



April 25, 2022

City of Keller

Attn: Alonzo Liñán, P.E.

Public Works Director

1100 Bear Creek Pkwy Keller, TX 76248

Re: Master Drainage Plan Phase 3 Fee Proposal

Dear Mr. Liñán,

Thank you for the opportunity to provide you with this proposal for Professional Services. As you know we have completed Phases 1 and 2 of the Master Drainage Plan and are ready to begin Phase 3. The ultimate project task is generally to obtain record information on existing creeks, channels and storm drains throughout the City. We have calculated surface runoff from all contributing areas and we have evaluated the capacity of the existing system. Based on the estimated flooding depths, we will calculate proposed improvements which would allow the system to function within normal operating parameters based on the City's Unified Development Code.

The evaluation and recommendations will be documented in a report book, GIS data and XPSWM models. The goal of this project is to determine which public storm drains are undersized, where and approximately what size public storm drains should be constructed and where if possible, should regional detention be considered. These recommendations will be in the form of a bound report and current models which will allow for future updates as development occurs.

The following is an overview of the final phase along with a proposed contract. We're excited about the opportunity to work with the City on this project and look forward to continuing with the final phase.

Sincerely,

Baird, Hampton & Brown

Kevin B. Miller, P.E.

Senior Associate, Senior Civil Engineer

Enclosure: Scope of Work

Agreement for Engineering Services

CC: Konstantine Bakintas, P.E.

Scope of Work

Phase 3:

Please note, as we have discussed previously, these are detailed analysis based on approximate data. The ground elevations are from 2017 Lidar which is now 5 years old. None of the areas analyzed have actually been surveyed and the "existing" storm drain is based on best available information but it too has not been surveyed. The analysis presented will be based on Standard Engineering practice and is accurate for planning purposes. This phase includes:

- 1. We will create exhibits for the major creeks and channels which will compare existing floodplain based on the current FIRM as well as inundation limits based on 2D analysis of the overall watershed;
- 2. Potential detention areas that could reduce downstream flooding will be highlighted;
- 3. We will calculate the required storm drain size necessary to convey the 100-year runoff according to City Ordinances. Deficiencies in the existing system will be noted as well as upgrades will be identified;
- 4. We will create exhibits for the public storm drain systems, to identify existing pipes and potential upgrades;
- 5. We will provide a bound Master Drainage Plan Report to describe the process used for the Master Drainage Plan evaluation and display the suggested improvements;
- 6. We will provide copies of the models created, along with GIS shape files of the storm drain system, and raster images of the areas of inundation.
- 7. We will meet with City staff to discuss the Master Drainage Plan and address City comments;

We will be available to meet with City Council to provide an overview of the final document. We expect this phase to take approximately 12 months. The fee for this phase is \$224,730.

AGREEMENT FOR ENGINEERING SERVICES

BETWEEN THE CITY of KELLER AND

BAIRD, HAMPTON & BROWN, INC. Engineering & Surveying

I.

This Agreement is executed by and between the City of Keller, a municipal corporation located at 1100 Bear Creek Parkway, Keller, Texas 76248 in Tarrant County, Texas, acting by and through Mark Hafner, its duly authorized City Manager (hereinafter called "CITY"), and Baird, Hampton & Brown, Inc. a Texas corporation, located at 3801 William D. Tate Ave, Suite 500, Grapevine, TX, acting by and through Konstantine Bakintas, PE; its duly authorized Principal (hereinafter called "ENGINEER").

WITNESSETH, that CITY desires professional engineering services in connection with the **Master Drainage Plan**.

NOW, THEREFORE, CITY and ENGINEER, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

II. PROJECT

In this Agreement, the "PROJECT" means Phase 3 of the engineering study and analysis for the **Master Drainage Plan** in accordance with the Public Works Design Criteria. The limits of the PROJECT are **the entire City Limits of the City of Keller**.

III. BASIC AGREEMENT

ENGINEER is an independent contractor and undertakes and agrees to perform professional engineering services in connection with the PROJECT, as stated in the sections to follow. It is understood and agreed that ENGINEER is not and will not by virtue of this contract be deemed to be an agent or employee of CITY and that CITY will not be entitled to direct the performance by ENGINEER's employees or subcontractors of the tasks contemplated by this contract. All engineering services shall be performed with diligence and in accordance with professional standards customarily obtained for such services in the State of Texas. For rendering such services CITY agrees to pay ENGINEER as set forth in Section VIII: "Compensation" and Exhibit F: "Compensation".

IV. SCOPE OF ENGINEER'S SERVICES

ENGINEER shall render the professional services necessary for development of the PROJECT, as detailed in Exhibit A: "Basic Engineering Services", and in accordance with the schedule in Exhibit B: "Project Schedule"; said exhibits being attached hereto and incorporated herein for all purposes. ENGINEER shall be responsible, to the level of competency presently maintained by other practicing professional engineers in the same type of work in the Dallas/Fort Worth Metroplex area, for professional and technical soundness, accuracy, and adequacy of all designs, drawings, specifications, and other work and materials furnished under this Agreement.

V. SPECIAL ENGINEERING SERVICES

The CITY will pay the ENGINEER for Special Engineering Services as indicated in Exhibit C: "Special Engineering Services", attached hereto and made a part of this Agreement.

VI. ADDITIONAL ENGINEERING SERVICES

The CITY will pay the ENGINEER for Additional Engineering Services as indicated in Exhibit D: "Additional Engineering Services", attached hereto and made a part of this Agreement.

VII. CITY PROVIDED INFORMATION/SERVICES

The City will furnish items and perform those services as identified in Exhibit E: "Services to be provided by the City", attached hereto and made a part of this Agreement.

VIII. COMPENSATION

- A. In consideration of the services described herein, CITY shall pay and ENGINEER shall receive compensation in accordance with Exhibit F: "Compensation".
- B. Total payments for the third phase, excluding reimbursable expenses, to ENGINEER by CITY for services shall not exceed <u>Two Hundred Twenty-Four</u> Thousand Seven Hundred Thirty (\$224,730) Dollars.
- C. CITY may authorize additional services to be provided by ENGINEER as mutually agreed upon by the parties. Any authorization for additional services shall be given to ENGINEER by CITY in writing and approved by CITY.

IX. OWNERSHIP OF DOCUMENTS

All completed or partially completed evaluations, reports, surveys, designs, drawings and specifications prepared or developed by ENGINEER under this Agreement, including any original drawings, computer disks, mylars or blue lines, shall become the property of CITY when the Agreement is concluded or terminated, and may be used by CITY in any manner it desires; provided, however, that ENGINEER shall not be liable for the use of such drawings for any project other than the PROJECT described in this Agreement.

X. INDEMNITY

ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS CITY AND ITS OFFICERS, AGENTS, SERVANTS AND EMPLOYEES FROM ANY LIABILITY ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PROPERTY, INCLUDING COURT COSTS AND REASONABLE ATTORNEYS' FEES INCURRED BY CITY, PROXIMATELY CAUSED BY THE NEGLIGENT ACTS OR OMISSIONS OF ENGINEER OR ITS OFFICERS, AGENTS, SERVANTS, CONTRACTORS, OR EMPLOYEES IN THE EXECUTION, OPERATION, OR PERFORMANCE OF THIS AGREEMENT.

Approval by CITY of contract documents shall not constitute or be deemed to be a release of the responsibility and liability of ENGINEER, its officers, agents, employees and subconsultants, for the accuracy and competency of the services performed under this Agreement, including but not limited to evaluations, reports, surveys, designs, working drawings and specifications, and other engineering documents

XI. INSURANCE

For the duration of this Agreement, ENGINEER shall maintain the following minimum public liability and property damage insurance which shall protect ENGINEER, its subcontractors, its subconsultants and CITY from claims for injuries, including accidental death, as well as from claims for property damage which may arise from the performance of work under this Agreement. ENGINEER shall provide a Certificate of Insurance verifying coverage:

- A. Worker's Compensation Insurance
- B. Comprehensive General Liability and Bodily Injury
- C. Comprehensive Automobile Liability
- D. Professional Liability

The Certificate of Insurance shall contain a provision that such insurance cannot be canceled or modified without thirty (30) days prior written notice to CITY.

XII. ARBITRATION

No arbitration arising out of or relating to this Agreement shall occur without both parties' written approval.

XIII. TERMINATION AND SUSPENSION

- A. CITY may terminate this Agreement at any time for convenience or for any cause by a notice in writing to ENGINEER. Either CITY or ENGINEER may terminate this Agreement in the event the other party fails to perform in accordance with the provisions of this Agreement. Upon receipt of such notice, ENGINEER shall immediately discontinue all services and work and the placing of all orders or the entering into contracts for supplies, assistance, facilities, and materials, in connection with the performance of this Agreement and shall proceed to cancel promptly all existing contracts insofar as they are chargeable to this Agreement.
- B. If CITY terminates this Agreement under the foregoing Paragraph A, CITY shall pay ENGINEER a reasonable amount for services performed prior to such termination; the amount paid shall not exceed the amount appropriate for the percentage of work completed.

XIV. SUCCESSORS AND ASSIGNS

CITY and ENGINEER each bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement; except as above, neither CITY nor ENGINEER shall assign, sublet or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of CITY.

XV. AUTHORIZATION, PROGRESS, AND COMPLETION

CITY and ENGINEER agree that the PROJECT is planned to be completed in accordance with the Exhibit A: "Project Schedule" which is attached hereto and made a part hereof. ENGINEER shall employ manpower and other resources and use professional skill and diligence to meet the schedule; however, ENGINEER shall not be responsible for schedule delays resulting from conditions beyond ENGINEER's control. With mutual agreement, CITY and ENGINEER may modify the Project Schedule during the course of the PROJECT and if such modifications affect ENGINEER's compensation, it shall be modified accordingly, subject to City Council approval.

For Additional Engineering Services, the authorization by CITY shall be in writing and shall include the definition of the services to be provided, the schedule for commencing and completing the services and the basis for compensation as agreed upon by CITY and ENGINEER.

XVI. SUBCONTRACTS

ENGINEER shall be entitled, only if approved by CITY, to subcontract a portion of the services to be performed by ENGINEER under this Agreement.

XVII. RIGHT TO AUDIT

ENGINEER agrees that CITY shall, until the expiration of three (3) years after final payment under this Agreement, have access to and the right to examine and photocopy any directly pertinent books, design calculations, quantity take-offs, documents, papers and records of ENGINEER involving transactions relating to this Agreement. ENGINEER agrees that CITY shall have access during normal working hours to all necessary ENGINEER facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. CITY shall give ENGINEER reasonable advance notice of intended audits.

XVIII. EXHIBITS

Both parties agree to the following exhibits and as such, the following exhibits are made a part of this Agreement:

Exhibit "A" Basic Engineering Services
Exhibit "B" Project Schedule
Exhibit "C" Special Engineering Services
Exhibit "D" Additional Engineering Services
Exhibit "E" CITY Provided Information/Services
Exhibit "F" Professional Services Compensation
Exhibit "G" Conflict of Interest Questionnaire

XIX. MISCELLANEOUS

- A. <u>Authorization to Proceed.</u> Signing this Agreement shall be construed as authorization by CITY for ENGINEER to proceed with the work, unless otherwise provided for in the authorization.
- B. <u>Notices.</u> Any notice or correspondence required under this Agreement shall be sent by certified mail, return receipt requested, or by personal delivery and shall be

effective upon receipt, if addressed to the party receiving the notice or correspondence at the following address:

If to ENGINEER:

Baird, Hampton & Brown, Inc. Attn: Konstantine Bakintas 3801 William D. Tate, Suite 500 Grapevine, TX 76051

This Agreement is executed in two (2) counterparts.

If to CITY:

City of Keller Attn: Alonzo Liñán, PE 1100 Bear Creek Parkway Keller, TX 76248

Konstantine Bakintas, PE, Principal

C. <u>Disclosure</u>. By signature of this Agreement, ENGINEER warrants to CITY that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interests, direct or indirect, in property abutting the PROJECT and business relationships with abutting property owners. ENGINEER further warrants that it will make disclosure in writing of any conflicts of interest which develop subsequent to the signing of this Agreement and prior to final payment under this Agreement.

Date:

Attest: City Secretary

Mark Hafner, City Manager

Date:

EXHIBIT A

BASIC ENGINEERING SERVICES FOR MASTER DRAINAGE PLAN – PHASE 3

This phase of the project provides suggested improvements to the City of Keller public storm drain facilities. This project will evaluate the calculations provided in the first two phases and analyze the calculated surface flow to estimate the underground capacity required to reduce surface flooding. This is the third and final phase of the project. This phase will culminate in recommendations for public storm drain improvements in the form a Master Drainage Plan.

The scope of work for BASIC Engineering Services involves calculating excess surface runoff during the 100-year event. At the time of the original agreement there were over 5400 pipes in the City's existing infrastructure. Analysis was expected to be completed using Autodesk Storm or EPASWM. During Phase 2, the model was changed (with the City's approval) to XPSWM. This is a sophisticated software used for 2D Unsteady State modeling of both surface and underground stormwater. The resulting models produced surface inundation maps for the 1, 10 & 100 year events. This phase will evaluate the quantity of runoff from those models that is still above ground. From that analysis we will calculate the additional storm drain pipes required to convey the excess water underground thereby reducing flooding. During this phase we will also highlight any areas where regional detention could help reduce flooding.

I. GENERAL

A. Meetings

- 1. The ENGINEER will meet with the CITY's staff during the analysis process to ensure that all known areas of flooding are evaluated.
- 2. The ENGINEER, if requested, will assist the CITY's staff in a meeting with CITY COUNCIL to brief them on the PROJECT.
- B. Project Management, Administration and Coordination
 - The ENGINEER will establish and maintain PROJECT schedules and budgets, develop monthly progress reports, prepare invoices, and meet with other entities on an as needed basis for the duration of the PROJECT.

2. Supervision of Subconsultants

The ENGINEER will establish a work program and schedule for each subconsultant, if any, at the beginning of each phase/section of the PROJECT. The ENGINEER will be responsible for the coordination, supervision, review and incorporation of work performed by subconsultants.

II. HYDRAULICS

A. Modeling

- Each of the major subbasins includes a hydraulic model to facilitate future updates. Surface runoff was modeled using 2017 Lidar provided by the City. Underground storm drain pipes are based on 2018 GIS data provided by the City. Runoff was calculated during Phase 2. Inlet nodes were added from the GIS data and capacity was based on estimated averages.
- 2. Surface flow not entering the existing underground system will be determined from the model.
- 3. Existing conditions models were created and will be reviewed to provide an understanding of the existing weak points and ascertain the areas most likely overwhelmed.
- 4. Ultimate development models were created and will be reviewed to provide guidance for future storm drain improvements.

Phase 3 is the final phase and will take approximately 12 months.

EXHIBIT B

PROJECT SCHEDULE FOR MASTER DRAINAGE PLAN

PROJECT SCHEDULE

Evaluate ROW Excess	30 wc	orking da	ays	
Identify Upgrades	60	"	"	
Generate Exhibits	70	"	"	
Generate Opinions of Cost	30	"	"	
Report	35	"	"	
Meetings & QA/QC	15	"	"	
Total Project Schedule	240 wc	240 working days		
-	froi	m 05/16	/22 thru	04/26/23

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EXHIBIT C

SPECIAL ENGINEERING SERVICES FOR MASTER DRAINAGE PLAN

There are no SPECIAL Engineering Services anticipated at this time.

EXHIBIT D

ADDITIONAL ENGINEERING SERVICES FOR MASTER DRAINAGE PLAN

- ADDITIONAL Engineering Services, not included in the scope of work, include those services that may result from significant changes in the general scope, extent or character of the PROJECT or its design including, but not limited to, changes in size, complexity, CITY's schedule, character of construction or method of financing; and revising previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond ENGINEER's control.
- II. ADDITIONAL Engineering Services not included in the scope of work, also include assistance to the CITY in connection with bid protests, rebidding or renegotiating contracts for construction, materials, equipment or service, or preparing to serve or serving as a consultant or witness for CITY in any litigation, arbitration or other legal proceeding involving the PROJECT.
- **III.** ADDITIONAL Engineering services in connection with the PROJECT and described above, and including services which are to be furnished by the CITY and services not otherwise provided for in this Agreement, will be provided at the following rates:

Engineering:		Surveying:	
Engineering & Management – Principal/VP	\$ 285.00 /hr.	Engineering & Management – Principal/VP	\$ 285.00 /hr.
Project Management	\$ 190.00 /hr.	Surveying Services – Senior RPLS	\$ 190.00 /hr.
Engineering – Senior PE	\$ 190.00 /hr.	Surveying Services – RPLS	\$ 145.00 /hr.
Landscape Architect	\$ 135.00 /hr.	CAD/Tech. Survey Services – Sr Tech.	\$ 135.00 /hr.
Landscape Architect Intern	\$ 90.00 /hr.	CAD/Tech. Survey Services	\$ 90.00 /hr.
Engineering Services – PE	\$ 135.00 /hr.	Land Surveying Research	\$ 90.00 /hr.
Engineering Services – EIT	\$ 100.00 /hr.	Field Surveying – 1 Person Crew	\$ 175.00 /hr.
Design Services – Senior Designer	\$ 135.00 /hr.	Field Surveying – 2 Person Crew	\$ 205.00 /hr.
Design Services – Designer	\$ 100.00 /hr.	Construction Staking – 2 Person Crew	\$ 225.00 /hr.
CAD / Drafting Services	\$ 70.00 /hr.	GIS Technical Services	\$ 90.00 /hr.
Clerical Services	\$ 65.00 /hr.		

EXHIBIT E

CITY PROVIDED INFORMATION/SERVICES FOR MASTER DRAINAGE PLAN

The CITY will provide the following services to the ENGINEER in the performance of the PROJECT upon request:

- I. Provide any available As-Built plans for existing streets and drainage facilities, if available.
- **II.** Assist the ENGINEER, as necessary, in obtaining any required data and information from Federal Authorities.
- III. Give prompt written notice to ENGINEER whenever CITY observes or otherwise becomes aware of any development that affects the scope or timing of the ENGINEER's services.

EXHIBIT F

COMPENSATION FOR MASTER DRAINAGE PLAN

I. COMPENSATION

For and in consideration of the services to be rendered by the ENGINEER, the CITY shall pay, and the ENGINEER shall receive, the compensation hereinafter set forth for the Study and Analysis representing Phase 3 of the Master Drainage Plan and additionally for Additional Engineering Services. All remittances by CITY of such compensation shall either be mailed or delivered to the ENGINEER's office.

A. Compensation for the Basic Engineering Services (Hydraulic Analysis and Report) shall be a lump sum fee of \$224,730.

Phase 3 shall be the results of the hydraulic analysis of the City wide watershed. Phase 3 will culminate with electronic models along with a written report, Opinion's of Cost and supporting exhibits.

Payment for Phase 3 portion of the Basic Engineering Services shall be due in monthly installments in proportion to that part of the services which have been accomplished. Final payment for services authorized in the Design phase shall be due at the completion of these services.

- B. Compensation for Additional Engineering Services not covered by Basic Engineering Services or Special Engineering Services provided herein shall be as follows:
 - For all of ENGINEER's personnel time applied to the Additional Engineering Services and not itemized above, the following hourly rates shall be used:
 - 2. For all direct non-labor and/or subcontract expense, including mileage, travel and living expenses at invoice or internal office cost times a multiplier of 1.10.

Payments to the ENGINEER for authorized Additional Engineering Services will be due monthly, upon presentation of monthly statement by the ENGINEER for such services.

Engineering:		Surveying:	
Engineering & Management – Principal/VP	\$ 285.00 /hr.	Engineering & Management – Principal/VP	\$ 285.00 /hr.
Project Management	\$ 190.00 /hr.	Surveying Services – Senior RPLS	\$ 190.00 /hr.
Engineering – Senior PE	\$ 190.00 /hr.	Surveying Services – RPLS	\$ 145.00 /hr.
Landscape Architect	\$ 135.00 /hr.	CAD/Tech. Survey Services – Sr Tech.	\$ 135.00 /hr.
Landscape Architect Intern	\$ 90.00 /hr.	CAD/Tech. Survey Services	\$ 90.00 /hr.
Engineering Services – PE	\$ 135.00 /hr.	Land Surveying Research	\$ 90.00 /hr.
Engineering Services – EIT	\$ 100.00 /hr.	Field Surveying – 1 Person Crew	\$ 175.00 /hr.
Design Services – Senior Designer	\$ 135.00 /hr.	Field Surveying – 2 Person Crew	\$ 205.00 /hr.
Design Services – Designer	\$ 100.00 /hr.	Construction Staking – 2 Person Crew	\$ 225.00 /hr.
CAD / Drafting Services	\$ 70.00 /hr.	GIS Technical Services	\$ 90.00 /hr.
Clerical Services	\$ 65.00 /hr.		

II. PAYMENT

Payments to the ENGINEER will be made as follows:

A. Invoice and Time of Payment

Monthly invoices will be issued by the ENGINEER for all work performed under this Agreement, and shall be in proportion to the percent completion of the total work. Invoices will be prepared in a format approved by the CITY; and are due and payable on receipt.

EXHIBIT G

CONFLICT OF INTEREST QUESTIONNAIRE FOR MASTER DRAINAGE PLAN

[Conflict of Interest Questionnaire is on the following 2 pages.]

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

1 0	vendor of other person doing business with local govern	intental entity			
	s questionnaire is being filed in accordance with chapter 176	OFFICE USE ONLY			
	he Local Government Code by a person doing business with governmental entity.	Date Received			
adr bus tha	By law this questionnaire must be filed with the records administrator of the local government not later than the 7 th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.				
176	person commits an offense if the person violates Section 5.006, Local Government Code. An offense under this section Class C misdemeanor.				
	Name of person doing business with local governmental entity. Konstantine Bakintas, PE				
2	Check this box if you are filing an update to a previous filed qu	estionnaire.			
	(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section 176.006(a), Local Government Code, is pending and not later than the 7 th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)				
	Describe each affiliation or business relationship with an employee or contractor of the local governmental entity who makes recommendations to a local government officer of the local governmental entity with respect to expenditure of money.				
	NONE				
	Describe each affiliation or business relationship with a person who is who appoints or employs a local government officer of the local goverr of this questionnaire.				
	NONE				

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

ГΟ	rvei	idor or other person doing business with local gove	arninental entity is	age z			
5	Name of local government officer with whom filer has affiliation or business relationship. (Complete this section only if the answer to A, B, or C is YES.)						
		section, item 5 including subparts A, B, C & D, must be completed fo ition or business relationship. Attach additional pages to this Form		the filer has			
	A.	Is the local government officer named in this section receiving or lithe filer of the questionnaire?	kely to receive taxable in	come from			
		☐ YES ☐ NO					
	B.	Is the filer of the questionnaire receiving or likely to receive taxable local government officer named in this section AND the taxable inceentity?					
		☐ YES ☐ NO					
	C.	Is the filer of this questionnaire affiliated with a corporation or of government officer serves as an officer or director, or holds an own					
		☐ YES ☐ NO					
	D.	Describe each affiliation or business relationship.					
6	Desc	cribe any other affiliation or business relationship that might c	ause a conflict of intere	est.			
	NON	E					
7							
		also Ed Coloral	04/25/22				
		Signature of person doing business with the governmental entity	Date				

Adopted 01/13/2006