



March 16, 2018

Michael J. Ellis, Village Manager
Village of Grayslake
10 South Seymour
Grayslake, IL 60030

Attn: Bill Heinz

**RE: Historic Smokestack at the SW corner of Central Park
Smokestack Rehabilitation Design & Construction Services
Scope & Proposal for HDR Engineering Services**

Gentlemen:

The enclosed Scope of Services and proposal is in response to your recent request for HDR to provide follow-up services to the Village of Grayslake to develop Plans & Specifications for the rehabilitation of the above reference structure. HDR's Scope of Services and proposal is presented for your review and comments or acceptance. This package has been assembled as a follow-up to HDR's Inspection and Assessment Report of August 16, 2016. The services proposed within this package generally include design and plan development to support the scope of work presented within the aforementioned report inclusive of the Minimum Requirements highlighted for the rehabilitation of the subject smokestack as primary bid items, and for the others as optional.

This construction project will have a unique nature as did HDR's investigative phase, since there are several unknowns associated with the smokestack, even though a Phase I ground level inspection has been completed. As we are aware, there are no design plans or as-built plans available which accurately depict the existing structure. So, the documents HDR proposes to develop will be based on the best estimate of the configuration and dimensions of the existing smokestack which is limited to the sketches and field notes HDR developed in August 2016.

As referenced within HDR's Inspection and Assessment Report of August 16, 2016 access to the interior of the smokestack has been restricted due to environmental conditions. At that time, the conditions included the existence of bird carcasses, bird excrement (hazardous waste) and other unknowns. HDR's proposal and associated scope of design work is limited to the exterior of the structure, with the only exceptions being the inclusion of a design for the rehabilitation of the lower west-side access door lintel and for the removal and replacement of the cast-in-place concrete rim at the top of the stack. No environmental services are proposed as part of this package and HDR assumes that appropriate OSHA compliant and EPA compliant remediation will have been completed to address all existing environmental concerns and that certified clean conditions will exist prior to HDR gaining access to the site.

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As referenced within HDR's Inspection and Assessment Report of August 16, 2016 some undefined adaptive re-use of the smokestack was anticipated when the Phase I inspection and assessment was completed. At that time, the details of how the structure would be re-used were unknown. That being the case, the proposed rehabilitation work excluded functional elements that would provide features such as access, security measures or customized aesthetic treatments. So, the north side access to the smokestack, which in August 2016 was enclosed within the since demolished gelatin factory building has no scope of work associated with it.

In addition to HDR's proposed design services to develop Plans & Specifications, this package also includes a proposed allowance for HDR to provide Phase III construction services to assist the Village during construction. HDR's Phase III services are anticipated to include shop drawing and other submittal reviews, technical support during construction, a limited number of field visits inclusive of one to develop a pre-completion punch list and another to serve as a final walk-through to validate the completion of the punch-list.

HDR's Phase II deliverables will consist of Plans and Specifications that will ultimately be included with and made part of bid documents the Village will issue for the rehabilitation of the smokestack. In addition, HDR's input in support of the Village's bidding documents will also include providing a scope of work description and other ancillary construction oriented input into the Village's Part 1 – General Conditions and “up-front” bid documents.

HDR looks forward to continuing to serve the Village of Grayslake on this interesting and important project. If this proposal package meets your needs and expectations without modification, acceptance by an affixed signature below will constitute a notice for HDR to proceed with the design for this project as presented. As presented within, HDR's estimate to complete the proposed scope of work is a time and materials fee not to not exceed \$73,580.

Sincerely,

HDR Engineering, Inc.

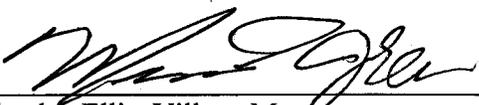


Patrick J. Pechnick, PE
Senior Vice President

Enclosures – Scope of Services
Fee Estimate

March 16, 2018

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Acceptance: ^{UBK}  Date 3-21-18
Michael J. Ellis, Village Manager

**Historic Smokestack
At SW Corner of Central Park
Grayslake, IL
Exterior Rehabilitation Design Services
Scope of Work
August 17, 2016
Rev. 2 - 3.14.18**

The following describes the Scope of Services HDR proposes to provide to the Village of Grayslake to develop Plans and Specification (Technical Provisions) for the exterior rehabilitation of the above referenced structure. In addition to producing bid documents, this proposal also covers a limited scope of services for HDR to provide construction support to assist the Village periodically as the rehabilitation of the smokestack is underway.

Task 1 – Project Administration

Accounts for HDR's internal functions, including project management, accounting and project administration related to HDR's services.

Task 2 – Site Visits During Design

HDR will conduct two site visits to observe, measure and review select conditions and details of the structure as part of the design process. During the first visit, HDR will establish the limits of proposed rehabilitation work and obtain measurements of select details as needed for design. A review of the anticipated quantities which are to be estimated for bidding will also be undertaken at this time. The second site visit will serve as a plan-in-hand review to check the proposed scope and limits of work against the observed conditions of the stack. In addition, a review of the anticipated quantities which are to be estimated for bidding will be undertaken at this time.

HDR will also check for existing temporary benchmarks that remain which were established during the field survey HDR conducted in June 2016.

Task 3 – Develop Bidding Plans & Specifications (Technical Provisions)

HDR will develop plan sheets of the smokestack in a conventional CAD format to be used as bidding documents and to guide the construction associated with the rehabilitation of the exterior of the structure. The proposed work will reflect the recommendations presented in HDR's Phase I Inspection and Assessment Report dated August 16, 2016. Up to six plan sheets are anticipated and have been budgeted.

The baseline work to be included as primary work items for bidding include:

- 1) Tuck Pointing of Distressed areas of the smokestack surfaces (20%)
- 2) Miscellaneous Masonry Repairs to include replacement of severely spalled brick and restoration of the corbel at northwest side of the smokestack
- 3) Removal and Replacement of CIP Reinforced Concrete coping at rim
- 4) Rehabilitation of Lintel at access door on west side at base of stack
- 5) Replacement of two Steel Compression Rings – No's. 18 & 19.
- 6) Rehabilitation/Replacement of Lightning Arrestor System^{1, 2}

Footnotes:

- 1 - HDR will generate documents as a performance design to guide the contractor to a specialist to provide details for a code compliant certified design.
- 2 - This bid item will be packaged for the contractor to quote as an independent line item to allow for easy adjustments in the construction agreement or change order. The actual material and installation required to restore the existing system may differ significantly from what would be needed for the total replacement of the lightning arrestor system.

The secondary work to be included as optional work items for bidding include:

- 1) Masonry Cleaning
- 2) Surface cleaning and re-coating of steel compression rings

Technical Specifications will be developed to compliment the Design Plans. These will be in the form of special provisions or specifications which do not include General Conditions or other contractual provisions for contracting purposes. As part of this task, HDR will also develop and provide a bid sheet formatted for bidding, which identifies the bid items and associated estimated quantities. Any bid items related to General Conditions will be defined by and issued by the Village.

HDR understands that the Village of Grayslake has its own procurement documents which include General Conditions, owner specific construction contract language, bidding instructions and related criteria. HDR understands that the Village will compile a bid package which will include the Village's procurement documents and HDR's technical specifications and design plans.

To help enable the bidding process and with the objective of reducing the potential for scope creep during construction, the bid documents are anticipate to include an electronic copy of the **Appendices** included within HDR's August 2016 assessment report for the bidder's use.

The additional background material (excerpts of the assessment report) is anticipated to be provided to the bidders for the purpose of securing fair and documentable bids primarily for the partial tuck pointing, as well as for other line items that will be included in the bid documents.

Task 4 – Engineer’s Estimate of Probable Construction Cost

HDR will develop an engineer’s estimate of probable construction cost based on unit prices it is able to obtain from industry sources, in combination with any background on pricing of specialties or project related items which the Village may provide.

Task 5 – Investigate the need for Aviation lights via the FAA

HDR will investigate the need for aviation lights through the FAA to determine if aviation lights will be required for the rehabilitated structure.

Task 6 – Bidding Services

HDR will assist the Village with bidding services for the subject project, which will commence following the Village’s advertisement for bids and end with a recommendation for contract award. Bidding services will include:

- a) Leading a pre-bid meeting/site visit
- b) Answering RFIs in writing during bidding, via e-mail correspondence
(4 responses budgeted)
- c) Issuing one Addendum during the bidding process
- d) Engineer’s review of Bid Tabulation
- e) Recommendation for Award of Construction Contract

Task 7 – Construction Services

HDR will support the construction process by performing shop drawing and submittal reviews, by providing limited periodic site visits and by responding to RFI’s during construction. A punch list process and final walk-through to validate the completion of punch-list work will also be provided.

The itemized list of services to be included during construction follows:

- a) Shop Drawing and Submittal Reviews
- b) Site Visits (4 during construction, 1-Develop Punch List, 1-Final walk through)
- c) Responses to RFI’s

Smokestack - Exterior Rehabilitation Design Services

HDR ENGINEERING, INC COST PROPOSAL			
Task	Task Name	Total Hours	Total by Task
1	Project Management & Administration	32	\$ 7,394.70
2	Site Visits During Design	18	\$ 3,182.82
3a	Rehabilitation Design Plans	168	\$ 27,094.08
3b	Specifications	60	\$ 11,156.52
4	Engr's Estim of Probable Construction Cost	14	\$ 2,177.10
5	Investiagtion for Aviation Lights	6	\$ 1,409.10
6	Bid Services	38	\$ 7,689.18
7	Construction Services	68	\$ 9,273.48
8	QA/QC	16	\$ 2,979.66
			\$ 72,356.64
	Total Hours and Labor	420	\$ 72,356.64
	Expenses		\$ 1,222.10
	Total Fee		\$ 73,578.74