

November 11, 2022

*Via Email: howard.redfearn@mansfieldtexas.gov*

Mr. Howard Redfearn  
Environmental Manager  
City of Mansfield  
1200 E. Broad Street  
Mansfield, Texas 76063

**Re: Miscellaneous Drainage Analysis Services  
Westra No. MAN22032**

Dear Mr. Redfearn:

Westra Consultants is pleased to submit this Letter Agreement to provide professional services for the above referenced project. This letter, when countersigned below, shall serve as our agreement and Notice to Proceed. Our project understanding, scope of services, schedule, and fee are listed below.

### **Project Understanding**

The Project includes three (3) drainage concern locations to be analyzed within the City of Mansfield. The drainage analysis locations are described below and shown on **Attachment "B"**.

1. Red Oak Drainage System Analysis: flooding within The Oaks and Shannon Creek subdivisions along the backyards of 907-911 Red Oak Dr and the basement of 910 Willow Creek Rd.
2. Five Oaks Drainage System Analysis: street flooding exceeding the right-of-way of Willow Brook Dr and flowing across an HOA open space lot at the intersection of Willow Brook Dr and Falcon Ridge Dr, located in the Five Oaks Crossing Phase 2 subdivision.
3. Willowstone Estates Detention Analysis: flows overtopping the embankment of Detention Pond #2 located in the Willowstone Estates Section I subdivision, causing flooding in the downstream subdivision.

### **Scope of Services**

Westra shall provide professional engineering services to analyze the existing stormwater conveyance systems and detention ponds summarized in the following tasks:

#### **Task 1 - Red Oak Drainage System Analysis**

1. Perform one site visit with the City of Mansfield to review the existing conditions and locations of the flooding. Meet with residents, as available, during the site visit to obtain observed extents of flooding. It is assumed the site visit will be setup and scheduled by the City with the residents.
2. Obtain and review record drawings, GIS data and any drainage studies provided by the City. The record drawing information for the storm drain systems will be utilized for a traditional 1D drainage analysis (no 2D modeling is included) in accordance with the City's current ISWM Drainage Criteria Manual.
3. Delineate an overall drainage area (no sub-areas) for the analysis point utilizing the City's existing LiDAR topographic contours and the record drawings.
4. Calculate the 25-yr and 100-year peak flows for the drainage area.

5. Obtain the FEMA Flood Insurance Study (FIS) for Hogpen Branch and determine the starting HGL for the storm drain utilizing the FIS and the iSWM Manual and Frequencies for Coincidental Occurrences.
6. Develop a StormCAD model to include approximately 800 feet of 54-inch storm drain main through The Oaks subdivision behind the homes on Red Oak Dr.
7. Analyze the capacity of the existing 54-inch main for the 25-year and 100-year peak flows.
8. Provide a Technical Memo with exhibits and the findings of the analysis to include the capacity of the 54-inch main, and the amount of overland flow behind the lots along Red Oak Dr. The Technical Memo will also include a paragraph describing recommended improvements.

### **Task 2 - Five Oaks Drainage System Analysis**

1. Perform one site visit with the City of Mansfield to review the existing conditions and location of the flooding. Meet with residents, as available, during the site visit to obtain observed extents of flooding. It is assumed the site visit will be setup and scheduled by the City with the residents.
2. Obtain and review record drawings, GIS data and any drainage studies provided by the City. The record drawing information for the storm drain systems and Ladera Mansfield Phase II detention pond will be utilized for a traditional 1D drainage analysis (no 2D modeling is included) in accordance with the City's current iSWM Drainage Criteria Manual.
3. Delineate an overall drainage area to the HOA lot located at the intersection of Willow Brook Dr and Falcon Ridge Dr utilizing the City's existing LiDAR topographic contours and the record drawings. No detention analysis will be performed for the detention pond in the upstream Ladera Mansfield Phase II subdivision, and the design discharges from the pond design plans are assumed to be correct.
4. Calculate the 25-yr and 100-year peak flows for the drainage area.
5. Develop a StormCAD model to include approximately 930 feet of 42-inch, 36-inch and 33-inch storm drain main along Willow Brook Drive, to the outfall behind the HOA lot.
6. Analyze the capacity of the existing system for the 25-year and 100-year peak flows.
7. Provide a Technical Memo with exhibits and the findings of the analysis to include the capacity of the Willow Brook Dr storm system, and the amount of overland flow across the HOA lot. The Technical Memo will also include a paragraph describing recommended improvements.

### **Task 3 - Willowstone Estates Detention Analysis**

1. Perform one site visit with the City of Mansfield to review the existing conditions and location of the pond overtopping. Meet with residents, as available, during the site visit to obtain observed extents of flooding. It is assumed the site visit will be setup and scheduled by the City with the residents.
2. Obtain and review record drawings, GIS data and any drainage studies provided by the City. The record drawing information for the pond inflows will be utilized for a traditional 1D drainage analysis (no 2D modeling is included) in accordance with the City's current iSWM Drainage Criteria Manual.
3. Delineate an overall drainage area (no sub-areas) for the pond utilizing the City's existing LiDAR topographic contours and the record drawings.
4. Evaluate the 100-year peak flows to the pond, detention capacity, discharge flow, and capacity of the emergency overflow spillway. The model will include a detention analysis of the pond and will be based on the surveyed elevations provided by the City and the record drawings for the detention pond.

5. Provide a Technical Memo that summarizes the findings of the detention analysis. The Technical Memo will also include a paragraph describing recommended improvements.

For each Task, Consultant shall prepare a Technical Memo submittal to the City for review and meet with the City to discuss the analysis results and potential improvement options. No concept designs, analysis, or proposed improvement designs are included with this Scope of Services.

Deliverables: - Three technical memos with exhibits, findings, and improvement recommendations.

Meetings: - One (1) kickoff meeting  
 - Three (3) site visits  
 - Three (3) submittal review meetings

### Additional Services

Services not specifically identified in the Scope of Services above shall be considered additional and shall be performed on an individual basis upon authorization by the Client. Compensation for Additional Services shall be based on the hourly rates in effect at the time services are performed or on a pre-negotiated fee. Such services shall include, but not be limited to the following items.

1. Detention analysis of the Ladera Mansfield Phase II pond.
2. Surveying services.
3. Proposed improvement options, analysis, or designs.
4. Additional analysis locations.
5. Design of construction plans.

### Information Provided by Client

1. Right of entry and site visit coordination.
2. Record Drawings
3. GIS data for the Project locations

### Fee, Billing and Schedule

The Consultant will perform the work described in the Scope of Services on a reimbursable basis in accordance with the Standard Rate Schedule located on **Attachment "A"**. The total recommended budget for services and expenses is estimated to be **\$58,500**. Consultant shall notify the Client for authorization prior to exceeding the budgeted amount. Fees will be invoiced monthly based upon hours completed as of the invoice date. Payment is due within 30 days of the receipt of the invoice.

A breakdown of the tasks, fees and expected timeframes for completion are provided in the table below. Each task will be authorized by the Client prior to beginning these services.

Task	Fee	Expected Timeframe to Complete
1. Red Oak Drainage System Analysis	\$14,500	30 calendar days
2. Five Oaks Drainage System Analysis	\$19,800	30 calendar days
3. Willowstone Estates Detention Analysis	\$24,200	45 calendar days
<b>TOTAL</b>	<b>\$58,500</b>	



## Westra Consultants, LLC Standard Provisions

- (1) **Basic Agreement.** Consultant shall provide or furnish the Services set forth in this Agreement. If authorized by Client, or if required because of changes in the Project, Consultant shall furnish services in addition to those set forth in this Agreement as "Additional Services". Unless otherwise agreed to in writing, the Client shall pay the Consultant for any Additional Services an amount based upon the Consultant's then-current hourly rates schedule.
- (2) **Period of Service.** Consultant shall complete its Services in a timely manner after receipt of a fully executed Agreement, any required retainer, and within the specific time period stipulated in the agreement. If no specific time period is stipulated, Consultant shall complete its Services within a reasonable period of time. If, through no fault of Consultant, such periods of time or dates are changed, or the orderly and continuous progress of Consultant's Services is impaired, or Consultant's Services are delayed or suspended, then the time for completion of Consultant's Services, and the rates and amounts of Consultant's compensation, shall be adjusted equitably.
- (3) **Client's Responsibilities.** In addition to other responsibilities described herein or imposed by law, the Client shall:
- (a) Provide all information and criteria as to the Client's requirements, objectives, and expectations for the project including all numerical criteria that are to be met and all standards of development, design, or construction.
  - (b) Provide to the Consultant all previous studies, plans, or other documents pertaining to the project and all new data reasonably necessary in the Consultant's opinion, such as site survey and engineering data, environmental impact assessments or statements, upon all of which the Consultant may rely.
  - (c) Arrange for access to the site and other private or public property as required for the Consultant to provide its services.
  - (d) Review all documents or oral reports presented by the Consultant and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of the Consultant.
  - (e) Furnish approvals and permits from governmental authorities having jurisdiction over the project and approvals and consents from other parties as may be necessary for completion of the Consultant's services.
  - (f) Give prompt written notice to the Consultant whenever the Client becomes aware of any development that affects the scope, timing, or payment of the Consultant's services or any defect or noncompliance in any aspect of the project.
- (4) **Payment Procedures.** Consultant shall be compensated in accordance with the following provisions:
- (a) Consultant shall prepare and submit invoices periodically and in accordance with Consultant's standard invoicing practices. Payment of each invoice shall be due and payable within 30 days of receipt. Any retainer held by the Consultant shall be held for the duration of the project and applied to the final invoice. Interest will be added to accounts not paid within 30 days at the rate of 1.0% per month beginning on the 31<sup>st</sup> day. If the Client fails to make any payment due to the Consultant under this or any other agreement within 30 days, the Consultant may, after giving seven days written notice to Client, suspend Services and withhold deliverables under this Agreement until Consultant has been paid in full all amounts due for Services. Consultant may also initiate legal proceedings, including filing liens, to secure its rights under this Agreement.
  - (b) If Client disputes an invoice, either as to amount or entitlement, then Client shall promptly advise Consultant in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion.
  - (c) If the Consultant initiates legal proceedings, including filing a lien, to collect payment, it may recover, in addition to all amounts due, its reasonable attorneys' fees, reasonable experts' fees, and other expenses related to the proceedings. Such expenses shall include the cost, at the Consultant's normal hourly billing rates, of the time devoted to such proceedings by its employees.
- (5) **Termination.** The obligation to continue performance under this Agreement may be terminated in accordance with the following provisions:
- (a) For cause by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party. Failure to pay Consultant for services is a substantial failure to perform and a basis for termination.
  - (b) For cause by Consultant upon seven days written notice if Client demands that Consultant furnish or perform services contrary to Consultant's responsibilities as a licensed professional; or if the Consultant's Services are delayed for more than 90 days for reasons beyond Consultant's control.
  - (c) For convenience by Client effective upon Consultant's receipt of written notice.
  - (d) In the event of any termination, Consultant will be entitled to invoice Client and to receive full payment for all Services and Additional Services performed in accordance with this Agreement, plus reimbursement of expenses incurred through the effective date of termination in connection with providing the Services and Additional Services.
- (6) **Successors, Assigns, and Beneficiaries.** This Agreement gives no rights or benefits to anyone other than the Client and the Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole benefit of the Client and the Consultant. The Client shall not assign or transfer any rights under or interest in this Agreement, or any claim arising out of the performance of services by Consultant, without the written consent of the Consultant. The Consultant reserves the right to augment its staff with subconsultants as it deems appropriate due to project logistics, schedules, or market conditions. If the Consultant exercises this right, the Consultant will maintain the agreed-upon billing rates for services identified in the contract, regardless of whether the services are provided by in-house employees, contract employees, or independent subconsultants.
- (7) **Use of Documents.** All documents prepared or furnished by Consultant are instruments of service, and Consultant retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Client shall have a limited license to use the documents on the Project, extensions of the Project, and for related uses of the Client, subject to receipt by Consultant of full payment due and owing for all Services and Additional Services relating to preparation of the documents and subject to the following limitations:
- (a) Client acknowledges that such documents are not intended or represented to be suitable for use on the Project unless completed by Consultant, or for use or reuse by Client or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Consultant;
  - (b) any such use or reuse, or any modification of the documents, without written verification, completion, or adaptation by Consultant, as appropriate for the specific purpose intended, will be at Client's sole risk and without liability or legal exposure to Consultant or to its officers, directors, members, partners, agents, employees, and consultants;
  - (c) Client shall indemnify and hold harmless Consultant and its officers, directors, members, partners, agents, employees, and consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the documents without written verification, completion, or adaptation by Consultant; and
  - (d) such limited license to Client shall not create any rights in third parties.
- (8) **Opinions of Cost.** Consultant's opinions (if any) of probable construction cost are to be made on the basis of Consultant's experience, qualifications, and general familiarity with the construction industry. However, because Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids,

or actual construction cost will not vary from opinions of probable construction cost prepared by Consultant. If Client requires greater assurance as to probable construction cost, it shall employ an independent cost estimate. Consultant's services required to bring costs within any limitation established by the Client will be paid for as Additional Services.

(9) **Insurance.** The Consultant carries Workers' Compensation insurance, professional liability insurance, and general liability insurance. If the Client directs the Consultant to obtain increased insurance coverage, the Consultant will take out such additional insurance, if obtainable, at the Client's expense.

(10) **Standard of Care.** The standard of care for all professional engineering and related services performed or furnished by Consultant under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. No warranties, express or implied, are made or intended by the Consultant under this Agreement or otherwise, in connection with any services performed or furnished by Consultant.

(11) **LIMITATION OF LIABILITY.**

(a) In recognition of the relative risks and benefits of the Project to both the Client and the Consultant, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of the Consultant and Consultants officers, directors, partners, employees, shareholders, owners and subconsultants for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert-witness fees and costs, so that the total aggregate liability of the Consultant and Consultants officers, directors, partners, employees, shareholders, owners and subconsultants, shall not exceed the greater of \$250,000 or three times the total compensation received by the Consultant under this Agreement.

(b) Higher limits of liability may be negotiated for additional fee.

(c) Under no circumstances shall the Consultant be liable for extra costs or other consequences due to changed conditions, or for costs related to the failure of contractors to perform work in accordance with the plans and specifications.

(d) This Section is intended solely to limit the remedies available to the Client or those claiming by or through the Client, and nothing in this Section shall require the Client to indemnify the Consultant.

(12) **THIRD-PARTY BENEFICIARIES.** Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Consultant. The Consultant's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against the Consultant because of this Agreement or the performance or nonperformance of services hereunder. The Client and Consultant agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors and other entities involved in this Project to carry out the intent of this provision.

(13) **Mutual Waiver of Consequential Damages.** Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client nor the Consultant, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the Client and the Consultant shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

(14) **Dispute Resolution.** Client and Consultant agree to negotiate all claims and disputes arising out of this agreement in good faith during the 30 days after notice of such claim or dispute. If negotiations are

unsuccessful, then said claim or dispute shall be mediated in accordance with the Construction Industry Mediation Procedures of the American Arbitration Association as a condition precedent to litigation. Any mediation or civil action by Client must be commenced within one year of the accrual of the cause of action asserted but in no event later than allowed by applicable statutes.

(15) **Hazardous Substances and Conditions.** The parties acknowledge that Consultant's Services with respect to hazardous substances and/or conditions shall be strictly limited to providing professional analysis, recommendations, and reporting only when specifically agreed to in the Consultant's scope of services. In no event shall Consultant be a custodian, transporter, handler, arranger, contractor, or remediator with respect to hazardous substances and conditions. If the Consultant or any other party encounters, uncovers, reveals, or otherwise becomes aware of a hazardous substance or condition not contemplated in the scope of services the client shall be notified. Upon notification, the Consultant may, at its option and without liability for consequential or any other damages, suspend performance of Services on the portion of the Project affected until such portion of the Project is no longer affected, or terminate this Agreement for cause if it is not practical to continue providing Services.

(16) **Construction Phase Services.**

(a) If the Consultant's services include the preparation of documents to be used for construction and the Consultant is not retained to make periodic site visits, the Client assumes all responsibility for interpretation of the documents and for construction observation, and the Client waives any claims against the Consultant in any way connected thereto.

(b) If the Consultant is retained to provide construction phase services Consultant shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Consultant have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a Constructor to comply with laws and regulations applicable to such Constructor's furnishing and performing of its work. Furthermore, Consultant shall not be responsible for the acts or omissions of any Constructor and Consultant neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform its work.

(c) The Consultant is not responsible for any duties assigned to the design professional in the construction contract that are not expressly provided for in this Agreement. The Client agrees that each contract with any contractor shall state that the contractor shall be solely responsible for job site safety and for its means and methods; that the contractor shall indemnify the Client and the Consultant for all claims and liability arising out of job site accidents; and that the Client and the Consultant shall be made additional insureds under the contractor's general liability insurance policy.

(17) **Confidentiality.** The Client consents to the use and dissemination by the Consultant of photographs of the project and to the use by the Consultant of facts, data and information obtained by the Consultant in the performance of its services. If, however, any facts, data or information are specifically identified in writing by the Client as confidential, the Consultant shall use reasonable care to maintain the confidentiality of that material.

(18) **Miscellaneous Provisions.** This Agreement is to be governed by the law of the State of Texas. This Agreement (including any expressly incorporated attachments), constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. Except as provided in Section 1, this Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument. Any provision in this Agreement that is unenforceable shall not affect the enforceability of the remaining provisions. The non-enforcement of any provision by either party shall not constitute a waiver of that provision nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

## Attachment "A"

### WESTRA CONSULTANTS, LLC

Standard Fixed Rate Schedule

Effective January 1, 2022, to December 31, 2022\*

<b>Engineering / Technical</b>	<b>Hourly Rate</b>
Principal	\$200
Project Manager	\$170
Professional Engineer	\$150
EIT/Designer	\$130
CAD Technician	\$110
Clerical/Intern	\$90

### **Direct Cost Reimbursables**

1. Reimbursable expenses include general office related expenses performed in-house such as printing, plotting, PDF files, scanning, photocopies, certain clerical expenses, supplies, postage, etc. are included in the standard rates for personnel and will not be billed separately.
2. Subcontracted expenses, travel related expenses, and outsourced expenses such as permits/fees, express mail/shipping, printing/reprographics, or rental of specialized equipment will be billed at the actual rate plus 10%.
3. Mileage will be billed at the standard mileage rate established by the Internal Revenue Service as of the effective date of this contract and subject to annual adjustment.

*\* Rates shown are for calendar year indicated and are subject to change in subsequent years.*



**ATTACHMENT "B"**  
**Mansfield Miscellaneous Drainage Analysis Services - Location Map**

