

(version 2-20-2018)

This AGREEMENT ("Agreement") is entered by and between **Dannenbaum Engineering Corporation** ("Contractor"), located at **3100 West Alabama, Houston, TX 77098** and **City of League City** ("City"), a municipal corporation, located at 300 W. Walker, League City, Texas 77573 on the date set forth below.

#### Terms:

- 1. **Scope of Services:** Contractor will perform the designated services and/or provided the designated products, as set forth in **Exhibit A**, which is attached and incorporated herein, and which can be generally described as **Dove Meadows & Borden's Gully Detention Pond Project**. If there is a conflict between the terms of this Agreement and Exhibit A, the terms of this Agreement will prevail.
- 2. Term and Termination: This Agreement shall begin on June 10, 2019 and shall terminate on upon completion of project (estimated at 3 years). This City reserves the right to terminate this Agreement for convenience upon seven (7) days-notice to the Contractor. Upon such termination, the City shall pay Contractor, at the rate set out in <u>Exhibit A</u>, for services satisfactorily performed or products satisfactorily provided up through the date of termination. Notwithstanding any provision in this Agreement to the contrary, the City will not be required to pay or reimburse Contractor for any services performed or for expenses incurred by Contractor after the date of the termination notice that could have been avoided or mitigated by Contractor. This Agreement is eligible for NA renewal option(s) with a term of NA year.
- 3. Compensation: Contractor shall be paid for the services, as set forth in **Exhibit A**, attached and incorporated for all purposes. In no event shall the total compensation exceed \$255,500.00 during the term of this Agreement. The City shall pay Contractor in accordance with the Texas Government Code 2251. Contractor must submit invoices for all services, which invoices must include dates of service and details of services provided. Payment for delivery of services rendered shall not be unreasonably withheld or delayed. If the City disapproves any amount submitted for payment by Contractor, the City shall give Contractor specific reasons for disapproval in writing. Upon resolution of any disputed charges, Contractor shall submit an amended invoice covering any remaining charges to the City.
- 4. **Insurance:** The Contractor is required to maintain insurance through the term of this Agreement.

If required by the City, Contractor shall maintain Comprehensive General Liability insurance coverage of \$1,000,000 per occurrence or medical malpractice insurance (whichever applies) throughout the entire term of the Agreement. If at any point during the Agreement, Contractor will enter City property, Contractor shall also maintain the following insurance: (i) Worker's Compensation coverage with statutory limits for the State of Texas, including Employers Liability coverage of \$500,000 per accident; (ii) Commercial Automobile Liability coverage of \$1,000,000 Combined Single Limit; (iii) for engineers and architects only: Professional Liability coverage of \$5,000,000 per occurrence; and (iv) for builders only: Builder's Risk coverage in the amount of the construction cost, including protection against named windstorm and flood. All policies must contain a waiver of subrogation against City. Comprehensive General Liability and Commercial Automobile Liability policies must name the City as Additional Insured. Contractor shall pay all insurance deductibles and deductibles must not exceed \$10,000 unless approved in advance by City. Contractor shall provide City Certificates of Insurance evidencing these insurance requirements prior to the start of work.

- 5. **Independent Contractor:** Contractor is an independent contractor and is not an employee, partner, joint venture, or agent of the City. Contractor understands and agrees that he/she will not be entitled to any benefits generally available to City of League City employees. Contractor shall be responsible for all expenses necessary to carry out the services under this Agreement and shall not be reimbursed by the City for such expenses except as otherwise provided in this Agreement.
- 6. Intellectual Property: This Agreement shall be an Agreement for services and the parties intend and consider any work created as a result of this Agreement, including any and all documentation, images, products or results, to be a work for hire under federal copyright law. Ownership of the work shall belong to and remain the exclusive property of the City. The work may be edited at any time within the City's discretion. If the work would not be considered a work-for-hire under applicable law, Contractor hereby assigns, transfers, and conveys any and all rights, title and interest to City of League City, including without limitation all copyrights, patents, rights of reproduction, rights to ownership, and right to secure registrations, renewals, reissues and extensions thereof. As the sole copyright holder of the work, the City maintains and asserts the rights to use, reproduce, make derivative works from, and/or edit the Work in any form of medium, expression or technology now known or hereafter developed, at any time within the City's discretion. Contractor shall not sell, disclose or obtain any other compensation for the services provided herein. If the work is one to which the provisions of 17 U.S.C. § 106A apply, the Contractor hereby waives and appoints the City to assert on the Contractor's behalf the Contractor's moral rights or any equivalent rights regarding the form or extent of any alteration to the work (including, without limitation, removal or destruction) or the making of any derivative works based on the Work, including, without limitation, photographs, drawings or other visual reproductions of the work, in any medium, for the City's purposes.
- 7. Confidentiality: During the course of the work and/or services to be provided under this Agreement, Contractor may come in contact with confidential information of the City. Contractor agrees to treat as confidential the information or knowledge that becomes known to Contractor during performance of this Agreement and not to use, copy, or disclose such information to any third party unless authorized in writing by the City. This provision does not restrict the disclosure of any information that is required to be disclosed under applicable law. Contractor shall promptly notify the City of any misuse or unauthorized disclosure of its confidential information and upon expiration of this Agreement shall return to the City all confidential information in Contractor's possession or control. Contractor shall further comply with all information security policies of the City that may apply and shall not make any press releases, public statements or advertisement referring to the services provided under this Agreement or the engagement of Contractor without the prior written approval of the City.
- 8. Warranties and Representations: Contractor warrants and agrees that Contractor shall perform the Services and conduct all operations in conformity with all applicable federal, state, and local laws, rules, regulations, and ordinances. For any Service performed on premises owned or controlled by the City, Contractor warrants and agrees that Contractor will perform the Services in compliance with all City Rules, including but not limited to, prohibitions related to tobacco use, alcohol, and other drugs.
- 9. Licenses/Certifications: Contractor represents and warrants that it will obtain and maintain in effect, and pay the cost of all licenses, permits or certifications that may be necessary for Contractor's performance of this Agreement. If Contractor is a business entity, Contractor warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation; and is duly authorized and in good standing to conduct business in the State of Texas, that it has all necessary power and has received all necessary approvals to execute and deliver the Agreement and is authorized to execute this Agreement according to its terms on behalf of Contractor.
- 10. **Performance/Qualifications:** Contractor agrees and represents that Contractor has the personnel, experience, and knowledge necessary to qualify Contractor for the particular duties to be performed under this Agreement. Contractor warrants that all services performed under this Agreement shall be performed consistent with generally prevailing professional or industry standards.

- 11. **Conflict of Interest:** Contractor warrants, represents, and agrees that Contractor presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of the Services hereunder. Contractor further warrants and affirms that no relationship or affiliation exists between Contractor and the City that could be construed as a conflict of interest with regard to this Agreement.
- CONTRACTOR 12. INDEMNIFICATION: SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE CITY, AND EACH OF ITS DIRECTORS, OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS. PROCEEDINGS, COSTS, DAMAGES AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND REASONABLE LITIGATION COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF CONTRACTOR OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF CONTRACTOR IN THE EXECUTION OR PERFORMANCE OF THIS CONTRACT, TO THE EXTENT THE CLAIM ARISES FROM NEGLIGENCE, WILLFUL ACT, BREACH OF CONTRACT OR VIOLATION OF LAW.
- 13. **Force Majeure:** Neither the City nor Contractor shall be liable for any delay in the performance of this Agreement, nor for any other breach, nor for any loss or damage arising from uncontrollable forces such as fire, theft, storm, war, or any other force majeure that could not have been reasonably avoided by exercise of due diligence.
- 14. **Notices:** Any notice given under this contract by either party to the other may be affected either by personal delivery in writing or by mail, registered or certified postage prepaid with return receipt requested. Mailed notices shall be addressed to the addresses of the parties as they appear in the contract. Notices delivered personally shall be deemed communicated at the time of actual receipt. Mailed notice shall be deemed communicated three (3) days after mailing.
- 15. **Texas Family Code Child Support Certification:** Pursuant to Section 231.006, *Texas Family Code*, Contractor certifies that it is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated, and payment may be withheld if this certification is inaccurate.
- 16. **State Auditor:** Contractor understands that acceptance of funds under the Agreement constitutes acceptance of the authority of the Texas State Auditor's Office, or any successor agency (collectively, "Auditor"), to conduct an audit or investigation in connection with those funds. Contractor agrees to cooperate with the Auditor in the conduct of the audit or investigation, including without limitation providing all records requested. Contractor will include this provision in all contracts with permitted subcontractors.
- 17. **Jurisdiction:** Any disputes under this Agreement shall be brought in a court of competent jurisdiction in Galveston, Texas and governed by Texas law.
- 18. **Alternative Dispute Resolution:** To the extent that Chapter 2260, Texas Government Code, is applicable to this Contract and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 and the related rules adopted by the Texas Attorney General Pursuant to Chapter 2260, shall be used by the City and the Contractor to attempt to resolve any claim for breach of contract made

by Contractor that cannot be resolved in the ordinary course of business. The Director of Finance of the City shall examine Contractor's claim and any counterclaim and negotiate with Contractor in an effort to resolve such claims. The parties hereto specifically agree that (i) neither the occurrence of an event giving rise to a breach of contract claim nor the pendency of a claim constitute grounds for the suspension of performance by Contractor, (ii) neither the issuance of this Contract by the City nor any other conduct, action or inaction of any representative of the City relating to this contract constitutes or is intended to constitute a waiver of the City's or the state's sovereign immunity to suit; and (iii) the City has not waived its right to seek redress in the courts.

- 19. **Entire Agreement:** This Agreement contains the entire Agreement between the parties and supersedes all prior agreements, arrangements, and understanding, oral or written between the parties relating to this Agreement. This Agreement may not be modified except by mutual written agreement of the parties executed subsequent to this Agreement.
- 20. **Eligibility to Receive Payment:** Contractor certifies that, as a matter of State law, it is not ineligible to receive the Agreement and payments pursuant to the Agreement and acknowledges that the Agreement may be terminated, and payment withheld if this representation is inaccurate.
- 21. Payment of Debt/Delinquency to State: Contractor certifies that it is not indebted to the City of League City and is current on all taxes owed to the City of League City. Contractor agrees that any payments owing to Contractor under the Agreement may be applied directly toward any debt or delinquency that Contractor owes the City of League City regardless of when it arises, until such debt or delinquency is paid in full.
- 22. **Products and Materials Produced in Texas:** If Contractor will provide services under the Agreement, Contractor covenants and agrees that in performing its duties and obligations under the Agreement, it will purchase products and materials produced in Texas when such products and materials are available at a price and delivery time comparable to products and materials produced outside of Texas.
- 23. **Risk of Loss:** If applicable, all work performed by Contractor pursuant to the Agreement will be at Contractor's exclusive risk until final and complete acceptance of the work by City. In the case of any loss or damage to the work prior to City's acceptance, such loss or damage will be Contractor's responsibility.
- 24. **Publicity:** Contractor shall not use City's name, logo or likeness in any press release, marketing materials or other public announcement without receiving City's prior written approval.
- 25. **Legal Construction/Severability:** In the event that any one or more of the provisions contained in this contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision, and this contract shall be construed as if such invalid, illegal or unenforceable provisions had never been contained in it. To this end, the provisions of this contract are declared to be severable. The Parties may mutually agree to renegotiate the contract to cure such illegality/invalidity or unconstitutionality if such may be reasonably accomplished.
- 26. **Limitations:** The Parties are aware that there are constitutional and statutory limitations on the authority of City to enter into certain terms and conditions of the Agreement, including, but not limited to, those terms and conditions relating to liens on City's property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers and limitations of legal rights, remedies, requirements and processes; limitations of periods to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorneys' fees; dispute resolution; indemnities; and confidentiality (collectively, the "Limitations"), and terms and conditions related to the Limitations will not be binding on City except to the extent authorized by the laws and Constitution of the State of Texas.
- 27. **Sovereign Immunity:** Except as otherwise provided by Texas law, neither the execution of the Agreement by City nor any other conduct, action or inaction of any City representative relating to the Agreement is a waiver of sovereign immunity by City.

- 28. Authority: Contractor warrants and represents that Contractor has full power and authority to enter into and perform this Agreement and to make the grant of rights contained herein. The person signing on behalf of the City represents that he/she has authority to sign this Agreement on behalf of City.
- 29. **Non-Waiver:** No covenant or condition of this Agreement may be waived except by written consent of the waiving party. Forbearance or indulgence by one party in any regard whatsoever shall not constitute a waiver of the covenant or condition to be performed by the other party.
- 30. **Prohibition on Boycotting Israel:** Pursuant to Section 2270.002, Texas Government Code, by executing this Agreement Contractor verifies that Contractor: (1) does not boycott Israel; and (2) will not boycott Israel during the term of this Agreement.
- 31. Prohibition Against Business with Iran, Sudan or Foreign Terrorists Organizations: Contractor warrants, covenants, and represents that Contractor is not engaged in business with Iran, Sudan, or any company identified on the list referenced in Section 2252.152, Texas Government Code.

Executed on this day of	, (date to be filled in by City Secretary)
DANNENBAUM ENGINEERING CORE	PORATION - "Contractor"
Click or tap here to enter text.	
CITY OF LEAGUE CITY - "City"	
John Baumgartner – City Manager	-
Attest:	
Diana Stapp, City Secretary	-
Approved as to Form:	
Office of the City Attorney	-

## Exhibit A

## Scope of Services/Description of Products

(20 number of pages, including this page)

Scope of services and fee schedule to the City of League City as noted on attached proposal.

#### DANNENBAUM ENGINEERING CORPORATION

3100 WEST ALABAMA HOUSTON, TEXAS 77098 PO Box 22292 HOUSTON, TEXAS 77227 (713) 520-9570

May 10, 2019

Mr. Christopher Sims, P.E. Director Engineering City of League City 500 W Walker ST League City, TX 77573

RE:

**Dove Meadow Detention Analysis & Design** 

Dear Mr. Sims:

My staff and I appreciate the opportunity to present this proposal to you, and your continued confidence in Dannenbaum Engineering Corporation (DEC). As you know, we have recently completed an analysis on Borden's Gully and Magnolia Bayou. That study reviewed the possibility of expanding the existing detention basins in the Borden's Gully and Magnolia Bayou Watersheds within League City, as well as the option of constructing the Dove Meadow Detention Basin. As you are also aware we are preparing an additional proposal for the possible diversion of Borden's Gully and Magnolia Bayou to Dickinson Bayou. This proposal will use existing data and models being generated by those existing and proposed studies to review the Borden's Gully Watershed and what benefit the Dove Meadow Detention Basin will have on the watershed. Also included in this effort will be an examination of the effects of the existing Hughes Lane and Deitz Road crossings on the watershed.

To undertake the study and design portion of this proposal, we, along with our team members, will undertake the following additional scopes:

- 1. Prepare a boundary survey of the subject Dove Meadow Detention Basin site.
- 2. Assist The City of League City with any survey documents and engineering support if site acquisition is required to go to condemnation.
- 3. Undertake topographic surveys of the detention basin site, Borden's Gully (from Dove Meadows to IH 45 including Hughes Lane and Deitz Road culverts), Dove Meadows street and storm drainage system.
- 4. Prepare a plat of the detention basin site for recordation.
- 5. Contact the Corps of Engineers to determine if any permits are required. This work will require the delineation of waters of the U.S. in the affected reaches in Borden's Gully, the detention basin and park area. Once completed, the work will include meetings with the Corps and processing potential Nationwide Permits 7, 14, 29 or 41, as well as possible 404 Exemption for Maintenance of an Existing channel.
- 6. Present the finding of the hydraulic studies at the potential of two Town Hall meetings, and two Council meetings, as requested. These studies would include:
  - a. The National Oceanic and Atmospheric Administration (NOAA) recently released the Atlas 14 rainfall data. The current 24-hour rainfall for the 100-year storm frequency in Galveston County is approximately 13 inches, the NOAA Atlas 14 is proposing 17 inches for Galveston County. The revised data could potentially raise the base flood elevation (BFE) and increase the special flood hazard area (SFHA) within the project

Page Two City of League City May 10, 2019

area. The Borden's Gully HEC-HMS model will be updated with the new rainfall data. The updated HEC-HMS hydrographs will be used as inputs into the HEC-RAS model. The updated unsteady HEC-RAS model will be run to determine the new existing water surface elevations (WSELs), and floodway and floodplain boundaries with the NOAA Atlas 14 rainfall data.

- b. The proposed Dove Meadows Detention Basin was preliminarily sized and analyzed in the 2018 Magnolia Bayou and Borden's Gully Analysis of Improvements to Existing Detention Areas Study. The pond was modeled as an on-line detention basin with Borden's Gully. DEC will look into the benefits of possibly directing all Dove Meadow development storm sewer flow and addition of an extreme event overflow from Dove Meadow into the proposed detention basin and the potential benefits to Dove Meadow.
- c. The existing Borden's Gully crossings at Hughes Lane and Deitz Road constrict flow. A preliminary simulation was performed assuming flow was not constricted at Hughes Lane and Deitz Road in the 2018 Magnolia Bayou and Borden's Gully Analysis of Improvements to Existing Detention Areas Study. The preliminary results showed a significant water surface elevation (WSEL) reduction by improving the crossings and eliminating the constriction. Using the survey data, DEC will propose the additional culverts and/or upsize the existing crossings to relieve the constriction and lower the WSEL, as well as, potentially lower the bottom elevations of all detention basins, and thus add more storage capacity. Additionally, the design will review the potential of adding some park open space in the bottom of the detention basin. It is expected to observe peak flow impacts downstream, which can hopefully be mitigated in the proposed Dove Meadows Detention Basin.
- d. The City has tasked DEC to study a potential diversion channel from the upstream drainage areas of Borden's Gully to Dickenson Bayou in an effort to potentially alleviate the repetitive flooding this area experiences. DEC will incorporate the proposed Borden's Gully Diversion into this analysis so that the benefits of all proposed projects can be analyzed and documented. However, a hydraulics model will review the benefits if this project is the only project that is undertaken.
- 7. Obtain two soil borings and slope stability analysis.

Attachment A is attached which defines what services are defined as basic services and what services are defined as additional services. Also, Attachment A contains proposed cost information. Pending the results of the above work, it is hopeful that the City will authorize DEC to undertake the design. Basic services as defined as follows of the new detention basin and any improvements to the Borden's Gully channel and downstream culverts. As the cost of construction of this basin will largely be impacted by the location and final placement of excavated material, it would be timely for the City to consider that in their budget process. An estimate of anticipated project construction cost is attached to this proposal in Attachment B. If authorized, we would request that the City use its "Drone" capabilities to video the existing conditions before any work is commenced.

Page Three City of League City May 10, 2019

Our projected budget to undertake the above described scope is:

1.	Hydra	ulic/Hydrology Studies		\$ 35,000	*
2.	Prelim	inary Engineering Report		\$ 30,000	**
3.	To Do	lesign of Dove Meadow Detention We Meadow Storm Sewer Systen We from Dove Meadow to Dete	n; Extreme Event	\$ 60,000	**
4.	SWPP	P Preparation		\$ 5,000	**
5	Biddin	g Phase		\$ 10,000	**
6.	Consti	ruction Phase Services		\$ 10,000	**
7.	Projec	t Observation during Constructi	on	\$ 10,000	*
8.	Consti	ruction Management Services		\$ 30,000	*
9.	Soil Bo	orings of Basin, Not Including Co	nstruction Tests.	\$ 5,500	*
10.	a.	Waters of the U.S. Delineation of Nationwide Permits	n and Processing	\$ 15,000	*
	b.	Processing of Individual Perm	it	\$ 10,000 (addi	itional to 6a)       *
11.	Hughe	ish Bench Mark, Field Surveys o es Road; Dietz Road; Detention E lary Survey; Process Plat throug	Basin Site; Prepare	\$ 30,000	*
12.	Out of	Pocket Expenses		\$ 5,000	*
*	Additi	onal Service	TOTAL	\$255,500	

\*\* Basic Service

Respectfully submitted,

Jack Carter, P.E. Division Manager

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## ATTACHMENT A

## **DOVE MEADOWS DETENTION**

## BASIC AND ADDITIONAL SERVICES

## These would include:

I. Preliminary Engineering – which will include field visits and visits with City Staff, preparation of a preliminary report (30% stage) which would include results of H & H analysis; survey work; geotech work; environmental studies and permit applications to the Corps of Engineers.

Fees for this work would be as follows:

Preliminary Engineering – Basic Service	\$ 30,000
H & H Analysis – Additional Service to Complete Item 6 of Scope	\$ 35,000
Surveying – GeoSurv – Additional Service to Complete Items 1-4 of Scope	\$ 30,000*
Geotech – Terracon – Additional Service Item 7 of Scope	\$ 5,500*
Environmental/Corps – Hydrex – Additional Service Item 5 of Scope	\$ 25,000*
SUBTOTAL	\$125,500

<sup>\*</sup>Scope for additional services are in main proposal

II. Design Phase Services – Plans will be submitted for 60%, 90% and 100% review intervals by the City. The plan set shall include drainage area maps; plan view and cross sections of the proposed detention basin and Borden's Gully Improvements; intake and outfall details; details for connection to the Dove Meadows storm system and extreme event pathway; detail sheets and Storm Water Pollution Prevention Plan; as there are no new roads proposed, we would likely include a traffic control plan other than a routing of trucks to take to get to FM 517; copies of specification; quantities and cost projections will be provided during this phase.

Design Engineering – Basic Service		\$ 60,000
Stormwater Pollution Prevention Plan – Basic	Service	\$ 5,000
	SUBTOTAL	\$ 65,000

III. Bidding Phase - Fees for this phase will be as follows:

Bid Phase should include at a minimum attending pre-bid conference, addressing RFI's, preparing contract amendments, the tabulation of bids, recommendation of award letter, etc.

Bidding Phase – Basic Services		\$	10,000
Printing Service if Required – Additional Service	9	<u>\$</u>	2,500
	CLIDTOTAL	ç	12 500

IV. Construction Phase Services – Fees for this phase will be as follows:

Construction Phase Services should cover pre-construction meetings, review of material submittals, visits to job site to ensure work progress and quality of work is meeting contract documents (5 to 10 hours per week), final inspection and related punch lists, monthly status meetings, producing as-builts, etc.

Construction Phase Services – Basic Services		\$ 10,000
Project Observation of Construction. – Additional Additional Construction – Additional Construct	onal Service	\$ 10,000
Construction Management Services – Addition	nal Service	\$ 30,000
Mileage Allowance – Additional Service		\$ 2,500
	SUBTOTAL	\$ 52,500
	TOTAL	\$255,500

# ATTACHMENT B PROJECTED PROJECT CONSTRUCTION COST

		TOTAL		= \$2,7	712,000
14.	. Stormwater Pollution Prevention Plan	LS		<u>=</u> \$	25,000
13.	. Hydromulch Seeding	10ac.	@ \$3,000/ft.	=\$	30,000
12.	. Dietz Road Culvert	LS		=\$	50,000
11.	. Hughes Road Culvert	LS		=\$	50,000
10.	. Borden's Gully Desilting	2,200 ft.	@ \$15.00/ft.	=\$	33,000
9.	Concrete Pilot Channel	1,600 ft.	@ \$20.00/ft.	=\$	32,000
8.	Backslope Swales	4,000 ft.	@ \$3.00/ft.	=\$	12,000
7.	Backslope Drains	4 ea.	@ \$5,000	=\$	20,000
6.	Outfall Pipe to Borden's Gully	LS		=\$	15,000
5.	Detention Basin Intake Structure from Borden's Gully	LS		=\$	30,000
4.	Connect Existing Dove Meadow Storm Sewer System to Future Detention Basin; Additional Inlets, Storm Sewers within Diversion Point of Dove Meadow (if needed)	LS		=\$	60,000 *
3.	Extreme Event Concrete Swale from Dove Meadow	LS		=\$	30,000 *
2.	Site Clearing/Stripping Including Spreading of Mulched Materials on Detention Basin Surfaces	LS		=\$	75,000
1.	Detention Basin Excavation and Soil Disposal	150,000 cu. yd.	@ \$15 /cu. yd.	= \$ 2,	250,000

<sup>\*</sup> Contingency items if study justifies.

## ATTACHMENT C

## **SCHEDULE**

2019
– August 16, 2019
L6 – September 16, 2019
oer 1 – October 1, 2019
1 – November 1, 2019
per 1 – February 1, 2019
oer 1 – December 15, 2019
er 15 – January 15, 2020
15 – February 15, 2020
y 15 – March 15, 2020
.5 – April 1, 2020
.5 – April 1, 2020 - April 15, 2020
- April 15, 2020
- April 15, 2020 — May 1, 2020

## GEOSURV, LLC REGISTERED PROFESSIONAL LAND SURVEYORS SERVICE AUTHORIZATION AGREEMENT

Dove Meadows Detention/League City & Dickinson, Texas May 1, 2019

This PROFESSIONAL LAND SURVEY SERVICES AUTHORIZATION is subject to the terms and conditions of that certain PROFESSIONAL SERVICES AGREEMENT by and between GEOSURV, L.L.C., and DANNENBAUM ENGINEERING CORPORATION.

## PROPERTY DESCRIPTION:

Perry and Austin Survey Abstract 19 TR 121-2 (+/- 18.521) acres Galveston County, Texas.

#### SCHEDULE:

Services to be initiated following receipt of Notice to Proceed from CLIENT.

#### FEE ESTIMATE:

Boundary Survey (Dove Meadows Detention Basin) Topography (as defined by Project Engineer) Sub-Total	\$ 5,900.00 + tax \$ 9,500.00 \$15,400.00 Tax 472.00
Prepare and process plat through City of League City.	\$ 7,800.00
Total Fee Estimate	\$23,672.00

## SPECIAL INSTRUCTIONS / CIRCUMSTANCES:

This estimate is **not** inclusive of any fees associated with the application or recordation of the preliminary and final plat required by the City of League City and are the responsibility of the CLIENT.

## GEOSURV, LLC REGISTERED PROFESSIONAL LAND SURVEYORS SERVICE AUTHORIZATION AGREEMENT

GEOSURV, LLC A Texas Limited Liability Company By: Dale L. Hardy, President 200 Houston Avenue, Suite B League City, Texas 77573 281-554-7739 dhardy@geosurvllc.com Date: May 1, 2019 Dannenbaum Engineering Corporation By: Jack Carter, P.E. Division Manager 3100 West Alabama Houston, Texas 77098 713-527-6462 jack.carter@dannenbaum.com

Approved this \_\_\_\_ day of \_\_\_\_\_ 2019.

## **Jack Carter**

From:

Clayton Collier <ccollier@hydrex-inc.com>

Sent:

Tuesday, April 30, 2019 7:03 AM

To:

Jack Carter

Subject:

Re: New Project for League City

Yes sir, barring any unforeseen circumstances presented by our friends at the Corps.

Sent from my iPhone

On Apr 30, 2019, at 6:37 AM, Jack Carter < <u>Jack.Carter@dannenbaum.com</u> > wrote:

Clayton, Thanks. Does your \$12,800 include the outlined Nationwide applications?

Sent from my iPad

On Apr 29, 2019, at 3:49 PM, Clayton Collier < ccollier@hydrex-inc.com > wrote:

Jack, here are my initial thoughts.

## Possible Trimming Area north of Dove Meadow Subdivision:

Option A: Lay the south bank back, but keep excavations above the OHWM. Avoid the suspect wetlands area to the south (evident by dark signatures on aerials/google earth). No Permit Required if staying above OHWM and avoiding wetlands.

Option B: NWP 41 for Reshaping Existing Drainage Ditches

#### **Dove Meadow Detention Basin:**

A wetlands delineation will be needed to determine if any wetlands will be impacted. NWP 29 for residential development may be used for impacts up to 0.5 acres. Impacts >0.5 acres will require an Individual Permit.

From a map and lidar review, there looks to be a low potential for wetlands within the proposed detention basin.

## Intake and Outfall Structure:

May be authorized under NWP 7 for Outfall Structures and Associated Intake Structures. Pre-construction notification <u>will be</u> required if any of the intake/outfall is below OHWM.

#### **Culvert Work at Hughes Lane and Deats Road:**

May be authorized under NWP 14 for Linear Transportation. Pre-construction notification is not likely.

# Removal of Accumulated Sedimentation in Borden's Gully from Dove Meadow Det. Basin to I-45 (2800 LF):

Option A: fall under the Section 404 exemptions for "Maintenance of an Existing

Drainage Ditch"

Option B: One-Step Excavation (non-regulated activity)

#### Scope of Work

- 1) Delineation of Waters of the U.S. (includes 10-acre detention pond, trimming area, and OHWM of 2800 LF Borden's Gully): \$6000
- 2) Pre-Application Meeting with USACE: \$1800
- 3) Pre-Construction Notification for NWP: \$5000

I anticipate all three steps above being needed for this project, totaling \$12,800. Should an Individual Permit be needed, I suggest adding another \$10,000 to the budget.

Scope of Work:

Clayton Collier, REM, PWS
Senior Environmental Scientist
Hydrex Environmental
936.568.9451 office
936.554.7358 cell
ccollier@hydrex-inc.com
www.hydrexenvironmental.com

<image002.jpg>

From: Jack Carter [mailto:Jack.Carter@dannenbaum.com]

Sent: Friday, April 26, 2019 9:50 AM

To: Clayton Collier < ccollier@hydrex-inc.com >

Subject: New Project for League City

Clayton, see the attached aerial and proposal to league city. They have approved this. But we need to add costs.. At an absolute minimum, I will need some help to get a nationwide, or individual permit, to build a new detention basin, connect to Borden's gull, and potentially modify some road crossing culverts. For now, can you give me a broad idea of what could be required from your end.

Jack

Jack Carter, P.E. <image003.jpg> 3100 W. Alabama Houston, TX 77098 Office:713-527-6462

Cell: 713-824-8582

jack.carter@dannenbaum.com





Dannenbaum Engineering Corporation 3100 W. Alabama Houston, Texas 77098

Attn: Mr. Jack Carter, P.E.

Re: Cost Estimate for Geotechnical Engineering Services

**Dove Meadow Subdivision Detention Basin** 

Teal Drive and Blue Wing Drive

League City, Texas

Terracon Proposal No. P91195036

Dear Mr. Carter:

Terracon understands we have been selected based on qualifications to submit this document to Dannenbaum Engineering Corporation to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached proposal.

Exhibit A

Project Understanding

Exhibit B

Scope of Services

Exhibit C

Compensation and Project Schedule

Our base fee to perform the scope of services described in this proposal using all-terrain vehicle (ATV) mounted drilling equipment is \$5,100. See Exhibit C for consideration of additional services.

We understand the client will authorize our services by issuing a "Contract for Professional Engineering Services". This contract will be reviewed by our legal department prior to commencement of work.

Sincerely,

Terracon Consultants, Inc.

(Texas Registration No. F-3272)

Rehan Khan, E.I.T.

Staff Geotechnical Engineer

Reham Khom

Bobbie S. Hood, P.E.

Geotechnical Services Manager

Bobbie Sue 1

Dove Meadow Subdivision Detention Basin ■ League City, Texas May 6, 2019 ■ Terracon Proposal No. P91195036



## **EXHIBIT A - PROJECT UNDERSTANDING**

Our scope of work is based on information obtained from email correspondence with the client. Aspects of the project that are undefined or assumed are highlighted as shown below. We request the design team provide input to verify this information prior to our initiation of field exploration activities.

## **Site Location**

ltem	Description
Site location	The project site is located southeast of the intersection of Teal Drive and Blue Wing Drive in League City, Texas.
Frieding improvements and site	At the time of our site visit, the site was vacant with scattered trees and was accessible from the north dead-end of Blue Wing Drive.
Existing improvements and site	We expect the site and exploration locations remain accessible with
access	our ATV-mounted drilling equipment during normal business hours
	at the time of authorization.

## **Planned Construction**

Item	Description
Proposed improvement	A new detention basin approximately 15 acres in size with a maximum depth of 8 feet. The sideslopes of the basin are planned to be either 4H:1V or 5H:1V.

Dove Meadow Subdivision Detention Basin ■ League City, Texas May 6, 2019 ■ Terracon Proposal No. P91195036



## **EXHIBIT B - SCOPE OF SERVICES**

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

## **Field Exploration**

The field exploration program is planned to consist of the following:

Number of Borings	Planned Boring Depth (feet) 1	Planned Location
6	15	Within the proposed basin area.

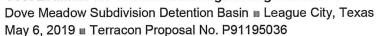
The total drilling footage is planned to be 90 feet.

**Boring Layout and Elevations:** We use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-25 feet. Field measurements from existing site features are also utilized.

Subsurface Exploration Procedures: We advance soil borings with ATV-mounted drilling equipment using continuous flight augers (solid stem). Six samples are obtained in the upper 12 feet of each boring and one sample at a depth of about 13 to 15 feet. Soil samples are generally recovered using open-tube samplers. Hand penetrometer tests are performed on samples of cohesive soils to serve as a general measure of consistency. Granular soils and soils for which good quality open-tube samples could not be recovered are generally sampled by means of the Standard Penetration Test (SPT). This test consists of measuring the number of blows (N) required for a 140-pound hammer free falling 30 inches to drive a standard split-spoon sampler 12 inches into the subsurface material after being seated six inches. This blow count or SPT N-value is used to evaluate the stratum.

The samples are placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. In addition, we observe and record groundwater levels during drilling and sampling.

Our exploration team prepares field boring logs as part of standard drilling operations. Field boring logs also include sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the geotechnical engineer's interpretation and include modifications based on observations and laboratory tests.





**Property Disturbance:** We backfill borings with auger cuttings. Our services do not include repair of the site beyond backfilling our borings. Excess auger cuttings are dispersed in the general vicinity of the borings. Because backfill material often settles below the surface after a period, we recommend borings be checked periodically and backfilled, if necessary. We can provide this service or grout the holes for additional fees, at your request.

## **Laboratory Testing**

The project engineer reviews field data and assigns various laboratory tests to better understand the engineering properties of various soil strata. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practices and professional judgement. Standards noted below include reference to other related standards. Such references are not necessarily applicable to describe the specific test performed.

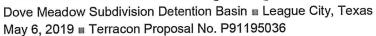
- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture)
  Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D1140 Standard Test Methods for Amount of Materials in Soils Finer than the No. 200 Sieve
- ASTM D2166/D2166M Standard Test Method for Unconfined Compressive Strength of Cohesive Soil

Our laboratory testing program includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

## Safety

Terracon is currently not aware of any environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our scope of services does not include any level of environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings into the subsurface, therefore Terracon complies with local regulations to request a utility location service through Texas 811. We consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.





All private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are not made aware to us. If the owner/client is not able to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating services. Fees associated with these additional services are not included in our current scope of services. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

**Site Access:** By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.

## **Engineering and Project Delivery**

Results of our field and laboratory programs are evaluated by a professional engineer licensed in the State of Texas. The engineer develops a geotechnical site characterization, performs the engineering calculations necessary to evaluate foundation alternatives, and develops appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our *GeoReport* system. Upon initiation we will provide you and your design team the necessary link and password to access the website (if you don't already have one). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to all project documents as they are uploaded to the site, and a collaboration portal. A typical delivery process includes three basic stages:

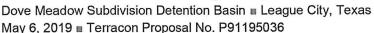
Stage 1: Project Planning

Stage 2: Site Characterization

Stage 3: Geotechnical Engineering

When utilized, a collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we will upload a printable version of our complete final geotechnical engineering report. This includes the professional engineer's seal and signature, which





documents our services. All previous submittals, collaboration, and final report will be maintained in our system indefinitely. This allows future reference and integration into subsequent aspects of our services, as the project goes through final design and construction.

The final Geotechnical Engineering report provides the following:

- Site plan and exploration plan;
- Computer generated boring logs with field and laboratory data;
- Stratification based on visual soil classification;
- Groundwater levels observed in borings during drilling and at 5-minute intervals for 15 minutes; and
- Detention basin construction considerations:
  - Slope stability analysis,
  - o Groundwater control and excavation considerations,
  - o Clay liner (if required), and
  - o Erosion control.

Dove Meadow Subdivision Detention Basin ■ League City, Texas May 6, 2019 ■ Terracon Proposal No. P91195036



## **EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE**

## Compensation

Based upon our understanding of the site, the project as summarized in Exhibit A and our planned scope of services outlined in Exhibit B, our base fee is shown in the following table:

	<b>Fask</b>	Lump Sum Fee
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting &		\$5,100
Reporting		70,

Our scope of services does not include services associated with surveying of boring locations, special equipment for wet ground conditions, or repair of damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services.

Additional consultation (such as attendance on a project conference call, engineering analysis, review of project documents, etc.) requested will be performed on a time-and-materials basis. The fee to provide additional consultation services will be in excess of the above provided fee to complete the geotechnical services and will not be incurred without prior approval of the client.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require scope of work revisions and/or result in higher fees, we will contact you for approval, prior to initiating these services. A supplemental proposal stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the Supplemental Agreement for Services form.

## **Project Schedule**

We developed a schedule to complete the scope of services, based upon our existing availability and understanding of your project schedule. However, this does not account for any delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

GeoReport Stage	Posting Date from Notice to Proceed 1, 2	
Project Planning	4 working days	
Site Characterization	15 working days	
Geotechnical Engineering	20 working days	

Dove Meadow Subdivision Detention Basin ■ League City, Texas May 6, 2019 ■ Terracon Proposal No. P91195036



### GeoReport Stage

## Posting Date from Notice to Proceed 1, 2

- 1. Upon receipt of your notice to proceed we will activate the schedule component of our *GeoReport* website with specific, anticipated working dates for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
- 2. We will maintain a current calendar of activities within our *GeoReport* website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.