



CONSULTING ENGINEERS

LAND PLANNERS

SURVEYORS

July 11, 2014

Silver Springs HOA
c/o Bill Nolan
recon009@earthlink.net

RE: Silver Springs Underdrain System

Alliance Engineering, Inc. is pleased to submit for consideration the following proposal for services as outlined in the Invitation to Consultants for the Underdrain System in the Silver Springs Single Family Subdivision.

A dewatering system was installed by the developer of Silver Springs in 1979 to control the ground water levels. It consists of the installation of primarily 6" and 8" perforated plastic tubing in a gravel trench. Twenty-eight (28) access manholes were installed at intervals ranging from 200 to 600 feet. Two outlet locations were located in the field. A third outlet has not been verified and may have not been installed. Root invasion of the drain system has caused backflows and had to be excavated to repair and clean. Several attempts to video the pipes were mainly unsuccessful.

The HOA desires to locate the pipe system and access manholes, to conduct an inspection of the dewatering system pipes, and prepare recommendations on future improvements and inspection procedures to insure a properly functioning system.

The proposal consists of 3 phases as outlined below. The HOA may choose to amend and/or eliminate parts of the services proposed.

Phase 1 – Locate Manholes and Raise to Grade

Phase 1 consists of locating manholes and raising them to grade for future access. Manholes will be located using metal detectors and ground penetrating radar. Manhole adjustment to consist of the removal of the metal lid and replacement of a concrete top with a 24" manhole ring and cover for easy access. After manholes have been recovered and adjusted to grade, a survey of the manholes will be performed and their location relative to the road easements and the lots will be provided to the HOA.

Phase 2 – Pipe Inspection Report

Phase 2 consists of a video inspection of the pipe drains to determine their condition and location. A sending unit mounted to the video camera will establish its location on the ground

then surveyed and incorporated to the location map included with Phase 1. A report will be prepared of the condition of the pipe system and problem areas located and delineated.

Based on discussions with SBWRD and ProPipe, who have direct knowledge and experience of a portion of the drain system, a video inspection will have challenges that will need to be overcome. The drain line consists of perforated corrugated plastic tubing installed in a gravel trench about 8 to 10 feet deep. The installation of the pipe was not linear and consists of curved pipe within the trench width. This installation created difficulties in maneuvering a camera thru the pipe. In addition, root invasion created obstacles that will need to be overcome. We have been in touch with the manufacturer of the video equipment and they have indicated that they will assist us to determine the best or proper equipment needed and work with subcontractors. It must be noted that no guaranty can be assured that the entire system can be successfully inspected. Other methods such as excavation may need to be considered subject to the HOA approval.

Phase 3 -- Recommendations

Based on findings from Phases 1 and 2, we will prepare recommendations that require immediate action and provide long term maintenance recommendations.

We will work closely with the HOA during all phases of the work and adjust the scope based on findings and HOA requests.

Cost of Services

We propose to perform services on a time and material basis with a not to exceed total price outlined below for each task without approval by the HOA. Subcontractor costs are estimated for budgetary purposes and will be billed on a cost plus 10% basis.

Phase 1 -- Locate and Raise Manholes

Project management.....	\$1,500.00
Contractor coordination and inspections	\$1,500.00
HOA correspondence and discussion	\$500.00
Survey manholes and prepare exhibit.....	<u>\$5,000.00</u>
Sub-total.....	\$8,500.00

Subcontractor Costs

Raise manholes to grade... 26 each @ \$1,000	\$26,000.00
Ground penetration radar..... Allowance.....	\$1,500.00
Landscape and road repair allowance.....	<u>\$5,000.00</u>
	\$32,500.00

Total Phase 1 \$41,000.00

Phase 2 – Pipe Inspection and Report

Project management.....	\$3,000.00
Contractor coordination and inspections	\$3,000.00
HOA correspondence and discussions.....	\$500.00
Survey pipe system and update exhibit	<u>\$4,000.00</u>
Sub-total.....	\$10,500.00

Subcontractor Costs

Video pipe system..... 8,900 LF @ \$3.00	\$26,700.00
Contingencies	<u>\$8,300.00</u>
	\$35,000.00

Total Phase 2 \$45,500.00


Note: Subcontractor costs are estimated for budgetary purposes.

Phase 3 – Recommendation Report Budget \$5,000.00

Summary Phase 1	\$41,000.00
Summary Phase 2	\$45,500.00
Summary Phase 3	<u>\$5,000.00</u>
Total.....	\$91,500.00

Alliance Engineering appreciates the opportunity of performing services for you. If you have any questions regarding this proposal or require additional information, please contact the undersigned.

Sincerely,
ALLIANCE ENGINEERING, INC.



John Demkowicz, PE

Attachment: Rate Schedule



CONSULTING ENGINEERS LAND PLANNERS SURVEYORS

Hourly Rate Schedule
(Effective June 1, 2014 through May 31, 2015)

<u>Service</u>	<u>Per Hour Rate</u>
Principal Engineer	\$150.00
Senior Engineer	\$117.50
Senior Surveyor	\$100.00
Senior Land Planner	\$100.00
Office Surveyor	\$100.00 - \$105.00
Landscape Architect	\$100.00
Engineer	\$60.00 - \$80.00
Inspector	\$60.00 - \$70.00
Draftsman	\$60.00 - \$80.00
Secretarial	\$55.00
3 Man Survey Crew	\$180.00
2 Man Survey Crew	\$155.00
1 Man GPS Survey Crew	\$125.00
Reimbursable Expenses	Cost + 10%
Mileage (out of town jobs)	56 cents per mile

Computers and plotters are included in the rates listed above. Rates are effective through May 31, 2015.

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