

## Philadelphia Museum of Art- Guaranteed Energy Savings Project

A Pre-proposal meeting was held on May 31<sup>st</sup> for the Project. Below is a list of attendees in the meeting as well as a summary of the questions and answers given in the meeting. In addition, below is a list of questions received via [energy@phila.gov](mailto:energy@phila.gov) that have been answered in advance of the walkthroughs.

### Attendees List

Name	Company	Phone #
Barry Carl	JCI	610-212-5572
Matt Holt	JCI	610-235-9140
Nick Srocic	JCI	215-872-0703
Chris Farren	Noresco	732-551-0645
Al Shaikoli	PMA	215-772-0208
Andrew Lang	Siemens	908-463-9369
Brian Paleveda	Siemens	717-418-4485
L.J. Petroni	Siemens	215-901-3057
Jon Zeller	Ameresco	484-560-8437
Mike Kopistansky	Ameresco	215-805-4051
Elias Badin	Ameresco	215-776-1503
Charles Williams	PMA	215-684-7214
Jim Harven	TEN	215-630-6507
Eric Johnson	TEN	412-491-8613
Paul Carter	TEN	724-814-7299
Rich Reinert	PMA	
Joseph Weviev	OEO	215-683-2079

### Questions from the Pre-proposal meeting:

**A. Will schematics drawings and the presentation slides be available?**

PMA staff has provide basis maps and floorplans for ESCOs use during the walkthroughs. The spaces above level 1 will not be touched by the Core project and can be a focus for ECMs.

**B. Will areas of core project change the function of the space when renovation is complete?**

Yes, in some areas. Level C (lowest level) will change from back-of-house to public space. Portions of Level B will be reconfigured, but remain back-of-house. Level A will be reconfigured to better provide office, dining, retail, and gallery spaces. The Core project will not relocate the existing chiller plant or cooling towers, however some piping as well as significant electrical work will be moved as part of the Core project.

**C. Will there be an investment grade audit agreement prior to the investment grade audit being completed?**

The Administrator has no plans for an investment grade audit agreement. The selected Proposer will be asked to complete and IGA after selection.

**D. Are there QECBs available?**

Yes, As described in the RFP, the City has approximately \$9 million of allocated QECBs for potential use on this project. Financing will be addressed later on.

**E. Will there be a limitation on the number of attendees allowed in the walk-throughs?**

Each team should specify the trades they will be bringing with them for each walk-through to make the time as efficient and meaningful as possible.

**F. How long with the site audits be?**

There will be two 4-hour segments for Proposers to participate in. At this time there are no other scheduled opportunities for a walk-through

**G. What level of accuracy will be expected for the initial audit?**

It's understood that it will be difficult to complete a fully detailed audit. The Administrator is interested in understanding what opportunities each team with the understanding that all ESCOs have the same opportunity to review the site and information.

**H. How do I contact OEO for questions?**

Joseph Wene can be contacted directly ([joseph.wene@phila.gov](mailto:joseph.wene@phila.gov) ) but all correspondence for the project should include [energy@phila.gov](mailto:energy@phila.gov).

**I. Will ESCOs be judged on OEO participation levels and workforce?**

ESCOs will be judged as either compliant and responsive to the EOP or not. Any response and resulting project will need full approval from City Council, the Philadelphia Museum of Art Trustees and likely the Philadelphia Energy Authority. All of the approving entities will review the project and are interested in a diverse workforce and set of subcontractors. Subcontractors can apply for a project labor agreement from a union to potentially become temporary signatories.

**J. Will questions and answers be posted put on the PEA website?**

Yes.

**K. Are there access to prints before the walk-through?**

The Project team will try.

**L. Are there other energy reports and will they be made available?**

Likely not. Some of these reports may not be made available before the project team is selected for security purposes.

**M. In regards to lighting are there standards that are being targeted?**

We expect that Proposer will lean on their prior experience with lighting design in museum space. There are specific needs for gallery, non-gallery, and back of house spaces. These will be reviewed with gallery designers during the walkthroughs.

**N. How do you know the energy differential between the Core Project and ECMs?**

An energy model will be made available of the completed Core Project in the next phase.

The following questions were submitted via [energy@phila.gov](mailto:energy@phila.gov)

**1. Water/Sewer utility history & information for same period as provided energy utilities.**

Water and Sewer use information is posted on the website for the Main and Perelman Buildings and Rodin Museum. The water tariff will be provided with this information.

**2. Electric interval data, if available; data typical seasonal months would be acceptable (summer/winter/spring or fall)**

Available electric interval data is posted on the website.

**3. Environmental setpoints or ranges by space type not already provided.**

This was discussed at the HVAC and controls walkthrough. The set points range based on season as follows: PMA T 68 to 76 and RH 47 to 53; Perelman T 70 to 72 and RH 46 to 50.

**4. We would like to know where the exterior lighting boundaries are; building mount or so many feet away from the building or property line.**

The boundary for the PMA is Anne d'Harnoncourt Drive, for the Perelman is building-mounted lighting plus parking lot lighting, and for Rodin is the fenced garden plus lighting on The Thinker.

**5. What are the exact dates we can audit (secured access areas); do we need an escort and if so how many can we get? What hours can we audit and do we need any background checks?**

This has been previously communicated to the teams via email.

**6. Can you please provide additional information on the proposed EOP beyond what was provided in the RFQ document? Specifically, will requirements for MBE/WBE/DBE business participation be made prior to submission of any proposal? Or will the requirements be entered after the selection of the winning proposal? How will a team be scored on its participation plan?**

The project EOP and other related information has since been published on the website. Project selection criteria is listed in the RFP.

**7. For the Selection Criteria:**

**a. Is the "Responsiveness to Philadelphia antidiscrimination policy" to be considered the strength of our MBE/WBE team proposal?**

This question is unclear. The consideration of the Economic Opportunity Plan is discussed above in question 1.

**b. Is the "Local/Regional Presence" the potential added points for a local business entity?**

The selection criteria are not based on a system of points.

**c. Could you please define "industry position, longevity and recognition" and how it will be objectively defined and measured?**

The Administrator's team will use their best ability and experience to take this selection criteria into account in reviewing the respondents.

**8. General occupied schedule for employees and visitors. Please provide any demographics such as # of visitors/week or day, full time and part time employees.**

Visitor occupied times vary by building and are available on the PMA website. Staff-occupied times can be generalized as 6:30am to 6:00pm daily. Approximate visitors for a typical week are: PMA 10,000; Perelman 1,000; Rodin 1,500.

**9. Chiller logs (for each chiller), probably one year or at least some samples from summer, spring/fall and winter months.**

This will be provided to the selected proposer.

**10. Sub-meter data for the Perelman building, if available.**

This is not available.

**11. Access to or copies (hard or soft version) of Mechanical, Electrical and Plumbing drawings along with HVAC schedules for all three buildings.**

These will be provided after an ESCO selection has been made.

**12. After reviewing the schedule for the RFP I wanted to inquire if it was possible to extend the due date for questions, your response to questions, and the response?**

At this time, there is no plan to extend the RFP deadline.

**13. What is specific interest or issue regarding the air handling replacement/fan wall recommendation provided in the RFQ?**

AHUs not subject to replacement as part of the Core Project were identified and discussed at the HVAC walkthrough.

**14. Please provide any steam trap audits or tag listings, as available**

Steam trap inspection reports will be provided to the selected proposer.

**15. Please provide electrical single line drawings – as designed for Core project & current condition (demo drawing)**

Full sets of drawings and details on the Core project will be provided at after a vendor selection has been made.

**16. Please provide any past cogeneration studies**

No previous cogeneration project studies will be made available for this Proposal. Proposers are free to provide an ECM if they believe it to be an advantageous for the project. Large scale cogeneration would be extremely difficult for this project for a number of reasons, including the project timeline and schedule.

**17. Please provide controls system documentation/data**

**a. Drawings**

**b. Points Lists**

**c. Sequence of Operations**

**d. Any available trends of AHUs, CHW plant or critical zones which will help us understand better how the buildings' HVAC systems operate**

This was discussed in the HVAC and controls walkthrough. See response to question 3 and 15 above.

**18. Utility information**

**a. Please provide Veolia demand interval data for representative seasons, if available**

An older copy of the Veolia demand data has been provided on the project website; newer data needs to be requested from Veolia and will be provided to the selected proposer.

**19. Energy Modeling – please provide input/outputs of before & after models to understand the energy impact of the CORE project**

Energy models prepared for the Core Project are only applicable to portions of the building/systems within the scope of that project. Comprehensive models are not available.

**20. Please provide any previous lighting audits or proposals that would be helpful in our assessment**

No such audits or proposals are available.

**21. Section 4.2 asks that the submission be submitted electronically at 10MB or less to ensure delivery. Is this limited to a single email or can additional emails be sent if the total response is larger than 10MB?**

The 10MB requirement is primarily to prevent the email server from kicking the email back as a result of the size limit. If necessary, multiple emails can be sent with attachments that together exceed 10MB, but constitute one proposal.

**22. During the pre-proposal conference, it was mentioned that the utilization of Union labor / contractors is required on this project. Please confirm that this is the case.**

**a. Is there any trade-type work that can be completed by non-union companies?**

Union labor is a Philadelphia Museum requirement. Question I above discusses options for the project.

**23. Please post a copy of the “Core Projects” power point presentation given at the pre-proposal conference.**

This was provided to proposers via email.

**24. During the pre-proposal conference, it was mentioned that the Museum installed a new window demo. Where specifically is this new window system installed, and how many window units were installed?**

This was reviewed at the building envelope walkthrough.

**25. Please provide details regarding the size and capacity of the new chillers being specified/installed under the “Core Project”**

There are no chillers being added to the Main Building as part of the Core Project.

**26. Please provide electronic copies of existing Mechanical / Electrical / Plumbing (MEP) and controls system drawings on CD**

As discussed, detailed drawings will be provided after ESCO has been selected.

**a) If electronic copies are not available, could a date and time be provided for ESCOs to return to the site and review any existing hard copy drawings?**

**27. Please provide basic floorplan or fire evacuation plans in electronic format of each facility.**

Provided to each team via e-mail containing a Dropbox link on Tuesday June 13, 2017.

**28. Please provide lighting plans and fixture counts for each site.**

Existing lighting system details were discussed at the Lighting walk-through.

**29. Please provide the square footage space of the Rodin Museum and Garden.**

Please refer to floor plans referred to in the response to question 27 above.

**30. Please provide a sample copy of the most recent utility bill for each utility serving each site; i.e: electric, natural gas, steam, water, sewer, propane, fuel oil (if applicable)**

**a. Will the PEA be providing stipulated rates to use for calculating savings on water/sewer measures as were provided for electricity, steam, and natural gas?**

**b. Will the PEA be providing water/sewer usage data?**

See Question 1 above. Additional Utility bill information is posted on the website.

**31. Please provide a copy of the existing maintenance services contract for the Siemens Apogee Building Automation System (BAS)**

PMA holds a single contract for both building mechanicals and BAS with a mechanical services provider.

**32. The Facilities Profile document provided with the RFP mentions a sub-meter for steam and electricity serving the Perelman Building. Can you please provide data from these meters?**

There are no submeters for electricity and steam to the Perelman Building.

**33. Regarding Attachment D-5 (PRELIMINARY ANNUAL CASH FLOW ANALYSIS FORM), please define the “Annualized Interest Rate” that all ESCOs should use when preparing project financial pro formas and Cash Flows. For proposal purposes, we recommend a standardized 5% rate be used by all ESCOs for this phase of the project.**

All ESCO should use a standardized 5% interest rate for this phase of the project.

**34. Please provide drawings and floorplans.**

See question A above.

**35. Charles mentioned during the meeting that there is a standard set up for windows. Could that be provided to us in advance of the walkthrough.**

This was reviewed at the building envelope walkthrough.

**36. Please provide a list of building improvements included in the Master Plan for next twenty years and clarify if it is ok if any of these measures are included in the ESCO proposal.**

This request would be very difficult to provide and the majority of the projects with considerable energy impact will be reviewed at the HVAC and controls walkthrough.

**37. Please provide a list of the building improvement completed over the last 9 years.**

Main Building: exterior renovation in 2009; Art Handling Facility opened and chiller replaced in 2012  
Perelman Building: opened after renovation and expansion in 2007  
Rodin Museum: exterior renovation in 2010 and interior renovation in 2012  
Parking garage: opened in 2009

**38. Please provide current building automation system points list, and start/stop times for scheduled equipment.**

See response to question 3 above.

**39. Please provide current lighting control system points list, and on/off times for scheduled lights.**

The hours of lighting use are as follows: PMA 7am-7pm except for Wed & Fri when public hours are extended; Perelman 6:30am-6pm; Rodin approximately 1-hour before to 30-mins after public hours.

**40. Please provide current Core project MEP drawings and power point from kick off meeting.**

Core Project drawings will be made available to the selected proposer. The PowerPoint slides from the pre-proposal meeting were made available via e-mail Tuesday June 13, 2017.

**41. We noticed in the building description that pneumatic actuation is still being utilized throughout the facilities. We understand there can be benefits to this approach. Is pneumatic actuation preferred by the Museum staff?**

No, the pneumatic control is the legacy system, but is not preferred. DDC (direct digital control) to the BAS would be preferred.

**42. At the prebid meeting it was noted that rate reductions were not to be considered at this point. However would any offsite renewable generation or supply be considered?**

It's unlikely that offsite generation would be considered, as they may be duplicative of other projects and work ongoing by the City for energy procurement, however proposers can provide a project information if available.

**43. Can other programs be considered such as demand response? If so, how should these revenues be considered given that the stream is highly speculative beyond the 3 year projections and agreements offered by PJM?**

The Philadelphia Museum of Art participates in some Demand Response and Load Management Programs through the City of Philadelphia contract. Generally, projects that enhance the ability to provide load management to the project will be favorably received. Revenue from demand response should not be considered as part of a guaranteed savings project since the revenue cannot be guaranteed.

**44. Should operations and maintenance savings be taken into account in the potential project cash flows? If so can you please provide guidance on what would or would not qualify?**

O&M savings should be calculated and will be looked upon favorably as it will reduce the PMA costs, however since the project debt will be paid by the City, O&M savings cannot be used for the guaranteed energy savings agreement, only energy savings.

**44. Should capital cost avoidance be considered in the project cash flows? If so can you please provide guidance on what would or would not qualify?**

This will be determined later in the project development process. Likely after an ESCO has been selected. Proposers can provide information on options in the proposal.

**45. Please provide twelve months of utility profile data, a full two years would be preferred. Please include any demand charges.**

This information is already on the PEA website.

**47. Please provide average visitors/day/month/building, number of full time employees/building, hours of operation open to public/day, and occupied hours of non-public spaces.**

Hours of operation for each building is provided on the PMA website, and staff occupied areas are in use generally between 6:30am and 6:00pm. Approximate visitors for a typical week are: PMA 10,000; Perelman 1,000; Rodin 1,500.

**48. Please provide water utility usage data, cost per Kgal, and sewer charges.**

See question 1 above.

**49. Can the sign-in sheet and power point slides (presented during the pre-bid meeting on May 31th) be provided before the site visit?**

See above.

**50. Are electronic copies of Mechanical, Electrical, Plumbing drawings available for the three buildings (Main, Perelman, Rodin)?**

See question 11.

**51. Is it possible to provide multiple 10 MB submissions (Report, Appendix, etc.)? Providing a complete proposal under 10 MB may be challenging.**

Yes, see question 21 above.

**52. Are there any lighting design specifications for the “Core” project the ESCOs should consider for the GESA project? Can these be provided before the site visit next week?**

The Core Project lighting is primarily back of house and is therefore not applicable to the galleries and public spaces of Levels 1 and 2 in the Main Building, nor the spaces of Perelman and the Rodin.

**53. Are there any window design specifications for the existing buildings the ESCOs should consider for the GESA project? Can these be provided before the site visit next week?**

This was discussed during the Building Envelope site walk-through.

**54. Would it be possible for the shortlisted ESCOs to get access to the plan room(s) for the buildings to review existing M/E/P drawings? As we have a considerable amount of square footage to cover on Thursday, perhaps this request could be provided for a few hours following the guided tours. This would take the burden off your team to produce electronically while providing us the necessary information (ductwork configuration, detailed HVAC system configurations, and equipment inventories) to develop comprehensive solutions at these facilities.**

The Administrator provided equal time to each Proposer in the walkthroughs. For a variety of reasons, including security concerns, controls and other drawings will not be provided at this phase of the procurement. Given the variety of vendors and contractors that have completed work for the PMA in the past, additional access to PMA information as a result of pre-existing experience or contracts is a reality of the Proposal phase of the procurement regardless of the efforts of the Administrator. Access to a fuller set of documents will occur after a vendor selection has been made.

**55. Also, do you have any additional existing BAS system, schedules, sequences of operation that can be shared with the ESCOs? It would also be helpful to provide access to the existing front end while at Thursday’s site visit? This information would be helpful in determining any available ECM’s pertaining to BAS optimization.**

BAS information cannot be provided at this time, however please consider our systems run 24/7/365 and the set points stated in the response to question 3 above.

**56. Can you please provide the number of humidifiers, steam reheat coils, and variable air volume boxes within the ductwork at the Main Museum?**

Over 400 VAVs, each AHU has at least 1 humidifier, the majority of which have steam re

**57. Please provide copies of controls drawings for the Main building and Perelman. Not enough time was available during the walkthroughs for all Esco's to access the prints for pictures and Siemens already has this information.**

See Question 54.

**58. The RFP and RFQ Sections 2.1 State: "The Administrator has several ECMs that it is specifically interested in and additionally, is looking to leverage work planned in the Philadelphia Museum of Art's Core Project, as part of this scope." Please specify what is meant by leveraging work at Core Project as part of this scope. If any savings are meant to be leveraged by the ESCO, please specify the savings stream amount as any estimation of these figures by the ESCO would not be practically feasible given the information transferred at this time.**

The statement about leveraging the work planned in the Philadelphia Museum of Art's Core project as part of this scope is meant to imply that some construction processes and access will be made easier by the large amount of construction activity already happening on site.

**59. Please provide 2-3 years of logged steam usage data for steam meters located in the main building and Perelman mentioned during the walk-through.**

Two years of main building steam usage data has been provided.

**60. Please provide the 2004 renovation plans and specs of the Perelman building.**

Architectural plans from the renovation/expansion of the Perelman Building were shared via e-mail.

**61. Can the Administrator provide 2 years of daily and/or monthly steam usage from the BAS meter for the Perelman Building?**

See question 59 above.

**62. Is the Administrator willing to provide the selected ESCO any assurances or compensation for the development of the Investment Grade Audit in the event the Administrator does not move forward with the project?**

The Administrator is fully committed to completing a project at the Philadelphia Museum of Art and the project timeline or. If Proposers require specific assurances or compensation in the event of a project not moving forward, they should provide their requirements as part of their proposal.

**63. Is the Administrator planning to relocate the kitchen spaces in the Main Building? Should ESCOs consider kitchen equipment as potential ECMs?**

The kitchen in the main building was recently relocated from Level A to Level B. No further changes to the kitchen are planned as part of the Facilities Master Plan work. Potential ECMs for kitchen equipment would be considered.

- 64. Can the Administrator provide screenshots of the Perelman BAS control system including:**
- a. AHU configuration
  - b. Building schedules
  - c. VAV boxes and setpoints

See Question 54.

- 65. Can PMA confirm the hours that the lights in the gallery space are turned on one-half hour before public access and turned off one-half hour after the museum closes to the public? For the Main Building, this totals 56 hours per week. For Perelman and Rodin, this totals 48 hours per week.**

The hours of lighting use are as follows: PMA 7am-7pm except for Wed & Fri when public hours are extended; Perelman 6:30am-6pm; Rodin approximately 1-hour before to 30-mins after public hours.

- 66. Can PMA confirm that most work areas in the non-gallery areas of the museum are lit approximately 50 hours per week and that halls in non-gallery areas are lit approximately 12 hours per day?**

While work areas may be estimated at 50-hours of lighting per week, some back-of-house corridors are 24/7. The Perelman Building and the Art Handling Facility (Section 9 of the Main Building) have nightlights.

- 67. Are there any areas (excluding security office and security lounge) that lighting remains lit for longer hours?**

Yes, see the response to Question 66 above.

- 68. Please provide the Irrigation plan piping distribution, if available**

Irrigation plans are not readily available, but can be summarized as thus.

Main Building – The majority of the east side of Anne d’Harnoncourt Drive from Kelly Drive in the north to Spring Garden Street in the south, the Sculpture Garden; green roof area at south terrace are irrigated; the east courtyard is piped, but the system is not utilized

Perelman Building - no irrigation

Rodin Museum – garden is irrigated along with the city park property (outside of fencing) from a common City of Philadelphia irrigation system

- 69. Main Building: Will the Core project utilize a cistern for storm water recovery?**

Yes, a cistern was installed recently and is in the process of being piped.

- 68. Main Building: Are the new window assemblies already determined? If so, can we obtain specifications on these including resultant R-value?**

The windows that are being replaced as part of the Core Project are specific to Level A where the windows are exposed on both the interior and the exterior. This is not consistent to the majority of the windows in Level 1 and Level 2 and need not necessarily comply with the same specification.

**69. Rodin: How old is the roof?**

The Rodin Museum roof was resurfaced in 2013.

**70. When comparing the provided blended utility rates with published rate schedules, we could not match up the results. Is there a reason for this?**

Yes, the blended utility rates are partially representative of different billing rates from the City's electricity and natural gas supplier. The City's utility rates vary and can change several times a year at the City's discretion and in accordance with their purchasing and hedges. The utility rates provided are based on future hedges and projections, not historical costs.

**71. Can Siemens be allowed to provide controls drawings to the ESCOs?**

See Question 54.