



March 26, 2015

Mr. Josh Malwick
Capital Projects Engineer
City of Norman
201 West Gray, Bldg A
Norman, Oklahoma 73069

RE: Contract No. K-1213-161 Proposal to perform additional design services for revised preliminary plans for 12th Avenue SE and SH 9 in Norman, Oklahoma.

Dear Mr. Malwick:

Tetra Tech, Inc. (Tetra Tech) is pleased to provide this proposal in response to your request for revisions to the preliminary plans for the 12th Avenue SE project south of SH 9 in Norman, Oklahoma. This proposal includes our proposed scope of work and cost to perform these additional services. Our cost for this additional work as outlined in the following is \$37,830.00 for these revisions on 12th Avenue SE and on SH 9 and the addition of the 12" waterline relocation plans to the construction documents.

Please contact me at (405) 416-2049 if you have any questions regarding this proposal or need assistance with any other matter.

Respectfully Submitted,

TETRA TECH

A handwritten signature in blue ink that reads 'Jonathan Heusel'.

Jonathan Heusel, P.E.

Attachment: Cost Proposal Breakdown

1.0 TECHNICAL AND MANAGEMENT APPROACH

Tetra Tech will perform modifications to the preliminary plans and preliminary engineering report that include realignment of the 12th Avenue SE to and including the SH 9 intersection. This modification also provides modifications to the 12th Avenue SE north of SH 9 and the development of non-participating 12" waterline relocation plans for the alignment south of SH 9.

1.1 Project Schedule

Tetra Tech has performed preliminary review of the adjustments and will initiate the modifications to design immediately following the contract award. The revised preliminary plans can be provided two (2) weeks from the notice to proceed. A project schedule will be adjusted following the Plan-In-Hand (PIH) meeting.

1.2 Proposed Scope of Work

The scope of the proposed work includes the following activities:

Scope of Work for the realignment of 12th Avenue SE

The project on 12th Avenue SE alignment is proposed to be modified starting at the south end of the project to avoid impacting the overhead utilities and to reduce relocation expenses. Tetra Tech has identified the changes necessary for the redesign of the intersection for the configuration of 12th Ave SE. We have reviewed the impacts of these revisions and the additional design and CAD work needed for these modifications include the following:

- The transition taper will begin at station 101+91.18 and slide the proposed roadway to the west from its current design.
- At approximately station 105+00, the roadway will be shifted approximately 8 feet to the west to provide sufficient space between the OG&E transmission pole and the roadway footprint.
- OG&E's distribution pole near Station 102+90 is not in alignment with the other poles and may have to be relocated to the east.
- After the transition, the new alignment will parallel the current design
- The alignment shift west will likely require additional right-of-way on the west side of the proposed roadway.
- Profile modifications may be necessary in order to minimize right-of-way needs.
- The Grove apartment's driveway will need to be shown on the plans. This drive is located south of Campus Crest Drive and additional survey will be required to locate the OG&E poles near Str. 53 and the new Grove driveway.
- Typical Sections for 12th Avenue SE will have to be adjusted for the shift in alignment as well as the lane modification to the section north of SH9.

- Additional work in the intersection of SH 9/ 12th Avenue SE intersection is needed due to adjusted geometric layouts, revised turning radii analysis with AutoTurn, storm drain revisions, medians and adjusted traffic control.
- Quantities, Earthwork, and all Summaries will have to be adjusted
- Geometric Data Sheet revisions with offset alignments are needed.
- P&P Sheet adjustments include the following:
 - STS drainage revisions (Station / offsets adjustments, quantities, and profile adjustments)
 - The traffic island (SW corner of SH 9) will be designed at the intersection.
 - Revisions to ROW lines, plans and callout adjustments
 - Drive locations, revisions and adjusted quantities
- DA Map revisions
- Signing and Striping revisions
- Modifications to all of the cross sections and right of way limits

Scope of Work for the relocation of the 12" waterline and details

- Tetra Tech coordinate, design and develop plans for the relocation of the existing 12" waterline south of SH 9.
- Develop east / west crossing and tie-in details
- Revise cross sections
- Coordinate with City of Norman
- Prepare quantities and estimates

1.3 Schedule

- Tetra Tech understands the schedule considerations and have assisted with the submittal of revised plan-in-hand (PIH) plans to the City and ODOT earlier this month. Upon NTP, Tetra Tech will proceed with the following revised schedule:

| Milestone | Dates |
|---|----------------|
| Notice to Proceed | April 10, 2013 |
| Pre-Design Services (60 days) | June 18, 2013 |
| Preliminary Design Review Meeting (PIH Meeting) | March 2015 |
| Environmental Clearance | January 2016 |
| ROW Acquisition Documents Final | February 2016 |
| Design Services (60 days) | May 2015 |
| 90% Plan Submission | November 2015 |
| Final Plans (95% - Not Bid Set – 45 days) | February 2016 |
| Anticipated Construction | May 2016 |

1.4 Cost Estimate

The build-up for the cost estimate is provided as an attachment. All aspects of the additional efforts to the existing sheets, as described above, are included in the cost proposal. The following is a summary of the contract, amendments with task orders to date:

| | |
|--|------------------|
| ○ Original Contract | \$249,646 |
| ○ Amendment #1 for additional work on SH 9 | \$24,420 |
| ○ <u>Amendment #2 for scope revisions and waterline design</u> | <u>\$37,830</u> |
| Total Amended Contract Amount | \$311,896 |

IN WITNESS WHEREOF. OWNER and CONSULTANT have executed this Amendment.

DATED this _____ day of _____, 2015.

The City of Norman
(OWNER)

Signature _____

Name _____

Title _____

Date _____

ATTEST:

Secretary

Seal

APPROVED as to form and legality this _____ day of _____, 2015

City Attorney

Tetra Tech, Inc.
(CONSULTANT)

Signature _____

Name Richard A. Lemmon

Title Senior Vice President

Date March 27, 2015

ATTEST:

gonis B. Salen
Secretary

Seal



**Attachment
Cost Proposal Breakdown**

| TE Price Proposal | | | | | | | | | | Revision Date: Feb. 24, 2015 | | | | | | | | | | |
|---|----------|----------|------|---|-----------------|---------------------|-----------|-------------------|--------------------|---------------------------------|--------------------|-------------------|-------------------|----------------|--------|--------|--------|-----------------|--------|---------------------|
| 12th Avenue SE - Amendment #2 | | | | | | | | | | | | | | | | | | | | |
| 12th Avenue SE - SH 9 to Cedar Lane Road | | | | | | | | | | | | | | | | | | | | |
| Submitted to: City of Norman (Attn: Josh Malwick) | | | | | | | | | | | | | | | | | | | | |
| Contract Type: Fixed Price | | | | | | | | | | | | | | | | | | | | |
| Project Phases / Tasks | Schedule | | | | Total Labor Hrs | Pricing by Resource | | | | | | | | | | | | | | |
| | From | | Thru | | | Work Days Off | Work Days | Project Manager 2 | Sr Project Manager | Engineer 2 | Project Engineer 1 | Sr CAD Designer 2 | Sr CAD Designer 1 | Labor Rate Esc | Labor | Subs | Travel | Mat'l's & Equip | ODC's | Task Pricing Totals |
| | Months | | | | | | | | | | | | | | | | | | | |
| 02/12/15 03/16/15 | | | | | | | | | | | | | | | | | | | | |
| 3D-Slide Alignment - NTP 2/6/2015 | | | | | | | | | | | | | | | | | | | | |
| 03D.01 Revise Title and all Typ Sections | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 3 | 143 | 23 | 8 | 108 | 31 | 110 | 24 | 2 | 2.00% | 37,424 | - | - | 406 | 37,830 |
| 03D.02 Revise all Earthwork, Quantities and Summary Sheets | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 10 | 1 | 11 | 2 | 31 | 88 | - | 2 | 2.00% | 18,070 | - | - | 366 | 18,436 | |
| 03D.03 Intersection Revisions | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 1 | 1 | 1 | 1 | 8 | - | - | - | 2.00% | 1,072 | - | - | - | 1,072 | |
| 03D.04 Geometric Data Sheets | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 11 | 1 | 1 | 4 | 6 | - | - | - | 2.00% | 1,518 | - | - | - | 1,518 | |
| 03D.05 Estimates and draft docs for presentations | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 3 | 3 | - | - | 1 | 2 | - | - | 2.00% | 407 | - | - | - | 407 | |
| 03D.06 P&P Sheet revisions | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 24 | 2 | 30 | - | 12 | - | - | - | 2.00% | 2,196 | - | - | - | 2,196 | |
| 03D.07 DA Map revisions | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 54 | 2 | 12 | 40 | - | - | - | - | 2.00% | 6,770 | - | - | - | 6,770 | |
| 03D.08 Signing and Striping | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 6 | 1 | 2 | 4 | - | - | - | - | 2.00% | 815 | - | - | - | 815 | |
| 03D.09 Revise ROW | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 7 | 1 | 2 | 4 | - | - | - | - | 2.00% | 980 | - | - | - | 980 | |
| 03D.10 Revise Cross Sections | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 6 | 0 | 4 | 2 | - | - | - | - | 2.00% | 1,089 | - | - | - | 1,089 | |
| 03D.11 PM and Administration | 02/12/15 | 03/16/15 | 1.0 | 2 | 18 | 12 | 0 | 4 | 8 | - | - | - | - | 2.00% | 1,671 | - | - | - | 1,671 | |
| 03W-Add Waterline sheets - after 30% PH plans are turned in 2-12-15 | | | | | | | | | | | | | | | | | | | | |
| 03W.01 Add waterline P&P sheets - (5) | 02/12/15 | 03/16/15 | 1.0 | 3 | 20 | 80 | 4 | 2 | 98 | - | 28 | 24 | - | 2.00% | 19,354 | - | - | 20 | 19,374 | |
| 03W.02 Revised Cross Sections | 02/12/15 | 03/16/15 | 1.0 | 3 | 20 | 23 | 1 | 16 | - | 12 | - | - | - | 2.00% | 8,795 | - | - | - | 8,795 | |
| 03W.03 Details (2) | 02/12/15 | 03/16/15 | 1.0 | 3 | 20 | 33 | 1 | 8 | - | 12 | - | - | - | 2.00% | 2,590 | - | - | - | 2,590 | |
| 03W.04 Quantities | 02/12/15 | 03/16/15 | 1.0 | 3 | 20 | 14 | 2 | 12 | - | - | - | - | - | 2.00% | 3,753 | - | - | - | 3,753 | |
| 03W.05 Estimates | 02/12/15 | 03/16/15 | 1.0 | 3 | 20 | 10 | 2 | 8 | - | - | - | - | - | 2.00% | 1,593 | - | - | - | 1,593 | |
| 03W.06 PM and QA / QC | 03/17/15 | 03/19/15 | 0.1 | 1 | 1 | 8 | 2 | 6 | - | - | - | - | - | 2.00% | 1,173 | - | - | 20 | 1,173 | |
| Totals | | | | | | | | | | | | | | | | | | | | |