

Municipality Village of Hanover Park	<b>L O C A L  A G E N C Y</b>	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds</b>	<b>C O N S U L T A N T</b>	Name HR Green, Inc.
Township Wayne				Address 420 N. Front Street
County DuPage				City McHenry
Section 18-00068-00-PV				State Illinois

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of November, 2017 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

### Section Description

Name Cinema Drive West Roadway Improvements

Route Cinema West Length 0.45 Mi. 2,375 FT (Structure No. NA )

Termini Cinema Drive West between Redford Lane and Ladd Court

**Description:**

Surveying, design engineering and bid administration services for the roadway reconstruction of Cinema Drive West between Redford Lane and Ladd Court within the Village of Hanover Park.

### 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, and checked below:
  - 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 plans and staking as required.

Note: Four copies to be submitted to the Regional Engineer

- 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 paragraphs 1a, 1g, 1i, 2, 3, 5, 6 and Exhibit A the not to exceed amount of \$43,200.00. See Exhibit B for cost breakdown.
- a.  A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
  - b.  A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

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

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 1.55 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 the services have been performed in accordance with the following schedule:
  - 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 paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus 1.55 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 detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 1.55 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:

Village of Hanover Park of the  
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By \_\_\_\_\_

President and Board of Trustees

Village Clerk

By *[Signature]*

(Seal)

Title *Village Manager*

*11/21/17*

Executed by the ENGINEER:

HR Green, Inc.

420 N. Front Street

ATTEST:

McHenry, Illinois 60050

By *[Signature]*

By *Abham Chaudhry*

Title Project Manager

Title Vice President

<b>Approved</b>
_____
Date
Department of Transportation
_____
Regional Engineer

EXHIBIT A

**Engineering  
Scope of Services**

Village of Hanover Park  
Cinema Drive West Roadway Improvements

Presented to:

Village of Hanover Park

Presented by:



November 2017

## **Project Understanding**

The project is located on Cinema Drive West between Redford Lane and Ladd Court in the Village of Hanover Park. The roadways, approximately 2,375 centerline feet, will be reconstructed with new concrete curb and gutter with minor drainage improvements.

The design engineering tasks include topographic and boundary surveying services, geotechnical investigation (soil borings), clean construction demolition debris (CCDD) sampling and analysis, preparation of roadway and drainage plan and profiles, removal plans, intersection grading plans, detailed cross sections, and all other related work necessary to complete the contract plans and specifications.

The project will be completed to meet Motor Fuel Tax (MFT) standards in the event MFT dollars are considered.

## **TOPOGRAPHIC & BOUNDARY SURVEY**

### **Right of Way Survey**

HR Green will recover existing right of way evidence for approximately 2,375 feet along Cinema Drive West from Redford Lane westerly and southerly to east of Ladd Court. HR Green will calculate the existing right of way as shown on the provided right of way documents and/or adjacent recorded plat of subdivisions to include on the base map.

### **Roadway Topographic Survey**

Roadway Topographic Survey will include the area lying within the existing right-of-way and 10 feet beyond for the area described above. Survey will also include 50 feet along each side street. Survey will include visible existing features and improvements. Existing utilities will be surveyed from visible flags or markings. Storm, sanitary sewer and water main structures will be surveyed including rim elevation, invert pipe size, direction and elevation as observed at unlocked manholes. Survey will reference existing NGS control stations, Illinois State Plane Coordinate System East Zone NAD83(2011). Elevations will be based upon NAVD88.

### **Tree Survey**

HR Green will locate existing trees greater than six (6) inches in diameter, lying outside a tree line, within the project limits. Tree size and type (coniferous or deciduous) will be referenced within the topographic base map.

### **Site Topography Survey Base Map**

HR Green will generate a MicroStation drawing of the existing features collected along the roadway according to IDOT standards. One (1) foot contours will be generated with the elevations referenced to NAVD88 (U.S. Survey Feet). HR Green will provide a MicroStation drawing with existing features and improvements within the project limits to be shown.

## **PRELIMINARY ENGINEERING**

### **Project Kickoff Meeting**

HR Green will attend an introductory kick-off meeting with Village staff. Input from the Village during this meeting will help develop a shared vision for the area.

### **Pavement and Soils Investigation**

HR Green will retain the services of a geotechnical sub-consultant to perform the geotechnical investigation for the project. The tasks to be performed as part of the pavement and soils investigation will include pavement borings with soil sampling, testing and analysis.

Soil samples will also be tested for contamination using a Photo Ionization Detector (PID), selecting and submitting samples to an analytical laboratory and preparation of the IEPA Certification Report.

#### **Utility Coordination**

HR Green will initiate utility coordination by contacting utilities that have facilities along the project limits. HR Green will work with the Village and private companies to obtain preliminary utility data and to categorize the needs for each utility including relocation, protect-in-place, modification or abandonment.

### **DESIGN ENGINEERING**

#### **Water Main Adjustments**

In general water main adjustments will consist of water main lowering, protect-in-place and/or fire hydrant relocation(s) to accommodate the proposed roadway and drainage improvements.

Water main replacement and/or sanitary sewer repairs are not anticipated as part of the proposed improvements at this time.

#### **Storm Sewer Design**

HR Green will analyze the profile and drainage area for the consideration of adding new and/or the replacement of existing storm sewers. The anticipated storm sewer construction will be performed in order to drain low points within the right-of-way. Based on field reconnaissance there appears to be a significant storm sewer mainline within the roadway corridor available to accept new lateral tie-ins if deemed necessary.

It has been assumed that a Location Drainage Study or Hydraulics Study will not be required for this project. The drainage area releases into the existing closed storm sewer system. Therefore it is anticipated coordination and permits will not be required as this work is considered non-qualified and permits will not be required. Based upon field review of the project area we do not anticipate involvement with Army Corps of Engineers as there are no wetlands.

The storm sewer improvements will be shown within the contract documents and depict proposed storm structure locations, storm sewer pipe alignment and profiles, pipe sizes and slope, construction details, pavement and/or parkway restoration and storm sewer specifications.

HR Green will prepare a Storm Water Pollution Prevention Plan for the proposed improvements. The plans will be prepared to comply with the provisions of the NPDES Permit Number ILR40 for discharges from small separate storm sewer systems, and include a site description, planned controls, proposed maintenance practices, erosion control inspection procedures, and application of non-storm water discharge measures, Contractor Certification Statement and preparation of the Notice of Intent for Village signature.

#### **Roadway Design**

HR Green will perform a field evaluation within the project limits to verify driveway widths, identify special landscaping elements and examine existing utility infrastructure. HR Green will also coordinate with the Village to design a full depth Hot Mix Asphalt (HMA) pavement that meets Village standards.

The pavement reconstruction will be coordinated with the drainage improvements as we anticipate new concrete curb and gutter. It is anticipated the roadway reconstruction will involve slight profile adjustments to improve drainage, while also being mindful of driveway impacts.

HR Green will also analyze geometric improvements at the intersections to reduce vehicle encroachment onto the adjacent parkway as well as accommodating ADA sidewalk ramps. Intersection grading plans will be developed to provide detailed elevations of the reconstructed pavement, storm structures, and new sidewalk ramps to meet ADA standards.

### **Landscaping and Restoration**

A detailed restoration plan will be included in this project due to the potential impacts to existing landscaping features. Detailed construction plans are critical to ensure the contractor has sufficient direction and pay items to restore the landscape back to its original condition. In addition, project specifications will provide detailed procedures on how the restoration will occur.

### **Erosion Control**

An erosion control plan will be prepared that makes recommendations to control erosion and retain sediment on the construction site. Erosion control measures and best management practices will include silt fence, inlet filters, and seeding and mulching plans.

### **Maintenance of Traffic Analysis**

An analysis of how the proposed improvements will be constructed and the maintenance of traffic and facilities will be discussed with the Village. It is assumed applicable IDOT Highway Standards will be used for traffic control and protection during construction and a detour plan will not be required.

It is anticipated that construction may require day-time lane closures. Maintenance-of-traffic control specifications and notes will identify and detail the allowable contractor operations, and required traffic control devices will be included in the bidding documents. Construction sequencing procedures will be detailed in the plans and specifications to ensure that temporary access to local traffic and driveways are provided at the end of each work day.

### **Contract Plans and Documents**

HR Green staff understands that a project's cost and schedule are controlled best by the preparation of detailed and accurate contract plans and special provisions. HR Green is fully committed to details and clarity in the preparation of plans and contract documents.

HR Green will develop and assemble the contract plans and special provisions for a local letting. Plans will be developed to predetermined milestones for submittal which will consist of preliminary (60%), pre-final (90%) and final engineering documents. Comments received will be addressed and a disposition of comments provided to the Village. Final design drawings will also be submitted to the Village for comment before they are finalized. All construction documents will be reviewed by a QA/QC engineer and a construction engineer prior to their submittals to be certain of their completeness, accuracy, and constructability.

The contract plans will include the following sheets:

- Cover Sheet
- Index/General Notes/Standards
- Summary of Quantities
- Typical Sections
- Alignment, Ties and Benchmarks
- Existing Removal Plans
- Roadway and Drainage Plan and Profiles
- Erosion Control and Restoration Plans
- Intersection Grading Plans
- Village Standards and Details
- Cross Sections every 50 feet and every driveway

Final Contract Documents will include the following:

- Bid forms - Notice to Bidders, Schedule of Prices, Bid Bond Requirements
- Special Provisions
- Plans and Specifications
- Estimate of Time
- Opinion of Probable Cost

### **Special Provisions**

HR Green will prepare contract special provisions for the project. The document will include



Supplemental, Recurring, BDE, District 1, and project specific special provisions. The project specific special provisions will be written to cover any items not covered by the Standard Specifications for Road and Bridge Construction.

#### **Construction Cost Estimates**

Opinions of probable construction cost will be developed and refined throughout the design process so that the Village has the latest cost estimate. These costs will be determined using pay items and the latest historical unit prices available for the area.

#### **Project Coordination and Meetings**

Our experience gained in completing projects for municipal clients has led us to an understanding of the critical nature of early project coordination both with public agencies and affected property owners/residents. By maintaining open levels of communication from the beginning with all of the stakeholders involved in the process, we gain access to their invaluable input and support. Early project coordination also allows us to ensure that those items requiring action from other agencies are submitted early in the project in order to maintain the project schedule. Project coordination work will include:

1. The scheduling of an initial kick-off meeting with the Village to review the overall project and scope of work to ensure that the goals and objectives of the Village will be satisfied.
2. Attendance at the bid opening.
3. Preparation/distribution of meeting minutes of all meetings attended which will detail the discussions of attendees along with the action required of the attendees.

#### **Bidding Assistance**

HR Green will prepare reproducible plans and bidding documents and respond to questions during the bidding process. HR Green will also assist the Village to log and track contractor distribution of the bidding documents. HR Green will also coordinate public advertisement in the IDOT Local Roads Contractor's Bulletin and the local newspaper to meet Village advertising requirements.

#### **Bid Recommendation**

HR Green will attend the bid opening and prepare the Engineer's Estimate of Cost. Following the bid opening, HR Green will examine the bid documents and perform calculation checks of each Contractor to confirm the low bidder and generate bid tabulations. Provided all bid documents are in order, HR Green will prepare a letter of Recommendation to Award for the Village Board Meeting. At the same Board Meeting, the Contract and Contract Bond can be executed and HR Green will organize the contract documents and bid tabulations for Village and contractor signatures.

#### **ITEMS NOT INCLUDED**

The following items are not included as part of this agreement:

- A. Temporary or Permanent Easements;
- B. Plat of Highways;
- C. Permitting is not anticipated;
- D. Water Main Design and/or Plans;
- E. Public Informational Meetings;

*Items not included in the agreement can be provided by HR Green under separate agreement, if desired.*

**Exhibit B**  
**COST PLUS FIXED FEE**  
**COST ESTIMATE OF CONSULTANT SERVICES**

DF-824-034  
 REV 12/04

**FIRM**  
**Project**  
**PRIME/SUPPLEMENT**

HR Green Inc.  
Village of Hanover Park  
Prime

**OVERHEAD RATE** 1.55  
**COMPLEXITY FACTOR** 0

**DATE** 11/02/17

ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
Preliminary Engineering	16	929.88	1,441.31	49.99	344.06				2,765.24	6.40%
Topographic & Boundary Survey	100	3,488.47	5,407.13	200.00	1,290.73				10,386.33	24.04%
Design Engineering	200	8,492.09	13,162.74	324.00	3,142.07				25,120.90	58.15%
Bid Administration	16	943.46	1,462.36	100.00	349.08				2,854.90	6.61%
Geotechnical Investigation		0.00	0.00				2,072.63		2,072.63	4.80%
<b>TOTALS</b>	<b>332</b>	<b>13,853.90</b>	<b>21,473.54</b>	<b>673.99</b>	<b>5,125.94</b>	<b>0.00</b>	<b>2,072.63</b>	<b>0.00</b>	<b>43,200.00</b>	<b>100.00%</b>