

TO:

Mayor and City Council

FROM:

Malcolm Matthews, Director, Parks and Recreation Department

THROUGH: Terry M. Brechtel, City Manager

**COPIES:** 

Christopher J. Brady; Finance; Management and Budget; Legal; Public Works;

File

**SUBJECT:** 

Ordinance Accepting the Proposal from Fernandez, Frazer, White & Associates,

Inc. to Perform Civil Engineering Services Associated with the Southside Lions

Park - Lake Improvements Project

DATE:

January 29, 2004

# SUMMARY AND RECOMMENDATIONS

This ordinance accepts the proposal and authorizes a professional services agreement in an amount not to exceed \$156,230.00 payable to Fernandez, Frazer, White & Associates, Inc. (SBE/MBE/DBE) for civil engineering services in connection with the Southside Lions Park -Lake Improvements Project in City Council District 3; appropriates \$167,730.00 from 1999 Park Bond Funds; establishes a project budget and allocates \$10,000.00 for engineering contingency and \$1,500.00 for bid advertising/printing.

Staff recommends approval of this ordinance.

#### **BACKGROUND INFORMATION**

The 1999 Parks General Obligation Bond Issue approved funding to rehabilitate park facilities in the lake area of Southside Lions Park located at 900 Hiawatha in City Council District 3. The lake dam spillway located in the park requires stabilization and this has become a priority to design, then to obtain adequate funding and to construct repairs.

Fernandez, Frazer, White and Associates, Inc. has performed professional services, including a Master Plan, associated with Southside Lions Park. The proposed scope of services to be approved includes Assessment (Phase I) and Design (Phase 2) of the stabilization project. Additional proposed services for assistance with Bidding and Construction Administration will not be funded at this time. The scope of work and consultant's proposal were reviewed and approved by the City Engineer.

Southside Lions Civil Engineering Services January 29, 2004 Agenda Page 2

The civil engineering design work will be completed from March 2004 until June 2004. Concurrently, staff will continue efforts to identify funds to complete the construction work that will be required so that construction may proceed immediately after the design is completed.

#### **POLICY ANALYSIS**

These actions are consistent with the approved 1999 Park Bond Issue. The consultant firm was selected based upon demonstrated ability and qualifications and was originally selected through the City's consultant selection process.

#### FISCAL IMPACT

Funding of \$200,000.00 was approved in the 1999 Park Bond Issue for Southside Lions Park – Lake Area improvements. A total of \$167,730.00 will be appropriated for this civil engineering project. Engineering fees are \$156,230.00, engineering contingency is \$10,000.00 and bid advertising/printing is \$1,500.00. The General Fund operating budget is not impacted through this action. Future funding for construction will need to be identified.

# **COORDINATION**

The Public Works Department, Office of Management and Budget and Finance Department have provided assistance.

# SUPPLEMENTARY COMMENTS

A Discretionary Contracts Disclosure Form is attached from Fernandez, Frazer, White & Associates, Inc.

Malcolm Matthews,

Director of Parks and Recreation

Thomas G. Wendorf, P.E.

Director of Public Works

Christopher J. Brady, Assistant City Manager

Approved:

Terry M. Brechtel

City Manager

# City of San Antonio Discretionary Contracts Disclosure\*

For use of this form, see City of San Antonio Ethics Code, Part D, Sections 1&2
Attach additional sheets if space provided is not sufficient.
State"Not Applicable" for questions that do not apply.

\* This form is required to be supplemented in the event there is any change in the information under (1), (2), or (3) below, before the discretionary contract is the subject of council action, and no later than five (5) business days after any change about which information is required to be filed.

# Disclosure of Parties, Owners, and Closely Related Persons

For the purpose of assisting the city in the enforcement of provisions contained in the City Charter and the code of ethics, an individual or business entity seeking a discretionary contract from the city is required to disclose in connection with a proposal for a discretionary contract:

(1) the identity of any individual who would be a party to the discretionary contract;
N/A
(2) the identity of any <u>business entity</u> <sup>1</sup> that would be a party to the discretionary contract:
and the name of:
(A) any individual or business entity that would be a subcontractor on the discretionary contract;
(B) any individual or business entity that is known to be a partner, or a parent or subsidiary business entity, of any individual or business entity who would be a party to the discretionary contract;
N/A
(3) the identity of any <i>lobbyist</i> or <i>public relations firm</i> employed for purposes relating to the discretionary contract being sought by any individual or business entity who would be a party to the discretionary contract.
N/A

<sup>&</sup>lt;sup>1</sup> A *business entity* means a sole proprietorship, partnership, firm, corporation, holding company, joint-stock company, receivership, trust, unincorporated association, or any other entity recognized by law.

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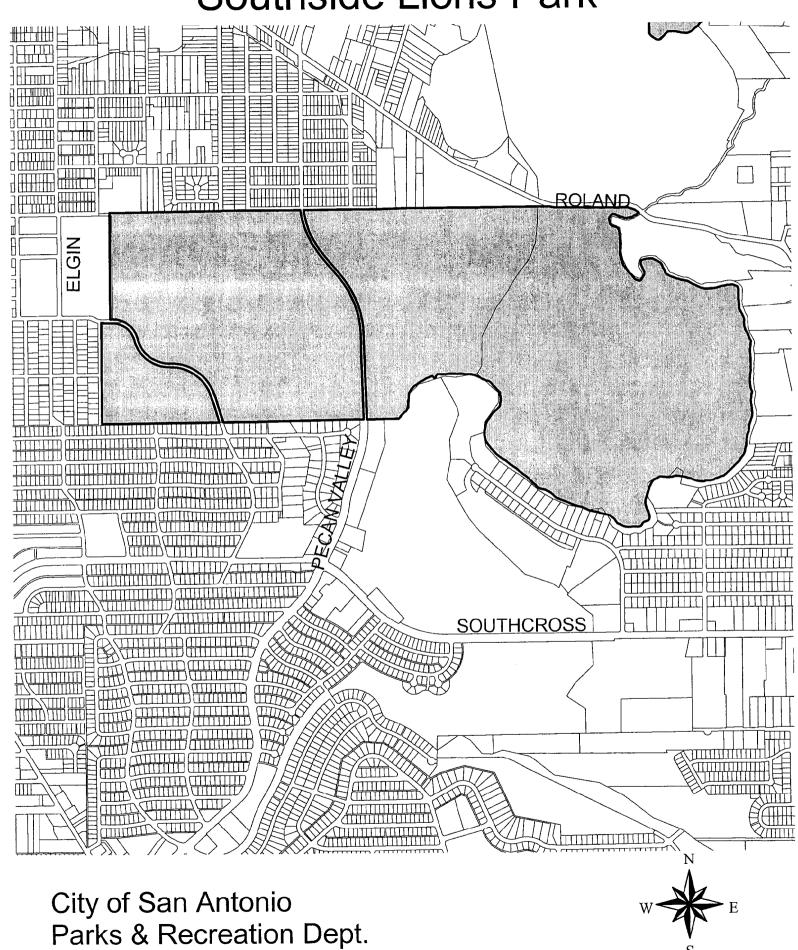
Any individual or business entity seeking a discretionary contract from the city must disclose in connection with a proposal for a discretionary contract all political contributions totaling one hundred dollars (\$100) or more within the past twenty-four (24) months made directly or indirectly to any current or former member of City Council, any candidate for City Council, or to any political action committee that contributes to City Council elections, by any individual or business entity whose identity must be disclosed under (1), (2) or (3) above. Indirect contributions by an individual include, but are not limited to, contributions made by the individual's spouse, whether statutory or common-law. Indirect contributions by an entity include, but are not limited to, contributions made through the officers, owners, attorneys, or registered lobbyists of the entity.

To Whom Made:	Amount:	Date of Contribution:
NONE		
Disclosures in Proposals		
Any individual or business entity see known facts which, reasonably unde	king a discretionary contract wit erstood, raise a question <sup>2</sup> as to	h the city shall disclose any whether any city official or
employee would violate Section 1 official action relating to the discretion	of Part B, Improper Economic	Benefit, by participating in
official action relating to the discretio	Hally Contract.	
Signature:	Title: President	Date:
albert 3 Fernandy	Company: Fernandez, Fra White & Associates, Inc.	azer, December 5, 2003

<sup>&</sup>lt;sup>2</sup> For purposes of this rule, facts are "reasonably understood" to "raise a question" about the appropriateness of official action if a disinterested person would conclude that the facts, if true, require recusal or require careful consideration of whether or not recusal is required.



Site Map
Southside Lions Park



# FERNANDEZ, FRAZER, WHITE AND ASSOCIATES, INC. CONSULTING ENGINEERS/PLANNERS/LANDSCAPE ARCHITECTS

December 5, 2003

Mr. Rodney Dziuk San Antonio Parks and Recreation Department 506 Dolorosa San Antonio, Texas 78205

RE: Southside Lions Park Dam Modifications

Dear Mr. Dziuk

As requested, we are providing the following breakout by phases for professional services on the above referenced project. The phases and scope of work correspond to our letter of October 29, 2003.

Phase 1 Assessment: \$81,750.00

Phase 2 Design \$74,480.00

Phase 3 Bid \$7,750.00

Phase 4 Construction \$28,520.00

Total \$192,500.00

The above fee does not include geotechnical services. We recommend Fugro South, Inc. for this work and will obtain a fee proposal if authorized. Four bores are anticipated.

Sincerely,

Albert B. Fernandez, P.E., R.P.L.S.

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PARK PROJECT SERVICES S.A. PARK REC DEPT. BY

11824 RADIUM SAN ANTONIO, TEXAS 78216 Telephone: 210/377-0774 October 29, 2003

Mr. Rodney Dziuk San Antonio Parks and Recreation Department 506 Dolorosa San Antonio, Texas 78205

RE: Southside Lions Park Dam Modifications

Dear Mr. Dziuk

Our proposal for conducting a study, preparing plans and specifications, and providing construction phase services associated with the restoration of the Southside Lions Park Dam and downstream spillway for Phase 1 through 4 as outlined below is \$192,500.00. Fees for Phase 5 will be negotiated after the scope of work for phase 5 is defined and prior to authorization to proceed.

An alternative scope of work for your consideration would consist of preparing the Phase 1 Dam Assessment and Rehabilitation Planning only. Our fee for providing Phase 1 services only is \$81,750.00. Fees for Phase 2 through 4 would be negotiated after the scope of work is more fully defined by the Phase I study.

The Southside Lions Park Dam consists of a rolled earth dam with a maximum dam height of about 23 feet and dam length of approximately 400 feet with a contributing drainage area of about 800 acres (source of structure data is National Inventory of Dams ID TX01458 completed by the U.S. Army Corps of Engineers). The dam was completed in 1963 and is estimated to impound about 68 acre-feet of water at normal water level with an estimated surface area of about 10 acres. The maximum water storage volume is estimated to be 103 acre-feet. The structure contains a low flow conduit through the dam to pass small flows. Larger flows pass the dam through an uncontrolled spillway on the right end of the dam. The uncontrolled spillway is earth lined and water passing through the spillway enter Salado Creek approximately 250 feet downstream of the toe of the dam.

The top of the dam is paved with asphaltic concrete for use as a road within the park. The paved road also extends across the full width of the spillway crest.

In recent years, flows passing through the uncontrolled spillway have significantly eroded the unlined spillway and caused damage to the downstream end of the low flow conduit. The uncontrolled spillway and conduit need rehabilitation to ensure the integrity of the structure. In addition, a complete dam and safety assessment is warranted to assist in proactively identifying and scheduling dam maintenance and repair needs.

The purpose of the proposed Southside Lions Park Dam Rehabilitation Project is to complete an assessment of the dam and its associated facilities and appurtenances and to develop and implement a staged rehabilitation plan so that the lake created by dam continues to be a safe, aesthetic amenity for the citizens of San Antonio.

The scope of work is outlined in the attached Exhibit "A".

The proposal includes standard periodic inspection during the Construction Phase. The consequences of the failure of a dam structure demands highly trained and experienced full time construction observation to ensure proper construction of the improvements. This level of knowledge and experience may not be available within the Parks and Recreation Department construction management staff. We highly recommend the project include full time qualified construction observation. We are available to provide this service and will provide a fee proposal if desired.

The project will require a geotechnical study and report. We anticipate 4 bores. We recommend Fugro South, Inc. for this work and will obtain a fee proposal if authorized.

We look forward to providing these services to ensure the integrity of the lake and dam at Southside Lions Park.

Sincerely,

Albert B. Fernandez, P.E.

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# EXHIBIT "A" SCOPE OF WORK

The following Scope of Work is proposed to proactively assess the dam and its appurtenances and to develop rehabilitation TO ADDRESS immediate safety-related needs.

#### Phase 1 – Dam Assessment and Rehabilitation Planning

Phase 1 will include preparation of a dam assessment and dam rehabilitation report. The report will provide guidance and recommendations for use in programming and planning future work tasks. The work will be:

#### Task 1 - Field Surveying

Complete topographic and planimetric surveys of the dam, the water storage area (up to six feet above the existing top of dam) and the area downstream of the embankment and spillway to the edge of Salado Creek. Establish two centerline of dam monuments and profile the top of dam. Prepare three cross sections of the dam (at maximum embankment height and approximately 100 feet on either side of the maximum section). Prepare a survey and description of the existing outlet conduit and upstream inlet box. Prepare a centerline survey of the existing uncontrolled spillway from the edge of water to Salado Creek. Survey five cross sections on Salado Creek at approximate 2,000-foot intervals downstream of the dam.

#### Task 2 - Hydrology and Hydraulics

Prepare inflow hydrology into the site for storms ranging from the 2, 5, 10, 25, 50, 100, 500, and the Probable Maximum Precipitation events. Route the flood events through the existing structure to determine lake elevations during each event under current conditions. The hydrology will be based on Natural Resource Conservation Service (NRCS) methodology. U.S. Army Corps of Engineers (USCOE) HEC or NRCS software will be used as appropriate for hydraulic analyses.

#### Task 3 – Dam Breach Analyses and Dam Hazard Classification

Conduct dam breach analyses to estimate the impact of a dam failure on downstream property, roads and safety to the public. Propose a dam hazard classification based on the impacts estimated from the dam breach analyses. Meet and work with the Dam Safety Section of the Texas Commission on Environmental Quality (TCEQ) to obtain approval of the proposed dam hazard classification.

#### Task 4 – Geotechnical Investigations

Prepare and carry out a geotechnical investigation program designed to gather information on the dam integrity and for use in future design work. The work will include borings in the field, sample collection, testing and analyses. The geotechnical borings, sampling and testing are not included in this pricing and will be subcontracted to specialty firm.

#### Task 5 - Environmental Assessments

Prepare an Environmental Site Assessment Phase 1 Report as outlined in ASTM Standards and prepare an environmental planning assessment based on the principles outlined in the National Environmental Policy Act (NEPA). The Environmental Site Assessment (ESA) Phase 1 Report will provide a review of available environmental information and an observation of the site to look for indications of potential or actual contamination. The NEPA Environmental

Planning Assessment will review the current conditions at the site (terrestrial and aquatic biology, cultural and archaeological resources), assess impacts of proposed changes and suggest mitigation strategies. This scope does not include ESA Phase 2 work, work for preparation of an Environmental Impact Statement and work for permitting other than the original preparation of the permit applications.

#### Task 6 – Planning for Structure Rehabilitation

Based on the site topography, hydrology, hydraulics, geotechnical data and dam hazard classification, we will complete studies to assess the condition of and rehabilitation needs of the dam and appurtenances. The analyses will include providing adequate hydraulic capacity at the dam, ensuring structural integrity of the dam and associated facilities, and ensuring that flows passing the dam are safely conveyed to Salado Creek without endangering the integrity of the structure.

Flood routing will be completed for the structure and used to determine the desirable combination of low level outlet, top of dam elevation and overflow spillway elevation, width and configuration. The structural integrity of the embankment will be assessed.

A conceptual design will be prepared for the two most promising alternatives and cost estimates of the rehabilitation work will be prepared.

#### Task 7 – Presentation of Alternatives and Selection of Plan

Information regarding the alternatives studied and the recommended rehabilitation plan will be presented to the staff at City of San Antonio Parks and Recreation. The rehabilitation plan will contain conceptual design of the improvements, proposed staging of the improvements, project schedule and estimated project cost. The City will be asked to select their preferred alternative to move forward into design.

#### Task 8 – Draft Report and Review

A Draft Report will be prepared containing the results of the dam assessment and the proposed rehabilitation plan. Six copies of the draft report will be provided for review.

#### Task 9 – Coordination with Other Agencies

Coordination will be carried out with local, state and federal agencies to inform them of the proposed project. Any additional studies, work effort or analyses required by these entities is not included in this fee proposal and will be priced separately.

#### Task 10 – Address Draft Final Report Comments

Comments provided by the City will be addressed and appropriate changes made in the report. Six copies of the final report will be provided to the City.

## Phase 2 – Design of Stage 1 Improvements

Phase 2 will include preparation of the designs, plans and specifications and bid documents for the low level outlet and the uncontrolled spillway. The fees proposed are based on design of a standard NRCS riser, low level flow conduit not exceeding 36 inches in diameter and an uncontrolled concrete spillway structure consisting of a baffled chute not exceeding 30 feet in width. If required, the engineering fee will be renegotiated to accommodate alternate types of structures or sizes.

#### Task 1 - Field Surveying

Complete surveys required to obtain details needed for design of the proposed improvements.

# Task 2 – Final Design, Plans and Specifications

Prepare final designs, plans and specifications for the low level outlet and uncontrolled spillway selected for implementation. Designs, plans and specifications for other recommended improvements are not included in this fee proposal.

# Task 3 – Agency Coordination and Approvals

Submit the proposed Stage 1 construction plans to the TCEQ for approval. In addition, submit the proposed plans to the USCOE for permitting under a nationwide general permit. If the USCOE requires that an application be made for a stand-alone permit, additional fees will be required.

Submit an application to the floodplain administrator in San Antonio for construction in the floodplain. Submit an application for a non-point source pollution control permit.

Task 4 – Opinion of Probable Cost and Construction Performance Time Prepare an opinion of probable cost for the proposed improvements and a construction performance time.

#### Task 5 - Construction Bid Documents

Prepare the construction bid documents for project.

#### Task 6 - Review of Bid Documents

Submit copies of the construction bid documents to the City for review.

#### Task 7 - City Review Meeting

Attend the City review meeting to discuss the documents and receive comments.

#### Task 8 - Revise Construction Bid Documents

Revise its plans and specifications as appropriate to address comments from the city.

#### Task 9 - Final Bid Documents

Prepare and supply the final bid documents to the City.

#### Phase 3 – Bid Phase Services for Stage 1 Improvements

Phase 3 will include services to solicit, receive and evaluate construction bids for the project. The work will be:

#### Task 1 - Issue Plans and Addendums

Issue the plans and addendums and handle the consultant portion of the bid solicitation. 20 bid sets are included in the fee proposal.

Task 2 - Attend the Pre-Bid Conference and Respond to Questions

#### Task 3 - Recommendation of Award

Assist in evaluating the bids received and making a recommendation for award.

# Phase 4 - Construction Phase Services for Stage 1 Improvements

Phase 4 will include support to the City of San Antonio during construction improvements. The work will be:

Task 1 – Pre-Construction Conference Attend the pre-construction conference.

#### Task 2 - Periodic Observation

Provide periodic observation of the general progress of the work. The observation will be at intervals not more frequent than once each two weeks and for an on-site duration of not more than one hour.

Task 3 – Submittals, Shop Drawings and Requests for Information Review and respond to contractor's submittals, shop drawings and requests for information.

Task 4 – Substantial Completion Review and Final Completion Review Participate in the substantial completion review, preparation of the punch list and in the final completion review.

Task 5 – Record Drawings Prepare record drawings.

#### Task 6 - One-Year Warranty Inspection

Approximately one month prior to the expiration of the one-year construction warranty, participate in a review of the site and identify warranty work that should be completed by the contractor.

#### Phase 5 – Planning, Design, Bidding and Construction Services for Other Staged Improvements.

Phase 5 will include services to the City of San Antonio for additional improvements (if required) to be completed after the Stage 1 improvements. If required by TCEQ or requested by the City, an Emergency Action Plan in accordance with published TCEQ guidelines will be prepared. Fees for Phase 5 will be negotiated after the scope of work for phase 5 is defined and prior to authorization to proceed.

# Southside Lions Park - Lake Improvements Project

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Index Cod	e: <u>Description:</u>		Current <u>Budget:</u>	Revisions:	Revised <u>Budget:</u>
REVENUE	ES:				
1999 Park	(Bond Funds (\$200,000)	Total:	<u>\$0.00</u> \$0.00	\$167,730.00 \$167,730.00	\$167,730.00 \$167,730.00
EXPENDI	TURES:				
new new new	Engineering Fees Engineering Contingency Bid Advertising/Printing	Total:	\$0.00 \$0.00 <u>\$0.00</u> \$0.00	\$156,230.00 \$10,000.00 <u>\$1,500.00</u> \$167,730.00	\$156,230.00 \$10,000.00 <u>\$1,500.00</u> \$167,730.00