



May 11, 2023

Mayor and City Council
City of Hilshire Village
8301 Westview Drive
Houston, Texas 77055

Re: Proposal for Engineering Services for Hilshire Green Drive Paving, Drainage & Utility Improvements Project

Dear Mayor and City Council Members:

HDR Engineering, Inc. (HDR) is pleased to submit this proposal for Professional Engineering Services for the above referenced project. The proposal is based on our understanding of the project as discussed in our previous meetings and conversations. For your convenience this proposal consists of General Overview, Scope of Services, Fee Schedule, and Terms and Conditions.

GENERAL OVERVIEW

HDR (previously Claunch & Miller, Inc.) developed a Street Condition Survey & Overall Paving Improvement Plan, and a Comprehensive Underground Utility Assessment for the City of Hilshire Village in 2003 and 2004, respectively. The utility assessment report recommended the replacement of existing 6-inch water lines and rehabilitation of existing 8-inch sanitary sewers within Hilshire Green Drive as part of the Priority 2 Projects. These water and sewer lines are approximately 50-years old, exceeding their normal lifespan, therefore, they shall be replaced and rehabilitated, accordingly.

The Street Condition Survey & Overall Paving Improvement Plan identified the concrete curb and gutter roadway along Hilshire Green as a Priority 2 Project. The deterioration level reported back in 2003 was 2B (based on the Pavement Condition Rating System), or rigid pavement in fair condition with slight to moderate faulting at cracks and joints; rideability is fair to good and surface is intermittently slightly rough and uneven; surface slightly polished.

As part of the City's 2023-2024 Capital Improvement Plan (CIP), the City has identified and prioritized the replacement and rehabilitation of these water and sanitary sewer lines, and the reconstruction of Hilshire Green Drive, as the next CIP Project to be designed and constructed. The City requested HDR to submit a proposal for the replacement and rehabilitation of the aging utility infrastructure, as well as the reconstruction of the concrete curb and gutter roadway and associated drainage system along Hilshire Green Drive.

The proposed Hilshire Green Drive improvements include the abandonment of the existing 6-inch water lines and valves, installation of approximately 350 LF of 8-inch water line, installation of fire hydrants and valves; rehabilitation of approximately 800 LF of existing 8-inch sanitary sewers, rehabilitation of sanitary sewer manholes, transfer and reconnection of approximately twelve (12) water and sanitary sewer services to the new lines, associated appurtenances; and reconstruction of approximately 360 LF of 29-ft wide concrete curb and gutter roadway and associated drainage system.

Trenchless methods of construction are recommended for this project area, similar to the methods used in the Archley, Pine Creek, Bridle Spur, Friarcreek, Pine Chase, Glourie, Guinea, and Ridgeley project areas, in order to minimize the impact to residents and traffic. The water lines will be constructed by auger methods whenever possible, and the existing sanitary sewer system will be rehabilitated by pipe bursting or cured-in-place methods. Some portions of the water and sanitary sewer system may be open cut, when necessary.

The preliminary engineer's opinion of probable construction cost (OPCC) for this project is \$621,000 as reflected in the City's 2023-2024 CIP. Please note that this is an estimate of probable construction cost based on preliminary and limited information available at this time, as well as current market conditions. Changes in the market conditions could potentially increase or decrease this cost. Once the design is completed, HDR will furnish a more accurate OPCC.

This proposal addresses the engineering services HDR will provide the City during the Design, Bidding and Construction Phases, as well as other services necessary to support the project. The proposal is separated into Basic Services (expected normal engineering services) and Special/Additional Services. Special/Additional services are those services that are beyond the Basic Services provided for in the scope portion of this proposal.

Due to the nature of this project there are certain Special/Additional Services that will be needed and others that may or may not be required. In the fee schedule portion of this proposal the Special/Additional Services that are anticipated are listed and a budgetary amount included. Other Special/Additional Services may be required and may be identified as the project progresses but will only be performed when authorized by the City.

SCOPE OF SERVICES

I. DESIGN PHASE SERVICES

A. Basic Services

- Attend two (2) Public Hearing/Workshop Meetings with City Council and residents to address project progress and obtain feedback from City and residents, as necessary.
- Obtain utility information/record drawings on water and sanitary sewer lines designated for replacement and/or rehabilitation.
- Coordinate with private utility entities (i.e. gas, electric, cable, telephone, etc.), incorporate appropriate comments from pertinent entities into the final documents, and secure signatures.

- Water and sanitary sewer improvements will be replaced and/or rehabilitated as identified in the City's 2004 Comprehensive Underground Utility Assessment Report.
- Perform field reconnaissance of the sanitary sewer lines and manholes within the project areas to obtain information on design features, general deterioration and condition, and other information that could impact construction. The information gathered from the field visit will be included in the schematic layout drawings that would aid the design efforts.
- Proposed roadways will be completely reconstructed with 29-ft wide concrete curb and gutter within the Hilshire Green Drive right-of-way, unless otherwise requested by the City. The storm sewer system will be designed to handle a City of Houston 2-year storm frequency.
- Prepare bidding/construction drawings and specifications for the project based on planned improvements, as described in the General Overview section of this proposal.
- Prepare an Opinion of Probable Construction Cost (OPCC) for the project.
- Complete design services within four (4) months of the City's authorization to proceed with these engineering services.
- Furnish two (2) sets of 70% Submittal documents (Plans and Specifications) to the City.
- Furnish two (2) sets of Bid/Construction documents to the City.

B. Special/Additional Services

1. Topographical Survey

- Perform topographical survey services of the project areas to produce background information for design effort.

2. Geotechnical Investigation

- Obtain soil borings and perform laboratory work to determine geotechnical characteristics of soils and pavement within the project areas, and make design and construction recommendations for paving, drainage and utility improvements.

3. Tree Protection Plan

- Obtain urban forestry consulting services to evaluate the impact of proposed improvements to existing trees and landscape within the project area and develop a tree protection/preservation plan that will minimize impact to existing trees and landscape within the project areas.

4. Traffic Control Plan

- Preparation of traffic control plans and specifications, including construction sequence, and traffic control/detour plan phases required for the construction of the project.

5. Storm Water Pollution Prevention Plan

- Preparation of storm water pollution prevention plans and specifications for the project, in accordance with the Texas Pollutant Discharge Elimination System (TPDES) requirements.

6. Miscellaneous Expenses

- Reproduction for review sets, submittals to Hilshire Village, TCEQ, and private utility companies.
- Travel (mileage) and Courier/delivery services cost.

II. BIDDING PHASE SERVICES

A. Basic Services

1. Bidding Services:

- Assist the City in obtaining bids for the project. The City will advertise the project and will absorb all related advertising costs. HDR will coordinate with the City and will assist in developing the wording of the advertisement.
- Post and manage bid documents in CIVCASTUSA.com for potential bidders.
- During the bidding process, provide information to and answer questions from potential bidders concerning the Project's construction documents and prepare addendums as necessary.
- Conduct a pre-bid conference for potential bidders.
- Attend Bid Opening and evaluate the bids and the qualifications of the apparent low bidders and advise the City as to the acceptability of the apparent low bidder.

III. CONSTRUCTION PHASE SERVICES

A. Basic Services

1. Construction Administration:

- Conduct a pre-construction conference for the project.

- Conduct monthly construction progress meetings, prepare and distribute agendas and meeting notes.
- Act as the City's Project Representative during the construction phase.
- Address questions and provide clarifications regarding plans, design details and related items during construction.
- Review and respond accordingly to all submittals as required by the contract specifications.
- Prepare change orders necessitated by field conditions.
- Review the contractor's pay estimates, evaluate the completed work, and make payment recommendations to the City.
- Visit the site at intervals appropriate to the various stages of construction to observe the progress and quality of executed work and to determine in general if such work is proceeding in accordance with the Contract Documents. Full-time site representation is not included as part of the Construction Administration tasks.
- Monitor Contractor in maintaining a set of as-built drawings.
- HDR will not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor(s) or the safety precautions and programs incident to the work of the Contractor(s). HDR's effort will be directed toward providing a greater degree of confidence for the City that the completed work of Contractor(s) will conform to the Contract Documents, but HDR will not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. During site visits and on the basis of on-site observations HDR shall keep the City informed of the progress of the work, shall endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the Contract Documents.
- Conduct substantial completion and final inspections of the Project, prepare punch list(s), and make a recommendation for Final Payment and closeout of the Project.

B. Special/Additional Services

1. Construction Observation Services:

- Provide one construction observer (on-site representative) to observe the daily progress of construction activities and to assist in the interpretation of plans and specifications. The estimated construction time for this project is 120 calendar days.

- HDR will provide support to the on-site representative(s) through supervisory and administrative services.
- The on-site representative(s) will be on-site daily during construction activity.
- In the event of rain days where construction may be hindered or stopped, the representative will be on-site long enough to verify that inclement weather has occurred and the associated impact on the contractor and construction.
- The on-site representative shall maintain daily reports.
- The on-site representative will attend meetings with the Contractor and the City such as pre-construction conference, progress meetings, and other project related meetings.
- The on-site representative will take periodic photographs of the construction progress and of key items of concern.
- The on-site representative will estimate quantities installed for use in reviewing monthly pay estimates. The on-site representative will review the Contractor's quantity measurements, the Contractor's payment request and make recommendation of payment of the periodic pay request to HDR's project manager.
- The on-site representative will aid in the coordination of activities of the testing laboratory.
- The on-site representative will coordinate with the City and the Contractor for construction scheduling, resident notification and complaints.
- The on-site representative will assist in the performance of the substantial completion and final inspections, the preparation of punch list(s) and subsequent follow up inspections.
- The on-site representative will assemble and maintain notes, comments, sketches, and supporting data related to the project in order to assist in the preparation of record drawings.
- The on-site representative will be provided in an effort to aid in the process of observing performance of work of the Contractor(s). Through more extensive on-site observations of the work in progress, HDR shall endeavor to provide further protection for the City against defects and deficiencies in the work of the contractor(s); but the furnishing of such on-site representative will not make HDR responsible for construction means, methods, techniques, sequences or procedures or safety precautions or programs, or for Contractor(s) failure to perform their work in accordance with the Contract Documents.

2. Record Drawing Services

- After construction is completed, HDR will prepare the record drawings for the project based on as-built information furnished by Contractor.

3. Miscellaneous Expenses

- Reproduction cost (i.e. pay estimates, meeting notes, submittals, etc.)
- Travel (mileage) and Courier/delivery services cost.

FEE SCHEDULE

The Basic Services Fee for the above-described scope of services are proposed to be on a lump sum basis, calculated on the basis of level of effort (LOE) estimates to complete each of the tasks required to fulfill the design, bidding and construction phase services of this project (refer to Exhibit A – Level of Effort for Hilshire Green Drive Paving, Drainage & Utility Improvements).

The fee schedule is separated into: Design, Bidding, and Construction Phases, as outlined below:

Basic Services:

a) Design Phase Services – Lump Sum Level of Effort (See Exhibit A)	=	\$79,705
b) Bidding Phase Services – Lump Sum Level of Effort (See Exhibit A)	=	\$9,852
c) Construction Administration – Lump Sum Level of Effort (See Exhibit A)	=	\$29,571
Total – Basic Services (Exhibit A)	=	\$119,128

Design Phase & Bidding Phase Additional Services:

a) Topographical Survey – Subcontract Cost (See Exhibit A) - \$5,875 + 10%	=	\$6,463
b) Geotechnical Investigation – Subcontract Cost (See Exhibit A) - \$6,400 + 10%	=	\$7,040
c) Tree Protection Plan – Subcontract Cost (See Exhibit A) - \$4,020 + 10%	=	\$4,422
d) Traffic Control Plan – Lump Sum Level of Effort (See Exhibit A)	=	\$11,033

e) Storm Water Pollution Prevention Plan – Lump Sum Level of Effort (See Exhibit A)	=	\$4,530
f) *Miscellaneous Expenses (Reproduction, Travel & Courier Services) – Subcontractor Cost (See Exhibit A) – Cost plus 10%	=	\$500
Total – Design & Bidding Additional Services (Exhibit A)	=	\$33,987

Construction Phase Additional Services:

a) *Construction Observation – Hourly (Based on average 40 hours/week)(See Exhibit A)	=	\$134,719
b) Record Drawings – Lump Sum Level of Effort (See Exhibit A)	=	\$3,618
c) * Miscellaneous Expenses (Reproduction, Travel & Courier Services) – Subcontractor Cost (See Exhibit A) – Cost plus 10%	=	\$1,500
Total – Construction Additional Services (Exhibit A)	=	\$139,836

Grand Total = **\$292,952**

* At this time the magnitude of these tasks is not known. Therefore budgetary amounts are provided. These figures may increase or decrease depending upon actual work required. If an increase becomes necessary it can be accomplished by utilizing available funds from other line items that have under run, or by contract amendment.

The anticipated construction duration required for the project is estimated to be 120 calendar days. The budget fee for construction observation includes hourly costs for a full-time site representative (based on average 40 hours/week), supervisory and administrative services, and reimbursable items. Reimbursable items will be:

- Vehicle Expenses (Mileage at the prevailing Federal rate)
- Reproduction (Documents pertaining to the project, special requests by the client, miscellaneous photocopies not pertaining to normal duties and responsibilities)

TERMS AND CONDITIONS

This project will be performed as a Project Engineering Design Service under the current on-going engineering services contract with the City of Hilshire Village, and its terms and conditions will apply.

Invoices will be submitted on a monthly basis, reflecting charges to date on the basis specified in this proposal. Lump sum project tasks will be billed as a percentage of completion, based on the

estimated progress of the work to date. Outstanding invoices will accrue interest charges at the current maximum allowable rate after 30 days.

For all services billed on an hourly basis, the fee includes hourly costs for all personnel based on actual raw labor rates times a multiplier of 3.05 for all employees. Hourly rates are subject to revision on an annual basis due to raises and personnel changes, however, the multiplier will not change without authorization from the City.

Overtime for site representative personnel and hourly employees will be charged at 1.5 times the normal rate. Overtime is defined as time over 40 hours within a one-week period (Sunday to Saturday).

Subconsultant and subcontractor costs will be billed at the subcontract invoice cost plus 10%. Reimbursable expenses will be charged at cost plus 10%.

Mileage will be charged at the prevailing Federal rate.

HDR Engineering, Inc. appreciates the opportunity to submit this proposal and we look forward to working with the City of Hilshire Village on this very important project.

Sincerely,

HDR Engineering, Inc.



David Weston
Vice President/Area Manager

cc: Marketing Files

Attachments:

1. Exhibit A – Level of Effort (LOE) for Hilshire Green Drive Paving, Drainage & Utility Improvements.
2. Landtech, Inc. Survey Proposal dated 5/8/2023.
3. Geotest Engineering, Inc. Geotechnical Proposal dated 5/9/2023.
4. C.N. Koehl Urban Forestry, Inc. Proposal dated 5/9/2023.

Accepted by City of Hilshire Village this _____ day of _____, 2023

By _____
Name and Title

From: [Cassie Stephens](#)
To: [Him, Efrain](#)
Cc: [Lisa Ray](#); [Vasquez, Javier](#)
Subject: Re: Hilshire Village Authorization for Hilshire Green Paving, Drainage & Utility Improvements Project...
Date: Wednesday, July 19, 2023 11:01:25 AM

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning, Efrain,

Please proceed with the engineering services listed in your previous message as approved by Hilshire Village City Council on 7/18/2023, not to exceed the amount of \$114,000.

Thank you,

Cassie Stephens

Assistant City Secretary

City of Hilshire Village

Office: 713-973-1779

Fax: 713-973-7793

PUBLIC OFFICIALS:

This email with any attachments may constitute a public record of the City of Hilshire Village and may be subject to public disclosure under the [Texas Public Information Act](#).

A "reply all" of this e-mail could lead to violations of the [Texas Open Meetings Act](#). Please reply only to the sender.

From: Him, Efrain <Efrain.Him@hdrinc.com>

Sent: Tuesday, July 18, 2023 7:54 PM

To: Cassie Stephens <cassie.stephens@hilshirevillagetexas.com>

Cc: Lisa Ray <lisa.ray@hilshirevillagetexas.com>; Vasquez, Javier <javier.vasquez@hdrinc.com>

Subject: Hilshire Village Authorization for Hilshire Green Paving, Drainage & Utility Improvements Project...

Cassie,

Based on tonight's 7/18/2023 Council Meeting, Discussion and Possible Action Item 5.A. Hilshire Green Paving, Drainage & Utility Improvements Project, City Council has authorized HDR to proceed with the following services from the attached Engineering Services Proposal at this time:

1. Design Phase Services (Basic Services) for a lump sum amount of \$79,705.00
2. Topographic Survey (Additional Services) for a cost + 10% amount of \$6,463.00
3. Geotechnical Investigation (Additional Services) for a cost + 10% amount of \$7,040.00
4. Tree Protection Plan (Additional Services) for a cost + 10% amount of \$4,422.00
5. Traffic Control Plan (Additional Services) for a lump sum amount of \$11,033.00
6. Storm Water Pollution Prevention Plan for a lump sum amount of \$4,530.00
7. Miscellaneous Expenses (Reproduction, Travel & Courier Services) for a cost + 10% amount of \$500.00

The total authorized amount at this time is \$113,693.00

All other remaining services (i.e. Bidding Phase Services, Construction Administration, Construction Observation, Record Drawings, and Miscellaneous Expenses for Construction Phase) will be authorized by the City at a later time.

Could you please confirm this understanding/authorization by replying to this e-mail, so I can proceed forward with this project?

If you have any questions or comments, please do not hesitate to contact me (713) 622-9264.

Thanks,

Efrain A. Him, P.E.
Senior Project Manager

HDR
4828 Loop Central Drive, Ste. 800
Houston, TX 77081
T 713.622.9264 F 713.622.9265
efrain.him@hdrinc.com

hdrinc.com/follow-us

**CITY OF HILSHIRE VILLAGE
EXHIBIT A - LEVEL OF EFFORT (LOE) FOR HILSHIRE GREEN DRIVE PAVING, DRAINAGE & UTILITY IMPROVEMENTS**

Item	Description / Task	Basic Services (HDR) - Estimated Manhours									Subtotal (hrs)	Subtotal (cost \$)	Additional Services - HDR	Basic Services - Subconsultants (cost+10%)	Additional Services - Subconsultants (cost+10%)	Other Costs/Allowances	Total Fee
		Principal (hrs)	Sr. Project Manager (hrs)	Project Manager (hrs)	Project Engineer (hrs)	Sr. Designer (hrs)	CAD Operator (hrs)	Clerical (hrs)	Constr. Manager (hrs)	Constr. Inspector (hrs)							
	Raw Salary	\$90	\$85	\$65	\$45	\$60	\$55	\$30	\$85	\$60							
	Raw Salary Multiplier	2.99	2.99	2.99	2.99	2.99	2.99	2.99	3.05	3.05							
I	Phase II - Final Design :																
A	Project Management and Document Submission																
	1. Data Collection				8.0	1.0	1.0	12.0			22.0	\$2,497					\$2,497
	2. Geotechnical Investigation										0.0			\$7,040			\$7,040
	3. Site / Coordination / Workshop Meetings		8.0	16.0	16.0	8.0	8.0	8.0			64.0	\$10,764					\$10,764
	4. Progress Submittals QA/QC (70% & 100%/Mylars)	10.0	8.0	8.0	8.0				10.0		44.0	\$9,948					\$9,948
	5. Specifications, Preparation & Review		8.0	8.0	18.0			24.0			58.0	\$8,163					\$8,163
	6. Construction Cost Estimate, Preparation & Review		4.0	8.0	16.0			12.0			40.0	\$5,801					\$5,801
	7. Interagency Coordination & Private Utility Signatures	4.0	8.0	8.0	12.0			8.0			40.0	\$6,997					\$6,997
	8. Misc. Expenses (Reproduction, Travel & Courier Services)										0.0		\$0		\$500		\$500
	Subtotal Project Management & Document Subm.	14.0	36.0	48.0	78.0	9.0	9.0	64.0	10.0	0.0	268.0	\$44,168	\$0	\$0	\$7,040	\$500	\$51,708
B	Drawings																
	G-1 Cover Sheet		1.0		1.0		4.0				6.0	\$1,047					\$1,047
	G-2 General Notes / Legend & Abbreviations		1.0	2.0	4.0		4.0				11.0	\$1,839					\$1,839
	G-3 Overall Layout Plan (1"=60')		1.0		1.0		4.0				6.0	\$1,047					\$1,047
	S-1 thru S-2 Survey & Control Maps										0.0			\$6,463			\$6,463
	P-1 Plan Sanitary Sewer Rehab 1"=40' (Hilshire Green)		2.0	4.0	12.0	2.0	18.0				38.0	\$6,219					\$6,219
	PP-1 Plan & Profile 1"=20' H / 1"=2' V (Hilshire Green)		2.0	8.0	12.0	4.0	24.0				50.0	\$8,342					\$8,342
	SWP-1 SWPPP (1"=60')(Hilshire Green)		1.0	2.0	4.0		12.0				19.0	\$3,154					\$3,154
	SWP-2 SWPPP Details 1 (NTS)		1.0	1.0	2.0		4.0				8.0	\$1,375					\$1,375
	TCP-1 Construction Sequence Plan		1.0	2.0	6.0	2.0	10.0				21.0	\$3,453					\$3,453
	TCP-2 Traffic Control Plans		1.0	4.0	6.0	2.0	12.0				25.0	\$4,171					\$4,171
	TCP-3 Typical Traffic Control Intersection Details		1.0	1.0	2.0		8.0				12.0	\$2,033					\$2,033
	TCP-4 Typical Traffic Control Details		1.0	1.0	2.0		4.0				8.0	\$1,375					\$1,375
	D-1 Paving Details 1		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-2 Paving Details 2		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-3 Paving Details 3		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-4 Water Details 1		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-5 Water Details 2		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-6 Water Details 3		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-7 Water Details 4		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-8 Sanitary Sewer Details 1		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-9 Sanitary Sewer Details 2		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	D-10 Storm Sewer Details		1.0	2.0	3.0		4.0				10.0	\$1,704					\$1,704
	TP-1 thru TP-3 Tree Protection Plans & Details										0.0			\$4,422			\$4,422
	Subtotal Drawings	0.0	23.0	45.0	82.0	10.0	144.0	0.0	0.0	0.0	304.0	\$35,536	\$15,563	\$0	\$10,885	\$0	\$61,984
C	Bidding Phase																
	1. Attend Pre-Bid Meeting		2.0		2.0						4.0	\$777					\$777
	2. Prepare & Issue Addenda		2.0	4.0	8.0		8.0	4.0			26.0	\$4,037					\$4,037
	3. Respond to Bidder Questions		2.0	2.0	8.0						12.0	\$1,973					\$1,973
	4. Bid Evaluation / Bid Tabulation		1.0	1.0	2.0			6.0			10.0	\$1,256					\$1,256
	5. Recommendation of Award		1.0	2.0	2.0			6.0			11.0	\$1,450					\$1,450
	6. Construction Contract Preparation							4.0			4.0	\$359					\$359
	Subtotal Bidding Phase	0.0	8.0	9.0	22.0	0.0	8.0	20.0	0.0	0.0	67.0	\$9,852	\$0	\$0	\$0	\$0	\$9,852

\$7,040 Geotechnical

\$500 Mileage, Repro & Courier

\$6,463 Survey

\$4,530 SWPPP

\$11,033 Traffic Control Plan

\$4,422 Tree Protection

Item	Description / Task	Basic Services (HDR) - Estimated Manhours									Subtotal (hrs)	Subtotal (cost \$)	Additional Services - HDR	Basic Services - Subconsultants (cost+10%)	Additional Services - Subconsultants (cost+10%)	Other Costs/Allowances	Total Fee
		Principal (hrs)	Sr. Project Manager (hrs)	Project Manager (hrs)	Project Engineer (hrs)	Sr. Designer (hrs)	CAD Operator (hrs)	Clerical (hrs)	Constr. Manager (hrs)	Constr. Inspector (hrs)							
	Raw Salary	\$90	\$85	\$65	\$45	\$60	\$55	\$30	\$85	\$60							
	Raw Salary Multiplier	2.99	2.99	2.99	2.99	2.99	2.99	2.99	3.05	3.05							
II	Phase III - Construction Phase Services:																
	1. Attend Pre-Construction Meeting		2.0	2.0	2.0						6.0	\$1,166					\$1,166
	2. Attend Scheduled Construction Progress Meetings		8.0	8.0	16.0						32.0	\$5,741					\$5,741
	3. Submittals		6.0	12.0	24.0			10.0			52.0	\$7,983					\$7,983
	4. RFI's/Change Orders		2.0	8.0	12.0		4.0	2.0			28.0	\$4,515					\$4,515
	5. Review Contractor Monthly Pay Estimates		3.0	6.0				12.0			21.0	\$3,005					\$3,005
	6. Substantial/Final Completion Walk-Thru/Punch Lists		3.0	6.0	10.0						19.0	\$3,274					\$3,274
	7. As-Built Drawings		2.0	4.0			12.0	4.0			22.0	\$3,618					\$3,618
	8. Project Closeout		8.0	4.0				12.0			24.0	\$3,887					\$3,887
	9. Construction Observation							34.0	688.0	722.0	\$134,719						\$134,719
	10. Misc. Expenses (Reproduction, Travel & Courier Services)									0.0	\$0				\$1,500		\$1,500
	Subtotal Phase III - Construction Phase Services	0.0	34.0	50.0	64.0	0.0	16.0	40.0	34.0	688.0	926.0	\$29,571	\$138,336	\$0	\$0	\$1,500	\$169,408
SUBTOTAL PHASE II - BASIC SERVICES HOURS		14.0	61.0	91.0	160.0	15.0	111.0	84.0	10.0	0.0	546.0						
SUBTOTAL PHASE II - BASIC SERVICES COST		\$3,767	\$15,503	\$17,686	\$21,528	\$2,691	\$18,254	\$7,535	\$2,593	\$0		\$89,557					\$89,557
SUBTOTAL PHASE II - ADDITIONAL SERVICES HOURS (HDR)		0.0	6.0	11.0	22.0	4.0	50.0	0.0	0.0	0.0	93.0						
SUBTOTAL PHASE II - ADDITIONAL SERVICES COST (HDR)		\$0	\$1,525	\$2,138	\$2,960	\$718	\$8,223	\$0	\$0	\$0		\$15,563			\$500		\$16,063
SUBTOTAL PHASE II - ADDITIONAL SERVICES COST (SUBS)														\$17,925			\$17,925
TOTAL PHASE II - BASIC & ADDITIONAL SERVICES												\$89,557	\$15,563	\$0	\$17,925	\$500	\$123,544
SUBTOTAL PHASE III - BASIC SERVICES HOURS		0.0	32.0	46.0	64.0	0.0	4.0	36.0	0.0	0.0	182.0						
SUBTOTAL PHASE III - BASIC SERVICES COST		\$0	\$8,133	\$8,940	\$8,611	\$0	\$658	\$3,229	\$0	\$0		\$29,571					\$29,571
SUBTOTAL PHASE III - ADDITIONAL SERVICES HOURS (HDR)		0.0	2.0	4.0	0.0	0.0	12.0	4.0	34.0	688.0	744.0						
SUBTOTAL PHASE III - ADDITIONAL SERVICES COST (HDR)		\$0	\$508	\$777	\$0	\$0	\$1,973	\$359	\$8,815	\$125,904		\$138,336			\$1,500		\$139,836
SUBTOTAL PHASE III - ADDITIONAL SERVICES COST (SUBS)														\$0			\$0
TOTAL PHASE III - BASIC & ADDITIONAL SERVICES		\$0	\$8,133	\$8,940	\$8,611	\$0	\$658	\$3,229	\$0	\$0		\$29,571	\$138,336	\$0	\$0	\$1,500	\$169,408
TOTAL PHASES II & III - BASIC AND ADD. SERVICES HOURS		14.0	101.0	152.0	246.0	19.0	177.0	124.0	44.0	688.0	1,565.0						
TOTAL PHASES II & III - BASIC SERVICES																	\$119,128
TOTAL PHASES II & III - ADDITIONAL SERVICES																	\$173,824
TOTAL PHASES II & III - BASIC AND ADDITIONAL SERVICES																	\$292,952

\$3,618 Record Drawings
 \$134,719 Construction Observation
 \$1,500 Mileage, Repro & Courier

May 8, 2023

Mr. Efrain A. Him P.E.
Senior Project Manager
HDR
4828 Loop Central Drive, Suite 800
Houston, Texas 77081

RE: Hilshire Green Paving, Drainage and Utility Improvements Project

Dear Mr. Him:

It is my pleasure to submit the following proposal for providing professional surveying service for the above referenced project. The scope of work will be as follows:

Topographic survey for Hilshire Green Drive from Cul-De-Sac dead end to Wirt Road:

- ROW and 20 feet beyond both sides of ROW.
- Cross sections at 50 feet intervals.
- At the intersection with Writ Road, extend the survey to the center of Wirt Road.
- Locate boreholes.

Provide CAD file of the plan view of the field data.

Lump Sum Fee of \$5,875.00

Thank you for the opportunity to submit this proposal.

Sincerely,



Paul Kwan, RPLS.
President



GEOTEST ENGINEERING, INC.

Geotechnical Engineers & Materials Testing

5600 Bintliff Drive

Houston, Texas 77036

Telephone: (713) 266-0588

Fax: (713) 266-2977

Proposal No. 1140618199

May 9, 2023

Mr. Efrain A. Him, P.E.
Senior Project Manager
HDR
4828 Loop Center Drive, Suite 800
Houston, Texas 77081

**Re: Proposal for Geotechnical Services
Hilshire Green Paving, Drainage & Utility Improvements Project
City of Hilshire Village, Texas**

Dear Mr. Him:

In accordance with your request on May 8, 2023, Geotest Engineering, Inc. is pleased to submit this proposal for the referenced project. Based on the provided information, we understand that the scope of the project will include replacement and installation of new water lines by open cut and/or auger construction, rehabilitate existing sanitary sewers by pipe bursting, removal and replacement of existing storm sewer system, and reconstruction of concrete roadways and driveways within the ROW along Hilshire Green Drive from Cul-De-Sac dead end to Wirt Road in City of Hilshire Village, Texas. The proposed waterline will be approximately 4 to 6 feet deep below the existing grade.

Purpose and Scope

The purpose of this investigation is to explore subsurface soil and water level conditions and to develop geotechnical recommendations for the proposed improvements in the City of Hilshire Village, Texas. The scope of this investigation is based on the information provided to us in your e-mail on May 8, 2023, and will include the following tasks:

- Calling Texas 811 and Coordinate with utility locators to get areas for the proposed boring locations cleared.
- Drilling and sampling two (2) 10-foot borings for the proposed improvements.

- Grouting all boreholes using non-shrink cement bentonite grout after completion of drilling and water level measurements. The use of cement bentonite grout will eliminate the potential problems and safety hazards associated with surface settlements that might occur if boreholes are backfilled with soil cuttings.
- Perform appropriate laboratory tests on selected representative soil samples to develop the engineering properties of the soil.
- Perform engineering analyses to develop geotechnical recommendations for the design of the proposed utility improvements including excavation stability, open cut and trenchless parameters, bedding and backfill, groundwater control, pavement replacement and repair and construction considerations.
- Prepare a geotechnical investigation report including field and laboratory data and geotechnical recommendations in accordance with City of Houston Guideline.

It is our understanding that your surveyors will tie-in our borings after completion of the drilling.

Project Schedule

We should be able to start the fieldwork within one (1) week after receiving your written authorization. It is estimated that the fieldwork will be completed in about one (1) week barring bad weather. The laboratory tests will be completed in about two (2) weeks. A geotechnical report, which will include field and laboratory data and geotechnical recommendations, will be submitted in about eight (8) weeks after receiving the written authorization.

Cost

Based on the scope of work outlined above, the cost of the field investigation, laboratory testing, engineering analyses and geotechnical report will be a lump sum amount of \$6,400.00. The cost breakdown given in Attachment No. 1 is for additional

information only. The invoices will be billed on Lump Sum basis based on percent completion. This cost is based on the assumption that no site clearance will be required.

We appreciate the opportunity to propose on this project. We hope that this proposal meets your approval. If you have any questions, please call us at (713) 266-0588. Please indicate your formal acceptance by signing one copy of this letter in the space below and returning one original to us.

Sincerely,
GEOTEST ENGINEERING, INC.
TBPE Registration No. F-410

B.C. K

Mohan Ballagere, P.E.
Vice Present

MB\ego
Copies Submitted: (1-PDF)
Enclosure: Attachment No. 1 – Cost Breakdown
PC38\Geotechnical\Proposals\40618199.DOC

ACCEPTED BY: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

**ATTACHMENT NO. 1
COST BREAKDOWN**

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
<u>Field Investigation</u>				
Mob and Demob of Truck Mounted Drilling Rig	1	LS	\$400.00	\$400.00
Drilling and Continous Sampling (0'-20)	20.0	ft.	\$24.00	\$480.00
Grouting of Completed Bore Holes	20.0	ft.	\$8.00	\$160.00
Utility Clerance for Boring Locations,Marking borings and Field Coordination	4.0	hr.	\$85.00	\$340.00
Vehicle Charge	4.0	hr.	\$9.00	\$36.00
Traffic Control (Minor Street)	1.0	day	\$800.00	\$800.00
			Subtotal	\$2,216.00
<u>Laboratory Testing</u>				
Liquid and Plastic Limits	2	ea.	\$68.00	\$136.00
Moisture Content Only	8	ea.	\$10.00	\$80.00
Percent Passing No. 200 Sieve	2	ea.	\$52.00	\$104.00
Particle-Size Analysis	1	ea.	\$62.00	\$62.00
Unconsolidated Undrained Triaxial Compression	2	ea.	\$69.00	\$138.00
			Subtotal	\$520.00
<u>Engineering Services</u>				
Sr. Engineer	2	hrs.	\$170.00	\$340.00
Project Engineer	4	hrs.	\$133.00	\$532.00
Graduate Engineer	24	hrs.	\$105.00	\$2,520.00
Support Personnel, Word Processing	4	hrs.	\$68.00	\$272.00
			Subtotal	\$3,664.00
			Total	\$6,400.00

May 9, 2023

Mr. Efrain A. Him., P.E.
Senior Project Manager
HDR
4828 Loop Central Drive, Suite 800
Houston, Texas 77081

Re: Proposal for Urban Forestry Consulting Services on the City of Hilshire Village,
Hilshire Green Paving, Drainage & Utility Improvements Project.

Dear Mr. Him,

As per your request, C.N. Koehl Urban Forestry, Inc proposes to provide Urban Forestry Consulting services for the design phase of the Hilshire Green Paving, Drainage & Utility Improvements Project. Based on your request for proposal, and our most recent experience on similar projects, we propose to provide the following Urban Forestry services:

Field Evaluation/Site Visit

We will walk each side of every street and utility easement on which construction is proposed and evaluate the species, size, condition, and preservation feasibility of each tree. We will confirm the surveyed location of each tree and approximately locate any trees that may be impacted that were not picked up by surveyor. Proposed construction activity adjacent to each tree will be evaluated to determine impacts on long-term tree survival. The data collected and used in the preliminary evaluation will also be used for the final evaluation and tree preservation plan.

Fee for Field Evaluation/Site Visit
Hilshire Green (400 l.f.)
5.0 hours @ \$140.00/hour.....\$700.00

Preliminary Evaluation/Tree Preservation Plan

The plan and profile drawings, provided by the engineer, will be reviewed prior to final submittals, to determine treatment for each tree. Each tree will be numbered on the drawings. A tree treatment schedule will list each tree by number, species, diameter, condition, and anticipated treatment. Each tree (public and private) adjacent to construction activity will be evaluated to ensure that construction activity will not destroy too much of the root system. Should we find any conflicts with proposed construction we will make recommendations for minor design changes or for removal of the tree. Recommendations for minor design changes, such as shifting bends, a ts&v, vertical offset, inlets, or a fire hydrant, will be redlined on plan and profile drawings copied to our

Tree Submittal Form with a brief description of recommended changes and emailed to your office. Design change recommendations can then be reviewed by engineer and client to determine feasibility.

After we receive your comments on our design change recommendations we will develop an Autocad drawn tree protection plan which will identify the mitigative and protective treatments needed to ensure long term tree survival and compliance with the City's Tree Ordinance. Plan and profile drawings, provided by the engineer, will be used to indicate each tree by number, and exact location of preservation treatments (protection fencing, root pruning trench, etc.). Details for tree treatments will be included in the tree protection plan. Quantity totals and cost estimates for each tree treatment will be provided. The preliminary tree protection plan and quantity totals and cost estimates will be emailed to you so that your staff may use the quantity estimates as needed and plot the tree protection plan as it is needed. The AutoCad drawn tree protection plan would include our logo with a signature line, which we provide a signed PDF file at the mylar stage. The preliminary tree protection plan and quantity/cost estimate can be included in your 70% and/or 90% submittal so that the City's staff can review our plan and provide comments prior to the final submittal. We will need 14-18 business days to schedule and complete the field evaluation and preliminary tree protection plan.

Fee for Preliminary Evaluation/Plan
8.0 hours @ \$140.00/hour.....\$1,120.00

Final Evaluation/Tree Preservation Plan and Specifications

We will review the construction design just prior to the final submittal, following comments from the City on recommendations made in the 70% and/or 90% submittal, to ensure that any design changes that may have been made are incorporated into the final tree protection plan. Changes necessary to the tree protection plan will be completed in the DWG drawings and resubmitted to engineer for final plotting. Quantity/Cost estimates will be finalized and forwarded to engineer for inclusion in project. We will need 7-10 days to schedule and complete the Final Evaluation and Plan.

Fee for Final Evaluation/Plan
6.0 hours @ \$140.00/hour.....\$840.00

Drafting AutoCAD (DWG) files of Tree Preservation Plan

We do have AutoCAD capabilities and will provide a CAD drawn document. We will need the electronic files of proposed construction in DWG format. We will use the project title block and insert plan drawings at a 1:40 scale, double banked on each sheet, similar to most traffic control plans. This format typically allows us to fit approximately 1,200-1,500 l.f. per plan sheet, which would give us 1 sheet on this project. A sheet with tree protection details will also be included for a total of 2 sheets. The drawings will be emailed or uploaded to your one drive so that you may plot the files as you need them. CAD drafting will be completed in conjunction with the Preliminary and Final Plans. No additional time required.

Fee for Drafting DWG files of the Tree Preservation Plan
6.0 hours @ \$60.00/hour.....\$360.00

Total CAD drawn Tree Protection Plan Fees.....\$3,020.00

During Construction Consulting Services

We can be available during the construction phase of the project should any issues arise that may impact tree protection. We propose providing services on an as needed bases, with a not to exceed limit. This will allow the City to utilize our services as little or as much as is deemed appropriate. We propose the following fee schedule:

Urban Forestry Consultant..... \$140.00/hour
Mileage..... \$0.60/mile

Total Not to Exceed Fee for During Construction Consulting.....\$1,000.00

We have utilized the services contained in this proposal on similar projects for The City of West University Place Infrastructure Replacement Program, City of Houston Neighborhood Street Reconstruction Program, City of Houston Surface Water Transmission Program, City of Missouri City Street Reconstruction, City of Friendswood Street Reconstruction, City of Piney Point Street Reconstruction, City of Baytown Street Reconstruction, and numerous City of Houston waterline and sewer projects in the past. It is our goal to provide you the most effective, efficient, and value-added services we can provide. We are willing to provide services in whatever capacity you deem appropriate.

If this proposal meets with your approval and you would like to retain our services, please forward your standard agreement or a notice to proceed, and we will schedule the work as soon as we receive the plan and profile sheets. We greatly appreciate the opportunity to present this proposal and look forward to working with you on this project. If you have any questions or would like to make any changes, please do not hesitate to call me or Craig at 281-391-0022.

Respectfully submitted,



Sarah Koehl
President