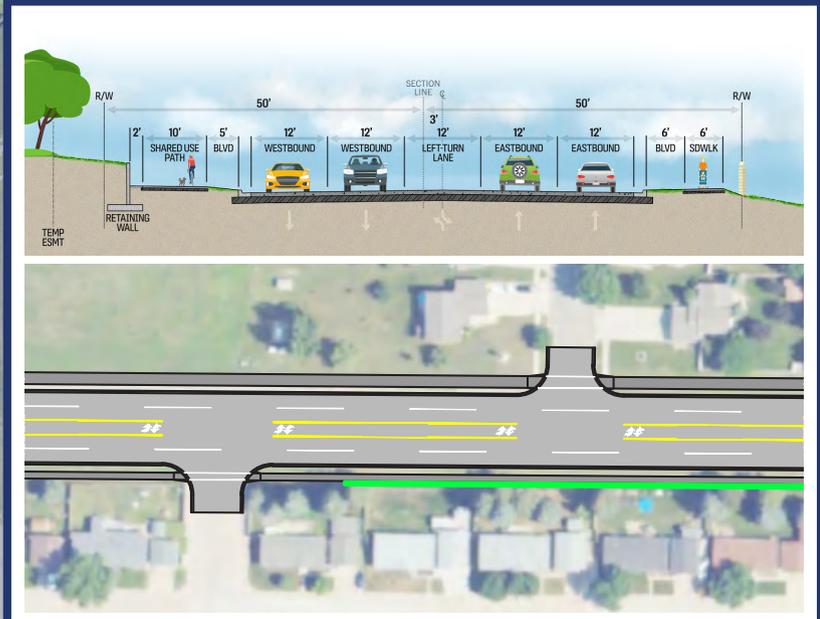
A2.02 Additional Services Not Requiring Owner's Authorization

- A. Engineer shall advise Owner that the Engineer is performing or furnishing the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance authorization from Owner. Engineer shall proceed with such Additional Services with the understanding that the Engineer will be paid hourly for such services at the Engineer's standard

hourly rates unless an agreement has been reached between the parties for other methods of payment. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice from Owner.

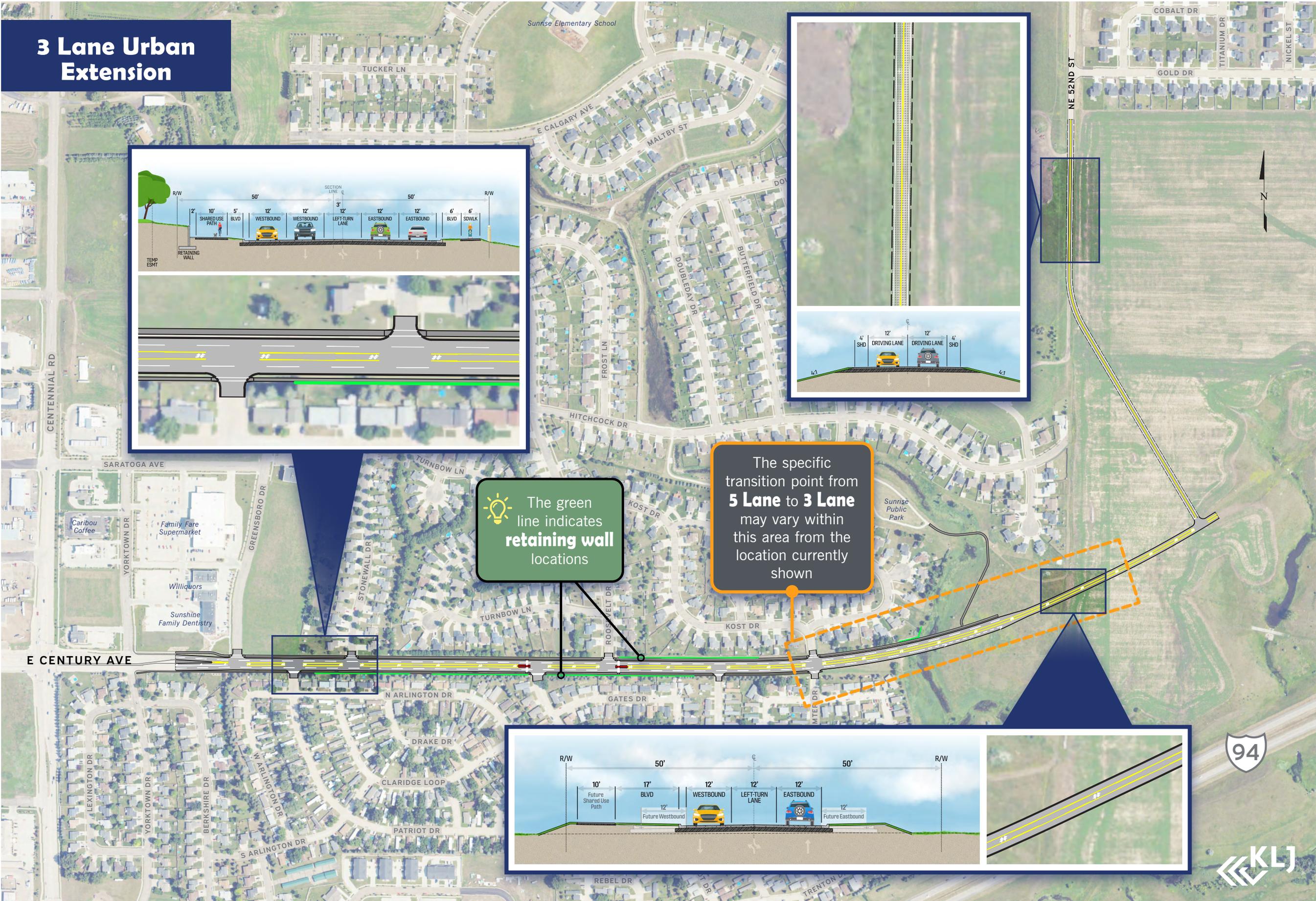
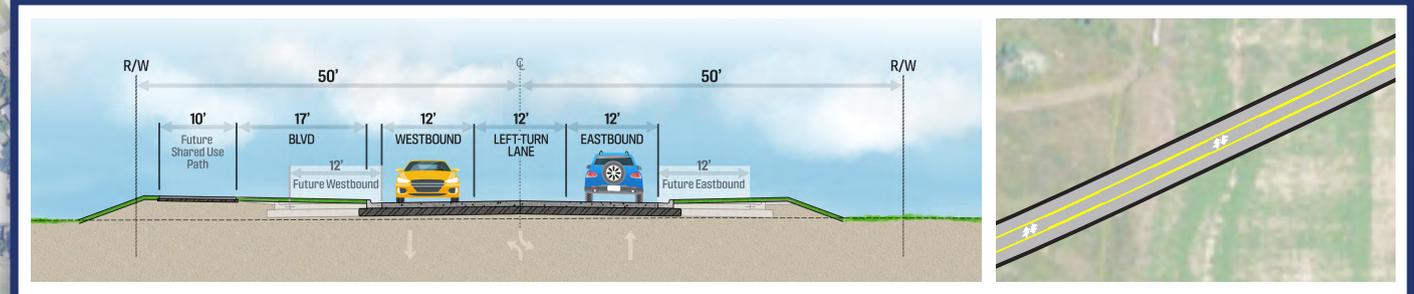
1. Attending meetings requested by Owner or Constructor in addition to those specified as Basic Services.
2. Services in connection with work change directives and change orders to reflect changes requested by Owner or Constructor.
3. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; services after beginning the Bidding Phase of the Construction Documents in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Project; evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract.
4. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.
5. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Constructor.
6. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of any part of the Work by Owner prior to Substantial Completion.
7. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Constructor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.
8. Services during the Construction Phase rendered after the original date for completion of the Work referred to in this Agreement.
9. Reviewing a Shop Drawing more than two (2) times, as a result of repeated inadequate submissions by Constructor.
10. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Constructor's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, state, or local safety authorities for similar construction sites.

3 Lane Urban Extension



The green line indicates retaining wall locations

The specific transition point from **5 Lane** to **3 Lane** may vary within this area from the location currently shown



KLJ Project Name:	East Century Avenue
KLJ Project Number:	2304-00414
City of Bismarck Number:	HC 165 - Final Design & Bidding - Amend 1

EXHIBIT A1.2 Project Budget 

Task Code	Description	Senior Project Manager	Senior Project Manager	Senior Engineer	Engineer	Engineer in Training II	Engineer in Training I	Designer	CAD Technician III	Senior Engineer	Engineer	Environmental Planner III	Environmental Planner II	Senior Engineer	Engineer	Engineer in Training I	Planner	Senior Engineer	Engineer in Training II	CAD Technician II	ROW Professional	ROW Professional	CAD Technician II	Principal Land Surveyor	Senior Crew Chief	2-Person Survey Crew	DIRECT LABOR Subtotal	Subconsultant Bill	KLJ's % Markup Subconsultant's Name	Subconsultant Fee	TASK TOTAL
3.14	ROW Acquisition	\$ 81.00	\$ 81.00	\$ 72.00	\$ 57.00	\$ 43.00	\$ 37.00	\$ 53.00	\$ 38.00	\$ 72.00	\$ 57.00	\$ 48.00	\$ 37.00	\$ 72.00	\$ 57.00	\$ 37.00	\$ 48.00	\$ 72.00	\$ 43.00	\$ 34.00	\$ 46.00	\$ 46.00	\$ 34.00	\$ 63.00	\$ 51.00	\$ 69.00					
	Right of Way and Easement Research and Negoti	8																			164	164				\$ 15,736.00			\$ -	\$ 15,736.00	
	SOR Reports																				82	82				\$ 7,544.00			\$ -	\$ 7,544.00	
	Prepare Right of Way Plats and Easement Exhibit			2	8		41														41	41	74	24		\$ 9,917.00			\$ -	\$ 9,917.00	
	Market Analysis																				4	20				\$ 1,104.00			\$ -	\$ 1,104.00	
	Waiver Valuations																				19	18				\$ 1,702.00			\$ -	\$ 1,702.00	
	Appraisals (1 Appraisal)																									\$ -	\$ 8,000.00	Boulder Appraisal	\$ 8,000.00	\$ 8,000.00	
	Review Appraisal (2 Reviews)																									\$ -	\$ 7,500.00	Jorge Pagan Appraisal	\$ 7,500.00	\$ 7,500.00	
	Assemble and Submit Right of Way and Easement																				41	41				\$ 3,772.00			\$ -	\$ 3,772.00	
	Internal Meetings and Coordination																				15	15				\$ 1,380.00			\$ -	\$ 1,380.00	
	QCQA																				21	21				\$ 1,932.00			\$ -	\$ 1,932.00	
		8		2	8		41														387	402	74	24		\$ 43,087.00	\$ 15,500.00		\$ 15,500.00	\$ 58,587.00	
3.15	Utility Coordination	\$ 81.00	\$ 81.00	\$ 72.00	\$ 57.00	\$ 43.00	\$ 37.00	\$ 53.00	\$ 38.00	\$ 72.00	\$ 57.00	\$ 48.00	\$ 37.00	\$ 72.00	\$ 57.00	\$ 37.00	\$ 48.00	\$ 72.00	\$ 43.00	\$ 34.00	\$ 46.00	\$ 46.00	\$ 34.00	\$ 63.00	\$ 51.00	\$ 69.00					
	Utility Coordination			16	24																						\$ 2,520.00			\$ -	\$ 2,520.00
	Utility Coordination Meetings (8)	4		8	24		16																				\$ 2,860.00			\$ -	\$ 2,860.00
	Utility Encounter Plans			8	16		80		24							24											\$ 6,248.00			\$ -	\$ 6,248.00
	Pothole Coordination of Existing Utilities	2		2			4	4																			\$ 666.00			\$ -	\$ 666.00
	NuStar Coordination	8		8			16																		2	6	\$ 2,332.00			\$ -	\$ 2,332.00
		14		42	64		116	4	24							24								2	6	\$ 14,626.00	\$ -		\$ -	\$ 14,626.00	
4	Bidding	\$ 81.00	\$ 81.00	\$ 72.00	\$ 57.00	\$ 43.00	\$ 37.00	\$ 53.00	\$ 38.00	\$ 72.00	\$ 57.00	\$ 48.00	\$ 37.00	\$ 72.00	\$ 57.00	\$ 37.00	\$ 48.00	\$ 72.00	\$ 43.00	\$ 34.00	\$ 46.00	\$ 46.00	\$ 34.00	\$ 63.00	\$ 51.00	\$ 69.00					
4.1	Bid Advertisement	1	1	1																							\$ 234.00			\$ -	\$ 234.00
4.3	Answer Contractor Questions	4	1	8	4																						\$ 1,497.00			\$ -	\$ 1,497.00
4.4	Substitution Requests	2		4	4																						\$ 966.00			\$ -	\$ 966.00
4.5	Issue Addendum (2)	4	1	10	30	8	24	16																			\$ 5,675.00			\$ -	\$ 5,675.00
4.7	Bid/Contractor Analysis	2		2	4																						\$ 534.00			\$ -	\$ 534.00
4.8	Contracts/Notice of Award	1		1																							\$ 153.00			\$ -	\$ 153.00
4.9	City Commission Meeting	2																									\$ 162.00			\$ -	\$ 162.00
		16	3	26	42	8	24	16										10	8	8						\$ 9,221.00	\$ -		\$ -	\$ 9,221.00	
		333	59	464	566	408	537	412	260	24	92	24	24	150	264	790	80	100	202	108	387	402	74	24	18	6	5808				
																											\$ 295,693.00	\$ 15,500.00	\$ 15,500.00	\$ 311,193.00	

Summary of Costs:		NDDOT	
Direct Labor			\$ 295,693.00
Indirect Costs -	196.37%		\$ 580,652.34
Subtotal			\$ 876,345.34
On bill rate Fixed Fee -	15.00%		\$ 131,451.80
Raw labor cos COF -	0.66%		\$ 1,951.57
Direct Expenses			\$ -
Subconsultants			\$ 15,500.00
Reimbursables			\$ -
Balance to Lump Sum or Agreed Fee			\$ -
Total Estimated Engineering Costs			\$ 1,025,248.71