



REQUEST FOR PROPOSALS FOR PROFESSIONAL SERVICES

Smelter Creek Analysis in Douglas County

1. Introduction

Carson Water Subconservancy District (CWSD) is seeking professional services to revisit the hydrology of the Smelter Creek drainage, obtain new aerial topography data, and model the floodplain using HEC-RAS.

Smelter Creek is an ephemeral stream flowing out of the Pinenut Range through the Ruhenstroth development in Douglas County, Nevada. From previous work conducted on Smelter Creek, two sites were identified where a small embankment could be constructed to provide both detention storage and peak attenuation. (A copy of that report is available on CWSD web site.) Constructing such a structure would result in a significant number of residential structures being removed from the Zone A (undefined BFE), Zone AO and Zone AE special flood hazard areas (SFHAs). The proposed project will consist of technical review of the hydrology of the watershed (the effective hydrology is from the 1976 NRCS study) using HEC-HMS. Each pond location would be modeled using HEC-HMS to get an appropriate size for the outlet works, and then the outflow hydrographs would be used to study the impact of each of the two potential locations on the downstream hydraulics. New aerial topography would be obtained for the area. A HEC-RAS model would be constructed using data from the new topography to study the impact of the proposed ponds.

By updating the 1976 study and remapping Smelter Creek this project will provide up-to-date, accurate data for Douglas County to determine final detention basin size, location, and conduct a preliminary cost-to-benefit ratio analysis.

Identified tasks include the following:

- Obtain the current effective data for the community, such as the flood hazard data shown in effective FIS reports and on effective FIRMs, and any other pertinent data.
- Conduct field surveys and reconnaissance to determine conditions along the floodplain, including obtaining channel and floodplain cross sections, identifying or establishing temporary or permanent bench marks, and obtaining physical dimensions of hydraulic and flood control structures in accordance with FEMA regulations.
- Develop topographic maps and/or DEMs for the flooding sources using the LiDAR data and data collected via field surveys.
- Calculate the peak flood discharge for specified percent-annual-chance storm events using HEC-RAS.
- Identify two potential detention storage sites and appropriate size for the outlet works.
- Evaluate how many residential structures would be removed from the 100-year and 500-year SFHA based on the two potential detention storage sites and appropriate size for the outlet works.
- Provide a preliminary benefit-cost analysis for the two potential detention storage sites.

- Provide cost estimates for construction at both detention storage sites for all earthwork and outlet structures.
- Provide a list and cost of required permits for construction.
- Delineate the proposed 1- and 0.2 percent-annual-chance floodplain and the regulatory boundaries with the structures in place.
- Participate and present the project at a Carson River Coalition (CRC) River Corridor Working Group meeting - one (1) meeting anticipated.
- Assist CWSD and Douglas County staff, if needed, with project updates to CWSD Board of Directors and Douglas County Board of Commissioners.
- Assist CWSD and Douglas County staff with public meetings regarding this project - one (1) public meeting is anticipated.

2. Minimum Requirements and Qualifications

To qualify for consideration the firm must:

- 1) Submit information on at least two successful flood attenuation studies of similar size and scope in Western Nevada
- 2) Demonstrate experience with FEMA processes and requirements, hydrologic and hydraulic analyses, and floodplain modeling and mapping
- 3) Show ability to provide the following certifications:
 - a. Field Surveys and Topographic Data Development: A Licensed Land Surveyor must provide an accuracy statement for field surveys and/or topographic data used and certify these data meet the Federal Geographic Data Committee National Standards for Spatial Data Accuracy or the American Society for Photogrammetry and Remote Sensing. (NAVD 88, NAD 83)
 - b. Hydrologic and Hydraulic Analyses and Floodplain Mapping: A Registered Professional Engineer must certify hydrologic and hydraulic analyses and data in accordance with 44 CFR 65.6(f).

3. Selection Process

A review and selection committee will evaluate the RFPs. The committee will consist of three (3) to five (5) members and be comprised of staff from CWSD and Douglas County. The committee will use a point formula during the review process. Based on the composite scores, a consultant shall be selected for contract negotiation. The following categories will be evaluated in the selection process:

- General Information (10%):
 - Provide a general description of the company and/or team that is proposing to provide services, including all sub-consultants.
 - Provide an organizational chart showing key personnel who will be working on the project. For each key person, provide the following information:
 - Percentage of time that each person will be committed to the project
 - Length of time with the firm
 - Applicable professional registrations and education.
- Project Team experience with similar projects in Western Nevada including experience with flood attenuation studies (45%):

- Provide a list of similar projects on which the project team has experience. For each reference project, please provide the following information:
 - Description of the project, including project name and location
 - Project owner and/or client information
 - Role of the firm, including a description of the services provided
 - Role of each key team member who worked on the reference project and the percentage of time spent by each key team member on said project
 - Approximate dates services were provided
 - Reference information - two (2) contacts, including current telephone numbers per project.

- List current workload of project team and indicate ability to start immediately and complete project within specified timeline (20%):
 - Provide a table/list that summarizes the current major assignments of all key team members, percentage of time committed to each assignment, anticipated end date of major assignments, and percentage of time to be committed to this project. Also include a statement as to when the team would be available to start work on this project.

- Understanding of the project and approach to performing the required services (25%).
 - Discuss the major issues your team has identified on this project and how your firm/team intends to address those issues. Identify any technical innovations that may be incorporated and/or innovative approaches that will be used in executing the work. Also, discuss the particular expertise your firm/team offers and how you propose to use that expertise to benefit the CWSD and Douglas County to add value to the project.

During evaluation, the committee reserves the right, where it may serve the County's best interest, to request additional information or clarification from the Consulting Firm or to allow corrections of errors or omissions.

The selection of the most qualified project teams may be based wholly on an evaluation of the submitted RFP. Consultant costs are not to be included with the RFP and will not be a factor in the evaluation of the RFP. Please note that the anticipated budget for this project is \$75,000. By submitting a proposal the consultant is indicating that the work will be accomplished within the available budget as defined in this request for proposals

4. Project Timeline

At the discretion of the committee, additional information and/or oral interviews of the top rated project teams that are deemed qualified by the committee may be requested. The committee may also select a consultant based solely on the RFP.

Proposals due to CWSD by:	November 12, 2014
If necessary, interviews of pre-selected firms will be conducted the week of:	December 1, 2014
Selection Committee will make its recommendations on or before:	December 9, 2014

Proposed approval by CWSD Board of Directors on:
Project completion no later than:

December 17, 2014
June 30, 2016

5. Submittal Content

The proposal shall not exceed 10 one-sided pages addressing the information requested above. The cover letter must not exceed two (2) one-sided pages, must clearly state who the Project Manager will be for the firm, and must be signed by an officer of the firm. The cover letter will clearly summarize the firm's qualifications and provide a list of three (3) professional references with contact information. Resumes of key personnel, including project manager, and related information and company brochures may be provided as attachments to the 10-page proposal referenced above.

6. Submittal Deadline

To be considered for selection, please submit two (2) copies of your proposal to the address below by 5:00 p.m. November 12, 2014. Also, please submit a digital copy of your proposal to Edwin James at edjames@cwdsd.org.

Carson Water Subconservancy District
777 E. William Street, Suite 110A
Carson City, NV 89701

7. Withdrawal of RFP

Request to withdraw RFP received after the time and date set for opening and acknowledging RFP will not be considered.

8. Objection by Unsuccessful Proposer

Any firm who is not selected by the committee may file a written objection to CWSD. Any objection shall be submitted to CWSD a minimum of five (5) days prior to the CWSD Board of Directors meeting where action on this RFP will be heard. Any late objection will be rejected.

Minority and Women own businesses are encouraged to submit proposals.