



September 16, 2022

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

Re: Proposal for Engineering Services for Wirt Road Safety Project, Revision 01

Dear Mayor and City Council Members:

HDR Engineering, Inc. (HDR) is pleased to submit this revised 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**

Wirt Road was originally a gravel access road to some small farms along Spring Branch Creek in the 1940's. In the 1950's residential development along what is now Old Katy Road turned into a two (2) lane asphalt track leading to thinly populated residential neighborhoods. This quiet situation existed through the 60's and 70's. In the 1980's the bridge over Buffalo Bayou opened access from the Southwest Freeway to the Katy Freeway and Wirt Road was widened into a four (4) lane boulevard.

Today, it is a major north/south artery in the Houston traffic pattern and carries a traffic load far in excess of its planned capacity in 1984. The Wirt Road Safety Project seeks to improve the safety of pedestrians by completing the sidewalk along the west side of Wirt Road between Westview Drive and the Harris County Park at the northwest corner of the intersection of I-10 and Wirt Road.

The City has reached out to Harris County Precinct 3 to request assistance on this Project. As a result of these initial meetings, Harris County Precinct 3 has committed to fund and oversee the construction of the proposed sidewalk improvements if the City of Hilshire Village designs these improvements and obtain approvals and permits from the City of Houston (COH) accordingly, since Wirt Road is within COH right-of-way. The City is coordinating and requesting an Interlocal Agreement (ILA) from HC Precinct 3 to formalize this commitment.

Likewise, the City has also reached out to the COH to request assistance on this Project. Initial discussions revolved around funding participation for additional Mobility Improvements such as left turn holding lane expansions/additions and a new traffic signal to improve the safety of pedestrians and motorists along Wirt Road. However, the City has decided not to pursue the Mobility Improvements at this time and the COH is unable to cost share the engineering design services associated with the proposed sidewalk improvements. Since the work will take place in COH right-of-way, a separate ILA with the COH will be required to outline all parties responsibilities and contributions.

The Preliminary Opinion of Probable Construction Cost (OPCC) is \$383,840 (See Exhibit A).

## **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 City of Houston (COH) stormwater, water and sanitary sewer lines within project area.
- 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.
- Perform field reconnaissance of the project area to obtain information on existing features, general deterioration and condition, and other information that could impact construction of proposed sidewalks and wheelchair ramps.
- Prepare Drawings (Plan View only, double banked) for the proposed sidewalk and wheelchair ramp improvements, including necessary driveway and culvert adjustments. Proposed 5-ft wide sidewalk and wheelchair improvements will be designed in accordance with the COH Infrastructure Design Manual, and Texas Accessibility Standards (TAS)/Americans with Disabilities Act (ADA).
- Prepare construction drawings and specifications for the project based on planned sidewalk and wheelchair ramp improvements.
- 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 100%/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.
- Perform supplemental topographical survey services for each intersecting streets to Wirt Road, as may be required by the COH for crosswalk locations.

**2. Geotechnical Investigation**

- No geotechnical investigation services are anticipated for the Wirt Road Safety Project proposed sidewalk 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 area.

**4. Traffic Control Plan**

- Preparation of traffic control plans and specifications, including construction sequence, and traffic control 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. COH Permitting**

- Coordination and submittal of Permit Plans for COH review, approval and permitting. Budget includes estimated fees for COH review and permitting.

**7. TDLR TAS/ADA Permitting**

- Coordination and submittal of Permit Plans for Texas Department of Licensing and Regulation (TDLR) review, approval and permitting. Budget includes estimated fees for TDLR review, permitting and inspections.

**8. Miscellaneous Expenses**

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

## **II. BIDDING PHASE SERVICES (NOT APPLICABLE)**

### **A. Basic Services**

#### **1. Bidding Services:**

- Harris County Precinct 3 will be funding the construction and assigning one of their On-Call Contractors to perform this Project, therefore, no Bidding Services will be provided by HDR under this project

## **III. LIMITED CONSTRUCTION PHASE SERVICES**

### **A. Basic Services**

#### **1. Construction Administration:**

- Harris County Precinct 3 will oversee construction of the project; therefore, Limited Construction Phase Services will be provided by HDR under this project.
- Attend a pre-construction conference for the project.
- Attend monthly construction progress meetings.
- 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 based on HC Precinct 3 Inspector reports, 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.
- 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.

- 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.

**B. Special/Additional Services**

**1. Construction Observation Services (NOT APPLICABLE):**

- Harris County Precinct 3 will oversee construction of the Project; therefore, no Construction Observation Services will be provided by HDR under this project.

**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 and limited construction phase services of this project (refer to Exhibit B – Level of Effort for Wirt Road Safety Project).

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 B)	=	\$24,489
b) Bidding Phase Services – Lump Sum (NOT APPLICABLE) Level of Effort (See Exhibit B)	=	\$0
c) Limited Construction Administration – Lump Sum Level of Effort (See Exhibit B)	=	<u>\$6,130</u>
<b>Total – Basic Services</b>	=	<b>\$30,619</b>

**Design & Bidding Phase Additional Services:**

a) Topographical Survey – Subcontract Cost (See Exhibit B) - \$10,535 + 10%	=	\$11,589
b) **Supplemental Topographic Survey (14 Street Intersections) – Subcontract Cost (See Exhibit B) - \$5,700 + 10%	=	\$6,270
c) **Supplemental Design Services (14 Street Intersections) – Lump Sum/Intersection Level of Effort (See Exhibit B)(\$1,000/Street Intersection)	=	\$14,000
d) Geotechnical Investigation – (NOT APPLICABLE) Subcontract Cost (See Exhibit B) - \$0 + 10%	=	\$0
e) Tree Protection Plan – Subcontract Cost (See Exhibit B) - \$7,220 + 10%	=	\$9,048
f) Traffic Control Plan – Lump Sum Level of Effort (See Exhibit B)	=	\$4,102
g) Storm Water Pollution Prevention Plan – Lump Sum Level of Effort (See Exhibit B)	=	\$2,736
h) *COH Permitting – Hourly Level of Effort (See Exhibit B)	=	\$5,346
i) *TDLR TAS/ADA – Hourly Level of Effort (See Exhibit B)	=	\$3,346
j) *Miscellaneous Expenses (Reproduction, Travel & Courier Services) – Subcontractor Cost (See Exhibit B) – Cost plus 10%	=	<u>\$1,000</u>
<b>Total – Design &amp; Bidding Additional Services</b>	=	<b>\$57,435</b>

**Limited Construction Phase Additional Services:**

a) *Construction Observation – (NOT APPLICABLE) Hourly (Based on average 40 hours/week)(See Exhibit B)	=	\$0
b) Record Drawings – Lump Sum Level of Effort (See Exhibit B)	=	\$831
c) * Miscellaneous Expenses (Reproduction, Travel & Courier Services) – Subcontractor Cost (See Exhibit B) – Cost plus 10%	=	\$500
<b>Total – Limited Construction Additional Services</b>	=	<b>\$1,331</b>

**Grand Total** = **\$89,385**

- \* 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.
- \*\* Supplemental Topographic Survey and Supplemental Design Services associated with Street Intersections will be performed on an as needed basis if required by the COH during the review and permitting process for intersecting streets requiring wheelchair ramps on both sides of Wirt Road for pedestrian crosswalk.

The anticipated construction duration required for the project is estimated to be 120 calendar days. 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 2.99 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 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 C. Weston  
Area Manager

cc: Files (10336207)

Attachments:

1. Exhibit A – Preliminary Opinion of Probable Construction Cost (OPCC)
2. Exhibit B – Level of Effort (LOE) for Wirt Road Safety Project
3. Landtech Survey Proposal dated September 15, 2022
4. C.N. Koehl Urban Forestry Proposal dated September 14, 2022

Accepted by City of Hilshire Village this \_\_\_\_\_ day of \_\_\_\_\_, 2022

By \_\_\_\_\_  
Name and Title



WIRT ROAD SAFETY PROJECT  
CITY OF HILSHIRE VILLAGE

EXHIBIT A

PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST (OPCC)

Item	Item Description	Unit	Quantity	Unit Price	Cost
<b>Sidewalk Items:</b>					
1	Traffic Control, complete in place, the sum of:	LS	1	\$18,000.00	\$18,000.00
2	SWPPP Plan, complete in place, the sum of:	LS	1	\$8,000.00	\$8,000.00
3	5-ft wide, 4" thick, reinforced concrete sidewalk, complete in place, the sum of:	SF	15,750	\$10.00	\$157,500.00
4	Remove and replace 6" concrete driveway	S.Y	500	\$130.00	\$65,000.00
5	Curb ramp with detectable warning pavers, in conformance with ADA requirements, complete in place, the sum of:	EA	13	\$2,500.00	\$32,500.00
6	12" wide solid Type I reflective pavement markers (thermoplastic), complete in place, the sum of:	L.F.	260	\$10.00	\$2,600.00
7	Remove, store, and reset existing traffic sign, complete in place, the sum of:	EA.	15	\$500.00	\$7,500.00
8	Remove, salvage, and reinstall post mailbox, complete in place, the sum of:	EA.	2	\$600.00	\$1,200.00
9	18-inch RCP culvert, complete in place, the sum of:	LF	24	\$90.00	\$2,160.00
10	Adjust existing valve box, meter box, or cleanout to be flush with top of proposed pavement or finished grade, complete in place, the sum of:	E.A.	5	\$350.00	\$1,750.00
11	Adjust existing manhole/inlet to be flush with top of proposed pavement or finished grade, complete in place, the sum of:	E.A.	1	\$750.00	\$750.00
<b>Base Bid Items Total:</b>					<b>\$296,960.00</b>
<b>Supplemental Items:</b>					
12	Cement Stabilized Sand, complete in place, the sum of:	CY	40	\$45.00	\$1,800.00
13	Bank Sand, complete in place, the sum of:	CY	40	\$20.00	\$800.00
<b>Supplemental Items Total:</b>					<b>\$2,600.00</b>
<b>Tree Protection Items:</b>					
14	Remove tree 3"-11.99", complete in place, the sum of:	EA.	4	\$500.00	\$2,000.00
15	Remove tree 12"-23.99", complete in place, the sum of:	EA.	4	\$1,000.00	\$4,000.00
16	Plant 2" tree with 15 gallon container, complete in place, the sum of:	EA.	4	\$500.00	\$2,000.00
17	Plant 4" tree with 65 gallon container, complete in place, the sum of:	EA.	4	\$1,200.00	\$4,800.00
18	Clearance prune, complete in place, the sum of:	EA.	20	\$100.00	\$2,000.00
19	Tree protection fence, complete in place, the sum of:	L.F.	250	\$10.00	\$2,500.00
20	Root pruning trench, complete in place, the sum of:	L.F.	200	\$10.00	\$2,000.00
21	Remove existing flower bed/garden bed, complete in place, the sum of:	EA.	2	\$500.00	\$1,000.00
<b>Tree Protection Items Total:</b>					<b>\$20,300.00</b>
Sidewalk Items Total:					\$296,960.00
Supplemental Items Total:					\$2,600.00
Tree Protection Items Total:					\$20,300.00
Total Construction Cost:					\$319,860.00
Contingency (20%):					\$63,972.00
<b>OPINION OF PROBABLE CONSTRUCTION COST:</b>					<b>\$383,840.00</b>

**CITY OF HILSHIRE VILLAGE  
EXHIBIT B - LEVEL OF EFFORT (LOE) FOR WIRT ROAD SAFETY PROJECT**

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	\$120	\$90	\$65	\$45	\$58	\$47	\$30	\$58	\$38							
	Raw Salary Multiplier	2.99	2.99	2.99	2.99	2.99	2.99	2.99	3.05	3.05							
<b>I</b>	<b>Phase II - Final Design :</b>																
<b>A</b>	<b>Project Management and Document Submission</b>																
	1. Data Collection		1.0		2.0						3.0	\$538					\$538
	2. Geotechnical Investigation										0.0			\$0			\$0
	3. Site / Coordination / Workshop Meetings		2.0		2.0						4.0	\$807					\$807
	4. Progress Submittals QA/QC (70% & 100%/Mylars)	2.0	2.0						2.0		6.0	\$1,610					\$1,610
	5. Specifications, Preparation & Review		1.0		2.0			4.0			7.0	\$897					\$897
	6. Construction Cost Estimate, Preparation & Review		1.0		2.0			1.0			4.0	\$628					\$628
	7. Interagency Coordination & Private Utility Signatures		1.0		4.0			1.0			6.0	\$897					\$897
	8. COH Permitting		1.0		8.0						9.0		\$1,346			\$4,000	\$5,346
	9. TDLR TAS/ADA Permitting		1.0		8.0						9.0		\$1,346			\$2,000	\$3,346
	10. Misc. Expenses (Reproduction, Travel & Courier Services)										0.0		\$0			\$1,000	\$1,000
	<b>Subtotal Project Management &amp; Document Submission</b>	<b>2.0</b>	<b>10.0</b>	<b>0.0</b>	<b>28.0</b>	<b>0.0</b>	<b>0.0</b>	<b>6.0</b>	<b>2.0</b>	<b>0.0</b>	<b>48.0</b>	<b>\$5,377</b>	<b>\$2,691</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,000</b>	<b>\$15,068</b>
<b>B</b>	<b>Drawings</b>																
	G-1 Cover Sheet			1.0	1.0		4.0				6.0	\$891					\$891
	G-2 General Notes / Legend & Abbreviations			1.0	1.0		4.0				6.0	\$891					\$891
	G-3 Overall Layout Plan (1"=60' / Double Bank)		1.0	1.0	1.0		4.0				7.0	\$1,160					\$1,160
	S-1 Survey & Survey Controls										0.0				\$11,589		\$11,589
	S-1A Supplemental Survey (Street Intersections)										0.0				\$6,270		\$6,270
	P-1 Plan 1"=20' (Wirt 1) Double Bank		1.0	1.0	4.0	2.0	16.0				24.0	\$3,597					\$3,597
	P-2 Plan 1"=20' (Wirt 2) Double Bank		1.0	1.0	4.0	2.0	16.0				24.0	\$3,597					\$3,597
	P-3 Plan 1"=20' (Wirt 3) Double Bank		1.0	1.0	4.0	2.0	16.0				24.0	\$3,597					\$3,597
	P-4 Plan 1"=20' (Wirt 4) Double Bank		1.0	1.0	4.0	2.0	16.0				24.0	\$3,597					\$3,597
	P-1A-4A Supplemental Plan Design (Wirt Street Intersections)		4.0	8.0	24.0	16.0	32.0				84.0		\$13,132			\$868	\$14,000
	SWP-1 SWPPP (1"=60' / Double Bank)		1.0	1.0	4.0		6.0				12.0		\$1,845				\$1,845
	SWP-2 SWPPP Details 1 (NTS)			1.0	1.0		4.0				6.0		\$891				\$891
	TCP-1 Construction Sequence Plan			1.0	2.0		4.0				7.0		\$1,026				\$1,026
	TCP-2 Traffic Control Plans			1.0	2.0		4.0				7.0		\$1,026				\$1,026
	TCP-3 Typical Traffic Control Intersection Details			1.0	2.0		4.0				7.0		\$1,026				\$1,026
	TCP-4 Typical Traffic Control Details			1.0	2.0		4.0				7.0		\$1,026				\$1,026
	D-1 Paving Details			1.0	1.0		4.0				6.0	\$891					\$891
	D-2 Storm Sewer Details			1.0	1.0		4.0				6.0	\$891					\$891
	TP-1 thru TP-3 Tree Protection Plans & Details										0.0				\$9,048		\$9,048
	<b>Subtotal Drawings</b>	<b>0.0</b>	<b>10.0</b>	<b>23.0</b>	<b>58.0</b>	<b>24.0</b>	<b>142.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>257.0</b>	<b>\$19,112</b>	<b>\$19,970</b>	<b>\$0</b>	<b>\$26,906</b>	<b>\$868</b>	<b>\$66,856</b>
<b>C</b>	<b>Bidding Phase (Not Applicable)</b>																
	1. Attend Pre-Bid Meeting										0.0	\$0					\$0
	2. Prepare & Issue Addenda										0.0	\$0					\$0
	3. Respond to Bidder Questions										0.0	\$0					\$0
	4. Bid Evaluation / Bid Tabulation										0.0	\$0					\$0
	5. Recommendation of Award										0.0	\$0					\$0
	6. Construction Contract Preparation										0.0	\$0					\$0
	<b>Subtotal Bidding Phase</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>II</b>	<b>Phase III - Limited Construction Phase Services:</b>																
	1. Attend Pre-Construction Meeting		1.0								1.0	\$269					\$269
	2. Attend Scheduled Construction Progress Meetings		4.0								4.0	\$1,076					\$1,076
	3. Submittals			2.0	4.0						6.0	\$927					\$927

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	\$120	\$90	\$65	\$45	\$58	\$47	\$30	\$58	\$38							
	Raw Salary Multiplier	2.99	2.99	2.99	2.99	2.99	2.99	2.99	3.05	3.05							
	4. RFI's/Change Orders		1.0		2.0						3.0	\$538					\$538
	5. Review Contractor Monthly Pay Estimates		2.0		4.0						6.0	\$1,076					\$1,076
	6. Substantial/Final Completion Walk-Thru/Punch Lists		2.0		4.0						6.0	\$1,076					\$1,076
	7. As-Built Drawings		1.0				4.0				5.0		\$831				\$831
	8. Project Closeout		1.0		4.0			4.0			9.0	\$1,166					\$1,166
	9. Construction Observation (Not Applicable)										0.0		\$0				\$0
	10. Misc. Expenses (Reproduction, Travel & Courier Services)										0.0		\$0			\$500	\$500
	<b>Subtotal Phase III - Construction Phase Services</b>	<b>0.0</b>	<b>12.0</b>	<b>2.0</b>	<b>18.0</b>	<b>0.0</b>	<b>4.0</b>	<b>4.0</b>	<b>0.0</b>	<b>0.0</b>	<b>40.0</b>	<b>\$6,130</b>	<b>\$831</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$7,461</b>
<b>SUBTOTAL PHASE II - BASIC SERVICES HOURS</b>		<b>2.0</b>	<b>17.0</b>	<b>17.0</b>	<b>57.0</b>	<b>24.0</b>	<b>116.0</b>	<b>6.0</b>	<b>2.0</b>	<b>0.0</b>	<b>241.0</b>						
<b>SUBTOTAL PHASE II - BASIC SERVICES COST</b>		<b>\$718</b>	<b>\$4,575</b>	<b>\$3,304</b>	<b>\$7,669</b>	<b>\$4,162</b>	<b>\$16,301</b>	<b>\$538</b>	<b>\$354</b>	<b>\$0</b>		<b>\$24,489</b>					<b>\$24,489</b>
<b>SUBTOTAL PHASE II - ADDITIONAL SERVICES HOURS (HDR)</b>		<b>0.0</b>	<b>3.0</b>	<b>6.0</b>	<b>29.0</b>	<b>0.0</b>	<b>26.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>64.0</b>						
<b>SUBTOTAL PHASE II - ADDITIONAL SERVICES COST (HDR)</b>		<b>\$0</b>	<b>\$807</b>	<b>\$1,166</b>	<b>\$3,902</b>	<b>\$0</b>	<b>\$3,654</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>			<b>\$22,661</b>			<b>\$7,868</b>	<b>\$30,529</b>
<b>SUBTOTAL PHASE II - ADDITIONAL SERVICES COST (SUBS)</b>																<b>\$26,906</b>	<b>\$26,906</b>
<b>TOTAL PHASE II - BASIC &amp; ADDITIONAL SERVICES</b>												<b>\$24,489</b>	<b>\$22,661</b>	<b>\$0</b>	<b>\$26,906</b>	<b>\$7,868</b>	<b>\$81,924</b>
<b>SUBTOTAL PHASE III - BASIC SERVICES HOURS</b>		<b>0.0</b>	<b>11.0</b>	<b>2.0</b>	<b>18.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.0</b>	<b>0.0</b>	<b>0.0</b>	<b>35.0</b>						
<b>SUBTOTAL PHASE III - BASIC SERVICES COST</b>		<b>\$0</b>	<b>\$2,960</b>	<b>\$389</b>	<b>\$2,422</b>	<b>\$0</b>	<b>\$0</b>	<b>\$359</b>	<b>\$0</b>	<b>\$0</b>		<b>\$6,130</b>					<b>\$6,130</b>
<b>SUBTOTAL PHASE III - ADDITIONAL SERVICES HOURS (HDR)</b>		<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>5.0</b>						
<b>SUBTOTAL PHASE III - ADDITIONAL SERVICES COST (HDR)</b>		<b>\$0</b>	<b>\$269</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$562</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>			<b>\$831</b>			<b>\$500</b>	<b>\$1,331</b>
<b>SUBTOTAL PHASE III - ADDITIONAL SERVICES COST (SUBS)</b>																<b>\$0</b>	<b>\$0</b>
<b>TOTAL PHASE III - BASIC &amp; ADDITIONAL SERVICES</b>		<b>\$0</b>	<b>\$2,960</b>	<b>\$389</b>	<b>\$2,422</b>	<b>\$0</b>	<b>\$0</b>	<b>\$359</b>	<b>\$0</b>	<b>\$0</b>		<b>\$6,130</b>	<b>\$831</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$7,461</b>
<b>TOTAL PHASES II &amp; III - BASIC AND ADD. SERVICES HOURS</b>		<b>2.0</b>	<b>32.0</b>	<b>25.0</b>	<b>104.0</b>	<b>24.0</b>	<b>146.0</b>	<b>10.0</b>	<b>2.0</b>	<b>0.0</b>	<b>345.0</b>						
<b>TOTAL PHASES II &amp; III - BASIC SERVICES</b>																	<b>\$30,619</b>
<b>TOTAL PHASES II &amp; III - ADDITIONAL SERVICES</b>																	<b>\$58,766</b>
<b>TOTAL PHASES II &amp; III - BASIC AND ADDITIONAL SERVICES</b>																	<b>\$89,385</b>

September 15, 2022

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

RE: Hillshire Village Wirt Road Safety 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 per City of Houston requirement of Wirt Road from the west right of way line to the curb of the south bound lane. Survey of utility and flowline of utilities are excluded. Provide survey control map.

Wirt Road from the west right of way line to the curb of the south bound lane  
 $3,450 \text{ feet} \times \$2.30/\text{feet} = \$7,935.00$

Site Control Monument per City of Houston requirement.  
 $1 \times \$2,600.00 = \$2,600.00$

Optional-

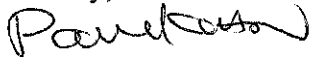
Topographic survey per City of Houston requirement of the full intersection. Survey of utility and flowline of utilities are excluded.

Westview –	\$ 500.00
Bobbitt Lane –	\$ 400.00
Hilshire Grove Lane –	\$ 400.00
Brykerwoods –	\$ 400.00
Wedgewood –	\$ 400.00
Hillshire Villa Drive –	\$ 400.00
Bellewood –	\$ 400.00
Edgeway –	\$ 400.00
Bryonwood Drive –	\$ 400.00
Betty Jane Lane –	\$ 400.00
Hilshire Green Drive –	\$ 400.00
Ridgeley –	\$ 400.00

Hickory Shadows (North) –	\$ 400.00
Hickory Shadows (South) –	<u>\$ 400.00</u>
Total	\$5,700.00

Thank you for the opportunity to submit this proposal.

Sincerely,



Paul Kwan, RPLS.  
President

*S:\Users\Receptionist\Hillshire Village Writ Road Safety Project 09/15/2022*

September 14, 2022

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 Wirt Road Safety Project, Westview Drive to Hickory Shadows Drive.

Dear Mr. Him,

As per your request, C.N. Koehl Urban Forestry, Inc. proposes to provide Urban Forestry Consulting services for design phase of the Hilshire Village Wirt Road Safety Project. Approximately 3,496 linear feet of project right of way will be evaluated for proposed sidewalk/bike lane, and utility construction. Based on your request for proposal, and our most recent experience on past projects working with consulting civil engineers and the City of Houston's Street Tree Ordinance and Urban Forestry department, we propose to provide the following Urban Forestry services:

**Phase II – Services for Final Design**  
**Field Evaluation/Site Visit**

We will walk west side of the Wirt where 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 and compliance with City of Houston Street Tree Ordinance. The field evaluation will be scheduled in conjunction with the 60% submittal Tree Protection Plan development. The data collected will be used in development of the 60%, 90%, and final Tree Protection Plans.

Fee for Field Evaluation/Site Visit  
6.0 hours @ \$125.00/hour.....\$750.00

**Tree Protection Plan for 60% Submittal**

The plan and profile drawings, provided by the engineer, will be reviewed between the 30 and 60 percent 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, anticipated treatment, and mitigation required by ordinance for trees to be removed. Each tree (public and private) adjacent to construction activity will be evaluated to ensure that construction activity will not destroy too much of the structural root system. Should we find any conflicts with proposed construction or any liability issues we will make recommendations for minor design changes or for removal of the tree. Recommendations for minor design changes, such as shifting sidewalk alignment or using alternative walking surface, 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.

Minor design changes may reduce the number of trees needing to be removed and reduce the cost of replacement plantings required by ordinance. The design review and comment process is typically the most value-added aspect of our services, because the changes will preserve trees rather than requiring removal and replacement to comply with Street Tree Ordinance. If our recommendations preserve one 24" diameter ordinance tree the cost savings to the project, in removal and replacement costs, is approximately \$13,000.00.

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 of Houston's Street 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, zero curb cutback, water line augers, etc.). The plan will also include the location, species, and size of replacement tree plantings required to comply with the Street Tree Ordinance. 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 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 tree protection plan will include our logo with a signature line, which we sign at the mylar stage. The tree protection plan and quantity/cost estimate can be included in your 60% submittal so that the City's Urban Forestry staff can review our plan and provide comments prior to the final submittal. We will need 12-15 business days to schedule and complete the field evaluation and preliminary tree protection plan.

Fee for 60% Tree Protection Plan  
18.0 hours @ \$125.00/hour ..... \$2,250.00

Arboriculturally Significant Trees

Per City of Houston Urban Forestry requirement, Arboriculturally Significant Trees will be identified in the Tree Protection Plan. A separate table will be included on Tree Protection Plan Detail sheet that list each Arboriculturally Significant Tree by Tree Number, Location, and Tree Description.

Fee for Arboriculturally Significant Tree List  
2.0 hours @ \$125.00/hour ..... \$250.00

Construction Feasibility/Site Meeting

We will attend site meeting or Zoom meeting with City of Houston Public Works, EOR, and Urban Forestry to review tree protection plan and tree removal/mitigation requirements. We will prepare tree removal summary list and areas of design and tree preservation conflicts to review in the meeting.

Fee for Construction Feasibility/Site Meeting  
6.0 hours @ \$125.00/hour ..... \$750.00

Tree Protection Plan for 90% submittal

We will review the construction design between the 60% and 90% submittal, following comments from the City on recommendations made in the 60% submittal, to ensure that any design changes that may have been made are incorporated into the tree protection plan. Changes

necessary to the tree protection plan will be completed in the DWG drawings and resubmitted to engineer for submittal. Quantity/Cost estimates will be updated and forwarded to engineer. We will need 7-10 business days to schedule and complete the 90% Tree Protection Plan.

Fee for 90% Tree Protection Plan  
5.0 hours @ \$125.00/hour.....\$625.00

Tree Protection Plan for Final submittal

We will review the construction design between the 90% and final submittal, following comments from the City on recommendations made in the 90% submittal, to ensure that any design changes that may have been made are incorporated into the tree protection plan. Changes necessary to the tree protection plan will be completed in the DWG drawings and resubmitted to engineer for submittal. Quantity/Cost estimates will be updated and forwarded to engineer. We will provide a signed PDF set of the Tree Protection Plans prior to final submittal. We will need 7-10 business days to schedule and complete the 90% Tree Protection Plan.

Fee for Final Tree Protection Plan  
4.0 hours @ \$125.00/hour.....\$500.00

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. Tree treatment schedule will be included on each sheet which will call out treatments for each specific tree. This format typically allows us to fit approximately 1,200-1,500 l.f. per plan sheet, which would give us 3-4 sheets on this project. Two sheets with project details will also be included, which would give us a total of 5 to 6 sheets. The drawings will be emailed or uploaded to your cloud, 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.

Drafting Services Fee for DWG files of the Tree Preservation Plan  
10.0 hours @ \$60.00/hour.....\$600.00

**Total Final Design Services Fees**

**Urban Forestry Services for development of Tree Protection Plan.....\$5,125.00**  
**Drafting Services Fee for DWG files.....\$600.00**  
**Total Fee for CAD drawn Tree Protection Plan.....\$5,725.00**

**PHASE III – CONSTRUCTION PHASE SERVICES**

We can be available on an as needed basis to respond to RFIs or any tree related issues that may arise during the construction process. We propose providing this service on an hourly basis at our hourly rate of \$125.00/hour.

Proposed Not To Exceed Limit.....**\$2,500.00**



**TOTAL FEES INCLUDED IN THIS PROPOSAL**

**Phase 2        \$5,725.00**  
**Phase 3        \$2,500.00**

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, Houston Storm Water Management Program, City of Missouri City Street Reconstruction, City of Friendswood Street Reconstruction, City of Piney Point Street Reconstruction, City of Sugarland Street Reconstruction, City of Texas City 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 at 281-391-0022.

Respectfully submitted,



Craig Koehl  
Urban Forestry Consultant