

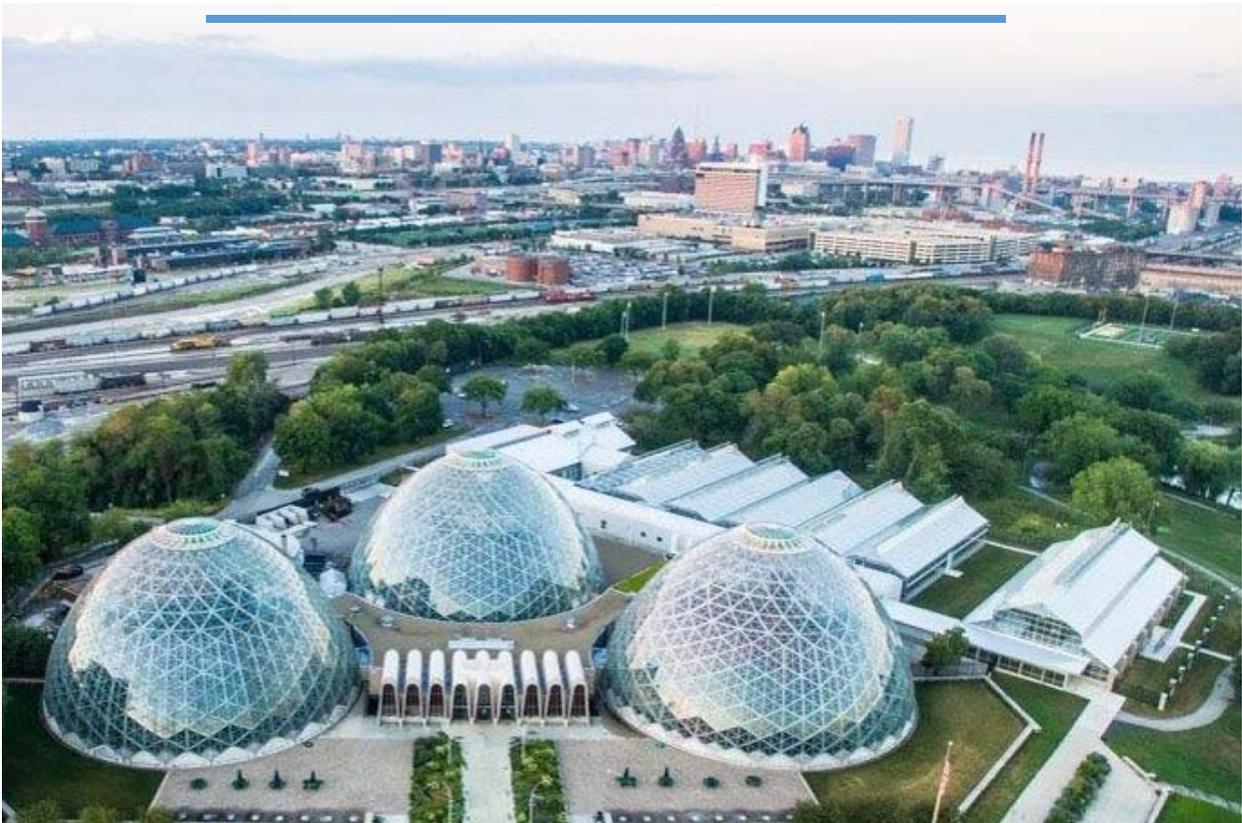
# *MITCHELL PARK HORTICULTURAL CONSERVATORY (DOMES)*

*524 S. Layton Blvd. Milwaukee, WI. 53215*

*P684-18607-2*

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*REQUEST FOR PROPOSALS:  
Glazing system Investigation  
March 2019*



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Milwaukee County Department of Administrative Services  
Architecture, Engineering and Environmental Services Unit  
633 W. Wisconsin Ave. Suite 1000

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To All Interested Consultants

**Project:** *Mitchell Park Horticultural Conservatory (Domes) Glazing system Investigation*

**Project No.:** *P684-18607-2*

**Subject:** **REQUEST FOR PROPOSALS (R.F.P.)**

Milwaukee County Department of Administrative Services, and Parks Department along with the Milwaukee County Task Force on the Mitchell Park Conservatory Domes is requesting proposals for professional consulting services to help look at the condition of the domes' existing aluminum glazing system that covers the three conoidal domed structures. The Conservatory building complex includes three 50+ year old display domes, a greenhouse and annex complex added in 2015, as well as support and educational structures. The Domes are in need of extensive rehabilitation along with repairs and updates needed for many support spaces. In order to properly plan for the future, Milwaukee County requests an investigation of the current glazing system to determine their condition and then provide recommendations regarding potential rehabilitation strategies, followed by actual mock-ups and testing of the recommended repair materials and methods.

## **I. BACKGROUND**

- **See attached map for location.** *The Horticultural Conservatory is located at 524 S. Layton Boulevard in the heart of Milwaukee, WI, a mid-sized city on the western shores of Lake Michigan. Mitchell Park is roughly a 61- acre urban park with a variety of amenities in natural settings. All work related to the glazing rehabilitation should assume that the Conservatory shall remain within these structures.*
- **Ownership:** *The Conservatory is owned by Milwaukee County and under the jurisdiction of the Department of Parks, Recreation & Culture. Planning and testing is to be a cooperative effort with Milwaukee County, Parks and the Conservatory staff.*
- **Current Conservatory Mission Statement:** *To provide the residents of Milwaukee County and all visitors a horticultural showcase featuring five changing floral shows per year; examples of tropical and arid flora displayed as naturally as possible; educational opportunities; cultural programs; horticultural information and the protection of certain rare and endangered species.*
  - **Friends of the Domes:** *The Friends of the Domes ("FOD") is a non-profit support group for The Mitchell Park Horticultural Conservatory, also known as "The Domes." The FOD directly channel resources that make possible many of the educational, scientific and cultural programs held at this very special and unique community landmark. Their support complements, but is separate from, the support provided by Milwaukee County.*

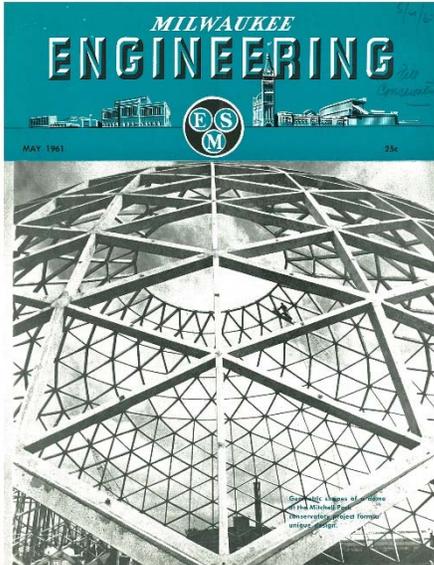
- **History:** Milwaukee's Mitchell Park Conservatory was first built in 1898 with a greenhouse style conservatory in Milwaukee's first public park. To the south, the Sunken Gardens displayed a large water-mirror pond with fountains and extensive parterre gardens surrounding it. In 1955 the existing structure was determined to be unsafe and impractical to repair.



- The current Horticultural Conservatory was dedicated in 1965 and had a total cost of \$4,200,000. A national design competition was held, and a local architect Donald Grieb had the winning design with three beehive-shaped glass domes. The process of construction began with demolition of the old conservatory in 1955 and developed in phases. The existing facility contains three conoidal glass-covered concrete frames called the "domes", each containing a different climate. The Tropical Dome, Desert Dome, and Floral Show Dome have become iconic on the City's landscape. Each "dome" is approximately 85 feet tall and the base has a 140 foot diameter. The Domes provide 46,000 sq. ft. of display space. The glazing system covering these structures was custom designed by Supersky, Inc. for this facility and the extruded aluminum sections contained a drainage system for condensation and moisture. Originally the frame contained a flushing system for those drainage channels.



- *The original concrete structure was precast on site in hexagonal shapes and erected on temporary steel framing. The glazing system is composed of triangulated aluminum frames and single pane wire glass. The frames rest on the concrete structure through stainless steel posts at nodes. This late 1950's design used advanced concepts in design and state-of-the-art construction techniques.*



*In 2014, the County's greenhouses were relocated from western Milwaukee County to just east of the Facility, and functionally connected. This added 61,000 square feet of facilities, including a 10,000 sq. ft. greenhouse-like conservatory annex that can function as a special event space. The greenhouses serve the horticultural needs of the Conservatory, Boerner Botanical Gardens, and various satellite park sites.*



*Further information on the recent studies, photos and County action can be found at the following links:*

- <http://county.milwaukee.gov/Domes> (Domes update site with studies)
- <https://milwaukeecounty.legistar.com/LegislationDetail.aspx?ID=2862809&GUID=728C247C-2D42-4585-8EDF-9B793C27DC22&Options=&Search=> (Legislative information Center, see attachment 23 on site)
- <http://county.milwaukee.gov/MitchellParkConserva10116.htm> Domes web page

## II. GENERAL PROJECT DESCRIPTION

*The Domes glazing investigation is intended to look into the condition of the structures for the Mitchell Park Horticultural Conservatory and Domes, A 2008 condition report of the Facility and cost estimates for repair, rehabilitation, reconstruction or replacement has been previously completed: It can be found at the following site; <https://mkecoparks.helpscoutdocs.com/article/302-mitchell-park-domes-condition-reports> 2016.11.10 Graef Update Report on Costs and Options. This current study and analysis is intended to be a more in-depth study of the glazing structure and its true condition in order to determine an expected remaining service life for the structural components and the required maintenance to seal the interior from leaking. Consultant to visually inspect the connections, materials, as well as develop repair solutions and provide a mock-up for testing repairs. Usage of federal Historic Tax Credits for rehabilitation of the Domes is being considered. Consultants with expertise in meeting the Secretary of the Interior's Standards for Rehabilitation (link:<https://www.nps.gov/tps/standards/rehabilitation.htm>) are desired . It is expected that lift rental and temporary spot removals of protective mesh as well as re-placement of that same mesh will be performed by Consultant and their subcontractors. Full coordination with the Conservatory horticulturalists is expected in order that the plants and exhibits are not damaged.*



## A. PROJECT DELIVERABLES

For consultant services as described in section II, it is expected that consultant/glazing expert will provide:

### Task #1

- *Localized visual inspections: identifying locations of leaking and damage that generally apply to all domes,*
- *Commentary on condition of the aluminum frame, seals, glass and components.*
- *Description of preferred methods to clean frame, to disassemble and reassemble pieces, to change to alternate materials within system of in replacing system.*
- *Provide a minimum of two alternate methods of repairing or replacing materials and/or components to achieve waterproof and durable fenestration.*
- *Recommend a process to protect the rare plant collection within the Domes structures from weather and temperatures during the repairs.*
- *Provide detailed drawings of the repair methods being proposed and preliminary estimates for the costs of repairs including associated costs for protecting interior plants and spaces.*
- *Attend a minimum of two task force meetings with Milwaukee county Staff to discuss interim findings and ideas for repair.*
- *Final bound report (also in digital format) to be submitted per schedule with methodology, results, conclusions, and rehabilitation recommendations.*
- *Presentation of final report at County and Task Force meeting with media presentation. (Powerpoint type)*

### Task #2

- *Meet with Milwaukee County Parks and A&E representatives to discuss the alternate repair solutions proposed.*
- *Present the preferred method and describe process for providing a mock-up of the repairs.*
- *Provide shop drawings and manufacture any needed seals, gaskets, extrusions or various components required to construct mock-up of a minimum of three glazing panels.*
- *Construct mock-up area in coordination with Domes staff and Milwaukee County.*
- *Provide water testing of repaired system and testing of glazing in connection to shifting of the extruded frame or seals to verify resistance to cracking or damage.*
- *Final bound report (also in digital format) to be submitted per schedule with methodology, results, conclusions, and commentary on future repair project.*

## III. QUALIFICATIONS TO COMPETE

### A. DESIRED TEAM CHARACTERISTICS AND COMPOSITION

- i. Any interested firm with experience in manufacturing or repairs of window curtain wall systems, or mechanical engineering consultants.
- ii. A typical team may consist of, but is not limited to: scientists, engineers, estimators, or material testers and technicians.

- iii. Understanding of and experience in the manufacturing of glazing systems, skylights, atriums and curtain walls.
- iv. Knowledge and experience with government facilities, horticultural centers, or other public facilities that have components of required light transmittance for growing plants such as greenhouses.

**B. PRE-PROPOSAL CONFERENCE**

Non-mandatory meeting to be held Tuesday, March 22, 2019 at 1:00 p.m. at the Mitchell Park Conservatory.

**C. PROJECT TIMETABLE**

March 6, 2019	Issue RFP's
March 22, 2019, 1:00 p.m.	Pre-Proposal conference and site walk-thru at 1:00 p.m. in Mitchell Park Domes (524 S. Layton Blvd., Milwaukee, WI), for all firms/manufacturers submitting and teams.
March 29, 2019, 2:00 p.m.	Consultant Proposals due at 2:00 pm Central Time (three bound + one email or digital copy)
April 17, 2019	Contract issued.
July 17, 2019, 2:00 p.m.	Task #1 Final Report - study due to Milwaukee County
Date TBD	Presentation to Milwaukee County and Task Force for Domes
November 1, 2019, 2:00 p.m.	Task #2 Final Report - study due to Milwaukee County

**IV. PROPOSAL EVALUATION**

Milwaukee County reserves the right to accept or reject any and all submittals, issue addenda, request clarification, waive technicalities, alter the nature and/or scope of the proposed project, request additional submittals, and/or discontinue this process. See attached "Proposal Submission Guidelines".

Proposal Evaluation Criteria

Following a list of general criteria which will be used to evaluate the proposals:

- a. Quality and responsiveness to the RFP. Weight: 20%
- b. Project approach and understanding, including strategy to perform requested work and time schedule. Weight: 30%.
- c. Qualifications and experience. Weight: 35%
- d. Fee and hourly rates. Weight: 15%.

**V. RELATED WORK BY OTHERS**

- 1. Limited documentation of the existing buildings will be made available by Milwaukee County in PDF format.
- 2. Previous studies and building condition reports will be made available to consultants on web page.

## VI. SUBMITTAL CONTENT

The RFP submittal shall conform to the Outline below and attached submission guidelines. It shall include the Consultant Proposal Form that is attached and the following information:

- A. **Cover:** Include project number and name, project location, consultant's name, address, telephone number, FAX number, e-mail address, proposal date, etc.
- B. **Table of Contents:** Include an identification of the material by section and page number.
- C. **Letter of Transmittal:** The name and description of the organization submitting the proposal briefly stating the proposer's understanding of the service to be provided.
- D. **Description of Qualifications (Organization's Experience):** Include a list of similar projects that the organization has participated on in the past five (5) years. Attach a separate sheet for each project, up to five (5) maximum, include color photos or sketches, giving a brief description of each project and the organizations participation. Provide a description of your firm's experience with sustainable planning, or related work including but not limited to:
  - Glazing system and curtain wall Assessments
  - Non-destructive Testing
  - Fenestration Consulting
- E. **Project Organization and Staff Experience:** Include an organizational structure of the project team, including the relationship of the sub-consultants to be used for this project. The name of the Principal In Charge of this project with any Professional Registration Numbers in the State of Wisconsin, along with the name, occupation and title of the Project Manager who will be in charge of this project. Provide a resume' for each individual involved in the project, and include their name, title and/or duties for the project, professional registration, relevant certifications, a brief description of related experience including time contribution in this capacity to past projects, and qualifications. Provide a description of your staff's experience with facility planning or related work.
- E. **Sub-Consultants:** Indicate the names and addresses of any sub-consultants and/or associates proposed to be used in this project. State the capacity they would be used in and the approximate percentage of the total services they would provide. Also state their past experience in the field. Provide resume's as needed.
- F. **Project Approach:** This section will include a description of scope of work including types of material testing and description of methods, as well as any problems you anticipate in this project and how you propose to overcome them. Recommendations regarding potential rehabilitation strategies should also be included. Discuss how you plan to staff and/or schedule the concrete material testing to efficiently complete the work effort. In addition report any special conditions requested.
- G. **Constant Effort:** Include a spreadsheet/matrix listing the names, classifications, hourly rates and hours to be spent by each required task to complete the project study as described in this RFP.
- H. **TBE (DBE) Goals:** The Targeted Business Enterprise (TBE) participation goal for this contract will be 17%.

## **VII. GENERAL REQUIREMENTS**

1. Due to the scientific knowledge and professional skill required to perform the services under this project, the County reserves the right to award a construction contract without requesting competitive bids if it determines such award is in the best interests of the County. The successful consultant and/or any contractor/manufacture affiliated with the prime consultant is encouraged work collaboratively on this project. It is understood that the final bid solution may contain a proprietary system if that is deemed necessary to conduct these repairs. The successful consultant and/or any contractor affiliated with the prime consultant shall NOT be prohibited from submitting bids in the construction bidding process for this project.
2. Selected Consultant shall follow Milwaukee County Code of Ethics as follows: No person(s) with a personal financial interest in the approval or denial of a Contract being considered by a County department or with an agency funded and regulated by a County department, may make a campaign contribution to any County official who has approval authority over that Contract during its consideration. Contract consideration shall begin when a Contract is submitted directly to a County department or to an agency until the Contract has reached final disposition, including adoption, County Executive action, proceeding on veto (if necessary) or departmental approval.
3. The successful consultant must be an Equal Opportunity Employer.
4. The submittal shall conform to all attached documents. All submittals should use this RFP and its attachments as the sole basis for the proposal. The issuance of a written addendum are the only official method through which interpretation, clarification or additional information will be given.
5. All costs for preparing a Proposal submittal, attending the selection interview if required, or supplying additional information requested by Milwaukee County, is the sole responsibility of the submitting party. Material submitted will not be returned.
6. The proposal must be submitted in a single bound 8-1/2" x 11" document.

Please return **three (3)** BOUND copies of your proposal and a complete digital copy in Adobe format no later than **2:00 P.M. on Friday March 29, 2019**, to **Julie Bastin**, Project Manager, 633 W. Wisconsin Avenue, Suite 1000, Milwaukee, Wisconsin, 53203 (Telephone (414) 278-3948, FAX (414) 223-1366; email: Julia.bastin@milwaukeecountywi.gov.

Please direct any questions regarding this RFP to me at the above address, FAX number or email address.

Sincerely,

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Julie Bastin, P.E.

Attachments:

1. Project Location Map (1 page)
2. Project Site Map.
3. Proposal Submission Guidelines
4. Consultant Proposal Form
5. TBE instructions
6. Milwaukee County DAS Lump Sum - standard Agreement type 'D'

cc: G. High, DAS-FM A/E      S. Folaron, DPRC      G. Smith, DPRC  
J. Bastin, DAS-FM A/E      B. Engel, CDBP  
S. Toomsen, DPRC      S. Carron, DAS -FM  
M. Brill, DAS-FM A/E