Dear Colleague

NON-LIVING COLLECTIONS
Summer, 2001

Enclosed please find sample narratives, schedules of completion, and summary budgets from 10 successful applications from the 2001/2000 IMLS Conservation Project Support (CP) grant competitions.

The attached samples were selected because they demonstrate how individual institutions with different conservation needs successfully developed projects that address those needs. We feel these narratives are logically and clearly presented, and give sufficient information to support the request.

INSTITUTE of MUSEUM and LIBRARY SERVICES

This packet contains 10 samples that represent different types of conservation projects. They emphasize the overall institutional conservation perspective, the involvement of conservation professionals in all phases of the project, and the importance of the project as the highest institutional priority for collections care.

In addition, there are four samples of funded education components. We hope that these samples give you the impetus to partner with your staff educators to develop your own creative way to educate the general public about your conservation project.

The samples included in this packet are listed on the back of this letter.

No endorsement by IMLS of any personnel, conservation facilities, private firms, or conservation procedures and methods identified in the narratives should be assumed.

I hope that these sample narratives will be useful to you as models for structuring a proposal for your conservation needs. IMLS Office of Museum Services program staff is available at (202) 606-8539 or imlsinfo@imls.gov, and will be happy to discuss any questions you have as you develop your proposal.

The application deadline for the 2002 Conservation Project Support grant program is:

October 15, 2001

Applications for CP are available from the IMLS Web site (www.imls.gov), or by calling us at 202-606-8539. We look forward to receiving your application.

Sincerely,

Mary Estelle Kennelly

Mary Estelle Kennelly
Director, IMLS
Office of Museum Services

A Federal agency serving the public by strengthening museums & libraries
1100 Pennsylvania Avenue, NW • Washington, DC 20506 • Phone: 202-606-8536 • Fax: 202-606-8591

Sample Conservation Projects: Non-Living Collections

Project Type	Museum	State	IMLS Award	Match	Total Project Costs
General Survey	Pacific Asia Museum	CA	$26,155	$56,138	$82,293
Detailed Survey	Railroad Museum of Pennsylvania	PA	$49,150	$107,821	$156,971
Detailed Survey	Riverside Municipal Museum	CA	$39,005*	$63,954	$102,959
Environmental Survey	Noyes Museum of Art	NJ	$7,579	$7,579	$15,158
Treatment	Canterbury Shaker Village	NH	$31,734	$33,957	$65,691
Treatment	Mendocino County Museum	CA	$10,671	$10,839	$21,510
Treatment	Oakland Museum	CA	$50,000	$67,568	$117,568
Environmental	Kresge Art Museum	MI	$42,465	$42,465	$84,930
Environmental	Olana	NY	$22,445	$40,412	$62,857
Environmental	Scurry County Museum	TX	$10,460	$11,961	$22,421

*This figure includes $4,435 for an education component

Sample Education Components:

Museum	State	Education Award	Total Grant Award
Nebraska State Historical Society	NE	$4,369	$39,375
Riverside Municipal Museum	CA	$4,435	$39,005
Science Museum of Minnesota	MN	$9,975	$53,915
Zoo Atlanta	GA	$9,968	$52,638

Pacific Asia Museum
IMLS CONSERVATION PROJECT SUPPORT

Application Narrative

1 What is the design of the project?

Pacific Asia Museum (PAM) is requesting IMLS support to engage the services of a team of professional conservation specialists who will perform a general conservation survey of the museum's collections and the historic structure within which the collections are stored and displayed.

In order to address and balance the various and possibly conflicting preservation issues at PAM, the museum has assembled a team of consultants to work with PAM staff to survey the collections and assemble the data needed to set institutional goals for overall collections care. The team will include a decorative arts conservator, a textile conservator, a book and paper conservator, an environmental scientist, and an architectural preservationist. PAM's collections manager will serve as project manager. She will be assisted by PAM's registrar and work directly with PAM's executive director and senior curator.

Each team member will concentrate on surveying and reporting on that part of the museum's collections which matches her or his area of specialization. They will, however, work closely enough to arrive at an internally consistent final report that sets forth their collective recommendations for future conservation care at the museum.

The general goals, objectives, and plan of work for the consultants are based on recommendations contained in the publication *The Conservation Assessment: A Tool for Planning, Implementing, and Fundraising*, developed jointly by The Getty Conservation Institute and the National Institute for the Conservation of Cultural Property. The project will include three phases: information gathering, reflection and interpretation, report and recommendations.

PHASE ONE: May 15 – August 1, 2000

At the outset of the first phase, PAM staff will provide consultant team members with information they require before their first site visit. This information will include, but not be limited to, a completed Pre-Visit Questionnaire (from *The Conservation Assessment)*. Four of the five consultants are from the Los Angeles area and will be available for a meeting before their site visits to introduce themselves and to answer questions from PAM staff and board members who are on the Collections Committee. The fifth consultant will be available by telephone.

As the project manager for the survey, the PAM collections manager will work with each consultant to prepare an agenda before his or her site visit so thatnecessary staff interviews can be scheduled, documents can be retrieved, and any additional preparations can be made. The Collections Assessment Guidelines from *The Conservation Assessment* (see Supporting Materials) will serve as the basis for the agenda.

Site visits by the objects conservators will precede those by the environmental scientist and architectural preservationist. However, the scientist and preservationist will confer with the conservators on conditions about which they have particular concerns. The site visits will be scheduled one at a time to enable the PAM collections manager, assisted by the PAM registrar, to support each conservator's work, as needed.

During each site visit, the conservators will use the outline for assessment contained in sections 2, 5, 6, 7, 8 and 9 of the Collections Assessment Checklist in *The Conservation Assessment* (see Support Materials). The environmental scientist and architectural preservationist will refer to sections 3, 4, 6, 7 and 8. The estimated time for each object conservator's site visit, meetings, and report writing is as follows:

Decorative arts conservator	5 days for decorative arts collections 2 days of meetings 3 days for report writing
Textile conservator	3 days for the textile collection. 2 days of meetings 2 days for report writing

Book and paper conservator	1 day for the museum library 2 days for the prints and drawings collection. 2 days of meetings 2 days for report writing
Architectural preservationist	3 days to survey the building 2 days of meetings 2 days for report writing
Environmental scientist	3 days to review and measure the museum environment 2 days of meetings 2 days for report writing

PHASE TWO: August 1, to September 15, 2000

A draft of each consultant's survey report will be sent to other team members and appropriate PAM staff for comments. PAM staff may be asked to provide additional materials. Consultants will be available to each other by telephone. Consultants and PAM staff will have a one-day meeting early in September to discuss the outline and content of the final survey report and an institutional conservation plan (to be drafted by staff) based on the individual survey reports. They will use this opportunity to resolve any possible conflicts in priorities that may arise from the different approaches each consultant takes to the overall project and to reach a consensus on the conclusions of the final survey report and the goals, priorities, and methodologies of the conservation plan.

PHASE THREE: September 15 – October 15, 2000

Final survey reports (focusing on recommendations for her or his area), prioritized for immediate, mid-term, and long-range implementation, will be submitted by each consultant. The reports will review PAM staff positions and responsibilities and make recommendations for additional staff and/or training. They will make recommendations for specific guidelines reflecting concern for collections and building preservation to be included in the new collections management policy. The project manager will collate the individual survey reports into sections of a final draft of the museum-wide survey report. She will create a summary of the entire report that lists the consultants' recommendations for future conservation care of PAM's collections in order of priority. The project manager will circulate this conservation survey report to the consultants and project staff for approval.

PAM staff will also submit their draft of an institutional conservation plan for comments from the consultants. The survey report and the conservation plan will be endorsed and submitted by PAM's executive director and senior curator to the board's Collections Committee. Staff will continue to work with the committee to refine the plan as part of developing PAM's new collections management policy.

This timeline reflects the best estimates by the consultants for the time needed to complete their tasks. It also corresponds with PAM's plans for finalizing an updated comprehensive collections management policy before the end of the year 2000. In addition, this period coincides with PAM's schedule for extensive renovation of existing storage areas for ethnographic and decorative arts collections, now housed in temporary storage facilities.

2. What are the objects and historic structure that are the focus of this project?

The museum's permanent collections contain more than 12,000 rare and representative examples of art and ethnographic objects from Asia and the Pacific Islands, spanning more than three thousand years. They are in diverse media and are housed in a historic building which itself needs proper care and conservation.

Through its collections, the museum carries out its mission by demonstrating to its audience the range and diversity of the arts of Asia and the Pacific Islands and by using the arts as a means to explore the region's cultures and histories. Eleven cultural community Arts Councils, each focusing on a different country within the museum's

purview, are available to advise and support staff in developing exhibitions and education programs. Selected items from the collections are made available to these groups to augment their cultural programs at the museum.

The centerpiece of the museum's permanent collection, **the museum building,** is a city, state and national historic landmark, and the only example of Chinese Imperial palace-style architecture in the western United States. Constructed in 1924 by Grace Nicholson as her "Chinese Treasure House", the building also boasts one of the U.S.'s few authentic Chinese courtyard gardens open to the public. The building has served as a center for art, culture, and learning since its construction. In 1943, Miss Nicholson bequeathed her home to the City of Pasadena with the stipulation that it remain a cultural center. It served as the site of the Pasadena Art Institute, subsequently known as the Pasadena Art Museum, an important center for avant-garde art through the 1960's. Pacific Asia Museum's founders leased the space beginning in 1971 and it was deeded to the museum as its permanent home in 1987. In 1997, a series of grants from private supporters enabled the restoration of the tile roof, exterior ornamentation, and paint colors to the original specifications.

The museum's large collection of East Asian **Ceramics** exceeds 1,500 pieces, including over 600 Chinese ceramics from the Neolithic era through the Qing dynasty. The Han, Tang, Song and Ming dynasties are strongly represented, as are Imperial porcelains from the Qing dynasty. Also significant are 350 Southeast Asian ceramics from the Margot and Hans Ries Collection (published in a 1982 catalog); approximately 40 Vietnamese ceramics from the collection of Ambassador and Mrs. Jack Lydman; Japanese tea ceremony wares, folk ceramics, and *satsuma* and *kutani* wares. Donations in 1998 included over 100 Chinese ceramics from the Sheila and Robert Snukal Collection and Japanese stonewares from the Ries Collection. In early 2000, the museum will open a new Ceramics Study Gallery, funded entirely by the Snukal family, which will include open storage for selected Asian ceramics in the permanent collection as well as materials from the ceramics Study Collection.

The central holdings of the **Costumes and Textiles** collection are 2,000 Chinese textiles from the Ming (1368-1644) and Qing (1644-1911) dynasties, and 500 textiles, including silk *kimono*, from Japan's Edo (1603-1868) and Meiji (1868-1912) periods, roughly 100 Southeast Asian textiles, and forty examples of Indian textiles. Among the most prized holdings are 50 outstanding Imperial Chinese silk robes and an important Chinese embroidered handscroll signed and dated 1627. (Funds permitting, a part-time curator, specializing in textiles, will join the staff in 2000.)

The museum has one of the finest collections of **Japanese Paintings and Drawings** in the United States, a total of 225 rare works by Hiroshige, Hokusai, Utamaro, and other artists of the Edo and Meiji periods, formerly part of the Harari Collection. The museum recently purchased an important collection of over 200 Japanese folk paintings called *Otsu-e*, which, when added to the existing Otsu-e in the collection, make it one of the largest collections outside Japan.

The museum collection holds more than 800 examples of Japanese, Chinese and "Orientalist" **Graphic Art,** including Japanese Edo-period woodblock prints and modern *Sosaku*, or Creative, prints. Of particular note are a rare complete set of 166 woodblock prints created in Japan by 20th century French artist Paul Jacoulet (published in a 1989 museum catalog) and a full set of 80 Marilyn Korn prints. The museum also holds 75 posters by Japan's foremost graphic designer, Tanaka Ikko. In 1998, the print collection was augmented by major gifts of over 150 Edo and Meiji period prints (doubling the museum's holdings), and forty 20th-century Japanese prints.

The museum's **Jade Collection** comprises 150 pieces of Chinese works from the Neolithic period through the Qing dynasty. The museum received a significant addition in 1998 of a pair of carved jade ear pendants, believed to have been owned by China's last Dowager Empress, Ci Xi.

The museum owns over 200 outstanding examples of **Buddhist and Hindu** bronze, wood, ivory, and stone sculptures, paintings, and ritual objects from India, Tibet, Nepal, China, Korea, Japan, Southeast and Central Asia spanning 2,000 years of artistic production. The museum also holds a notable collection of South Indian miniature Chola bronze figures from the 10th century onwards and approximately 30 Indian miniature paintings. PAM is the only California museum where the Vietnamese community can view examples of 18th-19th century Vietnamese Buddhist sculpture.

The museum is actively increasing its collection of **Pacific Islands Artifacts,** which features items of personal adornment, masks, spears, drums, shields and carvings from Polynesia, Micronesia, and Melanesia. The museum holds more than 75 *tapa* (bark cloth) items, as well as objects associated with *tapa* manufacturing from a bequest by Dr. Carl S. Denzel, former Director of the Southwest Museum, Los Angeles. In 1998, a large group of

ceremonial and functional artifacts from New Guinea was donated by Harlan Givelber, making PAM's Pacific Island collection one of the strongest in the region.

The **Study Collection** consists of approximately 1,000 pieces for handling and research by scholars and students, loans to community sites, and for use in programs. These Chinese and Japanese textile samples, Japanese netsuke, and ceramic shards are of lesser importance, are damaged or repaired, or duplicate objects in the permanent collection.

The Research Library, begun in 1975, is the only local library that emphasizes Asian art. Comprising 8,000 donated and purchased volumes, the holdings include an extensive collection of books on the Philippines and 800 books on Indian art and culture donated by Dr. Paul Sherbert, former Consul General in Madras and first Director of the Asia Society in New York. In 1998, gifts included volumes on Asian ceramics and the culture of Pakistan and the Indus Valley civilization, and a fund for the purchase of books on Japanese culture.

The Photography Archive encompasses more than 2,000 photographs and glass slides of Asian subjects, including early photographs documenting the Boxer Rebellion in China.

3. How does the project relate to PAM's ongoing conservation activities

As part of PAM's new five-year plan, PAM board and staff have made it a priority to conduct a comprehensive examination of the policies, practices, and conditions that impact on the care and preservation of the museum's collections. This includes review and revision of the museum's current collections management policy, as well as a review of the museum's staffing, training, physical environment, and storage and exhibition conditions. The President of the Board of Trustees has appointed a board and staff committee to examine the museum's current written guidelines for collections management and to work together to develop a revised and expanded collections management policy. This group is presently in the information gathering stage.

The highest collection conservation priority for the museum has previously focused on improving storage conditions for the textile collection, now stored in an area separate from the rest of the collections. This area has climate control, the textiles are stored in archival boxes or in metal cabinets, and there is vigilant monitoring for pest infestation. However, the space is now filled to capacity and the collection continues to grow.

The museum was recently awarded grants totaling $200,000 toward remodeling of its existing storage facility for its ethnographic and decorative arts collections. The remodeling of this main storage area, which will include the addition of compact shelving units, will increase the amount of total cubic feet of available storage by about 80%. Staff needs the advice of a conservator before textiles can be stored with these other collections.

The decision to apply for an IMLS Conservation Project grant arises partly from PAM staff's recognition that guidelines for collections care should be incorporated into the new policy and that PAM collections should not be re-installed in permanent storage without recommendations from environmental and object conservation consultants. A long-range plan for phased implementation of the consultants' recommendations will give PAM curatorial staff a solid base for influencing allocations of museum resources including staffing, space planning, budget allocations, and fundraising activities.

In 1998, a $25,000 planning grant from the Getty Grant Program enabled staff to work with a systems consultant on a comprehensive three-year plan to develop an electronic catalogue of PAM's collections with public access through the Internet. The Getty reviewed the plan and in September 1999, awarded the museum $237,000 for implementation. Beginning in January 2000, every item in the museum collection will be accessed for digital photography and comparison to cataloguing and condition data in the original records. This process will also allow staff to electronically tag items requiring conservation.

In December 1996, an NEA-funded conservation assessment of selected Asian paintings was conducted by Sondra Castile, Asian art conservator for the Metropolitan Museum of Art. The museum has acted upon her recommendations for removal of works from non-archival mats and framing materials, and is currently seeking funds for the cleaning, repair, and remounting of the scroll paintings. A recent loan of ten works by Hokusai to an exhibition in Italy necessitated the remounting of two scrolls and eight drawings. While case by case conservation efforts are good, they would be more beneficial if done within the context of a long-range conservation plan..

PAM's annual budget includes line items for archival storage materials as well as some funds allocated for conservation work by outside consultants. (There is $4,000 for such work in the 1999 PAM budget.) The individual exhibition budgets always include funds for conservation work when necessary. Approximately $2000 was allocated for cleaning and repair of Otsu-e paintings for their premier exhibition in 1999.

4. What are the anticipated benefits of this project?

A comprehensive survey of the status and conservation needs of the museum's collections is an important first step in preparing a plan for their overall conservation. With an unprecedented amount of collections-related activity scheduled to take place in the near future, PAM staff is concerned that these activities should be organized and implemented according to a plan firmly rooted in an institutional conservation plan. The museum has been mindful of the need to consider conservation practices in storage and exhibitions, but a comprehensive prioritized long-range plan would insure that available PAM funds will be allocated most effectively.

Highlights of the survey and the resulting conservation plan will be shared with all PAM board and staff, and they will be posted on PAM's Web site to encourage the public's access to the collections.

The museum's long-term plans call for significant expansion of its current facility. Such an expansion must also be guided by principles and priorities of a conservation plan for the institution. Though the exterior has been recently renovated, the interior environmental conditions of the museum's landmark building should be monitored at regular intervals. The reports from the conservation consultants would establish standards and bases for comparison in the future as well as alert staff to potential problems which should be addressed when planning the expansion.

5. How will the applicant ensure that ongoing museum functions are not inhibited by the project activities?

The survey consultants will work with PAM staff at carefully controlled intervals to help assure that PAM staff can continue to meet their daily obligations. Completing this survey and writing a plan based on it are two of the musem's highest priorities for the year 2000. Additional temporary staff are being hired for the storage facilities renovation work and the electronic catalogue project. Their schedules will be integrated with the survey so that each project team's activities support the others. This will enable PAM project staff to maintain a steady workflow while working with the consultants. The survey itself is expected to have minimal impact on the museum's functions. If necessary, specific tasks associated with the survey can take place on days when the museum is closed to the public.

6a. What are the proposed conservation methods and why are they conservationally sound?

As indicated above, the survey's methods will be drawn directly from *The Conservation Assessment: A Tool for Planning, Implementing, and Fundraising*, developed jointly by The Getty Conservation Institute and the National Institute for the Conservation of Cultural Property. PAM collections management staff feel they provide the best overall guidelines for performing a general conservation survey of PAM. All project consultants and staff are thoroughly familiar with these methods and guidelines and are prepared to use them in completing the survey.

7. How does the project budget support the project goals and objectives?

The project budget comprises only the costs associated with the personnel assigned to the project. Thus, consultant fees, staff time, and travel are the only budget items, and each item was based on an established salary, fee, or cost, and on a reasonable estimate of the amount of time each team member would spend on the project. In turn, the consultant fees are in line with the outstanding level of experience that each has in her or his respective field. PAM is pleased that these outstanding professionals have agreed to lend their expertise to this endeavor.

8. What are the qualifications of the project personnel?

The survey team includes Maureen Russell, decorative arts conservator ; Cara Varnell, textile conservator; Joanne Page, book and paper conservator; James Druzic, environmental scientist; Michael Henry, architectural preservationist. Each consultant has worked in the past with one or more of the others. Maureen Russell is Objects Conservator at the Los Angeles County Museum of Art (LACMA), where she also supervises gallery maintenance. Cara Varnell, formerly Associate Textile Conservator at LACMA, is now in private practice. Joanne Page, formerly Assistant Paper Conservator at LACMA, is now in private practice. These three will provide descriptions and general conditions of works in the collections by category, including those on view in the permanent galleries. They will also survey storage conditions as well as installation conditions for works on exhibit. They will summarize findings and make recommendations as necessary.

James Druzic is Senior Scientist with the Getty Conservation Institute. His activities will include close examination of the building's ventilation system, storage and exhibition facilities with a focus on humidity and temperature, natural and artificial lighting levels, and a range of biological issues. His final report will also cover indoor- and outdoor-generated air pollution and the implications for the museum building and collections. Michael Henry is an architect and engineer and a principal in the firm of Watson & Henry Associates, a firm specializing in assessment and recommendations for the preservation of historic structures. He will perform a general survey of the building envelope, the mechanical systems, and the site. His report will include recommendations based on his consultation with the other conservators in order to reconcile possibly conflicting needs of the collection and the building.

PAM staff who will be most involved with the conservation survey team are Marcia Page, collections manager, Betty Wan, registrar, and David Kamansky, executive director and senior curator. Other staff members will be included, as needed, and will be involved in decision making regarding the project during regular staff meetings.

Marcia Page will act as project manager for the survey and will be the liaison between the project consultants and PAM staff. She and Betty Wan will support the consultants' work during site visits, accessing storage areas, collection objects and records, and providing other assistance as needed.

Ms. Page has 24 years experience in project management related to museum collections and exhibitions. She has a certificate in Preventive Conservation from ICCROM and has had training in basic techniques for cleaning and repair of textiles and works on paper. She has worked with four of the five proposed consultants on past projects.

Betty Wan has worked for PAM for 8 years and has been registrar since 1995. She trained under the museum's former registrar of 20 years, has attended numerous workshops sponsored by the Western Regional Registrar's Committee, and participated in a recent staff training workshop conducted by Joanne Page, paper conservator. She has extensive knowledge of the history of the museum's acquisition and de-accessioning activities as well as the allocation of collection storage in various areas of the museum.

David Kamansky has been executive director and senior curator of the museum for more than 25 years. His dedication to building the collections has always included a commitment to the regular allocation of funds for conservation activities, even in the leanest budget years. His participation in the project, primarily to review and re-define the museum's standards and goals for conservation of the historic building and the collections, ensures that the PAM board of trustees will respond positively to the recommendations from the project team.

PACIFIC ASIA MUSEUM GENERAL CONSERVATION SURVEY
SCHEDULE OF COMPLETION

	Phase 1 5/15/00-8/01/00	Phase 2 8/01/00-9/15/00	Phase 3 9/15/00-9/30/00
1. Information Gathering	■		
2. Reflection & Interpretation		■	
3. Report & Recommendation			■

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Pacific Asia Museum

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		$15,806	$15,806
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*			
FRINGE BENEFITS		$4,821	$4,821
CONSULTANT FEES	$24,985		$24,985
TRAVEL: DOMESTIC			$1,170
FOREIGN			
SUPPLIES & MATERIALS			
SERVICES			
OTHER			
TOTAL DIRECT COSTS	$ 26,155	$ 20,627	$ 46,782
INDIRECT COSTS*	$	$ 9,356	$ 9,356

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ 56,138

AMOUNT OF CASH—MATCH $ 29,983.00

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $ n/a

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 29,983

AMOUNT REQUESTED FROM IMLS $ 26,155

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%) 47 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Railroad Museum of Pennsylvania
Pennsylvania
Detailed Survey

What is the design of the project?

The Friends of the Railroad Museum of Pennsylvania, a non profit association providing support for the Museum's historic artifacts, seeks funding to complete a Detailed Conservation Survey of 94 historic locomotives and railcars in the Museum's collection. The survey will identify conservation problems and provide a rationale for the prioritization of treatment plans. The project will be completed using a team approach, bringing conservators and railroad rolling stock professionals into a process that traditionally has been done using a "let's fix it up and run it" mentality.

A number of collections surveys, including CAP (1990), Map II (1997), and a General Conservation Survey (2000) concluded that an Environmental Survey (now underway; completion 12/31/00) and a Detailed Conservation Survey were the Museum's highest collections care priorities. Along with an exhibit plan (now underway; completion 6/30/01) a Detailed Conservation Survey is one of the final components needed to complete a formal long-range conservation plan for the Railroad Museum of Pennsylvania.

In order to develop the long range conservation plan, it will be necessary to carry out an object by object survey of the locomotives and railcars in the collection, document the condition of individual pieces with photographs and conservator's reports, and assign treatment priorities based on conservation and curatorial assessments.

Restoration Manager Allan Martin will serve as project manager. Mr. Martin and the Museum's Curator, George Deeming, will work closely with a railcar conservation specialist Glenn Guerra and a locomotive conservation specialist, still unidentified, each of whom is recognized for their expertise in evaluating the condition and treatment needs for the particular pieces they are surveying. The Pennsylvania Historical and Museum Commission (PHMC), which administers the Railroad Museum of Pennsylvania (RMP), is providing the services of two staff conservators, John Hartmann and Brian Howard from its Commonwealth Conservation Center (CCC) and a textile conservator, Fonda Thomsen, as a match for this IMLS proposal. John is the Chief Conservator for the CCC and Brian is an experienced furniture/objects conservator. The CCC is a regional conservation center administered by the PHMC that provides extensive conservation services for 27 PHMC-administered historic sites and museums. Fonda is an experienced textile conservator available through a conservation services contract with the PHMC

The project will consist of four primary activities: preparation for the conservation survey; conducting the detailed conservation survey; preparation of the conservator's survey reports; and the development of the final long range conservation plan.

The survey has been designed to enhance our collections records with details about materials and workmanship, evidence of prior treatments/repairs and historic use, and notes, including B&W and digital photographs, on condition. The images taken during the survey will be incorporated into the Museum's new collection database. Use of the database will facilitate the sorting and retrieval of collected data, identify objects by priority categories, aid in the planning of treatment schedules, and provide useful information to current and future scholars.

This kind of comprehensive survey has never been done on our collections and will indicate the Museum's commitment to meet the requirements for AAM accreditation. This project is also essential for moving ahead with a multi-million dollar exhibit plan and for acquiring future funding for long range conservation treatment of the collection.

Activity One (40 staff days) will involve in-house preparations for the detailed conservation survey. This aspect of the project represents part of the Railroad Museum's matching contribution and will be carried out by the Restoration Manager and Curator. They will procure the materials and supplies to be used during the survey, review and update collections records and assemble catalog sheets on the pieces to be surveyed, finalize the format for inclusion of condition survey data into the collections database, and prepare the railcars and locomotives for accessibility to ensure maximum safety and productivity during the survey. A survey schedule will be developed with the conservators that will be coordinated by the Museum staff.

Activity Two (80 staff days, 50 CCC days, and 72.5 consultant days) will consist of the actual survey of the collection by the conservators with the assistance of the Museum staff. During this period the Conservators, Restoration Manager and Curator will examine each locomotive and railcar and record their notes on condition checklist survey forms. Prior to the survey, railcars will be emptied of obstacles and appropriate portable lighting will be provided for general and detailed photography and close examination.

Activity Three (5 staff days, 3 CCC days, and 46 consultant days) will consist of individual conservators preparing their survey reports off site. These reports will include an overview of information collected during the survey, observations concerning the collections, recommendations for conservation treatments, recommendations for preparing the piece for exhibit, cost proposals for treatment and estimates for exhibit preparation. Included will be asbestos and lead paint abatement recommendations if applicable. The conservators will assign each artifact a conservation priority rating and base their treatment priorities on condition and urgency of need.

Activity Four (60 staff days, 2 CCC days and 3 consultant days) will consist of the Restoration Manager, Curator and Director preparing a long-range treatment plan and project report. An curatorial technician will incorporate the data and images collected during the survey into the Museum's Collection Database.

As part of this activity, the Restoration Manager will establish curatorial priorities based on each object's authenticity, informational value, role in the exhibit program, and usefulness in supporting the Museum's mission. The Restoration manager, Curator and Director will then summarize the findings of the detailed conservation survey, reconcile conservation and interpretive priorities, and develop a final treatment plan and estimates for treatment based on overall priority rating and curatorial needs. In addition, pieces requiring further study will be identified. The consultants will review and comment on the project summary before the final report is issued.

The grant period will extend from September 2001 through August 2003. Estimates of time for each activity have been made by curatorial staff and consultants who have extensive experience carrying out conservation surveys. Some pieces in excellent, restored condition will take less to survey than some which arrived at the Museum needing considerable treatment or those that have significant structural problems. It is estimated that, on the average, it will take about 6 hours to perform the on-site survey on each piece.

2. What are the object(s) which are the focus of this study/project?

The Railroad Museum of Pennsylvania holds one of the word's finest collections of historically significant locomotives and railcars. The Collections span the history (1825 to the present) and operational scope of railroading in Pennsylvania. The Museum's original core collection was begun in the late 1930's by the Pennsylvania Railroad (PRR) which began setting aside one of each of its major classes of steam locomotives and railcars as they were retired. In addition, the PRR built several working locomotive replicas and restored an entire train of 1900 era passenger cars for exhibition in the 1939-40 New York World's Fair. Numbering 27 pieces, this core collection was stored in a Pennsylvania roundhouse until the late 1960's when the financially distressed railroad began looking for a permanent home.

The Commonwealth of Pennsylvania realized the value of this important collection, secured the collection and began plans for building a new Railroad Museum which was completed in 1975. While a few pieces went to other museums, were sold or scrapped prior to acquisition, 23 pieces from the historic PRR collection, most one of a kind survivors, were transferred to Strasburg and formed the Museum's core collection.

In the 25 years since the Museum opened, 71 additional locomotives and railcars were added to the collection, each carefully selected because they were made or used in Pennsylvania. Represented in the collection are 20 steam engines, 2 reproduction steam engines, 6 electric locomotives, 6 diesel-electric locomotives, one gasoline switcher, 6 self propelled passenger cars, 21 passenger cars, 21 freight cars and 11maintenance of way/non-revenue cars.

The *steam engine* collection is one of the finest in the world and consists of locomotives ranging in age from 1875 to 1948. Functions represented in the collection include yard switchers, fireless locomotives (powered with steam provided by steam electric generating stations) fast passenger engines and powerful freight "hogs". The steam engines are large (some weigh in at 220 tons, and are 140 feet long with tenders attached) and complicated machines which were the technological wonders of their day.

The *electric engine* collection consists of freight, passenger and utility engines that ran on overhead cantanery wires or charged third rails. Electric engines were used in and around cities where air pollution limited the use of steam engines. This collection ranges in age from 1912 through 1963 and includes two of the 240 ton GG-1 class fast passenger engines, one of which is the prototype designed by Raymond Loewy.

The *diesel-electric engine* collection consists of some real work-horses of the 20th century. These locomotives used diesel engines to run on-board electric generators that powered electric traction motors on both freight and passenger engines. These range in age from 1942 to 1968 and in size from 75 to 180 tons.

The six *self propelled passenger cars* in the collection document the evolution of the commuter passenger railcar from the 1930's through the early 1970s.

The *passenger car* collection includes one of the oldest original surviving passenger cars in the U.S. (1855), an entire train of 1890's passenger cars restored by the PRR, a fully equipped Pullman sleeper, dining parlor, observation and business cars. It also includes an 1890 Railway Post Office car in original condition, and standard and experimental cars built by several of Pennsylvania's railroads.

The *freight car* collection consists of cars of every shape, size and function: box cars, hopper cars, gondolas, refrigerated cars, flat cars, cabooses, tank cars, and others from the 1890s to the 1960's represent various cargo carrying railcar types.

The *maintenance of way* collection is dominated by a self-propelled wreck crane designed to lift up to 250 tons of derailed rolling stock back onto the rails. Other items in this collection include rail inspection cars, right of way mowers, a horse transport car, and an 1896 Russell snow plow.

The collections are displayed in a 100,000 square foot exhibit hall and an outdoor railyard. The Museum is now in the design phase of a new multi-million dollar exhibit that will break new ground in the field of rail history. A large percentage of the collection is scheduled for inclusion in the exhibit and will need to be treated prior to installation. This survey will help us organize treatment priority for the exhibit pieces and usher the Museum's collections care into the 21st century, just in time for AAM accreditation.

3. How does the project relate to your Museum's ongoing conservation activities?

The PHMC and the Railroad Museum of Pennsylvania are committed to the continued preservation and conservation of its collections. The CCC provides general conservation consulting services on a regular basis for the RMP, reviewing storage renovation plans, building plans, and exhibit plans. The Chief Conservator worked closely with the CAP and MAP II surveyors, provided the recently completed General Conservation Survey, and was instrumental in developing the proposal for the Environmental Survey now underway. The Museum has been working, for the past decade, towards a comprehensive long-range conservation plan that implements the combined recommendations from the various survey reports. Included in the Museum's commitment toward preservation was the construction of a Restoration Shop in 1998 where treatment of the historic rolling stock collection can now take place year-round with the resources of well equipped metal, paint and wood shops.

This project is the Museum's greatest collections care need because it is the final piece required to develop the formal long-range conservation plan.

The Museum is currently operating using an interim conservation plan that implements the recommendations of the completed CAP, MAP II, and General Conservation Survey reports. Recommendations from those reports already accomplished include: establishing an environmental monitoring plan and installing Dataloggers; developing a Housekeeping Manual; building a restoration shop for rolling stock; installing a security and fire detection system; replacing the roof on old rolling stock hall and developing interim collection storage areas with appropriate storage systems and minimal environmental controls. Additional recommendations from those reports now in-process include re-housing the library/archives collection in new acid-free containers, completing a computerized inventory of the collection and planning a fire suppression system.

A major goal recommended in the CAP report was accomplished in 1995 when the Museum built a $2.4 million, 46,000 sq. ft. addition to rolling stock hall and was able to move an additional 30% of its collection indoors.

Another major collections care goal was accomplished in 1995 with the addition of a permanent professional Curator to the staff, followed by a Restoration Manager in 1998 and a Restoration Technician in 1999.

Previous IMLS GOS grants have been used to stabilize and treat specific railcars and locomotives in the collections.

Long-range conservation plan goals include completing an environmental survey and implementing recommendations for existing buildings and systems, conserving/stabilizing/restoring individual objects as prioritized by the exhibits plan, installing a fire suppression system, building a new centralized collections storage building, and building another addition to Rolling Stock Hall or a round house to house collections now stored outside.

4. What are the anticipated benefits of this project?

The Railroad Museum of Pennsylvania is taking the lead with nation-wide rail museums to bring conservation concepts into a field that has historically used railcar and locomotive restorers who utilized heavy-handed replacement of components and wholesale repainting with little or no documentation of existing historic fabric as the sole means of dealing with this type of collection. We hope to sponsor a regional workshop through the Association of Railway Museums using this survey as a case study to show other museums what we are doing and why it is critical to incorporate modern museum conservation concepts in their approach to collection care too.

This project has been designed to evaluate the condition of the rolling stock on exhibit and in storage, describe preservation needs and treatment options, assign treatment priorities, and develop a budget for conservation treatment needs.

The detailed condition survey data that will be incorporated into our electronic database will facilitate the sorting and retrieval of data, identify objects by priority categories, aid in planning treatment schedules, provide essential information for future preservation planning efforts and fund raising activities for these efforts, and provide useful information to current and future scholars.

Full photographic documentation of our rolling stock collection will provide descriptive documentation to each piece's basic physical features and current condition. These images will be incorporated into our new collections management data base, and will be sent over the new LAN (T-1 transmission capability) to the central collections management database at PHMC's Harrisburg headquarters where it will also be accessible by the CCC.

Developing a priority for treatment of rolling stock using the Interpretive Plan and the Detailed Conservation Survey will assist the Restoration Shop staff with determining which pieces need to be worked on next. Materials can be ordered and funding arranged ahead of time, saving man-hours and money. The exhibit plan can then be staged in a way that is practical and doable, with exhibit sections prioritized as rolling stock slated for those sections are completed for exhibit. We will also most likely find out some new information on objects during the survey research that can be incorporated into the exhibit, thus providing visitors with the most up-to-date information available.

5. How will the applicant insure that ongoing museum functions are not inhibited by these projects?

Ongoing museum functions will in no way be inhibited by this project. The survey will be conducted by consultants hired from the outside and from the CCC. Museum personnel assigned to the project have collection conservation as a priority listed in their regular job description. The 100,000 square foot exhibition hall provides such a large space, that roping off individual pieces during the survey, if required, will not detract from the visitor's experience. If anything, the detailed conservation survey will enhance the operations of the Museum, by providing proof to the visitors and to the community that the Museum is responsibly addressing the needs of the collection in a rational way.

Matching funds will be allocated by the Friends of the Railroad Museum and the PHMC's Keystone Preservation Fund as required and will not affect the allocation of funds for other site operations.

6. What are the proposed conservation methods, and why are they conservationally sound?

Sufficient time has been built into the proposal schedule for the curatorial staff to adequately prepare the collection to ensure maximum safety and productivity during the survey.

The conservators have been chosen based upon their qualifications to evaluate condition, set conservation treatment priorities and recommend proper storage environments for the specialized rolling stock collection.

The passenger railcars, many of which are constructed with a variety of materials including wood, textiles, steel, and plastics, are especially difficult to survey and require specialists from different disciplines. These will be surveyed by a team including the visiting railcar consultant, chosen specifically for his expertise in structural analysis of frame, trucks and carbodies; a furniture/objects consultant who can adequately survey the built-in cabinets and furniture in the parlor and business cars and who can examine all the misc. pieces such as smoking stands, ladders, and etc. that are found in the cars as utility equipment; a textile conservator who can examine the textiles in the car seats, berths, and dining areas;

The freight railcars will also be examined by the railcar conservation specialist. While they are generally constructed in simpler form and from fewer diverse materials than the passenger cars, they also have specialized conservation needs that will be addressed by the specialist.

The Steam , Diesel-electric, and electric engines will be examined by a specialized consultant who is familiar with the intricacies of the large locomotives. The consultant chosen will provide us with a detailed

report that identifies the best way to preserve and treat the engines while at the same time preserving as much original historic fabric as possible. The goal here is not to return the engines to operating condition (a process that can destroy or remove as much as 40% of the original fabric to meet federal boiler regulations). The goals are to provide a prioritized plan to safely remove hazardous materials such as asbestos and lead paint, (retaining as much historical fabric of the engines as possible) cosmetically restore the engines to a carefully researched and selected period of their service life and install them in the new exhibit.

The Museum Staff will work closely along side the conservators every step of the way, incorporating the project survey notes into the collection management database. The staff will then have the informational tools to generate a treatment proposal plan based on conservation or curatorial priorities and treatment types. The database will provide crucial information for developing the funding priorities for the long-range conservation plan.

The detailed conservation survey will build upon the data collected by previous surveys and combine recommendations from several critical plans now underway, including the exhibit plan and the environmental survey, to develop the long-range conservation plan. In this way, all the conservation survey work that has gone before will be incorporated into an integrated plan that will guide the Museum's future conservation activities.

7. How does the project budget support the project goals and objectives?

The project budget has been developed by the site staff in cooperation with the conservators. The budget is based on the estimation of time needed to survey the 94 locomotives and railcars. The conservator's hours have been calculated based on the overall condition and complexity of each individual piece and include both time for the field survey and time for developing the reports on individual pieces. The proposed rates have been informed by extensive experience with similar surveys and the familiarity with the Railroad Museum's collections.

The overall project budget is consistent with a project of this size, which is the equivalent of conducting historic building surveys for 94 small buildings.

8. What are the qualifications and responsibilities of the project personnel?

PHMC and RRMP Staff:

Project Manager Allan Martin will provide overall direction for the survey. He will direct the in-house preparations for the project, coordinate the conservators schedules and activities, assist the conservators and oversee the photography during the survey, reconcile treatment priorities with the curatorial priorities, and, using the individual conservator's reports, will prepare the long range conservation plan and project report. Mr. Martin leads the Museum's collections care and conservation management, holds a BA in History, an asbestos removal license and has received advanced conservation training by the National Park Service, University of Delaware, and PHMC. He has 16 years experience in the stabilization and restoration of historic railcars and locomotives.

George Deeming, Curator has an MA in museum archival and editing studies and nine years experience overseeing collections management, research activities and exhibit planning.

David W. Dunn, Director, has 26 years of Museum experience that includes administration and curatorial experience and extensive conservation training.

A curatorial technician, as yet unidentified but who is trained on the use of the new PHMC database, will enter the survey data, including digital photographs, on the new collections management software.

Brenda Riegle will provide guidance and assistance to the project director as needed. She is currently assigned as the Chief of the Collections Care Section, Bureau of Historic Sites and Museums where she manages collections-related projects at 26 historic sites across Pennsylvania. Ms. Reigle has an MA in museum studies from Cooperstown and has extensive experience directing collection surveys and museum assessment programs funded by IMLS and AAM. Ms. Reigle's contribution is not included as either a match or as IMLS funded.

Consultants:

Glenn Guerra will serve as the passenger/freight car conservator for the project. He will examine the car, direct the photography and collect data on individual railcar's paint, construction design, materials, and other data that documents the condition of the car. He will then work with the curatorial staff to determine the best possible treatment plan that includes stabilization, conservation treatments, and if needed, a plan for abatement of hazardous materials and reconstruction, retaining as much historical fabric as possible. Mr.

Guerra has more than seventeen years of museum experience in railcar preservation, including surveys at the California State Railroad Museum, Pennsylvania Trolley Museum, and other railroad museums, operating railroads and trolley museums.

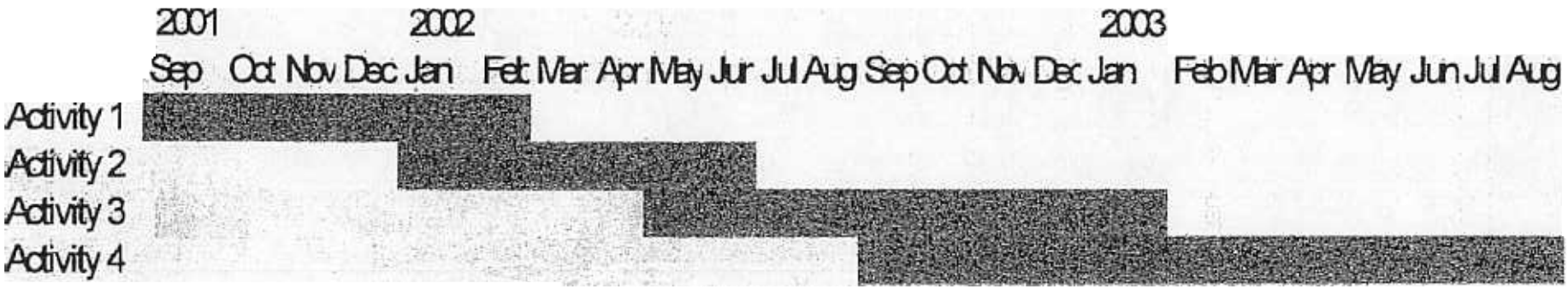
The Locomotive Conservator has not yet been identified. We have been unable to locate someone with the experience with conservation of "gross inanimate objects" in their resume. In addition, the steam and diesel-electric and electric engines all have their own idiosyncrasies that may require a specialist in each area. Ideally we are looking for someone with a background in historic locomotive scholarship who would be able to evaluate each piece, describe and record its current condition and make recommendations on conservation treatment that would preserve as much original historic fabric as possible and that would make the engine hazard-free and exhibitable.

Fonda Thompsen, conservator Fellow, AIC has a BA from Penn State University and received her textile conservation training at the Abegg-Stiftung Textile Museum, Berne, Switzerland. Fonda will provide her textile expertise for the conservation team as part of the survey for 17 passenger coaches with original or period textile furnishings.

John Hartmann has an MA from the State University of New York's Cooperstown graduate program in the Conservation of Historic and Artistic Works. He currently serves as Chief Conservator as well as paintings conservator for the PHMC's Commonwealth Conservation Center and has held that position since 1985. He has extensive experience conducting collection surveys and is a fellow member of AIC and IIC. John will be working closely with the visiting railcar and locomotive consultants to ensure appropriate conservation methods are being followed.

Brian Howard will be surveying the furniture and cabinets in the passenger cars, the wooden components in the locomotives and act as general objects conservator. Mr. Howard has an M.A. from the Art Conservation Department of the State University College at Buffalo and Certificate of Advanced Studies. He is a furniture/objects conservator for the CCC. His specialties include the treatment of furniture, decorative arts, conservation assessments, and general surveys. He is a member of AIC and IIC.

Schedule of Completion
2001 IMLS Conservation Project Support – Railroad Museum of Pennsylvania



Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Railroad Museum of Pennsylvania

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		28,050	28,050
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*			
FRINGE BENEFITS		8,976	8,976
CONSULTANT FEES	36,400	54,595	90,995
TRAVEL: DOMESTIC	9,800	6,200	16,000
FOREIGN			
SUPPLIES & MATERIALS	2,950		2,950
SERVICES			
OTHER			
TOTAL DIRECT COSTS	$ 49,150	$ 97,821	$ 146,971
INDIRECT COSTS*	$	$ 10,000	$ 10,000

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ 156,971

AMOUNT OF CASH—MATCH $ 29,170

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $ 78,651

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 107,821

AMOUNT REQUESTED FROM IMLS $ 49,150

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%) 33 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Riverside Municipal Museum
California
Detailed Survey

1. What is the design of the project?

Project Goal

Surveys of Riverside Municipal Museum [**RMM**] collections of archival paper documents and materials, textiles, costumes, baskets, furniture, tools and natural history specimens - as well as the RMM house museum (Heritage House) - were funded by an IMLS grant [IC-80179-98] for the fiscal year 98/99. The document "1999 RMM Collections Conservation Report" resulted from the work of conservator's on this project. Prominent among conservator recommendations in that report were that the RMM should pursue an architectural/engineering assessment of its collections storage facilities, and prepare a long-range plan for collections conservation. **Thus the RMM is requesting IMLS support to complete the surveys of its major collections as well as the facilities that house them. In addition, the Museum seeks support for a professional analysis of all the resulting conservator reports, in order to prioritize the conservator recommendations preparatory to the RMM developing and implementing a Long Range Conservation Plan [LRCP].**

The Getty Conservation Institute's Conservation Assessment: A Proposed Model for Evaluating Museum Environmental Management Needs provides the conceptual framework for this project. The Institute's year 2000 version of this model expressly addresses conservation issues in settings "where mechanized building-wide climate control systems are not a practical option". It remains to be determined whether RMM facilities - as presently constituted, or in modified form - are capable of maintaining stable collections environments.

Project Objectives:

1. The RMM staff will employ the Getty Conservation Institute model as the basis for a self-assessment of its facilities and the environment in which collections are maintained. The Curator of Collections will assemble data and comments provided by staff into **a complete facilities self-assessment report.**
2. Two contract conservators will survey and **assess the preventative conservation requirements of the RMM's collections of ethnographic objects, paintings and painted diorama murals**, resulting in two written reports containing recommendations based on those findings.
3. Subsequent to having received and studied the RMM's self-assessment, an architectural conservator will survey and **assess all three RMM facilities where collections are housed**, to document the status of these structures with respect to determining how a stable environment for collections might be attained. A written report will be produced, including recommendations based on these findings.
4. A team of three contract conservators will **review the content of all the collections and facilities surveys and prioritize recommendations from both the 1998-99 and proposed 2001-03 projects**, issuing a summary report on the entire survey process.
5. Through frequent consultations with the team of reviewing conservators, and based on the summary report described above and recommendations contained in Ogden (1997 - see below), **RMM staff will develop a LRCP for RMM facilities and collections.** This plan will establish measurable goals and objectives, along with a schedule for the implementation of sustainable technical solutions, revised collections management policies, and improved facilities and environmental maintenance procedures.

This project will be comprised of two phases:

PHASE I - conservation surveys: 1 October 2001 - 30 September 2002

Before the surveys begin, the three conservators will be supplied with reference materials (such as the "1999 RMM Collections Conservation Report") to provide background for the project, including information developed through the RMM's environmental self-assessment (following the Getty Conservation Institute's "Conservation Assessment Model"). The painting conservator will also be sent a list of RMM paintings and diorama murals. In addition, the architecture/facilities conservator will be sent copies of prior architectural and engineering assessments of the present RMM building (prepared in conjunction with building expansion planning efforts - see question #3).

At the time of the on-site visits, Museum staff will ensure that any additional relevant supporting documentation on collections storage, exhibition areas and facilities is ready and available for examination by conservators. The project director/Curator of Collections will work with each consultant to prepare an agenda for the on-site visit. During the visit, the consultants will meet with all relevant Museum staff. Each conservator will tour all facilities to view RMM collections on exhibition and in storage. Conservators will provide brief training sessions for relevant staff as a means of modeling proper storage, packing, and monitoring techniques for their respective collections. The assessment consultants will write reports based on their observations and data collected at the RMM. These reports will be reviewed by RMM staff before each final draft is completed.

Ethnographic Materials Conservator:	3 days surveying collections; 3 days to write report
Paintings Conservator:	5 days surveying paintings&diorama murals; 2 days to write report
Architecture/Facilities Conservator:	10 days surveying 3 facilities; 5 days to write report

PHASE II - survey recommendations review, prioritization and LRCP development: 1 October 2002 - 30 September 2003

When the conservators have submitted their written reports for this project, these reports will complete the collections and facilities survey data for the RMM. The project director will work with the team of three review conservators to develop a prioritization of all recommendations (including those from the 1998-99 IMLS CPS surveys). The Museum's project staff and the review team will discuss prioritization and implementation schedule development. The review team will then finalize the recommendations which will ultimately be incorporated into the LRCP.

Conservator review team:

Ethnographic Materials Conservator (principle author):	5 days on site; 5 days to write report
Architecture/Facilities Conservator:	5 days on site; 5 days to write report

Art & Paper Conservator (editor): 2 days on site; 1 day to edit report

The project director, in consultation with the RMM project staff and conservator review team, will develop the RMM's LRCP. Additional guidance for developing the plan will come from Sherelyn Ogden's publication, Preservation Planning: Guidelines For Writing a Long-Range Plan [1997, American Association of Museums and Northeast Document Conservation Center]. The draft plan will be submitted to the review team for comment. The revised LRCP will be submitted to the Municipal Museum Board [the City's representative on Museum activities] and the City Council [the RMM is a City department] for final approval. This document will mandate RMM collection conservation activities and provide direction for future collection management and facilities needs.

The estimated distribution of staff time for both phases of the 2001-2003 conservation project is: Project Director [80 days], Senior Curator for Heritage House [30 days], Curator of Natural History [16 days], Sr. Curator of History [30 days], Curator of Anthropology [30 days], Restoration Specialist/facilities liaison [10 days], RMM Department Secretary [16 days].

2. What is the object[s], historic structures[s], or specimen[s] that is the focus of this project?

This project brings to a conclusion the surveys the RMM requires before a comprehensive LRCP can be written. The 1998-99 CPS project focussed on five collections areas: textiles, costumes&baskets; furniture; archival papers; natural history; house museum.

The RMM Anthropology division's holdings total approximately 12,130 items; 7,614 of which are ethnographic - Native American baskets (675 California, 632 Southwest USA, 142 Great Basin, 63 Plateau and 211 Northwest Coast) and cradle boards as well as 531 textiles, 1,665 pottery objects, 506 toys, and 15 house models (created in 1900 for a Smithsonian Institution exhibition at the 1901 Pan-American Exposition). The RMM's California basket collection has provided the basis for a series of comprehensive exhibitions, associated publications and public lectures. RMM baskets have been a focus of scholarly research, such as the work of Justin Farmer (a Diegueño Indian) on anomalies of California baskets. Interpretation often involved description of the naturally-derived materials employed in their fabrication (often plant species also documented in the Herbarium), the stories of the basket makers themselves (the RMM maintains one of the largest extant files on known Southern California basket makers) and demonstrations by contemporary artisans. The History and Anthropology divisions also share ethnographic collections of Chinese and Japanese objects including: artifacts from the Riverside Spring Ranchera site (historic Indian community c.1880-1915); artifacts from the Chinatown archaeological site; objects from Riverside's Chinatown, Chinese textiles and costumes; and Japanese textiles, costumes, toys and folk art.

As a result of a recent donation of historically significant painted portrait works, and a preliminary inventory of the RMM's 53 paintings and 10 diorama murals, RMM curatorial staff identified the painting collection as having significance necessitating a survey. The paintings reflect the RMM's mission and have relevance with respect to the region's cultural and natural history. The major portion of the RMM's collection of paintings reflects the expressed tastes and decorative preferences visible in local orange growers' homes during the late 19th century. These paintings often have an European locale or historical theme, which was appropriate for the period and community. Portraits of locally and internationally prominent individuals are also represented in the RMM collection. The subjects of these works include: Marcella Craft, a Riverside resident, who became an internationally acclaimed opera singer in the early 20th century; and Miguel Estudillo, who was a State Senator and California State Court judge, and his wife Minerva Cook Estudillo, who was a descendant of Mayflower passenger James Cook. The Estudillo portraits[circa 1920] were painted by W. C. Tanner, a noted California impressionist.

The RMM also has a collection of local and regional landscape paintings which depict the development of the Riverside region, at one time a primarily agricultural community. These works include the early-twentieth century landscapes by Carl Eytel, a German expatriate and noted painter of desert and mountain scenes. These particular Eytel paintings have additional significance as they were given by him to Edmund Jaeger (the 20th century's foremost authority on North American desert natural history). Jaeger was a life-long Riverside resident and was instrumental in the development and expansion of the RMM. The Museum's diorama murals (painted from the late 1950s to the early 1970s) provide a background for both miniature and life size works which depict scenes from local history and natural habitats. Prominent southern California artists Ralph Love and Marilyn Griffith painted the murals for the natural history dioramas, while noted miniaturist Cal Peters painted the seven history diorama murals, in addition to creating the foreground miniatures

The three Museum facilities include: the main RMM building, an Italian Renaissance-Revival style structure built in 1912 and originally used as a U.S. Post Office; the house museum "Heritage House", an 1891 Queen Anne-style home that once belonged to a prominent citrus-growing family; and the RMM Annex, a 1970s adapted re-use of a 1932 commercial structure. The main RMM building and house museum were admitted to the National Register of Historic Places in 1973, and thus play a role in chronicling the development of this community. The RMM/Post Office building houses the collections of the Anthropology division and the Natural History division. The History division collections include items stored at the Annex (3-dimensional objects, textiles and costumes) plus archival materials (which, subsequent to the 1998-99 conservation assessment have been, in part, transferred to a joint RMM/Riverside Public Library Local History Resource Center storage facility located in the downtown library building). Heritage House, an inter-disciplinary interpretation of a 19th century orange grower's home, houses and exhibits 2,875 furnishing objects, decorative arts, textiles and other household items. The suitability and status of these buildings for RMM collections storage/exhibit functions will be addressed with the conservation self-assessment and survey of the facilities.

3. How does the project relate to your museum's ongoing conservation activities?

Phase I of the proposed project will assess the overall conservation needs of the RMM ethnographic and paintings

collections and the ability of the three RMM storage/exhibition facilities to meet the environmental needs of all collections. The report from the ethnographic objects and paintings conservators will complete the assessments needed to develop future RMM collections management and environmental improvements strategies. The Getty-model self-assessment and the report from the building conservator will create a conceptual framework for tracking the performance of RMM buildings; provide an overview of existing collections risks relative to the structures themselves, their operations and visitation; suggest possible solutions to environmental problems in the form of structural or operational (i.e. building maintenance or collections management) modifications; provide the RMM with a conservator's review and critique of expansion planning documents (see below).

The present RMM Collections Policy was developed through a process of staff reviews and adopted by the Municipal Museum Board in December, 1996. This document addresses all aspects of collection management, including acquisitions, loans and deaccessions, to ensure compliance with the RMM's mission and current professional standards. Implementation of this policy, via monthly Collections Committee meetings, has provided valuable guidance in RMM collections management. As measures to address the overall conservation needs of the RMM collections have expanded, funds spent on conservation supplies and expenses have increased: $968 [FY97/98], $981 [FY98/99], $2421 [FY99/00] and $3143 from 7/1/00 to 9/30/00 for a combined total of $7513. Acid-free paper, Ethafoam, archival record boxes, envelopes, sleeve protectors, file folders, encapsulation materials, botanical specimen mounts, object storage boxes, textile rolls and textile and costume boxes are among the supplies acquired. Materials to build racks and shelving to expand textiles & costumes storage have been acquired. In addition to support from general Museum department funds, financial support for collection management expenditures has also been provided by competitive grants, the Riverside Museum Associates [the RMM's private non-profit support group], the Clark Herbarium Fund and the Municipal Museum trust [a fund comprised of donations and bequests to the RMM].

In response to 1998/99 conservator recommendations, steps were taken during the latter half of 1999 to create an Integrated Pest Management program (IPM) for all RMM facilities. Through a series of staff meetings, a RMM Pest Management Policy was drafted and adopted (10/28/99). An IPM plan of procedures and tasks was completed and adopted on 6/29/2000, following detailed pest management audits of the downtown Museum building, Annex and Heritage House. Use of all but residual amounts of pesticides has subsequently been eliminated for the interior of RMM structures. To prevent incursions of ants, roaches and crickets, exterior applications of a pesticide certified for these pests is applied monthly (beginning on 12/99) by a licensed pest control contractor. Several series of sticky traps have been set out in work and collections storage areas of both structures to monitor the effectiveness of pest control measures. Planning is underway for commercial deep cleaning of the RMM building's attic, and a grant application is in review requesting funds from the California Department of Pesticide Regulation for a more detailed monitoring program in collections storage areas (using pheromone traps and other pest-specific approaches). Other pest control procedures include large, commercial-grade freezer cabinets at the downtown Museum and Heritage House [used for treating incoming loans and new accessions as well as any infestations that may occur]. RMM staff recently attended a workshop on CO2 fumigation methods and equipment.

As of 6/30/00, there were 36,059 object records in the RMM computer network's relational data base, which employs the collections management software known as ARGUS [Questor Systems, Inc.]. ARGUS provides the RMM's central means of storing and retrieving collections records and collections activity data. To date, 5,643 object records included digital images. Specifically, input object records per division include: Anthropology 7,154 [2,248 images]; Education 975 [48]; History 21,137 [2,301 images, including Heritage House 2,880 with 122 images]; Natural History 5,562 [1,020 images]; and the Riverside Local History Resource Center 1,231 [26 images]. IPM audit and monitoring data are being recorded in ARGUS to document pest activity at the three facilities, along with data on building services activities and general collections risks (water leaks, etc.). Features of ARGUS make it possible to track conservation activities related to individual objects or entire collections.

Present RMM exhibition and storage areas are monitored by curatorial and building maintenance staff, with storage areas maintained as closed, locked, and/or restricted spaces accessible only through each collection's curator. Anthropology collection objects are stored in a light free, temperature controlled environment with Ethafoam padding on shelves or in enclosed drawers with acid-free shelf linings. The artifacts and storage furniture are secured against the impact of earthquakes (a potential disaster in this geographic region). In the event of fire and flood, alarms and monitoring equipment are in place to detect the presence of smoke and/or water. A hygrothermograph records environmental data for anthropology collections storage. The Municipal Museum's IPM program is employed to collect data on insect activity. To prevent the introduction of insect pests, new acquisitions and returning loans are initially isolated, assessed and - if necessary - treated before their placement in collection storage or on exhibition. The current inventory of this collection is providing improved imaging of objects through the use of a digital camera. As they are moved and inventoried, images and information up-dates are expanding the records of these objects stored in the RMM ARGUS data base.

History division collections include 1,500 textiles and costumes, 20,000 photographs, 3,000 glass negatives, and over 300 archival boxes of documentary materials. The bulk of the History collection is stored in two separate light free, temperature controlled areas. Textiles and costumes are wrapped in acid free paper, placed in archival storage boxes and then stored on steel rapid-rack shelving. Large, flat textiles such as quilts and coverlets are first rolled on archival textile tubes which have been mounted on steel pipes, and then covered with acid free paper and stored on shelving. The rapid-rack shelving was modified to accommodate these textiles with three to four textile rolls per row. A tiered floor to ceiling storage area was constructed for selected hanging costumes. This unit also has fabric covered walls and dust curtains in front. Garments are hung on padded hangers and placed on one of the three tiers in this unit. Women's costumes are located by historic period, while men's and children's costumes [smaller collections] are grouped by gender. The RMM's decorative arts and furnishings objects are stored on steel and wooden shelving. Small objects are wrapped in acid-free paper and placed in archival storage boxes before placement on steel shelving. Steel rapid-

rack shelving and pallet racks are used for large furnishings and equipment. The shelving racks are currently being secured against seismic activity. [The contents of Heritage House are maintained as a part of the History division. Seismic stabilization has been completed for the house museum structure. An expanded program of object stabilization will begin by 11/00.]

The Natural History division holdings consist of 3,500 Earth Science specimens [rocks, minerals and fossils], over 5,987 zoology specimens [387 taxidermy mounts, skins, head and horns; 4,600 insect specimens; 1,000 dry specimens of mollusks, crustaceans and other marine invertebrates] and the Clark Herbarium of approximately 10,000 dry plant specimens. At present, Natural History storage arrangements consist primarily of conventional cabinet units, plus custom, over-sized wood cabinets for stored taxidermy mounts or wood multi-drawer cabinets for earth sciences storage. Physical inventories of taxidermy, mineral specimens and the contents of the Herbarium were begun in 1997, retrieving data into the ARGUS database. As collections are inventoried, the general condition of objects is assessed, and object images are digitally recorded. Exhibits and collections storage areas are examined daily by the Natural History curator, with environmental conditions in life sciences storage monitored by a recording hygrothermograph. Detailed inspections, treatments, and repairs of specimens in exhibit installations are made annually. Pest control procedures include housekeeping plus visual and sticky trap monitoring, along with use of chest freezers to treat active infestations. A few, old, mounted specimens employed toxic substances in their preparation; as there are no wet collections, all associated preservatives and accompanying hazards are avoided. [All chemicals stored at the RMM have been assessed by City Fire Safety and Hazardous Materials officials for safe storage methods and locations.]

Phase II of the proposed project will allow the staff and the conservator review team to analyze all prior assessments in order to clarify RMM conservation issues and establish the interrelated, interdisciplinary character of RMM conservation needs. Particular attention will be focussed on storage and facilities needs, present and future. The general conservator's report will identify the principal agents of deterioration among the RMM collections and prioritize measures to address these concerns. This report will provide the basis for the LRCP.

For some years, the RMM has been conducting studies preparatory to planning for a major expansion of the downtown Museum building, with the goal of increasing space for collections storage, exhibition and public programming. To date, these studies have been conducted by Wayne Donaldson, AIA ["Adaptive Re-Use and Seismic Retrofit Study" {10/2000}] and ELS/Elbasani and Logan Architects ["RMM Feasibility Study" {8/1990}]. Copies of the reports from these two studies will be provided to the facilities conservator for Phase I of this project. The report of the general conservator will assess the impact of collections conservation requirements on the recommendations of the two architectural studies and their applicability to RMM long-range collections storage plans.

Previous IMLS grants

The RMM has had prior success in obtaining federal funds for conservation and preservation of its collections. An Institute of Museum Services [IMS]-Conservation Project Support grant [IC-00086] in 1986 supported hiring textiles and costumes conservator Catherine McLean, [Los Angeles County Museum of Art] to assess collections storage conditions, assist in development of a five year textiles and costumes collection plan, and suggest methods to provide increased stability for selected objects. In 1988, additional IMS funds were received [grant IC-80398-88] for conservation projects in the History Division: contract consultants included Catherine McLean [to survey and document textiles and costumes and to perform condition report on selected objects], Robert McGiffin, conservator Autry Museum of Western Heritage, Los Angeles [to survey and document artifacts from the furniture collection and to perform condition reports on selected objects], Gloria Scot-Freel, paper conservator the Corona Library Heritage Room [to survey selected archival materials], Wilbur Faulk, Chief of Security, Getty Center, Los Angeles [to assess environmental and security conditions in the History Division collections]. In 1989, John Twilley, conservator at the Los Angeles County Museum of Art, examined the RMM and Annex to assess the structural facilities and environmental quality for collections storage.

Results from the 1986 IMS project included preparation of condition reports and conservation treatments for selected textiles and costume objects (an 18th century Chinese imperial dragon robe; Riverside's citrus heritage quilt; a star quilt; a Japanese kimono worn by Riverside diva Marcella Craft in performances of *Madame Butterfly)*, plus the environmental improvements for textiles and costumes described above. A textiles and costumes collections management policy and a 5 year collection plan [1987-1991] were prepared. The 1989 project allowed the Museum to continue its conservation program with condition surveys on selected objects, an environmental and security assessment and a public workshop on caring for personal objects [offered by the conservators] were accomplished.

The 1989 assessment identified problems in areas of seismic stabilization, pest management, dust control and environmental [water, fire, chemicals] disasters. Some of John Twilley's concerns have been rectified, including: removal of corroded basement water pipes, relocation of the flammable materials cabinets, acquisition of additional fire extinguishers and initiation of IPM processes. Implementation of other recommendations [a more systematic use of seismic restraints in storage and exhibition areas, improved dust control in Annex shop and modification of ground floor exterior ramp to prevent flooding] are planned for the FY 2000/2001.

Implementation of recommendations from the 1998-99 IMLS CPS general conservation survey

In the anthropology collection, partial solutions to limited space have resulted from the relocation of the Navajo rugs to the Annex's textiles and costumes storage area. This move has provided additional space for basket storage, and as the basket inventory continues, baskets are packed using acid-free paper and Ethafoam, placing less stress on their structure (per recommendations of conservators from the 1998-1999 CPS project). Flat textiles in the history collection have been moved from wood dowels in a wooden textile rack to archival textile rolls on iron rods in the rapid-rack steel shelving. The shelves and textile roll positions have been numbered to provide accurate locations for objects, with these numbers recorded in the ARGUS data base. Wooden racks have been

removed from the collections area.

In the decorative arts, furnishings and equipment storage, paintings are being prepared for storage in vertical storage units in the downtown RMM building's special collections storage area. At Heritage House, windows have been tinted to protect the interiors against damage caused by day light. In addition, an independent conservator from the Getty Conservation Institute has been contracted to secure selected artifacts against seismic risk. RMM history archival materials were moved [1998] from the Annex to the Riverside Local History Resource Center (a joint Museum-downtown Riverside Public Library project) providing a more controlled environment and improved access for these materials. Utilizing funds from a California State Library grant, the RMM's archival materials are now housed in a special collections caged area in the downtown branch Riverside Public Library (directly across the street from the RMM). The Center is staffed by salaried professionals, and managed according to SAA standards. All RMM materials (in the range of 600 linear feet of original source material, including the Frank Miller Hutchings, S. C. Evans, Ethan Allen Chase, and L. V. W. Brown Collections, plus the RMM's historic photo collections) have been repacked into new, archival quality containers and folders (using Mylar sleeves for photos).

In natural history, inventories have been completed of the vertebrate paleontology, fossil plants and Herbarium reference books collections. A lichen collection created by Edmund Jaeger has been moved to archival-quality storage in compartmented acid-free boxes with Ethafoam padding.

4. What are the anticipated benefits of this project?

Phase I of this project will greatly benefit the RMM because it will complete the needed collections and facilities conservation surveys: the paintings and ethnographic collections assessments cover the only collections of size not treated in the previous CPS survey, and the facilities survey focusses on the three RMM structures and their ability to provide stable environments for collections; the conservator's report will provide the RMM with an architectural perspective on the prevalence of the 10 principal agents of deterioration at each site, as well as general recommendations regarding managing and minimizing risks. This conservator will review all previously plans for rehabilitation and new construction for the RMM, as well as other facilities documentation (National Register nomination materials) and relevant public policies (CA Historic Building Codes, City of Riverside planning, building and historic preservation codes), and comment on their relationship to collections risk. All three conservator reports, in addition to those from the 1998-99 IMLS CPS grant, will provide this institution with an overall portrait of the conservation needs of the RMM collections, and will serve as a planning aid critical to this institution, especially considering the RMM's lack of a staff conservator. The prioritization of conservator recommendations in **Phase II** will provide the preparations needed for formulation of the RMM's LRCP. Consultation with the conservator review team will enable the RMM staff to develop and implement a well-informed and sustainable plan, a valuable planning tool for the future of the RMM in many aspects of its operations. The LRCP will define broad strategies for environmental management that will serve the needs of the collections in both present and future facilities. This document will include recommendations for changes in RMM policies and practices, measures required to reduce collections risks. The LRCP will also include a list of tasks intended to bring about improvements in collections storage methods, conservation procedures and environmental monitoring, tasks that will take greatest advantage of the RMM's current facilities and prepare for capital improvements and expansion.

5. How will the applicant ensure that ongoing museum functions are not inhibited by these project activities?

The proposed project has been carefully designed to cause little impact on regular RMM functions. Collections management does not generally occur in the public domain; RMM staff will adjust their schedules to incorporate this project into their collections-related tasks. Curators and collections staff care for their collections and maintain storage facilities as part of their ongoing responsibilities. This project will not subject objects in storage or on exhibition to undue disruption. Paintings in storage will be surveyed at their storage location, while those framed works on exhibition will be temporarily removed from exhibition and examined at that location. All objects will be subject to minimal movement during the survey process. The three large diorama murals and seven small diorama backgrounds will have to be examined in situ, but are readily accessible through the exhibit windows. The facilities survey will be conducted at all three sites with a minimum of disruption to objects in storage and on exhibition. The security and stability of museum objects is of primary concern during this project. RMM staff time allocated to this project is a fiscal commitment by this institution and reflects its support of collections management. The financial resources for RMM personnel are included in the Museum department's annual budget.

6. What are the proposed conservation methods and why are they conservationally sound?

Methodology efficiency&reliability

Without a trained conservator on staff, the RMM project staff used the Getty Conservation Institute's Conservation Assessment: A Proposed Model for Evaluating Museum Environmental Management Needs as a framework for planning this project. The RMM's environmental self-assessment will provide a context for internalizing the facilities recommendations resulting from the Phase I and Phase II reports. RMM curatorial and collections staff will work with conservator consultants throughout this project. All of the contract conservators have professional training, as well as extensive experience working in art and history museums. The project's trained conservators will ensure that RMM collections are treated with currently accepted conservation methods and that objects and collections are not endangered during the course of the project.

The proposed project will bring specialized conservators to the RMM to survey and assess ethnographic objects, paintings and architecture/facilities. The paintings and ethnographic objects conservators will survey these collections (in storage and on long

term exhibition) in order to make general recommendations pertaining to the stability and environmental needs of these objects. The architecture/facilities conservator will review the results of the RMM staff's facilities self-assessment, and survey each of the three RMM sites (the main Museum building with its offices, exhibition and collections storage areas; the annex with its offices, design studio, carpentry shop and collections storage areas; and the house museum with its exhibition areas) and make general recommendations with respect to environmental stability and collections security: the resulting report will include drawings and photographs which document findings. Recommendations from these surveys and previous assessments will then be evaluated and prioritized by a team of conservators, selected for their expertise in evaluating three, critical physical entities: the RMM buildings, the collections, and the Museum's collections records. Two members of the team have worked with RMM staff on the 1998-99 IMLS-funded survey.

The LRCP will result from these two survey projects and will be drafted by the RMM Curator of Collections, who will also serve as director for the proposed project. She will work with administrative and curatorial staff in the development of the LRCP. The reports from these surveys and the LRCP will provide the foundation for the RMM administration's efforts to acquire planning and support for improved facilities for RMM collections storage.

7. How does the project budget support the project goals and objectives?

Budget development

The project budget was developed in consultation with the RMM staff and the outside conservators. It includes both staff and consultant time contributed to the project, as well as travel, lodging and project-related expenses (photography, photocopying, office supplies) for the conservators and preparation of their reports.

Determination of project costs

The RMM is requesting from IMLS $38,659 for a two year period to support the cost of services from the conservators. The Museum will match this with $39,099 from salaries and fringe benefits of project staff. The RMM total project budget is estimated to be $77,758. This sum includes conservator's fees, expenses, RMM staff time and benefits.

Reasonable and appropriateness of project costs

The RMM, through its 2001-2002 and 2002-2003 staff budgets, supports this project with a substantial in-kind match. The consultant's budget was developed in discussion with each conservator; it includes their daily fee, travel and per diem for the project. The consultant fees are in line with the level of experience that each has in his or her respective field.

8. What are the qualifications and responsibilities of the project personnel?

RIVERSIDE MUNICIPAL MUSEUM STAFF

James Bryant, Curator of Natural History; B. A., Austin College; M.A.T., Univ. Texas-Dallas; will be natural history collection liaison; time commitment: 16 days.

Shari Call, Department Secretary; will handle project finances, correspondence, consultant arrangements and document production; time commitment: 16 days.

Alan Curl, Senior Curator for Heritage House; B. A., M.A. Univ.Cal. Riverside; will be house museum liaison; time commitment: 30 days.

Gary Ecker, Exhibits Carpenter & Restoration Specialist; B. A., Cal. State Fullerton; will work as facilities liaison with architectural/facilities conservator; time commitment: 10 days.

Brenda Buller Focht, Curator of Collections and Project Director; B. H. E., Univ. British Columbia; M. S., Iowa State Univ.; M. A., Ph. D., Univ. Cal. Riverside; will direct conservation project, coordinate activities and be responsible for development of Museum long-range conservation plan; time commitment: 80 days.

Chris Moser, Curator of Anthropology; B.A., M. A., Ph. D., Univ. Cal. Los Angeles; will be anthropology collection liaison; time commitment: 30 days.

Vince Moses, Senior Curator of History; B. A., M. A., Baylor Univ.; Ph. D., Univ. Cal. Riverside; will be history collection liaison; time commitment: 30 days.

CONSERVATORS

Antoinette Dwan, B.A. University of California, Berkeley; M.S. Art Conservation, Paper Conservation Specialty, University of Delaware/Winterthur Museum; Professional location: Private practice; will provide detailed editing of the report; time commitment: 3 days.

Tamsen Fuller, A. B., Bryn Mawr College; Conservation of Archaeological Materials Diploma, The Institute of Archaeology, London; Professional Location: Private practice; will assess ethnographic collections and write a report based on her findings; will head the conservator review team's efforts to prioritize survey recommendations and assist in the development of the LRCP; time commitment 16 days.

Carolyn Tallent, B. A., Rice University; M. A. Art Conservation, University of Delaware/Winterthur Museum; Professional Location: Private practice; will conduct a survey of paintings and diorama murals, evaluate their environments and write a report based on her findings and make recommendations; time commitment: 8 days.

Frederick Walters, Professional Location: Private practice; will conduct a facilities survey of the three RMM sites to determine their ability to provide stable environments for collections, and write a report based on his findings and make recommendations; will participate with the conservator review team and assist in preparation of the report; time commitment: 25 days.

1. What is the design of the education component?

In 1988, the RMM received IMS funds [grant IC-80398-88] which brought three conservators on site to conduct limited surveys on the Museum's textiles and costumes, archival papers and furniture collections. In conjunction with this project an exhibition on object conservation and a conservation workshop were held. At the public workshop, specialist conservators presented information on object conservation. The public also brought in personal objects for individual assessments. The exhibition featured storage materials and methods to use in preserving family heritage objects. During the 1990s, programs such as the 1988 conservation workshop and exhibition were requested by members of the local community. In response (and in conjunction with the proposed conservation project), **the RMM is requesting IMLS support to hold a series of public conservation clinic/workshops and supporting exhibitions.**

Project Objectives:

1. Specialized contract conservators will conduct **five clinics/workshops on conservation** of archaeological and geological objects [Tamsen Fuller], paintings [Carolyn Tallent], objects made of paper [Gloria Freel], textiles, costumes and baskets [Irena Calinescu and Cara Varnell] and three-dimensional objects [Robert McGiffin].

2. RMM curatorial, design and construction staff will mount **five small, temporary exhibits to coordinate with the conservator clinic/workshop areas of specialization.** These exhibits will present Museum objects that show the result of damage from water, pests, light and chemicals.

The series of five public clinics/workshops and corresponding changing exhibits will be scheduled during Phase I of the proposed conservation project (over a period of eight months from September 2001 - April 2002). The public clinic/workshops will be one-day seminars open to a general audience, free of charge, featuring presentations on the care and stabilization of objects. The workshop presentations will be made by conservators who specialize in the appropriate subjects. Each conservator will work with the relevant RMM curator on program content development (see Program Development below). Each program's audience will be encouraged to bring in items from their own collections [e.g. family heirlooms] in order to have the conservators make recommendations for their storage, use and/or stabilization.

The first two workshops on objects of paper and three-dimensional objects in October and November will be conducted by conservators who participated in the 1988 conservation project. In February 2002, a textiles, costume and baskets conservation workshop will be held; since it is expected that a large number of objects will be brought by the audience, this workshop will have two conservators. The workshop on conservation of paintings will be held in March, to be followed by workshop on archaeological and geological objects in April. These will be presented by conservators who would be conducting surveys of Museum collections under the proposed conservation project.

The RMM curatorial staff will work closely with design and production staff on the preparation and installation of the five small exhibits (see Program Development below). These exhibits will be coordinated with a specific conservator's presentation. The exhibit will display objects from RMM collections which illustrate different conservation issues. The impact of physical damage through light, water and insect pests will be presented for a variety of materials. Some of the content of the workshops will be illustrated by the RMM exhibitions. Museum objects will be exhibited that are relevant to each workshop topic. For example, paper artifacts that have been damaged by excess light and poor framing materials and other paper artifacts damaged by insects and rodents will be on exhibit at the time of the workshop on conservation of paper objects. In addition, an on-line version of each exhibit's content will be created for the Museum's web site (www.ci.riverside.ca.us/museum). The on-line exhibit will also feature information on other objects in the RMM collections, along with conservator's findings and recommendations for creating a proper environment for RMM holdings.

The six conservators will each be on site one day for their respective workshops. [Conservators Fuller and Tallent, who will conduct assessment surveys, will also participate in the workshops the Saturday following their survey of the Museum collections.] The estimated distribution of staff time for this education component: Curator of Education [24 days], Senior Curator of History [6 days], Curator of Anthropology [6 days], Curator of Natural History [6 days], Curator of Collections [6 days] Exhibits Designer [24 days] and Exhibits Carpenter [5 days].

2. What are the anticipated benefits of this educational project?

It is the mission of the RMM to serve as a community "center for learning". Thus the museum is well-placed to provide the general public with a demonstration of conservation techniques. Collaboration between the RMM and the conservators on these programs will likely result in roughly 50,000 people being served during the project period, as participants in the workshops or as visitors to the exhibits or the Museum web site. During calendar year 1999, more than 80,000 people visited the downtown museum and Heritage House, or took part in RMM programs, much of that total coming from the Fall and Winter months (the time frame for the proposed project). The RMM also has a strong track record in successful adult programming, with over 100 people attending an afternoon symposium on mountain lions (1999) and over 130 attending a day of antique appraisals (May, 2000) carried out by volunteer experts from the Butterfields auction house. Riverside is a community with a strong sense of history and is home to several National Register historic properties as a well as the National Historic Landmark hotel in the heart of downtown, the Mission Inn. No doubt the workshops and exhibits on object conservation will benefit staff members from the numerous small museums and historic

societies in the region. The RMM's success in the professional development area includes a recent workshop on collections management software (jointly hosted by the RMM and two other downtown Riverside museums), with over 30 professionals in attendance from throughout California.

This project will directly benefit RMM audiences, as conservators will give public presentations on preserving personal objects - a topic that has been requested by Museum audiences. One component of the Museum's Mission and the proposed LRCP is educational outreach: the series of workshops and exhibits held in conjunction with the conservation project would further the Museum's educational outreach for its collections as well as provide direct application for individuals. The educational project proposed by the RMM provides an opportunity for the public to learn about conservation and its important role in Museum collections as well as how they can apply conservation methods to their own objects. This workshop series would be a precursor for more in-depth workshops by professionally trained conservators on object conservation, for the benefit of the public as well as RMM staff.

The precise content and interpretive outline for the proposed exhibits and workshops will be developed as part of a schedule of design and planning meetings, following the RMM's Public Programs Development policies and procedures. The project's Program Development Team will include representatives of all the Museum's public service areas (Collections, Exhibits, Education and volunteers). As part of the development process, it is the responsibility RMM Curator of Education to ensure that programs are both appropriate to the Museum's audience and that they are evaluated with regard to their educational outcomes.

3. How does the project budget support the education component goals and objectives?

The RMM is requesting from IMLS $4,579 for a six month period to support the cost of services from the conservators for their roles in the education component. The Museum will match this with $14,196 from salaries and fringe benefits of project staff. The RMM total project budget is estimated to be $18,775. This sum includes conservator's fees, expenses, RMM staff time and benefits, plus the cost of supplies to be used in demonstration of proper methods in storage/stabilization of paper, textile and three-dimensional objects.

8. What are the qualifications and responsibilities of the project personnel?

RIVERSIDE MUNICIPAL MUSEUM STAFF

James Bryant, Curator of Natural History; B. A., Austin College; M.A.T., Univ. Texas-Dallas; will be natural history collection liaison; time commitment: 6 days.

Dasia Bytnerowicz, Exhibits Designer; M.S. Polish Agricultural University; Polish Stagecraft School; exhibits to accompany programs of the education component; time commitment: 24 days.

Brenda Buller Focht, Curator of Collections and Project Director; B. H. E., Univ. British Columbia; M. S., Iowa State Univ.; M. A., Ph.. D., Univ. Cal. Riverside; will direct conservation project, coordinate activities and be responsible for development of Museum long-range conservation plan; time commitment: 6 days.

Gary Ecker, Exhibits Carpenter & Restoration Specialist; B. A., Cal. State Fullerton; will work with designer to create education exhibits; time commitment: 5 days.

Marjorie Mitchell, Curator of Education; B. A. , Cal. State San Bernardino; will direct the educational component of project; time commitment: 24 days.

Chris Moser, Curator of Anthropology; B.A., M. A., Ph.. D., Univ. Cal. Los Angeles; will be anthropology collection liaison; time commitment: 6 days.

Vince Moses, Senior Curator of History; B. A., M. A., Baylor Univ.; Ph.. D., Univ. Cal. Riverside; will be history collection liaison; time commitment: 6 days.

CONSERVATORS

Irena Calinescu, B. A. Indiana University, M. A. SUNY-Buffalo; Professional location: Private practice; will conduct workshop on textiles & baskets; time commitment: 1 day.

Tamsen Fuller, A. B., Bryn Mawr College; Conservation of Archaeological Materials Diploma, The Institute of Archaeology, London; Professional Location: Private practice; will conduct workshop on archeological/geological objects; time commitment: 1 day.

Gloria Freel, B. A., University of Connecticut; M. A., Univ. Cal. Riverside; New England Document Conservation Center; Professional Location: Corona Public Library, Heritage Room Senior Librarian; will conduct workshop on paper objects; time commitment: 1 day.

Robert McGiffin, B. A. Syracuse University; M. A. Cooperstown Graduate Program, Art Conservation Center; Professional location: Private practice; will conduct workshop on on 3-dimensional objects; time commitment: 1 day.

Carolyn Tallent, B. A., Rice University; M. A. Art Conservation, University of Delaware/Winterthur Museum; Professional Location: Private practice; will conduct workshop on paintings; time commitment: 1 day.

Cara Varnell, B. A., University of South Florida; Certificate in Textile Conservation, Hampton Court Palace, Surrey, U. K.; M. A., New York University; Professional location: Private practice; will conduct workshop on textiles & baskets; time commitment: 1 day.

SCHEDULE OF COMPLETION

Activity	2001	2002				2003		
	Sep - Dec.	Jan-Mar	Apr-Jun	July-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
1. Employ the Getty Conservation Institute model as the basis for a self-assessment of RMM facilities and the environment in which collections are maintained. Produce a complete facilities self-assessment report.								
2. Two contract conservators will survey and assess the preventative conservation requirements of the RMM's collections of ethnographic objects, paintings and painted dirarama murals, resulting in two written reports containing recommendations based on those findings.								
2a. Paintings conservator								
2b.Ethnographic Conservator								
3. Contract conservator will survey and assess all three RMM facilities where collections are housed. A written report will be produced, including recommendations based on these findings.								
4. Team of 3 contract conservators will review and prioritize recommendations from 1998-99 and proposed 2001-03 projects, and issue summary report.								
5. RMM staff develop and implement LRCP for RMM facilities and collections.								
Education Component								
1. Five clinic/workshops on conservation								
2. Five small, temporary exhibits to coordinate with the conservator clinic/workshop areas of specialization								

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Riverside Municipal Museum

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		$40,072	$ 40,072
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*			
FRINGE BENEFITS		13,223	13,223
CONSULTANT FEES	32,125		32,125
TRAVEL: DOMESTIC FOREIGN	~~10,638~~ 6,405		10,638
SUPPLIES & MATERIALS	475		475
SERVICES			
OTHER			
TOTAL DIRECT COSTS	$ ~~43,238~~ 39,005	$ 53,295	$ 96,533
INDIRECT COSTS*	$	$ 10,659	$ 10,659

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS		$ ~~107,192~~ 102,959
AMOUNT OF CASH—MATCH	$	
AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH	$ 63,954	
TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS)		$ 63,954
AMOUNT REQUESTED FROM IMLS		$ ~~43,238~~ 39,005
PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%)		40.5 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☑ No

If yes, name of agency _____ Date _____

Amount requested $ _____

THE NOYES MUSEUM OF ART
Lily Lake Road
Oceanville, NJ 08231-0489

2001 IMLS: Conservation Project Support
Environmental Improvement Project

1. WHAT IS THE DESIGN OF THE PROJECT?

The Noyes Museum of Art (NMA) respectfully requests 50% of the total cost towards a 14-month Environmental Improvement project. The proposal calls for the purchase of monitoring equipment and supplies which are necessary to access the light, humidity and temperature conditions in our storage vaults and galleries and facilitate their maintenance within acceptable limits, and for the Curator to hire an independent Conservator to assist the Museum in elevating its conservation standards. This project is critical to our goal of providing the most responsible care possible for our permanent collection and those works entrusted to us for short-term exhibition purposes.

The project addresses important concerns raised by conservator Marilyn Kemp Widener in her 1997 CAP report. In her Executive summary, Ms. Widener stated, "The Noyes Museum of Art is housed in a modern building wherein the needs of the collection may be compromised by the contemporary love of light and openness in its design." Regarding temperature and light she noted, "While the temperature and relative humidity readings during the CAP survey were within museum standards, it is not known whether there are fluctuations within the Museum due to seasonal or weather changes." She added, "The light in the galleries due to natural light may be excessive and detrimental to especially light sensitive objects."

Following the conservator's recommendations, the NMA proposes initiating an environmental monitoring program using four hygrothermographs and a UV light monitor capable of measuring both overall light and the UV levels within that light. Temperature, relative humidity and light levels will be recorded in four different locations - the NMA's two storage vaults and two of the four gallery wings - in order to evaluate the building's environmental characteristics. By comparing our recordings with published daily weather information, we will be able to determine the daily and seasonal performance of our HVAC system. UV and visible light levels will be recorded weekly (morning, noon and late afternoon) in multiple locations in order to diagnose the effectiveness of our high window and skylight filters and the appropriateness of the current lighting products being used. The goal of the program is to gather information to develop a plan which would mitigate unsuitable conditions.

The schedule for the project requires a month for ordering, obtaining and setting up equipment, 12 subsequent months for data collection and evaluation, and a final month to translate the analysis into a final written report.

Additionally, the Curator will hire an independent Conservator to assist the Museum in elevating its Conservation standards and make any specific recommendations with regard to the condition and maintenance of the permanent collection.

Overall, it is estimated that the project will take approximately one month of the Curator's time. This includes: private consultation with the outside Conservator, the monthly calibration and changing of the hygrothermograph charts, the measurement of light readings, and the summarization of findings. It will also take approximately two weeks of the conservation consultant's time.

The project will not disrupt ongoing museum activities since it requires exclusively the monitoring of overall environments. Also, objects will be observed within the normal spaces in which they are regularly exhibited or stored.

2. WHAT IS THE OBJECT(S), HISTORIC STRUCTURE(S), OR SPECIMEN(S) THAT IS THE FOCUS OF THIS PROJECT?

The Noyes Museum of Art was the vision of Ethel Marie Noyes (1911-1979) and Fred W. Noyes, jr. (1905-1987), the developers of the Towne of Historic Smithville and the Ram's Head Inn. The couple spent most of their adult lives in Galloway Township and sought to create a broad-based museum in the area. In 1973, the Noyeses formed the Mr. and Mrs. Fred Winslow Noyes Foundation strictly for this purpose. As one of New Jersey's six major museums, the NMA serves as a cultural and educational resource for the state of New Jersey and the Greater Delaware Valley region by presenting exhibitions, tours, lectures, workshops, discussions and outreach programs that promote awareness of and appreciation for the visual arts serving southern New Jersey's diverse residents, students and visitors. Located just outside Atlantic City, the Noyes Museum remains the area's only private, non-profit, educational art museum.

Building upon the core of the Fred and Ethel Noyes Collection, the NMA collects, preserves and exhibits American fine art, craft and folk art with an emphasis on New Jersey artists and folk art forms, reflecting the area's traditions, landscape and culture.

The Noyes Museum is a collecting institution and seeks to augment its permanent collection with important acquisitions purchased according to available resources. Currently, the NMA is custodian of approximately 365 19th- and 20th-century bird decoys and 36 fish decoys, and approximately 1000 20th-century works of fine art. Fine arts pieces include: 15 ceramic and glass works, 25 furniture and wood sculptures, 9 metalwork and metal sculptures, 200 acrylic/oil paintings, 16 photographic materials, 2 stone artifacts, 2 textiles, and 725 watercolors/drawings/prints (which includes 540 duck stamp prints.) The Museum also maintains a small multi-media study collection for academic use.

Recently, the Museum obtained 200+ paintings, drawings and prints by its founder, Fred Noyes, and is currently in the process of inventorying, cataloguing, and housing the works, with assistance from local museum studies college interns. This project encompasses all of the NMA's holdings as well as the 100+ pieces on site at any given time for exhibition purposes.

The NMA is housed in a 1983 modern building incorporating essential features of regional frame structures from the 18th and 19th centuries. Its form, scale, materials and detailing represent a blending of contemporary and early rural architecture. The building contains four gallery wings and a central circulation gallery. There are 9,000 square feet of gallery and circulation space, 1,500 square feet of administrative/support area space, 1,000 square feet of fire-proof storage vault space in addition to space for basement storage, maintenance and utilities. The stepped central gallery serves as the entrance and provides circulation to the four gallery wings and administrative areas.

Energy concerns and the desire for natural lighting were important influences on building design. The building is heated, cooled and ventilated with six individually zoned electrical heat pump systems. the two storage vaults have their own independent units with full humidity control. The two storage vaults are secure and fireproof with cinderblock walls. The two storerooms have fluorescent lights which are turned off when the room is not in use. There are no windows in the storage spaces. Six HVAC units (Barbar Colman) heat and cool the exhibition and office areas and are located outside the museum; the HVAC (Leibert mini-mate units) for the two storage rooms are ceiling mounted in the interior.

The Museum's galleries are lit by natural and track lighting (with dimmers). During daylight hours, natural light enters Galleries I, II, III and IV through high windows on the south wall and skylights on the slanted roof to the north. Skylights are made of double, mirror heat reflecting safety glass. High, south-facing, clear double-glass windows allow winter sunlight to heat high pocketed air which is then forced down by slow turning fans. Three of the four wall in each gallery are exterior walls.

This project's successful completion will have long-term benefits for the entire collection and objects on loan by providing the foundation for creating more stable housing and exhibition environments. The environmental information gathered during the 12 month time span will be used in planning for exhibition and artifact housing, as well as by the new Executive Director and Board for decision-making about improving HVAC systems, purchasing environment stabilizing products and/or planning for the long run. Eventually, with better control of the environmental conditions and enhanced care of its artworks, the NMA will be able to offer future generations high-quality exhibitions and programming and access to our permanent collection.

3. HOW DOES THE PROJECT RELATE TO YOUR MUSEUM'S ONGOING CONSERVATION ACTIVITIES?

Since the Museum's inception, staff members have performed routine registrarial recordkeeping duties such as completion of accession and catalogue records (card, ledger, and computer), Deed of Gift forms, receipts, loan agreements, and insurance certificates and claims, and have seen that permanent and/or loan works were safely stored in one of the two locked, fire-proof storage vaults when not on public exhibit. However, primarily because of staffing and budgetary constraints, the time and money required to properly manage and care for the collection have only recently been dedicated to these concerns.

The Museum took part in the CAP program in 1997 to assess institutional environmental conditions and consequently , the staff began developing a greater understanding of standard collections care practices and issues related to its growing collection, expanded exhibition schedule and diminishing storage space. The resulting report pointed out several areas of concern regarding storage and exhibition space environmental conditions. To begin addressing these issues, we are proposing initiation of a year-long monitoring program to understand how the building works and what improvements are needed, and to train staff to make decisions and manage the various building conditions.

Since the CAP survey, in addition to strategizing, the NMA slowly began making improvements to storage areas that are presently funded within our operating budget. Based on Ms. Weidner's recommendations, the NMA began removing extraneous materials from the vaults, had additional painting bins constructed, purchased rigid separating boards for paintings, and started developing a location numbering system. Plans are presently being made to purchase an updated computer and standard collections management software to improve the recordkeeping surrounding the Museum's valuable objects.

In an attempt to improve policies and procedures, along with environmental conditions, the Museum also took part in MAP II.

The Noyes Museum of Art, as all collecting institutions, has a responsibility to care for and make its collections accessible to the public it serves. Participation in the CAP program and MAP II indicate the Museum's intention to improve methods of safeguarding works held in its trust for the future.

4. WHAT ARE THE ANTICIPATED BENEFITS OF THIS PROJECT?

Almost all works of art are inherently unstable because they contain impermanent materials which undergo physical and chemical reactions over time. Although changes are to be expected and are irreversible, deterioration is accelerated by poor environmental conditions and, therefore, can be slowed by environmental conservation. Knowledge about the manner in which various environmental conditions can effect specific materials is critical, since it has been established that works are most vulnerable to unsuitable levels of light, relative humidity, and air pollution.

Building -wide records of temperature, humidity, and lighting will provide the information necessary for determining how our conditions compare to recommended specifications. The Museum will follow up by devising a comprehensive "plan of attack" for rehousing in storage rooms, purchasing blinds and/or UV screening in galleries, and improving the HVAC, security, and general exhibit conditions.

As a result of the improved conditions, the Museum would be more likely to attract prominent traveling exhibitions requiring the guarantee of adequate precautionary measures to ensure the preservation of the works of art being exhibited. This project would also foster the further growth of the NMA's permanent collection by highlighting areas to be improved before more works are acquired and the Museum's exhibit space is converted to include two rather than one gallery installed with the permanent collection.

5. HOW WILL THE APPLICANT ENSURE THAT ONGOING MUSEUM FUNCTIONS ARE NOT INHIBITED BY THESE PROJECT ACTIVITIES?

Part of the Curator of Collections and Exhibitions job is to safeguard the collections and assure their safekeeping in suitable storage conditions. the time required for the project id entirely appropriate and will not prevent her from attending to her other duties. The Curator will also train college interns and volunteers to assist with the monitoring, as needed. The matching funds for the project will be included in the curatorial conservation budget as part of the operating budget. Throughout the duration of the project, the galleries will remain open to the public, and thereby the readings will reflect actual environmental conditions as they exist in The Noyes Museum of Art.

6a. WHAT ARE THE PROPOSED CONSERVATION METHODS AND WHY ARE THEY CONSERVATIONALLY SOUND?

The equipment requested for the proposed environmental monitoring project was recommended by trained conservator Marilyn Kemp Weidner. Ms. Weidner has more than 40 years experience in the field, with specialization in the treatment of art and artifacts on paper, which include proprietorship of a still-operating fine art conservation laboratory.

The four Hygrothermographs requested record humidity levels and temperature simultaneously with human hair humidity sensor and bimetallic temperature sensor. The 7-day/24 hour charts will be bound in covers and analyzed weekly. Once enough data is collected (3-month periods), it will be analyzed in a statistical comparative chart to determine a foot print for the building. (The Museum owns a sling psychrometer, which will be used to calibrate the hygrothermographs.)

The UV Light Monitor desired is an advanced instrument providing measurements of the proportion of the UV light present, the total amount of UV, and the amount of visible light present. Weekly readings in each gallery will be taken at 9 a.m., noon and 3 p.m. to determine sun exposure as it moves daily over the building and as it shifts position seasonally. The statistics will be tracked on photocopied floor carts and analyzed quarterly in a summary report.

7. HOW DOES THE PROJECT BUDGET SUPPORT THE PROJECT GOALS AND OBJECTIVES?

Expenses provided for the purchase of monitoring equipment were obtained by comparison pricing current costs using resources provided by 1977 assessor Marilyn Kemp Widener. IMLS funds would support these purchases while the NMA would underwrite staff salaries and fringe benefits, training and the balance of purchase costs. Since monitoring will be routine and kept up beyond the first critical year, equipment purchased will support the Museum's long-term conservation efforts. Data collection will be performed by staff and/or trained volunteers, rather than a consultant to keep expenses at a minimum.

8. WHAT ARE THE QUALIFICATIONS OF THE PROJECT PERSONNEL?

Tsaio-Ning Tu, The Noyes Museum of Art's Curator of Collections and Exhibitions, will oversee this project. She holds a dual MA in Art History and Museum Studies from the City College of New York/CUNY and a BA in History from Fu-Jen Catholic University, Taipei, Taiwan. She has served as Production Manager in the Editorial department of the Metropolitan Museum of Art as well as Rizzoli International Publications. In addition, Ms. Tu has served as Guest Curator for *Affliction and Aspiration: searching for Spiritual Fulfillment in Contemporary Chinese Art,* Taipei Gallery, NYC and the *Windows of Art* project at the Rockefellar Center. She joined the NMA staff in May, 2000 and does possesses knowledge of conservation methods and equipment.

Fred Koszewnik is a consummate professional with extensive experience and knowledge of conservation methods and equipment. For the last 19 years he has managed a private conservation studio in Marlton, New Jersey and has worked for such notable clients as The Barnes Foundation of Merion Station, PA. He is presently responsible for collection conservation at institutions throughout the Greater Delaware Valley Region such as at the New Jersey State Museum in Trenton, New Jersey.

SCHEDULE OF COMPLETION
The Noyes Museum of Art
Environmental Improvement Project

Order Hygrothermographs
and Light Meter

May 2001

Storage and Exhibition Areas Monitoring;
Regular Review of and Summarization of Data;
Consultation with Independent Conservator and
Assessment of Current Conditions;
Obtain Recommendations for Further
Environmental and Storage Improvements in
Support of Long-Term Accredidation Efforts

June 2001 through May 2002

Analyze Data;
Prepare Final Report

June 2002

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant The Noyes Museum of Art

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES (PERMANENT STAFF)		2384.61	2,384.61
SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)		640.00	640.00
FRINGE BENEFITS		500.77	500.77
CONSULTANT FEES	2800.00	2800.00	5,600.00
TRAVEL: DOMESTIC			
FOREIGN			
SUPPLIES & MATERIALS	4768.41	1253.39	6,021.80
SERVICES			
OTHER	10.37		10.37
TOTAL DIRECT COSTS	$ 7578.78	$ 7578.78	$ 15,157.55
INDIRECT COSTS*	$ 0	$ 0	$ 0

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ 15,157.55

AMOUNT OF CASH—MATCH $ 7,578.78

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $ 0

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 7,578.78

AMOUNT REQUESTED FROM IMLS $ 7,578.78

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%) 50 %.

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Canterbury Shaker Village
New Hampshire
Treatment

1. What is the design of the project?

Canterbury Shaker Village (CSV) requests funding for conservation treatment of an important component of its 1793 Dwelling House (with additions in 1814 and 1837), one of the most significant of its twenty-five surviving original Shaker buildings. The original section, as well as each addition, utilized a pallet of paint colors for the woodwork and trim (doors, windows, built-in furniture, baseboards, chair rails, peg rails, and other trim) that was characteristic of that particular time and includes reds, ochres, and yellows. However, beginning in the 1860's, the Shakers re-painted most of the woodwork and trim using opaque white paint. In subsequent years, additional white re-paintings occurred. Original paint that was not re-painted has been stabilized by conservator Marc A. Williams (MAW), President of American Conservation Consortium, as part of an IMLS CP-2000 project. This grant application seeks funding to preserve and stabilize the extensive areas of re-painted woodwork and trim (photographs 1-8).

The paint has suffered from deterioration due to several factors, including: water infiltration prior to the building's treatment; breakdown in the various paint layers leading to cracking, cupping, cleavage and loss; and abrasion and impact. Deterioration of the white paint often has resulted in loss of the underlying original paint, as all layers are pulled from the wood in a unit. A common conservation solution would be to remove the later paint layers in order eliminate the deterioration threat and reveal the original painted surfaces. However, in this situation, there are several additional considerations. First, the later white paint was applied by the Shakers, and while not original, is historically significant. Second, removal of the white paint may not be technically possible as both the original and white paints are bound in linseed oil. And third, if technically feasible, it is likely that removal of the paint would be extremely time-consuming and expensive considering the large surface areas involved. To address these issues, conservator Williams has developed the following treatment approach that preserves all paint layers.

The woodwork and trim will be photographed before and after treatment. Areas of insecure paint will be set down with animal protein adhesive (gelatin or equivalent) utilizing a heated spatula as needed. The woodwork will be cleaned with a mild detergent solution. Approximately three small windows will be opened into the original paint layer (about 1" square) for each different paint color. Utilizing the window that appears to have the best representation of the original color, a spectrophotometer reading will be taken from an area about 4 mm in diameter. This size area will average the appearance more effectively than a reading taken from a cross-section or under magnification, which may not be representative of the larger area. A small sample of the paint will be sent to Williamstown Art Conservation Center for pigment identification (much less expensive than Susan Buck), including approximate ratios of pigments if more than one is present, which is highly likely [average 4 samples per room, totaling 56 samples].

Previous Shaker paint analysis by Susan Buck, including from Canterbury, indicate that the paints are likely to be formulated with three or four pigments (attachment 1). Utilizing the pigment identification results for each paint, conservator Williams will formulate a reversible paint in a binder of Acryloid B-67 in mineral spirits (approximately 15% - chosen for ease of reversibility, low toxicity, and performance characteristics), with the possible addition of other resins if they are found to be necessary to enhance performance. Several samples of each paint will be prepared with various concentrations of pigments and number of coats of paint. These will be evaluated by eye and with the spectrophotometer. Adjustments to concentration and ratios will be made and new samples prepared and evaluated. This process will be repeated as many times as necessary for each paint color until a suitable match has been formulated. Paint will be made in sufficient quantity to address each area. Areas surrounding the woodwork and trim will be protected with painters' tape and plastic. A barrier coat of Acryloid B-72 will be painted on the woodwork, which will also serve to

stabilize deteriorated paint by seeping into the network of cracks and consolidating them. When dry, two coats of the reversible paint will be applied.

Two days of paint consultant Susan Buck's time has been included in this project to allow for unexpected problems that may arise, particularly in the areas of color analysis and paint color formulation. Most likely, this will be phone consultation, but may include a brief visit or two to the Village if needed.

B-67 paint has been used with great effectiveness by conservator Williams as a prototype in a small area in the Sisters' Shop at CSV. It applies wonderfully, levels extremely well due to the mineral spirits solvent, covers much better than commercial paints (which are not easily reversible), and requires a much smaller amount of paint than is required with commercial products. The dried appearance has a wonderful level of gloss which is much more historically accurate than that of commercial paints. In addition, B-67 produces a harder paint surface than linseed oil paint, the most common Shaker binder (quoted from the manufacturer's literature "addition of Acryloid B-67 to alkyds, oils or varnishes produces coatings of improved hardness"). (It is understood that the optical properties of B-67 paint are slightly different than those of linseed oil paint. However, these minor differences are well worth the benefits of reversibility, stability and excellent properties of B-67 paint.) To create the most effective paint for each area, the concentration of B-67 can be varied, the amount of pigment per volume of B-67 can be adjusted, and if needed, flattening agents can be added. This painting system offers remarkable versatility and flexibility. Based upon significantly better coverage, the anticipated cost of the reversible paint is comparable to commercial paint.

An important component of this project is training the CSV paint crew in order to enhance treatment of the Dwelling House and other buildings at CSV. In the past, the best methodology for dealing with over-painted surfaces had been to send a sample of the original paint to Susan Buck for color identification, matched as well as possible to a commercial paint chip. The CSV paint crew would purchase the specified brand and color of paint and apply it. Clearly, this process was not reversible. Also, in most instances, the color did not appear by eye to be acceptably close to the original. This is an unavoidable limitation of working with commercial products and standard paint chip colors. By purchasing an inexpensive but serviceable colorimeter (utilizing a lap-top computer for processing power and without the optical expense of a microscope, which can exceed $15,000) for the project that will remain at CSV, the paint crew's ability to approach similar projects in other buildings at CSV will be enhanced significantly. They will work with conservator Williams on all aspects of the project in order to obtain the knowledge and experience to apply these techniques in the future.

Conservator Williams has been involved with conservation activities at CSV for the past six years. Initially, he wrote the wooden objects section and the Summary Report for the Village-wide Collections Assessment. Since then, he has been guiding conservation efforts in a wide variety of areas, including environmental monitoring, storage improvements, light control, and treatment of both collections and architectural features.

The project goals are: to stabilize and preserve painted woodwork and trim of the Dwelling House; to refine existing treatment procedures; to train the CSV paint crew, who has responsibility for all of these treatment areas, in improved materials and techniques; and to allow better future treatment in other buildings at the Village. Treatment will progress a few rooms at a time, dovetailed into the schedule for overall treatment of the building. The time estimates that follow are an **average** for each of the 14 rooms requiring treatment (see separate Room Descriptions list for details).

A) Document the existing condition of the painted woodwork with photographs and written reports. [Collections Manager, ½ day]

B) Set down cleavage. [MAW, ½ day; paint crew, ½ day]

C) Clean the woodwork. [MAW, ½ day; paint crew, ½ day]

D) Open test windows, analyze color, take samples. [MAW, ½ day; paint crew, ½ day]

E) Formulate reversible paint, analyze and adjust as required. [MAW, 2 days, paint crew, 2 days]

F) Protect adjoining areas with tape/plastic. [paint crew, 1 day]

G)Apply barrier coating/consolidant of B-72. [paint crew, 1 day]

H) Apply reversible paint. [paint crew, 3 days]

I) Remove protection, clean up. [paint crew, ½ day]

J) Document the painted woodwork after treatment with photographs and written records of materials and processes used. [collections manager, 1 day]

[Total time per room: MAW, 3 ½ days; paint crew, 9 days; Collections Manager, 1 ½ days]

[Total time for project, 14 rooms: MAW, 49 days; paint crew, 126 days; collections manager, 21 days]. In addition, the Chief Curator will order all supplies and equipment, will evaluate color formulations and approve final colors, and will manage all financial, scheduling, work flow and other aspects of the project.

The project will run from May , 2001 through September 30, 2002.

2. What is the object(s), historic structure(s), or specimen(s) that is the focus of this project?

Canterbury Shaker Village is an historic site museum in central New Hampshire. One of 19 communities organized by the United Society of Believers in Christ's First and Second Appearing, Canterbury was called to order in 1792. The last Canterbury Shaker died in 1992 In the early 1970s the Canterbury Shakers helped to organize a non-profit educational corporation to which their 694 acres of land, 25 historic buildings and thousands of original artifacts, documents and photographs were deeded. Today, Canterbury Shaker Village is a non-sectarian, public service museum offering a full range of programs annually to 65,000 visitors from all 50 states and 53 countries.

CSV is listed on the National Register of Historic Places and in 1993 was designated a National Historic Landmark, on the basis of its architectural integrity and significance. The 25 original buildings retain a high degree of authenticity and reflect the evolution of Shaker life over two centuries, a feature among Shaker sites that only the Sabbathday Lake, Maine Shaker community can approximate. Of all the Shaker Villages, Canterbury has the largest collection of intact, original Shaker materials.

The 1793 Canterbury Dwelling House is one of only two remaining 18th century Shaker dwelling houses, and is the only one in museum ownership and available for public viewing. As the home of the last Canterbury Shaker, Sister Ethel Hudson, it functioned as the primary residential building for nearly 200 years (1793-1992). Due to its recent occupancy and state of deterioration, the 4-floor, 56-space structure (including rooms, closets, storage rooms and hallways) has never been open to the public. The opening of the Dwelling House, which will

occur in stages, is CSV's millennium project. The great significance of the Dwelling House for the nation and the public lies in its integrity. The Dwelling House retains original Shaker painted finishes dating from its construction in 1793, its first major enlargement in 1814, and second major enlargement and remodeling in 1837.

3. How does the project relate to your museum's ongoing conservation activities?

In 1994, CSV undertook a comprehensive Collections Preservation Assessment. Wooden objects, including interior architectural features, were examined by Marc Williams, objects were examined by Meg Craft, and paintings were examined by Barbara Beardsley. The Summary Recommendations report was prepared by Marc Williams, and it included a list of Prioritized Collections Care Actions [copy included with this application]. Items 1) reduce light levels, 2) low-tech environmental improvements, and 3) cover objects from bat droppings have already been completed. Item 4) is to "Continue with the program to renovate buildings to provide tighter envelopes for collections preservation, as well as better preservation of the buildings themselves." This application intends to further this priority by stabilizing and preserving important architectural components of the Dwelling House, CSV's highest architectural priority.

Additional Collections Care Actions have been addressed as well. These include 5) continue work on the perimeter drainage system, 6) continue environmental monitoring and make improvements when indicated, 7) extend housekeeping into storage areas, 8) improve collections protection in work areas, and 9) reorganize collections storage, a huge project involving most of the Village's 25 buildings. All of these activities have been guided by Marc Williams.

Priorities for building preservation are developed by CSV staff based upon building condition. Implementation schedules for building treatments are dependent upon fund-raising timetables, since these projects tend to be very large. Generally, for this reason, one building at a time is treated in order to maximize efficiency, and to minimize the required handling, packing and storage of the Shaker collections that are contained in most of the buildings. The Dwelling House is currently the highest architectural priority.

In the past, the priorities for collections and the priorities for buildings have been separate. Recently, in order to reflect their interdependent needs, and to further emphasize the importance of the buildings as collection objects themselves, an integrated list of priorities was prepared by Conservator Marc Williams and CSV Chief Curator and Curator of Buildings Sheryl Hack. Entitled "Prioritized Preservation Actions for Collections and Buildings," a copy is included with this application. The number one priority is to complete the treatment, stabilization and preservation the Dwelling House.

Work on the Dwelling House began in 1994 with the preparation of an Historic Structures Report (HSR) by Ann Beha Associates of Boston, funded by the Getty Grant Program. Following the completion of the HSR, significant major and minor structural repairs were made, including repair and replacement of rotted sills, posts, beams, and floor supports. A perimeter drainage system was installed, gutters and downspout were replaced, windows were re-glazed, chimneys were repointed and flashed, the building exterior was repainted and a new roof was installed, creating a watertight shell. The original plaster is being stabilized and preserved in an ongoing project. In addition, 100% UV and 90% visible light filtering shades, as well as black out shades, were purchased to reduce light damage to original architectural finishes and collections. The conservation of the building's visible original painted finishes (not over-painted with white paint) and treatment of the linoleum floors have been undertaken utilizing IMLS CP-2000 funding.

The project for which funding currently is sought will significantly improve the quality of

treatment that original over-painted woodwork in the Dwelling House will receive. Current procedures are based on traditional restoration and craft practices. As such, often original materials are not sufficiently respected, non-reversible materials and procedures are employed, and overly-harsh treatments result, since the common conservation practice of testing and evaluation of a wide range of options is not employed. The opportunity for a conservator to work beside these craftspeople will significantly upgrade CSV's ability to better care for its buildings.

4. What are the anticipated benefits of the project?

The primary benefit is that important original interior components of the 1793 Dwelling House will be preserved and stabilized. Without funding for this project, CSV will not be able to afford the services of a conservator, and conservation-level treatments will not be possible. A secondary benefit is to upgrade the training and skills of the CSV paint crew to allow better future treatment of other buildings at CSV.

5. How will the applicant assure that ongoing museum functions are not inhibited by these projects?

The portions of the Dwelling House that are part of this project currently are not open to the public, due to their previous level of deterioration and the ongoing architectural treatment. Staff time is currently allocated for treatment of the building during the period of the grant. Thus, neither the visitor experience nor staff time commitments will be inhibited by this project.

6a. What are the proposed conservation methods and why are they conservationally sound?

The conservation methods follow standard conservation practice. They respect the integrity of the original architectural components, utilize tested, stable, reversible materials, and will be appropriately documented. Conservator Marc Williams has employed all of them in successful previous treatments. The conservation methods represent a significant upgrade of the traditional techniques currently utilized by CSV staff.

7. How does the project budget support the project goals and objectives?

Time estimates for treatment were jointly developed by Conservator Marc Williams and CSV staff. Marc Williams has twenty years of experience in estimating conservation projects. He has previously completed treatments of similar materials and surfaces at the Village, and understands the complexities and time needs of these undertakings. Architectural projects of this scope are common at the Village, as a number of other buildings already have been treated. Thus, time estimates for CSV staff are very accurate.

Chief Curator and Curator of Buildings Sheryl Hack will oversee and administer the project. She will represent CSV in making decisions concerning conservation procedures and appropriate levels and types of treatment for specific areas and in evaluating the success of each project component. As the supervisor of the paint crew and of the collections manager, she will ensure that project procedures are carried out as specified by Marc Williams.

The bulk of the budget of this project is consultant and staff time, with modest materials and other costs. Mr. Williams lives locally; hence, there are no travel expenses for him.

8. What are the qualifications of the project personnel?

Marc A. Williams: President, American Conservation Consortium, Ltd.; Fellow, AIC; former Chief Wooden Object Conservator, Smithsonian Institution; MS, Winterthur/Delaware Art Conservation Program.

Susan Buck: Principal, Historic Paint & Architectural Surfaces; PhD candidate, Art Conservation Research, University of Deleware; MS, Winterthur Art Conservation Program.

Chief Curator & Curator of Buildings, Sheryl N. Hack: Former Architectural Historian, Woodward-Clyde Consultants; former Architectural Historian and Preservation Planner, MAAR Assoc., Inc.; MA, Winterthur Program in Early American Culture.

CSV Paint Crew: Combined experience of 47 years working on preparation, repair and re-application of interior paint, plaster, finishes, and floors, as well as exterior paint.

Collections Manager & Conservation Technician, Melanie Clifton-Harvey: Former Conservator, Lincoln Cathedral, Lincoln, UK; former Exhibition Assistant, Pickford's House Museum, Derbyshire, UK; former Conservator, Southwestern Region Conservation Laboratory, Salisbury, UK; former Gilded and Painted Finishes Conservator, Leadenhall Market, London, UK; BTEC ND Conservation and Restoration of Art Studies, Lincolnshire College of Art and Design, Lincolnshire, UK.

Attachment 1

Object	Pigments[a]	Binder components
Red paints		
1. Red counter, 1820, ML	red ochre,[b] calcium carbonate fillers[h]	oil[c,f]
2. Red wall cupboard, 1790–1800, ML	red ochre, lampblack, charcoal black	oil,[c] protein[d]
3. Red cupboard, 1840, ML	red ochre, yellow ochre, raw sienna, chrome yellow	oil[c,f]
4. Orren Haskins counter, 1847, ML	red lead, red ochre, burnt sienna, yellow ochre, raw sienna	oil[c,f]
5. Red hanging cupboard, 1830–70, ML	red lead,[b] iron earth pigments[h]	oil[c,h]
6. Benjamin Lyon counter, 1860, ML	red ochre, burnt sienna	oil[c,f]
7. Benjamin Youngs Sr. tall case clock, 1806, WV	none	organic stain in oil[c,h]
Yellow paints		
8. Yellow cupboard, 1840–60, ML	zinc yellow, iron earth pigments	protein[d,g]
9. Interior of red wall cupboard, 1790–1800, ML	chrome yellow, red ochre, burnt sienna	oil[c,f]
10. Interior of Deaconesses cupboard, 1840, ML	chrome yellow, red ochre, iron earth pigments, charcoal black	oil[c,f]
11. Interior of red hanging cupboard, 1830–70, ML	chrome yellow,[b] lead white[b]	oil[c,f]
12. Dwelling Room built-in cupboards and drawers, 1840, EN	chrome yellow,[b] lead white,[b] iron earth pigments[b]	oil[c,h]
13. Dwelling Room built-in cupboard and drawers, 1837, CA	chrome yellow,[b] lead white,[b] (massicot?)	oil[c,f]
Blue paints		
14. Blue counter, after 1815, CA	Prussian blue,[j] calcium carbonate fillers[h]	oil,[c,h] carbohydrates[e]
15. Meeting House woodwork, 1792, CA	Prussian blue, calcium carbonate fillers	oil[c,f]
16. Blue-green chest with drawer, 1821, HA	Prussian blue,[j] chrome yellow,[h] calcium carbonate fillers[h]	oil[c,h]
17. Blue oval box, n.d.	lithopone,[b] lead white[b]	oil[c,f]
Green paints		
18. Green bed, ca. 1830, ML	chrome green, calcium carbonate filler, carbon black	protein,[d] oil,[c,h] carbohydrates[e]
19. Green bed, n.d., ML	chrome green, calcium carbonate fillers	oil,[c,h] carbohydrates[e]
20. Green oval box, n.d., ML	green earth, lead white, iron earth pigment	oil[c,k]
21. Green headboard, n.d., ML	green earth, yellow ochre, charcoal black	oil[c,k]
Orange and salmon-colored paints		
22. Deaconesses cupboard, 1840, ML	red lead,[i] barium yellow,[i] iron earth pigments,[i] chrome yellow[i]	oil[c]
23. Amos Stewart counter, 1860, ML	chrome yellow,[i] red lead,[i] red ochre,[i] burnt sienna, charcoal black[i]	oil[c]
24. Tailoring closet, 1840, ML	red lead,[i] iron earth pigments,[i] chrome yellow,[i] charcoal black[i]	oil[c]

Key

ML = Mount Lebanon

WV = Watervliet, New York

EN = Enfield, New Hampshire

CA = Canterbury, New Hampshire

HA = Hancock, Massachusetts

Notes

[a]Identified by polarizing light microscopy only, unless otherwise noted.

[b]Confirmed by identifying characteristic elements by X-ray fluorescence, using a Model A Kevex X-ray fluorescence unit.

[c]Identified by staining cross section with Rhodamine B.

[d]Identified by staining cross section with fluorescein isothiocyanate (FITC).

[e]Identified by staining cross section with triphenyltetrazolium chloride (TTC).

[f]Identified by staining cross section with 2, 7 dichlorofluoroscein (DCF).

[g]Identified by presence of amide I and amide II bands in infrared spectrum.

[h]Identified by presence of drying-oil binder by doublet between 2800 and 3000 cm^{-1} and a peak at 1750 cm^{-1} in the infrared spectrum; Fourier-transform infrared (FT-IR) spectroscopy using an Analect RFX-65 Model.

[i]Confirmed by identifying characteristic elements with X-ray fluorescence in a scanning electron microscope.

[j]Identified by presence of peaks at 2950 and 2890 cm^{-1} in the infrared spectrum.

Schedule of Completion

The project will run from May 1, 2001 through September 30, 2002. Treatment will progress a room or two at a time, dovetailed into the schedule for overall treatment of the building. Thus, it is not possible to predict when specific rooms will be treated.

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Canterbury Shaker Village, Inc.

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		27,985	27,985
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*			
FRINGE BENEFITS			
CONSULTANT FEES	27,100		27,100
TRAVEL: DOMESTIC	126		126
FOREIGN			
SUPPLIES & MATERIALS	4,508		4,508
SERVICES			
OTHER			
TOTAL DIRECT COSTS	$ 31,734	$ 27,985	$ 59,719
INDIRECT COSTS*	$	$ 5,972	$ 5,972

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS		$ 65,691
AMOUNT OF CASH—MATCH	$ 0	
AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH	$ 33,957	
TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS)		$ 33,957
AMOUNT REQUESTED FROM IMLS		$ 31,734
PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%)		48.3 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☑ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Mendocino County Museum
California
Treatment

1. What is the design of the project?

This project will begin in October, 2001, with preparations for shipping the 411 film negatives to the NEDCC. Curator of Collections will extract negatives selected for duplication from the rest of the collection (3 hours), create an object inventory (4 hours), check and document the condition of the negatives (36 hours), prepare the loan form (2 hours), contact County Risk Management Department to make arrangements for insurance coverage (1 hour), call the NEDCC to arrange a date for delivery of the negatives and call Federal Express to verify packing and shipping specifications for Hazardous Materials (1 hour). Curator of Collections will pick up and assemble six cartons and associated packing materials and prepare the negatives for shipment (18 hours), and fill out forms according to instructions provided by Federal Express (2 hours). Negatives will be shipped to the NEDCC in mid-November. Curator of Collections will consult with NEDCC staff as needed until they complete the duplication, and will order and receive acid free boxes and envelopes (5 hours).

Freezer for storage of original negatives, Marvelseal 360 envelopes for cold storage, open-wide paper enclosures for duplicate negatives meeting ANSI Standard IT 9.2-1991, and lignin-free document storage boxes will be ordered in January (1 hour). Negatives will be returned to the Museum in mid-February. Curator of Collections will unpack duplicate negatives, interpositives and originals and arrange each set in numerical order, checking to make sure that all original negatives have been returned and completing the loan paperwork (8 hours). Curator of Collections and Museum Director will work through the month of March to check the quality of each duplicate negative against the original, place each in labeled acid free openwide paper enclosure, and update catalog with locations of duplicate negatives and interpositives (80 hours each). Once this process is complete, Curator of Collections will contact NEDCC regarding quality control issues if necessary, and will make arrangements to have selected negatives re-duplicated (12 hours). In April the Curator of Collections and Museum Director will seal original negatives in individually-labeled Marvelseal 360 enclosures and place in freezer for cold storage. (24 hours each).

Past experience in completing Phases I and II have given staff a good indication of the time required to complete the various project activities. Great care must be taken in preparing the negatives for shipment to ensure that they will not suffer deterioration or damage in transit. The negatives are packed in document boxes, then packed in larger cartons inside a layer of insulation. A careful survey to ensure quality control once the negatives and duplicates have been returned is an essential although time consuming element, as the originals will be placed in permanent cold storage once the project is complete. Project activities have been scheduled to take place during months when Museum visitation is low in order to minimize disruption of normal work.

2. What is the object that is the focus of this project?

The Bavo Collection (Accession no. 83-27-LOT) consists of 1,770 large format nitrate- and diacetate-based film negatives which were produced at Wonacott Studios in Fort Bragg, California, between 1917 and 1947. Most of H. H. Wonacott's negatives were dumped over a cliff into the ocean by the new owner after Wonacott sold the business in 1947. This sampling of historically significant images was saved from the brink of destruction by the donor's father, Frank Albertson, and stored in his garage for 25 years.

The negatives were discovered by Albertson's daughter Jane Bavo following his death and were donated to the Mendocino County Museum in 1983.

These negatives form a detailed photographic record of life in coastal Mendocino County during the Great Depression and the early years of World War II. In his role as a small town commercial photographer, Wonacott responded to the local market which dictated the nature of the images he produced. His work for the Union Lumber Company documents technologies and work methods employed by the redwood lumber industry during a period of rapid technological and economic change. His photographs also document the heyday of the salmon fishing industry on the Mendocino Coast, when the Noyo Harbor was full of fishing boats and the warehouse freezers were stacked floor-to-ceiling with the season's abundant salmon catch. Besides his commercial and portrait work, Wonacott took an active interest in capturing his community on film. He often ventured out of the studio environment to make a photographic record of community events, storefronts and street scenes, and people at work and play. He photographed burials for family members, murder scenes for the local police force, construction of public facilities such as the Community Center which today serves the town as its City Hall, and construction of important features such as the stone jetty at the Noyo Harbor. He also produced scenic postcard images capturing the beauty of towering redwood trees and the dramatic Mendocino Coast.

The relevance of these photographs to the Museum's permanent collection of objects is substantial. They are used extensively to interpret the redwood logging and commercial fishing industries, and the rural lifestyles that prevailed in this area through the first half of the twentieth century. Public interest in the collection is high and the Museum receives many requests for copies of Wonacott images for use in publications and exhibitions, and by family members and community organizations. The images documenting the redwood logging and salmon fishing industries are relevant to studies involving conservation and the environment, and have served as a resource for researchers and historians in projects of regional, statewide and national scope.

3. How does the project relate to your museum's ongoing conservation activities?

The Museum's professional staff has worked to incorporate conservation activities into the daily operation of the facility since the building opened to the public in 1972. A Conservation Assessment Project (supported by IMS) conducted in 1989 identified problems in both storage and exhibition areas. Curatorial staff developed a plan to guide the direction of conservation activity over the course of the next ten years. This plan has been implemented and updated by a succession of four Curators and has served to ensure the institution's progress toward stated goals over the course of time.

Implementation of our Collections Conservation Plan over the past ten years has achieved completion of Collections Management policies and procedures, implementation of an Integrated Pest Management program, and development of an Emergency Preparedness plan. Storage and exhibition areas have been upgrad3e according to recommendations made by conservators. Most of this work has been funded through the Museum's annual budget allotment from the County of Mendocino, through expenditures of interest from the Museum's Endowment Fund, and/or by donations solicited from private parties to support specific projects. An IMS TAG grant proposal funded in 1995 supported consultations with a conservator regarding design and implementation of the Integrated Pest Management program and installation of in-

house anoxic fumigation capability in 1995, and construction of a Conservation Lab in 1996. In FY1999-2000 the County of Mendocino funded development of plans and specifications for a modern storage and conservation building to be built adjacent to the current facility. This project was selected for funding by the County in FY2001-2002. The building will house a vault with independent temperature and humidity controls for storage of photographic materials, and other specially-designed environments for optimal storage of fragile and environmentally sensitive objects.

Duplication of the Wonacott negatives has not been our only conservation priority over the past ten years. However, it has been and continues to be our highest priority because of the deteriorated condition of the negatives and the extreme historical significance of the images. IMS funding supported Phases I and II of the Wonacott Negatives Duplication Project in FY1993-1994 and FY1994-1995. Staff applied to the IMS to fund Phase III of the Wonacott Negatives Duplication Project in FY1995-1996. Our application received favorable reviews but due to limited funds and budget cuts that year, was not funded. In 1996 the Museum received 624 glass plate negatives which had been produced by Wonacott at his Willits studio between 1908 and 1917. These arrived stacked in cardboard boxes; immediate action was required to stabilize the collection. Other projects were put on hold until this work could be accomplished. Then in 1997 the Curator of Collections was diagnosed with cancer had to reduce her work hours through the course of treatment, so was unable to reapply for the 1998 deadline.

We applied for the 1999 deadline but were subsequently advised that reviewers had questioned our plans to destroy the original negatives once they had been copied, instead of putting them into long-term cold storage. With addition of our new storage facility, space will no longer be a pressing consideration, so we have amended this project to include long-term cold storage of the original negatives. Acquisition of the freezer will also make it possible for the Museum to provide optimum storage conditions for other collections of nitrate/diacetate photographic negatives which we may acquire.

Many of our conservation activities are project based, arising from an immediate need, in spite of efforts to plan and prioritize to accomplish long term goals. For example, four years ago we raised $2,000 through donations solicited from members of the Mendocino County Farm Bureau to treat saddles and tack that showed signs of active carpet beetle infestation, and to construct a Tack Room where these objects could be properly stored and monitored. Three years ago we received a donation of 624 glass plate negatives from a photographic studio operated by H. H. Wonacott in Willits from 1908 to 1917. Volunteer darkroom technicians were recruited and trained to make contact prints in the museum's darkroom; volunteers helped to clean, document and store the plates; and staff raised nearly $4,000 through the sale of matted, frame-ready "Commemorative Prints" to support conservation and exhibition of the images.

The Wonacott film negatives remain our greatest collections care need because of the relative instability of the images, the significance of the subject matter, and the high cost of conserving the images. The condition of the negatives makes it difficult if not impossible to get a good copy of the negative image by less costly means; the cost of sending them out for full format reproduction, coupled with the staff time required to complete the project, is prohibitive without the support of grant funding. We are eager to complete Phase III of the project, which will achieve duplication of all of the historically significant images in the collection.

4. What are the anticipated benefits of this project?

Preservation of the Wonacott negatives will ensure that the public may continue to learn from and enjoy these images of life and work in coastal Mendocino County. The new safety film negatives can be printed with excellent results by volunteers in our darkroom. They can be scanned and printed using our new digital system to obtain reference prints. Because of the deteriorated condition of the originals, many have not been printed or scanned, and staff has not been able to complete documentation of the people, places and events pictured. This is becoming a crucial factor as individuals old enough to remember Fort Bragg in the 1930s are now 80 years of age or older. Our goal is to obtain reference prints for the entire collection within the next two years so that we can circulate these images more widely and add to the documentation.

In 1998 the Museum staff worked with students and teachers at the Mendocino High School to develop a joint project. The students were working with a large-format camera to record portraits and oral history interviews with artists living and working on the Mendocino Coast. As part of their curriculum, the students produced contact prints from 24 of the Wonacott negatives which had been copied to safety film duplicates in Phase I and II of this project. This exercise helped them to gain expertise in making contact prints from the large-format film; the Wonacott prints they produced were exhibited at the Depot Marketplace in Fort Bragg in 1999 and 2000. The students' photographs of artists on the Coast were exhibited at the Mendocino County Administration Building in Ukiah, and published in a book titled "Mendocino Artists: An Endangered Species.

In 1999 we worked with the Fort Bragg Advocate newspaper, which supported printing of 64 negatives that had been copied to safety film duplicates in Phase I and Phase II of this project. The Advocate published these images as a regular feature over the course of the year, and received many inquiries from the public. Museum staff worked with the newspaper staff to record the information collected about the images.

After fundraising for three years, the Museum is finally acquiring (October, 2000) a Digital Workstation, which consists of a powerful computer with a CD-ROM recorder, an Epson Expression 836XLscanner with an 11" x 17" scanning bed (large enough to scan the large-format Wonacott negatives), and an Epson Stylus 3000 color inkjet printer. This technology will make it possible for us to economically produce reference prints from the duplicated negatives, which can then be used to obtain documentation of the images from people living in the Fort Bragg area. Once scanned, these images will be available for use in publications, exhibitions, and on the Internet. Our long-term plans, utilizing the duplicated negatives and digital technology, include development of books, exhibitions and internet-based educational materials featuring the photographs of H. H. Wonacott.

5. How will the applicant ensure that ongoing museum functions are not inhibited by these project activities?

The Mendocino County Museum has planned this project to coordinate with its financial resources and ongoing museum functions. The museum's match is met through staff salaries and benefits, indirect costs, and from our annual budget for special projects. Project activities will take place in months when visitation is low so that staff can complete them in an efficient and timely fashion.

Each year the Curator of Collections chooses three major projects, in addition to regular registration and conservation activities, and arranges her work schedule accordingly. This is one of her three major projects for FY 2001-2002.

6a. What are the proposed conservation methods and why are they conservationally sound?

Careful consideration was given to determining the best means of preserving the negatives in the Bavo collection. Most photographs in the Museum's collection are printed, then copied on 35mm or larger format safety film. However, this method does not work with the Wonacott images because the film negatives are less than perfectly flat, due to deterioration of the film base. When printing negatives in this condition, there is great risk of damaging the emulsion if the film is flattened under glass, but it is impossible to get a clear print without doing so.

Conservator Pauline Mohr, who surveyed the Bavo collection, recommended having the negatives professionally copied, using the two-step interpositive/duplicate negative process, at a lab specializing in this type of production such as the Northeast Document Conservation Center. This corroborated recommendations by conservators who completed the CAP assessment in 1989.

The duplicate negatives and interpositives will be sleeved in enclosures meeting ANSI Standard IT 9.2-1991, stored in lignin-free document storage boxes, and archived in the Museum's humidity-and-temperature controlled cool storage vault.

The original negatives, which are sleeved in open-wide paper envelopes meeting ANSI Standard IT 9.2-1991, will be sealed in Marvelseal 360 envelopes, filed in lignin-free storage boxes, and permanently placed in cold storage in a chest freezer. Staff will monitor the condition of the negatives to detect signs of active deterioration.

The design of this project incorporates recommendations received from conservators during the CAP grant in 1989; recommendations by Conservator Pauline Mohr; research regarding curation of nitrate and diacetate film negatives over the past six years by Museum Curator Rebecca Snetselaar; and consultation (September 1999) with Douglas W. Nishimura, Research Scientist, Image Permanence Institute of the Rochester Institute of Technology, regarding packaging materials/methods and equipment for implementing a cold storage system. Methods proposed are in conformance with accepted museum standards for preservation of nitrate and diacetate-based film negatives.

7. How does the project budget support the project goals and objectives?

This project represents Phase III in a four-phase project that began following the IMS-funded Conservation Assessment in 1989. Conservators recommended that the Museum hire a conservator to evaluate the degree of deterioration of the unstable negatives, then develop and implement a plan to copy the entire collection (least stable negatives first).

In 1993 conservator Pauline Mohr visited the Museum to analyze the deterioration of the collection and help prioritize duplication. The large number of negatives and limited budget for conservator services made it impossible for the conservator to examine each negative. Instead, Mohr viewed a range of 100 negatives chosen for varying degrees of deterioration, size and type. Staff were instructed in use of the Horvath scale to determine the level of deterioration of each negative. Following the conservator's visit, staff completed the survey to establish priorities for duplication based on condition, then consulted with a local historian-photographer with thirty years of experience studying photograph collections to prioritize for duplication in terms of historical significance.

Duplication of all 1,770 negatives at one time would have been too time consuming for staff to incorporate into a single year's work, so negatives were selected for duplication in six phases, according to priorities established in the two consultations.

Through this process it was determined that 223 of the images were either of no historical significance, were too over-or under-exposed to obtain a viewable print, or had deteriorated beyond the point of no return. Another 681 negatives were identified with highest priority for duplication either because of the extreme historical significance of the image, the level of deterioration, or a combination of factors. These were duplicated in Phases I and II (supported by IMS Conservation Support grants in FY1993-1994 and FY1994-1995). Of the remaining 866 images, 411 were chosen for duplication in the third phase based on priorities established in 1993. The fourth phase, involving duplication of the final 451 images of lesser historical significance, remains to be completed.

The project budget for Phase I underestimated the amount of time required to complete project activities and the cost to ship the negatives. It was also determined during Phase I that some economy could be achieved, with no compromise in image quality, by shooting two negatives of like densities on one sheet of 11" x 14" film, because of the unusual size of the negatives (6.5" x 11"). The costs and phases of the project were adjusted for completion in four instead of six phases as originally planned.

The budget was developed by obtaining quotes for services, equipment and supplies, determining which members of the staff were available to complete project activities, and estimating the number of hours required to complete the project based on past experience in Phases I and II.

8. What are the qualifications of the project personnel?

The Northeast Document Conservation Center (NEDCC) was chosen to perform duplication services because of its expertise, its well-equipped photo duplication laboratory, and its willingness to offer a discount to a non-profit museum. NEDCC is a non-profit regional facility specializing in conservation of art and artifacts on paper. The purpose of the Center is to provide the highest quality services to museums, libraries and historic sites that do not have in-house conservation facilities or whose needs exceed their capacity. Their lab has the capacity to maintain the highest level of quality control in reformatting nitrate and early diacetate negatives, and was recommended by conservators from the Western Regional Paper Conservation Laboratory in San Francisco. NEDCC has security systems and 24 hour surveillance of the building, and carries fine art insurance to cover the materials while they are on the Center's premises.

Pauline Mohr is a Conservator of works of art on paper with 25 years of experience in her field. Her experience includes 22 years as a staff conservation professional at the Western Regional Paper Conservation Laboratory in San Francisco, and 14 years in the same capacity at the San Francisco Museum of Modern Art.

Curator of Collections Rebecca Snetselaar has worked with the Wonacott negatives for six years. She has learned a great deal about photograph handling and conservation by reviewing information compiled by previous curatorial staff, and by conducting her own extensive research. She has knowledge of darkroom and photographic techniques and was instrumental in reviving the Museum's darkroom and training volunteers to perform contact printing from glass and film negatives.

Museum Director Dan Taylor has worked to develop a successful conservation strategy for the Wonacott negatives since becoming the Director of the Mendocino County Museum in 1988. He has worked with the curatorial staff to develop conservation planning and to complete Phase I and II project activities. His experience includes 16 years of working with collections of historical photographs.

Schedule of Completion – 2001/2002

Task	October	November	December	January	February	March	April
Pull negatives; create object inventory; check and document condition;							
Prepare loan form; arrange insurance, deliver, shipping; prepare negatives to ship							
Negatives at NEDCC; order and receive equipment and supplies							
Unpack shipment; check inventory and complete loan paperwork							
Check quality, label, place in storage, update catalog, reduplications as needed							
Place original negatives in Marvelseal enclosures and place in cold storage.							

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Mendocino County Museum

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		$6,204	$6,204
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*		0	0
FRINGE BENEFITS		$1,861	$1,861
CONSULTANT FEES		0	0
TRAVEL: DOMESTIC		0	0
FOREIGN		0	0
SUPPLIES & MATERIALS	$1,772		$1,772
SERVICES	$8,899		$8,899
OTHER		$ 885	$ 885
TOTAL DIRECT COSTS	$ $10,671	$ $8,950	$ $19,621
INDIRECT COSTS*	$	$ $1,889	$ $1,889

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ $21,510

AMOUNT OF CASH—MATCH $ 885

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $ 9,954

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 10,839

AMOUNT REQUESTED FROM IMLS $ 10,671

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%) 49.6 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Application Narrative – Conservation Project Support

1. What is the design of the project?

The goal of this project is to further the long-term preservation of sculpture in the collection of the Oakland Museum of California (OMCA). The objective is to provide conservation treatments for five, large-scale, outdoor sculptures identified by John Burke, Senior Conservator, and Philip Linhares, Chief Curator of Art, as the museum's highest conservation and curatorial priority. The condition of these sculptures range from environmental deterioration such as loss of protective paint coatings and failed anchors to extensive damage from graffiti and vandalism. Individual condition reports and treatment proposals are enclosed. Three of the sculptures are presently installed in public locations away from the museum where they are subject to ongoing graffiti and vandalism. As part of the project these sculptures will be relocated to the grounds of the museum and installed in a more secure and protected environment. The sculptures to be treated are:

Anansi by Henry Rollins. Painted steel sculpture, 1974. Approximate dimensions: 40 feet high, 30 feet wide at widest point. Location: 11th Street, across from the museum.

2 *Adams Point* by Jan Evans. Painted steel sculpture, 1975. Approximate dimensions: 9 feet high, 27 feet wide, 11 inches deep. Location: 12th Street, across from the museum

3. *Homage to Charlie Parker* by Mark Di Suvero. Painted and weathering steel with steel cable and galvinized fittings, 1978. Approximate dimensions: 12 feet high x 40 feet wide, x 33 feet deep. Location: Estuary Park. Planned location: Oakland Museum.

4. *Lowe Roll* by Jim Huntington. Cor-ten steel and sierra white granite, 1982. Approximate dimensions: 9 feet high, 10 feet wide, 10 feet deep. Location: Laney College. Planned location: Oakland Museum.

5. *Jack London* by Peter Forakis. Mild or weathering steel sculpture, 1982. Approximate dimensions: 22 feet high, 23 feet wide, 19 feet deep. Location: Laney College. Planned location: Oakland Museum.

The project will be accomplished over a 14-month period, from July 1, 2001, through August 31, 2002. The extended time frame will allow ample time to complete the project without interfering with ongoing conservation activities and other functions of the museum. John Burke, the museum's Senior Conservator, will serve as project director. He will spend an estimated 16 days on the project and will have overall responsibility for project staff, activities, and budget and will oversee all conservation work. The treatments will be carried out by independent conservator Genevieve Baird and her colleagues – Larry Rief and Melissa Arnold – at Baird, Rief & Associates, a conservation firm with extensive experience in the treatment of outdoor sculpture and monuments. Julie Trosper, the museum's part-time Object Conservator, will be hired to work an additional 40 days on the project. She will work directly with the staff of Baird, Rief & Associates on the conservation treatments, as well as coordinate the relocation of three of the sculptures. Joy Walker, the museum's Registrar, will spend an estimated six days on the project, assisting with artist research, collection records, and treatment documentation. Basic project activities are summarized below:

Activity 1. July – August 2001. Pre-treatment assessment, documentation, and preparation. The five sculptures to be treated will be re-examined and their current conditions documented in both written and photographic form by consulting conservator Genevieve Baird. The artists and/or artist's estate/foundation will be contacted by object conservator Julie Trosper to insure original intent is understood and honored as possible. Collection records and artist files will be researched and documentation on fabrication, materials, installation, treatment, and artist remarks will be assembled into a treatment file by museum registrar Joy Walker. John Burke will obtain necessary city permits, liaison with city and museum personnel, and work with Genevieve Baird to refine treatment goals, establish staging protocols, and order supplies.

Activity 2. August-September 2001. Construction of Concrete Pads and Footings. Before three of the off-site sculptures to be treated are moved, their existing pads and footings will be documented and measured by museum conservation staff. None of the sculptures are site specific. Proposed sites will be examined with the

Chief Curator of Art and a city structural engineer to finalize plans for the relocation of the sculptures to the museum grounds. The reinstallation will include the fabrication of new pads and supports and ensure that local construction codes, structural engineering, and appropriate earthquake mitigation techniques are followed In addition, the footing of *Adams Point* will be examined and stabilized prior to treatment.

- Activity 3. September-October 2001 Conservation treatment of *Adams Point* and *Ananzi*. In the fall of 2001, Baird, Rief, and Associates will undertake the conservation treatment of *Adams Point* and *Ananzi*. Sculpture surfaces will be cleaned with appropriate solvents, poultices, and/or soft material blasting materials and techniques described in the enclosed treatment proposals. Metal repairs and reinforcement of weak structural elements will be undertaken as needed. Surfaces will be primed, caulked, and coated. A final anti-graffiti sacrificial coat of teflonated wax emulsion will be applied to the fully cured, recoated sculpture surface. Julie Trosper, the museum's Object Conservator, will participate in the treatments. John Burke, Senior Conservator will periodically monitor the treatments. Estimated time for the completion of the actual treatment work is seven days for *Adams Point* and ten days for *Ananzi*.

  Activity 4. October-November 2001. Relocation of *Jack London, Lowe Roll*, and *Homage to Charlie Parker*. Prior to treatment, three off-site sculptures will be moved and reinstalled on the museum grounds, under the direct supervision of the conservation staff. John Burke and Julie Trosper will directly supervise and coordinate the move and reinstallation with Scott Atthowe Fine Arts Services, a professional art handling and transportation firm with extensive experience in moving large-scale sculptures.

  Activity 5. April-June 2002. Conservation treatment of *Jack London, Lowe Roll*, and *Homage to Charlie Parker*. In the late spring/early summer of 2002, Baird, Rief, and Associates will undertake the conservation treatment of *Jack London, Lowe Roll*, and *Homage to Charlie Parker*. General conservation methods and materials are described in Activity 3 above, and specific materials and techniques are described in answer to Question 6 below and in the enclosed treatment proposals. Estimated time for the completion of the actual treatment work is five days for *Lowe Roll*, seven days for *Jack London*, and 10 days for *Homage to Charlie Parker*.

  Activity 6. July-August 2002. Post-treatment evaluation, documentation, and reporting. At the conclusion of the treatments, Genevieve Baird will provide the museum with full condition reports, treatment records with photographic documentation, and a summary report for the final reporting for this project. John Burke will prepare the final report, which will be forwarded to IMLS within 90 days of the end of the grant period.

2. What are the objects that are the focus of this project?

The Oakland Museum of California (OMCA) is a large urban museum with collecting departments of art, history, and natural sciences, all focusing on the state of California. The art collection contains over 70,100 works by California artists from the late 18th century to the present. It is the finest and most comprehensive collection of its kind in the state. In addition to paintings, drawings, prints, photographs, crafts, and decorative arts, the art collection contains 1,020 sculptures, including 40 large-scale, outdoor sculptures by such nationally known artists as Mark, Di Suvero, Peter Voulkos, Michael Heizer, Deborah Butterfield, John Mason, Viola Frey, and David Gilhooly, as well as regionally important artists such as Peter Forakis, Michael Todd, Claire Falkenstein, Jim Huntington, Ruth Asawa, Henry Rollins, Fletcher Benton, and others. Twenty-nine of these sculptures are currently exhibited on the grounds of the museum, and eleven are installed in other public locations throughout the City of Oakland.

OMCA is an ideal site for the presentation of outdoor sculpture. The three-tired complex of galleries and gardens – designed by Kevin Roche in the late 1960s – occupies four city blocks (7.7 acres) adjacent to Lake Merritt, near downtown Oakland. The building has been widely acclaimed as a milestone in museum design. Extensive landscaping – which includes many roof gardens, terraces, patios, and a park-like central court – is an integral part of the architecture. The enclosed gardens occupy 26,400 square feet on four levels with 17 courts for

outdoor sculpture and museum activities. The building and grounds are monitored and protected by security guards 24 hours a day, seven days a week.

This project focuses on five, large scale, outdoor sculptures by noted California artists of the 1970s and early 80s. All are abstract, formalist sculptures that are representative of this period in American art, which was fostered by the National Endowment for the Arts and their "Works of Art in Public Places Program." Not since the 1930s, under various art programs of Roosevelt's New Deal, had there been such a wave public art patronage and the creation of monumental works of art in outdoor public spaces throughout the nation. Two of the sculptures to be treated in this project – *Anansi* and *Adams Point* – were originally created for *Public Sculpture/Urban Environment* (1974) – the first exhibition of its kind in the San Francisco Bay Area to involve the entire community in the presentation of contemporary public art. The exhibition was organized by George W. Neubert, Chief Curator of Art, at the Oakland Museum of California, who later commissioned and acquired the other works in this project by Mark Di Suvero, Jim Huntington, and Peter Forakis. All of the sculptures are constructed of painted and/or weathering steel; one is a combination of steel and granite. Two of the sculptures are installed across the street from the museum. Three are currently off-site in public locations at Laney College and Estuary Park. Photographs, descriptions, and treatment proposals are enclosed.

3. How does the project relate to your museum's ongoing conservation activities?

One of the museum's highest goals is "to preserve the legacy of the State of California by maintaining a suitable and secure environment and professional programs of conservation and restoration for the permanent collections the museum holds in public trust." To achieve this goal, the museum is actively involved in collections care and conservation utilizing established procedures for exhibits preparation and installation, staff training in the proper handling of artifacts, monitoring environmental conditions, appropriate housing for collections in storage, and conservation treatment of specific objects as funds are available. The museum has one permanent full-time Senior Conservator, two part-time Conservators, a modest budget for conservation projects, and a well-equipped 17,000 square-foot Conservation Center located about 1.5 miles from the museum. The Conservation Center is used for the examination and treatment of objects in the museum's collections, as well as objects from other Bay Area museums and private collections.

With funding from IMS in 1989, the museum conducted a general conservation survey of its facilities, collections, and environmental conditions. Since that time, the conservation staff has successfully implemented approximately 85% of the recommendations for environmental improvements made by the consulting conservators in their reports, including: 1) improved climate controls and monitoring, and earthquake mitigation measures throughout the museum's exhibition and collection storage areas, 2) implementation of an integrated pest management program (supported by an IMS grant in 1994), 3) construction of a climate controlled room at the museum's off-site Collections Storage Facility, and 4) upgrading and rehousing significant parts of the collections, including a) shells and geology specimens, b) paintings, c) works of art on paper, d) historical photographs, e) costumes and textiles, and f) ethnographic objects in archivally appropriate materials and storage furniture. With a 1997 IMLS conservation grant, the museum recently completed construction of a low-temperature storage vault for the long-term preservation of nitrate negatives in the photography collections. Enclosed is a summary of the institution's general conservation survey, a list of accomplishments to date, and a long-range conservation plan.

During the past decade, the museum has focused most of its limited conservation resources on environmental improvements. However, deferred maintenance on the outdoor sculpture collection has created an urgent need for the conservation treatments described in this proposal. Improving the condition of the outdoor sculpture collection is one of the museum's greatest collection care needs.

With support from a National Endowment for the Arts grant in 1995, the museum hired consulting conservator Dale Paul Kronkright to conduct a survey of OMCA's outdoor sculpture collection. Mr. Kronkright, John Burke, and other members of the museum staff spent ten days reviewing collection records, conducting an item-by-item survey, developing written and photographic documentation, condition reports, and treatment recommendations for

high priority items. In his report, Mr. Kronkright outlined an array of problems, including sculptures requiring immediate attention and a host of organizational issues challenging the conservation staff's ability to effectively provide for the preservation of the sculpture collection. Following his report, Mr. Kronkright returned to the museum for two days of hands-on training to improve monitoring and maintenance procedures for long-term care of the outdoor sculpture collection. A copy of Mr. Kronkright's survey narrative is enclosed.

Since the 1995 Sculpture Conservation Survey, the museum has taken steps to correct many of the deficiencies described in the report:

- The nine sculptures identified in Mr. Kronkright's report as "requiring immediate attention" have been stabilized, moved to safer locations, or removed.
  Of the museum's 40 outdoor sculptures, 13 have received conservation treatments during the past five years. One is scheduled for staff treatment this year. Five will receive conservation treatments with this project.
  The museum has added two-part time conservators to its staff and established an ongoing maintenance program for the outdoor sculpture collection.
  Additional registration staff has been hired, and documentation of the collections has been significantly enhanced.
  The museum's conservator, John Burke, has become part of OMCA's senior management team, which has strengthened "organizational collaboration" with regard to conservation issues.

4. What are the anticipated benefits of this project?

As a result of this project, the outdoor sculpture collection of the Oakland Museum of California will be structurally stabilized and visually improved. Interpretation of the collection will be enhanced and individual pieces will become more easily accessible to the public. Five major sculptures will receive conservation treatments. Three of the sculptures that are currently installed in public locations at Laney College and Estuary Park will be reinstalled on the grounds of the museum, making them more secure and easier to maintain. The museum will use the treatments and reinstallation as an opportunity to increase public awareness and understanding of the outdoor sculpture collection -- through press releases and a feature article in *The Museum of California* magazine, as well as new labels and signage.

5. How will you ensure that ongoing museum functions are not inhibited by these project activities?

Hiring an outside conservation firm, Baird, Rief & Associates, for this project will ensure that the activities of the museum conservation staff will remain at their present level. The budget also includes funds to hire Julie Trosper, the museum's part-time Object Conservator, to work an additional 40 days on the project. This will give her additional experience in the conservation treatment of large-scale outdoor sculpture. The project will require a modest amount of time on the part of the museum's Senior Conservator (16 days) as well as the Registrar (6 days) however, this should not effect the museum's ongoing functions.

6. What are the proposed conservation methods and why are they conservationally sound?

The treatment proposals were developed by consulting conservator Genevieve Baird, a specialist with more than 20 years experience in the conservation treatment of public art. Since 1978, her company – Baird, Rief & Associates – has executed numerous treatments on outdoor monuments and sculptures in the San Francisco Bay Area. A list of projects is enclosed. Most of the sculptures to be treated in this project are steel or weathering (Cor-ten) steel. Individual treatment proposals are enclosed. In general, surface soil and pollutants will first be removed from the sculpture using a detergent wash (2% Orvus) and pressure rinse (25 degree fan tip at 2000 psi). The likelihood of removing or sufficiently reducing painted graffiti will be tested with solvents. Solvents most likely to be used include methylethyl keytone, toluene, methanol in gel, and methylene chloride. If tests prove positive, painted graffiti will be sprayed with a solvent poultice to reduce or remove as much as possible. The surface will then be rewashed and pressure rinsed to remove residual solvent and poultice.

If solvents are inadequate, painted graffiti will be removed with abrasive blasting. Steel elements will be cleaned to near white blast standard (SSPC-SP 10) using an abrasive blast of copper slag (#70 sieve). Weathering steel elements will be cleaned to commercial blast standard (SSPC 6) using an abrasive blast of copper slag (#70 sieve), or with glass bead peening, to control partial removal of the corrosion crust so to leave corrosion products intact as possible. Surface will then be detergent washed (2% Orvus solution) and pressure rinsed afterwards to remove residual grit and to re-establish corrosion process. Steel will be primed with inorganic zinc primer (e.g. Tnemec 90-97). Areas around bolts, weld joints, etc., where localized corrosion is caused by crevices in the sculptural elements will be caulked with paintable silicone or urethane caulk as appropriate. The coatings system will involve some or all of the following: interim primer, base color coat, main color coat, and clear coat. Possible paints for coatings system are silicone alkyd or polyurethane enamel. A final anti-graffiti sacrificial coat of of ProSoCo SC-1 (teflonated wax emulsion) will be applied to the fully cured, recoated sculpture surface.

7. How does the project budget support the project goals and objectives?

The total project cost is $117,568. A detailed budget is enclosed. The budget itemizes the costs of each category and describes the methods of cost computation. The budget was developed by the project director John Burke and consulting conservator Genevieve Baird. The cost of the conservation treatments (which includes consultant fees, travel, materials, equipment rental, and photography) are based on quotes from Baird, Rief, & Associates. The cost art handling, transportation, and the construction of concrete pads and footings are based on quotes obtained by John Burke from local companies that work frequently with the museum.

We are asking the Institute of Museum and Library Services to consider a grant in the amount of $50,000 (42% of the total project cost) for the conservation treatments. The City of Oakland and the Oakland Museum of California Foundation will provide $17,033 in-kind support for project staff salaries, fringe benefits, and indirect costs, as well as $50,535 cash match for additional staff hours (for Julie Trosper), relocation of off-site sculptures to the museum, new concrete foundations and footings, and partial support for the conservation treatments.

8. What are the qualifications of the project personnel?

John Burke, Senior Conservator at the Oakland Museum of California, will serve as Project Director. He will have overall responsibility for project staff, activities, and budget and will oversee the conservation treatments. Mr. Burke has directed conservation activities at the museum since 1982 and has more than 28 years experience, specializing in the conservation and restoration of anthropological, artistic, and historic objects and sculpture. Since 1996, he has served on the Board of Directors of the American Institute of Conservation. He is former Director of AIC Professional Education and is currently Director of Specialty Groups.

Genevieve A. Baird, Consulting Conservator, will be responsible for the conservation treatments. Ms. Baird is owner, operator, and Senior Conservator at Baird, Rief & Associates, a conservation firm specializing in the treatment of public art. Baird, Rief & Associates is located in Georgetown, California, about 50 miles northeast of Oakland. Ms. Baird has more than 20 years experience in the conservation of art and artifacts. She holds an MA degree with a Certificate of Advanced Studies for the Conservation of Historic and Artistic Works from the Cooperstown Graduate Program, Cooperstown, and the State University of New York, Oneonta.

Julie Trosper, Object Conservator (part-time) at the Oakland Museum of California since 1998, will assist Mr. Burke and Ms. Baird with the conservation treatments and related activities described in the proposal. Ms. Trosper has more than 16 years experience in object conservation, including work at the M.H. de Young Memorial Museum, San Francisco; the University Museum of Archaeology and Anthropology, Philadelphia; and the Phoebe A. Hearst Museum of Anthropology, University of California, Berkeley. She holds an MS degree in Art Conservation from the University of Delaware/Winterthur Museum, Wilmington.

Larry A. Rief, Senior Conservation Technician at Baird, Rief & Associates, has 20 years experience in the conservation of art and artifacts. Under the direction of Genevieve Baird, Mr. Rief will be site manager and responsible for the day-to-day activity of the conservation treatments at the museum.

Melissa Arnold, Conservation Technican at Baird, Rief & Associates, has 10 years experience in the conservation of art and artifacts. Under the direction of Genevieve Baird and Larry Rief, she will assist with the conservation treatments of two of the largest sculptures: *Jack London* and *Homage to Charlie Parker*.

Joy Walker, Registrar in the Art Department, will assist with artist research and documentation of fabrication, materials, installation, treatment history, as well as recording final treatment documentation and ongoing maintenance records. Ms. Walker has ten years experience in collections management and care. She joined the museum's staff in 1995 and holds an MA degree in Museum studies with an emphasis in Collections Management, from John F. Kennedy University, Orinda, California.

Schedule of Completion

ACTIVITY	2001						2002							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1. Pre-treatment assessment, documentation, and preparation														
2. Construction of concrete pads and footings														
3. Conservation treatment of Adams Point and Ananzi														
4. Relocation of Jack London, Lowe Roll, and Homage to Charlie Parker to museum														
5. Conservation treatment of Jack London, Lowe Roll, and Homage to Charlie Parker														
6. Post-treatment evaluation, documentation, reporting														

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Oakland Museum of California

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES (PERMANENT STAFF)	0	11,610	11,610
SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)	0	0	0
FRINGE BENEFITS	0	4,063	4,063
CONSULTANT FEES	28,450	0	28,450
TRAVEL: DOMESTIC	8,650	0	8,650
FOREIGN			
SUPPLIES & MATERIALS	3,400	0	3,400
SERVICES	0	38,220	38,220
OTHER	9,500	3,675	13,175
TOTAL DIRECT COSTS	$ 50,000	$ 57,568	$ 107,568
INDIRECT COSTS*	$ 0	$ 10,000	$ 10,000

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS		$ 117,568
AMOUNT OF CASH—MATCH	$ 50,535	
AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH	$ 17,033	
TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS)		$ 67,568
AMOUNT REQUESTED FROM IMLS		$ 50,000
PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%)		42 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Kresge Art Museum

Conservation Project Proposal

What is the design of the project?

The Kresge Art Museum proposes an environmental improvement project to replace existing painting storage racks in the vault. Compact racks are necessary to gain extra space to store the growing collection, to reorganize the vault, and to create safer and better storage for the holdings.

Goals and objectives of each task and how they will be met:
Once notified of the grant, the staff will meet again with the selected contractor to review specifications for the storage racks. These will be ordered by January 2002. The actual project will take place during the summer. At that time the staff will move all of the contents of the storage vault (paintings and three-dimensional objects) into the North Gallery of the museum to temporarily store them out of harms way and in controlled conditions. The North Gallery is a space used for temporary exhibitions but will not be scheduled in summer 2002. The old racks in the vault will be removed and the new storage system installed. Then the staff will return the paintings to the vault, repositioning them by late August. Location records will be changed in the subsequent months. Since the vault is on ground level below the museum galleries and accessible by elevator, movement of objects will be minimal and always within the building so that no off-site storage will be required.

The two staff members most involved in the project will be the registrar and preparator. They will be in charge of the movement of the objects in and out of storage. Each will spend approximately four weeks on the project. The curator will spend a total of 40 hours, providing expertise to develop a logical and systematic way to reposition the paintings once the racks are put in place. The director will spend 20 hours finalizing negotiations with the vendor, overseeing the entire project, providing guidance and making sure that the project is implemented on schedule. The university's Physical Plant division will be contracted to remove and dispose of the old racks. Installation of the new system is part of the contract with Casper Corporation, the outside vendor.

The timing of the move and installation of the racks is most appropriate because summer visitation is typically light. By July school tours are completed, and university classes are over. The museum is closed on Mondays in July and completely during August. While the project will necessitate closing one of the temporary exhibition galleries, the rest of the museum will remain open in July. This timing will result in the least amount of disruption to the normal museum activities.

As with past conservation efforts, the museum will feature the project in the newsletter, include a story on the web site, and provide carefully constructed guided tours for museum members of the North Gallery, where the objects will be temporarily stored.

2. What is the object(s), historic structure(s), or specimens(s) that is the focus of this project?

Describe objects or specimens in this project and their:
Types, numbers and material: This project primarily involves the museum's collection of 380 paintings, dating from the 14th through 21st century. The majority is oil on canvas, with a few on wood and more recent work in mixed media. They range from small to quite large, including a stain painting by Morris Louis that is 8'8 ½" x 12'3 ½". While most works on paper are stored in a separate works on paper storage area in solander boxes or flat file cabinets, several oversize prints are stored in frames in the painting vault. Among these are two prints by Chuck Close: *Self Portrait/White Ink*, 1978 and *Alex*, 72" x 58" (unframed dimensions).

Paintings constitute 6% of the total collection of approximately 6500 objects. However, they are among the most significant objects in the collection. The core holding is abstract painting from the 1960s, including examples by Kenneth Noland, Charles Pollock, Theodore Stamos and Larry Poons. With the hiring in 1999 of curator April Kingsley, the collection is expanding in the area of abstract figurative works from the 1970s, building on the existing strength of the collection and on the curator's expertise and acquaintance with these artists. Also among the most important paintings are those by Francisco Zurbaran, Paolo di Giovanni Fei, Salvador Dali, Thomas Couture; American paintings include works by Daniel Garber, Fairfield Porter, Janet Fish, William Bailey, Worthington Whittredge, and Henry Siddons Mowbrey. Other media represented in the collection are: prints (Old Master; 19th and 20th centuries and non-Western); photographs; ceramics (Chinese, Japanese, Pre-Columbian, ancient Greek red and black figure vases, Roman; Meissen porcelain figures; and contemporary ceramics). Sculpture ranges from ancient Iranian through modern examples, as well as African, Chinese, and Japanese, Contemporary works include a mobile by Alexander Calder, Elizabeth Catlett, Haim Steinbach, Judy Pfaff, Duane Hanson, and Jenny Holzer, and mixed media pieces by Nancy and Edward Keinholz, Ann Hamilton and Krystof Wodiscko.

The Kresge Art Museum's collection provides community members with an opportunity to study and understand art from diverse countries and periods. As the only art collecting institution within a 45-mile radius, it serves not only the university and Greater Lansing, but also a larger outlying area. Kresge's collection ranges broadly across centuries and cultures. As a university museum, the collection was formed originally in 1959 to augment the teaching curriculum in the MSU Art Department, which includes art, art history and art education. The collection now reflects the broad academic curriculum of the university. The collection is a vital component to courses taught in other humanities areas including in African, Asian and Latin American Studies departments.

The population of the Greater Lansing area is largely working and middle class with an unusually high percentage of college-educated people. Because of the unique position in the area, the Kresge endeavors to collect and exhibit widely diverse works since members of the community do not have opportunities to experience these artworks elsewhere in the immediate area. Recent gifts of substantial endowment funds for acquisitions help the museum to continue to expand the collection.

3. How does this project relate to your museum's ongoing conservation activities?

Previous and current conservation activities:
The museum has made significant progress in the last decade on the long range conservation plan. With grant support, we completed condition assessments of the collection, improvements to the environment, and the treatment of significant works. The following condition assessments were undertaken: paintings (Jim Horns) and works on paper 1988, (Mary Wood Lee, Getty funded); environment and three-dimensional objects, 1990 (Lisa, Mibach, IMS funded); Asian art, 1995, (University of Michigan Museum of Art Asian Conservation Laboratory); reassessment of 15 paintings, 1998, (Kenneth Katz); update of environmental survey, 2000 (Barbara Heller, Detroit Institute of Arts). As a result of these surveys, information on each piece's condition is on record and used to monitor conditions and determine whether objects are stable for travel. Copies of the 1990 environmental survey, a document outlining goals accomplished and Ms. Heller's update are included in the application.

The surveys revealed that the vast majority of works are in very good condition, that no object was in need of emergency treatment but that several could benefit from some treatment. The curator and director developed a priority list for treatments and for environmental improvements. With IMS grants in 1992 and 1993, the following was accomplished: 1,000 paper pieces were rematted; the preparator attended week-long courses at the Campbell Center on matting works on paper, and packing and crating; new skylights were installed in the galleries; acid-free boxes for the storage of small objects were purchased, as were new metal shelves for sculpture storage in the vault. In addition, conservation treatments of six important European paintings were undertaken at the Detroit Institute of Arts Conservation Laboratory. During Fall 1993, twelve sculptures were treated by Lisa Mibach, mostly on site at the museum allowing the public to view the process. The entire conservation treatment project was the subject of an exhibition the following winter. Before, during and x-ray photographs, and explanations of conservation concerns and techniques were included in this highly successful show. Treatments of four Japanese and Chinese scrolls and paintings were undertaken in 1998 and at the end of 1998 we received an $11,000 grant from the Carpenter Foundation for the conservation of a 19th century Japanese screen, which became the focus of a spring exhibition in 2000. Each year several individual objects are treated as needed in an ongoing conservation treatment program. To ensure the well-being of the entire collection, the university allocated funds in 1996 to renovate space and create a large preparation room. In 1997 over $400,000 was provided to upgrade the HVAC system and new digital controls are currently being installed. In fall 1999, the museum purchased two exhibition cases with internal lighting and vapor barriers for the display of ancient Greek and Roman artifacts.

In winter 2000, the museum staff asked Barbara Heller of the Detroit Institute of Arts Conservation Services Laboratory to provide an update to the 1990 environmental survey. In discussions with staff, she helped priortize the following areas in need of upgrading:
Priority #1: new compact painting storage system, in order to increase the amount of space available to store paintings, to provide safer conditions in the storage vault, and to more efficiently use the vault space.

Priority #2: new gallery lighting to replace the old, inflexible system.
Priority #3: change the front glass sliding doors into the museum to provide a better means of regulating temperature fluctuations in the entry area and to adhere to ADA requirements.

Improvements to the vault as a result of installing compact painting storage racks will be significant. As the collection has grown, the vault has become more and more crowded. While access is strictly limited and only the preparator physically handles the objects, it has come to the point that in order to access a work on the painting racks, other shelving units need to be moved out of the way. The current rack system, installed in 1959, no longer slides smoothly nor has maintained alignment and often when pulling a rack, it derails. To gain access to the paintings, the large racks are pulled into the center of the room. The proposed compact racks will move back and forth easily along tracks, thereby allowing the center of the room to have other storage units that, although moveable, will not need to be moved more than necessary. Currently we have 3456 square feet of flat surface storage in the vault. The new racking system will take up less space but will provide an additional 914 square feet of flat storage space. Moreover, it will allow the staff to completely reorganize the rest of the storage in the room, which consists of metal shelves and cabinets for the storage of small scale sculpture and ceramics.

New storage racks are critical for the museum currently because of the overcrowded conditions in the vault. Lighting, priority #2, is equally important and will be addressed in the near future. Priority #3, a new front door, also is an issue of significance but its solution is not easy as any change affects the accessibility codes and will entail a complete redesign of the front of the building. An estimate of $1 million has been obtained and this project is currently on the university's list of ADA projects that need to be addressed as funding becomes available.

4. What are the anticipated benefits of this project?

The anticipated benefits relate to the proper care of the collection in storage and to making the paintings more accessible to staff and researchers. Under the current system, it is very difficult to provide access to researchers to works in the vault. Compacted storage that will be easily moved will allow the curator, director and registrar to handle the racks. Currently, only the preparator has the strength to pull the racks, which stick at points and jolt when pulled. Gaining more space in the vault will allow us to reorganize the sculpture and ceramic storage as well, ensuring the safety of all of the objects in storage.

After previous conservation projects, the museum staff has developed exhibitions as well as discussed the projects in the museum's newsletter. The most recent exhibition in summer 2000 celebrated the extensive conservation treatment of a Japanese 19th century screen. Before and after photographs were included and processes were explained in labels. While the paintings are temporarily in the museum's North Gallery during the installation of the new rack system, museum staff will provide "behind the scenes" tours for the members. We did this previously when paintings were brought up and hung salon style during the painting conservation survey. This educational program was particularly successful, as our audience was excited to learn about this aspect of museum responsibilities.

5. How will the applicant ensure that ongoing museum functions are not inhibited by these project activities? Describe financial and other resources the museum will contribute to the project to ensure that normal museum functions are not disrupted.

The museum will contribute both the necessary financial resources and in-kind staff time to ensure that the project succeeds. The project is scheduled to take place during the summer of 2002. Being on an academic campus, summers are usually very quiet, the museum closes on Mondays during the summer as well as the month of August. Therefore, implementing this project during a time when the museum would normally be closed, and when the staff catches up on projects and reviews the progress of the museum's annual goals is appropriate and conclusive. In order to empty the vault for the removal of the existing racks and the installation of the new ones, the paintings and other objects stored there need to be moved. They will be placed temporarily in the museum's North Gallery, a temporary exhibition space that can be completely closed to the public. For July, then, this portion of the museum will be closed. However, the rest of the museum will remain open to visitors.

If awarded a grant, the university administration will provide some matching funds that would not otherwise be available for the museum's use. The museum allocates a sum each year for conservation. In FY 99, for example, (see "contractual" line item in the budget), $11,000 was spent for the conservation of the Japanese screen and $17,000 for new cases. In addition, the Friends of Kresge Art Museum's Endowment for Acquisitions and Conservation provides a steady amount of funding each year for conservation projects as needed and funds will be available for projects during the time of the storage rack project.

6a. What are the proposed conservation methods and why are they conservationally sound?

Painting racks such as those to be installed in the vault are commonly used by museums for compact storage and will provide a safe means of storing paintings. The racks will be easily accessible, and the paintings will be easy to view and retrieve as needed. The racks will glide smoothly so there will be no jostling nor unnecessary vibration as there is currently.

7. How does the project budget support the project goals and objectives?

After considering the possibilities and consulting with several manufacturers of painting storage racks, as well as with conservator Barbara Heller of the Detroit Institute of Arts, we identified the Spacesaver Display Rack system as most appropriate for our needs and available space. The university's purchasing department identified vendors of this rack system. The Casper Corporation was the recommended local vendor and has installed similar racking systems elsewhere on the MSU campus. The university has found that this company's prices are competitive, their workmanship is of high quality, and they deliver within the specified timeframe. The Spacesaver System has a welded aluminum carriage and frames with flat aluminum mesh, flat T-rails and a roller-bearing carriage guidance system. The height of nine feet takes advantage of the height of the ceiling in the vault.

SCHEDULE OF COMPLET ON

uly. September 2001 January, 2002 uly. August, September,2002-December,2002

•Contractor site visit

:specifications

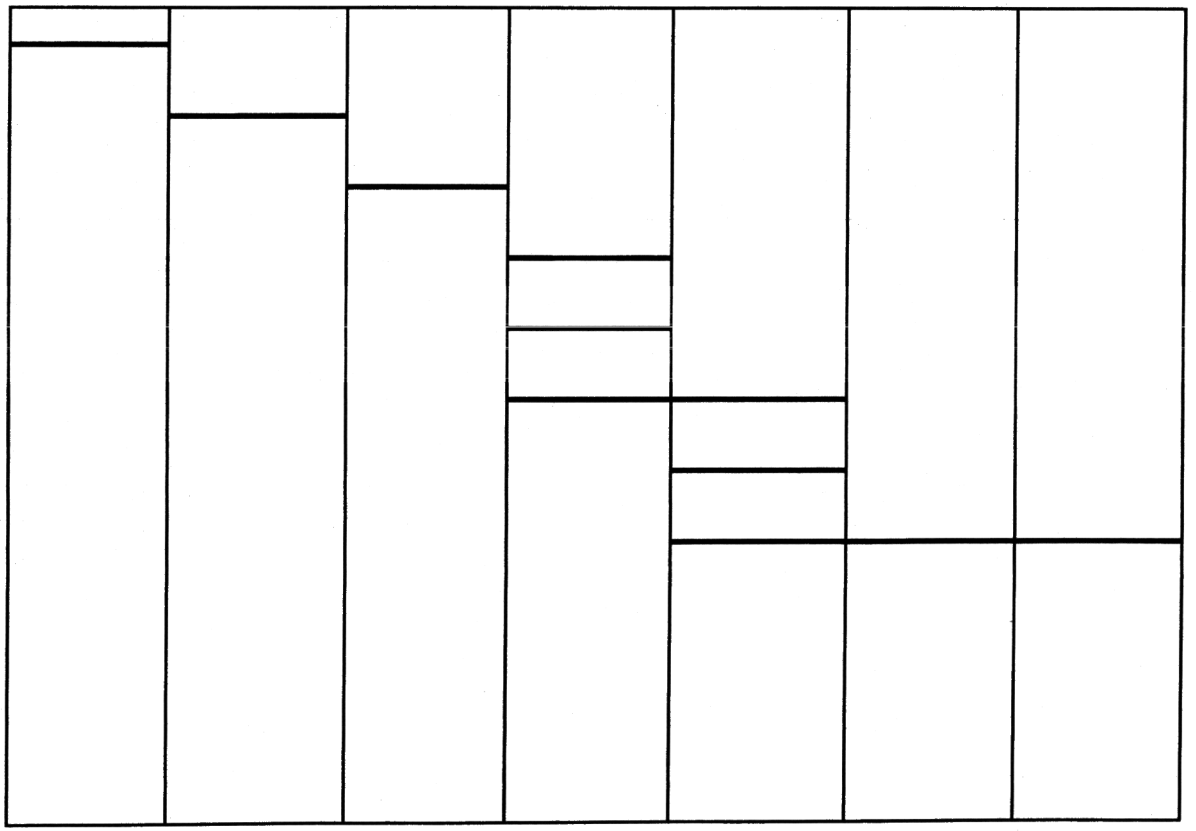
storage

Remove artwork from storage

storage

Return artwork to new storage

Documentation storage



Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Kresge Art Museum

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES *(PERMANENT STAFF)*		8,170.	8,170.
SALARIES AND WAGES *(TEMPORARY STAFF HIRED FOR PROJECT)*			
FRINGE BENEFITS		2,418.	2,418.
CONSULTANT FEES			
TRAVEL: DOMESTIC			
FOREIGN			
SUPPLIES & MATERIALS	42,465.	25,535.	68,000.
SERVICES		1,680.	1,680.
OTHER			
TOTAL DIRECT COSTS	$ 42,465.	$ 37,803	$ 80,268.
INDIRECT COSTS*	$	$ 4,662.	$ 4,662.

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS		$ 84,930.
AMOUNT OF CASH—MATCH	$ 27,215.	
AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH	$ 15,250.	
TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS)		$ 42,465.
AMOUNT REQUESTED FROM IMLS		$ 42,465.
PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%)		50 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☒ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Olana State Historic Site
New York
Environmental Improvement

1. What is the design of the project?

Friends of Olana and Olana State Historic Site seek IMLS support to hire a conservation technician to rehouse Olana's nearly 1800 works of art on paper, and to purchase some of the necessary supplies. The technician will work half-time for a year at the New York State Office of Parks, Recreation and Historic Preservation's Bureau of Historic Sites/ Peebles Island Resource Center, where Olana's art on paper collections are presently stored. The Peebles Island Resource Center (PIRC) provides museum support including conservation services for 37 state historic sites and state historic parks.

The collections are presently stored in a variety of folders, selected or constructed piecemeal as the works were accessioned in the early 1980's. The folders range from folded blotter paper, to Permalife © office folders, to lightweight folder stock taped together. A survey of nearly half of the collection has shown that most of these folders are 1) too small for many drawings, which can extend over the tabs of the office folders; 2) of inadequate weight to support heavy and sometimes embrittled supports; and 3) of a wide range of sizes, so that the folders slide within the storage boxes. In addition, the survey showed that many of the inner glassine folders are rippled and need replacement.

The bulk of the collection (over 1040 pieces) are graphite drawings, ink drawings, watercolors, and prints. These will be rehoused in heavier 20-pt acid-free bristol weight stock in three standard sizes. The heavier weight stock will offer better support for the drawings as they are handled by staff and researchers. Many of the drawings are double-sided and need to be turned over several times during viewing. The standard sizes have been chosen to fit within standard-size Microchamber © print storage boxes – 16x20, 20x24, and 22x28. Oversize items will be stored as they are presently, in flat files in individual folders.

Approximately 250 of the works are oil sketches on paper or board supports. All of these have been surveyed. We have found that a number of them exhibit flaking paint, thus requiring more support than folders can provide. These will be rehoused in sink mats.

The collections also include nearly 500 architectural sketches or stencils, with varying amounts of oil media. These will be rehoused in sink mats as needed (the exact number will be determined by the assistant painting conservator's survey) or in folders, as appropriate.

The proposed schedule of the project is as follows:

The conservation technician will be hired. (October 2001)

2. Working under the supervision of PIRC Paper Conservator Marie Culver, the technician will transfer drawings, watercolors, and prints to individual new 20-pt stock acid-free folders in three standard sizes. The technician will also provide each work with a new inner folder of acid-free glassine. Groups of rehoused drawings will be placed into storage boxes. PIRC Collections Manager Anne Cassidy will instruct the technician in proper folder labeling procedures, to ensure that information on current folders is preserved. (October 2001 through January 2002)

3. PIRC Assistant Paintings Conservator Mary Betlejeski will survey the architectural sketches and stencils with oil media, to determine their condition and housing needs.

4. Staff photographer Rich Clauss will photograph these items. (October 2001 through February 2002)

5. Working under the supervision of the paper conservator, the technician will construct sink mats for oil sketches and other works as needed. (February 2002 through June 2002)

6. Working under the supervision of the paper conservator, the technician will secure the works into sink mats using Japanese paper and wheat starch paste, or Mylar, Goretex ©, or paper corners, as

appropriate. Groups of rehoused works will be placed into storage boxes. (June 2002 through September 2002)

7. Throughout the project, as works are rehoused, Collections Management staff will retrieve and return them and update the site's automated collections management records. As needed, Olana Curator Evelyn Trebilcock will address curatorial issues associated with the overall project. (October 2001 through September 2002)

The works will be stored at PIRC, which maintains a 13,000-square-foot storage facility to supplement space available at sites and parks. The storage area can accommodate the expanded space requirements of the rehoused collection. PIRC is less than an hour's drive from Olana and PIRC Collections Management staff currently assist researchers needing access to Olana's art on paper collections. Planning for a new, state-of -the-art museum at Olana is underway, and when it is completed, the collection will be returned to the site for storage at that facility.

IMLS funds are sought to pay for the salary of the conservation technician and to purchase some of the rehousing supplies. New York State Office of Parks, Recreation and Historic Preservation (OPRHP) will match these funds through staff time and the purchase of the balance of the supplies

Rehousing this collection is an important preventive conservation measure and will improve access to this important art historic resource.

2. ***What are the objects that are the focus of this project?***

Olana, located in Husdon, NY, is the Persian-style house and 250-acre property designed and built by Hudson River School artist Frederic Edwin Church (1826-1900) as a home for his family and as a work of art. It is perhaps the best-documented and most intact artist's home in America. Church, the most celebrated painter in the United States by the late 1850's, returned from a tour of the Middle East in 1870 and began the design of his home. He turned over its management to his son Louis in 1891. The interpretive period of the house is from 1891, when Church considered work on the house to be essentially complete, to 1900, the year of his death.

Works that were displayed during Church's lifetime thus remain on display on the public tour floors. These include paintings by Sanford Gifford, Martin Johnson Heade, and a number of old masters, as well as many by Church himself. Loan of these items is often restricted in order to present visitors to Olana with a complete impression of the Churches' home. Most of the works on paper we have loaned in the last three years are from the collections in storage.

The collections concerned in this proposal comprise individual works of art on paper by Frederic Edwin Church, and by other artists, in the David C. Huntington Archive of Olana State Historic Site. Please see Appendix 4 for further discussion of this collection.

These comprehensive and largely unseen collections document Church's development as an artist. There are a large number of early works of the 1840's, along with mature works of the 50's through 70's, and a number of late works in the 80's and 90's. Church recorded his observations of nature, imaginary scenes, and sketches for larger works. A large number of works, particularly those in graphite, document the Church family's travels throughout the world, from Mexico to the Middle East to South America.

These collections were leafed through, pondered, and enjoyed by the Churches and their guests over the years. As with most works on paper, they remain best enjoyed in a more intimate environment. Dr. Karen Zukowski, author of "The Historic Furnishings Report for Olana State Historic Site: A History of the Interiors, Thoughts on their Significance, and Recommendations for Their Restoration" (Olana's furnishing plan), surmises that many sketches were probably stored in print cabinets in the family rooms.

The stencils and the architectural sketches are especially personal. As Olana has often been called Church's last great work of art, the evidence of his design process is of particular interest. Included are both experimental sketches of possible designs, as well as careful renderings of details and facades considered by Church for his home. The group of stencils includes the actual pounce patterns used to decorate the interior and exterior of Olana itself. Church wrote in 1871,

> "...having undertaken to get my architecture from Persia where I have never been — nor any of my friends either — I am obliged to imagine Persian architecture — then embody it on paper..."

These works provide a record of Church's deep involvement with the design and embellishment of his and his wife Isabel's home. In this late period of his life, he drew together many disparate artistic influences. These culminated in a Persian style that reflected not only the couple's extensive travels to foreign lands (including the Middle East if not Persia itself) but also, according to Zukowski, their sense that the family's own Christian faith originated in these countries.

The collection also includes a group of roughly 350 "Melbye/Pissarro" works: graphite and ink drawings, watercolors, and oil sketches. Five drawings are signed by Camille Pissarro. The rest are currently being studied for attribution. Fritz Melbye, a Danish artist, met and traveled with Pissarro between 1851 and 1854 in the Caribbean and in Venezuela. Pissarro returned to Europe and Melbye traveled to New York, where, according to Dr. Zukowski, it is likely that he met Church. Melbye traveled widely, and it is thought that before he visited China in the late 1860's, he left some of his belongings, including these drawings, with Church in New York. After Melbye died abroad, the sketches were probably brought by Church to Olana in 1889, after he closed his New York studio.

The Huntington archive also includes over 500 drawings and prints by other artists including Benjamin Coe, Richard Morris Hunt, and Calvert Vaux. Most of these were collected by Church, who favored prints by American artists and those after old masters. A few are later additions made to the collection during its administration by New York State Parks.

The collections to be preserved in this proposal are relevant and of interest to the local, regional, national, and international community, since they are largely unique works by prominent 19th century American and European artists. We have loaned works on paper from Olana to the following institutions in the last four years alone.

Clark Art Institute/Walters Art Gallery/Mint Museum, *"Noble Dreams, Wicked Pleasures: Orientalism in America 1870-1930"*, 2000-2001
Berry Hill Gallery/ Terra Museum of Art/ Portland (Oregon) Art Museum/ Portland (Maine) Museum of Art, *"In Search of the Promised Land: Frederic Edwin Church and Exploration"*, 2000-2001
William A. Farnsworth Library and Art Museum, *"Inventing Arcadia"*, 1999
Montclair Art Museum, *"Panorama of Pilgrim's Progress"*, 1999
Dallas Museum of Art/Corcoran Gallery/Clark Art Institute, *"The Painted Sketch"*, 1998-1999
Parrish Art Museum, *"The Tenth Street Studio Building"*, 1997
The Jewish Museum/Lilienfeld House, *"Camille Pissarro in the Caribbean, 1850-1855"*, 1996-97; and
The Albany Institute of History and Art, *"The Pissarro-Melbye-Church Connection"*, 1997

We are currently committed to loan several works on paper from Olana to the Tate Gallery/ Haus der Kunst, Munich/ Institute of Fine Arts, Minneapolis, for the exhibit *"American Sublime"* (2002-2003).

The project is relevant to the missions of all three sponsors. The mission of *Olana State Historic Site* centers on the preservation of works by Church and "materials relating to his vision for the property". The mission of the *New York State Office of Parks, Recreation, and Historic Preservation*, the site's parent organization, is to "provide safe and enjoyable recreational and interpretive opportunities for all residents

and visitors and to be responsible stewards of the state's valuable natural, historic, visual, and cultural resources". The mission of the *Friends of Olana*, a private not-for-profit support group for the site, is to advocate for and support the conservation, preservation, development, and improvement of Olana and its integral viewshed, and to encourage and support scholarly research and public programs consistent with the site's mission. The collections policy of Olana State Historic Site specifies the acquisition of objects which relate to the lives and careers of Church and his immediate family; objects which relate to the history of the property and its design; and works which relate to the Hudson River School and the artistic milieu of the nineteenth century.

The works on paper to be rehoused under this grant occupy an exclusive niche within these extraordinarily intact collections – the landscape, the structures, and the extensive furnishings of the family's home - which together document all aspects of the painter's life. These collections inform us of Church's predisposition as a collector, as a shaper of taste, and as an exemplar of his age's taste.

3. How does the project relate to your museum's ongoing conservation activities?

Olana has recently achieved notable success in securing funds for preservation. In FY 1999/2000 $1.7 million in state funds was awarded to Olana for exterior restoration. An additional $1 million in federal appropriations was awarded to OPRHP in 1998 for design and feasibility studies for the new museum building. The Friends, and the Luce, Getty, and Andy Warhol foundations supplied funds to complete the site's historic structures report in FY 1996/1997. Please see Appendix 3 for further details.

Conservation activities for Olana State Historic Site are planned and implemented jointly by site, regional, and PIRC staff (see Organizational Chart, Appendix 1), with the generous support of the Friends of Olana. The Friends fund a full-time curator, Evelyn Trebilcock. In addition, Friends have supported summer interns and third-year conservation program interns, who work either at Olana, under the direction of the curator, or at PIRC, under the supervision of PIRC conservators.

Preventive collections conservation activities are paramount. Olana curatorial staff, assisted by interns, have reorganized and rehoused most of the 10,000 documents comprising Olana's archival and photographic collections. They have produced the first-ever finding aid for the site's 40,000-piece archival collection. The curatorial staff also carries out ongoing pest and environmental monitoring, crucial activities in an historic structure. PIRC conservators have provided historic housekeeping training to Olana staff who carry out this essential function.

Conservation surveys and treatment of artifacts at Olana have been ongoing since the state acquired the site in 1967, a few years before the PIRC conservation labs were established. In 1999 alone, PIRC conservators and collections management staff provided 2055 hours working with Olana collections. Artifacts are chosen for treatment by curatorial and conservation staff. They make their selections consulting surveys and the Furnishing Plan, which describes the disposition of artifacts on the tour floors at Olana.

The PIRC conservators also prepare works from our collections for loan to other institutions. Most of these are requests for Church drawings; 57 works on paper have been loaned since 1996. Works are approved for loan by the PIRC Collections Committee, which relies on input from curators and conservators in making its decisions.

In 1992, an in-house CAP report (see Appendix 2 for summaries) was completed by a PIRC conservator and a PIRC building conservation specialist. A CAP follow-up team was formed after an in-house symposium. See Appendix 3 for a more comprehensive review of conservation activities at the site, including CAP/LRPP recommendations and accomplishments to date.

The Olana archive includes those works on paper that are not displayed since they are outside the period of interpretation. The CAP identified the survey of this collection as a priority, and it is an ongoing project for

the PIRC paper conservator. The data from this survey (see sample, Appendix 7) reinforced the CAP recommendation that Olana's art on paper in storage is in need of rehousing and provided the information needed to calculate rehousing needs. This IMLS CPS proposal, if funded, will permit us to address the last major remaining preventive conservation need for Olana's collection.

4. What are the anticipated benefits of this project?

The chief benefit of this project will be improved storage conditions for the collection. Sturdier folders will enable staff and researchers to handle the works in a safer manner.

The present storage system includes folders that do not sufficiently support their contents. 67% of the works surveyed required more sturdy housing. The random folder sizes mean that the folders slide readily in the boxes during movement. Some of the brittle supports have suffered. In addition, many items are in folders constructed of folder stock taped together with cloth tape. The ripples that have developed in many of these folders have in some cases transferred to the drawings. We have observed problems with the oil media, including flaking due to inherent instability and perhaps to unnecessary flexing of the lightweight folders. We have also seen flattening of heavy impasto, possibly due to the weight of the stacked, foldered oil sketches. All of these damaging conditions will be alleviated with new housing.

Requests to use the art on paper collections range from scholarly research requests, to reviews for potential loans, to reviews for interested supporters and potential donors. In 1999, 52 requests were accommodated. Researchers are closely supervised by staff, who handle each item. Most of the collection has been photographed, and photographs of the roughly 500 architectural drawings and stencils will aid all aspects of collections management and public service.

5. How will the applicant ensure that ongoing museum functions are not inhibited by these project activities?

Because the project will be conducted at PIRC and not at Olana, minimal Olana staff time is required and no disruption of the site's activities would occur. PIRC staff regularly schedule work with Olana, along with the other state historic sites and parks.

We propose to hire a conservation technician to undertake the task of transferring the drawings, prints, and sketches and constructing sink mats. This individual will be trained and supervised by the PIRC Paper Conservator Marie Culver, who usually spends between three and six weeks per year working with Olana's collection. Assistant Painting Conservator Mary Betlejeski works on special projects for all the historic sites. Collections Manager Anne Cassidy usually spends between two and four weeks per year working with these collections.

6a. What are the proposed conservation methods and why are they conservationally sound?

The proposed custom folders, to be provided by Archival Products, are of buffered stock that is heavier than normally available. This material was chosen because lighter materials do not provide sufficient support for these works.

The use of sink mats is fairly standard in the housing of works on paper. The proposed construction is to use the heavy folder stock used for the other folders, and to insert a collar/sink of buffered corrugated card. The sink will be attached with double-sided tape. The works of art will be secured with Japanese paper and wheatstarch paste hinges, or with paper, Mylar, or Goretex © corners, as appropriate.

Glassine has been selected as an inner folder material because the friable nature of the graphite drawings requires an exceptionally smooth surface. Its near transparency is convenient for both site staff and researchers.

We originally considered rematting the entire collection. However we have found that during storage, some of the drawings which are already hinged and matted expand to such a degree that they buckle, and rematting is necessary. Though this phenomenon occurs only occasionally, it is unpredictable. Therefore it was felt that the drawings should only be hinged as needed for loan and exhibition.

7. How does the project budget support the project goals and objectives?

The survey of nearly half of the collection to date indicated that 67% of those items surveyed required better housing. In order to reorganize storage into standard size folders, it was necessary to rehouse the entire collection.

The figures for materials were obtained directly from the vendor using the sizes of artifacts provided by PIRC's collections management records. Job listings and benchmarking other institutions permitted us to establish a competitive salary for the conservation technician's position.

8. What are the qualifications of the project personnel?

Marie Culver, PIRC Paper Conservator for nine years, will serve as the project director. She holds a Master's and certificate in conservation from the Cooperstown Graduate Program in the Conservation of Historic and Artistic Works (1983) and a Certificate of Advanced Study from the Fogg Art Museum (1984). She is a Professional Associate of the American Institute for Conservation.

Mary Betlejeski, PIRC Assistant Paintings Conservator, has been with PIRC since 1991. Her duties include the examination and treatment of paintings, supervision of interns, and responsibility for collection surveys. She received a Master of Arts in the Conservation of Easel Paintings from Gateshead Technical College, Gateshead, England, in 1990. She is a member of the International Institute for Conservation and continues her education by attending workshops and seminars in conservation.

Anne Cassidy, PIRC Collections Manager since 1994, served for 12 years prior to that as the Supervising Curator. She manages loans and the movement of collections throughout the historic site system, and supervises assistants and interns. Ms. Cassidy holds a Master of Arts in Early American Culture and Decorative Arts from the University of Delaware (1981).

Rich Clauss has been PIRC Photographer since October 1999 and provides documentary photography of collections for Collections Management and all PIRC conservation labs. He studied at SUNY New Paltz and Oswego, and has twenty-five years' experience as a professional photographer.

The Conservation Technician would be hired with grant money. A position advertisement is attached in Appendix 5. We have worked successfully in the past with pre-conservation program interns from nearby colleges, including Bennington College, Union College, Skidmore College, and SUNY-Albany. The position may be advertised locally, with AIC, and with other regional conservation labs.

Evelyn Trebilcock, Olana Friends Curator, holds a Masters in the History of Decorative Art from the Cooper Hewitt Masters Program, and a Post Graduate Diploma in Works of Art from Sotheby's Educational Studies. She directs all work involving collections and historical research –acquisitions, exhibitions, loans, conservation, storage - and supervises the site's Curatorial Assistant and the Librarian/Archivist.

ed ıle of Completi MLS Conservati Support 200 Olana State Historic Site

	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept
Task 1												
Task 2												
Task 3												
Task 4												
Task 5												

T· Tecl (ha fe dra to fo de lect ıanager an· ollec ge port

T· Assi ıta servato ırveys etches an· tectural dra gs for edi ıdi

T· ıotograph ho graphs arch tectura dra gs an· sten ils.

T ımè) constructs ık ats with instruc on an assistance from paper onserva tor/pr jec :or.

T· (half ape tor hi ge orks nk mats

Project Budget Form

SECTION 3: SUMMARY BUDGET-CP AND EDUCATION COMPONENT

Name of Applicant Olana State Historic Site

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES (PERMANENT STAFF)		$19,338	$19,338
SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)	$12,000		$12,000
FRINGE BENEFITS	$3,500		$3,500
CONSULTANT FEES			
DOMESTIC			
FOREIGN			
SUPPLIES & MATERIALS	$6,945	$7,236	$14,181
SERVICES			
OTHER			
TOTAL DIRECT COSTS	$	$	$54,658
INDIRECT COSTS*	$	$ 8,199	$ 8,199

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ 62,857

AMOUNT OF CASH—MATCH $7,236

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $33,176

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 40,412

AMOUNT REQUESTED FROM IMLS $ 22,445

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM MLS (MAY NOT EXCEED 50%) 36 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☑ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Scurry County Museum
Texas
Environmental Improvement

1. **What is the design of the project?**

The proposed grant project seeks to upgrade storage conditions for 1767 items which are on or in wooden housing in the Scurry County Museum's collection storage room. The grant period will extend from June 2001 through August 2002.

Throughout the Conservation Assessment Program report, the need for new steel shelving and the rearrangement of the storage room was cited. Twenty-eight years ago when the Museum was built, well-intentioned volunteers installed wooden shelves. Artifacts consisting of glass, metal, paper, and composite materials were placed on the shelves. In some cases, acid-free paper was used as a buffer. Textiles were placed in wooden cabinets which were lined with muslin. Large documents and maps fared better because they were placed in a steel map storage case. Identification, classification, and inventory upkeep were the main concerns of volunteers and museum employees working with the collection over the past two decades.

With the recordkeeping issues well addressed, attention has turned to the conservation of artifacts. The CAP and MAP II reports are guiding the conservation efforts. Specifically, the first Medium Term CAP recommendation is being addressed through this proposed storage room rearrangement. IMLS Conservation grant funds will be used to purchase metal storage shelves to replace the current wooden shelves and cabinets. Acid-free boxes, acid-free tissue, and an inert polyethylene foam for lining shelves will be purchased also.

Step One in rehousing will consist of ordering the metal shelving units and the previously mentioned materials. The curator has carefully measured the room's floor space and ceiling height and determined that sixteen units will be sufficient to rehouse the items currently in wooden drawers or on wooden shelves in four areas of the collection room (floor plan in Appendix).

Step Two is a systematic plan of removal, assembly, re-packing, and rehousing. The plan has been devised for each area by the curator and director after detailed measuring.

In Area 1, large wooden drawers with textiles in Units 1-4 on the north wall will be removed by local prison inmates and placed in the curatorial processing room on tables. The drawers will be covered first with cotton sheets and then with polyethylene sheets to prevent any dust from settling on the items until the workshop trainees re-pack the textiles within the week. Next, the inmates will remove the old wooden Units 1-4 and assemble and install the new metal ones. Once the new shelving units are ready to be filled, the conservator, curator, and workshop trainees will examine, record conditions, refold and re-pack the textiles. Then the acid free boxes with textiles will be set on the shelves. This is the only section to be reorganized by the workshop trainees as described below. Area 1 is the primary area which needs rehousing and contains the most delicate artifacts. Both the curatorial processing room and collection room are off-limits to the general public.

The second major area to be reorganized, Area II, will be the wooden shelves containing books. Three phases are planned for this area. Initially, two sections in the southwest corner will be freed of books by the curator. The books will be placed in the curatorial processing room on tables. The wooden shelving will be removed and hauled outside to dumpsters by the inmates. Next, new metal shelving units will be assembled and installed by the inmates. Finally, the books will be placed on the new shelves by the inmates who will be supervised by the curator. This work pattern will be repeated two more times and will extend over a six-week period.

Area III contains one very large upright wooden unit with eight drawers of textiles and lighting devices. The large drawers will be removed and placed in the curatorial processing room by inmates. The curator and a museum volunteer will examine the objects, prepare condition reports, and re-pack the items into acid-free boxes which will be set on the newly-installed metal shelves.

Area IV currently consists of wooden shelves on which are placed glass, ceramic, and composite artifacts. In this area, the curator will remove the items into the curatorial processing room, examine them, and re-pack them according to the conservator's instructions. While this is being done, the inmates will remove the old wooden shelves and assemble and install new metal shelving units. The inmates will carry the newly-packed boxes and place them on the shelves.

Because the Scurry County Museum has only two and a half staff members, outside assistance is necessary in order to implement and complete this project. Inmates are carefully selected for their community service work and highly monitored during the work. Four men with an interest in history and some construction skills will be sought from a population of 1,200 inmates. The Museum has used inmates before and found them to be very reliable and conscientious.

Step Three in this project addresses the three and a half day conservation repacking workshop led by conservator Mary Frederickson. During the first day, Ms. Frederickson will focus her remarks on analyzing the individual object and designing a storage component for it. On the second day, Ms. Frederickson will work with attendees on re-packing the textiles in Units 1 – 4. By the close of the workshop, textiles in ten of the twenty drawers within Units 1 – 4 will be rehoused. The second half will be completed within two months by the curator and a volunteer.

Scurry County Museum staff members and volunteers from six small Texas museums within a 75-mile radius, will constitute the workshop trainees. Since these six museums and the Scurry County Museum are the only museums in their respective counties, they engage in cooperative efforts to share information among their one and two person staffs and volunteers.

Ms. Frederickson believes the regional museum staff members/volunteers constitute the best labor resource for implementing the finer details of this project. She has rehoused a collection for the National Park Service in Florida by using a training program/hands-on approach, and feels these steps are suitable in rehousing the Scurry County Museum's collections. The training guide which Ms. Frederickson assembled for the Park Service will be used. A $150 stipend will be given to the six participating museums to cover travel and per diem expenses. Samples of materials used in the training will also be provided in a kit. This will enhance collection care efforts at the six small museums.

Approximately 5% of the museum director's time during the 13 month grant period would be spent attending the on-site workshop and overseeing the grant's administrative details, such as budgeting and reporting. The Museum's office manager will devote 5% of her time throughout the 13 months of the project to ordering supplies, preparing kits for the workshop participants, and doing the accounting associated with the reports.

The rehousing project has been scheduled from June 2001 through August 2002.

2. What are the objects that are the focus of this project?

The following summary identifies the categories and numbers of items which will be rehoused in this project. Although the Scurry County Museum's categories are used, they fit within the five types of materials selected for Item 17 on Page 8.4 of the Application Form.

APPAREL: Clothing, 380 items, the first acquisition of the Scurry County Museum was a gift of clothes. Most clothes are homemade, and the majority of women's clothes is from pre-World War II. Headgear, 225 items, ranges from Stetson and other Western hats, military caps, women's hats to sunbonnets. Footwear, 112 items, consists of silk stockings, bootees, wedding shoes, and a pair of cowboy boots, worn by an area woman, who, with her sister, both unmarried, managed a family ranch until they were both into their 80's. Personal Accessories, 170 items, added to the comfort and well-being of their owners and include six men's pocket purses, a Victorian travel mirror, and 1895 gold pocket watch, and a lap robe, used in horse-drawn vehicles, ca 1910.

HOUSEKEEPING and HOUSEHOLD ACCESSORIES, 130 items, focus on crocheted doilies, flour and feed sack linens, a hand-operated washing machine, twin laundry tubs, and irons.

BEDDING, 64 items, contains mostly 50-100 year old quilts, coverlets, and hand woven bedspreads. A crazy patch quilt has a campaign ribbon sewn from the Cleveland/Thurman Campaign of 1888.

PACKAGES and CONTAINERS, 195 items, are linked with 1930's-50's hatboxes, 1920-92 pharmaceutical bottles/boxes, a box with vulcanized patches for repairing a tire, sewing needle cabinet, a glass Crisco jar from World War II era, and a 1950's Swanson Meat Loaf Frozen Dinner box.

RECREATION, 245 items, contains purchased and homemade toys. Among the latter are sock dolls made for underprivileged and sick children by deceased county resident, Mrs. Murphy.

BOOKS and PAPERS, 1,000 items, contain textbooks, business ledgers, and home demonstration yearbooks, 1948-1970.

Relevance to the Museum's overall collections: The items being rehoused constitute 39% of the Museum's collection of 4,500 items. They were selected because of their location on or near wood. The conservator in her CAP report recommended that these artifacts be given priority rehousing. Items range from delicate handwork to local business ledgers.

Relevance to the institutional mission: The items have been collected on the basis of relationship to the region's history, object's condition, and its potential usage. These 4,500 items support the Museum's mission to collect and preserve local history items. By rehousing them, the Museum will more effectively use the existing storage space and in fact, have space freed up for future donations.

Relevance to the local, regional, national or international community: Since most of the collection consists of items that were used by the donors' families, they demonstrate a way of life which was rural and remote until World War II. The bulk of the collection was donated between 1971 and 1979, when the Museum was beginning and in good condition.

The collection has evolved from two sources. The 3,000 ranchers and farmers who lived in the County before the 1948 Oil Boom are prone to give artifacts from before 1948. Those 15,000 individuals who came after 1948 are inclined to donate post-Oil Boom items. Interest in local history has been renewed since two new industries (state prison unit and textile plant) have moved to the area. During the past three years, as the museum has revitalized itself along with the community, staff members have taken steps to educate the public about the collections and conservation measures needed in caring for artifacts and documents.

3. How does the project relate to your museum's ongoing conservation activities?

When the Museum was built in 1973, the collection rooms were purposely planned below ground level because of the region's greater potential damage from tornados and high winds rather than ground water. The MAP II surveyor commented "the below ground storage is a good idea for this area." There are no windows. In spite of being in an area known for dust storms, the collection rooms remain dust free because of their location. The door to the lower level and all doors within the collection areas are kept locked, with only the curator and director having keys.

During the 1980s, conservation work on two military uniforms was done by conservator Mary Frederickson. Because conservation work is highly technical, only general collection maintenance is undertaken by the curator who identifies problem areas for conservation. One such area, textile rehousing, had previously been identified by Ms. Frederickson. In 1997, the curator rehoused thirty-two larger textiles after obtaining funds from the Texas Historical Commission.

To address conservation activities, the Scurry County Museum staff members have utilized the latest Accreditation Report, the MAP II report, and the CAP report. These have guided the Museum staff during the past four years.

Upon receiving the CAP report, the five "Immediate General Project Recommendations" were acted upon. The pump area in the basement has been cleaned and a safety dam installed (Goals 1 and 2). Fire extinguishers have been inspected and identified (Goal 3). New safety equipment has been purchased (Goal 4). Material Safety Data Sheets have been obtained for all items in the receiving room and storage areas, and they have been placed in a notebook in the workroom off the lobby and downstairs (Goal 5). Short Term Goals began to be addressed with the photographing of items in the collection. The environment is monitored daily with newly purchased equipment. The temperature and humidity levels remain fairly constant. Fluorescent lights are covered with UV filters and are on only when a staff member is in the collection room.

To fulfill CAP report's recommendation to make rehousing the collection a medium term (1 to 3 years) goal, this grant application is being made. This project will also address the short term goal of purchasing one metal storage cabinet/steel shelving unit per year.

4. What are the anticipated benefits of this project?

The results of this project will provide immediate and long term benefits to the Scurry County Museum, its collections, constituencies, and the museum field.

The orderly rehousing of a major portion of the collection under the guidance of a conservator by a group of trained museum staffers will ensure maximum protection of artifacts. The artifacts will be on steel shelves which are covered by polyethylene foam. This will insure that the overall environment

will be clean and stable. By rehousing these artifacts, more room will become available for new additions to the collection. We anticipate many artifacts coming into the Museum's collection before and during the re-planning of the main gallery.

As part of the rehousing, the condition of individual items will be noted. This will update the 1996 inventory and add validity to the ongoing photographic documentation.

The workshop component of this project will be useful to the rural West Texas museum community, especially to the four smallest museums which cannot afford to send staff members or volunteers to state and regional meetings. Information and personal guidance about rehousing collections will be beneficial to these museums embarking on long term collection care projects.

Further, the project will benefit the Scurry County Museum's constituencies by ensuring the preservation of and access to the collections. Because the Scurry County Museum is the largest and only professional one within a 52-mile radius, regional residents visit the Museum several times a year. They view the collections as a source of cultural pride. Hence, it is important to them that the collections which are used for exhibits are in good condition. The condition of objects will be extremely important as the Museum begins re-planning its permanent gallery in 2001 and evaluating which objects can be utilized in the new displays.

5. How will the application ensure that ongoing museum functions are not inhibited by these project activities?

The project will involve no interruption in the normal functioning of the Museum. Activities 2 through 28 will be executed in areas that are not open to the general public. The collection rooms on the lower floor are located east of the workroom, and the workroom provides direct access to the freight elevator. On the first floor, there are two exits from the elevator, one into the receiving room and one to the outside.

Activities 1 and 29 will be incorporated into the office manager's daily routine. The reporting activities, Activities 30 and 31, will be included as part of the director's daily work. Activities 5 and 6 will be scheduled into the Museum's programming schedule which includes at least one workshop per year on some aspect of museum operations. Further, the workshop participants will expedite the curator's work for the remainder of the project on Units 1 -- 4, Activity 6. The Museum is committed to preserving the collections by following the recommendations made in the CAP report and pursuing funding for collection care.

6. What are the proposed conservation methods and why are they conservationally sound?
This project is designed to improve the environment in which the collections are stored. By installing steel shelves and using acid-free boxes and tissue, as well as inert polyethylene, the objects will have maximum protection from accidental damage by individuals in the collection room and will afford better accessibility during inventory and during the evaluation of objects as exhibits change.

All training materials have been used at a previous workshop where the goals were to train outside museum personnel so that they could assist in rehousing an entire museum's collection. Trainer Mary Frederickson has prepared a guidebook which she will use. Also, samples of materials used in the rehousing project will be distributed in a kit to the trainees. These trainees will be recruited from the six small Texas museums within a 75-mile radius of Snyder which have agreed to send one or

more staff members or volunteers to this training opportunity. They will carry the information with them and use it as they address their own institution's conservation issues.

Mary Frederickson has been an instructor for the Winesdale Seminar since 1982 and has conducted numerous training sessions for the National Park Service, IMLS, and state agencies. Further details regarding her qualifications appear in Section 8.

7. How does the project budget support the project goals and objectives?

The project budget was developed by the museum staff members in consultation with the conservator, who prepared the Museum's CAP report. She also recommended a more cost effective supplier for the needed shelving. All budgeted items reflect the current 2000 catalogue prices.

Matching funds were determined by the director. The in-kind matches reflect the use of staff, volunteer labor from inmates, and peer labor from those attending the workshop/hands-on training. The cash match will come from the Museum's operating budget and through a private foundation award.

8. What are the qualifications of the project personnel?

Mary Frederickson's firm provides consultations for the conservation and care of collections and contracts for conservation and restoration work for art and artifacts. In addition, Ms. Frederickson conducts condition surveys, long range planning for collection care, and specialized training workshops for museum personnel. Since 1992 she has been a roving conservator for the National Park Service, Southeast Region. She was selected by The Smithsonian Institution in Washington D.C. to teach conservation in Brazil. Further recognition for "exceptional contributions to the United States Government and the museums of this nation" came from the Institute of Museum and Library Services.

Sue Goodwin, Curator, started work at the Scurry County Museum in 1985 as a volunteer/part-time employee, and in 1992 joined the staff full time. Since then, she has coordinated the grant-funded rehousing of large textiles, inventoried the collection every three years, supervised the photographing of individual items within the collection, identified items needing further documentation, presentation or deaccessioning, and maintained daily records of curatorial activities. Her work has enhanced the overall collections, storage, environment, and access. She has worked with State Historical Commission staff members, Permian Basin Museum Association members, and two consultants (MAP II and CAP). In 1999, she was a member of the National Endowment for the Humanities Consultation grant team to refocus the themes and interpretation in the Museum's main gallery. Ultimately, this project will rest upon what objects the Scurry County Museum has and how it can care for what is donated or purchased for the humanities focused gallery. This IMLS conservation grant will enable the Museum to address the collection care issues for current and future artifacts.

IMLS Conservation Support Grant

Schedule of Completion

	2001							2002			2002	
Plan of Work	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May
Activity 1: Order Supplies, Office Manager	x											
Area I Units 1-4												
Activity 2: Remove drawers from Units 1-4, inmates	x											
Activity 3: Remove old wooden units, inmates	x											
Activity 4: Assemble new metal shelves, inmates	x											
Activity 5: Conduct workshop conservator & trainees	x											
Activity 6: Examine & repack drawers into acid free boxes, conservator, trainees, curator, director	x	x										
Activity 7: Shelve boxes, trainees, curator	x											

IMLS Conservation Support Grant

Schedule of Completion

	2001						2002					
Plan of Work	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May
Area II Units 5-10												
Activity 8: Remove books from Units 5 & 6, curator			x									
Activity 9: Remove wooden shelves, inmates			x									
Activity 10: Assemble & install steel shelves, inmates			x									
Activity 11: Place books on new shelves, inmates			x									
Area II Units 7-8												
Activity 12: Remove books from units 7 & 8, curator				x								
Activity 13: Remove wooden shelves, inmates				x								
Activity 14: Assemble & install steel shelves, inmates				x								
Activity 15: Place books on new shelves, inmates				x								

IMLS Conservation Support Grant

Schedule of Completion

	2001							2002				
Plan of Work	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May
Area II Units 9-10												
Activity 16: Remove books from Units 5 & 6, curator						x						
Activity 17: Remove wooden shelves, inmates						x						
Activity 18: Assemble & install steel shelves, inmates						x						
Activity 19: Place books on new shelves, inmates						x						
Area III Units 11-12												
Activity 20: Remove drawers, inmates								x				
Activity 21: Remove wooden cabinet, inmates								x				
Activity 22: Assemble & install new steel shelves, inmates								x				
Activity 23: Examine & repack textiles & light devices, curator, & volunteer								x	x			
Activity 24: Replace artifacts in boxes & on shelves, curator & volunteer								x	x			

IMLS Conservation Support Grant

Schedule of Completion

	2001							2002				
Plan of Work	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May
Area IV Units 13-16												
Activity 25: Remove artifacts, curator/ volunteer											x	x
Activity 26: Remove old shelves, inmates											x	
Activity 27: Examine & repack artifacts, curator & volunteer											x	x
Activity 28: Reshelve repacked artifacts, curator & volunteer												x
Entire Project												
Activity 29: Monitor grant money, office manager/director	x											x
Activity 30: Prepare semi-annual report, director							x					
Activity 31: Prepare final report, director												x

IC-10139

Project Budget Form

SECTION 3: SUMMARY BUDGET - CP AND EDUCATION COMPONENT

Name of Applicant Scurry County Museum

IMPORTANT! READ INSTRUCTIONS IN PART 4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	MATCH	TOTAL
SALARIES AND WAGES (PERMANENT STAFF)		7,025.12	7,025.12
SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)		1,600.00	1,600.00
FRINGE BENEFITS		505.81	505.81
CONSULTANT FEES	2,000.00		2,000.00
TRAVEL: DOMESTIC	474.12		474.12
FOREIGN	-		
SUPPLIES & MATERIALS	8,434.04	-	8,434.04
SERVICES		1,330.00	1,330.00
OTHER		1,500.00	1,500.00
TOTAL DIRECT COSTS	$ 10,908.16	$ 11,960.93	$ 22,869.09
INDIRECT COSTS*	$	$ 4,573.82	$ 4,573.82

* *If you do not have a current Federally negotiated rate, your indirect costs must appear in the Match column only.*

TOTAL PROJECT COSTS $ 27,442.91

AMOUNT OF CASH—MATCH $ 1,500.00

AMOUNT OF IN-KIND CONTRIBUTIONS—MATCH $ 10,460.93

TOTAL AMOUNT OF MATCH (CASH AND IN-KIND CONTRIBUTIONS) $ 11,960.93

AMOUNT REQUESTED FROM IMLS $ 10,460.93

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS (MAY NOT EXCEED 50%) 39.7 %

Have you received or requested funds for any of these project activities from another Federal agency? *(please check one)* ☐ Yes ☐ No

If yes, name of agency _____ Date _____

Amount requested $ _____

Education Components

Application Narrative--Education Component
Nebraska State Historical Society, Archeology Division
Archeological Records Collection Project

---

1. What is the design of the education component?

- *project activities in detail, goals and objectives of component and how they will be met*

The education component for this project will involve the writing and publication of a booklet on the importance and care of archeological records collections. The booklet will provide the basic information pertaining to archeological document handling and storage. It will be written in a reader-friendly format. We envision utilizing illustrations to contrast good and bad storage environments and to illustrate examples of archeological documents. The topics to be covered in the booklet can be broken into the following chapters and appendices:

- Chapter 1 Why are archeological records important?
- Chapter 2 What are the types of archeological records?
- Chapter 3 How should I prepare and care for these records?
- Sources for additional information
- Tear-out response card

- *amount of time staff and consultants will spend on the project*

The project staff include the Archeology Registrar (20% time), and the Chief Conservator from the Ford Conservation Center (15%), an Exhibits and Design Services graphic artist (25%), and the Associate Director of Research/Publications (1%). We will be using the Nebraska State Historical Society's artist for layout and the Associate Director of Research/Publications for editing.

- *why your schedule of completion is appropriate*

A published booklet can be completed in five months. The Registrar will spend 12 days over three months to write the booklet with contributions from the conservator on the conservation section for records care. One months of time is allotted for editing, design, and layout. Publishing will be done through the State Printing Office. Prior booklets printed by the State Printing Office for the Archeology Division have been completed within this time frame.

- *any intended products*

A booklet on the importance and care of archeological records collections that is integrated into an existing series of education outreach publications. The Division publishes booklets when funding is available on a variety of topics (see supporting document, *The Cheyenne Outbreak Barracks*).

- *how your education component relates to your conservation component*

The booklet will discuss the importance of archeological documentation and its preservation.

2. What are the anticipated benefits of this educational project?

- *relevance to the museum's audience*

Hopefully, the booklet will inform those responsible for archeological collections of the importance of documentation and the methods to care for the invaluable archeological records.

- *the outcomes of this project for your museum's general audience*

The booklet will serve as a reference for amateur and professional archeologists, students, and archaeological collection managers.

- *how the benefits will be used by your museum and disseminated to your audiences*

The booklet will be the next installment of the preexisting archeology publication outreach series published by the Nebraska State Historical Society. It will be disseminated to patrons who use our records and collections, to students, and the interested public. The booklet will be mailed to individuals requesting information on the care of archeological documents via the phone and Internet. We plan to mail copies to local museums, colleges and universities where archeology is taught, and known amateur collectors in Nebraska. Currently, we are unaware of any existing records on the preservation of archeological records collections (see supporting document).

- *potential for continuing the project after the planning period or after the initial implementation stage*

The booklets will become part of the Archeology Division education outreach series.

3. How does the project budget support the education component goals and objectives?

The costs for writing, editing, and design were determined from current salary figures. The publication and printing cost was determined from our last publication in the education outreach booklet series that was published in 1999.

4. What are the qualifications and responsibilities of the project personnel?

Jeannette Blackmar has graduate degrees in museum studies and in anthropology. She has worked for nearly two years at the Nebraska State Historical Society Archeology Division as the Archeology Registrar. Courses taken include archaeological collection management, conservation, museum management, and research administration. She has given lectures on the handling of archeological material, the care of artifacts in the field to both undergraduate and graduate students. She has written a summer fieldschool manual and archeological papers in peer-reviewed journals. Since 1995 she has presented papers at local and national conferences. She will be responsible for writing the booklet, selecting illustrations, and assisting with questions regarding layout.

Julie Reilly is the Associate Director and Chief Curator at the Ford Conservation Center in Omaha, Nebraska. Her responsibilities for this project include writing and planning illustrations.

Deb Brownson is employed by the Nebraska State Historical Society as a graphic artist and will provide layout and design. She will make arrangements with the State Printing Office for printing.

Jim Potter is currently the Associate Director of Research/Publications for the Nebraska State Historical Society. He will provide editing and assistance with copyright procedures.

Riverside Municipal Museum
California
Education Component

1. What is the design of the education component?

In 1988, the RMM received IMS funds [grant IC-80398-88] which brought three conservators on site to conduct limited surveys on the Museum's textiles and costumes, archival papers and furniture collections. In conjunction with this project an exhibition on object conservation and a conservation workshop were held. At the public workshop, specialist conservators presented information on object conservation. The public also brought in personal objects for individual assessments. The exhibition featured storage materials and methods to use in preserving family heritage objects. During the 1990s, programs such as the 1988 conservation workshop and exhibition were requested by members of the local community. In response (and in conjunction with the proposed conservation project), **the RMM is requesting IMLS support to hold a series of public conservation clinic/workshops and supporting exhibitions.**

Project Objectives

1. Specialized contract conservators will conduct **five clinics/workshops on conservation** of archaeological and geological objects [Tamsen Fuller], paintings [Carolyn Tallent], objects made of paper [Gloria Freel], textiles, costumes and baskets [Irena Calinescu and Cara Varnell] and three-dimensional objects [Robert McGiffin].

2. RMM curatorial, design and construction staff will mount **five small, temporary exhibits to coordinate with the conservator clinic/workshop areas of specialization.** These exhibits will present Museum objects that show the result of damage from water, pests, light and chemicals.

The series of five public clinics/workshops and corresponding changing exhibits will be scheduled during Phase I of the proposed conservation project (over a period of eight months from September 2001 - April 2002). The public clinic/workshops will be one-day seminars open to a general audience, free of charge, featuring presentations on the care and stabilization of objects. The workshop presentations will be made by conservators who specialize in the appropriate subjects. Each conservator will work with the relevant RMM curator on program content development (see Program Development below). Each program's audience will be encouraged to bring in items from their own collections [e.g. family heirlooms] in order to have the conservators make recommendations for their storage, use and/or stabilization.

The first two workshops on objects of paper and three-dimensional objects in October and November will be conducted by conservators who participated in the 1988 conservation project. In February 2002, a textiles, costume and baskets conservation workshop will be held; since it is expected that a large number of objects will be brought by the audience, this workshop will have two conservators. The workshop on conservation of paintings will be held in March, to be followed by workshop on archaeological and geological objects in April. These will be presented by conservators who would be conducting surveys of Museum collections under the proposed conservation project.

The RMM curatorial staff will work closely with design and production staff on the preparation and installation of the five small exhibits (see Program Development below). These exhibits will be coordinated with a specific conservator's presentation. The exhibit will display objects from RMM collections which illustrate different conservation issues. The impact of physical damage through light, water and insect pests will be presented for a variety of materials. Some of the content of the workshops will be illustrated by the RMM exhibitions. Museum objects will be exhibited that are relevant to each workshop topic. For example, paper artifacts that have been damaged by excess light and poor framing materials and other paper artifacts damaged by insects and rodents will be on exhibit at the time of the workshop on conservation of paper objects. In addition, an on-line version of each exhibit's content will be created for the Museum's web site (www.ci.riverside.ca.us/museum). The on-line exhibit will also feature information on other objects in the RMM collections, along with conservator's findings and recommendations for creating a proper environment for RMM holdings.

The six conservators will each be on site one day for their respective workshops. [Conservators Fuller and Tallent, who will conduct assessment surveys, will also participate in the workshops the Saturday following their survey of the Museum collections.] The estimated distribution of staff time for this education component: Curator of Education [24 days], Senior Curator of History [6 days], Curator of Anthropology [6 days], Curator of Natural History [6 days], Curator of Collections [6 days] Exhibits Designer [24 days] and Exhibits Carpenter [5 days].

2. What are the anticipated benefits of this educational project?

It is the mission of the RMM to serve as a community "center for learning". Thus the museum is well-placed to provide the general public with a demonstration of conservation techniques. Collaboration between the RMM and the conservators on these programs will likely result in roughly 50,000 people being served during the project period, as participants in the workshops or as visitors to the exhibits or the Museum web site. During calendar year 1999, more than 80,000 people visited the downtown museum and Heritage House, or took part in RMM programs, much of that total coming from the Fall and Winter months (the time frame for the proposed project). The RMM also has a strong track record in successful adult programming, with over 100 people attending an afternoon symposium on mountain lions (1999) and over 130 attending a day of antique appraisals (May, 2000) carried out by volunteer experts from the Butterfields auction house. Riverside is a community with a strong sense of history and is home to several National Register historic properties as a well as the National Historic Landmark hotel in the heart of downtown, the Mission Inn. No doubt the workshops and exhibits on object conservation will benefit staff members from the numerous small museums and historic

societies in the region. The RMM's success in the professional development area includes a recent workshop on collections management software (jointly hosted by the RMM and two other downtown Riverside museums), with over 30 professionals in attendance from throughout California.

This project will directly benefit RMM audiences, as conservators will give public presentations on preserving personal objects - a topic that has been requested by Museum audiences. One component of the Museum's Mission and the proposed LRCP is educational outreach: the series of workshops and exhibits held in conjunction with the conservation project would further the Museum's educational outreach for its collections as well as provide direct application for individuals. The educational project proposed by the RMM provides an opportunity for the public to learn about conservation and its important role in Museum collections as well as how they can apply conservation methods to their own objects. This workshop series would be a precursor for more in-depth workshops by professionally trained conservators on object conservation, for the benefit of the public as well as RMM staff.

The precise content and interpretive outline for the proposed exhibits and workshops will be developed as part of a schedule of design and planning meetings, following the RMM's Public Programs Development policies and procedures. The project's Program Development Team will include representatives of all the Museum's public service areas (Collections, Exhibits, Education and volunteers). As part of the development process, it is the responsibility RMM Curator of Education to ensure that programs are both appropriate to the Museum's audience and that they are evaluated with regard to their educational outcomes.

3. How does the project budget support the education component goals and objectives?

The RMM is requesting from IMLS $4,579 for a six month period to support the cost of services from the conservators for their roles in the education component. The Museum will match this with $14,196 from salaries and fringe benefits of project staff. The RMM total project budget is estimated to be $18,775. This sum includes conservator's fees, expenses, RMM staff time and benefits, plus the cost of supplies to be used in demonstration of proper methods in storage/stabilization of paper, textile and three-dimensional objects.

8. What are the qualifications and responsibilities of the project personnel?

RIVERSIDE MUNICIPAL MUSEUM STAFF

James Bryant, Curator of Natural History; B. A., Austin College; M.A.T., Univ. Texas-Dallas; will be natural history collection liaison; time commitment: 6 days.

Dasia Bytnerowicz, Exhibits Designer; M.S. Polish Agricultural University; Polish Stagecraft School; exhibits to accompany programs of the education component; time commitment: 24 days.

Brenda Buller Focht, Curator of Collections and Project Director; B. H. E., Univ. British Columbia; M. S., Iowa State Univ.; M. A., Ph.. D., Univ. Cal. Riverside; will direct conservation project, coordinate activities and be responsible for development of Museum long-range conservation plan; time commitment: 6 days.

Gary Ecker, Exhibits Carpenter & Restoration Specialist; B. A., Cal. State Fullerton; will work with designer to create education exhibits; time commitment: 5 days.

Marjorie Mitchell, Curator of Education; B. A. , Cal. State San Bernardino; will direct the educational component of project; time commitment: 24 days.

Chris Moser, Curator of Anthropology; B.A., M. A., Ph.. D., Univ. Cal. Los Angeles; will be anthropology collection liaison; time commitment: 6 days.

Vince Moses, Senior Curator of History; B. A., M. A., Baylor Univ.; Ph.. D., Univ. Cal. Riverside; will be history collection liaison; time commitment: 6 days.

CONSERVATORS

Irena Calinescu, B. A. Indiana University, M. A. SUNY-Buffalo; Professional location: Private practice; will conduct workshop on textiles & baskets; time commitment: 1 day.

Tamsen Fuller, A. B., Bryn Mawr College; Conservation of Archaeological Materials Diploma, The Institute of Archaeology, London; Professional Location: Private practice; will conduct workshop on archeological/geological objects; time commitment: 1 day.

Gloria Freel, B. A., University of Connecticut; M. A., Univ. Cal. Riverside; New England Document Conservation Center; Professional Location: Corona Public Library, Heritage Room Senior Librarian; will conduct workshop on paper objects; time commitment: 1 day.

Robert McGiffin, B. A. Syracuse University; M. A. Cooperstown Graduate Program, Art Conservation Center; Professional location: Private practice; will conduct workshop on on 3-dimensional objects; time commitment: 1 day.

Carolyn Tallent, B. A., Rice University; M. A. Art Conservation, University of Delaware/Winterthur Museum; Professional Location: Private practice; will conduct workshop on paintings; time commitment: 1 day.

Cara Varnell, B. A., University of South Florida; Certificate in Textile Conservation, Hampton Court Palace, Surrey, U. K.; M. A., New York University; Professional location: Private practice; will conduct workshop on textiles & baskets; time commitment: 1 day.

Science Museum of Minnesota
Minnesota
Education Component

EDUCATION COMPONENT NARRATIVE

1. What is the design of the educational component

We request funding from IMLS to develop additional conservation programs for in the Collections Hall Visible Lab relating to the bryophyte collection. The programming will include the production of 2-3 small tabletop exhibits relating factors of deterioration to the new moss collection, supporting videos and a web page.

In December 1999, the Science Museum of Minnesota (SMM) opened a new facility with five long-term exhibitions. One of these, the Collections Gallery, is a 6,000 square foot exhibit, displaying a changing sample of the museum's collections in a framework designed to stimulate visitors to think critically about the nature of collecting and collections, the cultural assumptions that underlie museum practices, and the process of constructing of scientific knowledge. Within this exhibit is a 275 square-foot Visible Lab dedicated to the preparation and care of collections and provides a space for the museum public to talk one on one with scientists and staff normally behind locked doors.

In 1982, SMM opened its first visible lab where museum science staff demonstrated preparation techniques on actual specimens, and discussed scientific research and collections with museum visitors. This approach was so successful that an extensive renovation of exhibition halls from 1989–1991 included construction of a visible lab in each hall. Collections conservation has been involved in programming from the beginning.

While we have found the visible labs to be highly popular public programs, they present several logistical challenges:

- The availability —and expense— of staffing them;
- Only a small group at a time has a good view of the activities;
- Key elements of many preparation activities and factors of deterioration can only be seen through a microscope;
- Many activities take longer than the public can view in at one sitting.

One solution to all of these challenges is to produce edited video reenactments of conservation activities that can be shown whether or not a staff member or volunteer is available. A scope can be used that can utilize a scope to project an enlarged image on a large screen visible to more people, and that can be edited to show activities that in reality take too long to be seen in their entirety in one viewing. For this grant we will focus on conservation issues.

GOALS AND OBJECTIVES

The primary goal of this project is to expand and enhance an already successful public program, making the best use of our strengths, talent and equipment. The lab is primarily a demonstration space where the public can get a taste of "behind the scenes" activities and come away with a better understanding of what caring for a collection entails. These are based on our long-range plan for informal science.

INTENDED PRODUCTS

- **Two table-top exhibits and related demonstrations** centered in the Visible Conservation Lab that help museum visitors to understand factors of deterioration ;
- **Two 3-5 minute videos** on factors of deterioration relating to herbarium collections (possibly on light deterioration, and on mechanical damage to be displayed at the visible lab as support for program.
- **Web page**, possibly interactive, relating to preservation of collections, particularly herbarium material, with links to other SMM web pages.
- **Training material** to be used for current and future volunteer training.

The tabletop exhibits that conservation has begun to develop are designed to be set on the counter top in the visible lab behind the window (6 feet long x 2 feet deep). (see Appendix). The general subject matter is the factors of deterioration as they relate to the museum's collections. The exhibits will rotate so that different exhibits will be out for public view at different times. They can be set in place at Conservation demonstrations will be conducted by trained volunteers in conjunction with the exhibit. The videos will be used when no staff are available to work in the lab.

The exhibits we propose to develop will focus on factors of deterioration directly relating to the bryophyte collection and other herbarium materials. Possible subjects include light deterioration, mechanical damage, infestation or the importance of using archival materials for storage. Equipment purchased with IMLS CP Grant IC-90020-99 will be used to create the three-video clips to be shown in the lab. For example, the video might show a time-lapse of light deterioration, or a macroscopic image of the structure of a moss specimen in pristine condition and after it has been crushed or abraded. The videos will also be used on the museum's Web Site. Training for staff and volunteer interpreters will focus on the primary topics.

PROJECT ACTIVITIES/WORK PLAN

May – August 2001	Planning and idea development
July – October 2001	Production of materials and program
October 2001	Volunteer and staff training (2 sessions, 3 hours each)
September – December 2001	Installation of the exhibits
January 2002 – April 2003	Analysis, review and refine programming

The schedule was developed in consultation with staff from other relevant sections of the museum including volunteer programs, exhibition and program development, and the video/web production team. The schedule also reflects time commitments of the conservator, manager for the visible lab, and collections manager.

2. *What are the anticipated benefits of this educational project*

Relevance to the museum audience

The exhibition and video production will:

- Raise awareness of museum collection issues by relating the collection, even something as seemingly specialized as the bryophyte collection, to audience day to day experiences.
- Show and demonstrate how moss has been used in various cultures, from current use of sphagnum in gardening to use as diaper materials in many native cultures. Use of lichen as dye will relate to one of our most popular and long running programs: fibers and dyes. This can lead to an examination of the chemistry of moss.
- Demonstrate factors of deterioration that affect this collection and relate it how to properly prepare and preserve personal dried plant collection. The ethics of collecting can be discussed.

The outcomes of this project for your museum's general audience

The proposed exhibits, demonstrations, and videos will enhance the audiences understanding of:

- collecting practices and collections care
- museum practices
- the factors of deterioration

How the benefits will be used by your museum and disseminated to your audiences

- Develop a more integrated training program for volunteer training – relating the new collection to already existing programming
- Expand the video library for the visible lab – more programming
- Add new temp exhibit and "quick response" exhibits to provide greater turn over, public exposure to more collections
- Disseminate through visible lab (programming, exhibit, video) and web

Discuss the potential for continuing the project after the planning period or after the initial implementation stage

All products described in this proposal are designed to be modular and reusable. The tabletop exhibits are modular and meant to be installed for a short period of time. They can be rotated out and stored for a time, then brought back to the exhibit floor when the subject matter is focused on again. They will be kept intact so that they can be reinstalled with a minimum of effort.

A video library on various subjects (conservation, factors of deterioration, collecting, interviews with scientists, relevance to science, bio diversity etc) is being built. These can be run at any time as an enhancement to the programming (static exhibits or active demonstrations) or when the lab is unoccupied.

The web page(s) will become a permanent link to the conservation page on SMM's web site.

3. *How does the project budget support the educational component goals and objectives?*

Cost factors involved in selection personnel, materials, equipment or scheduling

The project costs were determined in consultation with the Head of the museum's Exhibit Division and the Creative Director of the museum's Print Graphics Department, the two areas that will be most involved with the project. All costs

are for materials and for labor provided by project funded personnel. Cost for materials were estimated from catalog price lists and cost for labor and services are based on the salary rates for the appropriate museum personnel. All materials are standard for the type of products that we are producing.

The match will come from salaries of salaries of permanent staff working on the project.

4. *What are the qualifications and responsibilities of the project personnel?*

Gretchen E. Anderson, Objects Conservator, established SMM's Conservation Department in 1989. Her full bio can be found in question # 8 of the conservation project proposal. Anderson began her conservation training by working in SMM's first visible lab. In 1996 she had a lab built in the Anthropology Hall of the old facility and was responsible for programming it. She spearheaded the drive to have a visible lab to be used by the research and collections division in the new facility, which opened in December 1999 and was responsible for acquiring the video equipment and other enhancements to the program

Anderson will devote five percent of her time to providing photography for the exhibits and will be the primary liaison with exhibits staff.

Catherine Hintz has held the position of Collections Gallery Program Manager since the new gallery opened in December 1999. She is responsible for training staff and volunteers in the Collections Gallery and in the gallery's Visible Lab. All training includes background information from content experts and activities to encourage interaction with museum visitors. Hintz worked for nine years in the museum's education division and designed and wrote numerous grant-funded activity-based science curricula on topics including anatomy and physiology of the cardiopulmonary systems, the science of sound and music, and hot wheel physics. In her years in the education division, she worked with diverse groups including under-served youth, as well as gifted and talented.

She holds a BS in Technical Writing and Geology from Michigan Technological University and a teaching license from the University of Wisconsin. She is also a member of the National Science Teacher Association.

Hintz will devote five percent of her time to creating the educational components including volunteer training.

Zoo Atlanta
Georgia
Education Component

1. WHAT IS THE DESIGN OF THE EDUCATION COMPONENT?

The departments of education, research, and technology will develop a companion education program designed to inform visitors about issues facing gorillas in captivity and the wild and the role that zoos play in these issues. The education program will be located in a video kiosk located in the Willie B. Gorilla Conservation Center (the location of Zoo Atlanta's interpretive materials on gorillas). This education program will engage visitors in a learning experience about gorillas through the use of technology. The goals of the education project include: 1) developing a state-of-the-art video presentation to educate the public about gorillas in general; 2) developing video interactives that allow the public to act as scientists studying gorillas; 3) developing general educational materials about the IMLS conservation project on all-male groups that can be distributed with the interactive to zoos participating in the study for use at their institution.

Using an interactive kiosk, the visitor will select from topics about gorillas. These video vignettes will include: 1) situations facing gorillas in the wild, including habitat loss and commercial hunting; 2) situations facing gorillas in captivity, including the question of all-male groups; and 3) the scientific program at Zoo Atlanta and how it has contributed to improved management and knowledge of our animals and gorillas in general. Specifically, the kiosk will present the issue of all-male groups as a case study of captive management challenges, focusing on: 1) the switch in zoos from importing animals from the wild to developing a self-sustaining captive population; 2) the demographic changes which have followed this switch and have led to a more equal sex ratio and thus the need to intensively manage males; 3) the current situation with respect to all-male groups (numbers and predicted numbers for the future); 4) what data from wild gorillas tells us about all-male groups; 5) why scientific studies on all-male groups are needed and these studies are being undertaken through the IMLS Conservation Project.

The visitor may also participate in an interactive activity in the kiosk. Visitors will be walked through the basics of genetic management in captivity (i.e. studbook, mean kinship, family trees, founders etc) They will then be presented with the genetic information on several male gorillas (actual males represented in the captive population) and be asked to place them in either a breeding group or a non-breeding, all-male group based on their genetic information. Finally, visitors will be informed if their decisions were the best choice for the animals based on the current housing situations for these males. The second component of the interactive will allow visitors to access some of the data that are being collected through the Conservation Project. Visitors will be told how these data have been collected, how they are being compiled and analyzed, and how we hope to use the information. Visitors will compare data from several institutions that have varying social groupings (i.e. one zoo may have a group with a silverback while another does not) so that they start to see how these data might provide us with insights on managing male gorillas.

General education activities will be developed to incorporate into Zoo Atlanta's existing education programs. These activities and games will not require technology and will be geared towards grades four through twelve. These activities will be appropriate and available for the other zoos participating in the conservation study.

<u>Staff time</u>

1) Education staff: 28 hours per month during development
2) Technology staff: 50 hours per month during development
3) Research staff: 8 hours per month during development; 3 hours per month to keep behavioral information updated

4) Consultants: Research Engineer 64 hours, Research Associate 80 hours, Student assistant 160 hours.

Time Line
The project will require four months to develop and will start in May of 2001

Products
Products from the education component include: 1) a series of video vignettes displayed in Zoo Atlanta's interpretive center which will include general information on gorillas and Zoo Atlanta's role in gorilla research and conservation; 2) the above video and the accompanying text will be available to all zoos participating in the IMLS Conservation Project study; 3) an interactive activity which allows the public to learn about demographic management and behavioral research; 4) a publication assessing the use of video and the associated cognitive and affective gains; 5) general education activities related to the gorilla conservation project.

2. WHAT ARE THE ANTICIPATED BENEFITS OF THIS EDUCATION PROJECT?
Gorillas represent the largest population at Zoo Atlanta are a favorite among zoo visitors. Additionally, the gorillas are a focal point for much of Zoo Atlanta's educational programs. Traditionally, Zoo Atlanta has relied on graphical displays to provide the visitors with information on gorillas. However, research has demonstrated that zoo visitors spend very little time reading graphics (1). Instead, we believe that given the pervasiveness of technology in our society, that state-of-art technology should be a major component of our educational process. We recently refurbished our gorilla interpretive area with traditional graphics as well as videos and video-based interactives and informal evaluations show that these are among the most popular with zoo visitors.

In addition with providing visitors with state-of-the-art educational opportunities, Zoo Atlanta believes it is important to educate visitors about the high level of care that our animals receive, the amount of detail that goes into the daily management of our animals and the population as a whole, the situations faced by gorillas in the wild and captivity, and how zoos are working together to solve these problems (1). By developing a video that highlights these topics, Zoo Atlanta will be contributing to the public's understanding of gorillas, captive management, and conservation. Additionally, by using on the question of all-male groups as a case study of captive management issues, Zoo Atlanta can highlight the role that science and inter-institutional cooperation is playing in furthering our understanding of these groups and securing the future management and growth of the gorilla population. Finally, developing an interactive that allows visitors to use demographic data to make breeding decisions and analyze raw data from the all-male gorilla study will provide further learning opportunities about gorillas and the role of science in captive-management. By making the case study and interactive parts of the video available to zoos collaborating on the all-male study, we can help ensure that the public at large has these educational opportunities. The interactive will be a part of the on-going interpretative information about gorillas, and the data will be updateable and will allow visitors to learn about the current situations of gorillas. With additional funding, more video vignettes would be produced.

3. HOW DOES THE PROJECT BUDGET SUPPORT THE PROJECT GOALS AND OBJECTIVES?
The budget will support developing the content and programming of an interactive kiosk. In addition the budget will support staff time to produce education materials related to the conservation project. The computer consultants have an established relationship with Zoo Atlanta and have developed two

other kiosks for the zoo. Their salary information is current and is below market rates for their field. The equipment costs were determined from the bids received from technology vendors. Three of the Zoo Atlanta staff members successfully developed another interactive kiosk. Based on the development of that kiosk, the time estimates for Zoo Atlanta staff are reasonable and accurate. The salaries for Zoo Atlanta staff members are based on current information. Zoo Atlanta will match funds by contributing staff time and providing all computer equipment for the kiosk, including the touch screen, computer, sound dome, and kiosk stand. Zoo Atlanta will also provide the video editing equipment to produce the videos.

4. WHAT ARE THE QUALIFICATIONS AND RESPONSIBLITIES OF THE PROJECT PERSONNEL?

Beth Hoos, Manager of Fee Programs, supervises the development and implementation of Zoo Atlanta's revenue-generating programs in the education department. Beth's previous experience includes extensive behavior research on free-ranging monkeys. For the last two years, Beth has taught the animal behavior research programs at Zoo Atlanta. In addition, Beth coordinated the development of the vocalization kiosk and contributed to the content and design of the graphics in the Willie B. Gorilla Conservation Center (WBGCC). Beth will assist in the development of the content of the kiosk. She will supervise the development of the additional education activities and will implement these activities into Zoo Atlanta's education programs. 12.5% effort for 4 months.

Richard Hezlep, Productions Coordinator, oversees the audio and video technology and productions at Zoo Atlanta. Richard led the video production of the vocalization kiosk in the WBGCC. He will oversee the video production and technology design of the kiosk. Richard will advise the consultants of Zoo Atlanta's requirements. 31% effort for 4 months.

Tara Stoinski, Ph.D., Coordinator of Primate Research, conducts her own research on primates and helps oversee graduate students studying primates at the zoo. Since 1995, she has conducted various studies on the 22 gorillas housed at Zoo Atlanta, and, in particular, has been studying the all-male group. Tara will direct the research for the conservation project. Tara will assist in the initial content development of the kiosk and will provide updated behavior information about the conservation project for the kiosk. Tara will assist in the evaluation of the kiosk and produce the related publication Tara will coordinate the distribution of the video and educational materials to the other zoos participating in the conservation project. 3% effort across the year.

Shelly Lakly, Ph.D., Director of Education, will be responsible for the overall leadership of the project including coordinating the efforts of the three departments involved in the project, development, delivery and evaluation of the kiosk, educational activities and conservation messages. Dr. Lakly has extensive experience in development, design, execution and evaluation of research and science projects. Before joining Zoo Atlanta, Dr. Lakly was a research scientist and educator with experience in curriculum development and science education in addition to a background in conservation issues, ecology, and limnology. She holds a M.S. in Conservation Ecology and a Ph.D. in Ecology from the University of Georgia's Institute of Ecology. 5% effort for 4 months.

Consultants from the Georgia Institute of Technology's Interactive Media Technology Center will develop the kiosk design. Their responsibilities will include creating graphics content, editing audio and video, and installing the program. Brian Jones, Research Engineer II, will supervise Tiffany O'Quinn, Research Associate I, and an undergraduate student assistant. Mr. Jones and Ms. O'Quinn have an established relationship with Zoo Atlanta and have developed two other kiosks for the zoo.