



CITY OF WASHINGTON, ILLINOIS Public Works Committee Agenda Communication

Meeting Date: March 2, 2020

Prepared By: Jon Oliphant, AICP, Planning & Development Director

Agenda Item: Freedom Parkway Phase I Engineering Contract Authorization

Explanation: A Request for Qualifications for the completion of Phase I engineering for the remainder of Freedom Parkway was released prior to Christmas with a submittal deadline of January 17. The hope is to complete Phase I engineering near the end of 2020 and then transition into Phase II thereafter in early 2021. Barring any unforeseen circumstances, the desire will be to complete the plan design in the first half of 2021 to allow for some construction to commence as soon as later in 2021.

Nine firms submitted statements of qualifications. Most of these firms have considerable experience with similar types of projects that would be designed to meet federal specifications in order to ensure that the road is eligible for Surface Transportation Block Grant funds through the Tri-County Regional Planning Commission (TCRPC). A call for projects for the FY 2023-24 cycle was recently announced by TCRPC with an application deadline of April 10. Staff plans to submit an application for funding for much of the remaining construction with the possible exception of roughly the eastern 30% of the road, which could be expedited solely using local funds upon the finish of Phase I and II engineering.

Staff recommends Terra Engineering to complete the Phase I engineering. Terra completed Phase I and II engineering for the eventual realignment of the Nofsinger Road/US 24 intersection and has significant experience with comparable projects. The project scope would include Intersection Design Studies at intersections that figure to have increased traffic volumes and may be warranting of traffic signals or roundabouts. This will also help determine the best locations for future curb cuts to provide ingress/egress for private developments.

Fiscal Impact: The contract would be for a not-to-exceed amount of \$120,927.66. The FY 19-20 budget includes \$165,000 for engineering for Freedom and Lakeshore Drive. Staff has tentatively budgeted for an additional \$50,000 for Phase II engineering in FY 20-21 and \$60,000 to complete that in FY 21-22.

Action Requested: Staff requests approval of the Freedom Phase I engineering contract with Terra Engineering.

Municipality City of Washington	L O C A L A G E N C Y	Preliminary Engineering Services Agreement	C O N S U L T A N T	Name TERRA Engineering, LTD
Township				Address 401 Main Street Ste 1560
County Tazewell				City Peoria. 61602
Section				State IL

THIS AGREEMENT is made and entered into this _____ day of _____, 2020 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION.

Section Description

Name Freedom Parkway Extension

Route _____ Length 0.70 Mi. 3500.00 FT (Structure No. _____)

Termini Extension to Cummings Lane

Description:

Preliminary Engineering Phase I for the extension of Freedom Park from its current terminus near Menards warehouse to Cummings Lane approximately 3,500 to the east.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described in **Attachment A, Scope of Services**.
 - a. Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

- i. Assist the LA in the tabulation and interpretation of the contractors' proposals
 - j. Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. Prepare the Project Development Report when required by the DEPARTMENT.
- (2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
- (3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
- (4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
- (5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
- (6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed as stipulated in Appendix A - Scope of Services in accordance with one of the following methods indicated by a check mark:
 - a. A sum of money not to exceed \$120,927.6 based on **Attachment B – Estimate of Cost**.
 - b. A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by PEORIA COUNTY based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees	(see note)
Under \$50,000		%
		%
		%
		%
		%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

~~2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus 5 percent to cover profit, overhead and readiness to serve "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out of pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.~~

~~"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.~~

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after Invoicing by the ENGINEER.
 - ~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~
 - ~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

~~By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.~~
 4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in Appendix A - Scope of Services and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus 166.00 percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of THE LA AGREES.
 5. That, should the LA require changes in any of the Phase I - Project Development except for that required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the CITY, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 166.00 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.
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It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

City of Washington of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

Clerk

By _____

(Seal)

Title _____

Executed by the ENGINEER:

TERRA Engineering, LTD

401 Main Street Suite 1560

ATTEST:

Peoria, IL 61602

By _____

By _____

Title _____

Title _____

Attachment A – Scope of Services

Freedom Parkway Extension, City of Washington

Project Description

The City of Washington desires to extend Freedom Parkway from its existing terminus near the Menards warehouse to Cummings Lane and distance of 2,500 feet. Local funds will be used for the engineering however Local, MFT and Federal funds may be used construction. The contract is for the Phase I engineering with Phase II following at a later date.

The proposed improvements will include extending an existing 3-lane urban roadway, with bicycle accommodations, bioswales, pedestrian accommodations, street and pedestrian lighting, street trees, amenities, all within the existing 80-foot wide right-of-way. A traffic study will be done for the existing intersections at McClugage, Menards/Walmart entrance and Kingsbury Road along with new intersections at Cummings Lane, Lakeshore Drive and Business 24.

Design Standards

TERRA will follow IDOT policy and procedures, as described in Part III of the Bureau of Local Roads and Streets (BLRS) Manual for Federal-Aid.

Deliverables

- Phase I – Project Development Report
 - Special Environmental Studies
 - Traffic Study and Intersection Design Studies
 - Public Involvement Responses
 - Design Approval (BLR 22210)
 - Approval of Design Variances (BLR 22120)
 - Cost Estimate

Phase I - Project Development

The following Phase I Engineering tasks will be completed under this work order:

- **Survey, Field Investigations and Data Gathering**
 - Survey
 - Austin Engineering reviews and assembles existing survey data including control points, benchmarks, topo and boundary surveys for Freedom Parkway and Lakeshore Drive.
 - Verify Control points and Benchmarks in the field
 - Supplement existing Topographic survey along the proposed Freedom Parkway corridor from west of current terminus to Cummings Lane a minimum of 200 feet beyond existing ROW on Freedom Parkway, 600 feet north and south along Cummings as needed to complete Phase I recommendations (in particular, elevations, topo, utilities, existing pavement, intersection details at Cummings Lane)
 - Topographical survey of Kingsbury and Cummings Lane as needed to complete Phase I recommendations for possible geometric improvements

Attachment A – Scope of Services

Freedom Parkway Extension, City of Washington

- Boundary Survey for proposed Freedom Parkway corridor from current terminus to Cummings Lane, for Cummings Lane at proposed intersection and for Kingsbury Road at Cummings Lane to establish existing ROW and establish new easements and/or ROW.
- Pin existing ROW – if necessary
- Geotechnical Services
 - Obtain soil borings at least every 500 feet along the proposed corridor of Freedom Parkway.
 - Obtain soil borings at least every 500 feet along the proposed corridor of Lakeshore Drive (optional)
 - Obtain percolation tests and soil reports
- Traffic Counts
 - Set up Miovision cameras to count and class vehicles and turning movements and count bikes and pedestrians for 48 hours during standard weekdays at the following locations:
 - McClugage Road and Freedom Parkway
 - Freedom Parkway and entrances to Menards and Walmart
 - Business 24 at Lakeshore Drive
 - Cummings Lane at Recreation Drive
 - Cummings Lane at Kingsbury Road
 - Process data for peak volumes at the above intersections
- **Environmental**
 - Submit an Environmental Survey Request (ESR) for Freedom Parkway Corridor, Lakeshore Drive Corridor and intersection of Kingsbury and Cummings Lane
 - Prepare a PESA (Preliminary Environmental Survey Assessment) as required by the ESR.
 - Respond to the PESA and coordinate the PSI if needed
 - Perform a PSI (Preliminary Site Investigation) as needed based on the results of the PESA.
 - Prepare an MFT Certification / Project Status (BLR 10100)
 - Attend Bi-Monthly to determine Environmental processing, anticipate Federal Approved CE Project.
- **Project Studies**
 - Traffic Impact Study
 - Prepare Traffic Impact Study to reflect the redistribution of traffic with the extension of Freedom Parkway. Study shall cover the existing intersections at

Attachment A – Scope of Services

Freedom Parkway Extension, City of Washington

McClugage, Menards/Walmart and Kingsbury as well as the proposed intersections with Lakeshore Drive and Cummings Lane.

- **Intersection Design Studies** –Number of IDS's will be based on results of the Traffic Impact Study. It is anticipated there will be 3 IDS's: Lakeshore Dr, Cummings Ln and Menards/Walmart.
- Drainage Studies
 - Identify existing drainage patterns and exiting storm sewer system
 - Develop drainage system design including green infrastructure (GI) practices such as bioswales to accommodate roadway and surrounding drainage.
 - Review previously developed storm sewer system and provide cost/impact comparison to green infrastructure system.
- **Preliminary Design**
 - Existing Conditions:
 - Prepare property boundary mapping
 - Prepare existing profiles
 - Proposed Improvements:
 - Review proposed typical section, adjust if necessary
 - Review proposed horizontal alignment, adjust if necessary
 - Review proposed vertical profile, adjust if necessary
 - Develop proposed drainage plan from green infrastructure or storm sewer options
 - Prepare cross sections
 - Prepare plan and profile sheets
 - Identify utility conflicts and required relocations (if any)
 - Identify required design variances; prepare justification and submit IDOT
 - Develop street lighting and landscaping options
 - Determine/refine ROW needs including temporary construction easements
 - Proposed Improvements – Lakeshore Drive
 - Establish alignment
 - Establish Profile for a distance suitable to develop intersection with Freedom Parkway
 - Develop proposed drainage plan from green infrastructure or storm sewer options for interim drainage
 - Prepare cross sections
 - Determine/refine ROW needs including temporary construction easements

Attachment A – Scope of Services

Freedom Parkway Extension, City of Washington

- Access Control
 - Review current properties adjacent to Proposed Freedom Parkway, Lake Shore Dr and Cummings Lane that will be impacted by project.
 - Based off of Comprehensive plan develop an estimated use and traffic for properties.
 - Develop access plan that will accommodate properties and potential need for dedicated turn lanes and traffic signal.
- **Public Involvement**
 - Coordinate and facilitate meeting with stakeholders
 - Write letters to properties impacted by project.
- **Coordination & Project Management**
 - Coordinate with City
 - Coordinate with utility companies
 - Coordinate with IDOT
 - Review project deliverables for compliance
 - Prepare monthly invoices

**Attachment B
MANHOUR ESTIMATE**

PROJECT: Freedom Parkway Extention
PROJECT NO: 20-XXX
COMPUTATION BY: EST Date: 2/25/2020
CHECKED BY: CCC Date: 2/25/2020

<u>TASKS</u>	<u>HOURS</u>	<u>DOLLARS</u>
DATA COLLECTION	152	\$17,341.92

DIRECT COSTS

(Soil Borings/Report)		\$4,200.00
Traffic Counts		\$900.00
Austin Engineering		\$2,500.00
		\$7,600.00

PHASE I ENGINEERING	769	\$90,295.74
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DIRECT COSTS

Travel, Printing, Etc		\$690.00
PESA		\$5,000.00
		<u>\$5,690.00</u>

TOTAL Not To Exceed: \$120,927.66