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Smithsonian Environmental Research Center (SERC)

Agrivoltaics Research Platform Preproposal Conference and Site Visit

May 4, 2026

SERC AgV – Agenda

SERC Agrivoltaics Research Project Preproposal Conference

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9:00 – 10:00: Presentation of Project Overview Brief and Information from BGE

10:00 – 12:00: Site Visit

Key Smithsonian Personnel:

- Christine Grant, Contracting Officer
- Mark Manning, Pre-Construction Project Manager
- Ray Jones, Contracting Officer's Technical Representative
- Jacob Bradd, SERC Facilities Site Representative
- Pat Megonigal, SERC Deputy Director (Research POC)
- Brian Coyle, SERC Executive Officer

Key BGE Personnel:

- James Mirabile, Principal Engineer of Green Power Connection Team
- Autumn Patton-Sanders, Senior Large Account Representative

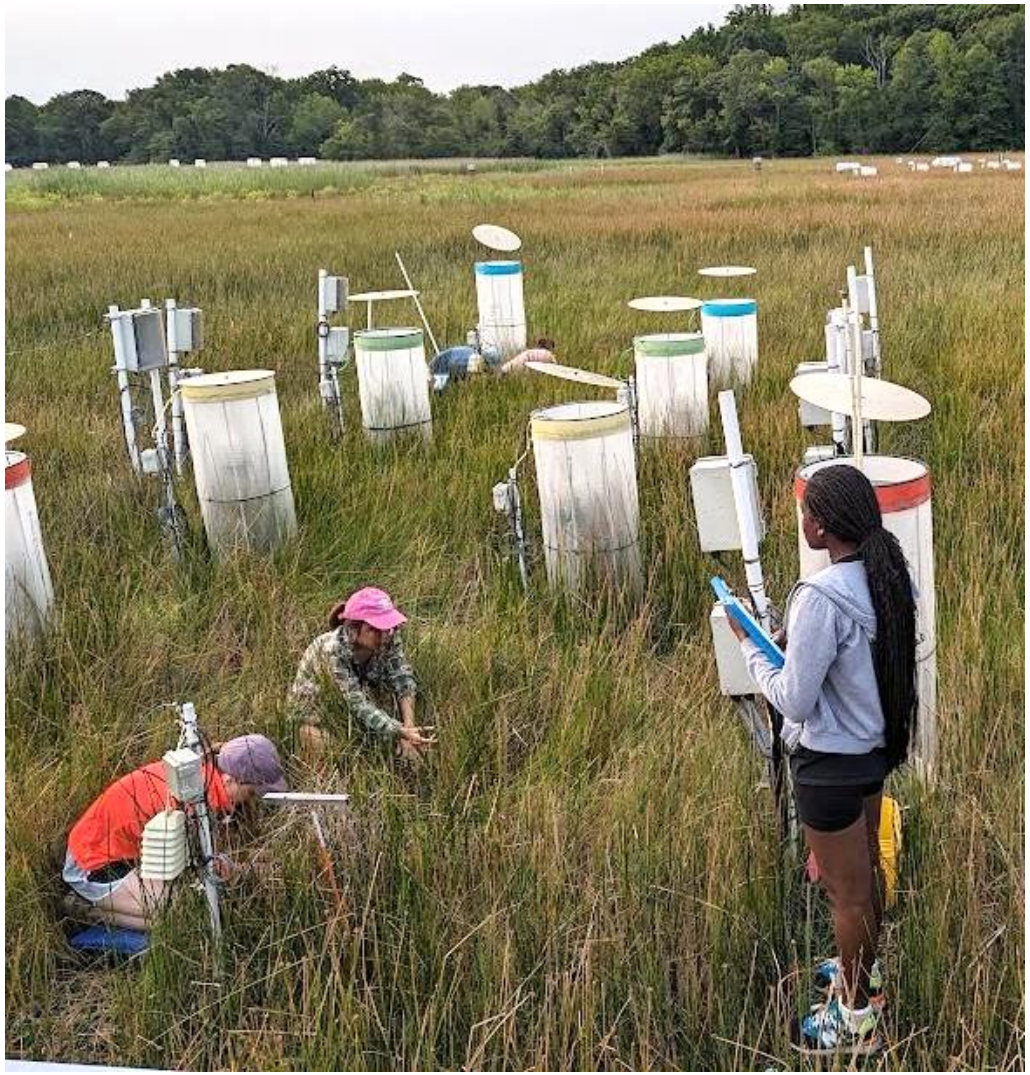
Developers & Contractors | BGE - An Exelon Company

1. **Supports SERC and Smithsonian science and education mission**
   – Creates a living laboratory for collaborative agrivoltaics research and education
2. **Demonstration of dual use solution for energy & food security and farm preservation**
   – Renewable energy is a critical enabler for resilience
3. **Design-Build Project for a 2.0 MW Photovoltaics System at SERC**
   – Contributes to regional grid decarbonization
4. **Contribution to GHG reductions via SRECs**
5. **Project would deliver long-term cost savings for SERC and Smithsonian**
   – Lowers electric procurement costs and reduces exposure to electricity price volatility

- Proposals are due by June 22, 2026, at 3:00 PM ET
- RFIs requested by May 18, 2026, at 3:00 PM ET

Support SERC's Mission for Research and Education

- Study the effects of solar fields on biodiversity, ecosystem function, but primarily agriculture research
- Conduct vital research and inter-institutional collaborations on land management and agrivoltaics
- Edgewater campus agrivoltaics and renewable energy research infrastructure will enhance SERC’s convening role and collaborative impact
- Educate students, policy makers, industry and the public on dual use renewable energy and integrated climate solutions that preserve farmland
- Deliver renewable energy generation capable of offsetting ~85% of SERC's aggregate annual electricity consumption, supporting the advancement of AgV research



SERC AgV – Project Site

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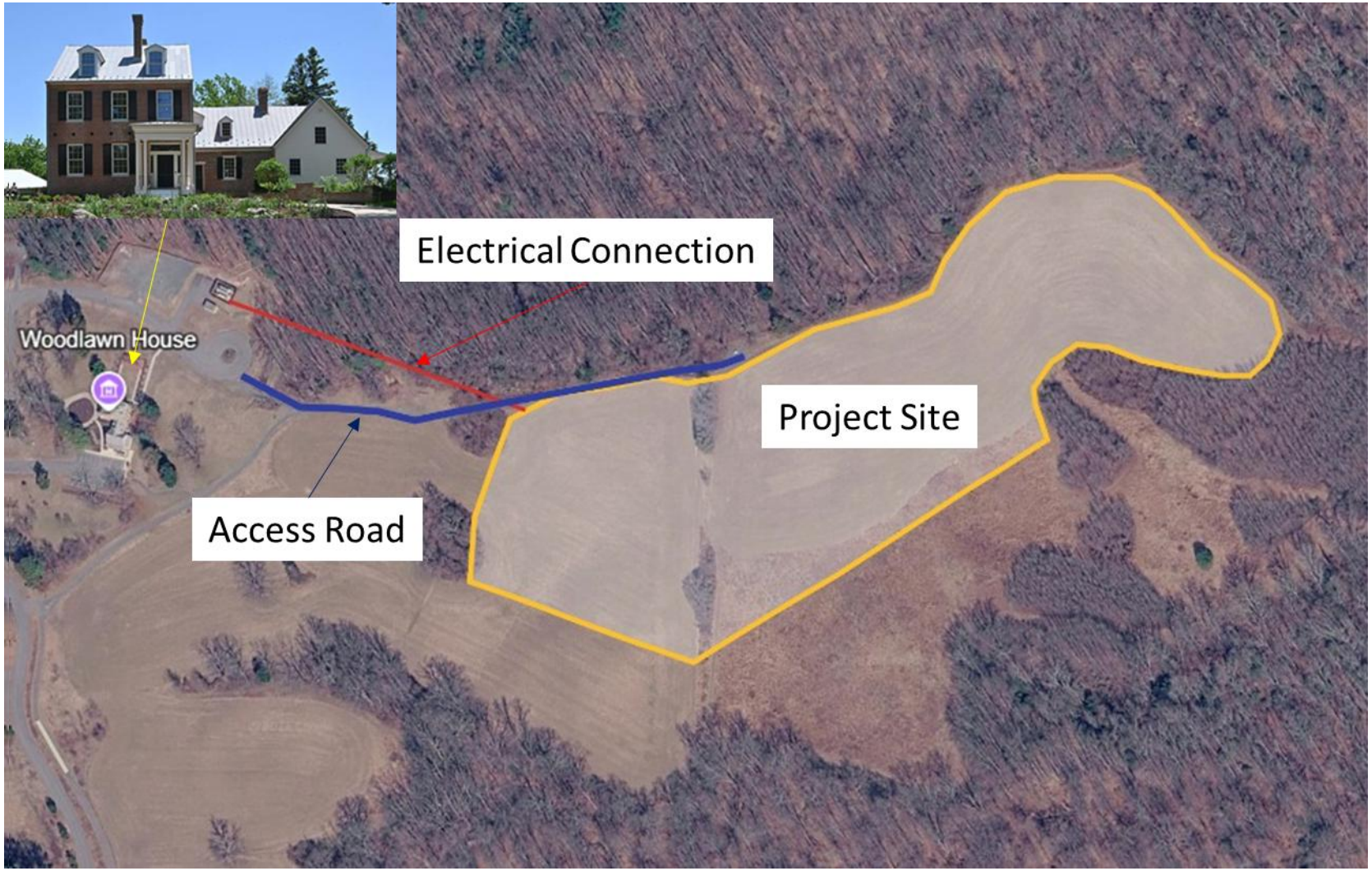

Project Site covers ~12 acres within SERC Campus

- Not visible from roads, houses or waterfront
- Covers ~3% of the Contee Conservation Easement
- Good location for scientific access and for educational tours
- Proximity to electrical service and roadway
- *GPS Coordinates: 38°53’51.24”N,76°32’49.70”W*

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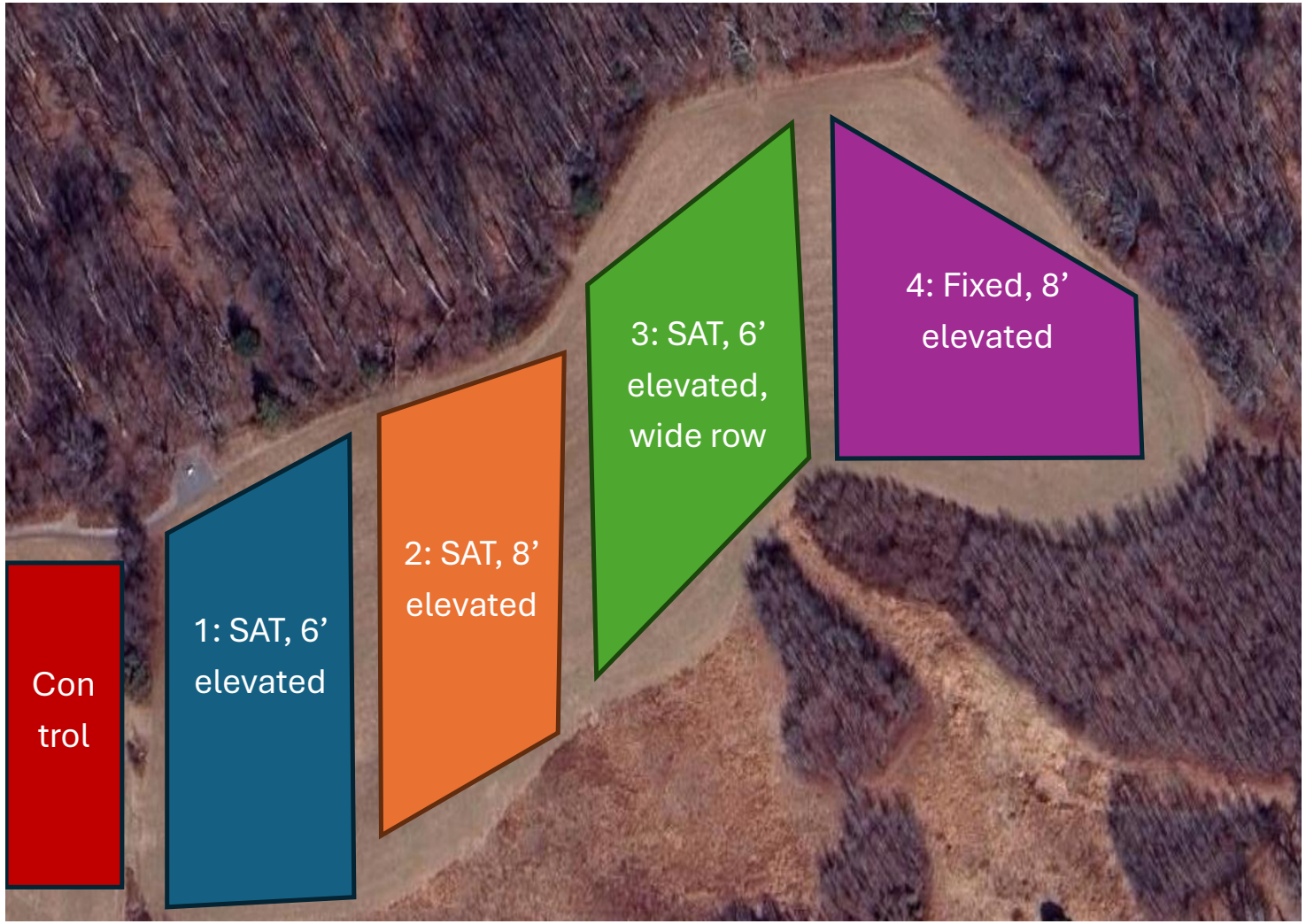
An Ambitious Agrivoltaics Research Platform

Photo by Joe DelNero / NRE

Photo by the Department of Energy

Photo by Br



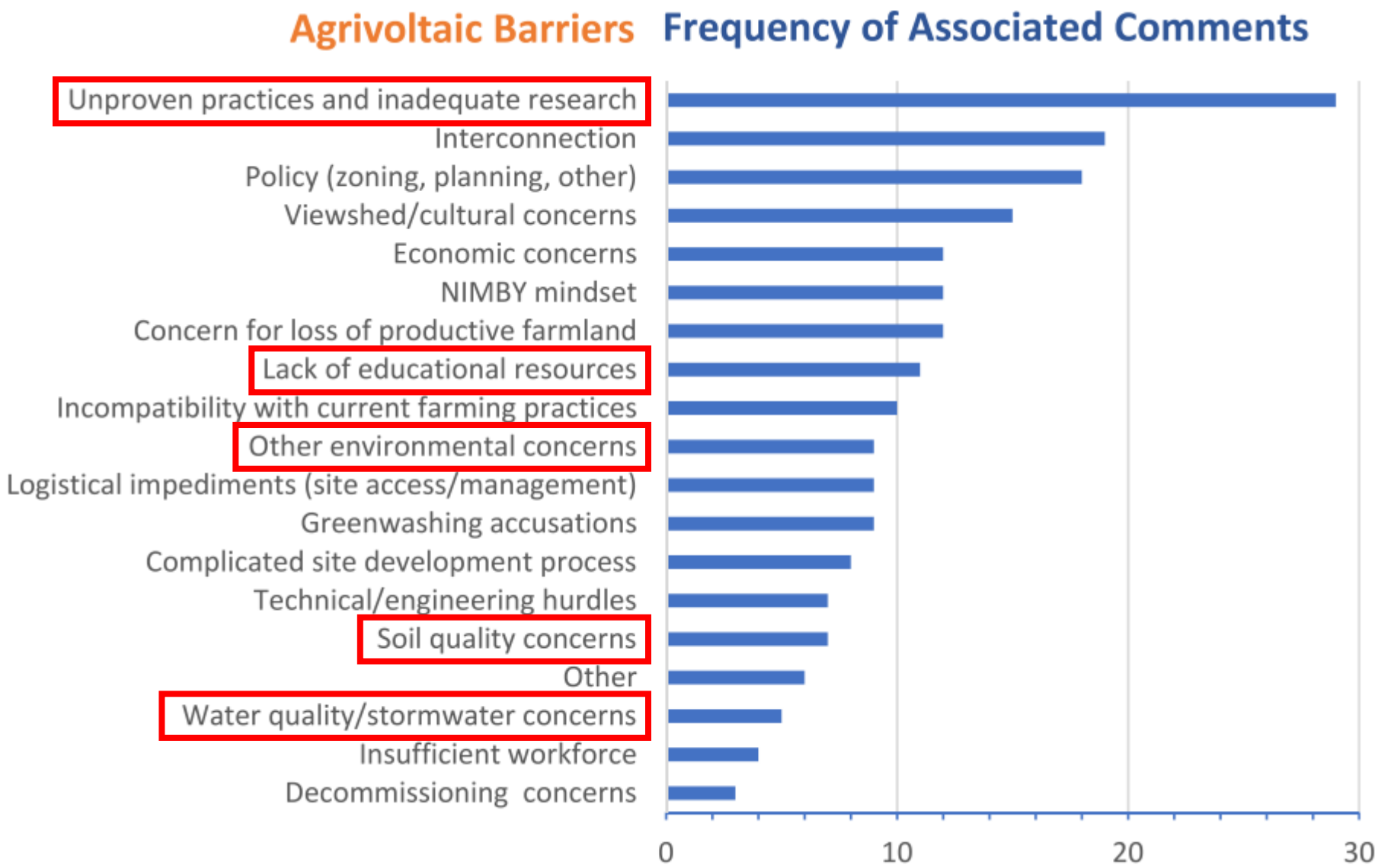
- 12-acre site enclosed by chain link fence
- Four different panel configurations to test different types of farming
- Perimeter spacing of ~30 feet between panels and fence
- New well for irrigation (option)

1: Traditional
Single Axis Tracking
Panel height – 6’
Row spacing – 20’

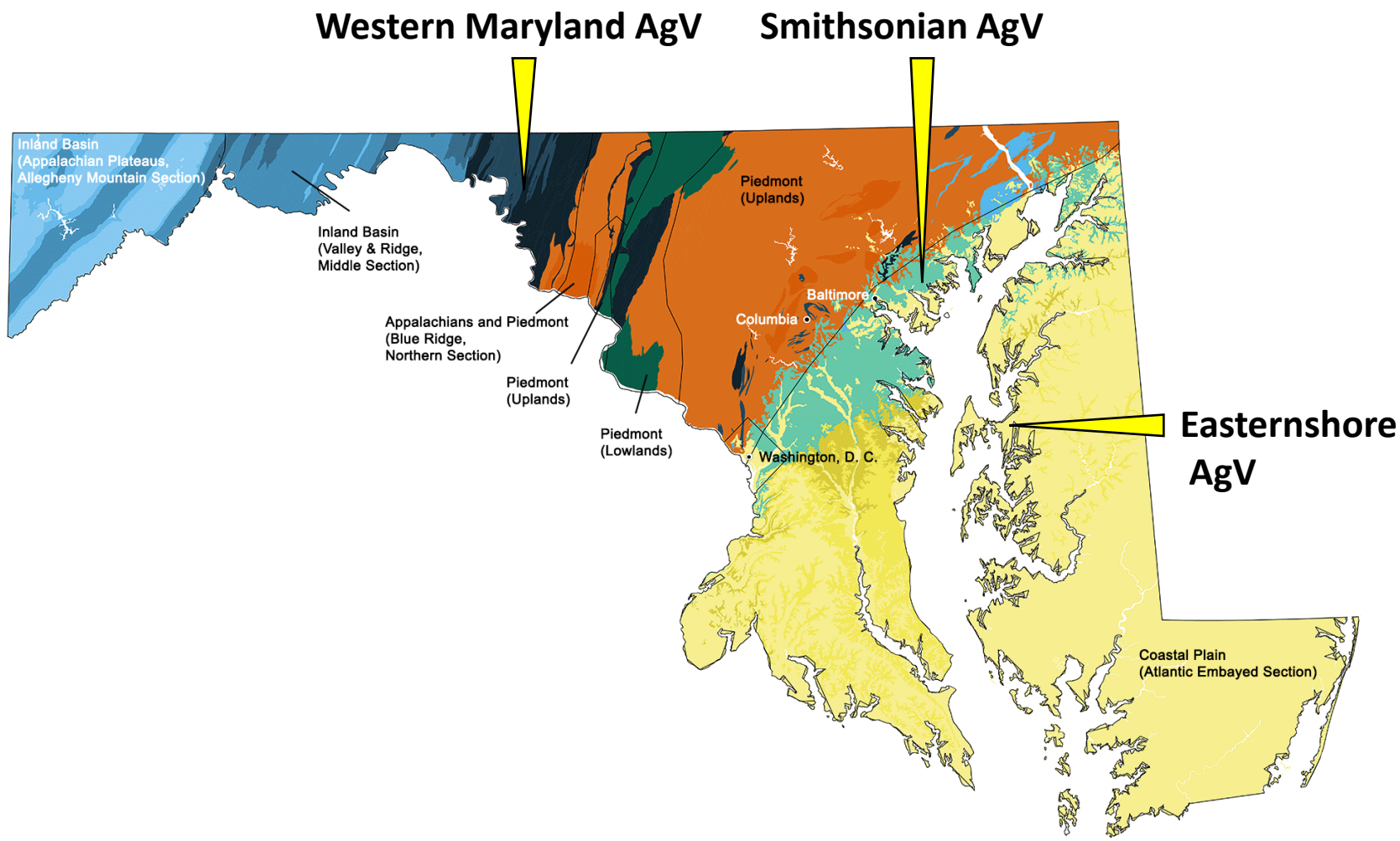
2: Elevated SAT
Single Axis Tracking
Panel height – 8’
Row spacing - 20’

3: Wide Row
Single Axis Tracking
Panel height – 6’
Row spacing – 35’

4: Elevated Fixed
Fixed Panel
Elevated – 8’
Row spacing - 20’



Morash and Pavao-Zuckerman (2026) *Energy Policy*


Western Maryland AgV
Smithsonian AgV
Easternshore AgV
Inland Basin
(Appalachian Plateaus,
Allegheny Mountain Section)
Inland Basin
(Valley & Ridge,
Middle Section)
Appalachians and Piedmont
(Blue Ridge,
Northern Section)
Piedmont
(Uplands)
Piedmont
(Lowlands)
Piedmont
(Uplands)
Baltimore
Columbia
Washington, D. C.
Coastal Plain
(Atlantic Embayed Section)

SERC AgV – Base Bid and Options

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BASE BID: Design, permitting, construction and commissioning of all site infrastructure improvements and a 2.0 MW DC agrivoltaics system interconnected to the BGE electrical distribution system. Note: system O&M is not included in the base bid.

OPTION 1: Operation and Maintenance of the agrivoltaics system for one year, with a further option for up to four (4) additional years.

OPTION 2: Agricultural Water Well System: A well and distribution system to each array suitable for year-round usage for agricultural watering purposes only as specified above.

SERC AgV – Technical Evaluation Factors

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(RFP Section M – Evaluation Factors for Award)

- Award will be made to the responsive and responsible Offeror whose proposal provides the best value to the Smithsonian Institution

- Cost proposals will be evaluated for completeness, reasonableness, and compatibility with the technical approach

Technical proposals will be evaluated using the following factors, listed in order of importance:

1. Design-Build Team Past Performance
   – Quality, relevance, and success of similar completed projects

2. Schedule and Plan of Accomplishment
   – Offeror's understanding of the work and ability to perform it in a timely and effective manner

3. Concept Design Submission
   – Responsiveness to the Statement of Work and overall technical quality

SERC AgV – Procurement Reminders

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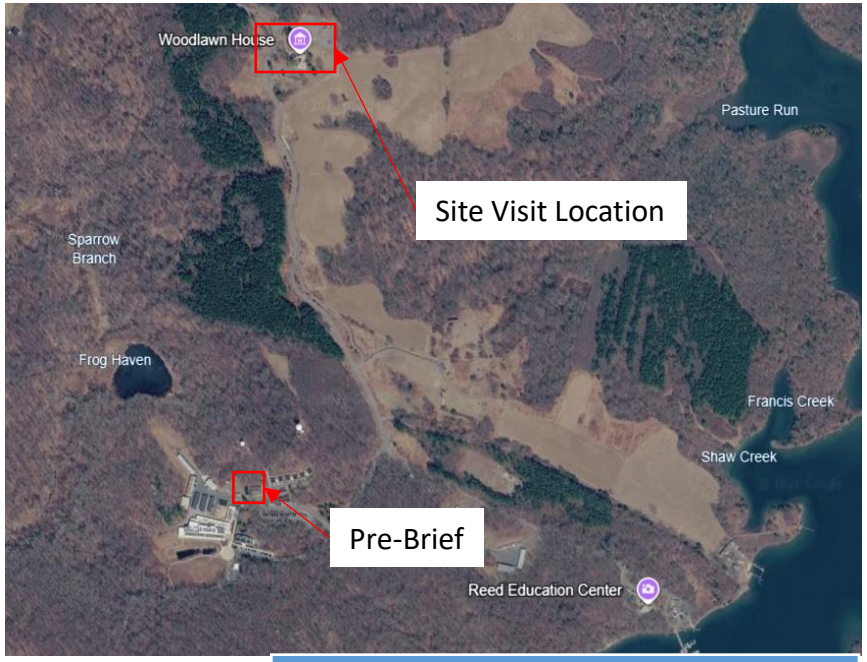
- This pre-proposal briefing is informational only
- Offerors shall rely on the written RFP and any issued amendments
- All communications and questions shall comply with the RFP instructions

Thank you for your interest in the SERC Agrivoltaics Research Project

Campus Area Wayfinding Information



From the pre-brief location the visit will be held near the Woodlawn House. Parking is outlined in the second picture.

No parking along road or in the circle, it is for emergency services.

Woodlawn Area Wayfinding Information

Follow the trail down to the informational sign. See trail start in next image.

The road start will be at the bottom of the circle; there will be cones to identify the viewing area further down the trail.