

ENGINEERS = LAND SURVEYORS PLANNERS = LANDSCAPE ARCHITECTS

March 23, 2017

Via email: aecheita@cityofsparks.us

Andy Echeita City of Sparks 431 Prater Way Sparks, NV 89431

RE: CIVIL ENGINEERING DESIGN & SURVEY SERVICES FOR 2018 CDBG NEIGHBORHOOD STREET RECONSTRUCTION

Dear Andy,

Thank you for contacting CFA to discuss the City's need for topographic survey and civil engineering design for the CDBG street reconstruction in the neighborhood near Sparks High School including D St., H St., and I St. from Rock Blvd. to 15th St., 15th St. from D St. to Prater Way, 16th St. from D St. to Prater Way, and 16th St. from G St. to I St. Based on our meeting with you to define the City's goals for this project, I've prepared the following scope of work and fees related to civil engineering and survey services.

TASK S1 – TOPOGRAPHIC SURVEY & MAPPING

CFA will prepare a topographic survey base map within the project area. A field survey will be conducted to map the paved roadway and associated improvements including, curb, gutter, sidewalk, asphalt paving and surface apparent utilities. Any existing centerline monuments located in the roadway to be improved will be surveyed for location so they can be restored to their original location after construction. Suitable data will be collected to allow the preparation of a topographic map with 1' contour interval that will be used by CFA's engineering team as the basis for their design work. In an effort to save cost, we have removed boundary survey from the base bid. If the need should arise this will be handled under separate contract to resolve any issues requiring boundary information for a specific parcel.

TASK C1 – INVESTIGATION OF EXISTING CONDITIONS, MEETINGS AND COORDINATION

CFA will meet with the City of Sparks and evaluate curb and gutter, sidewalk, pedestrian ramps and driveway approaches to identify and confirm limits of removal and replacement of these features. For roadway investigation, the City will provide a geotechnical report by others with recommendations for roadbed reconstruction and section design. We will confirm the limits of reconstruction and/or grind and overlay for our project area.

With respect to subsurface utilities, CFA will identify utility companies whose utilities are likely to be within the project limits. The City of Sparks will issue notification to the utility agencies on the list and CFA will

coordinate with the utility agencies for the upcoming work, facility relocation and new installation (asneeded), and insure affected utilities are shown on the plans, evaluate potential conflicts, and investigate resolution strategies that may be required.

Depths of existing sanitary sewer and storm drain utilities will be checked and noted on the plans if there is any reason to expect conflict due to vertical clearances or shallow existing conditions.

TASK C2 – PRELIMINARY DESIGN DRAWINGS & DETAILS

Utilizing the recommendations of the geotechnical report and coordination with the City of Sparks during Investigation of Existing Conditions, CFA will prepare preliminary design drawings showing the removal and replacement of curb and gutter, sidewalk, pedestrian ramps and driveway approaches. We will also show the limits of reconstruction and/or grind and overlay. CFA will provide a typical detail for pedestrian ramp and driveway approaches meeting ADA standards, but will not provide detailed grading design for each location. Conformance to ADA grading standards will be determined in the field through coordination between the contractor and City of Sparks inspectors. Striping will be shown as remove and replace of existing, with new striping meeting current design standards of the MUTCD and the Orange Book. For the purposes of this proposal, we assume that readily available aerial imagery will be sufficient to re-establish the striping needed for replacement within the project limits. CFA will also provide a quantities tabulation and preliminary engineer's estimate for the improvements. We assume the City of Sparks will provide the technical specifications for this project with CFA's assistance for review and conformance to the plans.

For coordination with utility agencies, CFA will distribute design review submittals to utility agencies for review and comment, and provide the City a list of utility agency provided design review submittals and agency review comments.

TASK C3 – FINAL DESIGN DRAWINGS & DETAILS

After sufficient review by the City of Sparks and appropriate utility agencies, CFA will update the preliminary design drawings incorporating all review revisions into the final design. We will also provide assistance with City-supplied technical specifications for review. Final quantities and Engineer's Estimate will also be prepared and supplied to the City of Sparks.

TASK C4 – BIDDING SERVICES

For the purposes of plan set and specification distribution, CFA will provide the City with full plans and specifications, including addenda in PDF format for use in the electronic bidding system.

CFA will be available during the bidding process to answer technical questions and will attend the pre-bid meeting. All questions and responses will be documented and provided to the City. CFA will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to the City of Sparks. CFA will prepare and provide a PDF summary of the pre-bid meeting, as directed by the City.

CFA will attend the bid opening and review the bids received for irregularities and provide recommendation for award. CFA will tabulate the bid results into a MS Excel spreadsheet and check accuracy of bid items.

FEE

CFA will provide the services outlined above for the following fees:

Task S1 – Topographic Survey & Mapping\$	16,800
Task C1 – Investigation of Existing Conditions, Meetings & Coordination\$	2,500
Task C2 – Preliminary Design Drawings & Details\$	19,300
Task C3 – Final Design Drawings & Details\$	8,500
Task C4 – Bidding Services	2,000
TOTAL \$	

ITEMS PROVIDED BY CLIENT OR OTHERS

You will need to provide us with the following items:

- All fees payable to government entities.
- Geotechnical studies/reports, including geological hazards, recommendations for earthwork preparation, paving section design, materials testing & specifications.
- Traffic study, if required.
- Structural design of all retaining walls, and light pole bases, if necessary.

ADDITIONAL SERVICES

CFA can also perform the additional services outlined below at your request. Budget amounts can be determined as information becomes available.

- Design for utilities, storm drain, and sewer, if necessary.
- Construction administration & support services.
- Construction staking.

Thank you for contacting CFA regarding this project and please do not hesitate to contact me if you have any questions on the scope of services or budget.

Sincerely,

bei John

Lonnie J. Johnson, P.E. Director of Engineering

