

# 1 UMCES 10 PROJECTS 100 PHOTOS

*2018 UMCES Facilities through 10 Projects and 100 photos*

Beaven Hall  
Bernie Fowler Laboratory Lobby  
Solomons House  
Mansueti Building  
Greenhouse Rehabilitation  
Acid Cabinets & Breaker  
Solar Field, Carport and EV stations  
Shoreline Jetty and Restoration  
Morris Marine Laboratory Renovation  
Facilities Maintenance &  
Landscape Improvements



December 2018 Free



December 10, 2018

Dear UMCES Colleagues,

I am pleased to present the **2018 UMCES Facilities Management Annual Report** and to report to you all, of another successful year in Facilities Management in all UMCES labs and units. This marks the fourth consecutive year putting together the UMCES FM annual report. The report was put together in collaboration with and in full-support from AL, CBL and HPL Facilities Representatives (Heather Johnson, Stacy Hutchinson & Jeff Miley – respectively), Lab Directors, and input from many in UMCES Facilities. Each year UMCES Facilities members work very hard behind the scenes to keep the building systems running and all interior/exterior spaces well-maintained for the faculty/students/staff members and the visitors. I would like to once again take this opportunity to say thank you to all UMCES Facilities members and to share the FM 2018 highlights through **100 photos focusing on 10 projects** with all in the UMCES family.

This year, we have prepared a photo album edition titled, *'One UMCES; 2018 through 10 Projects and 100 Photos.'* We have focused this year's edition through the lens of different perspectives with an artistic rendition. We hope you enjoy and have a chance to look back at 2018 through these photos.

Have a wonderful end of the year and a safe Holiday season!

Best regards,

A handwritten signature in black ink, appearing to read "Ray Cho".

Ray Cho  
Director of Facilities Administration  
University of Maryland Center for Environmental Science  
Cambridge, MD 21613  
(410) 221-2003



# BEAVEN HALL

## SECOND FLOOR INTERIOR RENOVATION

SECOND FLOOR LOOKING OUT  
THE WINDOWS TO PATUXENT  
RIVER ON A RAINY DAY

*October 2018*

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The oldest state-funded building on the campus, Beaven Hall was built in 1931 on land donated by the people of Solomons.

The building was re-dedicated in 1992 to honor Dr. G. Francis Beaven (1903-1964), a pioneering fisheries scientist who worked at CBL for nearly 30 years and was widely recognized in his day as Maryland's leading authority on the shellfish of Chesapeake Bay.

Being the oldest UMCES building, the structure had various issues through recent years. First floor renovation work was completed in 2017 and as of November 2018, the second floor is being renovated to better serve UMCES faculty, students and staff members.



PATUXENT RIVER AND THE RESEARCH PIER  
ON A RAINY DAY LOOKING OUT THE WINDOWS  
AT BEAVEN HALL

*October 2018*

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BEAVEN HALL SECOND FLOOR RENOVATION  
WORK AFTER NEW HVAC DUCT INSTALLED  
AND DEMOLITION WORK TO BEGIN

*October 2018*



BEAVEN HALL SECOND  
FLOOR RENOVATION WORK  
AFTER PARTIAL FLOOR TILE  
REMEDICATION AND DEMOLI-  
TION WORK TO BEGIN

*October 2018*

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BEAVEN HALL SECOND FLOOR RENOVATION  
WORK AFTER PARTIAL FLOOR TILE REMEDIATION  
AND DEMOLITION WORK TO BEGIN

*October 2018*

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SOUTH SIDE SECOND FLOOR OF BEAVEN HALL -  
DEMOLITION WORK TO BEGIN

*October 2018*





BOOKS/GOV.DOCS./  
NOAA/FAO/EPA 2107



BEAVEN HALL UNDER RENOVATION

*October 2018*

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BEAVEN HALL UNDER DEMOLITION  
EXISTING DUCT REMOVED FROM OPENING

*October 2018*



BEAVEN HALL FACADE FROM RESEARCH PIER

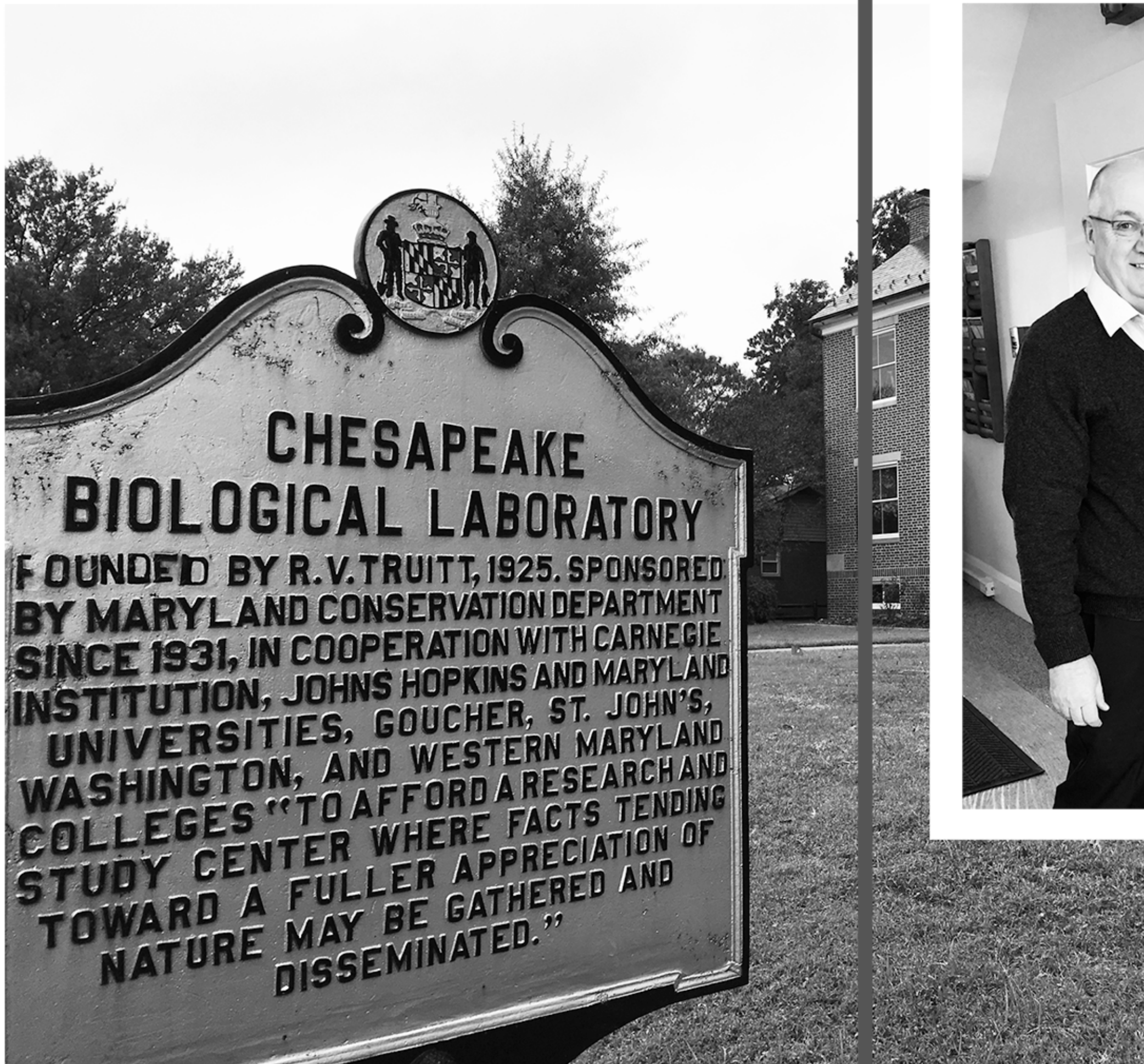
*October 2018*

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BEAVEN HALL ORIGINAL BUILDING DEDICATION  
PLAQUE - BY THE CONSERVATION DEPARTMENT IN  
THE MARINE LIFE OF MARYLAND

*October 2018*





# BERNIE FOWLER

## LABORATORY LOBBY DEDICATION

FIRST FLOOR DEDICATION  
PLAQUE FOR SENATOR BERNIE  
FOWLER

*October 2018*

*Clyde Bernard Fowler, (born in 1924 in Baltimore, Maryland) is a former Maryland State Senator (1983-1994) and County Commissioner (1970-1982) from Calvert County, Maryland, but is perhaps best known for his advocacy for the cleanup of the Patuxent River.*

*Bernie has been connected with the Patuxent River from his early days running "Bernie's Boats" on Broomes Island to his time fishing in the river for striped bass, croaker and crabs. After noticing the diminishing clarity, Bernie ran for public office and made the health of the Patuxent River a key issue.*

*Working with CBL faculty members Doug Heinle, Walter Boynton, Chris D'Elia and Jim Sanders, Bernie came to understand the role of nutrients in the deteriorating water quality he could see with his own eyes. In the early 1970's Bernie was instrumental in a lawsuit that forced the U.S. Environmental Protection Agency to enact pollution control measures, and in the 1980's his signature legislation required all major wastewater treatment plants to decrease their nitrogen and phosphorus discharge.*



This laboratory was built in 1994 and re-dedicated in 1998 to honor former Maryland State Senator C. Bernard "Bernie" Fowler for his efforts to protect the Chesapeake Bay watershed. He is particularly known for his annual "wade-in" in the Patuxent River. In 2018, the lobby area was refinished to celebrate Senator Fowler.

Research laboratories for environmental chemistry and toxicology are housed in BFL. Researchers in laboratories trace the abundance of natural and man-made chemicals throughout the environment and their effects on aquatic animals.

The Bernie Fowler Building includes Interactive Video Network (IVN) classrooms which connect the campus with sites around the world.

As a part of this lobby renovation, we also replaced all the lighting to LED, refinished the main staircase, renovated the main conference room and installed state of the art A/V equipment for improved citizen science events and online meeting capabilities.



BERNIE FOWLER  
LABORATORY LOBBY BY  
MAIN ENTRANCE

*October 2018*

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BERNIE FOWLER DEDICATION WALL IN BFL BUILDING LOBBY UNDER MAIN STAIRCASE

October 2018

BERNIE FOWLER'S SNEAKER INDEX

October 2018



BERNIE FOWLER  
LABORATORY MAIN STAIRCASE  
& DEDICATION WALLS

*October 2018*

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# SOLOMONS HOUSE

## ROOF AND EXTERIOR RENOVATION

SOUTH ELEVATION OF NEWLY  
RENOVATED SOLOMONS HOUSE  
FROM CHARLES STREET

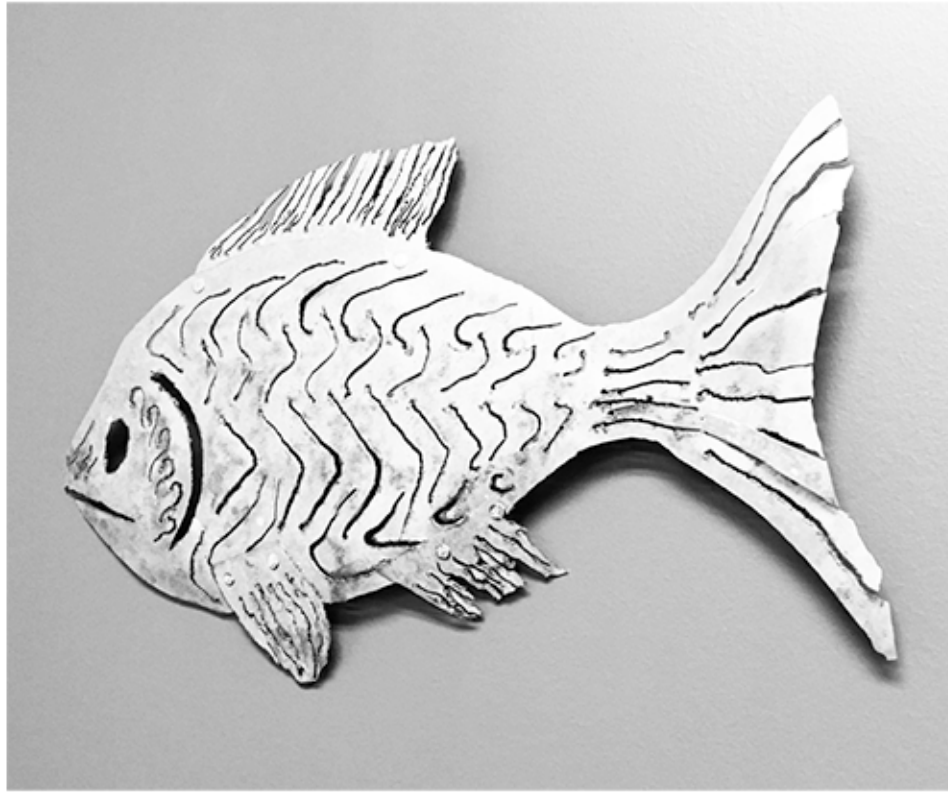
*October 2018*

Solomons House is the oldest structure in Solomons, dating from about 1780. It can be identified on an 1814 map of the region compiled and drawn by Commodore Joshua Barney, renowned local naval hero [Barney's Flotilla] of the War of 1812. It was occupied by Isaac Solomon, the Delaware-born businessman who established the largest oyster cannery on the Bay. Solomons Island is named after him.

It has been altered extensively over 200 plus years. The large central gable was added in the early 20th century, as were interior modifications after electricity was extended to the island. It was purchased by the Laboratory in 1994 as part of a larger land parcel. The Solomons House is now the Visitor Center.

In 2018, the building upgraded its deteriorating roof and exterior finishes, all windows were replaced and all of the interior lighting was converted to LED lighting as well as new landscaping around the house.





METAL SCULPTURE ART WORK BY UMCES  
FACULTY, DR. CHRIS ROWE IN TRUITT LAB

*October 2018*

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SOLOMONS HOUSE UNDER EXTERIOR  
BUILDING ENVELOPE WORK

*August 2018*





SOLOMONS HOUSE INTERIOR  
VISITOR CENTER AREA

*September 2018*

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SOLOMONS HOUSE ATTIC WINDOW  
LOOKING AT PATUXENT RIVER HORIZON

*September 2018*







ENVIRONMENTALLY SENSITIVE DESIGNED (ESD)  
SOLOMONS HOUSE FRONT PORCH LANDSCAPING

*September 2018*

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SOLOMONS HOUSE  
AFTER ALL RENOVATION WORK  
COMPLETED

*October 2018*

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# MANSUETI BUILDING

**INTERIOR  
RENOVATION +  
ROOF AND AIR  
HANDLER UNIT  
REPLACEMENT**

INTERACTIVE VIDEO NETWORK  
CLASSROOM IN MANSUETI  
BUILDING LOOKING OUT TO  
CHARLES STREET

*October 2018*

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Built in 1980 and dedicated in 1992 to honor Dr. Romeo Mansueti (1923-1963), a former CBL fishery scientist, naturalist, and biological illustrator, this building renovation was completed in 2018 to house classrooms, CBL main server room, and various administrative offices.

With the completion of the R. V. Truitt Replacement Laboratory building, Mansueti building was able to provide much needed space relief for the administrative function previously crammed in Beaven Hall and a few other buildings around the CBL campus.







RENOVATED INTERACTIVE  
VIDEO NETWORK CLASSROOM  
IN MANSUETI BUILDING

*October 2018*

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CHESAPEAKE BIOLOGICAL LABORATORY'S  
CHERYL CLARK WORKING IN HER RENOVATED  
OFFICE IN MANSUETI BUILDING

*October 2018*

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# MORRIS MARINE

## LABORATORY RENOVATION PHASE I

PHASE I BUILDING  
RENOVATION FOR MORRIS  
MARINE LABORATORY

*March 2018*

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Morris Marine Lab, the original sea-water research facility at the University of Maryland Center for Environmental Science (UMCES) Horn Point Lab (HPL) is in need for systematic renovation.

Continued delays in the UMCES capital project queue have pushed this building renovation project further out each year. With lack of funds to support comprehensive complete renovation of the entire lab building, UMCES has been utilizing operating funds to support phased infrastructure renovation efforts to keep critical research and academic space operational.



MORRIS MARINE LABORATORY  
DURING PHASE I  
DEMOLITION

*January 2018*

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MORRIS MARINE LABORATORY  
DURING PHASE I  
DEMOLITION

*January 2018*

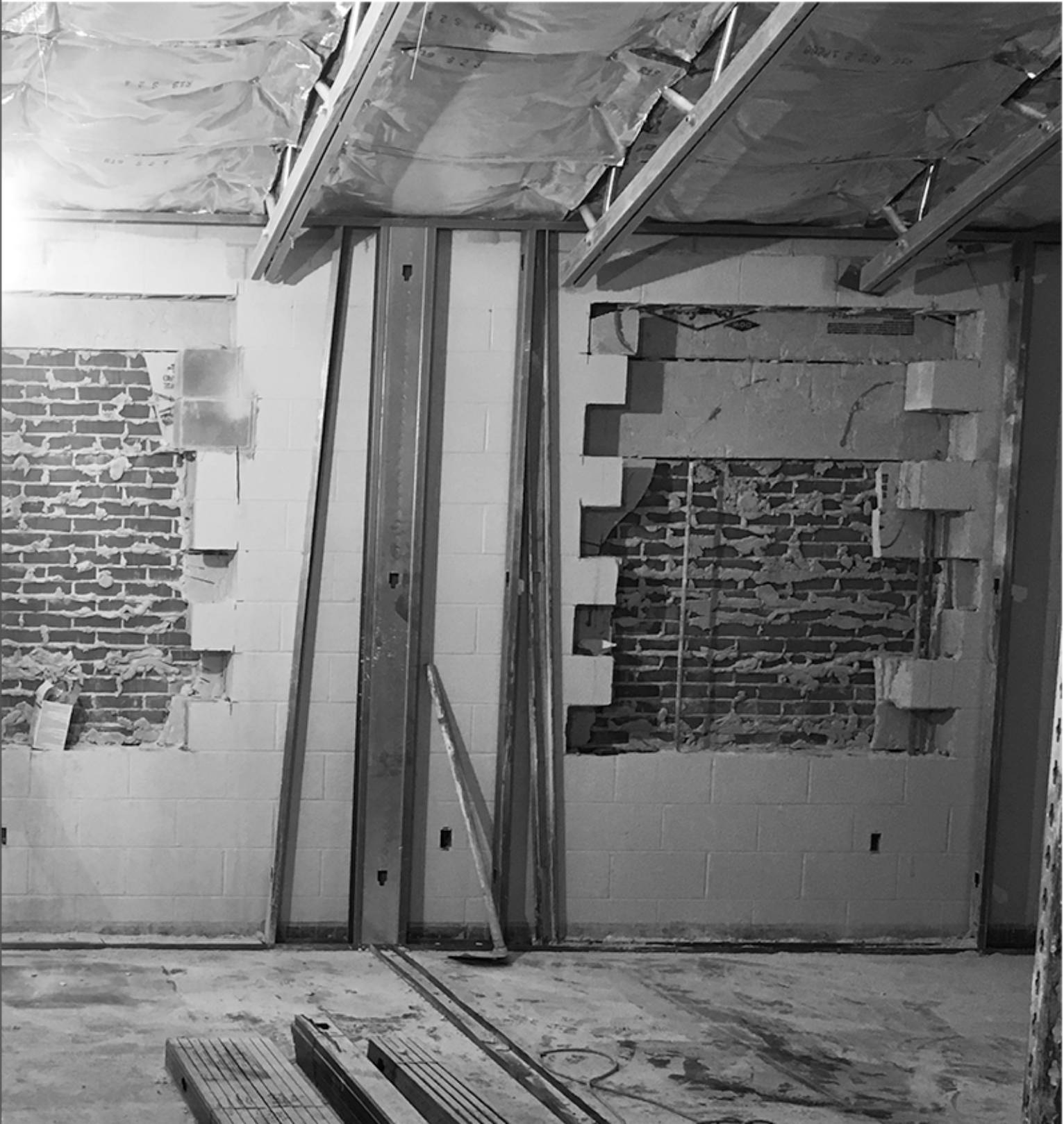
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MORRIS MARINE LABORATORY  
DURING PHASE I  
DEMOLITION

*January 2018*

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MORRIS MARINE LABORATORY  
DURING PHASE I: NEW WORK -  
OFFICE FRAMES AND AIR HANDLER

*March 2018*

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MORRIS MARINE LABORATORY  
DURING PHASE I: INSPECTIONS  
AND WALK THROUGHS

*March 2018*

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MORRIS MARINE LABORATORY  
DURING PHASE I: NEW WORK -  
LARGE CONFERENCE AND  
COLLABORATION ROOM

*March 2018*

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NEWLY ESTABLISHED GRADUATE RESEARCH  
GALLERY ON MAIN HALLWAY OF MORRIS  
MARINE LABORATORY

*October 2018*

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**GRG**  
GRADUATE  
RESEARCH  
GALLERY

*"The UMCES Horn Point Lab **Graduate Research Gallery** honors the next generation of scientists and researchers.*

*It embodies and celebrates UMCES graduate students' diverse scientific and cultural backgrounds in the universal language form of Fine Arts.*

*Please enjoy the exciting and artful researches happening at the Horn Point Laboratory."*

*Lab Director  
Mike Roman*

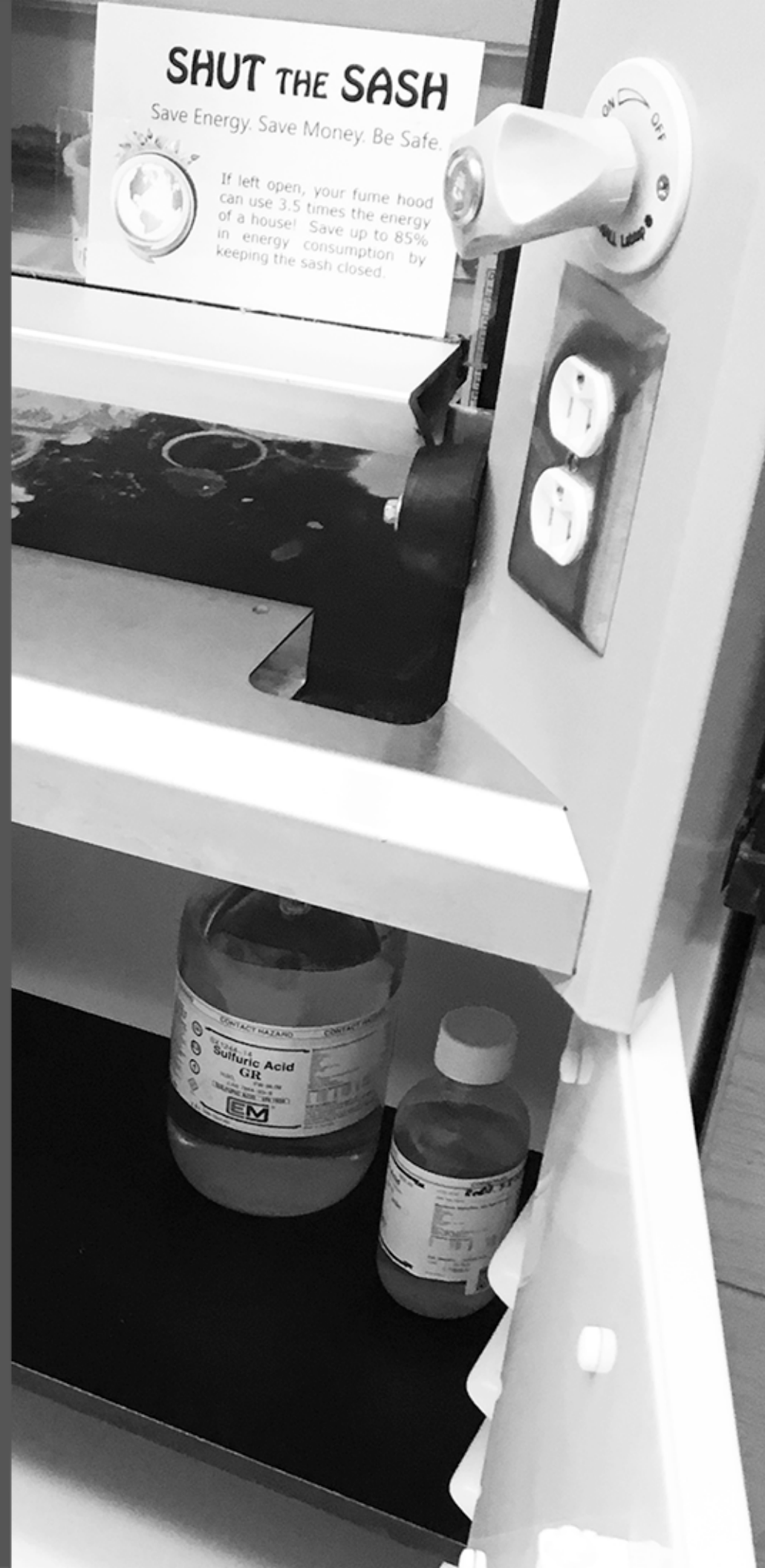
NEWLY RENOVATED MORRIS MARINE  
LABORATORY CONFERENCE / COLLABORATION  
ROOM IN USE

*October 2018*

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# ACID CABINETS

## REPLACEMENT OF ALL CORRODED CASEWORK AND HARDWARE

APPALACHIAN LABORATORY  
ACID CABINET

*August 2018*

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In 2018, the three UMCES managed laboratory campuses laboratory safety persons formed an UMCES wide Laboratory Safety Workgroup.

The group will work to better serve UMCES faculty, staff and students by collaborating and consolidating Laboratory Safety procedures and practices.

The workgroup completed the online SDS inventory of all chemicals in 2018 as well as upgraded the much needed corroded acid cabinets to new casework and fixtures.

The workgroup will also focus 2019 on consolidating the current three separate chemical hygiene plans (CHP) into one UMCES wide CHP. The consolidated CHP will be annually reviewed and updated by the group.



NEW ACID CABINET CASEWORK INSTALED

*April 2018*

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# GREEN HOUSE

## PHASED REHABILITATION: INTERIOR SHADING, IRRIGATION SYSTEM & MECHANICAL UPGRADES

APPALACHIAN LABORATORY  
GREEN HOUSE EXTERIOR

*August 2018*

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The greenhouse is located at the southwest corner of the Appalachian Laboratory.

It is approximately 4,000 sq. feet and consists of a head house, mechanical room and 3 individual zones for specialized research in such areas as plant growth, plant competition and plant diversity.

The computer system that controls the greenhouse is located here, as well as, a drying oven and soil sterilizer. The necessary materials for research experiments such as soil, sand, and gravel, including a wet area with a sink are also housed here.

Starting in 2017, the greenhouse has been going through a systematic upgrades and rehabilitation to better aid UMCES researchers.



PREREHABILITATION RESEARCH GREEN HOUSE  
MAIN CORRIDOR

*April 2016*

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FACILITIES ADVISORY COUNCIL (FAC)  
AND DR. ERIC DAVIDSON INSPECTING  
VARIOUS SITE / FACILITIES ISSUES AT  
APPALACHIAN LAB

*April 2016*

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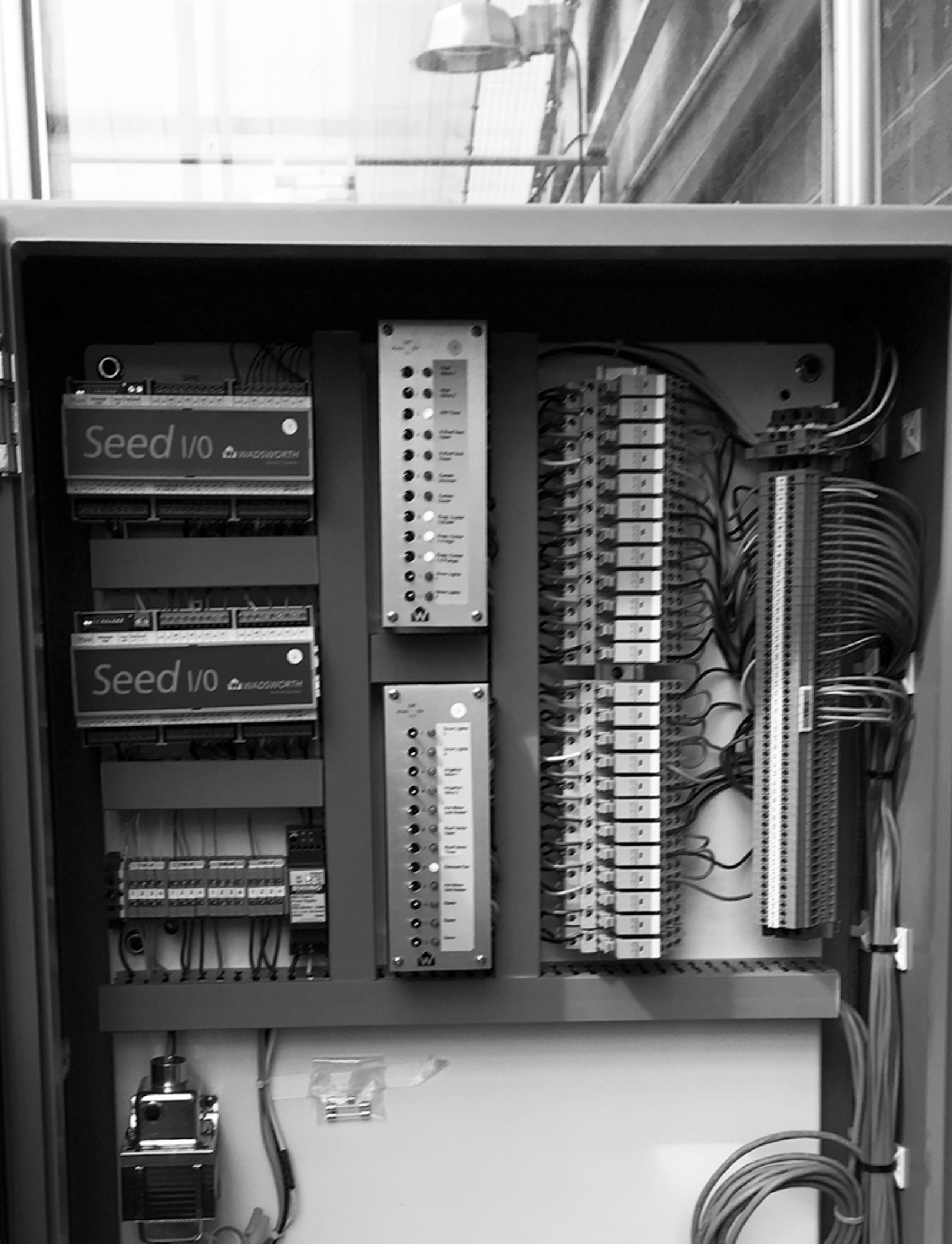


FIRST PHASE OF THE GREEN HOUSE REHABILITATION  
NEW SHADING DEVICES TO CONTROL NATURAL  
LIGHT SETTINGS

*April 2017*

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SECOND PHASE OF THE  
GREEN HOUSE REHABILITATION  
UPGRADING CLIMATE CONTROL  
SYSTEM

*February 2018*

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THIRD PHASE OF THE GREEN HOUSE REHABILITATION  
REFURBISHED COOLING UNITS TO CONTROL TEMPERATURE  
AND HUMIDITY SETTINGS

*July 2018*

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# SHORELINE JETTY

## REHABILITATION & RESILIENCE PROJECT ON THE CHOPTANK RIVER

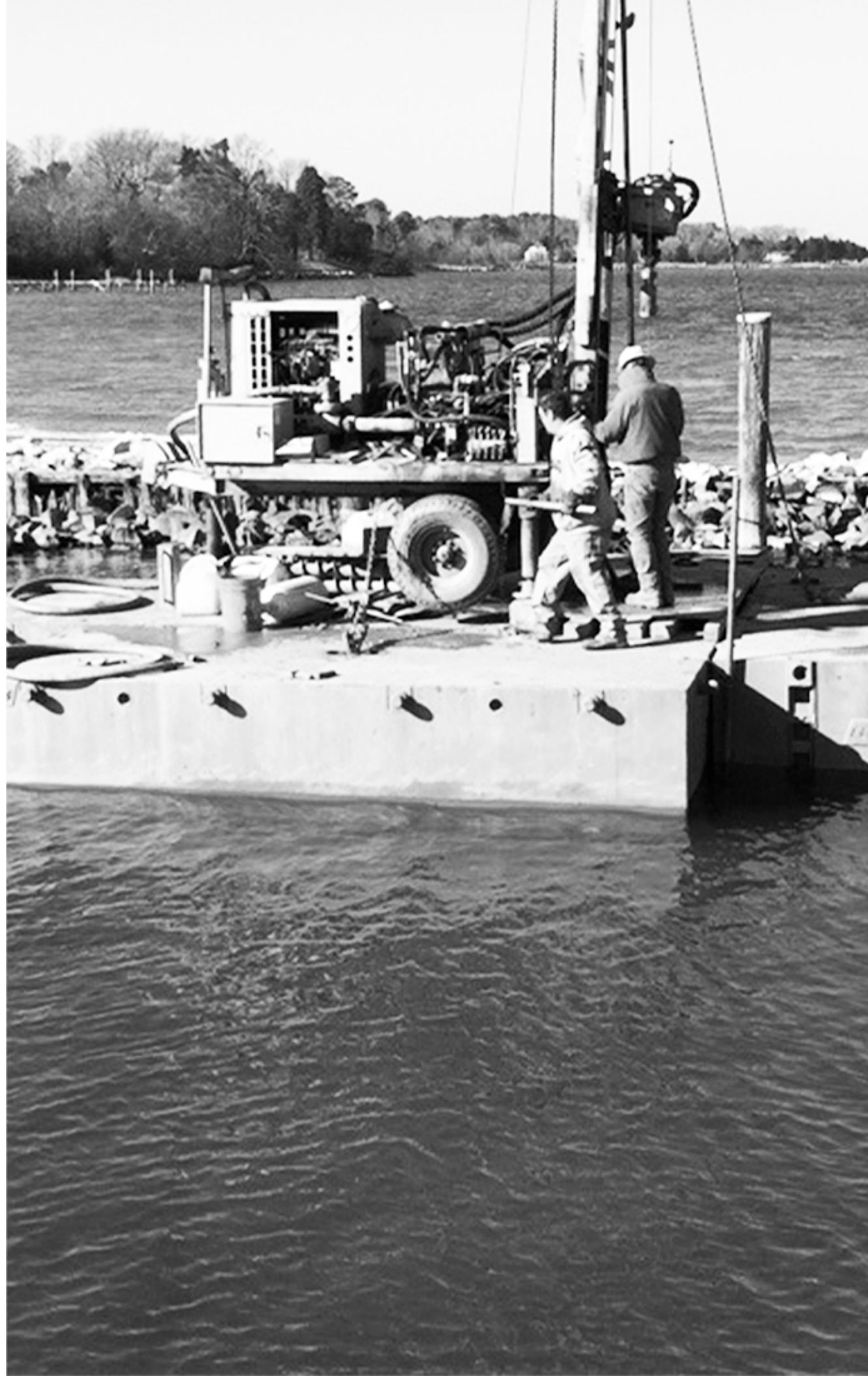
COMPLETED JETTY REHABILITATION AT HORN POINT LABORATORY ON THE CHOPTANK RIVER

*March 2018*

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The Horn Point Laboratory shoreline rehabilitation project is a phased coastal infrastructure project to protect the shoreline erosion from tidal wave as well as to protect the oyster pier facility and the dock.

The original design had multiple areas from area A to E with different approaches on shoreline protection methods. The portion completed in 2018, focused on rehabilitation of the existing jetty which encapsulates the existing undersized stone with 1200 LB to 2200 LB armor stone, then constructing a 10'-0" wide splash apron over. The new jetty also raises the top elevation to approximately +6'-0" MLW.



VARIOUS EQUIPMENTS AND VEHICLES UTILIZED  
DURING TAKING BORING SAMPLES AROUND  
PROJECT AREA

*October 2016*

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CONSTRUCTION BARGE ARRIVAL +  
SHORELINE JETTY PROJECT UNDER  
CONSTRUCTION PHASE

*January 2018*

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SHORELINE JETTY PROJECT UNDER  
CONSTRUCTION PHASE IN FROZEN  
CHOPTANK RIVER

*January 2018*

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HORN POINT BOAT BASIN  
ENTRANCE BLOCKED  
ACCESS CHANNEL  
WITH SEDIMENTS

*May 2015*

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COMPLETED MAINTENANCE  
DREDGING OF THE ACCESS CHANNEL  
TO THE BOAT BASIN &  
NATIVE VEGETATION PLANT BY  
DR. LORIE STAVER AND OTHERS

*November 2018*



COMPLETED ARMOR STONE JETTY REHABILITATION  
AT HORN POINT LABORATORY ON THE CHOPTANK

*October 2018*

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# 2MW ONSITE SOLAR PROJECT

## SOLAR FIELD SOLAR CARPORT & ELECTRIC VEHICLE CHARGING STATION

HORN POINT LABORATORY  
SOLAR FIELD

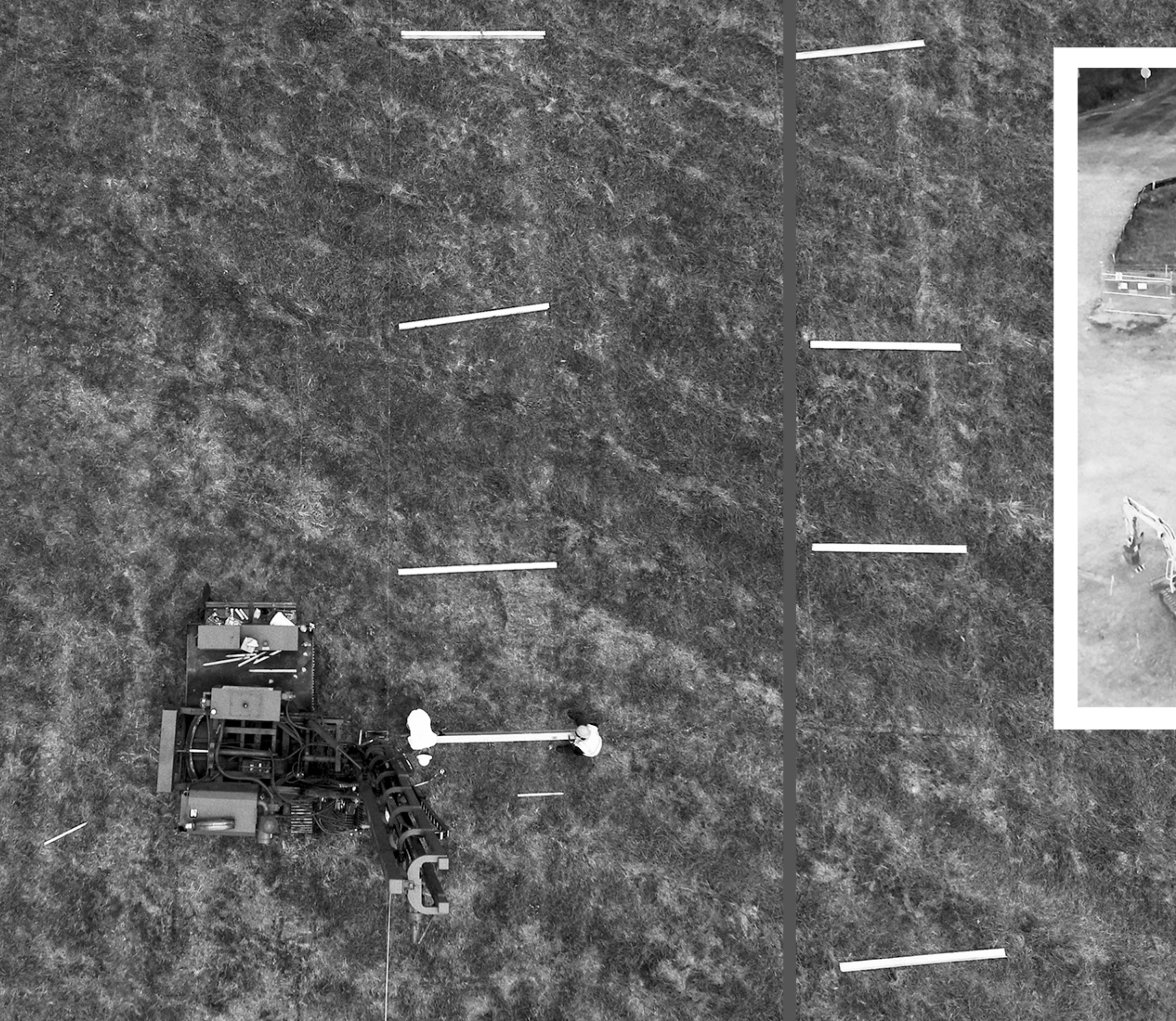
*March 2018*

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In the spring of 2018, the switch was flipped on a new solar field spanning 10 acres on the University of Maryland Center for Environmental Science's Horn Point Laboratory campus.

The 11,000 solar panels are expected to generate the equivalent of 50% of the campus' annual energy consumption.

The campus also put the final touches on a new solar canopy over a 46-space, crushed stone parking lot that will offset the cost of four level-II electrical vehicle charging stations. This project is thanks to a grant from the Maryland Energy Administration.



SOLAR FIELD  
AT HORN POINT LABORATORY  
BEGINNING CONSTRUCTION

*January 2018*

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SOLAR FIELD  
AT HORN POINT LABORATORY  
UNDER CONSTRUCTION

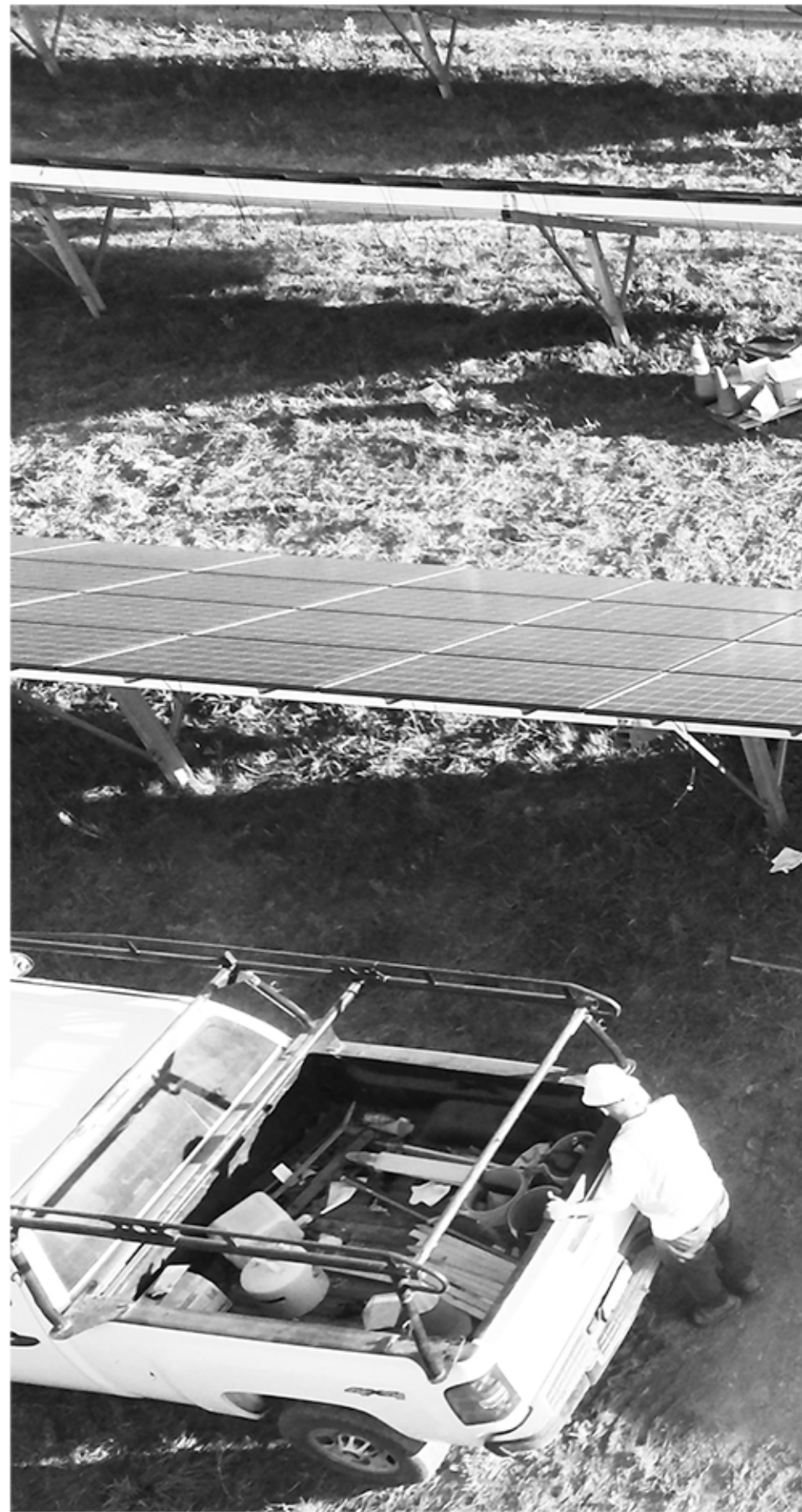
*February 2018*

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SOLAR FIELD  
AT HORN POINT LABORATORY  
UNDER CONSTRUCTION

*March 2018*



SOLAR FIELD  
AT HORN POINT LABORATORY  
UNDER CONSTRUCTION

*April 2018*

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SOLAR CARPORT  
AT HORN POINT LABORATORY  
UNDER CONSTRUCTION

*November 2017*

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SOLAR CARPORT  
AT HORN POINT LABORATORY  
UNDER CONSTRUCTION

*December 2017*

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COMPLETED SOLAR CARPORT  
AT HORN POINT LABORATORY  
AND EV CHARGING STATIONS

*May 2018*

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COMPLETED SOLAR CARPORT  
AT HORN POINT LABORATORY  
AND EV CHARGING STATIONS

*May 2018*

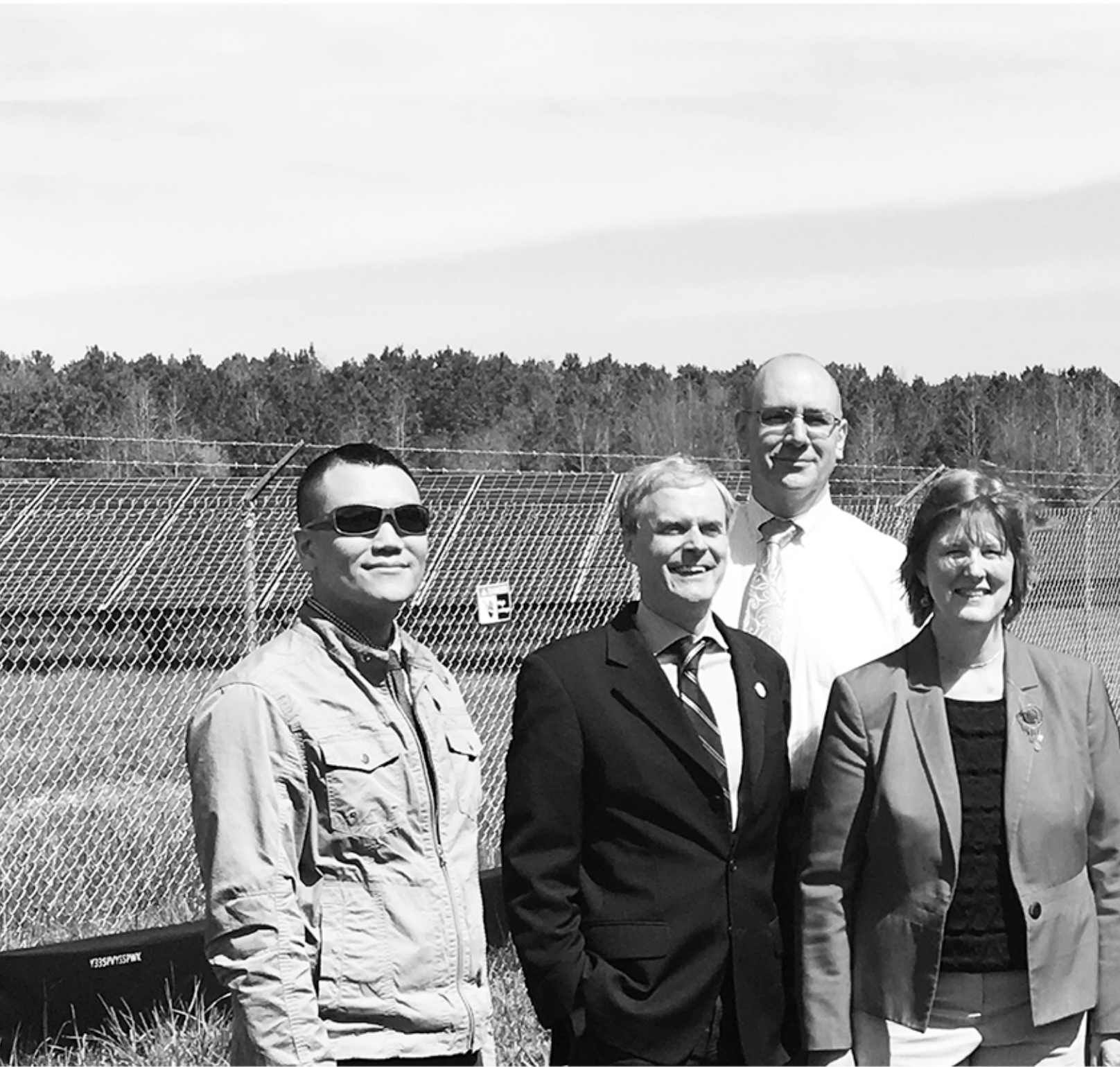
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A FEW PEOPLE AMONG MANY WHO MADE  
THE PROJECT POSSIBLE AT UMCES,  
MARYLAND ENERGY ADMINISTRATION  
AND STANDARD SOLAR, INC.

*May 2018*

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# PLACE & RITUAL

## FACILITIES MAINTENANCE + IMPROVEMENTS AT ALL UMCES LABORATORY CAMPUSES

NEW GRAVEL PEDESTRIAN  
PATH AND NATIVE PLANTS AT  
CBL CAMPUS

*August 2018*

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In 2018, all of the three UMCES managed laboratory campuses made significant facilities and landscape improvements.

UMCES facilities management will continue to focus improving and well maintaining the natural and built environment, in and around our campuses to better enhance the unique physical environment each laboratory campuses are located in.

UMCES facilities management will be good stewards of our facilities and environment.



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

CHESAPEAKE BIOLOGICAL  
LABORATORY

*Solomons, MD*  
2018





University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

APPALACHIAN LABORATORY

*Frostburg, MD  
2018*



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

HORN POINT  
LABORATORY

*Cambridge, MD*  
*2018*





TOP LEFT: CHESAPEAKE BIOLOGICAL LABORATORY  
BOTTOM LEFT: HORN POINT LABORATORY  
TOP RIGHT: APPALACHIAN LABORATORY

*FACILITIES MANAGEMENT*  
**2018**



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE