

Request for Qualifications (Architect / Engineer)

State of Ohio Standard Forms and Documents

Administration of Project: Local Higher Education

Project Name	<u>Western Geothermal Infrastructure Ph2</u>	Response Deadline	<u>5/29/15</u>	<u>2:00 PM</u>	local time
Project Location	<u>Miami University, Oxford Campus</u>	Project Number	<u>MUN-100056</u>		
City / County	<u>Oxford / Butler</u>	Project Manager	<u>Kami Archibald</u>		
Owner	<u>Miami University</u>	Contracting Authority	<u>Local Higher Education</u>		
Delivery Method	<u>CM at Risk</u>	Prevailing Wages	<u>State</u>		
No. of paper copies requested (stapled, not bound)	<u>5</u>	No. of electronic copies requested on CD (PDF)	<u>1</u>		

Submit the requested number of Statements of Qualifications (Form F110-330) directly to Elizabeth Davidson at Cole Service Building, 101 S. Fisher Dr., Rm 181., Oxford, OH 45056. See Section H of this RFQ for additional submittal instructions.

Submit all questions regarding this RFQ in writing to Kami Archibald at banninkj@miamioh.edu with the project number included in the subject line (no phone calls please). Questions will be answered and posted to the Opportunities page on the OFCC website at <http://ofcc.ohio.gov> on a regular basis until one week before the response deadline. The name of the party submitting a question will not be included on the Q&A document.

Project Overview

A. Project Description

Miami University is soliciting qualifications for professional engineering services for Western Geothermal Infrastructure Phase 2 project. This project will address the infrastructure needs for connecting five (5) existing buildings onto the Western Campus geothermal system. The Site/Infrastructure/Utility schedule of work specifically construction, should be completed concurrent with other campus projects to ensure timely completion of the overall Western development. The infrastructure systems that require design services are: Steam/Condensate, Heating Hot Water, Chilled Water, Storm, Domestic Water, Gas, and IT.

At the University's discretion, the selected firm may be utilized for future infrastructure improvements associated with the Long Range Housing Plan.

B. Scope of Services

This Request For Qualifications (RFQ) is for an Engineering Firm. The required engineering services include but are not limited to the following:

Western Geothermal Plant

The University introduced geothermal for heating/cooling needs for Western Campus in the first phase of this project in 2013-2014. The intent of the first phase was to enable new construction on the Western Campus to receive heating/cooling needs from the new geothermal plant and leave the existing campus buildings on the existing central heating and cooling plants. During the first phase, plans were made for future expansion of the geothermal system to convert existing buildings on Western Campus over to geothermal in subsequent phases.

The geothermal system that was installed in 2013 consists of four (4) 250-ton heat pump chillers, 315 geothermal wells, and a geothermal mat beneath a one-acre pond. This system serves the heating/cooling needs of three (3) residence halls and a dining facility.

In this phase 2 project, the existing system will be expanded to include approximately 400 additional geothermal wells resulting in 2,500 tons of available heating/cooling capacity by the geothermal plant. Provisions were made in phase 1 to include additional heat pump chillers in the existing geothermal plant. As part of this project, the selected A/E will need to determine the best equipment and sizing to meet the needs of the campus. Life cycle cost analysis shall be performed for proposed units. It is also expected that more pumps will be added to each piping system.

It has been suggested that a cooling only unit might benefit the existing system. A new load analysis will need to be performed to determine if this unit might be a viable option. In addition, it has been proposed to include a method to utilize the free-cooling of the geothermal loop in the spring when pond and well field temperatures are suitable to use for direct cooling, such that the water from the geothermal loop will route directly to the chilled water loop distribution system bypassing the chiller and avoiding compressor run-time.

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The phase 1 plans anticipated an expansion of the gas fired boilers to meet the needs of the additional building loads. An analysis shall be conducted to whether this expansion is necessary to meet the heating needs of the final proposed system.

Several various items will be upgraded from the phase 1 project including controls, sensors, additional valves or relocation of existing valves and sensors.

The electrical needs of the phase 2 work will need to be analyzed to determine what expansion is necessary. The phase 1 plans included space for another unit substation, but it will need to be carefully studied to conclude what the electrical requirements for the second phase of work will be.

Western Campus Distribution

The current University housing plan includes a renovation of an existing residence hall that will be done in conjunction with this project and possibly include an addition to the residence hall. While this project does not contain design or construction for that building, it will be the responsibility of this project to get the necessary utilities to the project site for the building's use. Four (4) existing buildings that are not being renovated will also be added to the geothermal system in the phase 2 plan. These four (4) buildings will need to be modified to accept service from the geothermal plant. An analysis of what will need to be altered in these structures to make them compatible with the geothermal system will need to be conducted. These buildings are a mix of residence halls, academic buildings, and administrative buildings that are all unique. The specific needs of each building will need to be taken into consideration. The buildings are as follows:

- 1) Clawson Hall—residence hall (renovation, possible addition)
- 2) Havighurst—residence hall
- 3) Presser Hall—academic, music
- 4) Child Development Center—administrative, child-care facility
- 5) Hoyt—administrative, IT center

This phase 2 plan will also need to include provisions for a future phase to include expansion of the geothermal system to create an entire Western loop that will eventually connect other buildings back to the geothermal plant. A hydraulic analysis will need to be performed on the Heating Hot Water and Chilled Water distribution systems for evaluating proper line sizes including future planned expansions and looping.

The distribution for the new and existing buildings will need to be analyzed to determine if additional utility tunnels would be necessary and beneficial vs. direct buried utility lines.

Program verification will be required for Western Geothermal Ph2 site infrastructure project.

The selected Architect/Engineer (A/E), as a portion of its required Scope of Services and prior to submitting its proposals, will discuss and clarify with the Owner and the State Architect's Office, the cost breakdown of the Architect/Engineer Agreement detailed cost components to address the Owner's project requirements. Participate in the Encouraging Growth, Diversity and Equity (EDGE) Program as required by statute and the Agreement.

As required by the Agreement, and as properly authorized, provide the following categories of services: Program Verification, Schematic Design, Design Development, Construction Document Preparation, Bid and Award Support, Conformed Documents, Construction Administration, Post-Construction, and Additional Services of all types.

Refer to the *OFC Manual* for additional information about the type and extent of services required for each. A copy of the standard Agreement can be obtained at the OFCC website at <http://ofcc.ohio.gov>.

During the construction period, provide not less than 16 hours (excluding travel time) on-site construction administration services each week, including (1) attendance at progress meetings, (2) a written field report of each site visit, (3) on-site representation comprised of the A/E and its consultant staff involved in the primary design of the project, all having relevant and appropriate types of construction administration experience.

For purposes of completing the Relevant Project Experience Matrix in Section F of the Statement of Qualifications (Form F110-330), below is a list of relevant scope of work requirements for this RFQ:

1. Steam/Condensate
2. Heating Hot Water
3. Central Chiller Plant/Geothermal Bore field experience
4. Utility tunnel construction
5. Telecommunication

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Interested A/E firms are required to submit the Commitment to Participate in the EDGE Business Assistance Program form in its Statement of Qualifications (Form F110-330) submitted in response to the RFQ, to indicate its intent to contract with and use EDGE-certified Business Enterprise(s), as a part of the A/E's team. The Intent to Contract and to Perform and / or waiver request letter and Demonstration of Good Faith Effort form(s) with complete documentation must be attached to the A/E's Technical Proposal. Both forms can be accessed via the OFCC website at <http://ofcc.ohio.gov>. The Intent to Contract and to Perform form is again required at the Fee Proposal stage.

For all Statements of Qualifications, please identify the EDGE-certified Business Enterprises, by name, which will participate in the delivery of the proposed professional services solicited in the RFQ.

H. Submittal Instructions

Firms are required to submit the current version of Statement of Qualifications (Form F110-330) available via the OFCC website at <http://ofcc.ohio.gov>.

Paper copies of the Statement of Qualifications, if requested, should be stapled only. Do not use special bindings or coverings of any type. Cover letters and transmittals are not necessary.

Electronic submittals should be combined into one PDF file named with the project number listed on the RFQ and your firm's name. Use the "print" feature of Adobe Acrobat Professional or similar software for creating a PDF rather than using a scanner. If possible, please reduce the file size of the PDF. In Adobe Acrobat Professional, go to Advanced, then PDF Optimizer. Also, please label the CD and the CD cover with the project number and firm name.

Facsimile or e-mailed copies of the Statement of Qualifications will not be accepted.

Firms are requested to identify professional registrations, memberships and credentials including but not limited to: LEED GA, LEED AP, LEED AP+, CCCA, CCM, CCS, CDT, DBIA, CPE, and any other appropriate design and construction industry credentials. Identify that information on the resume page for individual in Block 22, Section E of the F110-330 form.

Architect/Engineer Selection Rating Form

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Project Name Western Geothermal Infrastructure Ph2 Proposer Firm _____
 Project Number MUN-100056 City, State, Zip _____

Selection Criteria		Value	Score
1. Primary Firm Location, Workload and Size (Maximum 10 points)			
a. Proximity of firm to project site	Less than 75 miles	5	
	75 miles to 100 miles	2	
	More than 100 miles	0	
b. Amount of fees awarded by Contracting Authority in previous 24 months	Less than \$50,000	2	
	\$50,000 to \$100,000	1	
	More than \$100,000	0	
c. Number of licensed professionals	Less than 5 professionals	1	Max = 3
	5 to 10 professionals	3	
	More than 10 than professionals	3	
2. Primary Firm Qualifications (Maximum 30 points)			
a. Project management lead	Experience / ability of project manager to manage scope / budget / schedule / quality	0 - 10	Max = 20
b. Project design lead	Experience / creativity of project designer to achieve owner's vision and requirements	0 - 5	
c. Technical staff	Experience / ability of technical staff to create fully coordinated construction documents	0 - 5	
d. Construction administration staff	Experience / ability of field representative to identify and solve issues during construction	0 - 10	
3. Key Consultant Qualifications (Maximum 20 points)			
a. Key discipline leads	Experience / ability of key consultants to perform effectively and collaboratively	0 - 15	
b. Proposed EDGE-certified Consultant participation*	One additional point for every 2 percent increase in professional services over the advertised EDGE participation goal	0 - 5	
4. Overall Team Qualifications (Maximum 10 points)			
a. Previous team collaboration	Less than 2 sample projects	1	Max = 3
	2 to 6 sample projects	2	
	More than 6 sample projects	3	
b. LEED** Registered / Certified project experience	Registered projects	1	Max = 2
	Certified projects	2	
c. BIM project experience	Training and knowledge	1	Max = 3
	Direct project experience	3	
d. Team organization	Clarity of responsibility / communication demonstrated by table of organization	0 - 2	
5. Overall Team Experience (Maximum 30 points)			
a. Previous team performance	Past performance as indicated by evaluations and letters of reference	0 - 10	
b. Experience with similar projects / delivery methods	Less than 2 projects	0 - 3	
	2 to 6 projects	4 - 6	
	More than 6 projects	7 - 10	
c. Budget and schedule management	Performance in completing projects within original construction budget and schedule	0 - 5	
d. Knowledge of Ohio Capital Improvements process	Less than 5 projects	0 - 1	
	5 to 8 projects	2 - 3	
	More than 8 projects	4 - 5	
* Must be comprised of professional design services consulting firm(s) and NOT the primary firm ** Leadership in Energy & Environmental Design administered by the Green Building Certification Institute		Subtotal	

Notes:

Evaluator:

Name _____

Signature _____

Date _____