

Engineering Services Agreement
Amendment No. 1
NDDOT Project No. SU-4-989(121) PCN 22134
City of Minot Project No. 4331

Project: 31st Avenue Southeast Reconstruction – Broadway to 13th Street Southeast
City of Minot Project No. 4331
Apex Project No. 17.106.0119

Client: City of Minot (Engineering Department)
Attn: Lance Meyer, PE
City Engineer

Background/Description of Work:

Apex Engineering Group, Inc. was hired by the City of Minot to provide engineering services for the above project on May 14, 2018. The following Scope of Services tasks are added or expanded with this Amendment request:

- **Additional Roundabout design work** – At the time of original scoping a standard or signalized intersection (depending on the outcome of the preliminary engineering process) was planned for. As the project input process and safety concerns arose at the intersection of 31st Ave SE and 13th St. SE a roundabout option was explored. Ultimately the roundabout option was chosen as the preferred option. The design and modeling of the roundabout impacted the following: project limits north and south on 13th Street SE, the sewer and watermain utilities at the intersection, the hydrology and hydraulics at the intersection, and the effort needed to model the intersection (compared to a standard intersection), and the effort needed to joint the intersection. **Subtotal = \$22,350.**
Breakdown of hours:
 - Senior Engineer: 20 hours x \$165 = \$3,300
 - Design Engineer: 50 hours x \$131 = \$6,550
 - Graduate Engineer: 50 hours x \$106 = \$5,300
 - Engineering Technician: 80 hours x \$90 = \$7,200
- **Additional parcels for easement exhibits and legal descriptions** – Apex originally scoped to prepare easement exhibits and legal descriptions and obtain construction easements and / or right of way for up to 38 parcels (Task 1.12 & 1.13 of original Scope of Services). A total of 44 parcels were obtained. 6 additional parcels x \$1,785 / parcel (approximate average for each parcel per original scope) = **Subtotal = \$10,710**
- **Traffic Signal Additional Work (Subconsultant: SRF)** – As the project developed several new tasks were added to the original scope of work for the traffic signals. These included new EVP updates, the 5-Section signal head for the southbound right-turn, the new signal in the NW quadrant, the new controller / cabinet and the removal / new feed point, and the new video detection.

SRF also required additional time for the following: signal re-design / modifications after the east approach geometry was modified at Broadway, time to coordinate and design the revised system based on incomplete as-built data provided by the NDDOT, additional QC / QA as signal modifications developed, and some additional coordination. **Subtotal = \$9,210.** Breakdown of hrs:

- Engineer: 42 hours x \$100= \$4,200
- Senior Engineer: 26 hours x \$120 = \$3,120
- Senior Associate: 6 hours x \$175 = \$1,050
- Principal: 4 hours x \$210 = \$840

- **Lighting Additional Work (Subconsultant: SRF)** – The additional tasks that were added to the original street lighting scope of work included adding the existing circuiting for lighting along 13th Street SE, additional plan develop and wiring diagrams along 13th Street SE, several iterations of the lighting layout were provided before the design was finalized, and additional coordination for the lighting along 13th Street SE for the roundabout.

SRF also required: additional time for multiple feed point location coordination and the coordination that took with the rest of the project team, and additional time for lighting re-design / modifications after the east approach geometry was modified at Broadway and 31st Avenue SE.

Subtotal = \$9,398. Breakdown of hours:

- o *Engineer: 2.5 hours x \$100= \$250*
- o *Senior Engineer: 3 hours x \$120 = \$360*
- o *Principal Technician: 42 hours x \$114 = \$4,788*
- o *Principal: 20 hours x \$200 = \$4,000*

Fee Amendment Request:

The total fee for work completed as part of this Amendment:

Amendment No. 1 = **\$51,668.00**