STATE OF TEXAS § **COUNTY OF COLLIN**

AGREEMENT FOR PROFESSIONAL SERVICES

This agreement ("Agreement") is made by and between the City of Allen, Texas ("City") and Birkhoff, Hendricks & Carter, L.L.P., a Limited Liability Partnership ("Professional") (each a "Party" and collectively the "Parties"), acting by and through their authorized representatives.

RECITALS:

WHEREAS, the City desires to engage the services of the Professional as an independent contractor, and not as an employee, to provide the services described in Exhibit "A" (the "Scope of Services") to assist the City in Wastewater Trunk Sewer System Hydraulic Model Update (the "Project") on the terms and conditions set forth in this Agreement; and

WHEREAS, the Professional desires to render services for the City on the terms and conditions set forth in this Agreement;

NOW THEREFORE, in consideration of the mutual covenants set forth herein, and other valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the Parties agree as follows:

Article I Term

- 1.1 This Agreement shall commence on the last date of execution hereof ("Effective Date") and continue until completion of the services, unless sooner terminated as provided herein.
- 1.2 Either Party may terminate this Agreement by giving thirty (30) days prior written notice to the other Party. In the event of such termination the Professional shall deliver to City all finished and unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by the Professional in connection with this Agreement. Professional shall be entitled to compensation for any services completed to the reasonable satisfaction of the City in accordance with this Agreement prior to such termination.

Article II Scope of Service

2.1 The Professional shall perform the services in connection with the Project as set forth in the Scope of Services. The Professional shall perform the services: (i) with the professional skill and care ordinarily provided by competent engineers or architects, as the case may be, practicing in the same or similar locality and under the same or similar circumstances and

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professional license; and (ii) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect, as the case may be.

- 2.2 The City shall, prior to commencement of services, provide the Professional with the information set forth in the Scope of Services, if any.
- 2.3 The Parties acknowledge and agree that any and all opinions provided by the Professional in connection with the Scope of Services represent the professional judgment of the Professional, in accordance with the standard of care applicable by law to the services performed hereunder.
- 2.4 Upon execution of this Agreement the City has the right to use the Professional's instruments of service, including but not limited to reports, maps, cost estimates, recommendations or other deliverables for the Project, provided that the City substantially performs its obligations, including prompt payment of all sums when due, under this Agreement. The City's employees, agents, contractors and subcontractors may reproduce applicable portions of the instruments of service for use in performing services or construction for the Project. Upon payment of all amounts due Professional hereunder, all deliverables, materials and reports prepared by the Professional in connection with this Agreement shall become the property of the City. The City shall have the right to publish, disclose, distribute and otherwise use such deliverables, materials and reports only for those purposes for which they were intended. Subject to the foregoing, Professional shall, upon completion of the services, or earlier termination, provide the City with the deliverables, drawings, reports, maps, and materials prepared by Professional as set forth in the Scope of Services. Any reproductions shall include 24" x 36" blackline 3mil reproducible mylars of the completed drawings plus a compact disc containing all construction plan sheets in a ".dwg" format and a scanned 24" x 36" black & white "Tiff" images at 400 dpi resolution and in electronic format as requested by the City or as required in the Scope of Services.

Article III Schedule of Work

The Professional agrees to complete the required services in accordance with the Project Schedule outlined in the Scope of Services.

Article IV Compensation and Method of Payment

4.1 Professional will be compensated in accordance with the payment schedule and amounts set forth in the Scope of Services. Unless otherwise provided herein, payment to the Professional shall be monthly based on the Professional's monthly progress report and detailed monthly itemized statement for services that shows the names of the Professional's employees, agents, contractors performing the services, the time worked, the actual services performed, the rates charges for such service, reimbursable expenses, the total amount of fee earned to date, and

the amount due and payable as of the current statement, in a form reasonably acceptable to the City. Monthly statements shall include authorized non-salary expenses with supporting itemized invoices and documentation. The City shall pay such monthly statements within thirty (30) days after receipt and City verification of the services and expenses unless otherwise provided herein. The final payment of the compensation shall be made after satisfactory completion of the services following the City acceptance of the study, report, recommendation or other work set forth in the Scope of Services, and the submittal of "AS BUILT" drawings, or record drawings, as applicable.

- 4.2 Unless otherwise provided in the Scope of Services the Professional shall be responsible for all expenses related to the services provided pursuant to this Agreement including, but not limited to, travel, copying and facsimile charges, telephone, internet and email charges.
- 4.3 The hourly rates set forth in the Scope of Services, if any shall remain in effect during the term of this Agreement. Any changes to established hourly rates shall require the prior written consent of the City.

Article V Devotion of Time; Personnel; and Equipment

- 5.1 The Professional shall devote such time as reasonably necessary for the satisfactory performance of the services under this Agreement. Should the City require additional services not included under this Agreement, the Professional shall make reasonable effort to provide such additional services within the time schedule without decreasing the effectiveness of the performance of services required under this Agreement, and shall be compensated for such additional services on a time and materials basis, in accordance with Professional's standard hourly rate schedule, or as otherwise agreed between the Parties.
- 5.2 To the extent reasonably necessary for the Professional to perform the services under this Agreement, the Professional shall be authorized to engage the services of any agents, assistants, persons, or corporations that the Professional may deem proper to aid or assist in the performance of the services under this Agreement. The Professional shall provide written notice to and obtain written approval from the City prior to engaging services not referenced in the Scope of Services. The cost of such personnel and assistance shall be included as part of the total compensation to be paid Professional hereunder, and shall not otherwise be reimbursed by the City unless otherwise provided herein.
- 5.3 The Professional shall furnish the facilities, equipment and personnel necessary to perform the services required under this Agreement unless otherwise provided herein.
- 5.4 The Professional shall submit monthly progress reports and attend monthly progress meetings scheduled by the City or more frequently as may be required by the City from time to time based upon Project demands. Each progress report shall detail the work accomplished and special problems or delays experienced on the Project during the previous report period, and the planned work activities and special problems or delays anticipated for the next report period.

Article VI Miscellaneous

- 6.1 <u>Entire Agreement</u>. This Agreement constitutes the sole and only agreement between the Parties and supersedes any prior understandings written or oral agreements between the Parties with respect to this subject matter.
- 6.2 <u>Assignment</u>. The Professional may not assign this Agreement without the prior written consent of City. In the event of an assignment by the Professional to which the City has consented, the assignee shall agree in writing with the City to personally assume, perform, and be bound by all the covenants, and obligations contained in this Agreement.
- 6.3 <u>Successors and Assigns</u>. Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the Parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.
- 6.4 <u>Governing Law</u>. The laws of the State of Texas shall govern this Agreement without regard to any conflict of law rules; and venue for any action concerning this Agreement shall be in the State District Court of Collin County, Texas. The Parties agree to submit to the personal and subject matter jurisdiction of said court.
- 6.5 <u>Amendments</u>. This Agreement may be amended by the mutual written agreement of the Parties.
- 6.6 <u>Severability</u>. In the event any one or more of the provisions contained in this Agreement 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 provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.
- 6.7 <u>Independent Contractor</u>. It is understood and agreed by and between the Parties that the Professional, in satisfying the conditions of this Agreement, is acting independently, and that the City assumes no responsibility or liabilities to any third party in connection with these actions. All services to be performed by Professional pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of the City. Professional shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement.
- 6.8 <u>Right-of-Access</u>. The Professional shall not enter onto private property without lawful right-of-access to perform the required surveys, or other necessary investigations. The Professional will take reasonable precautions to minimize damage to the private and public property in the performance of such surveys and investigations. Any right-of-access to public or private property shall be obtained in accordance with the Scope of Services.

6.9 Notice. Any notice required or permitted to be delivered hereunder may be sent by first class mail, courier or by confirmed telefax or facsimile to the address specified below, or to such other Party or address as either Party may designate in writing, and shall be deemed received three (3) days after delivery or on the day actually received if sent by courier or otherwise hand delivered:

If intended for City:

With a copy to:

Peter H. Vargas City Manager City of Allen, Texas 3rd Floor, Allen City Hall 305 Century Parkway Allen, Texas 75013 214.509.4110 - telephone 214.509.4118 - fax

Peter G. Smith City Attorney Nichols, Jackson, Dillard, Hager & Smith, L.L.P. 1800 Ross Tower 500 North Akard Street Dallas, Texas 75201 214.965.9900 - telephone 214.965.0010 - fax

If intended for Consultant:

Attn: John W. Birkhoff, P.E. Managing Partner Birkhoff, Hendricks & Carter, L.L.P. 11910 Greenville Ave., Suite 600 Dallas, Texas 75243 (214) 361-7900 - telephone (214) 461-8390 - fax

6.10 Insurance.

Professional shall during the term hereof maintain in full force and effect the (a) following insurance: (i) a comprehensive general liability policy of insurance for bodily injury, death and property damage including the property of the City, its officers, contractors, agents and employees (collectively referred to as the "City") insuring against all claims, demands or actions relating to the work and services provided by the Professional pursuant to this Agreement with a minimum combined single limit of not less than \$1,000,000.00 per occurrence for injury to persons (including death), and for property damage and \$2,000,000.00 aggregate including products and completed operations coverage of \$1,000,000.00. This policy shall be primary to any policy or policies carried by or available to the City; (ii) policy of automobile liability insurance covering any vehicles owned, non-owned and hired and/or operated by Professional, its officers, agents, and employees, and used in the performance of this Agreement with policy limits of not less than \$1,000,000.00 combined single limit for bodily injury, death and property damage; (iii) statutory

Worker's Compensation Insurance at the statutory limits and Employers Liability covering all of Professional's employees involved in the provision of services under this Agreement with policy limit of not less than \$500,000.00; and (iv) Professional Liability with policy limit of not less than \$2,000,000.00 per claim and \$2,000,000.00 in the aggregate, covering negligent acts, errors and omissions by Professional, its contractors, sub-contractors, consultants and employees in the performance of services pursuant to this Agreement.

- (b) All insurance shall be endorsed to provide the following provisions: (1) name the City, its officers, and employees as additional insureds as to all applicable coverage with the exception of Workers Compensation Insurance and Professional Liability; (2) provide for a waiver of subrogation against the City for injuries, including death, property damage, or any other loss to the extent the same is covered by the proceeds of insurance, except for Professional Liability Insurance. A specific endorsement needs to be added to all policies, with a copy of the endorsement provided to the City that indicates the insurance company will provide to the City at least a thirty (30) day prior written notice for cancellation, non-renewal, and/or material changes of the policy. In the event the companies providing the required insurance are prohibited by law to provide any such specific endorsements, the Consultant shall provide at least thirty (30) days prior written notice to the City of any cancellation, non-renewal and/or material changes to any of the policies of insurance.
- All insurance companies providing the required insurance shall be authorized to (c) transact business in Texas and rated at least "A" by AM Best or other equivalent rating service. All policies must be written on a primary basis, non-contributory with any other insurance coverage and/or self-insurance maintained by the City.
- A certificate of insurance and copies of policy endorsements evidencing the (d) required insurance shall be submitted to the City prior to commencement of services. On every date of renewal of the required insurance policies, the Professional shall cause a certificate of insurance and policy endorsements to be issued evidencing the required insurance herein and delivered to the City. In addition, the Professional shall within ten (10) business days after written request provide the City with certificates of insurance and policy endorsements for the insurance required herein. The delivery of the certificates of insurance and policy endorsements to the City is a condition precedent to the payment of any amounts due to Professional by the City. The failure to provide valid certificates of insurance and policy endorsements shall be deemed a default and/or breach of this Agreement.

6.11 <u>Debarment and Suspension.</u>

- (a) In accordance with 2 CFR section 180.300, the principal of this contract as described in 2 CFR section 180.995 being duly sworn or under penalty of perjury under the laws of the United States, certifies that neither this company nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, the State of Texas or any of its departments or agencies.
- (b) If during the contract period the principal becomes debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation, the principal shall immediately inform the City of Allen.
- (c) For contracts that are financed by Federal or State grants, the principal agrees that this section will be enforced on each of its subcontractors, and will inform the City of Allen of any violations of this section by subcontractors to the contract.
- (d) The certification in this section is a material representation of fact relied upon by the City in entering into this contract.
- 6.12 Indemnification. PROFESSIONAL DOES HEREBY COVENANT AND CONTRACT TO WAIVE ANY AND ALL CLAIMS, RELEASE, INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS CITY COUNCIL, OFFICERS, EMPLOYEES, AND AGENTS, FROM AND AGAINST ALL LIABILITY, CAUSES OF ACTION, CITATIONS, CLAIMS, COSTS, DAMAGES, DEMANDS, EXPENSES, FINES, JUDGMENTS, LOSSES, PENALTIES OR SUITS, CAUSED BY OR RESULTING FROM THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTURAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY THE PROFESSIONAL, ITS AGENT, ITS CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE PROFESSIONAL EXERCISES CONTROL SUBJECT TO THE LIMITATIONS IN TEXAS LOCAL GOVERNMENT CODE § 271.904 AND TEXAS CIVIL PRACTICE AND REMEDIES CODE, § 130.002 (B).

INDEMNIFIED ITEMS SHALL INCLUDE REASONABLE ATTORNEYS' FEES AND COSTS, COURT COSTS, AND SETTLEMENT COSTS IN PROPORTION TO THE PROFESSIONAL'S LIABILITY.

THE PROFESSIONAL'S OBLIGATIONS UNDER THIS SECTION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY PROFESSIONAL UNDER THIS AGREEMENT. THIS PROVISION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

- 6.13 <u>Counterparts</u>. This Agreement may be executed by the Parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the Parties hereto.
- 6.14 <u>Exhibits</u>. The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.
- 6.15 <u>Prohibition of Boycott Israel</u>. Professional verifies that it does not Boycott Israel, and agrees that during the term of this Agreement will not Boycott Israel as that term is defined in Texas Government Code Section 808.001, as amended.

(Signature Page to Follow)

EXECUTED this day of	, 2018.
	City of Allen, Texas
	By:Peter H. Vargas, City Manger
	ATTEST:
	By:Shelley George, City Secretary
APPROVED AS TO FORM:	
By: Peter G. Smith, City Attorney	
EXECUTED this day of	, 2018.
	BIRKHOFF, HENDRICKS & CARTER, L.L.P.
	By: John W. Birkhoff, P.E. Title: Managing Partner

EXHIBIT "A" SCOPE OF SERVICES

The Engineering Services to be provided under this Agreement shall include the following:

PART 1: WASTEWATER MODEL UPDATE

- A. Obtain from the City:
 - Updated ArcGIS files for wastewater collection system, parcels and contours.
 - 2. Meter data for industrial users, if any.
 - 3. Construction record drawings for existing sanitary sewer lines over 12-inch diameter installed since 2011.
- B. Update the City's Wastewater Trunk System model (created in 2011) to the current release of InfoSewer (ArcGIS-Based) wastewater modeling software.
- C. Create and/or modify pipes and lift stations in the current model to be consistent with existing 2018 system. Generally, lines larger than 12-inch in diameter will be included in the model. Some smaller diameter lines may be included as needed to complete hydraulic analysis in smaller sub-basins.
- D. Develop and apply dry-weather and wet-weather hydrographs to the 2018 model.
- E. Run 2018 model in a 48-hour extended period simulation (EPS). The EPS scenarios will include both wet-weather and dry-weather flows.
- F. Conduct trunk sewer system capacity analysis. Proposed system improvements shall be based on free-flow conditions. Existing system improvements shall be evaluated to determine if a free-flow or surcharged condition exists. Acceptable surcharging thresholds will be analyzed on a case-by-case basis for each trunk sewer system. Existing trunk system lines that exceed surcharge thresholds will be evaluated for replacement or paralleling.
- G. Evaluate and provide recommendations for capacity improvements for the existing trunk sewer system.
- H. Develop Capital Improvement Plan for recommended capacity improvements including preparation of engineer's opinion of probable construction cost.

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- Prepare a basic map of the modeled trunk sewer system, including:
 - Pipe sizes for modeled wastewater trunk sewers.
 - Manholes and numbers of modeled manholes
 - 3. Lift station capacities and force main diameters
 - 4. Color coded drainage basin delineation
 - The Wastewater Trunk Sewer System Map will utilize the electronic 2018 street, parcel, creeks and flood plain provided by the City of Allen as the base.
- Prepare written report summarizing the findings from the hydraulic model update, including recommendations, and capital improvement plan.
- K. Coordinate and attend up to two meetings with City staff to discuss finding and present results.

PART 2: WASTEWATER FLOW MONITORING

- A. Obtain and identify the flow meter locations proposed by the North Texas Municipal Water District (NTMWD) Capacity, Management, Operation and Maintenance (CMOM) Plan for use in selecting locations for City of Allen flow meters.
- B. Coordinate with City Staff to develop flow monitoring deployment plan using the City's twenty (20) area-velocity flow meters. Deployment Plan will be crossreferenced with NTMWD CMOM Flow Monitoring Plan. The City of Allen flow meters will be deployed at City of Allen collection system locations upstream of the NTMWD flow monitoring locations.
- C. Coordinate with NTMWD Staff and their Consultant to obtain CMOM flow monitoring data for use in conjunction with City of Allen flow meter data.
- D. Delineate drainage basin/service area for each flow meter deployed to estimate acreage, linear feet of pipe, and population served.
- Coordinate with City Staff to obtain access and collect data from City rain gauges during monitoring period.
- F. Perform QA/QC of flow meter data during meter deployment.
- G. Conduct flow balancing analysis of data.

- H. Assemble rainfall data in tabular format and determine volume and rainfall intensity of experienced storm events.
- I. Isolate dry weather week and extract base flows to determine average daily flow weekday and weekend flows.
- J. Select storm events and analyze data to extract wet weather modeling parameters.
- K. Calculate rainfall derived inflow and infiltration per linear foot of pipe within each serve area.
- L. Project observed rainfall derived inflow and infiltration to selected storm event for basis of design (i.e. 5-year, 6-hour storm).

PART 3: WASTEWATER MODEL CALIBRATION

- A. Utilizing flow monitoring data described in Part 2 and NTMWD flow metering data (Spring 2018) of its system; simulate base flow conditions in the 2018 wastewater trunk system model.
- B. Adjust model design storm variables to simulate the inflow and infiltration component from the field flow monitoring data. Adjustments to be made in rainfall intensity curve, friction factors and/or flow distribution within the model.
- C. A trial and error method will be utilized until the 2018 model results are within 15% of flow monitoring field data. A 15% or greater accuracy will be considered calibrated and within model tolerances.
- D. Calibration of the wastewater trunk system model will conclude upon reaching 15% of observed data, at the direction of the City, or when established funds are expended.

PART 4: PROJECT SCHEDULE

The Scope of Service outlined above will be completed on the following projected schedule:

	Completion Date
Notice to Proceed	February 13, 2018
Establish Flow Monitoring Plan & Deploy Meters	March 5, 2018
Meter Deployment (3-month duration)	March 19 – June 18, 2018

	Completion Date
Wastewater Model Updates	April 16, 2018
Flow Monitoring Data Analysis	August 27, 2018
Model Calibration	October 1, 2018
Capacity Analysis & Recommendations	October 29, 2018
Wastewater Collection System Map and Report	November 19, 2018

PART 5: COMPENSATION

UNDERSIGNED will accomplish the services outlined in the Agreement. Payment for Basic engineering services shall be lump sum, and payment for Additional engineering services shall be on the basis of salary cost times 2.40, with expenses at invoice cost times 1.15. A model software license fee of \$350 per month will also be included.

Professional will be compensated in accordance with the payment schedule below, not to exceed a total amount of Eighty Nine Thousand, Six Hundred Dollars (\$89,600).

A. BASIC SERVICES:

	1.	WASTEWATER MODEL UPDATE	\$30,800
	2.	WASTEWATER FLOW MONITORING	\$32,000
B.	AD	DITIONAL SERVICES:	
	1.	WASTEWATER MODEL CALIBRATION	\$23,100
	2.	Meetings	\$2,700
	3.	REIMBURSABLE ITEMS	\$1,000
		TOTAL SERVICES:	\$89,600

Payments are to be made monthly based on percent complete as determined by Birkhoff, Hendricks & Carter, L.L.P. Invoices shall include a breakdown of costs by task, a summary of billings to date of invoice for each task, and the balance remaining for each task (as well as the total contract remaining). City agrees to pay within 30 days upon receipt.