

AGENDA SUPPLEMENT SHEET



Agenda Item Number: H.5

Village Board Meeting Date: August 10, 2016.

Committee Meeting Date: August 3, 2016 A&F.

Item Title: Consider a Motion to Approve Addendum No. 1 from HR Green for Phase I Engineering Services for the Widening of 151st Street, between Cedar Road and Bell Road.

Motion for Consideration: Is there a motion to approve Addendum No. 1 from HR Green for Phase I Engineering Services for the widening of 151st Street, between Cedar Road and Bell Road, for a not to exceed amount of \$29,854.09?

Committee Recommendation: The Administration and Finance Committee approved the above motion (Yes = Trustees Caprio and Sweas. No = Trustee Rodgers).

Staff Contact: Development Services Director Salamowicz

Staff Recommendation: Staff recommends approval of the motion.

Background Information: With the construction of the new Village Hall nearly completed and the future development of Heritage Park, traffic on 151st Street is expected to increase. As a result, there is a need to widen 151st Street, which will allow better traffic flow between Cedar Road and Bell Road.

At the March 23, 2016 Board Meeting, Village Trustees approved a proposal from HR Green to perform a Phase I engineering study to widen 151st Street, from Cedar Road to Parker Road. 151st Street is the Village of Homer Glen's busiest local road. Future development along 151st Street is expected to increase traffic on this already busy roadway. The proposed widening project will incorporate a three (3) lane profile between Cedar Road and Parker Road. In addition, drainage improvements

will also be incorporated into the project as well as the potential to include a sidewalk or bike path, along the north side of the roadway, to provide pedestrian access to the new Village Hall and Heritage Park.

The limits of the 151st Street widening project, which was originally started by the Homer Township Highway Department and later taken over by the Village, were between Cedar Road and Parker Road. However, based on further reviews of development and other activities along 151st Street, staff recommends the eastern limit of the project be extended to Bell Road. This will increase the limits of the project from 8,320 feet to 13,020 feet, and thus increase the cost to complete the Phase I engineering study. HR Green has provided the attached Addendum No. 1, for the 151st Street Phase I engineering study, in the amount of \$29,854.09. Based on the original agreement amount of \$85,857.05, the total new costs to complete the 151st Street Phase I study will be \$115,711.14.

The 151st Street widening project, including the extension to Bell Road, is anticipated to cost approximately \$4.0 million dollars. The Village will look to submit an application for funding at the next call for Surface Transportation Program (STP) projects, in the spring of 2018. By that time, the Phase I study will have been completed, which will greatly increase the Village's chances of being selected. Based on the 20% local match requirements of the STP, the Village would be responsible for approximately \$800,000 of the project costs.

Budget Implications: The total not to exceed cost of \$115,711.14 for the Phase I Engineering Study, which is eligible for the use of MFT funding, will be paid from line item 20.00.85.670 of the Village's MFT Fund, which currently has a balance of approximately 2.5 million dollars.

**AGREEMENT FOR CONSULTANT SERVICES
ADDENDUM #1**

Project: 151st Street – Cedar Road to Bell Road
Job #: 86160183
Original Contract Value: \$85,857.05
Addendum #1: \$29,854.09
Revised Contract Value: \$115,711.14

ADDENDUM #1

Whereas, the Village of Homer Glen heretofore entered into a contract approved by the Village Board on March 23, 2016 with HR Green, Inc.

Whereas, revisions and additions to the original contract are necessary to accommodate additional scope of work requested by the Village of Homer Glen.

Whereas, a detailed Scope of Work is provided in Exhibit A as attached herein and shall be considered part of this Addendum.

Whereas, the foregoing changes and additions were not anticipated and were not provided for in the original contract;

Therefore, it is necessary to expand the contractual scope and upper limit of compensation to be paid under the contract, as such:

- The original Phase II Engineering Services Agreement shall remain intact.

Whereas, this addendum will provide the appropriate adjustments to include the labor fee and the direct cost for the items identified above.

Whereas, the adjusted upper limit of compensation will exceed the original contract by not more than \$29,854.09

Now, therefore, the parties hereto do mutually agree to changes to the AGREEMENT FOR CONSULTANT SERVICES as detailed above.

Save as to these provisions, all other terms and conditions of said contract are to remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Addendum #1 on this _____
day of _____, 2016.

FOR VILLAGE OF HOMER GLEN

ATTEST:

By _____ By _____
Village Clerk Village President

FOR HR GREEN INC.

ATTEST:

By *Ted Hamilton* By *Aheam Chaudhry*
Senior Project Manager Vice-President

**EXHIBIT A
SCOPE OF SERVICES
VILLAGE OF HOMER GLEN
151ST STREET
PARKER ROAD TO BELL ROAD
PHASE I ENGINEERING**

Project Understanding

The Village of Homer Glen (Village) intends to extend the existing Phase I Study along 151st Street from Parker Road to Bell Road. This work will match the scope of the original contract.

The existing conditions along 151st generally consist of a two lane pavement section with aggregate shoulders. The existing intersections of 151st Street at Parker Road and Bell Road were previously improved providing intersection channelization and no improvements are proposed.

The following are the general design assumptions made for the project: The proposed typical section will include two 11' through lanes in each direction, separated by an 11' painted median. The proposed improvements generally consist of widening the existing pavement structure from 24' to 33' edge to edge. Either aggregate shoulders or curb and gutter will be provided along the outside edges of pavement depending on right of way restrictions and drainage requirements. It has been assumed that no pedestrian facilities or public utility improvements will be included.

The extended length of the improvements along 151st Street is approximately 4,700' from east of Parker Road to west of Bell Road.

Scope of Work

COMPANY will prepare a Phase I Study and Design Report for the proposed improvements of 151st Street. The Phase I Study and Report will be prepared to Federal Standards. It has been assumed that this project will be processed as a Categorical Exclusion Group II.

A. Data Collection and Review

1. Prepare aerial mosaics of the project limits to be used for exhibits and presentations. The latest County aerials will be utilized.
2. Coordinate with utility companies to obtain maps of utilities within the project limits and place this information on a CADD base map.
3. Utilize existing roadway and utility plans from the Village/Will County to develop existing conditions plan.
4. Geotechnical Investigations: This work will be completed as part of the Phase II engineering. After the extent of the improvements is determined, an accurate scope of work will be developed to include required soil borings, and a soil report.

B. Survey Services

1. Research – Company will perform research for existing right of way and subdivision

plays lying adjacent to 151st Street from east of Parker Road to west of Bell Road. This research will assist in the location of the existing right of way.

2. Right of Way Location – Company will recover existing right of way evidence within the topographic limits described below in Homer Glen, Illinois. Company will calculate the existing right of way as shown on the adjacent subdivision plats and right of way plats, as provided by the Village, to include on the base map.
3. Roadway Topographic Survey – The survey included in this proposal will extend from east of Parker Road to 300' west of Bell Road.

C. Traffic and Accident Analysis

1. Existing traffic volumes from IDOT's web site will be utilized for design purposes.
2. Autoturn analyses will be performed along 151st Street at its intersection with one side street to determine proper radii required to allow larger truck movements to occur without encroachments to other lanes.
3. No signalized intersections will be proposed or changes to the existing signals at Parker Road and Bell Road. No Intersection Design Studies will be required to be completed for submittal to IDOT.
4. Accident data from the last five complete years will be requested from the Village for the improvement limits. Analysis will determine if it is a High Accident Locations (HAL) or wet cluster site. Collision diagrams will be provided. A summary of the accident analysis will be provided including corrective measures and recommendations to address safety related conditions.

D. Preliminary Design Studies

1. The preliminary horizontal geometrics will be developed and transposed on a 1" = 50' aerial map to determine the impacts the improvement will have on the surrounding properties.
2. Develop templated cross-sections for ROW and slope analysis, every 100' and at driveways throughout the project corridor. Cross-sections to include information regarding cross slopes, existing and proposed centerline elevations, existing right-of-way, proposed right-of-way, and any easements (existing or proposed).
3. Prepare the preferred plan and profile sheets for 151st Street (1" = 50' base maps).
4. Preliminary Opinion of Probable Cost will be developed for the preferred design.

E. Drainage Report and Hydraulic Report

1. Preliminary Investigation

COMPANY will perform a drainage analysis of the extended project corridor. Approach will be to maximize the use of ditches for drainage purposes. COMPANY will also review any available existing and/or proposed plans concerning the various developments within project limits for drainage information that may affect the proposed improvements. COMPANY will conduct

a field investigation to determine the extent of the existing watersheds encompassing 151st Street and confirm their respective outfall locations. All drainage design calculations will be completed per Village or Will County policy, whichever is more stringent.

2. Storm Sewer and Culvert Design

If storm sewer is proposed to limit right of way acquisition, COMPANY will route the proposed storm sewer to the outlets. Runoff rates will be determined for each inlet's individual tributary area and the storm sewer sized using the Rational Method. It is anticipated that Hydraflow modeling will be used. A 10-year frequency storm will be used for design and the system will be checked for the 100-year storm event.

Based on review of additional area, there are several minor cross culverts within the project limits. The culverts will need to be analyzed for existing and proposed conditions. It is anticipated that hydrology will be done with a hydrograph method and hydraulics will be completed with HY-8.

3. Detention Requirements

Based on the County requirements, detention would be required for an increase in impervious area larger than 2 acres. Initial calculations indicate that the increase in impervious area will be less than 2 acres and detention will not be required. No detention volume calculations will be completed in the preliminary engineering phase.

4. Floodplain and Compensatory Storage

Based on a review of the FIRM maps, there are no floodplains for floodways within the project limits that need to be analyzed. There will be no need for compensatory storage to be determined for filling in the floodplain.

F. Environmental Studies

1. The National Wetlands Inventory map shows wetlands within the corridor. A wetland report will be prepared.
2. A photo log of structures along the project corridor that appear to be greater than fifty (50) years old will be completed. The photos will be submitted to IDOT for their in-house cultural review.
3. Natural Resources - Trees within the corridor will be located. No tree survey (species/health) will be performed. Tree replacement will be based upon IDOT criteria.
4. Special Waste – Initial screening for special waste will be completed in order to obtain design approval from IDOT.

G. Project Development Report

1. Prepare additional text and exhibits for the Project Development Report (BLR 22110).
2. Preliminary Opinion of Probable Costs will be developed for the extended limit.

H. Meetings

No additional meetings beyond original scope will be required.

I. Items Not Included

The following items are not included in this contract.

- a. Permitting
- b. Geotechnical Services
- c. ROW and Easement Documents

Exhibit A - Phase I Engineering

Route: 151st Street - Parker Road to Bell Road
 Local Agency: Village of Homer Glen
 Section: _____
 Project: _____
 Job No. D-91-

*Firm's approved rates on file with IDOT's Bureau of Accounting & Auditing:	
Overhead Rate (OH)	<u>160.00%</u>
Complexity Factor (R)	<u>0.00</u>
Calendar Days	<u>200</u>

Method of Compensation:

- 14.5%[DL + R(DL) + OH(DL) + IHDC]
- 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
- 14.5%[(2.3 + R)DL + IHDC]
- Specific Rate
- Lump Sum

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by Others	In-House Direct Costs (IHDC)	Profit	Total
PHASE I Engineering									
Data Collection and Review		6	\$46.42	\$278.52	\$445.63	\$0.00	\$0.00	\$105.00	\$829.15
Field Survey	(See Exhibit B)	24	\$32.96	\$791.04	\$1,265.66	\$0.00	\$17.92	\$300.82	\$2,375.44
Traffic and Accident Analysis		6	\$44.22	\$265.32	\$424.51	\$0.00	\$0.00	\$100.03	\$789.86
Preliminary Design Studies		103	\$33.86	\$3,487.58	\$5,580.13	\$253.80	\$0.00	\$1,314.82	\$10,636.33
Location Drainage Study		52	\$32.81	\$1,706.12	\$2,729.79	\$0.00	\$0.00	\$643.21	\$5,079.12
Environmental Studies		4	\$54.77	\$219.08	\$350.53	\$5,500.00	\$0.00	\$82.59	\$6,152.20
Project Development Report		20	\$32.68	\$653.60	\$1,045.76	\$86.40	\$0.00	\$246.41	\$2,032.17
Project Administration		6	\$39.72	\$238.32	\$381.31	\$0.00	\$0.00	\$89.85	\$709.48
QA/QC		6	\$70.00	\$420.00	\$672.00	\$0.00	\$0.00	\$158.34	\$1,250.34
Totals		227		\$8,059.58	\$12,895.33	\$5,840.20	\$17.92	\$3,041.06	\$29,854.09

PHASE I ENGINEERING
DIRECT COSTS AND SERVICES BY OTHERS

Field Survey

In-House Direct Costs

Mileage	2	trips x	16	miles x	\$0.560	per day =	<u>\$17.92</u>
					Sub-Total		\$17.92

Preliminary Design Studies

Services by Others

Design Exhibits							
Exhibits to Village - Bond Copies							
6	sheets x	4	copy(ies) x	\$2.70	22" x 34"	per sheet =	\$64.80
Miscellaneous Exhibits							
40	sheets x	1	copy(ies) x	\$2.70	22" x 34"	per sheet =	\$108.00
Plans to Utilities							
3	sheets x	10	copy(ies) x	\$2.70		per sheet =	<u>\$81.00</u>
				Sub-Total			\$253.80

Environmental Studies

Services by Others

Special Waste Testing and Certification		
Chicago Testing Laboratories		\$1,500.00
Wetland Delineations		
AES Consultants		<u>\$4,000.00</u>
Sub-Total		\$5,500.00

Project Development Report

Services by Others

PDR Exhibits - Final to IDOT (4), Village (2)	8	sheets x	4	copy(ies) x	\$2.70	22"x34"	per sheet =	\$86.40
					Sub-Total			\$86.40

Total In-House Direct Costs	\$17.92
Total Services by Others	\$5,840.20
Total	\$5,858.12