



**FRESNO'S CHAFFEE ZOO CORPORATION
REQUEST FOR PROPOSAL
PROFESSIONAL ARCHITECTURAL/ENGINEERING SERVICES FOR NEW ZOO ENTRANCE**

Fresno's Chaffee Zoo Corporation, hereinafter referred to as "the Zoo", is conducting a competitive two-step process to retain a consultant to provide professional architectural/engineering services for a new entrance to include retail shops, ticket taking, guest services, restrooms, staff offices, arrival plaza, solar and animal exhibits.

The Zoo invites qualified firms to submit a written proposal relating to this solicitation, a screening committee will then evaluate the proposals. The firm's proposal selected will then enter negotiations with the Zoo for a fixed fee contract.

A complete copy of this RFP may be obtained from Mr. Jesse Santiago by calling (559) 903-5920 or online at www.fresnochaffeezoo.org. Written questions regarding this RFP must be received no later than 2:00pm, March 25, 2024. Questions may then be answered by written amendment to this document. Oral statements or instructions shall not constitute an amendment to the RFP.

All submittals must be received by the due date and at the submittal location specified herein. Any response received at the specified submittal location after the due date and time assigned will be returned unopened. Faxed or emailed responses are not acceptable and will not be considered. The Zoo reserves the right to reject any or all submittals, to negotiate with any or all responsible submitters, or to withhold the award for any reason it may determine, and to waive or not to waive any informalities in any submittal. All information regarding the content of the specific submittals will remain confidential until a contract is finalized, or all proposals are rejected. The Zoo reserves the right to change the process and/or modify the selection procedures described herein. All selection decisions by the Zoo are final.

Submitters shall be responsible for all expenses that they may incur in preparing proposals.

SUBMITTAL DUE DATE:
SUBMITTAL LOCATION:

2:00pm, April 15, 2024
The Fresno's Chaffee Zoo Corporation
Attn: Jesse Santiago
1250 W. Olive Avenue
Fresno, CA 93728

Jon Dohlin

Authorized Signature

March 4, 2025

Publish Date

SCOPE OF SERVICES

I. INTRODUCTION:

PROJECT: **New Zoo Entrance**

A. LOCATION: **894 W. Belmont Avenue, Fresno, CA 93728**

B. PROJECT TIMEFRAME: Selection of an Architectural firm and initiation of contract negotiations is expected to occur by June 26, 2025. The suggested time for completion of construction document services is expected to occur by March 26, 2026. Completion of the facilities is planned to occur by March 26, 2027.

The selected Architectural firm will be required to work with the Zoo Capital Construction Department to:

- Evaluate costs and maintain continuous budget control throughout the design.
- Value engineer the project.
- Participate in construction planning and schedule assistance.
- Ensure constructability prior to the Contractor's bid.

C. SCOPE: This project aims to construct a new multi-story front entrance that includes designing and constructing a welcoming entry area, integrating a trout stream exhibit, and incorporating retail shops to enhance the visitor experience. Additionally, the project will feature essential facilities such as a life support system for aquatic exhibits, ticket tracking systems, guest services, restrooms, and an arrival plaza for ease of access. Administrative offices will be included to support operations, ensuring a functional and efficient environment for both visitors and staff. The new Zoo project will help establish and showcase the Zoo's identity, help connect the guest's arrival sequence with the new parking structure and improve visitor flow and throughput, meet accessibility requirements, provide safety and security services, and help achieve the Zoo's environmental and sustainability goals.

Zoo Entry:

- Flow and Layout: Design the entrance to safely accommodate high volumes of foot and vehicle traffic efficiently. This includes creating separate lanes for general admission, ticket holders and special needs.
- Theme and Identity: Develop a design that is appropriate and enhance the Zoo's location in historic Roeding Park that reflects the Zoo's mission of animal care, education, inclusion, and conservation. Incorporate elements that evoke the unique location and natural resources of the great parks and habitats around Fresno and the Zoo's specific identity and regional significance. The design will provide both a welcoming presence and the start of an exciting exhibit experience.
- Park Setting: Create an appropriate set of amenities to support community use and recreation of Roeding Park and incorporate those uses into the arrival sequence of the Zoo.
- Context and History: Incorporate historical and new monuments to founders, supporters, and partners into the arrival experience of the Zoo.
- Visitor Experience: Create an entrance that sets the tone for a memorable experience, offering a sense of excitement and anticipation.
- Queue Management: Implement systems for managing lines, such as barriers or markers, to help guide visitors smoothly through ticketing and entry process.
- Universal Access: Ensure the entrance is accessible to individuals with disabilities, including wide, ramped pathways, elevators where necessary and accessible restrooms.
- Assistance Services: Provide services, clearly marked assistance points, and storage for guest accessibility equipment such as wheelchairs or mobility scooters.
- Ticketing Options: Offer circulation, layout, and equipment to support various ticketing methods, including but not limited to: physical tickets, digital tickets, membership support, self-service kiosks, and online booking systems to minimize delays and increase throughput. Consider design for pass-

- through and check in for private events.
- **Efficient Processing:** Design ticket booths and turnstiles to manage peak visitor times efficiently, with clear signage and staff to assist as needed.
 - **Security Screening:** Provide the option for the Zoo to implement security measures such as bag checks or metal detectors on an as-needed basis during events .
 - **Emergency Access:** Ensure that emergency services can quickly access the entrance area. Design clear, unobstructed paths for emergency vehicles and evacuation routes.
 - **Information and Assistance:** Provide information desks or kiosks or electronic signage near the entrance to assist visitors with questions, provide maps, and offer details about the Zoo amenities and exhibits.
 - **Rest Areas:** Include seating and shaded areas near the entrance for visitors to rest before or after their visit.
 - **Clear Signage:** Design clear, readable and bilingual signage that directs visitors to ticketing, restrooms, attractions, and other amenities. Consider digital signs to accommodate a multi-lingual and diverse audience.
 - **Way finding:** Use visual guides and maps to help visitors navigate the entrance and understand the layout of the Zoo.
 - **Maintenance:** Design the entrance with durable materials to ensure the ability to stand up to regular maintenance while maintaining cleanliness and functionality.
 - **Welcoming Design:** Create an inviting and visually appealing entrance that reflects the Zoo’s identity, mission, and vision. Incorporate immersive elements that evoke the Zoo’s location as the “Gateway to the Sierras” and create an imaginative, inspiring tone for their visit.
 - **Eco-Friendly Practices:** To align with LEED certification standards, the project will prioritize sustainable design and green building practices. This includes using environmentally friendly materials and energy-efficient lighting systems. A comprehensive waste management strategy will be implemented, along with water-saving technologies to enhance resource conservation. The design will incorporate appropriate active and passive elements, such as green roofs, rainwater harvesting systems, solar panels, and microturbines. Landscaping will reflect the local environment along with appropriate species to evoke the Sierras, enhancing the sense of place and reinforcing the Zoo’s commitment to conservation and sustainability. These measures will contribute to achieving LEED credits in energy, water, materials, and innovation categories.
 - **Seamless Transition:** Ensure that the entrance design smoothly transitions visitors from ticketing into the Zoo’s experience and exhibits while allowing for clear and efficient use of operational elements and guest amenities.
 - **Engage Stakeholders:** Consult regularly with the Zoo’s staff, community members, and other stakeholders to gather input and ensure the design meets the needs and expectations of all parties involved.

Crest of the Sierras Exhibit:

- **Objective:** Design an engaging and educational exhibit at the Zoo’s within the entry space that creates an immersive experience and establishes a narrative and begins their Zoo visit without hindering circulation or ease of entry.
- **Project Scope:** Creation of an aesthetically pleasing immersive and exciting exhibit featuring the trout streams and riparian habitats of the High Sierras that serves as an exciting and unique start to the visitor experience.
- **Visual Appeal:** Integrate the exhibit into the Zoos entrance architecture, ensuring it is a focal point without slowing admission flow.
- **Thematic Elements:** Immerse visitors into the High Sierras with a natural trout stream habitat and experience through the use of realistic and immersive features while incorporating LSS design and operation, animal management, and safety considerations.

- Visitor Experience: Design for optimal and exciting viewing angles and accessibility, incorporating messaging and interpretive signage. Careful consideration should be given to design features that minimize reflection and glare.
- Dimensions: Ensure the size and shape of the High Sierra exhibit conforms to available space for both animal health and exhibit maintenance.
- Water Features: Incorporate features such as waterfalls, rapids, riffles, and pools to enhance the natural look, mimic the natural functions, and provide visual excitement to the exhibit.
- Landscaping: Incorporate natural elements like rocks, trees, streamside vegetation and plants, and other organic elements to mimic a trout stream habitat. The design should ensure sufficient natural and/or artificial light for both animal health and plant growth.
- Support Structure: Design a robust structural system for the exhibit, ensuring it can safely hold the water, control flow and other components.
- Materials: Select durable and realistic materials to mimic natural components of habitat that are both convincing and resistant to water, UV exposure, and environmental wear.
- Water System: Design a system to recreate natural flow patterns, water qualities, temperatures, and oxygen levels.
- Support Services: Provide ongoing technical support and troubleshooting assistance.
- Documentation: Provide detailed drawings, operational manuals, and maintenance guides.
- Training: Train staff in the operation and upkeep of the exhibit, including emergency procedures.
- Permits and Approvals: Secure necessary permits and approvals from relevant authorities.
- Standards Compliance: Ensure the exhibit meets safety, environmental, and animal welfare standards.
- Post-Installation Review: Provide assessment of the exhibit's performance and visitor feedback after launch.
- Adjustments: Make any necessary adjustments based on operational data and visitor experience.

Life Support System (LSS):

- Objective: Design and install a comprehensive life support system for a trout stream exhibit to ensure optimal habitat conditions and water quality for trout.
- Site Survey: Conduct a thorough survey of the new front entrance area to assess space, existing infrastructure, and environmental conditions.
- Water Source Evaluation: Analyze the quality and quantity of the water source to ensure it meets the needs of the trout.
- Environmental Factors: Consider factors such as temperature, humidity, and light exposure. Note that featured exhibit will require cold, highly oxygenated water.
- Water Filtration: Design and specify filters (mechanical, biological, and chemical) suitable for maintaining clean and clear water.
- Pumps: Select appropriate water pumps to ensure adequate flow and circulation
- UV Sterilization: Incorporate UV sterilization if necessary to control pathogens.
- Heating/Cooling Units: Design systems to maintain optimal water temperature for trout.
- Thermometer and Controls: Integrate temperature monitoring and control systems.
- Air Pumps and Diffusers: Design equipment to ensure proper oxygenation of the water.
- Oxygen Levels: Design system for equipment to ensure proper monitoring and adjusting of oxygen levels as needed.
- Sensors: Design system with sensors for pH, ammonia, nitrite, nitrate, and dissolved oxygen levels, temperature, and turbidity sensors.
- Control System: Design system to integrate automated control systems for real-time monitoring and adjustments.
- Power Backup: Design system to have backup power solutions to ensure system operation during power outages.
- Alarm Systems: Design system to have alarms for critical system failures or deviations from optimal conditions.

- System Installation: Provide detailed steps for the installation of each component, including filtration, circulation, and monitoring systems.
- Testing and Collaboration: Provide initial testing of the system to calibrate and ensure functionality.
- Support Services: Provide technical support and troubleshooting guidance.
- System Documentation: Design detailed schematics, operation manuals, and maintenance guides.
- Training: Educate staff on system operation, troubleshooting and maintenance.
- Permits: Obtain necessary permits for the installation of the life support system
- Standards: Ensure compliance with relevant environmental and safety standards.
- Performance Evaluation: Provide assessment of stem performance and aquatic health.
- Optimization: Provide adjustments based on performance data to improve system efficiency and effectiveness

Retail Shop:

- Prime Location: Position the shop in a high-traffic area of the entry structure to maximize visibility, foot traffic and buying opportunities.
- Effective Layout: Design a layout that incorporates modern retail best practices and facilitates easy movement, clear sightlines, and organized flow. Ensure there are distinct areas for several types of merchandise, checkout counters, and customer service.
- Accessibility: Ensure easy access for all visitors, including those with disabilities, with wide pathways and clear signage.
- Inviting Design: Create an appealing storefront with vibrant colors, engaging displays, and thematic elements that reflect the Zoo's mission and branding.
- Engaging Environment: Create an immersive shopping experience that resonates with visitors and provides interpretive opportunities for the Zoo's educational and conservation goals.
- Comfortable Layout: Design an open and spacious layout that allows for easy navigation and encourages exploration.
- Zoned Areas: Divide the shop into sections (e.g., apparel, toys, educational materials, and local crafts) to help visitors easily find what they are looking for.
- Quality Control: Ensure all products are of high quality to reflect well on the Zoo and provide value for visitors.
- Targeted Merchandise: Souvenirs (plush toys, apparel and memorabilia related to the animals in the Zoo's care, educational items (books, games, and kits that promote wildlife conservation and education).
- Interactive Features: Consider adding interactive elements or educational displays that engage visitors and complement the Zoo's messages and experience.
- Thematic Décor: Incorporate Zoo-themed décor elements, such as animal sculptures or nature-inspired designs, to create an immersive shopping experience.
- Clear Signage: Use clear signage to guide visitors to checkout areas and inform them of payment options and return policies.

Ticket Taking:

- Visitor Flow: Design a layout that guides visitors seamlessly from arrival to ticket purchase and entry. Create a logical flow to minimize congestion and avoid bottlenecks.
- Queue Management: Plan for both physical and digital queue management systems to organize lines efficiently. Use barriers, signage, or digital displays to direct visitors and manage waiting times.
- Universal Design: Ensure the ticketing area is accessible to everyone, including people with disabilities. This includes ramps, wide aisles, accessible counters, and clear, legible signage.
- Assistance Features: Incorporate spaces for assistance, such as a dedicated staff station, first aid, or help desks.
- Ticketing Systems: Design for modern ticketing technology, including digital ticketing, self-service kiosks, and mobile scanning systems. Ensure systems are integrated for real-time sales and visitor management and consider capacity for attendance growth.

- Data Management: Include infrastructure and space for handling data, such as server rooms or connectivity solutions, to support ticketing and operational needs.
- Plan for security features, such as surveillance cameras, bag checks, or metal detectors while maintaining a welcoming environment.
- Emergency Access: Design clear, accessible routes for emergency services and ensure they are designated evacuation paths and safety signage.
- Aesthetic Appeal: Create a visually appealing entrance that reflects the Zoo's theme and brand. Use materials and design elements that enhance the visitor's first impression.
- Comfort Features: Provide amenities like seating, shade, and water fountains to enhance visitors' comfort while waiting. Consider innovative climate control solutions if the area is enclosed.
- Staff Areas: Design functional spaces for staff operations, including ticket counters, staff break rooms, and storage areas. Ensure staff areas are efficiently integrated with visitor areas.
- Maintenance: Choose durable materials that will stand up to high-touch visitor traffic and design for easy maintenance to keep the ticketing area in good condition and minimize operational disruptions.
- Thematic Elements: Incorporate design elements that reflect the Zoo's identity and mission, creating a cohesive experience that begins at the entrance.
- Educational Elements: Consider integrating education displays or information boards about the Zoo's conservation efforts or animal exhibits to engage visitors from the start.
- Eco-Friendly Design: Use sustainable materials and design practices to reduce environmental impact. Incorporate energy efficient lighting, water-saving fixtures, and waste management solutions.
- Green Infrastructure: Include green features such as natural ventilation, daylighting, and green roofs where possible to enhance sustainability.
- Stakeholder Engagement: Consult with the Zoo's staff, management, and community members to gather input and ensure the design meets their needs and expectations.
- Visitor Feedback: Consider feedback from visitors to understand their needs and preferences, which can inform the design process.

Guest Services:

- Description: Design a new guest services area, including purpose, size, and key functions (e.g., information desks, lost and found, security, first aid) and guest and staff access to same.
- Location: Locate the guest services area within the Zoo's entrance in light of any other relevant site conditions or constraints.
- Design Requirements: Outline specific design requirements, including the desired aesthetic, functional needs, and materials that align with the Zoo's branding and mission.
- Space Planning: Create the expected layout and flow for the guest services area, prioritizing staff comfort and efficient workspaces.
- Visitor Experience: Ensure that design enhances the visitor experience and meets best practices for comfort, accessibility, and ease of navigation.
- Operational Efficiency: Specify how design creates operational efficiencies, including staff workflow, service delivery, and integration with Zoo operation.
- Aesthetic Appeal: Create a visually appealing entrance that reflects the Zoo's theme and brand. Use materials and design elements that enhance the visitor's first impression.

Restrooms:

- Visitor Volume: Design restrooms to manage peak visitor loads. Estimate the number of fixtures needed based on expected traffic and peak times.
- Fixture Ratio: Include an adequate number of toilets, urinals (for men's restrooms), and sinks, ensuring proper ratios to avoid long waits.
- ADA Compliance: Ensure all restrooms meet ADA standards. Must include accessible stalls, grab bars, and lower sink heights, clear visible signage with braille and large text to help guide all visitors.
- Climate Control: Ensure proper ventilation to maintain a fresh environment. Consider energy-efficient exhaust fans or natural ventilation options.

- Lighting: Use bright, energy-efficient lighting that enhances visibility and safety. Consider motion-sensor lighting to conserve energy.
- Design Theme: Incorporate elements that reflect the Zoo's theme or branding, using colors and materials that harmonize with the overall environment.
- Materials: Choose high-quality, durable, and vandal-resistant materials for flooring, walls, and fixtures. Opt for easy-to-clean surfaces that withstand heavy use.
- Maintenance: Design with ease of maintenance in mind. Include features like touchless fixtures and durable finishes to reduce cleaning frequency and effort.
- Water Efficiency: Install water-saving fixtures such as waterless urinals, low-flow toilets, and sensor activated faucets to reduce water consumption.
- Eco-Friendly Materials: Use sustainable or recycled materials where possible and incorporate energy-efficient lighting and ventilation systems.
- Non-Slip Flooring: Use non-slip flooring materials to prevent accidents, especially in wet areas.
- Hygiene Features: Incorporate touchless fixtures for faucets, soap dispensers, and hand dryers to reduce contact and improve hygiene.
- Sanitary Disposal: Provide sanitary disposal bins for feminine products.
- Stall Design: Ensure stalls offer adequate privacy, with proper door heights and side panels, coat hooks and shelves.
- Waiting areas: Design waiting areas for lines to efficiently avoid congestion. Provide seating if space is allowed, especially for families or elderly visitors.
- Location: Position restrooms in accessible and convenient locations within the Zoo. Consider proximity to entrance/exit points, visitor flow, and other restroom facilities on campus.
- Signage and Wayfinding: Install clear and prominent signage directing visitors to restrooms from key areas of the Zoo. Use maps or digital display if applicable.
- Service Access: Design staff access points for maintenance and cleaning that do not interfere with visitor use. Include storage for cleaning supplies and equipment.
- Safety Protocols: Implement design features that facilitate safety check and emergency communication systems.
- Family Facilities: Include family restrooms or changing areas that cater to parents with young children or those needing additional space.
- Educational Elements: Integrated educational displays or messaging related to the Zoo's conservation efforts or animal care to enhance the visitor experience.
- Lactation Room: Provide a private, comfortable, and hygienic space for breastfeeding or pumping.
- Adult Changing Table: Provide a safe, comfortable, and accessible space for adults needing assistance with personal hygiene.
- Children's Changing Table: Provide a safe, comfortable, and accessible space for children needing assistance with personal hygiene.

Arrival Plaza:

- Visitor Flow: Design pathways and circulation routes to guide visitors smoothly from the entrance to Zoo amenities and exhibits. Consider how to manage dynamic visitor flow and avoid congestion.
- Information and Wayfinding: Include signage, maps, and information points to help visitors navigate the Zoo. Consider interactive elements like digital kiosks or touch screens.
- Amenities: Incorporate visitor amenities such as seating areas, shade structures and water fountains to enhance comfort.
- Thematic Design: Ensure the design creates a sense of welcome to the Zoo and reinforces the Zoo's identity, branding and mission.
- Materials and Finishes: Ensure the design incorporates materials that are durable, visually appealing, and suitable for the climate. Consider the use of natural or themed elements where appropriate.
- Landscaping and Green Space: Design landscaping elements, such as gardens, trees, and water features, to enhance the visitor experience and evoke the history of Roeding Park's botanical significance.

- Lighting: Provide lighting solutions that ensure safety and enhance the plaza's ambiance and include energy-efficient and well-placed lighting to illuminate the pathways, seating areas, and informational signage.
- Accessibility: Ensure the plaza is fully accessible to all visitors, including those with disabilities. Design pathways, seating, and amenities to meet ADA standards.
- Exhibit Interfaces: Design interfaces that create entry points onto pathways leading to various Zoo exhibit experiences, ensuring they are clearly marked and easily accessible from the plaza.
- Eco-Friendly Design: Incorporate sustainable design practices, including the use of eco-friendly materials, water-saving features, and energy-efficient systems.
- Green Infrastructure: Consider features such as green roofs, solar shades, rain gardens, permeable paving etc. to enhance sustainability.
- Maintenance: Choose durable, low-maintenance materials and design features that facilitate easy upkeep.
- Safety and Security: Address safety and security concerns by incorporating features such as surveillance cameras, emergency call stations, and well-lit pathways.

Support Spaces:

- Meet with stakeholders to understand the functional needs and objectives of new offices, workspaces, storage, and equipment areas.
- Define spatial requirements, including office layout, meeting rooms, reception areas, IT spaces, restrooms, and storage, with an eye towards maximum flexibility and future adaptations.
- Conduct a detailed site survey of the new zoo entrance location.
- Assess site constraints, including topography, existing structure, and utility connections.
- Develop a design concept consistent with the Zoos branding and aesthetics for non-public spaces.
- Create floor plans, elevations, and 3D renderings to visualize the layout and design.
- Refine the chosen concept into detailed design drawings.
- Develop detailed floor plans, sections, and elevations.
- Select materials, finishes, and fixtures that meet the project's functional and esthetic goals.
- Ensure design complies with local building codes, zoning regulations, and accessibility standards.
- Prepare and submit permit applications and work with authorities to obtain necessary approvals.
- Collaborate with structural, mechanical, electrical, and plumbing engineers to integrate their requirements into the design.
- Coordinate the landscape architects and other consultants as needed.
- Produce detailed construction drawings, including architectural, structural and MEP plans.
- Prepare specifications for materials, finishes and fixtures.
- Assist in the preparation of bid documents and contractor selection.
- Review contractor submissions and provide recommendations.
- Conduct site visits to monitor construction progress and ensure adherence to design.
- Perform a final inspection to ensure the completed project meets design specifications and quality standards.
- Address any issues or modifications required before final handover.
- Provide as-built drawings and other documentation as needed.

D. PROJECT BUDGET: Construction cost is estimated to be \$20,000,000.00 (twenty million).

- The Architectural Design Program to be prepared by the Consultant must provide an estimate of all probable costs for the development of suitable facilities and related improvements. Construction documents shall be prepared for those facilities and improvements that can be completed for the amount budgeted.
- As there are limited funds for this project, it shall be the Consultant's responsibility to produce construction documents conforming to this budget. The base bid is to provide for the construction of the facilities and site improvements that are determined by the Zoo and project stakeholders. Bid Alternates

will be included for lower-priority components and to allow for some flexibility in the design as it relates to the Construction Contract.

II. DETAILED SERVICES

A. DESIGN CRITERIA: The basic Project requirements that determine the design of the facilities shall be a product of the Consultant's detailed analysis and research of the needs and requirements of the facility, with direction provided by the Zoo staff and project stakeholders.

B. GOALS AND OBJECTIVES:

- The Project will prioritize an engaging sense of arrival and excitement while maintaining and optimizing the Zoo operations to enhance efficiency and organization.
- Evaluating the proposed facilities for compliance with the Americans with Disabilities Act (ADA) and providing ease of organization, mobility, and accessibility in and around the site are ~~important~~ objectives for the site development of this Project.
- Preparation of construction documents, which satisfy the functional requirements as described herein, and as established and attainable within the budgeted funds.

C. BASIC PROJECT REQUIREMENTS:

- Materials and design should align with the Zoo's mission for conservation and education. The area should be accessible and welcoming. The Consultant is to provide innovative guidance in the design approach with the selection of materials, orientation, structural and operating systems that respond to today's need for the conservation of energy and water while being responsive to the project budget.
- Careful consideration should be given to service and emergency circulation as well as security in and around the facility in the Project design. Vehicular traffic and access requirements are to be analyzed with the design solution reflecting the results of this analysis without sacrificing the character of the proposed facilities.
- The Project should reflect the Zoo's commitment to be operationally cost effective by providing attractive, functional, and flexible facilities that minimize staffing and maintenance requirements and maximize energy conservation.
- A Landscape plan shall be part of each planned facility. Plants that convey specific habitats and environments should be selected in consultation with the Zoo staff for ease of care, water conservation, and appropriateness for the Fresno climate, and shall meet MWELO (modern water efficient landscape ordinance) requirements.
- Building lighting should maximize energy conservation and exterior lighting should comply with Dark Sky Standards.
- The angle of the sun should be considered in the design of the buildings and outdoor spaces for energy conservation as well as to provide shade for the visitors. Provide sun-study modeling and renderings as appropriate to indicate sun and shade at key times of the day and year.
- Water conservation measures should be utilized. Rainwater harvesting, low flow and waterless fixtures, and gray water systems should be included to the extent the regulatory codes and project budget allows.
- The consultant shall provide presentation materials for periodic Public/Zoo's Board review.
- The consultant will collaborate closely with the Zoos staff to develop the design for this project. There may be a need for the design team to travel to other facilities to study recent construction of similar venues.
- An analysis of service and emergency circulation, vehicular access, lighting, and public barriers will be needed.

D. SPECIAL CONSIDERATIONS:

- Small businesses, disabled veterans, minority owned, and women owned business (SB/DVBE/MBE/WBE)
- Energy And Water Efficiency:

- The facilities designed under this Contract shall be designed for maximum efficiency in the use of both energy and water.
- The Consultant shall provide written technical analysis of energy conservation measures listed below. The analysis must include, but not be limited to, added construction costs, energy and cost savings, changes to annual maintenance costs and life cycle cost analysis.
 - Passive water harvesting
 - High efficiency lighting
 - Daylight step-down ballasts with photocells for lighting
 - Native, deciduous tree shading at ground level.
- Accessibility Compliance:
 - The facilities, as public spaces, shall be designed and constructed for accessibility and use by the physically disabled. In this connection, the most restrictive requirements of the Americans with Disabilities Act (ADA), Occupational Safety & Health Administration (OSHA), International Building Code (IBC), ADA Accessibility Guidelines (ADAAG) and American National Standards Institute, Inc. (ANSI) shall determine the design criteria to be used for the design of these facilities to ensure accessibility and compliance. The specific design criteria applicable to provisions for the physically handicapped shall be incorporated in the Architectural Design Program document for each facility.
- Site Requirements:
 - The Consultant shall conduct a complete site analysis to clearly identify problems and opportunities connected with the development of the site(s). Included in this analysis are all existing facilities, zoning, and other legal requirements. The functional and visual relationship among all site components, both the existing and the proposed facilities, will be studied, and design options on total integration will be presented for approval and development as part of this project. Alterations to the site circulation, paving and landscaping to accommodate the new facilities as well as the physically disabled are of primary importance. Existing site survey to be provided by Zoo.
 - As vegetation is considered a major asset to the Zoo environment, an evaluation of all plants impacted by development, regardless of protected status, shall be made. The evaluation shall consider those plants of major size and/or particular value such as: plants that provide shade for users or structures; plants possessing wildlife value for nesting, protection or as a food source; non-protected plants that are found to be rare in the urban environment and those plants possessing a unique character or particular aesthetic quality, or that can be used as browse for the Zoo's animals. Planning efforts shall reflect a hierarchy of preservation methods where first, plants are preserved in place; second, plants are transplanted on site; and last, plants are removed from the site.
 - Water conservation methods for landscape, irrigation, and site drainage shall be utilized. Such methods may include but are not limited to the use of drought tolerant vegetation, water harvesting areas, drip irrigation, self-sealing irrigation heads, ground moisture sensors and/or rain shutoff valves, and water absorbing gel or polymer soil additives. All landscaping irrigation shall be connected to the Zoo's reclaimed water supply.
 - Site drainage shall utilize and maintain existing flow patterns. Detention/retention areas shall be provided as required by code.
 - All comfort stations and drinking fountains must be fully accessible and ADA compliant.
 - The use of recycled materials throughout the realm of facility improvements is encouraged where economically feasible.
 - Related Projects: The Zoo has an approved Master Plan. The Consultant should be familiar with this Plan and must ensure that all work furthers the intentions and harmonizes with Phase One of that plan.

III. SCOPE OF PROFESSIONAL SERVICES

A. GENERAL DESCRIPTION:

- The specific services being furnished during the life of this Contract shall be rendered by Architects and/or

Engineers registered to practice in their field of endeavor with the State of California. The professional and associated services provided shall be rendered by personnel pre-approved by the Zoo, which reserves pre-approval rights for any personnel substitutes, and shall be rendered promptly and diligently upon receipt of written Notice to Proceed with any or all the services herein.

- Consultant shall be responsible for the completeness and accuracy of all services rendered under this Contract and must correct all errors of omission or commission on the drawings, specifications, and other documents notwithstanding prior to acceptance by the Zoo.
- Consultants to be specifically selected by the zoo shall include but not be limited to, Theme Rockwork, Life Support System, Graphics/Interpretation.
- The Zoo's Project Management Team, concerned with the development of the Project may include, but is not limited to, the following:
 - The Fresno Chaffee Zoo Director of Capital Construction
 - The Fresno Chaffee Zoo Construction Project Manager
 - The Fresno Chaffee Zoo Staff (selected)
 - The Fresno's Chaffee Zoo Board
- Record Drawings: Consultant shall furnish the Zoo, final detailed working drawings that reflect "as-built" conditions within thirty days of the Consultant's receipt of the as-built drawings from the Contractor. The consultant shall also furnish the record set of drawings on CD in AutoCAD format version two thousand or later. Consultant's Final Payment may be withheld pending receipt of said items.

B. WORK SCHEDULE:

- The consultant shall prepare a work schedule, in a format that shall present information in weekly increments, as required for the accomplishment of the various tasks involved in providing professional services under this Contract and will include at a minimum:
 - The events that will satisfy each of the professional services.
 - The dates for each event will start and be completed.
 - The dates of each public meeting and design review meeting.
 - The elements that will hinder normal progress.
 - The names of the people responsible for each event.

C. ARCHITECTURAL DESIGN PROGRAM:

- The Consultant shall prepare a formal comprehensive Architectural Design Program for the proposed facilities, clearly stating services, circulation and functional relationships in and adjacent to the facility; delineating size and types of the components; alternative approaches to the possible growth and change for the various functions; developing probable construction costs and Project budget recommendations; documenting interviews with designated Zoo personnel and other interested parties, and providing necessary detailed data to enable Design to be undertaken upon completion of the document.
- Site Analysis: The Consultant shall provide research, attend meetings, and participate in on-site visits to obtain and gather information, determine status, and provide documentation of the following:
 - Vegetation location and description.
 - Site access: Pedestrian, bicycle, and vehicle access; to include public transportation availability and planning as well as maintenance, delivery, and emergency vehicular access. Coordinate siting and circulation with parking structure.
 - Hydrological analysis of site drainage and drainage basin; to include water detention/retention requirements.
 - Geotechnical investigations to be provided by the owner.
 - ADA requirements.
 - Utilities: Location, size, capacity, and requirements for electrical, gas, water, irrigation, sewer.
 - The Consultant shall be responsible for coordinating with local Utility Company representatives (including City of Fresno, SJVAPCD, FMFCD, FUSD) to determine requirements and/or

recommendations for proposed improvements including, but not limited to, size and location of proposed equipment and anticipated fees. The consultant shall coordinate and/or provide requested project information to these entities throughout the design process until its completion.

- Zoning, easements, and other legal restrictions.
- View elements: Views to and from the site and other visibility issues as they relate to site safety.
- Water: Analysis of availability versus demands
- Fire safety and other safety issues.
- Future site enhancements.
- The consultant shall prepare a preliminary estimate of the Cost of the Work, updated, and refined as the design process progresses, and evaluated against the project budget to keep costs within budget while accommodating project needs.
- The Architectural Design Program is to be submitted for analysis, review, comment, and approval prior to proceeding with Basic Design Services for design of the facilities.
- The Architectural Design Program, in general terms, shall include the following:
 - Establish the project **GOALS** - a documentation of what the Zoo wants to do and why it wants to do it.
 - Collect, organize, and analyze the **FACTS** - organize and analyze the program facts to reveal their relative importance and meaning.
 - Uncover and test program **CONCEPTS** - test programmatic concepts related to ideas intended as functional solutions to the design and operational problems of the Project.
 - Determine Facility and Staff **NEEDS** - space requirements, quality of construction and costs.
 - State the design **PROBLEM** - after evaluating all the information derived from the above, develop the most important statements that can be made regarding the problem.
- The Architectural Design Program is viewed by the Zoos staff as a formal document to be used as the basis for making decisions concerning the Project and should be designed for ease of communication.

D. BASIC DESIGN SERVICES

- Schematic Design: Consultant shall prepare and present such schematic design drawings together with general description of the Project that follows the Architectural Design Program, including a summary of circulation, a consideration of all pending and long-range plans, available energy efficiency measures and proposed construction materials, as may be necessary to illustrate possible design solutions to the Zoo who will arrange for reviews, meetings, and acceptance. These items, along with all relevant supporting documentation, shall be included as an appendix to the AIA contract.
 - The Schematic Design submittal shall indicate the area(s) in which construction is proposed, along with the requirements for soils investigations prepared by the structural engineer for the Design Development phase. The consultant shall submit an opinion of probable construction costs based on current unit costs for similar construction.
- Design Development: The Design Development phase will proceed after written acceptance by the Zoo of Schematic Design. The consultant will proceed with the Design Development, and prepare plans, elevations, sections, and other drawings as required to fix the Project in its entire architectural, structural, civil, mechanical, electrical, graphics, landscape, and other technical design essentials.
 - The consultant will prepare a site plan indicating general locations and nature of all site improvements, provide an outline specification to establish the basic materials of construction, prepare a summary of the design features including energy measures incorporated in the design and an itemized construction cost estimate to enable the Zoo to appraise the economic value of the Project design to the Zoo. The consultant shall submit these items in one package to the Zoo for review and acceptance.
- Construction Documents: The Construction Documents phase will proceed after written acceptance of the Design Development package by the Zoo. Consultant will proceed with the Construction documents as follows:
 - Prepare working drawings and specifications for the construction of the facilities described in the accepted Design Development documents. The consultant shall leave room on all drawings in the

bottom right-hand part of each sheet for plan approval stamps.

- Submit these drawings to the Zoo for review, comment, and acceptance when they are approximately 60% complete.
- Submit plans and specifications to the Zoo for review, comment, and acceptance when they are approximately 90% complete.
- Complete detailed drawings and specifications. All final documents shall be prepared by such methods and be of such quality of workmanship as will permit the making of satisfactory reproductions for efficient execution of the construction work and for record purposes.
- Stipulate the number and types of material and/or equipment tests as recommended by the consultant and as formally approved by the Zoo.
- The Consultant shall arrange for preliminary reviews by the City of Fresno (Building Services Department) to satisfy all code requirements prior to an official submittal. Reviews of the required Building Services disciplines should be held to ascertain any potential problems prior to completing detailed drawings and specifications.
- Prepare an opinion of the probable construction costs for the base bid and alternates with the base bid when the Zoo accepts final designs, details, working drawings and specifications. Submit five (5) signed copies of the final opinion of the probable construction cost to the Zoo.
- Evaluation of Budget and Cost of the Work:
 - If at any time the Cost of the Work exceeds the Project budget, the Consultant shall make appropriate recommendations to the Zoo to adjust the Project's scope or budget, and the Zoo and the User Department shall cooperate with the Consultant in making such adjustments.
- The Consultant is required to include design services for all project engineering, including geotechnical and landscaping.
- The Consultant is required to obtain written approval for all permits necessary for construction.
- The Consultant shall prepare minutes of all meetings during the Architectural Programming and Basic Design Services phases. Minutes shall be forwarded to the Zoo within three working days of the meeting date.

E. PERMITTING SERVICES:

- Complete Code Review Analysis and Building Permit Application as required to obtain approvals and permits from all governmental authorities having jurisdiction over the project.
- Consultant is obligated to closely monitor and follow-up on the Building Permit application(s) as required to ensure the application(s) does not expire by limitation. The consultant shall request an extension of the time for action on the application, if necessary, to comply with the expiration of plan review limitation. The consultant will be responsible for making modifications to the plans, specifications and supporting documents as required to obtain building permit(s).
- Special Inspections: Consultant shall formally notify Zoo immediately upon notification of the need for special inspections required for permitting.

F. SERVICES DURING BIDDING AND CONSTRUCTION

- Review all Scopes of Work for bidding of the subcontracts.
- Review and analyze Approved Equal requests for substantial compliance with specifications and make recommendations to Zoo regarding suitability.
- Construction Contract Administration: The Construction Contract Administration phase will proceed after receiving acceptance by the Zoo of the construction documents. The consultant shall provide administration of the construction contract as set forth below:
 - Consultant shall review construction progress, provide advice, and consult with the Zoo concerning the progress and quality of the Work.
 - The consultant shall provide advice and consultation on the interpretation of the plans and specifications and in response to any questions which may arise before and during construction, and until the Project receives final acceptance by the Zoo.
 - Consultant shall review all shop drawings, working drawings, sketches, product details, samples, etc.,

submitted by Construction Contractor(s) or suppliers of material and equipment for conformance with Project design and compliance with the construction documents. Consultant shall maintain a record of submittals and of copies of submittals supplied by the contractor(s) and shall provide them to the Zoo.

- Consultant shall prepare such supplemental drawings and responses to Request for Information(s) with supporting documentation and data as deemed necessary for the Zoos approval and execution.
- Consultant shall be responsible for the completeness and accuracy of all services rendered under this Contract and correction of all errors of omission or commission on the drawings, specifications, and other documents notwithstanding prior acceptance by the Zoo.
- The consultant shall execute all punch lists, review record (as-built) drawings and operations manuals and certify the Construction Contractor's payment requests.
- Field Administration: The Consultant and Sub-Consultants shall furnish Field administration for the construction of the Project, until sixty days after final acceptance by the Zoo. Consultant shall make no less than weekly periodic visits to the site so as to be thoroughly familiar with the progress and with the quality of the Work and to determine whether, in Consultant's opinion, all phases of the Work conform to the Construction Documents and the most recently revised and approved operational schedule. Sub-Consultants shall make periodic visits to the site to thoroughly familiarize them with the progress and with the quality of the Work and to determine whether all phases of the Work conform to the Construction Documents and the most recently revised and approved operational schedule. Based on the Consultant's on-site observations as an architect/engineer, Consultant shall immediately inform the Zoo of defects and deficiencies observed in the executed work of the Construction Contractor(s).
 - The consultant shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Construction Contractor's work but shall make such on-site observations, which are commensurate with the progress of the Project.
 - Consultants shall attend weekly meetings to discuss construction progress and construction administration issues.

G. ADDITIONAL SERVICES

- Graphics: This service shall include the design, drawings, specifications, cost estimates and direction of the location of the building graphics required for the Project. The development of graphics and interpretive elements will be under the direction of the Zoo. Graphics design should cover exterior treatment as required to ensure the proper functioning of the facilities developed under this contract. Special consideration in the design of the project graphics is to be directed toward signing that will discourage vandalism. All graphics shall comply with ADA requirements. These graphics shall include, but not be limited to:
 - Exterior Building identification signs
 - Interior Building signs, including fire safety signs, state labor law and safety signs.
- Tree mitigation: This service shall include compensating for the removal of a healthy tree by planting a proportionate number of replacement trees based on the species and size of each existing tree, which is lost or taking other actions to restore and biologically enhance existing green space. Tree Preservation and Development Strategy service shall include:
 - Development Site Review
 - Tree Mitigation Strategy
 - Tree Appraisals
 - Tree Installation and Relocation Strategy
 - Tree Surveys
- Provide the Zoo with architectural renderings of the new facilities for any public comment, to offer stakeholders a clear and immersive preview of the proposed project.

H. REIMBURSABLE EXPENSES

- Presentation Media: The Consultant shall provide presentation media of the subject facilities to convey the proposed design for the Project. The presentation media shall be of a size and scale agreed

between the Consultant and the Zoo, and the completed presentation media shall be subject to the approval of the Zoo.

- Printing: An allowance will be provided for the reproduction of copies of the Architectural Design Program, Schematic Documents, and Design Documents; of copies of the final Construction Documents; and one set of the final record (as built) drawings and electronic media as required by Zoo.
- Travel Costs and Expenses: An allowance will be provided for expenditures made by the Consultant or his employees in the interest of the Project for transportation and living when traveling outside of the Greater Fresno Area in connection with the Project and for long-distance calls and overnight mailings. All such travel shall be at the Zoo's established rates and shall have prior approval of the Zoo.
- Public Meetings: Consultant shall participate with the Zoo and be available for public meetings dealing with this Project that may require presentation of the proposed facility and site design and its potential impact on the surrounding area.

IV. FINANCIAL CONSIDERATION

A. COMPENSATION AND METHOD OF PAYMENT

- For performance of the services described in II., the Zoo shall pay the Consultant based on the amounts as agreed upon between the Consultant and the Zoo which include overhead, profit and all other costs associated with performing services under this Contract. If the Scope of Services or the Project budget increases or decreases significantly, the amount of compensation shall be revised in accordance with the Zoo's procedures.
- Application for Payment shall be received by the Zoo not later than the 17th of the month, inclusive of the specified work completed through the end of the prior month, the Zoo shall make payment of the certified amount to the Consultant no later than the 10th day of the month subsequent to the following month. If an Application for Payment is received by the Zoo after the application date fixed above, payment shall be made by the Zoo not later than the 10th day of the third month subsequent to the following month.
- The Consultant shall prepare Pay Requests for the amount representing the actual value of the services rendered and submit these forms to the Zoo for approval and processing.
- Basic Design Services: Progress payments will be made consistently with the percentage of work completed for each payment period.
- Services During Bidding and Construction: The Consultant shall prepare Pay Requests for submittal to the Zoo for professional services rendered as of the first day of each calendar month in terms of the estimated percentage of construction completed by the Construction Contractor(s) at the time of Consultant's billing. Final payment may be made when the construction contract is declared satisfactorily completed.
- Additional Services: The Zoo should pay the Consultant only the authorized amounts for the complete performance of each of the required additional services.
- Consultants shall not be reimbursed for normal business use mileage within Greater Fresno. Work requiring travel outside of the local area shall include reimbursement for travel and expenses paid in accordance with the approved allowances. Vehicle usage, lodging, and per-diem expenses for out-of-town consultants must be identified and approved in the Consultant's cost proposal.
- Reimbursable Expenses (which are all not-to-exceed allowances) shall be paid at the cost to consultant and shall include no markup. Pay Requests shall be submitted with original documentation of incurred expenses for reimbursement as approved expenses are incurred but not to exceed the amount agreed upon by the Consultant and the Zoo.

EXHIBIT A

Master Plan









