

## **Request For Proposals – Exhibit Fabrication and Installation**

*Habitat Journey* (working title), a core exhibition at  
the San Diego Natural History Museum

**Submission Deadline:** 4:00 pm, 21 November 2012

**Pre-Bid Meeting:** 1 November 2012, 8:45 am at SDNHM, San Diego.

The San Diego Natural History Museum (SDNHM) seeks exhibit fabrication and installation services for an 8,000 sq.ft. permanent exhibition on the west side of the museum's 2<sup>nd</sup> floor. The exhibition, "Habitat Journey," will present and interpret the present day habitats of our region, complementing our core exhibition, *Fossil Mysteries*, with its focus on the prehistory of our region. The intent of this Request for Proposals is to obtain fixed price proposals from experienced firms to work with the SDNHM exhibit team on final design, fabrication and installation of the components for this exhibition.

The 2<sup>nd</sup> floor west wing is undergoing renovation to update electrical, mechanical and structural systems before installation of the new exhibition; a separate contract has been issued for architectural and construction management services. The wing and exhibition have been divided into a "California" section and a "Baja" section with the California section as the primary focus of the exhibit team and this RFP. The California section covers approximately 8,000 square feet; it has been funded by a grant from the California State Parks & Recreation Prop 84, and contractors must comply with all provisions for state bond projects.

The core exhibitions directly support the museum's mission, purpose and vision:

### *Our Mission*

*To interpret the natural world through research, education and exhibits; to promote understanding of the evolution and diversity of southern California and the peninsula of Baja California; and to inspire in all a respect for nature and the environment.*

### *Our Purpose*

- *To emphasize this unique and diverse region while maintaining a global perspective;*
- *To collect and preserve scientific specimens for research and as a continuous record of the changing world for future generations;*
- *To serve as a center for the scientific study of biological diversity and evolution;*
- *To provide dynamic leadership in natural history and environmental education through exhibits, publications, and educational programs, striving to make this outreach relevant to all the people of the San Diego region;*
- *To foster cooperative efforts in natural history research and education throughout our region.*

### *Our Vision*

*The San Diego Natural History Museum will be the premier collections-based environmental education and natural history research resource in our region. We will provide programs that are timely, user-friendly, and relevant to the real-life needs of the diverse populations of the San Diego-Baja California region today and tomorrow.*

**Overview:**

The exhibition space is composed of nine primary sections, of which six represent major habitats from the southern California region. The intent is to provide an experience of discovery and exploration into a region of extraordinary variety in landscape and biodiversity. San Diego County, for example, is home to more species than any other area of similar size in the continental United States. Nowhere in our country can one experience such dramatic variety in the landscape and climate in such a concentrated area.

Visitors will experience the seasons as they travel through habitats that are all within a short drive of San Diego. Components in the exhibit will enable visitors to gain a sense of the uniqueness of this region shaped by its geography and Mediterranean climate (one of only five in the world). They will also explore the connections between our own actions and the natural world, and how this natural place has changed over time.

**Audience:**

SDNHM is located in Balboa Park, a cultural destination for more than 11 million visitors annually. Visitor surveys indicate many visitors prefer to visit two museums in a single day, and our audience is roughly a 50-50 split between adults (either alone or in groups) and adults with children. The exhibit will be designed to address a variety of learning styles and provide some settings for groups to experience components together. It will be designed with bi-lingual labeling to engage a larger segment of our Spanish-speaking population. Front-end evaluation has been completed by Audience Focus, Inc., during spring-summer 2012.

**Concept development:**

Many concepts for this exhibit have been developed to varying degrees over the last 15-20 years, and these have been revisited, reworked, narrowed and focused by the SDNHM Exhibit team over the last year. Relevant documents that have been developed include a concept bubble diagram, concept floor plans, artist sketches, section floor plans and elevation drawings, component listing, and text display summaries. Detailed development continues and documents provided for the RFP should be considered as documents in progress and not finalized. Front-end evaluation reports have also been completed.

The exhibition floor plan is an open design; although the visitor experience might be enhanced by following a specific directional flow, it would not be impacted negatively for those who prefer to wander at will. Our design philosophy is to create exhibits with materials and methods that help us meet and exceed requirements for our LEED existing building operational status and that meet the Americans with Disabilities Act requirements. A specimen-rich experience incorporated into dioramas and models can be balanced with simple interactives, technology-enhanced interactives, live animals, and spaces that encourage interaction among visitors.

The nine main sections with brief descriptions include:

***Introduction and Transect of the region***

What makes our region so unique? You can go from the beach to the mountains to the desert, all in one day—from sea level to 5,000-foot elevations, from salty breezes to scorching temperatures. In Southern California the diversity of landscapes and habitats is amazing. Where else is there so much to explore so close to where you live? This place is unique, and we transform it by living here. Remember what it was and treasure what it is.

A 4-sided tower of images lets visitors scroll through thousands of photos of our region's landscapes, plants, and animals. Explore the floor map of our region to see how we're really part of a much larger bioregion that extends to the tip of the Baja California peninsula. Interact with a section of our region in miniature with a 17ft. long block transect. Run your hands over the terrain at the beach, mountaintops, and deserts, and discover just how different they are. Take your photo with a grizzly bear family on a San Diego beach, understanding that grizzlies once made their home here before we transformed the landscape.

### ***Ocean***

Whales are common off our beaches; compare their sizes and shapes with the sculptured field guide along the edge of the mezzanine; play the whale sound "pipe organ" to hear their songs. A tubular wave arcs overhead; walk through the arc as you walk towards the beach and watch the dolphins and sea life surf nearby.

### ***Shore (spring)***

From the beach to the mudflats in the estuaries of the coastal wetlands, discover the birds and animals during spring. Birds travel the Pacific Flyway overhead as nesting takes place among the plants in the diorama. A cutaway shows how the tides rise and fall, layering and mixing the salt and freshwaters. Kids can get face to face with modeled crabs, worms, and mollusks in the oversized mudflat core. Interactive stations tackle simple and complex concepts such as beaks & feet (form and function in birds); ecosystem services (filtering of contaminants), and productivity in the estuaries.

### ***Coastal Sage Scrub (summer)***

Water is scarce in summer during our Mediterranean climate, but everything that lives here needs it to survive. Spring in *Torrey Pines* State Reserve means fragrant and beautiful blooms; get to know the plants and the importance of the marine fog. Crawl through a replica of a sandstone cliff; investigate jars and sachets with real, dried coastal sage plants. Join us on *the patio* overlooking a canyon that is home to native and non-native plants and animals – which is native, which isn't? What animals, plants and invertebrates share our space? Where does our water come from? See how far it has to travel to meet our needs. Visit a cool, *riparian* refuge to see life in and near our streams; investigate tanks with live aquatic species and, nearby, a virtual aquarium. Zoom-in to your own, nearby waterhole using an interactive map. Visit the vernal pool, dry in the summer but which springs to life with the annual rains.

### ***Chaparral (fall)***

Fall in the chaparral means wildfires. Fire is a natural part of life in the chaparral, where some plants need periodic fires in order to regenerate. A synchronized experience in the chaparral theater with images, objects and sound immerses the visitor in the dramatic cycle – from a burn, to new colonizers that move in, through years of growth to a mature ecosystem.

### ***Mountains (winter)***

At the highest elevations in our region, winter arrives annually, dusting snow on high chaparral as well as pine and oak forests. Interact with mountain lion and deer in a snowy forest via augmented reality. Explore nooks of a real black oak tree in late fall color and the species that depend on acorn harvests for winter survival using a periscope-like interactive. A real cedar or pine filled with smaller animals and birds of the mountains provides storylines of diversity and survival. Kids can crawl into a fallen log to discover the species that hide therein.

### ***Desert (spring)***

Cross the peninsular range of mountains to the desert. Rains have come and colorful blooms abound. This is a rich, fragile ecosystem in which plants and animals have adapted to scarce water and extreme temperatures. Climb inside a classic Airstream trailer to see what happens when the desert comes to life at night; simple interactives and drawers of specimens tell stories of adaptations. The night sky plays continuously on screens inside. Outside the trailer, a model engages the visitor to discover rainshadows. Visitors can spot a bighorn sheep keeping watch from a rocky outcropping diorama above the palm oasis, and kids can scramble under the rocks to discover life in the shade.

### ***Change Over Time Lower (museum + collections)***

This place has changed. Millions of people have moved here in the last century, transforming the wild landscape to suit our needs. What are the changes? Examine specimens of animals and plants from the museum collections to learn what research can tell us about our region – as it was and how it is changing. Learn about the San Jacinto Survey, a current research project that revisits sites and analyses the diversity of life found during explorations 100 years ago.

### ***Change Over Time Upper (memories + impressions)***

Climb the stairs to the Attic. Investigate changes over time through photos, maps, aerial photos, specimens, and stories. What are your memories and impressions about these places? Share a photo, tell a story. See how other visitors value the places they remember and the changes they have seen.

## **Scope of professional services to be provided**

Contractor must be able to provide project management, professional exhibit fabrication and other specialty services to build and install the exhibits and components, and produce graphics as required on schedule. All fabrication and installation must be finalized and approved by SDNHM prior to 14 November 2014. The contractor will be expected to complete some remediation work, which may occur after this date within a reasonable time period.

The exhibit documents provided with this RFP describe in as much detail as possible at this time, the design intent, relevant content and resources available for these exhibits. The contractor is to collaborate with the SDNHM team to complete the detailed design of the components and experiences, resulting in an agreed upon component list with descriptions and costs.

The contractor will identify one person to serve as project manager and liaison to the SDNHM project manager. The contractor will establish a work plan and schedule to ensure timely completion of the project. A critical path schedule shall be prepared by the contractor and submitted in reproducible form. In addition to the start and completion of various construction stages, the schedule shall also show percentages of work to be completed at any given time, as well as significant dates that will serve as check points to determine compliance with approved schedule. Regular meetings with the SDNHM team are an integral part of the process and essential for ongoing communications; meetings must be indicated in the project schedule and written reports tracking progress shall be provided. SDNHM will facilitate meeting participation by the architectural services group when appropriate during design and fabrication process.

The contractor is responsible for producing engineering and shop drawings for fabrication including determining if stamped drawings are necessary. Shop drawings must be approved by SDNHM before production proceeds. If needed, stamped drawings must be produced by a

professional engineer licensed in California, and must adhere to local and state requirements.

The contractor shall furnish labor, materials and equipment required to perform the work as specified for fabrication and installation of exhibit components, custom furniture, and graphic production. Subcontractors or specialized vendors must be approved in advance by SDNHM. A list of exhibit components identified to this point is included with the bid documents.

Fabrication shall be of museum quality with attention paid to high-quality fit and finish, durability, and ease of maintenance. Defects will not be discernable to the human eye. Individual freestanding units must be seismically stable and able to withstand 100 pounds of lateral force without tipping at five-foot height from the finished floor.

Interactives must be designed and fabricated to survive use and abuse by visitors without failure and without danger to visitors. Mockups or prototypes are required for more complex interactives, and these shall be tested on-site; SDNHM is responsible for completion of formative evaluation of prototypes. Production cannot proceed without approval by SDNHM of interactive design after testing.

#### **Guarantee and warranty**

Components should be designed to facilitate repairs by SDNHM staff over time; parts of elements should be easily replaceable rather than having to replace entire exhibits. The contractor must guarantee and warranty all products, work and services for one year after the remedial work is completed. The contractor shall provide training on operation, maintenance and upkeep of installed components.

#### **Documentation**

Before closeout, the contractor shall provide all equipment manuals and warrantys, written maintenance manuals, electronic and hard copies of drawings, printed information on materials, and products and systems. Any original artwork, illustrations, and data provided by SDNHM shall be returned.

#### **Ownership**

All concepts, products, writings, designs, drawings, models, design inventions and/or exhibit components conceived or created solely or jointly with others at any time during the provision of services for this contract shall be property of SDNHM. All original products shall be delivered to SDNHM prior to receipt of final payment for services.

#### **General schedule for this project:**

September 2011	Design Development started
May 2012	Architect Services for renovation of space hired
Oct 2012	50% complete drawings for shellwork
Oct 2012	RFP issued for exhibition fabrication services contract
Jan 2013	contract awarded for exhibition fabrication contract
Sept – Dec 2013	Shellwork of 2 west space by general contractor completed
June 2014	<i>Habitat Journey</i> exhibition installation starts
November 14, 2014	<i>Habitat Journey</i> installation complete – exhibit opens
Through June 2015	summative evaluation, and remediation as needed

### **Project Budget and Funding Source**

SDNHM has raised approximately 80% of funds necessary to support the renovation of space and design, development and fabrication of the California section on 2 West. A significant percentage of the funds for the exhibit design, development and fabrication is provided by a grant from the capital development bond, Prop 84, awarded by the California Department of Parks & Recreation. The balance of the funding is being raised from private sources.

The project budget includes funding for the SDNHM exhibit team staff, permits, contracts for architectural services and general contractor services for the shellwork, and some direct costs to the museum in addition to the fabrication and installation services contract. The contractor selected under this RFP would be expected to assist the Museum by recommending workplan and materials that would make the most effective use of available dollars, providing the highest quality and most effective exhibit product. We have budgeted shellwork (not part of this RFP) at approximately \$1,200,000.

### **Labor Compliance Program**

This contract is subject to the state of California regulations for contracts and expenditures of public bond funds. As part of these requirements, and pursuant to California Labor Code Section 1771.5, SDNHM has an application for its Labor Compliance Program filed with the state to fulfill requirements affecting prevailing wage issues for work completed on-site. The LCP is under review and must have final approval before SDNHM can proceed with a contract for the services requested in this RFP. The successful bidder shall be responsible for complying with the provisions of the SDNHM's LCP, including the standard provisions requiring payment of prevailing wages, maintenance and submission of weekly certified payrolls and corresponding documents, and the hiring of apprentices as appropriate. The SDNHM LCP is managed by: Marty Glaske, Gafcon, 701 B Street, Ste 1600, San Diego, Ca 92101; for information concerning the SDNHM Labor Compliance Program, call Mr. Glaske at 619-231-6100 or Paisley S. Cato, SDNHM, 916-255-0241.

### **Schedule and proposal requirements**

**Request for Proposals issued:** 18 October 2012

**Documents available online:** 18 October 2012

Contact Paisley S Cato for access: [pcato@sdnhm.org](mailto:pcato@sdnhm.org)

**Pre-Bid Meeting:** 1 November 2012, 8:45 am at SDNHM, San Diego.

Required meeting;

Provide names of individuals attending by 4:00 pm 31 October, 2012, to

[pcato@sdnhm.org](mailto:pcato@sdnhm.org)

RFP documents should be downloaded before the pre-bid meeting.

**Questions** may be submitted until: noon, 15 Nov 2012 to [pcato@sdnhm.org](mailto:pcato@sdnhm.org)

**Answers** provided to all bidders by 19 Nov 2012

**Submission Deadline:** 4:00 pm, 21 November 2012

**Review and initial contract negotiation:** up to 21 Dec 2012

**Pre-Bid Meeting:** 1 November 2012, 8:45am at San Diego Natural History Museum, San Diego. This is a required meeting, giving respondents an opportunity to view the space, receive a briefing and information, and an opportunity to ask questions directly. A representative of our Labor Compliance Program will be available for questions. All RFP documents should be downloaded by bidders before the November 1 meeting. Printed copies will not be provided at the meeting. Tentatively, the schedule for the meeting will be:

8:45 – 9:00 am	sign in
9:00 – 11:00 am	presentation of concepts, model
11:00 – 11:30am	tour space (2west)

**Please provide names of individuals attending by 4:00 pm 31 October, 2012, to [pcato@sdnhm.org](mailto:pcato@sdnhm.org).**

### **Response Requirements**

Please organize your response in the order of the items below, providing a concise presentation of your firm's capabilities to satisfy the requirements of this request. Format your response on 8.5" x 11" paper. Please provide **one electronic copy and 3 printed sets** to SDNHM no later than 4:00 pm, Wed, November 21, 2012.

Include the following:

- 1) Letter of interest, signed by individual with authority to bind the firm in a contract;
- 2) Experience of the firm and/or team as fabricator of exhibits of similar scale, complexity and budget; include up to a maximum of three relevant examples, and indicate
  - experience developing and testing interactives;
  - the firm's record of meeting estimated budgets and success in providing the most effective expenditure of client's available funds while providing quality and value in fabrication;
  - the firm's record of meeting schedules;
- 3) Experience fabricating exhibits using 'green' and LEED-qualifying methods, materials;
- 4) Fabrication capabilities and services, indicating which are in-house and which would be outsourced; include a list of primary subcontractors, with a statement of their qualifications;
- 5) Names, titles and short bios of personnel to be directly involved in this project, indicating their role in the project; include primary personnel of subcontractors.
- 6) Proposed workplan describing individual tasks and relative scheduling of tasks. Address milestones for cost estimates, interaction with SDNHM team. List and describe deliverables.
- 7) Fee proposal;
- 8) References from three similar projects with current contact information for the project owner(s) and project manager.

**Deliver by 4:00 pm, Wednesday, November 21, 2012 to:**

Dr. Paisley S. Cato, Project Manager

San Diego Natural History Museum

*mailing address:* PO Box 121390, San Diego, CA 92112-1390

*street address:* 1788 El Prado, San Diego, CA 92101

## Questions

Project-related questions may be submitted in writing, via email, until noon (PST), 15 Nov 2012 to Paisley Cato [pcato@sdnhm.org](mailto:pcato@sdnhm.org).

Responses will be provided via email by 19 November to all vendors who attend the pre-bid meeting.

## Selection Criteria

- 1) Cost proposal
- 2) Experience in working in a collaborative manner
- 3) Work plan
- 4) Experience in fabricating successful, interactive components and exhibits
- 5) Experience in fabricating projects of a similar scale and complexity
- 6) Established record of fabrication quality and excellence for similar exhibits
- 7) Experience and availability of key individuals proposed for the project
- 8) Experience and availability of key subcontractors
- 9) Reputation for thoroughness and client responsiveness as demonstrated through references.
- 10) Innovative or outstanding work that demonstrates the firm's unique qualifications for this particular project

## Terms

This RFP has been prepared solely to solicit proposals and is not a contract offer. We retain the right to not award a contract for this project for any reason. We retain the right to cancel the project for any reason. The only document that will be binding on SDNHM is the contract duly executed by SDNHM and the successful applicant after the completion of the selection process and the award and negotiation of the contract. SDNHM will not be responsible for any expenses incurred by a firm in preparing and submitting a proposal.

## Documents available online (contact Paisley S. Cato at [pcato@sdnhm.org](mailto:pcato@sdnhm.org) for access):

1. Content Framework and Main Messages
2. Display summaries
3. Exhibit Plans
  - a. Overview Bubble diagram
  - b. Orientation floor plan
  - c. Exhibit floor plan
  - d. Sections (plan view, artist sketch)
  - e. Elevation views
  - f. Miscellaneous plans
4. List of Major Elements
5. Architectural Team plans (50%)

**NOTE:** These documents are property of SDNHM and made available only for use with this Request For Proposals; all documents are works in progress and are not to be considered final; all measurements should be assumed to be estimates. Documents are confidential, for use only by respondents to this RFP.