**SUPPLEMENTAL AGREEMENT NO. 1**
**FOR PROFESSIONAL SERVICES**
**City of Olathe, Kansas**

This Supplemental Agreement made this _____ day of _____, 2019, by and between the City of Olathe, hereinafter referred to as the "City", and HNTB Corporation, hereinafter referred to as the "Consultant".

WITNESSETH:

WHEREAS, the City and Consultant have previously entered into an Agreement, dated December 26, 2017 ("the Agreement"), to furnish Professional Services for

Mahaffie Circle Improvements Project
Project No. 3-C-107-17,

hereinafter referred to as the "Project"; and

WHEREAS, Section II.B.2 of the Agreement provides that Consultant shall provide, with City's concurrence, services in addition to those listed in the Professional Services Agreement, when such services are requested or authorized in writing by the City.

WHEREAS, this Supplemental Agreement No. 1 between the parties heretofore is to provide additional Professional Services in the way of **Additional Services** (HNTB Project Number 71135-DS-001) for the Project as outlined in **Exhibit A** of this Supplemental Agreement No. 1, attached hereto and incorporated herein by reference; and

WHEREAS, the City is desirous of entering into Supplemental Agreement No. 1 to pay the Consultant for additional services rendered to the City related to the Project; and

WHEREAS, the City is authorized and empowered to contract with the Consultant for the necessary additional professional services under the Agreement, and necessary funds for the payment of said services related to the Project are available and authorized under the Agreement.

NOW THEREFORE, the parties hereby agree as follows:

A. The total fee for the aforementioned additional professional services provided pursuant to this Supplemental Agreement No. 1 is $324,775 which raises the total fee for all services provided under the Agreement from $1,144,455 to $1,469,230.

B. That project completion date in Section II.D. of the Agreement is hereby amended as follows:

- All work must be completed on or before March 31, 2021.

C. That Section III of the Agreement is hereby amended to include the professional services as outlined in the proposal attached hereto as Exhibit A and made a part thereof.

IN ALL OTHER RESPECTS, the terms and conditions of the Agreement shall remain in full force and effect, except as specifically modified by this Supplemental Agreement No. 1, including all policies of insurance which shall cover the work authorized by this Supplemental Agreement No. 1.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Agreement No. 1 to be executed as of the day and year first above written.

**CITY OF OLATHE, KANSAS**

By: _____
Michael E. Copeland, Mayor

ATTEST:

_____
City Clerk

(Seal)

APPROVED AS TO FORM:

_____
City Attorney/Deputy City Attorney/Assistant City Attorney

**HNTB Corporation**

By: _____
Wayne Feuerborn
Senior Vice President

# EXHIBIT A – SCOPE OF SERVICES – SUPPLEMENTAL NO. 1

**Mahaffie Circle Improvements Project**
- **1.0 Construction Engineering Services**
- **2.0 Church Street Southbound Right Turn Lane at Old 56**
- **3.0 BNSF Bridge over Old 56 Painting**
- **4.0 Olathe Waterline Design**

**City Project # 3-C-107-17 / HNTB Job # 71135**
**Olathe, Kansas**

## Project Description

The overall project is a joint project between the City of Olathe and the Kansas Department of Transportation (KDOT). The City of Olathe will administer the design of the project with cooperation, communication, review, and input from KDOT. The original contract provided design services for preliminary and final design plans, right-of-way documents, specifications, and bidding services for two separate bid packages and bid lettings. One bid package will be for the bridge improvements on I-35 and will be let by KDOT. The other bid package will be for the construction of Mahaffie Circle and will be let by the City of Olathe. It is still assumed that KDOT will administer the construction of the I-35 bridge improvements and the City of Olathe will administer the construction of the Mahaffie Circle Extension.

This Supplemental Agreement No. 1 is for additional design services for construction engineering services related to both the bridge improvements on I-35 and the construction of Mahaffie Circle. The supplemental also includes design of a southbound right turn lane on Church Street at Old 56 Highway. The additional turn lane design will be added to the Mahaffie Circle bid package. Also included in this supplemental are services related to painting the BNSF Bridge over Old 56 and for design of a 12" Olathe waterline between Gamin and Old 56. No additional services are provided for construction inspection.

## 1.0 Construction Engineering Services

- KDOT I-35 bridge improvements construction engineering services – see attached for more detail
    - Includes services specific to the I-35 bridge improvements including shop drawing reviews and general construction engineering services as described in section 1.0.
    - Assumes a 16-month construction schedule starting in May 2019
- Mahaffie Circle construction engineering services – see attached for more detail
    - Includes services specific to the Mahaffie Extension from 151st Street to Old 56 including shop drawing reviews and general construction engineering services as described in section 1.0.

    - Assumes an 8-month construction schedule starting in March 2020
- Additional Design Services
    - Drainage System Design (beyond originally assumed effort per the scope of services Exhibit B of the original contract). This includes design and plan preparation (including special details) for I-35 bridge drainage system.
    - Design of TL-5 barrier and footing to accommodate the construction of barrier with asphalt pavement on Mahaffie (beyond originally assumed effort per the scope of services Exhibit B of the original contract)

## 2.0 Church Street SB Right Turn Lane at Old 56

- Develop typical section, horizontal and vertical geometry, and cross sections to accommodate Church Street SB right turn lane at Old 56
- Determine horizontal and vertical geometry for sidewalk connection on west side of Church Street from Old 56 to Dennis Ave.
- The sidewalk connection assumes a 5' wide sidewalk on west side only and vertical will be designed and provided in cross sections only. The sidewalk may be constructed on the back of curb (and therefore widened to 6' wide) or narrowed in width to 4' to avoid grading impacts. An integral sidewalk retaining wall (ISRW) or block wall may be required to limit grading impacts. No additional structural design is assumed for the sidewalk connection.
- Develop intersection detail sheet for Church Street and Old 56 (NW Quadrant) and Church Street and Dennis (SW Quadrant)
- Analyze storm drainage patterns and design an updated system to accommodate the right turn lane
- Develop pavement marking, signing and traffic control sheets/notes (assumes widening to be done under traffic). Pavement marking assumes crosswalks east/west on the south side of Old 56, north south on the west side of Mahaffie and north/south on Dennis Ave.
- Develop traffic signal plan assuming full replacement of the Mahaffie/Church St./Old Highway 56 intersection existing signal and update to City of Olathe standards
- Prepare preliminary and final fiber optic interconnect plans for Mahaffie from 151st Street to Old 56. Includes details, quantities, costs, and specifications
- Assess existing utilities and potential conflicts based on design and survey of field located utilities. Merge utility impacts with overall Mahaffie project coordination. This includes identified issue with utility box in SW quadrant of Church Street and Dennis Ave. related to the sidewalk connection.
- Develop quantities and cost estimate to be included with the Mahaffie Circle bid package

## 3.0 BNSF Bridge over Old 56 Painting

- Incorporate Traffic Control Plans (3 phases) into overall Mahaffie Traffic Control/Phasing scheme. Includes update and incorporation of quantities to the Mahaffie recap of quantities and cost estimate
- Assist with coordination of BNSF Agreement Final updates based on City of Olathe or BNSF comments. Assumes one meeting with BNSF to discuss agreement details and exhibit preparation.
- Review and update contract documents to incorporate BNSF Bridge over Old 56 Painting into Mahaffie master contract documents

## 4.0 Olathe Waterline Design

- Preliminary Olathe Waterline design of approximately 3700 LF of new 12" Waterline between Garmin and Old 56
- Design includes horizontal layout with hydrants/valve, preliminary plan/profile, connection details, quantities and cost estimate, reviews and quality control
- Preliminary Design also assumes coordination for Garmin Fire Line (assumes that Garmin is responsible for all engineering to reconnect fire service lines to new public main)
- Final Design includes addressing comments, providing standard details, quantities and cost estimate along with final plan preparation, reviews and quality control
- Final Design includes displaying the waterline in the roadway cross sections
- The waterline plan set sheets, quantities, and costs will be included with the Mahaffie Circle bid package
- See Water Line Extension assumptions below for additional information

## Assumptions

All assumptions noted in the original agreement still apply with the following key items noted:

- **Design Standards/Pavement Section -** City of Olathe standard details and pavement sections will be used and/or provided for the Church Street SB right turn lane at Old 56.
- **Design Surveys** – HNTB will contract with Wilson & Company (Wilson) for additional surveying services as noted in their attached supplemental scope of services.
- **Permits/Environmental** - No additional scope is provided for permit development or assistance related to any of the services outlined in the supplemental.
- **Public Involvement/Stakeholder Engagement** – No additional public meetings or stakeholder meetings are assumed in addition to the original contract.

- **Maintenance of Traffic (MOT)/Construction Sequencing** – the supplemental design assumes the widening for SB Right on Church Street at Old 56 will be done under traffic and the design and details will be limited to plan layout and standard details.
- **Traffic Signals/Street Lights –** Traffic signal design assumes full replacement of the Mahaffie/Church St./Old Highway 56 intersection existing signal and update to City of Olathe standards. No temporary signal design is assumed. No additional street lighting design is assumed in addition to the original contract.
- **BNSF Bridge over Old 56 Painting –** Scope assumes using GBA 2016 sealed bid plans (Olathe PN 3-G-001-16) and incorporating the traffic control plans and phasing with the Mahaffie bid package. It is assumed the plans will be included as a standalone plan set and referenced from the Mahaffie plans. The contract documents will be merged with the Mahaffie contract documents. No additional work is assumed to recreate the 2016 sealed plans.
- **Water Line Extension –** Scope assumes the design (no hydraulic modeling) of approximately 3700 LF of new 12" Waterline between Garmin and Old 56. Scope assumes that city will conduct all coordination, permit, and correspondence with KDHE. It is assumed city standard drawings and specifications will be used and no special details are required. No stray current analysis or cathodic protection related to adjacent existing gas lines is included. Scope assumes waterline extension along Mahaffie only, no additional side streets or service lines requiring profiles. Railroad coordination is not included. Without Geotechnical investigations on the waterline alignment excavation and trench condition will be assumed as unclassified soil.
- **Utility Coordination** - HNTB will provide additional utility coordination services assistance as noted in section 2.0 but all agreements will be coordinated and executed between the City of Olathe and applicable private utilities.
- **Construction Inspection Services –** Construction inspection services are not part of this scope of services but a supplemental agreement may be negotiated.

## Schedule

It is assumed that design and construction engineering activities will continue through 2020 as summarized below:

- **Supplemental No. 1 - Assumed Notice to Proceed (NTP) – March 12, 2019**
- 1.0 Construction Engineering Services
    - KDOT I-35 bridge improvements construction engineering services – May 2019 through October 2019 and February 2020 through November 2020
    - Mahaffie Circle construction engineering services – March 2020 through October 2020
- 2.0 Church Street Southbound Right Turn Lane at Old 56
    - March 2019 through December 2019
- 3.0 BNSF Bridge over Old 56 Painting
    - March 2019 through December 2019
- 4.0 Olathe Waterline Design
    - March 2019 through December 2019
- **Project Construction Complete – December 31, 2020**

The above schedule shall be adjusted based on changes necessitated by design reviews. If changes are encountered during design, right-of-way acquisition, and/or utility relocations the schedule will be updated accordingly.

## Deliverables

The following deliverables will be developed related to Supplemental No. 1:

- Shop Drawing Review Coordination Tracker (Section 1.0)
- Updated Mahaffie Documents (Sections 2.0-4.0)
    - Mahaffie Field Check Plans (Olathe) – March 8, 2019
    - Right-of-Way Documents (Olathe) – April 30, 2019
    - Mahaffie Office Check Plans (Olathe) – October 31, 2019
    - Mahaffie Final Plans and Specs (Olathe) – December 31, 2019

The following Exhibit A Project Map outlines the overall project area:


Dennis Ave.
Old 56
Maharffie Extension
I-35
151st Street

*EXHIBIT A - Scope of Services - 3-C-107-17 - Supplemental No. 1*

| Mahaffie Circle Extension Final Design<br>2/22/2019 | | Project Manager | Senior Technical Advisor | Project Engineer | Engineer | Technician | Total | Total Costs |
|---|---|---|---|---|---|---|---|---|
| | **Item of Work** | $223 | $208 | $163 | $108 | $118 | | |
| **1.0 Construction Engineering Services** | | | | | | | | |
| **1.1** | **KDOT I-35 Shop Drawings and Construction Reviews** | | | | | | | |
| | **Shop Drawings** | | | | | | | |
| 1.1.1 | Structural Steel (bent PL end diaphragms)(315) | | | 3 | 3 | | 6 | $ 813 |
| 1.1.2 | Structural Steel (bent PL end diaphragms)(316) | | | 3 | 3 | | 6 | $ 813 |
| 1.1.3 | Structural Steel (bent PL temporary diaphragms)(315) | | | 3 | 3 | | 6 | $ 813 |
| 1.1.4 | Structural Steel (bent PL temporary diaphragms)(316) | | | 3 | 3 | | 6 | $ 813 |
| 1.1.5 | Prestressed Concrete (315) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.6 | Prestressed Concrete (316) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.7 | Expansion Joint (315) | | | 24 | 16 | | 40 | $ 5,640 |
| 1.1.8 | Expansion Joint (316) | | | 24 | 16 | | 40 | $ 5,640 |
| 1.1.9 | Elastomeric Bearings (315) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.10 | Elastomeric Bearings (316) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.11 | Drainage Collection System (315) | | | 16 | 12 | | 28 | $ 3,904 |
| 1.1.12 | Drainage Collection System (316) | | | 16 | 12 | | 28 | $ 3,904 |
| 1.1.13 | Review Construction Drawings and Calculations for MSE walls (2 permanent (NB/SB), 1 temp MSE) | | | 24 | 24 | | 48 | $ 6,504 |
| 1.1.14 | Review Construction Drawings and Calculations for Temporary Shoring Sheet Pile (1 @ CL I-35, 1 @ SB side slope/approach slab) | | | 24 | 24 | | 48 | $ 6,504 |
| 1.1.15 | Form Liners for walls | | | 2 | 2 | | 4 | $ 542 |
| | **Construction Reviews** | | | | | | | |
| 1.1.16 | Deck Formwork (315) | | | 8 | 2 | | 10 | $ 1,520 |
| 1.1.17 | Deck Formwork (316) | | | 8 | 2 | | 10 | $ 1,520 |
| 1.1.18 | Concrete Placing Sequence (315) | | | 2 | 4 | | 6 | $ 758 |
| 1.1.19 | Concrete Placing Sequence (316) | | | 4 | 6 | | 10 | $ 1,300 |
| 1.1.20 | Bridge Removal Scheme / Demolition Plan (315) | | | 12 | 12 | | 24 | $ 3,252 |
| 1.1.21 | Bridge Removal Scheme / Demolition Plan (316) | | | 12 | 12 | | 24 | $ 3,252 |
| 1.1.22 | Temporary Falsework Drawings and Calculations (315) | | 4 | 16 | 24 | | 44 | $ 6,032 |
| 1.1.23 | Temporary Falsework Drawings and Calculations (316) | | 4 | 16 | 24 | | 44 | $ 6,032 |
| 1.1.24 | Erection Plan (315) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.25 | Erection Plan (316) | | | 6 | 6 | | 12 | $ 1,626 |
| 1.1.26 | Fillet Depth Verification (315) | | | 2 | 2 | | 4 | $ 542 |
| 1.1.27 | Fillet Depth Verification (316) | | | 2 | 2 | | 4 | $ 542 |
| | **KDOT I-35 Shop Drawings and Construction Reviews Subtotal** | | **8** | **260** | **244** | | **512** | **$ 70,396** |
| **1.2** | **KDOT I-35 General Construction Services** | | | | | | | |
| 1.2.1 | Prepare for and Attend Pre-Construction Meeting | 12 | | 4 | | | 16 | $ 3,328 |
| 1.2.2 | Construction Progress Meetings (Assume monthly participation for 16 months, 4 hours per month) | 64 | | | | | 64 | $ 14,272 |
| 1.2.3 | Plan Interpretation, Troubleshooting, RFIs (Assumes 10 hours per month for 16 months) | 50 | | 55 | 55 | | 160 | $ 26,055 |
| 1.2.4 | Site Visits (assume 2 people, 2 visits per construction season, 4 total visits) | 16 | | 16 | | | 32 | $ 6,176 |
| 1.2.5 | Minor Plan Revisions (Assume 6 minor revisions at about 8 hrs per revision) | | | 8 | 20 | 20 | 48 | $ 5,824 |
| 1.2.6 | Ongoing communication with City of Olathe, KDOT and task leads (assumes 16 month construction schedule). Includes monthly project review meetings, budget set-up and tracking, scheduling, and invoice preparation | 32 | | 32 | | | 64 | $ 12,352 |
| | **KDOT I-35 General Construction Services Subtotal** | **174** | | **115** | **75** | **20** | **384** | **$ 68,007** |
| **1.3** | **Olathe Mahaffie Shop Drawings and Construction Reviews** | | | | | | | |
| 1.3.1 | Review drainage structure shop drawings (precast inlets and manholes) | 2 | | 16 | 40 | | 58 | $ 7,374 |
| 1.3.2 | Review Contractor's material submittals (concrete mix design, aggregate, riprap, erosion control) | 2 | | 8 | 24 | | 34 | $ 4,342 |
| 1.3.3 | Review Waterline catalog cuts (material submittals) | | | 12 | 8 | | 20 | $ 2,820 |
| 1.3.4 | Signals, Street Lighting, and Fiber Interconnect shop drawings review (assumes HNTB initial review and Olathe final approval) | | 2 | 8 | | | 10 | $ 1,720 |
| | **Olathe Mahaffie Shop Drawings and Construction Reviews Subtotal** | **4** | **2** | **44** | **72** | | **122** | **$ 16,256** |
| **1.4** | **Olathe Mahaffie General Construction Services** | | | | | | | |
| 1.4.1 | Prepare for and attend Pre-Construction Meeting (Provide up to 6 half and 4 full sets of Final Plans and 10 spec books to contractor) | 4 | | 6 | 4 | 2 | 16 | $ 2,538 |
| 1.4.2 | Respond to questions during construction (assume 8 month construction schedule) | 8 | | 40 | 16 | | 64 | $ 10,032 |
| 1.4.3 | Prepare minor plan revisions as necessitated by conditions encountered in the field (does not include traffic control plans) | 2 | | 10 | 4 | 16 | 32 | $ 4,396 |
| 1.4.4 | Participate in final walk-through inspection | 2 | | | 2 | | 4 | $ 662 |
| 1.4.5 | Prepare final record pdf drawings which reflect: all change orders, minor design changes, changes made in the field by City representatives | 2 | | 6 | 4 | 12 | 24 | $ 3,272 |
| 1.4.6 | Submit one full-size pdf set of revised drawings | | | 1 | | 4 | 5 | $ 635 |
| 1.4.7 | Ongoing communication with City of Olathe and task leads (assumes 8 month construction schedule). Includes monthly project review meetings, budget set-up and tracking, scheduling, and invoice preparation | 16 | | 16 | | | 32 | $ 6,176 |
| | **Olathe Mahaffie General Construction Services Subtotal** | **34** | | **79** | **30** | **34** | **177** | **$ 27,711** |
| **1.5** | **Additional Structural Design Services** | | | | | | | |
| 1.5.1 | Drainage System Design (beyond originally assumed effort per the scope of services Exhibit B of the original contract). This includes design and plan preparation (including special details) for I-35 bridge drainage system. | | | 40 | 16 | 24 | 80 | $ 11,080 |
| 1.5.2 | Design of TL-5 barrier and footing to accommodate the construction of barrier with asphalt pavement on Mahaffie (beyond originally assumed effort per the scope of services Exhibit B of the original contract) | | | 8 | 8 | 12 | 28 | $ 3,584 |
| | **Additional Structural Design Services Subtotal** | | | **48** | **24** | **36** | **108** | **$ 14,664** |
| | **Construction Engineering Services Tota** | **212** | **10** | **546** | **445** | **90** | **1303** | **$ 197,034** |

*EXHIBIT A - Scope of Services - 3-C-107-17 - Supplemental No. 1*

| **Mahaffie Circle Extension Final Design**<br>**2/22/2019** | | **Project Manager** | **Senior Technical Advisor** | **Project Engineer** | **Engineer** | **Technician** | **Total** | **Total Costs** |
|---|---|---|---|---|---|---|---|---|
| | **Item of Work** | $223 | $208 | $163 | $108 | $118 | | |
| **2.0 Church Street SB Right Turn Lane at Old 56** | | | | | | | | |
| **2.1** | **Church Street SB Right Turn Lane at Old 56** | | | | | | | |
| 2.1.1 | Survey planning, Wilson coordination, set up additional files, download and process field data, prepare project DTM of topo survey and confirm design criteria for the project and discuss with the City | | | 2 | 2 | 2 | 6 | $ 778 |
| 2.1.2 | Develop typical section for Church Street at Old 56 and sidewalk connection on west side from Old 56 to Dennis Ave. | | | | 3 | 3 | 6 | $ 678 |
| 2.1.3 | Determine horizontal geometry for Church Street SB Right at Old 56 including edge of pavement, C&G/shoulders, tapers, storage length, and tie-ins. | | | 1 | 2 | 2 | 5 | $ 615 |
| 2.1.4 | Determine horizontal and vertical geometry for sidewalk connection on west side of Church Street from Old 56 to Dennis Ave. The sidewalk connection assumes a 5' wide sidewalk on west side only and vertical will be designed and provided in cross sections only. The sidewalk may be constructed on the back of curb (and therefore widened to 6' wide) or narrowed in width to 4' to avoid grading impacts. An integral sidewalk retaining wall (ISRW) or block wall may be required to limit grading impacts. No additional structural design is assumed for the sidewalk connection. | | 2 | 8 | 16 | 4 | 30 | $ 3,920 |
| 2.1.5 | Develop profile for widening of Church Street SB Right at Old 56 | | 1 | 1 | 4 | | 6 | $ 803 |
| 2.1.6 | Create surface model/cross sections every 25 feet for Church Street SB Right at Old 56 and sidewalk connection from Old 56 to Dennis Ave. | | 2 | 4 | 16 | | 22 | $ 2,796 |
| 2.1.7 | Develop plan sheet (plan scale 1"=20') and profile sheet for widening of Church Street SB Right at Old 56 and sidewalk connection from Old 56 to Dennis Ave. (assumes 1 plan and 1 profile sheet) | | | 2 | 6 | 4 | 12 | $ 1,446 |
| 2.1.8 | Develop intersection detail sheet for Church Street and Old 56 (NW Quadrant) and Church Street and Dennis (crossing side TBD) | | 2 | 2 | 8 | 4 | 16 | $ 2,078 |
| 2.1.9 | Develop Erosion and Sediment Control Plans (plan layout for Church Street SB Right at Old 56) which includes evaluating grading options and develop construction limits | | | 1 | 2 | 2 | 5 | $ 615 |
| 2.1.10 | Develop pavement marking, signing and traffic control sheets/notes (assumes widening to be done under traffic). Pavement marking assumes crosswalks east/west on the south side of Old 56, north south on the west side of Mahaffie and north/south on Dennis Ave. | | | 2 | 4 | 2 | 8 | $ 994 |
| 2.1.11 | Analysis of existing storm drainage patterns and ditch design to determine requirements along Church Street and at outlet point of drainage system. Includes analysis of existing culvert under Church Street. Design includes Drainage Area Map and Outlet Protection in overall plan set. | | | 2 | 8 | 2 | 12 | $ 1,426 |
| 2.1.12 | Replacement and/or Extension drainage system to accommodate Church Street SB Right at Old 56. Assumes approximately 1 inlet and 2 pipes and includes construct notes and pipe profile in overall plan set. | | | 2 | 4 | 2 | 8 | $ 994 |
| 2.1.13 | Assess existing utilities and potential conflicts based on design and survey of field located utilities. Merge utility impacts with overall Mahaffie project coordination. This includes identified issue with utility box in SW quadrant of Church Street and Dennis Ave. related to the sidewalk connection. | | 16 | 32 | | 12 | 60 | $ 9,960 |
| 2.1.14 | Traffic Signal Plan for the Mahaffie/Church St./Old Highway 56 intersection. This assumes full replacement, wiring diagrams, detail and quantities updates for Church St. SB Right widening (includes potential signal controller replacement). | 2 | | 44 | | | 46 | $ 7,618 |
| 2.1.15 | Prepare preliminary and final fiber optic interconnect plans for Mahaffie from 151st Street to Old 56. Includes details, quantities, costs, and specifications | 4 | | 32 | | | 36 | $ 6,108 |
| 2.1.16 | Quantities and Cost Estimate (to be included with overall Mahaffie project) | 1 | | 2 | 12 | | 15 | $ 1,845 |
| 2.1.17 | Senior Technical Review | | 2 | | | | 2 | $ 416 |
| 2.1.18 | Submit preliminary design sheets for review (includes quantities, typical, plan and profile sheets, cross sections, marking/signing) | 1 | | | 1 | 2 | 4 | $ 567 |
| 2.1.19 | Address design review comments on typical section, plan sheet, sidewalk connection, curb profile sheet, storm sewer, traffic control, cross sections, and pavement marking and signing sheets. Includes update to quantities. | | 1 | 2 | 4 | 4 | 11 | $ 1,438 |
| | **Church Street SB Right Turn Lane at Old 56** | **8** | **26** | **139** | **92** | **45** | **310** | **$ 45,095** |
| | | | | | | | | |
| | **Church Street SB Right Turn Lane at Old 56 Total** | **8** | **26** | **139** | **92** | **45** | **310** | **$ 45,095** |

*EXHIBIT A - Scope of Services - 3-C-107-17 - Supplemental No. 1*

| Mahaffie Circle Extension Final Design<br>2/22/2019 | | Project Manager | Senior Technical Advisor | Project Engineer | Engineer | Technician | Total | Total Costs |
|---|---|---|---|---|---|---|---|---|
| **Item of Work** | | $223 | $208 | $163 | $108 | $118 | | |
| **3.0 BNSF Bridge over Old 56 Painting** | | | | | | | | |
| **3.1** | **BNSF over Old 56 Painting** | | | | | | | |
| 3.1.1 | Incorporate Traffic Control Plans (3 phases) into overall Mahaffie Traffic Control/Phasing scheme. Includes update and incorporation of quantities to the Mahaffie recap of quantities and cost estimate | | 1 | 2 | 4 | 8 | 15 | $ 1,910 |
| 3.1.2 | Assist with coordination of BNSF Agreement Final updates based on City of Olathe or BNSF comments. Assumes one meeting with BNSF to discuss agreement details and exhibit preparation. | 2 | 2 | 8 | 2 | 2 | 16 | $ 2,618 |
| 3.1.3 | Review and update contract documents to incorporate BNSF Bridge over Old 56 Painting into Mahaffie master contract documents | 1 | | 8 | | | 9 | $ 1,527 |
| | **BNSF over Old 56 Painting** | **3** | **3** | **18** | **6** | **10** | **40** | **$ 6,055** |
| | **BNSF over Old 56 Painting Total** | **3** | **3** | **18** | **6** | **10** | **40** | **$ 6,055** |
| **4.0 Olathe Waterline Design** | | | | | | | | |
| **4.1** | **Preliminary Olathe Waterline Design** | | | | | | | |
| 4.1.1 | Site Visit | | | 4 | 4 | | 8 | $ 1,084 |
| 4.1.2 | Preliminary Design (Horizontal Layout w/ Hydrants and Valves) | | 2 | 8 | 40 | 20 | 70 | $ 8,400 |
| 4.1.3 | Preliminary Layout Plan/Profile Drawings | | 2 | 24 | 48 | 40 | 114 | $ 14,232 |
| 4.1.4 | Connection Details | | 1 | 8 | 8 | 16 | 33 | $ 4,264 |
| 4.1.5 | Quantities and Cost Estimate | | 2 | 4 | 12 | | 18 | $ 2,364 |
| 4.1.6 | Senior Technical Review and Quality Control | | 8 | 8 | | | 16 | $ 2,968 |
| 4.1.7 | Coordination for Garmin Fire Line (assumes that Garmin is responsible for all engineering to reconnect fire service lines to new public main) | | 4 | 4 | | | 8 | $ 1,484 |
| | **Preliminary Olathe Waterline Design Subtotal** | | **19** | **60** | **112** | **76** | **267** | **$ 34,796** |
| **4.2** | **Final Olathe Waterline Design** | | | | | | | |
| 4.2.1 | Address Preliminary Design Comments from City | | 4 | 12 | 24 | 24 | 64 | $ 8,212 |
| 4.2.2 | Provide Standard Drawings in Plans | | 1 | 2 | 1 | 4 | 8 | $ 1,114 |
| 4.2.3 | Update Quantities and Cost Estimate | | 1 | 2 | 8 | | 11 | $ 1,398 |
| 4.2.4 | Display Waterline in Cross Sections | | | 1 | 2 | 4 | 7 | $ 851 |
| 4.2.5 | Address Pre-Final Comments and Prepare Final Plans and Cost Estimate | | 4 | 8 | 16 | 16 | 44 | $ 5,752 |
| 4.2.6 | Senior Technical Review and Quality Control | | 8 | 8 | | | 16 | $ 2,968 |
| | **Final Olathe Waterline Design Subtotal** | | **18** | **33** | **51** | **48** | **150** | **$ 20,295** |
| | **Olathe Waterline Design Total** | | **37** | **93** | **163** | **124** | **417** | **$ 55,091** |
| | **Overall Total** | **223** | **76** | **796** | **706** | **269** | **2070** | **$ 303,275** |

**Fee Summary**

| | | |
|---|---|---|
| **Labor:** | Project Manager @ $223/hour | 49,729 |
| | Senior Technical Advisor @ $208/hour | 15,808 |
| | Project Engineer @ $163/hour | 129,748 |
| | Engineer @ $108/hour | 76,248 |
| | Technician @ $118/hour | 31,742 |
| | **Overall Estimated Labor Costs:** | **$ 303,275** |
| **Expenses:** | Printing/Plotting/Travel = | 500 |
| | Field Surveys and ROW Development (Wilson)= | 21,000 |
| | **Total Expense =** | **$ 21,500** |
| | **Total SA 1 Fee =** | **$ 324,775** |

| | |
|---|---|
| **Current Upper Limit per Contract** | **$ 1,144,455** |
| **Supplemental Agreement No. 1 Total** | **$ 324,775** |
| **Revised Upper Limit** | **$ 1,469,230** |

**SCOPE OF SERVICES**
**MAHAFFIE CIRLE EXTENSION – Supplemental No. 1**
**SURVEY TASKS**

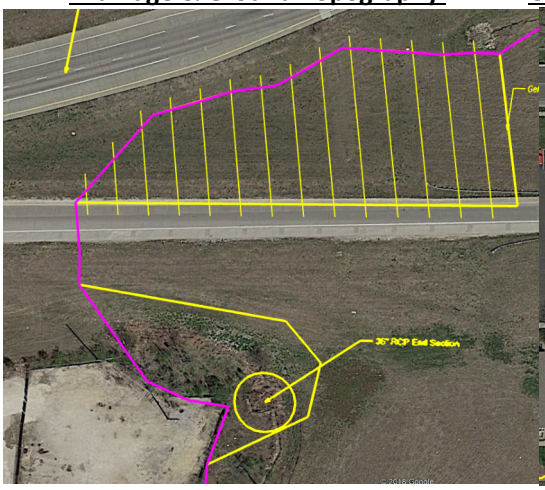
**METHOD/APPROACH**

Upon Notice to Proceed we will begin by scheduling a project Kick-Off Meeting with HNTB representatives and key Wilson & Company staff. This meeting will be a collaborative effort to discuss the challenges and objectives of the survey. Topics will include safety, efficiency, limits of survey, schedule, and progress reporting with performance benchmarks.
Our approach is as follows:

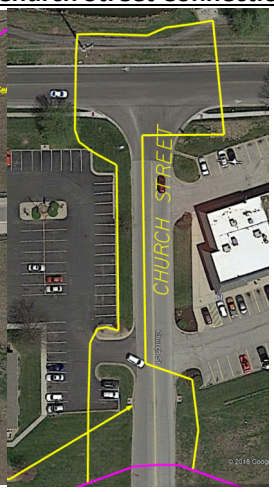
***SURVEY TASK LISTING***

**Supplemental No. 1– Topographic Surveying (As shown in yellow below – N.T.S.)**

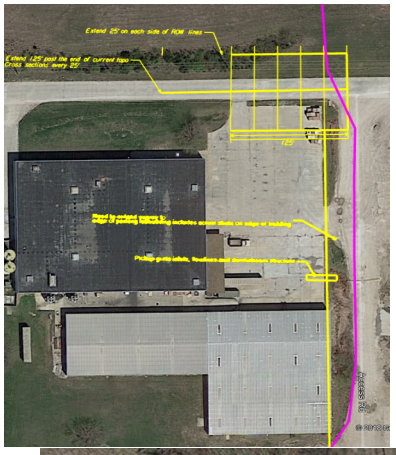
**Drainage & Ground Topography**

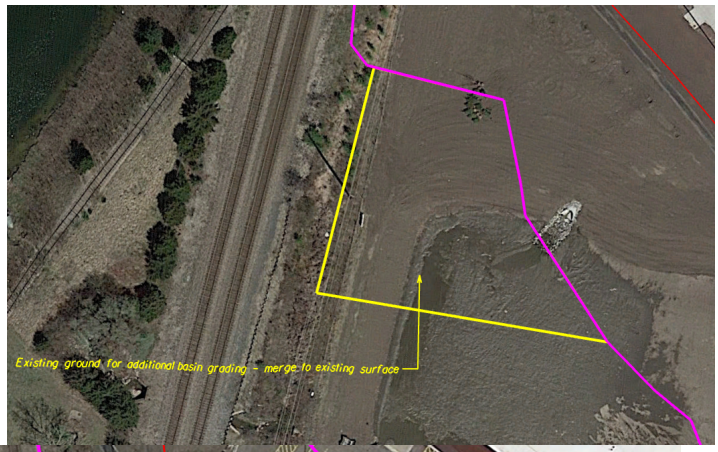


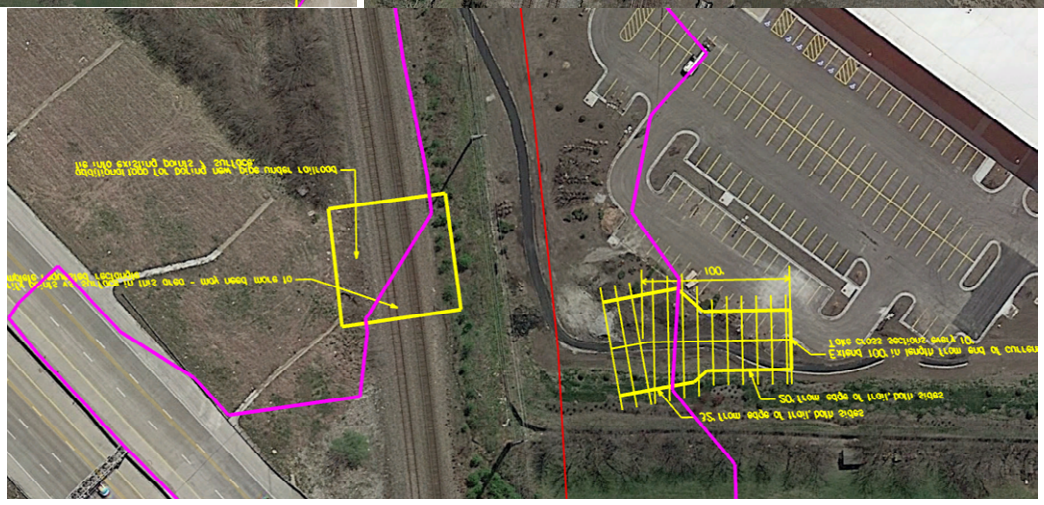

**Church Street Connection**




**Additional Topography Areas**





1. Notify Kansas One-Call to mark utilities in the field and collect record utility maps (if available). This survey will not include any Sub-surface utility investigation (SUE).

2. Previously set primary horizontal and vertical control will be recovered in the project corridor.

3. Field survey crews will survey marked utilities, sanitary & storm sewer structures (with reports) and ground surveying of subject areas (as shown in yellow above). Sewer and drainage networks will be traced to the nearest structure to extend out to or past the project limits. Utility information such as structure types, sizes, flowline elevations and utility owner will be gathered and included on the base drawing. Spot elevations and breaklines will be collected to provide ground elevations for incorporation into the Digital Terrain Model (DTM). Notification of BNSF will be obtained for work over and across rail property (flagging services).

4. Our survey technicians will compile all field data into to the base survey file identifying ground breaklines, cross-sections and changes in topography to produce a DTM. Supplemental spot elevations will be collected in a grid format in open natural ground areas in the project areas. Contours will be generated at a 1-foot contour interval.
   **Topographic Surveying Supplemental No. 1= $15,000.00**

5. As-needed surveying during design. During the design process it may be necessary to obtain field data on changes that occur from the adjacent developments along the route. Most of these requests are estimated to be short in duration and will only be "as-needed" to supplement the existing design. Base maps can be updated per the request of HNTB.
   **(3) Field days of 2-man survey crew w/equipment and Base Map updates = $6,000.00**

**DELIVERABLES**

Final deliverables will be produced and put through a final QA/QC process by a Kansas Licensed Professional Surveyor (including field check and review for design by Wilson & Company surveyors). Deliverables include the following:

1. Topographic drafting production by survey technicians will be performed in Microstation .DGN format using Kansas Department of Transportation (KDOT) standards for drawing deliverables.
2. Electronic files will include 3D DTM, 2D Topo, 2D Contour & .TIN Files.
3. Storm & Sanitary Sewer structure reports (invert, flowline, diameter & pipe sizes to be included)

**Mahaffie Extension Survey – Supplemental No. 1 - Fee Total = $21,000.00**

**ASSUMPTIONS**

1. Any additional tasks will be handled by a separate task order and agreed upon before work will begin.