



Rezek, Henry, Meisenheimer and Gende, Inc.

CONSULTING ENGINEERS

December 20, 2010

Mr. Peter Kolb, P.E.
Director
Lake County Public Works Department
650 Winchester Road
Libertyville, IL 60048



Re: Proposal for Engineering Services
Herons Landing Subdivision

Dear Mr. Kolb:

Pursuant to our previous discussions, we are pleased to submit this proposal to perform engineering services relative to a new water distribution system for the Herons Landing Subdivision in Long Grove.

Background

Herons Landing Subdivision is located on Port Clinton Road in the Village of Long Grove. The subdivision contains a total of 122 lots with a minimum lot size of one acre. Water supply within Herons Landing is currently via individual wells.

RHMG originally prepared a feasibility study for a public water distribution system for Herons Landing in 1995. This study was based on connecting the proposed Herons Landing water distribution system to the LCPWD's Vernon Hills water system, which receives Lake Michigan water from CLCJAWA. An update to the feasibility study was prepared by RHMG in 2004. In 2009 RHMG prepared updated cost estimates based on serving 118 of the 122 total lots.

As currently proposed, the water distribution system will be owned and operated by LCPWD. Funding will be via a special service area (SSA) created by the Village of Long Grove. The bond funds from the SSA will be transferred to LCPWD to cover the design and construction costs associated with the system. Service lines from the mains to the homes will be included as part of the general contract so that they can be funded via the SSA bonds.

Scope of Services

Our proposed scope of services for this assignment includes:

1. **Preliminary Design Phase**
 - 1.1. **Project Initiation Meeting with LCPWD Staff** - This initial task will consist of a meeting of key RHMG team members and LCPWD staff to discuss project requirements.



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design criteria, and milestone dates for submittals and review meetings.

- 1.2. **Project Initiation and Coordination Meetings with Other Interested Parties** - It is envisioned that there will be additional project initiation and coordination meetings with the Village of Long Grove staff and Heron's Landing Subdivision representatives. Five such meetings are included in the project scope.
- 1.3. **Research and Data Collection** - This initial phase will involve the collection and review of all existing data pertinent to the project including:
 - Aerial photographs and topography
 - Right-of-way and easement maps
 - Subdivision plans
 - Utility location maps
 - FEMA maps
 - Soil survey maps
 - Wetland maps

Some of this data has already been collected and reviewed in conjunction with RHMG's previous efforts on this project.

- 1.4. **Coordination with Homeowners Regarding Service Locations** - A mailing will be sent to all of the homeowners within the Heron's Landing Subdivision service area requesting information relative to their preferred location for their new water service line. RHMG will review and summarize the feedback from the mailings and provide followup as required.
- 1.5. **Perform Topographic Surveys** - Under this task, a detailed field survey of the project corridors will be performed. All topographic features will be located in the field. The topographic features located will include (but not be limited to) driveways, trees, utility poles, sign posts, mail boxes, valve boxes, manholes, catch basins, and culverts.

Topographic surveys of the individual lots will also be performed in order to identify the locations of the existing



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water services and to provide information necessary for design and construction of the new water services.

- 1.6. **Prepare Preliminary Drawings** - Preliminary drawings showing the proposed horizontal location of the watermains and service lines will be prepared. The drawings will be prepared at a scale of 1-inch = 30 feet.
- 1.7. **Meet with LCPWD Staff** - The preliminary drawings will be reviewed with LCPWD staff. Comments from the LCPWD will be incorporated into the preliminary drawings before submitting them to other interested parties for review.
- 1.8. **Review with Other Interested Parties** - The preliminary drawings will be reviewed with the Village of Long Grove staff and the Heron's Landing Subdivision representatives. Comments from these parties will be incorporated into the final design as appropriate.
- 1.9. **Wetlands Consulting** - A wetlands delineation and jurisdictional determination request will be prepared for the entire watermain corridor. An initial threatened and endangered species consultation will also be conducted. Any detailed studies or followup would be additional scope work. RHMG will subcontract with Hey and Associates for this specialty work.

2. Final Design Phase

- 2.1. **Prepare Final Drawings** - CAD drawings illustrating all details necessary for bidding and construction will be prepared using Microstation. These will include the plan sheets, as well as additional drawings necessary to illustrate valve vaults, hydrants, soil erosion and sediment control, road restoration and other appropriate details.
- 2.2. **Prepare Contract Documents and Specifications** - RHMG will prepare contract documents, bidding documents, and specifications for the proposed project, utilizing the Engineers Joint Contract Documents Committee (EJCDC) General Conditions. Required construction schedules will be identified. The construction contract will be set up on a unit price basis. All required bid items will be identified and their



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associated quantities estimated. Technical specifications will be written for pipe, manholes, and all associated materials and workmanship. LCPWD will provide the front end sections of the Contact Documents.

- 2.3. **Quantities and Final Cost Estimate** - A detailed takeoff will be prepared and incorporated into the bid form. Using these quantities, detailed construction and project cost estimates will be prepared. The construction cost estimate will be prepared in bid tabulation format.
- 2.4. **Meet with LCPWD Staff** - Review sets of the pre-final plans will be submitted to LCPWD. A meeting will then be held to discuss the plans and LCPWD's comments.
- 2.5. **Review with Other Interested Parties** - The pre-final drawings will be reviewed with the Village of Long Grove staff and the Herons Landing Subdivision representatives. Comments from these parties will be incorporated into the final design as appropriate.
- 2.6. **IEPA Permit Application and Coordination** - RHMG will prepare the IEPA permit application and provide the necessary followup and coordination.
- 2.7. **WDO Permit Application** - RHMG will prepare the Watershed Development Ordinance permit application for the erosion and sediment control portion of the project. An NPDES Stormwater Notice of Intent (NOI) form will also be prepared.
- 2.8. **Village of Long Grove Permitting** - RHMG will prepare the necessary applications and documentation, as well as followup coordination and meetings, necessary to obtain approval of the water distribution system by the Village of Long Grove.
- 2.9. **Wetlands Permitting** - Depending on the outcome of the wetlands delineation and jurisdictional determination in Task 1.9., U.S. Army Corps of Engineers and/or Lake County SMC Isolated Wetlands permit applications will be prepared. For Army Corps of Engineers jurisdictional wetlands, it is assumed that the project will be eligible for a Regional Permit



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as opposed to an Individual Permit. In addition, it is assumed that no mitigation will be necessary and that simple restoration plans will suffice.

2.10. Independent In-House Review - As a final quality control measure, a final in-house review of the complete design will be performed. The final review will address such issues as coordination between plans and specifications, coordination between drawings, missing details, constructability, and potential for construction claims.

2.11. Coordination and Administration - RHMGM will provide the required project construction administration.

3. Bidding Phase

3.1. Bidder Inquiries and Addenda - RHMGM will field inquiries from prospective bidders and issue addenda where required to make any necessary clarifications to the contract plans and specifications.

4. Construction Phase

4.1. Preconstruction Conference - RHMGM will conduct a preconstruction conference with the contractor, LCPWD, Village of Long Grove representatives, utility company representatives, and other applicable parties.

4.2. Shop Drawing Review - RHMGM will review shop drawings, which the contractor is required to submit, for conformance with the contract documents.

4.3. General Consultation - On an as-requested basis, RHMGM will provide consultation and advice to the LCPWD throughout the course of construction. This will include answering any questions, which may arise, providing interpretation and/or clarification of the plans and specifications, and participating in meetings. Up to 60 hours of general consultation time has been included in our manpower estimate for this task.

4.4. Record Drawings - RHMGM will prepare a set of record drawings incorporating those changes made during



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construction based on marked up prints furnished by the contractor and LCPWD's project inspector. Both a hard copy and an electronic CAD file will be furnished to the LCPWD.

Additional Scope Services

Additional scope services for the project shall include, but not be limited to the following:

1. Services due to major changes in general scope of the project or to preliminary alignments.
2. Revising plans, specifications, studies, reports and other design documents which have been previously approved by the CLIENT and/or County or other governmental agencies.
3. Detailed studies resulting from the discovery of threatened or endangered species within the project limits.
4. Detailed wetlands consulting involving the preparation of an Individual Permit application for U.S. Army Corps of Engineers jurisdictional wetlands and/or design of wetlands mitigation areas.
5. Giving testimony as an expert witness for the CLIENT in litigation or other court proceedings involving this project.
6. Providing engineering studies regarding the capacity of existing sanitary and/or water systems, or the ability of said systems to handle any additional loading from the proposed project.
7. Preparation of any special documents (other than the Final Engineering Plans and Contract Documents previously referenced in the Scope of Services) for the County's use in obtaining a loan or financing for the project.

LCPWD Responsibilities

During the performance of services, the LCPWD shall supply all criteria and full information as to its requirements for the project; designate a person to act with authority on LCPWD's behalf in respect to all aspects of the project; and provide and agree to the following:



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1. Provide all criteria and full information as to the requirements for the project.
2. Acquire all property and easements required for the project.
3. Guarantee access to the property and make all provisions for RHMG to enter upon public and private land as required for the performance of our services.
4. Examine all studies, reports, sketches, opinions of the construction costs, specifications, drawings, proposals and shall promptly render in writing decisions pertaining thereto within period mutually agreed upon.
5. Provide full-time construction observation for the project.

Proposed Fees and Schedule

RHMG proposes to perform the above services on an hourly rate basis using the rates included in the attached Exhibit A with a not-to-exceed fee limit of \$129,177. A detailed manpower estimate illustrating the basis of the proposed fee limit is included as Exhibits B.

Sincerely yours,

REZEK, HENRY, MEISENHEIMER AND GENDE, INC.

William R. Rickert, P.E., BCEE
President

WRR/amd

AMD/WP/Prop.Ltrs./LCPWD-Heron's Landing Subdivision 12-10

Enclosures

cc: Mr. Bill Mass, Herons Landing HOA



EXHIBIT A
BILLING RATES

Classification	Average Hourly Billing Rate
Project Manager	\$155.76
Senior Designer	\$131.16
Senior Project Engineer	\$129.84
Project Engineer	\$93.16
Structural Engineer	\$124.80
Architect	\$106.60
Electrical Engineer	\$108.33
Senior Drafter/Technician	\$86.64
Drafter/Technician	\$81.32
Junior Drafter/Technician	\$58.29
Clerical	\$61.33

**EXHIBIT B
MANPOWER/FEE ESTIMATE
HERONS LANDING WATER DISTRIBUTION SYSTEM
LAKE COUNTY PUBLIC WORKS DEPARTMENT**

TASK	MANHOURS						
	Project Manager	Senior Designer	Project Engineer	Sen. Draft /Tech.	Draft./ Tech.	Clerical	Total
1. Preliminary Design Phase							
1.1. Project Initiation Meeting with LCPWD Staff	3	3				1	7
1.2. Project Initiation & Coordination Meetings w/Other Parties	15	15	10	10		5	55
1.3. Research & Data Collection		8	6		12		26
1.4. Coordinate with Homeowners Regarding Service Locations	2	8	60			4	74
1.5. Perform Topographic Surveys	4	8	20	140	120		292
1.6. Prepare Preliminary Drawings	8	20	8	60			96
1.7. Meet with LCPWD Staff	2	3					5
1.8. Review with Other Interested Parties	2	4	4	6		1	17
1.9. Wetlands Consulting*	1	6					7
SUBTOTAL	37	75	108	216		11	579
2. Final Design Phase							
2.1. Prepare Final Drawings	16	66	16	132			230
2.2. Prepare Contract Documents and Specifications	6	24	10			15	55
2.3. Quantities and Final Cost Estimate	4	12		12	16	8	52
2.4. Meet with LCPWD Staff	2	3					5
2.5. Review with Other Interested Parties	6	8	10	10		2	36
2.6. IEPA Permit Application/Coordination	1	3	3			1	8
2.7. WDO Permit Application		1	3				4
2.8. Village of Long Grove Permitting	8	16	8			4	36
2.9. Wetlands Permitting*	1	3					4
2.10. Independent In-House Review	8	8		12			28
2.11. Coordination & Administration	20						20
SUBTOTAL	72	144	50	166		30	478
3. Bidding Phase							
3.1. Bidder Inquiries and Addenda	6	32	8			10	56
4. Construction Phase							
4.1. Preconstruction Conference		4				2	6
4.2. Shop Drawing Review		10	16			4	30
4.3. General Consultation	10	36	10			4	60
4.4. Record Drawings		2	8		22		32
SUBTOTAL	10	52	34	0	22	10	128
TOTAL	125	303	200	382	22	61	1241
Billing Rate	155.76	131.16	93.16	86.64	81.32	61.33	
Labor Cost	\$19,470	\$39,741	\$18,632	\$33,096	\$1,789	\$3,741	\$116,470
Expenses							
						4,807	
						7,900	
						12,707	
TOTAL FEE							\$129,177

* Subconsultant task - time shown is for coordination only