TECHNICAL SUBMISSION

FARM SHOW COMPLEX

Facility and Safety Improvements

Project No. DGS C-0700-0047 Phase 6

RESPONSE TO REQUEST FOR QUOTE

Submitted by:

Aramark Facility Services
2346 Boston Post Road, Suite 2
Guilford, CT 06437

May 20, 2026

Re: Commissioning Agent Services for DGS C-0700-0047 Phase 6, Farm Show Complex - Facility and Safety Improvements

Attn: Benjamin Cassidy

We are pleased to respond and provide a proposal and cost estimate for Commissioning Agent Services during the design and construction phase stages of the Department of General Services Project No. DGS C-0700-0047 PHASE 6, Farm Show Complex - Facility and Safety Improvements.

Aramark is familiar with the DGS requirements for design and construction and on many projects for DGS, including the Lincoln University Living Learning Center HVAC Upgrades project that is underway, the Shippensburg University Franklin Science Center, Penn West Cal U Science Building, PA State Museum, PA State Police Academy, Philadelphia County Maintenance Facility, and the Southwestern Veterans' Center. We have also worked on many similar large event facility projects and scope projects as shown in the contractor project experience section.

Manas Vaidya is slated as the project manager for this project. Manas has worked on several projects for DGS in the Eastern PA region, including as project manager for active DGS projects for the North Central Secure Treatment Unit, Danville Field Maintenance Center, and the Carlisle Readiness Center. He is located *less than 2 miles* from the project location and will be supported by our local team of Tim Russ for overall support, fire alarm, and ATC; Allison Bailey, P.E. for mechanical and controls; and Jacob Rourke, who has supported DGS on multiple projects for Aramark, will be supporting electrical and security systems commissioning. Carl Gottschalk will support building assembly systems. Chris Skalski, P.E., BCxP, will provide program manager support to the team.

We look forward to continuing and strengthening our relationship with the Department of General Services. Should you have any questions, please do not hesitate to contact Chris Skalski, Senior Manager, Commissioning Services at (484) 368-4180 or skalski-christopher@aramark.com.

Sincerely,

Brian Lee, P.E.
Vice President, Engineering Solutions
Authorized Signatory of Aramark Management Services Limited Partnership

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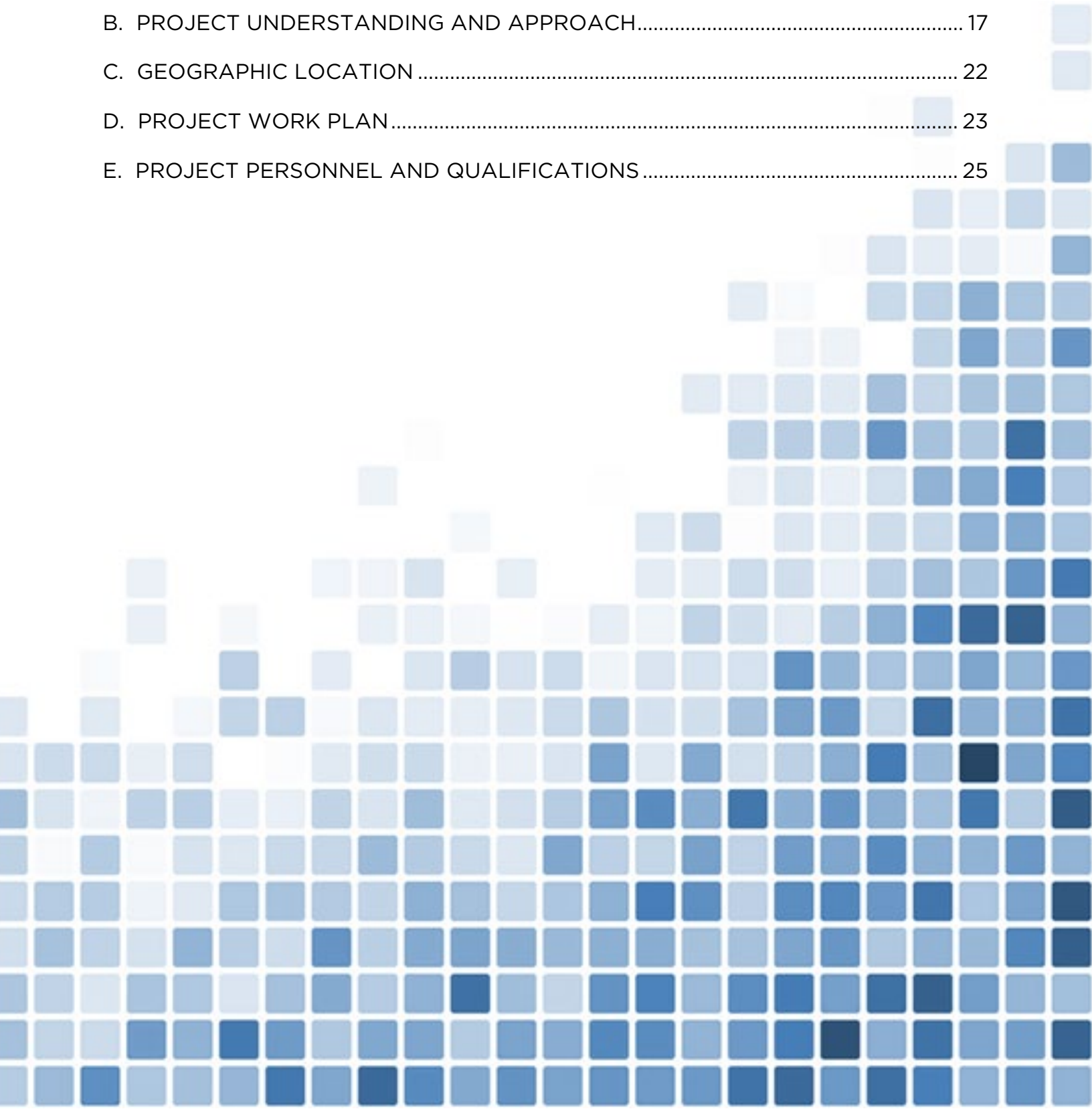


A. CONTRACTOR PRIOR EXPERIENCE

For nearly 45 years, Aramark Engineering Solutions has demonstrated proven expertise in developing and implementing energy management programs that promote sustainability and conserve energy. We bring a customized approach based on the individual drivers of each organization. As one of the largest third-party commissioning agents in the United States, our unique operational expertise distinguishes our service from our competitors.

Our commissioning philosophy is guided by the following three tenets:

1. Provide a facility that operates to support the program.
2. Verify systems achieve peak efficiency.
3. Confirm building infrastructure is readily maintainable by the operators.

Our services will further facilitate a seamless transition to the operations group and provide a technical resource to support building operations.

Experience At A Glance

Total Projects Commissioned: **1,500+**

Total GSF Commissioned: **120+ Million**

Constructed Value of Commissioned Projects: **$15 Billion**

Select Aramark Commissioning Clients

- Baylor University
- City University of New York
- Centenary College
- Drew University
- Edinboro University
- Franklin & Marshall College
- George Washington University
- Institute for Advanced Study
- NYS Dept. of Corrections
- NYS Office of Mental Health
- Ohio State University
- PA Dept. of General Services
- Penn State University
- Princeton University
- State of Pennsylvania (PADGS)
- University of Pittsburgh
- University of Kentucky
- University of Pennsylvania
- Washington College
- West Chester University
- West Virginia University

FACILITIES COMMISSIONED

- Recreation centers (athletic & aquatics)
- Campus & performing arts centers
- Museums, libraries & cultural institutions
- Residence Halls
- Large classroom, academic, and computer facilities
- Science, research, vivarium, BSL3 and laboratory
- Hospitals & mission critical facilities
- K-12 Schools and Campuses
- Retro-commissioning of existing buildings and systems
- Correctional facilities
- Heating, cooling plants and major electric infrastructure

RELEVANT PROJECT EXPERIENCE

Aramark brings close to 45 years of commissioning expertise, having worked on similar projects with the same scope, facilities, and equipment within the past five years. Please see a select list of projects below, followed by several highlighted projects with additional details.

Client	Project	Location	End Date
PA DGS	PA State Museum & PHMC Tower - Infrastructure Upgrades and Reno	PA	In progress
PA DGS	Railroad Museum	PA	In progress
Penn State University	Field Hockey Stadium	PA	In progress
Penn State University	Jeffrey Field Soccer Complex Reno & Addition	PA	In Progress
University of Pennsylvania	Class of 1923 Ice Rink – Energy Analysis and RCx	PA	In progress
University of Pennsylvania	Steinberg Conference Center – Energy and RCx	PA	In progress
Allegheny Health Network	Erie Sports Center	PA	2025
Maryland Stadium Authority	M&T Bank Stadium Renovations	MD	2025
Penn State University	Bryce Jordan Center – Multiple Projects	PA	2025
Penn State University	Lasch Football Building	PA	2025
Penn State University	Rec Hall ESP Upgrades & CW Bridge Connection	PA	2025
Penn State University	White Building ESP	PA	2025
University of Maryland	Barry Gossett Basketball Facility	MD	2025
University of Pennsylvania	Annenberg Center AHU Replacement	PA	2025
University of Pittsburgh	Bradford McDowell Sports HVAC	PA	2025
Vanguard University	Freed Center - Gymnasium	CA	2025
Penn State University - Behrend	Behrend Erie Hall Replacement	PA	2024
University of Pennsylvania	Dunning Coaches Center HVAC Replacement	PA	2024
University of Pennsylvania	Ott Center for Track and Field	PA	2024
University of Pennsylvania	Steinberg Conference Center	PA	2024
University of Pennsylvania	Hollenback Center HVAC Replacement	PA	2023
Penn State University	Eisenhower Auditorium	PA	2022
University of Pennsylvania	Boathouse Renovation and Addition	PA	2022
City University of New York	York College – Academic Core HVAC Upgrades	NY	2021
University of Pennsylvania	Irvine Auditorium - Energy & RCx	PA	2021

UNIVERSITY OF PENNSYLVANIA
ANNENBERG CENTER OF THE PERFORMING ARTS AHU REPLACEMENT

LOCATION:
Philadelphia, PA

GROSS SQUARE FEET:
157,631

ARAMARK FEE :
$31,352

CX SERVICES:
Design Review
MEP Systems Review
Installation Inspections
Performance Verification
Operations Training

CONTACT:
Kate Gilbert
Project Manager
kategil@upenn.edu

SCHEDULE:
September 2022-February 2024

The Annenberg Center for the Performing Arts is a theatre, dance and world music venue that consists of four theaters arrayed around a central lobby and grand stair that links each of the parts of the building. Founded in 1971, it is a major cultural destination and crossroads in the performing arts, connecting Philadelphia regional audiences and the University of Pennsylvania through exposure to innovative human expression in theatre, music, and dance. The HVAC systems are original have reached the end of their service life. An existing condition assessment and construction feasibility study was completed in 2020. The replaced seven air handling units provided a new DDC control system, steam PRV station, and main distribution panel to serve the AHU.

COMMISSIONING RESULTS:

During functional testing of the AHU systems, Aramark found the following themes of issues:

- Building pressurization issues based on return fan tracking control and OA plenum condition issues
- Air flow stations were inaccurate or not installed.
- Control devices not installed (i.e., AHU-1,3 cooling coil temp sensor).
- Failed control devices (i.e., AHU-5 outside air damper).
- Systems not meeting control set points (i.e., AHU-2 return air flow).
- AHU casing and fan issues (i.e., AHU-4A fan rubbing, leakage issues, abnormal pressures).
- Control system overrides for temporary operation until control device issues are resolved.

Some of the issues identified include:

- In AHUs 1-5, outside airflow AFMS ordered incorrectly on wrong end of airflow scale and will not operate properly. Does not read until damper is about 60% open at 3000 cfm,. Design minimum is 1900 cfm.
- Cooling coil temperature is not installed in AHU-1 and AHU-3. This sensor is preventing economizer operation via program logic.
- In AHU-3, the heating coil is leaking at unit penetration.
- Mixed air temperature sensors were installed in a manner where they were tucked behind filters and directly upstream of cooling coil in AHUs 1-5. This was causing mixed air temperature to be impacted by cooling coil temperatures.
- In AHUs 6 and 7, exhaust flows did not have ebtrons/sensors installed.

MARYLAND STADIUM AUTHORITY
M&T BANK STADIUM RENOVATIONS

CONTACT:
Kelly Smulovitz
Project Manager
ksmulovitz@mdstad.com
(410) 812-3947

GROSS SQUARE FEET:
500,000+

PROJECT COST:
$430 Million

CX SERVICES:
Submittal Reviews, Installation Inspections, Witness Contactor Testing, Equipment Start-up Witnessing, Pre-functional Testing, TAB Review, Performance Verification, Training Support and Verification, Systems Manual, Post Occupancy Review.

ARAMARK FEE
$739,292

SCHEDULE:
January 2024 -December 2026

Aramark was selected to commission the M&T Bank Stadium Renovation Projects in four phases. For the 2024 phase, projects included:

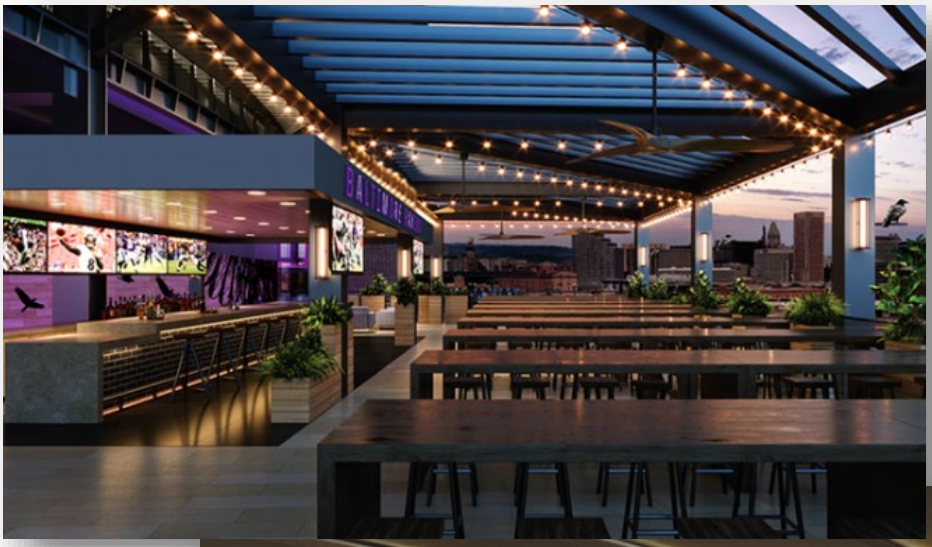
- Club Level Renovation – Replace all existing mechanical equipment on club level, renovate restrooms, and replace all finishes / lighting throughout.
- Suite Level Hallways and Entrances – Replace all existing mechanical equipment on suite level hallways and replace all finishes / lighting throughout.
- Chairman Suites – Completely renovate the current press level and turn it into suites, a large kitchen, and a lounge space. All associated MEP and finishes are included. The new space is approximately 30,000 SF.
- Press Relocation – Relocate the press from the current press level to lower suite level. All associated MEP and finishes included. The new space is approximately 9,000 SF.
- Miller Lite Building – Replace the tent in the SE corner with a two-story beer hall. First floor will be enclosed with glass and the second floor will be an outside rooftop bar. Building is approximately 13,000 SF.

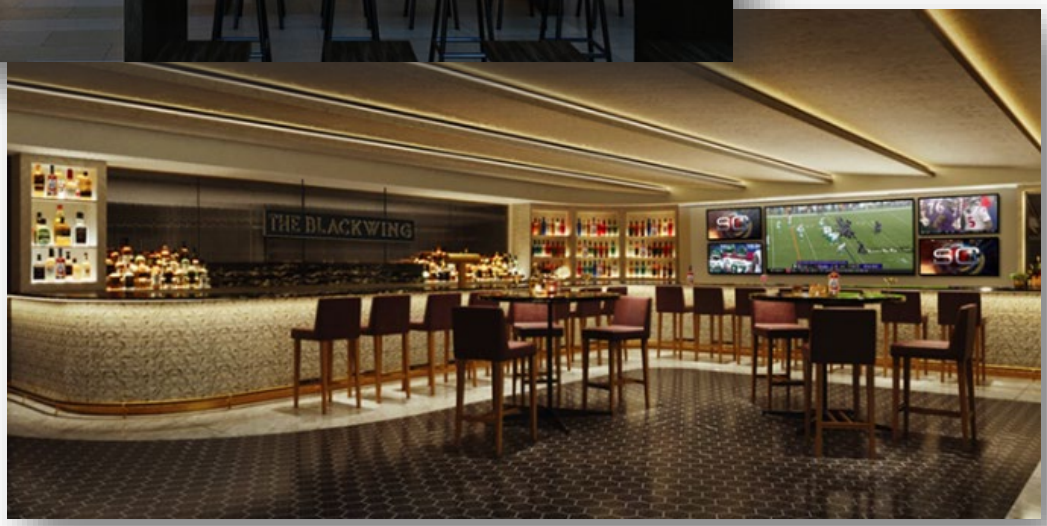
SYSTEMS COMMISSIONED:

The new MEP systems included AHUs, DOAS units, energy recovery modules, make-up air units, air-cooled condensing units, VRF systems, heat pumps, ductless split AC units, terminal heaters, pumps, exhaust fans, VFDs, DDC Control Systems, lighting controls, emergency generator, automatic transfer switch, chiller plant, heating water plant, domestic hot and cold water system, storm and sanity systems, and lightning protection.

COMMISSIONING RESULTS:

- **Equipment Accessibility –** Several locations identified with inadequate maintenance accessibility for Air terminal unit, fan coil units or air handling unit components. This resulted in a project team review and comprehensive walk–through and action plan to address the specific units that needed to be relocated and were addressed.
- **Fire Alarm Control Issues –** Fire alarm control programming issues that didn't shut down air handling units as required were identified. These issues were reviewed, addressed by fire alarm and automatic temperature controls contractor and retested.
- **Air Handling System Diversity & Terminal Unit Airflow Issues –** During functional testing and opposite season testing greater than 15–20% of terminal units experienced low airflows when controlling to air flow and space temperature set points. This resulted in space temperature alarms and complaints. The existing air handling unit systems are being reviewing and sizing for system diversity factor to address.
- **Space Temp Control Issues** were identified during functional testing and opposite season testing requiring various action items.
- **ATC Control Loop Tuning Issues** – Several units experienced automatic temperature control loop tuning issues that required correction and retesting.





CITY UNIVERSITY OF NEW YORK (CUNY)
YORK COLLEGE – HVAC UPGRADES TO ACADEMIC CORE

PROJECT LOCATION:	PROJECT SCHEDULE :	OWNER/PROJECT CONTACT:
Jamaica, NY 11451	2019-2021	Tria Case, Esq., University Director of Sustainability and Energy Conservation 646-664-2856
GROSS SQUARE FEET: 188,400	ARAMARK FEE $52,000	

York College underwent a campus wide mechanical, electrical, and plumbing upgrade and Aramark served as the commissioning agent to verify the upgraded systems comply with the design documents, design, intent and owner's needs. The new systems reside in four locations of the Academic Core Building. The Academic Core Building serves as an integrated hub encompassing academic spaces such as classrooms, lecture halls, and laboratories, alongside student services like admissions, financial aid, and registration. It also houses the York College Library, administrative and departmental offices, specialized facilities including a Makerspace and music practice modules, and amenities like dining and the bookstore.

Aramark performed equipment submittal reviews, site inspections of installed equipment, coordination/attendance at construction/commissioning meetings, witnessing of equipment startups and test and balance of airside and waterside equipment, system functional performance testing, deficiency/issue log tracking and resolution, and building management system (BMS) testing. Post construction, Aramark reviewed select operations and maintenance manual and ensured that all documentation for O&Ms that were reviewed were complete and properly turned over.

COMMISSIONING SERVICES PROVIDED:

Commissioning agent, installation inspections, performance verification, and issue resolution assistance.

SYSTEMS COMMISSIONED:

- (4) Split AC Units
- (3) Air Handling Units
- (2) Computer Room AC Units
- (2) VAVs
- (7) Duct Mounted Humidifiers
- Steam Generator
- Miscellaneous Pumps, Fans & Valves
- BMS (as it relates to the systems above)

COMMISSIONING SUCCESS:

32 issues were outlined and addressed, including:

- Electrical piping requiring additional support.
- Areas of insulation that were ripped/torn.
- Temporary power cables needing removal.
- Equipment missing tags/labels.
- High Humidity Alarms for Animal Lab spaces not set up properly.
- Inability to adjust relative humidity from local thermostats in Animal Labs.
- Identifying that the Sequence of Operations as designed would not work, as York College does not have heating hot water for the reheat coils to maintain space temperature setpoint during the summer months.

PLYMOUTH MEETING / HORSHAM READINESS CENTERS
PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES, PLYMOUTH MEETING/ HORSHAM, PA

The Department of General Services is renovating the Plymouth Meeting Readiness Center and Plymouth Meeting Annex and Building 350 at the Biddle Air Guard Base in Horsham, PA.

This project consists of three existing buildings to be renovated on two separate campuses approximately 12 miles apart: Plymouth Meeting Readiness Center (PMRC) and Plymouth Meeting Annex (PMA) at 1046 Belvoir Road Plymouth Meeting, PA 19428, and Building 350 on Langley Street at the Biddle Air Guard Base in Horsham, PA 19090.

Functional uses of the Horsham Building include administrative, multi-purpose room, training areas, vehicle storage area, and a storage area. Support areas include a locker room and restrooms.

The Plymouth Meeting Building will include a kitchen area, drill hall, and vault areas along with a locker room, restroom, and mechanical room.

The Horsham Building is undergoing equipment start-up and controls commissioning and will be functionally tested in the near future. The Plymouth Meeting Readiness Center is undergoing early construction.

Functional performance testing of the HVAC equipment serving Horsham Building 350 identified the following:

- AHU-1 is running in Auto but not making duct static pressure setpoint of 1.0" w.c. Static pressure reading 0.03"and fan speed locked out at 33%. This has a direct impact on VAV and max airflow cooling control. Recommended final Cx after final AHU balancing.
- ERV-1 does not have a return air duct smoke detector installed but ATC submittals calls for one.
- Freezstat shuts the unit down and dampers close however tied into fire alarm relay (but there is no duct detector). ALC to troubleshoot.
- Return air humidity sensor unreliable, reading a negative value. ALC to troubleshoot.
- Exhaust Fan H-4 ALC is reading 37.4 ppm on CO sensor and 1.8 ppm on NO2 sensor, however, local monitor reads 0.0 for both.

CONTACT:
Paul M. Artale, RLA
717-787-5118
partale@pa.gov

GROSS SQUARE FEET:
51,000

CX SERVICES:
Design Review
Submittal Reviews
Site Inspections
Pre-Fx Checklists
Functional Testing
Owner Training

ARAMARK FEE:
$29,190

SCHEDULE:
Summer 2023-In progress
(est. 2026)

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES
QUEHANNA MOTIVATIONAL BOOT CAMP – BUILDING D ADDITION

This project includes the construction of single story, approximately 12,000 square feet of a New Addition to existing building D at the Quehanna Motivational Boot Camp for the Pennsylvania Department of Corrections. The new building addition will consist of public lobby area, administration offices, multipurpose hall, visitation hall, and services spaces.

The one-floor building will include one RTU, several wall heaters, and electrical and plumbing systems. The project is currently in the beginning stages.

The systems and equipment to be commissioned are:

- Protective systems including fire suppression and fire alarm systems.
- Plumbing systems including domestic hot water systems.
- Heating, ventilating, air conditioning and refrigeration systems (HVAC) including heat generation, refrigeration, ventilation, and HVAC control systems.
- Electrical systems including power distribution, lighting, and controls, and emergency generator systems.
- communications systems including voice/data and sound/video systems.
- Electronic safety and security systems including security, alarm, and detection systems.

LOCATION:
Karthaus, PA

GROSS SQUARE FEET:
12,000

CONSTRUCTION COST:
$4.85 Million

CX SERVICES:
Submittals Review
Installation Inspections
Performance Verification
Operations Training

CONTACT:
Daniel S. Hemphill
Project Coordinator
717-678-3759

ARAMARK FEE:
$12,236

SCHEDULE:
2023-In progress (est. 2026)

Some of the issues identified in construction installation include:

- Spare conduits were blocking access to the VAV power/control panels. Coordination required to maintain access.
- A wire support for the suspended ceiling grid was observed to be preventing 90° opening of the VAV doors in Training Room 129.
- VAVs observed to be installed without gasketed bottom side access doors.
- Victaulic sprinkler head hoses were not being installed in accordance with FM Global requirements as required in the specs. Hoses installed per FM are required to have a 7" bend radius and are limited on number of 90-degree bends based on length of hose. Most hoses installed to date need to be reworked to meet requirements. Issue applies throughout project as necessary.

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES
FORT INDIANTOWN GAP NEW YOUTH CHALLENGE CENTER

This project consists of a new approximately 15,500 GSF multi-purpose facility which will include a gym/multi-purpose area, full-service kitchen, restrooms and hand washing stations, a physical exercise room, health suite, loading dock and building support and storage spaces. It will be located adjacent to the drill field and their living quarters, *the new facility will serve as the "hub" for the 150 cadets* for their meals, physical fitness, lectures, graduation, and other public events.

Aramark performed comprehensive commissioning of the facility's systems through the Design, Construction and Acceptance, and Occupancy and Operations/Warranty phases. The process included design reviews, commissioning coordination meetings, final system readiness checklists and functional performance tests preparation, field observation site visits, operations and maintenance manual reviews, air and hydronic test and balance report reviews, operation and maintenance training session reviews, system functional performance testing, systems manual submission, and final commissioning report submission.

LOCATION:
Lebanon County, PA

GROSS SQUARE FEET:
15,500

PROJECT COST:
$4 Million

CX SERVICES:
MEP, building envelope, building automation review, post occupancy analysis, HVAC&R technical requirements review, coordination of testing and balancing services

CONTACT:
Paul Hadginske
717-787-6482
phadginske@pa.gov

ARAMARK FEE:
$49,561

PROJECT SCHEDULE:
2021-2023

COMMISSIONING RESULTS:

Below are select issues that were identified and successfully resolved:

- All RTUs - it was observed in the gas firing cabinet that low voltage control wiring and pressure switch poly tubing was in direct contact with burner elements and also the hot flue gas piping. Without corrective actions, the internal wiring of the units would have failed causing the units to no longer or function or even catch on fire.
- Independent isolation shutoff valves needed to be added to all gas-fed kitchen equipment downstream of the reducers. Properly including the local manual shut-off hand valves per the design enables on-site personnel to manual shut-off the gas feed to each individual piece of gas served equipment in the kitchen for maintenance and safety purposes.
- MAU interface was not complete. Interface module needed setup to talk to the hood as the unit was not currently under control via the BMS. The corrective actions ensured proper communications with the BMS.
- Control wiring for RTU-5 duct smoke detection and control found never to be landed and shutdown sequencing inoperable. Correction of this issue ensures proper operation of the FA and smoke safety shutdown system in the need of a life safety event.

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES
NORTH CENTRAL SECURE TREATMENT UNIT – HVAC UPGRADES

The North Central Secure Treatment Unit is a juvenile justice facility on the grounds of Danville State Hospital located in Danville, PA and is operated by the Department of Human Services Office of Children, Youth, and Families. The Bureau of Juvenile Justice Services operates the buildings to provide treatment, care, and custody services for adjudicated youth. It includes an Admissions Building (male program), Green Building (female program) and Reed Building (female program). *The Green and Reed buildngs can be occupied by 24 residents in each building.* All buildings are enclosed by security fencing.

In each Building, the HVAC equipment has reached the end of its operational life and is failing.

Goals of the project:

- Replace aged and failing equipment.
- Improve energy efficiency.
- Provide system redundancy.
- Improve environmental control, safety, and comfort.
- Improve the serviceability of the systems.

We have provided comments regarding the design phase and have identified 10 items that need to be reviewed. The comments include:

- Aramark found that multiple times it stated that all supply air terminals are 250 CFM unless otherwise noted however, there was nothing noted. Clarification was requested on how the same CFM satisfies all spaces regardless of size, occupancy, equipment, and exterior load.
- The plans for the Green building call for roof mounted exhaust fans but the schedules show fans only for the Reed building.
- Duct plans and exhaust fans were not shown for the Reed building.
- All AHUs are scheduled with the same CFM and OA CFM, Clarification was requested again on how the same units satisfy all spaces regardless of size, occupancy, equipment, and exterior load.
- The MBH as schedule for the AHU HW coils is not consistent with the CFM, EAT/LAT and GPM EWT/LAT scheduled.

LOCATION:
Danville, PA

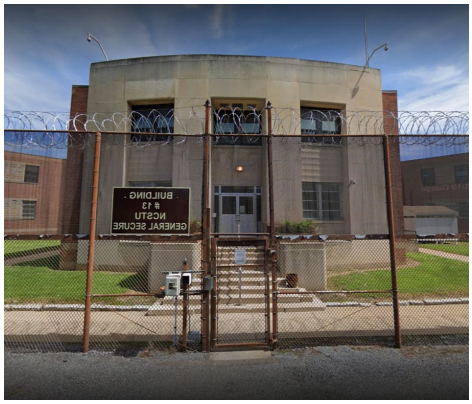
GROSS SQUARE FEET:
80,027

CX SERVICES:
Develop Owner's Project Req, Cx Plan, Cx Specs, Functional Test Forms, Final Cx Report Design Review, Submittal Reviews, Site Inspections, Pre-Fx Checklists, Functional Testing, Owner Training

CONTACT:
Erin M. McCulley, RA,
LEED AP BD+C
Department of General Services
(717) 346-5959

ARAMARK FEE:
$39,120

SCHEDULE:
2023-In progress (est. 2026)



NEW YORK STATE OFFICE OF MENTAL HEALTH
NEW YORK PSYCHIATRIC INSTITUTE BMS UPGRADES – BUILDINGS 4 & 5

New York State Psychiatric Institute in the Washington Heights neighborhood of Manhattan, NY consists of specialized outpatient research clinics, educational facilities, research laboratories, and provides inpatient and outpatient psychiatric services. The Institute consist of two buildings, the Herbert Pardes Building and the high-rise Lawrence G. Kolb Research Laboratory connected by bridge walkways. The entire institute's existing building management software, Siemens Legacy Insight/Apogee, was updated with the newest controls software, Siemens Desigo, along with existing panels and controllers not compatible with the new software. All graphics were also updated as part of this project. At project inception, twenty percent (20%) of the equipment that was associated with the BMS replacement project was selected for commissioning. With the number of issues related to the aging equipment and possible efficiency opportunities, Aramark was contracted to commission the remaining eighty percent (80%) of the project. A new adult services building consisting of 156 beds.

SYSTEMS COMMISSIONED:

Entire building management system including all panels, wiring, end devices, programming, and graphics.

COMMISSIONING SUCCESS:

Aramark identified the following high priority issues:

- Numerous firestopping and fire rated partition deficiencies due to new wiring.
- AHU Fire/Smoke damper issues with multiple air handling units.
- Sequence of operation issues that affected occupant comfort and energy usage.
- Sensor and calibration issues related to aging equipment.
- Airflow issues related to crucial research laboratories.

LOCATION:
New York, NY

GROSS SQUARE FEET:
57,134

PROJECT COST:
$1.8 M

CX SERVICES:
Design Review
Submittal Review
Installation Inspections
Performance Verification
Operations Training & Coordination
Energy Efficiency/Optimization

CONTACT:
Raymond Walsh
Plant Superintendent - Facility Services
646-774-6612

ARAMARK FEE:
$184,486

SCHEDULE:
2019-2022

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES
LINCOLN UNIVERSITY – THURGOOD MARSHALL LIVING LEARNING CENTER

LOCATION:
Lincoln University, PA

GROSS SQUARE FEET:
165,560

CONTACT:
Matthew Vail
717-783-0495
mavail@pa.gov

ARAMARK FEE :
$86,226

CX SERVICES:
Design Review
Installation Inspections
Performance Verification
Operations Training
SCHEDULE:
2025-In progres (est. 2028)

Constructed in phases from 1993-1998, the Thurgood Marshall Living Learning Center (LLC) is 165,560 square feet and used for common areas / cafeteria and student housing. There are co-ed residential rooms, guest quarters, meeting rooms, and the main cafeteria that serves the entire campus community. The building houses approximately 400 people.

This project will install an air conditioning system for the entire LLC that will be efficient, control humidity, improve air quality, and increase ventilation in the kitchen. Also, each student room will have control of their temperature to allow for greater comfort. The selected HVAC system will also have heating capabilities to be used instead of, or in addition to, the current gas boiler system. Additionally, the new cooling system will be compatible with future geothermal plans.

SYSTEMS BEING COMMISSIONED:

- Protective Systems including Fire Suppression and Fire Alarm Systems.
- Heating, Ventilating, Air Conditioning and Refrigeration Systems (HVAC) including Heat Generation, Refrigeration, Ventilation, and HVAC Control Systems.
- Electrical Systems including Power Distribution, Lighting, and Controls, and Emergency Generator Systems.
- Communications Systems including Voice/Data and Sound/Video Systems.

COMMISSIONING SUCCESS:

The project is in the design phase and design review has provided comments with impact on:

- Existing system issues that relate and impact project success
- Lincoln University campus initiatives to de-centralize current steam distribution system
- System optimization and control recommendations
- Equipment and controls capabilities coordination comments
- Scheduled equipment detail coordination

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES
STATE MUSEUM OF PA AND PHMC TOWER INFRASTRUCTURE UPGRADE & RENOVATIONS

As a part of this project, architectural elements and visitor amenities of the existing Museum will be renovated to provide an improved facility which will support the future renovation of exhibits.

Renovations include:

- A new fifth-floor event space and rooftop terrace with views of the Capitol and Susquehanna River.
- A 16th-floor observation deck in the PHMC Tower.
- Installation of two 15-passenger elevators in both buildings.
- *Creation of climate-controlled collections storage areas for sensitive artifacts.*
- A new welcome center
- Redesigned children's area (Curiosity Connection)
- New café and museum store.
- New offices at the ground level.
- Upgraded restrooms.

As part of this project, new security systems, fire detection, protection systems, stair pressurization systems, fire pump, and emergency power generation are required.

Systems being commissioned include:

- Building Assembly Systems including Building Shell, Exterior Wall Assemblies, and Roof Assemblies.
- Protective Systems including Fire Suppression and Fire Alarm Systems.
- Heating, Ventilating, Air Conditioning, and Refrigeration Systems (HVAC) including Heat Generation, Refrigeration, Ventilation, and HVAC Control Systems.
- Electrical Systems including Power Distribution, Lighting and Control, and Emergency Generator Systems.
- Communications Systems including Voice/Data and Sound/Video Systems.
- Electronic Safety and Security System s including Security, Alarm, and Detection Systems.
- Vertical Transportation (elevator) systems.

LOCATION:
Harrisburg, PA

GROSS SQUARE FEET:
750,000

PROJECT COST:
$55 Million

CX SERVICES:
Design Review
Submittals Review
Installation Inspections
Performance Verification
Operations Training

CONTACT:
Kati Woodling
717-346-4668
kawoodling@pa.gov

SCHEDULE:
2024-In progress
(Est. 2029)

ARAMARK FEE:
$162,662

Project status:
This project is currently underway in the design phase. A meeting was held in January and a sampling of topics that were discussed are included below.

- Clean steam riser, water test needed.
- Terminal units in design. Large space exception VAV box prefered
- Pumps updated per DD comments.
- North Vest heat / cool needs.
- Leak detection and ceiling heights, vestibule width.
- Ducts not fully designed.

B. PROJECT UNDERSTANDING AND APPROACH

PROJECT UNDERSTANDING

The Farm Show Complex Facility and Safety Improvements Project's purpose is to create a functional security system, fix the Expo Hall roof, and make operational improvements to HVAC and electric systems that will advance the Complex's ability to operate effectively and efficiently for vendors, visitors and staff. The project is focused on enhancing the performance, safety, and reliability of a large, high-traffic event facility through targeted upgrades to aging infrastructure and security systems. Serving over one million visitors annually across a one-million-square-foot campus, the Complex faces operational challenges driven by its age, varied construction, and deferred maintenance.

Key needs include replacement of the compromised Expo Hall roof and removal of obsolete systems, modernization of aging HVAC equipment operating below capacity with outdated refrigerants, and resolution of ventilation deficiencies impacting critical areas. The project also addresses significant electrical maintenance gaps and introduces a comprehensive, modernized security system with improved surveillance, access control, and centralized command operations to enhance situational awareness.

Project execution will be phased to minimize disruption to the Complex's year-round event schedule, beginning with detailed design and coordination, followed by early procurement of long-lead equipment, and prioritized construction activities in the Expo Hall and critical infrastructure areas. Commissioning, system integration, and staff training will serve as key final milestones, ensuring all systems are fully operational, integrated with the existing BAS where applicable, and prepared to support safe and efficient operations. Collectively, these improvements will provide durable, maintainable systems that accommodate future needs while enhancing the overall experience for staff, vendors, and visitors.

The project schedule notes design phase kick-off in July 2026 with design complete by October 2027; construction is slated from June 2028 to December 2029. The project will have $19.2 million BCA.

There are several project values and goals that will be incorporated throughout the Cx process as listed below. The OPR workshop and Cx plan in design phase will begin in June 2026, followed by our planned construction phase on-site presence with construction meetings and commissioning meetings during the construction phase from June 2028 through December 2029. We will work with the team in the OPR workshop and in the re-occurring meetings to proactively address and manage these items. For system specific details see the following paragraphs.

- Reliable security systems that eliminate the need and frequency of continual repairs.
- All designed systems should be intuitive and easily understandable for Complex staffing capabilities and issues with turnover.
- Spaces should be adequately sized to accommodate current and future staffing and equipment.
- New equipment systems should have long lifecycles, be flexible for future needs and not create hardship for maintainability.
- Design components should integrate into existing Building Automation System (BAS) where applicable.

With regard to electronic safety and security systems, security is one of the two primary focuses of the project and includes significant upgrades:

- Replacement and expansion of the existing surveillance camera system, including installation of high-definition cameras to improve coverage and identification capabilities.
- Deployment of a modern electronic access control system, replacing or augmenting existing keyed access with key card entry.
- Development of a primary and backup Command Post/Operations Center (CP/OC) to centralize monitoring, control, and response capabilities.
- Improvements to system monitoring, detection, and situational awareness, including enhanced tracking of activity across the facility and parking areas.

These enhancements are designed to significantly improve safety, security response, and operational awareness for a facility that hosts large public events and experiences high visitor volumes.

For building assembly systems, the primary work involves replacement of the Expo Hall's existing EPDM roof, which has experienced significant failure including detachment and widespread leaks. The project will also include removal of obsolete solar panels, repair of water-damaged areas, and restoration of the roof assembly to provide a watertight, durable enclosure. These upgrades are intended to improve building integrity, eliminate ongoing maintenance issues, and enhance long-term performance of the facility envelope. Our Cx approach will focus heavily on reviews in design phase detailing all requirements and submittal review for materials and coordination. Testing requirements will be outlined throughout the commissioning process.

The HVAC systems scope is a major component of the project and includes:

- Replacement of nine (9) rooftop Air Handling Units (AHUs) serving the Expo Hall, which are currently outdated, underperforming, and difficult to maintain. Reviewing these new unit specifications will also be a significant factor in the project value of long lifecycle and flexibility for future needs.
- Installation of new, modern HVAC equipment designed for improved efficiency, reliability, and maintainability.
- Ventilation and air distribution improvements, particularly in problem areas such as the switchgear room and food court, where inadequate airflow and temperature control currently exist. We will work not only in design team with duct sizing, air pathways but also the testing, adjusting and balancing effort to confirm in the field.
- Addition of mini-split systems to support new spaces such as the Command Post/Operations Center (CP/OC) and to provide dedicated cooling (e.g., for electrical rooms).

These upgrades are intended to resolve existing capacity issues, improve indoor air quality, and ensure consistent environmental control throughout the facility. All new and upgraded systems are to be integrated into the existing Building Automation system where applicable.

The electrical system improvements focus on upgrading and rehabilitating aging infrastructure, including:

- Evaluation and maintenance of existing electrical switchgear, much of which has not been serviced in over a decade. There are eight (8) units noted throughout the facility that are in dire need of maintenance and testing which will be part of the Cx effort.
- Ensuring reliable power distribution to new HVAC equipment, security systems, and command center operations.

- Integration of new systems into the facility's electrical network, including support for backup power and critical system reliability.

The goal is to create a more dependable electrical system that supports modern operational demands while addressing current deficiencies and maintenance concerns

While not the primary focus of the project, protective systems will be evaluated, maintained, and integrated with the upgraded building systems as part of overall facility improvements. This includes ensuring that fire alarm and suppression systems remain compliant, properly coordinated with new electrical and control systems, and fully operational following construction. The commissioning scope ensures that any affected fire protection infrastructure continues to meet safety and code requirements

The communications scope supports both operational efficiency and security and includes:

- Expansion and utilization of the existing fiber backbone infrastructure to transmit data for security and operational systems. Note one of the assumption in the PDS document
- Development of infrastructure to support voice, data, and audiovisual systems, particularly within the Command Post/Operations Center.
- Coordination of communications systems with security and building systems to ensure seamless information flow across the complex.

These upgrades enable enhanced connectivity, support modern monitoring capabilities, and improve coordination across the large facility

PROJECT APPROACH

It is evident that in order to truly assist in the short- and long-term success of this project, our commissioning plan requires a unique and varied blend of technical, operational, and engineering expertise. The challenges involved in the construction of this project focus on:

1. Project schedule
2. Complex building systems
3. Increased integration of systems and components
4. MEP technical expertise
5. Project turnover and operations expectations

We are familiar with these significant challenges through our extensive commissioning, operations backgrounds, and experience with capital and operation teams. Our focus is to "bridge the gap" between the construction teams, design teams, project management, and operations groups. Our solution to these challenges is to develop and integrate a unique commissioning program that will provide collaboration between teams, verify that the design intent (installation and performance) is met, establish parameters for acceptance of the construction/end users, and integrate turnover/operations smoothly and effectively.

A summary of the solutions are outlined in the following bullets.

- Creating partnerships and leading collaboration within the project and construction teams.
- Providing "on-site" representation to focus and coordinate the commissioning efforts.
- Coordinating and integrating teams of professionals in supporting corrective actions.
- Establishing parameters and testing requirements for system acceptance as opposed to component acceptance.

- Exercising the systems throughout operating ranges, safety, and emergency conditions.

Aramark will develop a program specifically geared towards the Farm Show Complex - Facility and Safety Improvements project. Aramark will work directly for the PADGS and provide an unbiased, objective view of the systems installation, operation, and performance. As part of the owner's building systems commissioning process, Aramark will cooperate with and coordinate all commissioning activities with the project manager, design professionals, construction manager, and contractors. This process is not to take away or reduce the responsibility of the design team or installing contractors, but to provide a finished and fully operational product in accordance with design intent.

Our scope of services consists of the following focused efforts:

PROFESSIONAL COMMISSIONING SERVICES – PHASE APPROACH

DESIGN PHASE

Regarding anticipated project schedule, commissioning on-boarding will occur shortly after award in June 2026. The design will kickoff in July 2026, OPR development in August 2026 and design completion by October 2027. Construction will start in June 2028 and will finish in December 2029. The commissioning team leader will develop, organize, implement, observe, document, and lead the commissioning effort in a manner that furthers the success of the project. This effort will not only minimize the impact on project schedule but also promote efficient system startup and turnover. A summary of activities in this phase consists of:

a. **Owner's Project Requirements (OPR)** – Working with the DGS Design Project Manager, Design Professional, and the Client Agency facilities maintenance staff, conduct an OPR workshop early in the concept design stage to develop the project goals, measurable performance criteria, cost considerations, benchmarks, success criteria, and supporting information. Provide descriptions of the following: a) primary purpose of Project, b) environmental and sustainability goals, c) energy efficiency goals, d) indoor environmental quality requirements, e) desired equipment/system quality, reliability, and maintenance requirements, f) facility operation and maintenance requirements including requisite personnel training and orientation.

b. **Commissioning Plan (Cx Plan)** – Provide written document that outlines the overall process, organization, responsibilities, schedule, allocation of resources, and documentation requirements of the Commissioning Process to verify and document that the design, construction, and operation of the facility meet the Owner's Project Requirements (OPR).

c. **Design Review** – Provide a review and comments of the Professional's design documents and Basis of Design (BoD) narrative for compliance with the Owner's Project Requirements. Design review includes a back-check of Commissioning Design Review Comments at subsequent Design Submission and participation in the page turn and design review meetings. During the Programming, Schematic and Design Development Phases, will provide constructability evaluations to guide the team and find innovative ways to increase the overall project value.

   Three design phase page turn meetings, as well as bi-weekly virtual design progress meetings are assumed in accordance with the PDS. We will review and reference the International Energy Conservation Code (IECC) as part of our review process.

d. **Commissioning Specifications** – Provide Commissioning Specifications for all systems/assemblies being commissioned for inclusion within the Project Construction Documents.

CONSTRUCTION PHASE

A pivotal aspect of our commissioning program is enabling team reviews and inspections of the systems in their area of expertise (i.e., mechanical, electrical, and plumbing). All commissioning documentation and progress including deficiencies and outstanding issues are documented in commissioning software program CxAlloy. The intent of CxAlloy is to generate a comprehensive list for the project manager to distribute to the design and construction teams for response and action. Subsequent to each focused inspection, a progress report will be issued detailing the deficiencies, resolution actions, and status of each item. We will maintain the current status for each item on the deficiency list as well as document the resolution actions in the final report. The CxAlloy documentation info is available to the Owner, and the data will be transferred at project completion to allow building information use of the life of the facility. The commissioning team leader will act as the point person and bring up issues to the construction and design teams. The focus of the construction installation phase will include the following:

a. **Submittal Review** – Identify and review Contractor submittals applicable to systems/assemblies being commissioned. Identify issues that might result in rework or change orders. Verify the following: a) conformance with Owner's Project Requirements (OPR) and Basis of Design (BoD), b) achievement of operations and maintenance requirements, c) enablement of performance testing. All submittal reviews and correspondence must take place in Trimble.

b. **Job Construction Meetings –** CxA shall attend regular job construction meetings as necessary to ensure the systems are properly installed, operated and tested, and are functioning correctly to meet the design intent. Aramark assumes bi-weekly meetings and this applies from the construction duration starting in June 20288 through December 2029.

c. **Commissioning Meetings** – CxA shall hold periodic jobsite Commissioning Meetings with all project stakeholders to review important aspects of equipment, HVAC system, and Controls System installation. Review and document necessary installation details, system testing procedures, and documentation requirements. CxA will keep meeting minutes and include in the Cx Report. Commissioning Meetings shall occur either as a part of the biweekly Job Construction Meetings or immediately following. This will be at the discretion of DGS Bureau of Construction. Aramark assumes this applies from the construction duration starting in June 2028 through December 2029.

d. **Construction Observation and Testing –** CxA shall utilize CxAlloy cloud-based commissioning and quality management platform for the documentation of all Construction Observation and Testing. Verify that the performance of the systems/assemblies being commissioned, as installed, meet the Owner's Project Requirements (OPR), Sustainability Criteria, Basis of Design (BoD), and Contract Documents. Furnish test procedures and checklists prior to equipment installation. Produce a Pre-functional test for each test. Test procedures shall list the entities responsible for executing each test. Provide installation inspections. Direct, witness, and document tests. Evaluate test results and verify that installed systems/assemblies meet the criteria for the Project.

e. **Issues and Resolution Log** – Develop a commissioning issues log containing open and continuing items, status, and name of person/organization responsible for resolution.

f. **Systems Manual** – During the design and construction of the project, the design and construction documents should be assembled into the systems manual. This assembly of documents provides the

details and history of the design and construction of the building and information needed to properly operate the building. The systems manual includes the project final OPR, BOD, construction record documents, submittals, completed startup, verification checklists, functional and performance checklists, verified sequence of operation, facility guide, training records, and commissioning report. The systems manual should be used in the initial and subsequent training of the building operations staff and occupants. The systems manual should be updated throughout the life of the building.

g. **Pre-Functional and Functional Performance Testing** – Confirm (but not necessarily witness) manufacturer's startup of individual equipment components (Pre-Functional Performance Testing). Write, direct completion of, witness, and document full Functional Performance Testing of each system and system component. Confirm proper operation of all control sequences for each season operation. Document in Cx Report.

h. **Training Plans and Records** – Review, pre-approve, and verify training of the Client Agency personnel by the Contractor, to operate and maintain systems/assemblies being commissioned. Include training plan, training materials, and records in final Systems Manual.

i. **End of Warranty Cx Report** – Provide post-occupancy operation commissioning, including incomplete, delayed, and seasonal testing, as well as warranty issues. Post-occupancy operations shall begin at Substantial Completion and shall continue through to the end of the warranty period.

j. **Preliminary and Final Cx Report** – A preliminary commissioning report should be prepared that shows the commissioning progress and equipment performance to date at the time the Certificate of Occupancy is issued. At the completion of the project the final commissioning report should be assembled and provided to the owner and others as required by the OPR and local jurisdiction requirements. This report includes the final commissioning plan, copy of design and submittal review reports, all startup, inspection, verification, functional and performance test forms and reports, the verified sequence of operation, the final Issues and Resolutions log, and summary of the performance of commissioned systems.

SYSTEMS TO BE COMMISSIONED

- Building Assembly Systems including Building Shell, Exterior Wall Assemblies, and Roof Assemblies.
- Protective Systems including Fire Suppression and Fire Alarm Systems.
- Heating, Ventilating, Air Conditioning and Refrigeration Systems (HVAC) including Heat Generation, Refrigeration, Ventilation, and HVAC Control Systems.
- Electrical Systems including Power Distribution, Lighting, and Controls, and Emergency Generator Systems.
- Communications Systems including Voice/Data and Sound/Video Systems.
- Electronic Safety and Security Systems including Security, Alarm, and Detection Systems.

C. GEOGRAPHIC LOCATION

Our proposed staff do not report to a physical office when not working on a project site; rather, they work from their home office. The distance to the job site of our proposed staff is noted below. As you can see, *our core team of Manas and Tim are less than 2 miles from this project site*. Travel time will not be necessary for reimbursement. Please note that Chris Skalski and Allison Bailey will not need to be on-site at the project.

- Manas Vaidya – Harrisburg, PA – 1.8 miles
- Tim Russ - Harrisburg, PA – 1.6 miles
- Jacob Rourke – Centre Hall, PA – 78 miles

D. PROJECT WORK PLAN

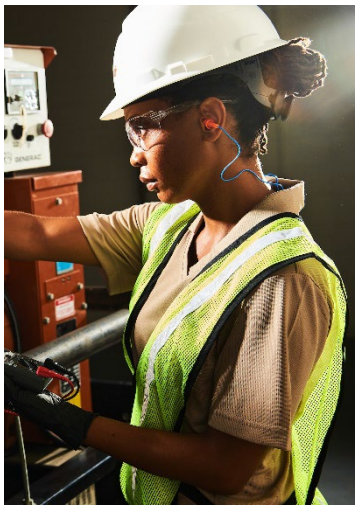
I. Schedule of Milestones

DESIGN REVIEW PHASE – JULY 2026 THROUGH OCTOBER 2027

- Conduct Owner's Project Requirements (OPR) workshop and develop OPR.
- Develop and provide the Cx Plan.
- Provide design review and comments.
- Develop and provide Cx specs for all systems/assemblies being commissioned.

CONSTRUCTION PHASE – JUNE 2028 THROUGH DECEMBER 2029

- Perform submittals review.
- Conduct Cx kick-off meeting with contractors.
- Attend construction meetings as needed.
- Hold regular commissioning meetings.
- Develop pre-functional test forms and provide to contractors.
- Conduct construction observation and testing.
- Develop and maintain issues and resolution log.
- Witness start-up of Cx systems.
- Perform functional performance testing of Cx systems.
- Conduct Cx meetings as needed.
- Develop and deliver Systems Manual.
- Review, pre-approve and verity training of personnel.
- Develop Preliminary Cx Report.



ACCEPTANCE PHASE – DECEMBER 2029 THROUGH SEPTEMBER 2030

- Develop End of Warranty Cx report.
- Develop Final Cx report.

II. Indicate all resources needed to complete the assignment including staff assignments, consultants, and reimbursements.

Aramark will perform all commissioning activities with its own personnel. Note contractor support and/or equipment manufacturer will be required to conduct functional testing as directed by Cx Agent. Staff assignments are indicated in the organizational chart. Reimbursements will be submitted for mileage, which is detailed in Section C above, and misc. meals while traveling.

III. Note inefficiencies or risks to successful implementation, and any planning efforts to mitigate issues such as travel distance, schedule conflicts and required coordination.

One potential risk to successful implementation is insufficient information at this stage on the depth of system upgrades required which will be further defined in the design phase. We will work with the team to fully detail that starting in OPR workshop and communicate with the DGS Design Project Manager of any additional cost impact.

IV. Indicate the anticipated number of hours required for completion of the work described in the Scope of Work (Attachment A).

A. Design Phase (OPR, Cx Plan, Design Meetings): **140 hours**

B. Construction Phase: **616 hours**

1) Construction and Cx meetings: 66 hours

2) Cx documentation (Submittals, Issues list, PFT checklist, FT forms): 174 hours

3) Site work (Installation observation, PFT verification, FT): 376 hours

C. Training Phase (Training coordination): **12 hours**

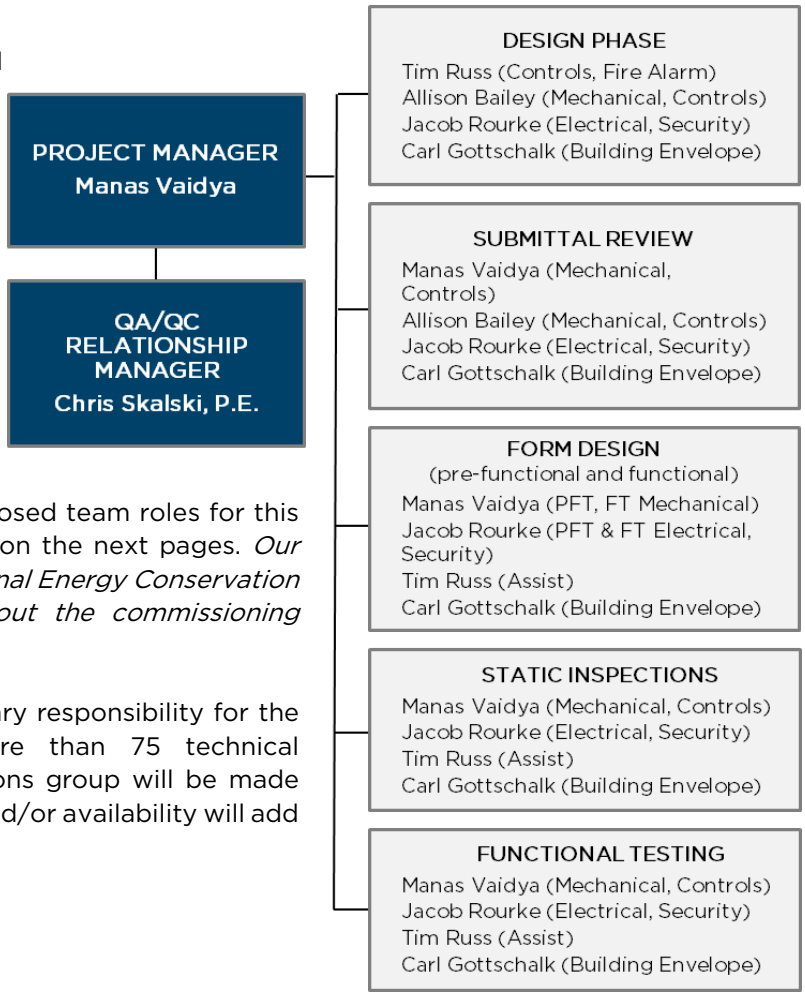
D. Warranty Phase (Opposite season testing, post-occupancy warranty review): **12 hours**

E. Final Documentation (Preliminary and Final Cx report, Systems Manual): **64 hours**

E. PROJECT PERSONNEL AND QUALIFICATIONS

All of Aramark's engagements rely on our experienced professional staff to function as the catalyst for the success of the overall program. Our staffing strategy for managing this relationship expertly and efficiently is straightforward:

- Provide PADGS with a qualified commissioning agent to lead the overall program and serve as the primary contact person.
- Support PADGS with a core technical team comprised of individuals with the requisite technical experience and skill sets.
- Provide experienced "quality assurance" resources to verify that the highest level of quality services is provided.



The organizational chart illustrates the proposed team roles for this engagement, and biographies are included on the next pages. *Our proposed team is familiar with the International Energy Conservation Code (IECC) and reference that throughout the commissioning process.*

Although the proposed staff will have primary responsibility for the proposed engagement, any of the more than 75 technical professionals within the Engineering Solutions group will be made available to PADGS if their skills, expertise, and/or availability will add incremental value to this engagement.

PROPOSED STAFF HIGHLIGHTS

Chris Skalski, P.E., BCxP
- 22 years' experience
- Professional Engineer (PA)
- LEED AP
- Building Cx Professional
- 22 years with Aramark

Manas Vaidya
- 10 years' experience
- Mechanical / Industrial Engineer
- 2.5 years with Aramark

Allison Bailey, P.E.
- 28 years' experience
- Mechanical Engineer
- Professional Engineer
- 17.5 years with Aramark

Tim Russ
- 25 years' experience
- Systems Specialist
- 2 years with Aramark
- Experience with PADGS

Carl Gottschalk
- 35+ years' experience
- Registered Architect (PA)
- 30.5 years with Aramark
- NCARB

Jacob Rourke
- 7 years' experience
- Energy Engineer
- NABCEP PVA Certified
- 2 years with Aramark

MANAS VAIDYA
Cx Manager
Aramark Engineering Solutions

EDUCATION

Lamar University
Master of Engineering
Industrial Engineering

Rajiv Gandhi Technical University, India
Bachelor of Engineering
Mechanical Engineering

CERTIFICATIONS

Certified Six Sigma Green Belt Professional

Mr. Vaidya is a mechanical and industrial engineer with over ten years' experience. He has a background in plant maintenance engineering, systems analysis, energy management, and BAS/energy management end devices.

On behalf of Aramark, Mr. Vaidya will provide professional commissioning services to various clients in the south-central Pennsylvania region.

Prior to Aramark, Mr. Vaidya was most recently a Systems Specialist for Siemens where he performed installation, startup, troubleshooting, commissioning, and repair on computerized temperature control systems which control HVAC equipment such as roof top units, air handlers, VAV boxes, heat pumps, chillers, pumps, cooling towers, boilers, and heat exchangers. As part of this role, he produced reports, provided plans and control system documents, and developed a building automation scope and implementation approach.

SYSTEMS EXPERIENCE:

- TAC Vista
- EcoStruxure
- Desigo
- Insight
- Metasys
- WCIS
- Apogee Commissioning

SELECT PROJECT EXPERIENCE:

M&T Bank Stadium Renovations - $430M, 300+K GSF
PADGS:

- Carlisle Readiness Center Renovations
- Danville Field Maintenance Building - $19.3M, $38K GSF
- Fort Indiantown Gap – New Readiness Center
- Loysville Youth Development Center
- Michaux State Forest
- North Central STU – HVAC Upgrades
- PA State Museum & PHMC Tower
- PA State Police Academy
- Railroad Museum
- SCI Greene CUP Upgrade
- Shippensburg University – Franklin Science Center

TIM RUSS
Manager, Commissioning
Aramark Engineering Solutions

YEARS OF EXPERIENCE

25 YEARS

EDUCATION

Milwaukee School of Engineering
Systems Engineering Edge Certification

NJATC Electrical Apprenticeship

CERTIFICATIONS

OSHA 30

Mr. Russ is a seasoned professional with more than 25 years' experience in temperature controls, fire alarm systems, access controls, smoke control systems, customer service and financial management. He has been recognized for an exceptional record in process improvement and supervising programs/projects in a high-pressure environment under limited time constraints.

With regard to smoke zone testing, Tim has installed many FSCS, including Stairway Pressurization and Smoke Purge systems. Additionally, he has installed these systems on both BMS and a Notifier 3030 FACP system.

Prior to Aramark, Mr. Russ was a Sr. System Specialist where he was responsible for performing complex installation, startup, and commissioning of building automation system equipment that had been newly installed. In addition, he developed building automation for improved occupant comfort, efficient operation of building systems, reduction in energy consumption and operating costs, and improved life cycle of utilities; verified complex system database and programming operations to ensure consistency with the scope of work and sequence of operations; diagnosed and repaired complex control system malfunctions, as well as serving as subject matter expert.

SOFTWARE EXPERIENCE

Visio and AutoCAD, Microsoft (Outlook, Office, PowerPoint, Word, Access and Excel), SQL Server, Dot NET, SharePoint Portal Server, Johnson Controls Metasys, SCT, CCT, GGT, Tridium Niagra, Schneider Electric EcoStructure, Notifier by Honeywell. FieldServer Technologies, ABT software, Desigo, Datamate and Insight.

COMMISSIONING PROJECT MANAGER EXPERIENCE:

M&T Bank Stadium Renovations
PADGS:
- Shippensburg Franklin Science Center
- State Museum and PHMC Tower
- PA State Police Academy

Hershey Medical Center - Comparative Medical Facility (CMF)
Manheim Central High School
WellSpan Health:
- Gettysburg Hospital - AHU-12 Replacement
- Waynesboro Hospital – Pharmacy Renovation
- Adams Health Clinic – LINAC
- York Hospital – IR Lab Phase 1

ALLISON BAILEY, P.E.
Sr. Manager, Commissioning
Aramark Engineering Solutions

TOTAL GSF COMMISSIONED
10 Million GSF

TOTAL COMMISSIONING PROJECTS
60 Projects

EDUCATION
Ohio State University
Bachelor of Science
Mechanical Engineering

CERTIFICATIONS
Professional Engineer (States of KY, OH, WV)

OSHA 10

Ms. Bailey is a mechanical engineer who possesses more than 28 years of experience in HVAC design, DDC control programming, HVAC system troubleshooting, project management, and project coordination.

On behalf of Aramark, Ms. Bailey is a member of our building commissioning team, providing commissioning services for various educational institutions throughout the U.S., including Ohio State University, Baylor University, University of Kentucky, Oberlin College, Edinboro University, Millikin University, and the University of Pittsburgh. Currently, Allison supports commissioning programs throughout the region and is involved in all design reviews as the design lead and mechanical systems reviewer. She is also project manager for the new Twin Valley Behavioral Health Hospital in central Ohio. Allison performs over 40 design reviews per year and has most recently reviewed multiple projects for Nemours, renovations at M&T Bank Stadium, and various other projects for Penn State University.

Prior to joining Aramark, Ms. Bailey worked as a mechanical engineer for MKC Associates where she was a project engineer for HVAC systems for new and existing buildings with an HVAC construction budget ranging from $1K - $5.6M. She was responsible for the coordination of HVAC systems design with all disciplines, including architectural, structural, electrical, plumbing, and technology.

COMMISSIONING PROJECT MANAGER EXPERIENCE:

Berea College – Deep Green Residence Hall – $16.5M, 42K GSF

Edinboro University – Cooper Science Center – $20M, 112K GSF

Millikin University – University Commons – $31M, 87K GSF

The Ohio State University
- South High Rise – Renovations/Additions – $172M, 583K GSF
- Biomedical Research Tower – $36M, 100K GSF

Twin Valley Behavioral Healthcare Hospital – $112M, 285,000 GSF

University of Kentucky – 90 Dining – $32M, 80K GSF

COMMISSIONING AGENT EXPERIENCE:

Allegheny Health Network
- Wexford Hospital, $275M, 345K GSF
- AGH Cancer Center, $50M, 79K GSF
- Forbes Cancer Center, $50M, 79K GSF

PADGS (Design Reviews):
- California University of PA, New Science Building
- Carlisle Readiness Center
- Danville Field Maintenance
- Hollidaysburg Veterans Home
- Norristown State Hospital, New Building Construction
- PA State Museum & PHMC Tower

University of Pittsburgh
- Benedum Hall – LEED Registered – $40M, 180K GSF
- Medical Center – Clinical and Research – $17M, 30K GSF

NY Office of Mental Health South Beach Psychiatric Hospital

JACOB ROURKE
Manager, Commissioning
Aramark Engineering Solutions

TOTAL NUMBER OF PROJECTS
20+

TOTAL GSF COMMISSIONED
1 Million+

EDUCATION
The Pennsylvania State University
Bachelor of Science
Energy Engineering

CERTIFICATIONS
NABCEP PVA

OSHA 10

ASSOCIATIONS
Association of Energy Engineers

Mr. Rourke brings more than eight years of experience in supporting electrical design, commissioning, and construction for commercial, pharmaceutical, and industrial sectors. On behalf of Aramark, Jacob is a member of our building commissioning team where he supports clients primarily in our East Region.

Prior to Aramark, Jacob worked as an Electrical Engineer for Barton Associates where he supported the design of low and medium voltage distribution and specialty systems, including but not limited to solar, power generation, utility interconnections, and life safety. He performed site inspections and construction coordination, as well as advising clients on alternative energy and systems options available to them including federal and local incentives.

Prior to Mr. Rourke's tenure with Barton Associates, he was an Electrical Engineer for Genesis Engineering. He supported pharmaceutical and healthcare facilities where he designed low voltage electrical and specialty systems. Mr. Rourke was also responsible for power, life safety systems, telecommunications, and lighting concept design.

PROJECT EXPERIENCE:

Nemours Children's Health
- 5W Moseley Institute Inpatient Unit
- 3CE Moseley Institute Outpatient Unit
- Administration & Research Building MEP Systems Upgrade

PADGS
- Holidaysburg Veterans Home
- Lincoln University, Thurgood Marshall Living Learning Center
- SCI Rockview Boiler Replacement

Penn State University
- College of Engineering, West 1
- Susan Welsh Liberal Arts Building
- Nursing Building
- Harrisburg ALC & Chiller Plant

Penn State Health
- Chiller 8&9
- AC-10 & 11

UPENN
- Amy Guthman Hall
- College Hall

University of Maryland
- Barry Gossett Basketball Facility
- Stanley Zupnik Hall

Wellspan York Hospital

CARL GOTSCHALK, A.I.A.
Project Manager
Aramark Engineering Solutions

EDUCATION

Rhode Island School of Design
Bachelor of Architecture
Bachelor of Fine Arts

University of North Carolina
Coursework – Two Years

PROFESSIONAL REGISTRATIONS

National Council of Architectural Registration Boards (NCARB)

Registered Architect (CT, MA, NY, PA, TX, FL, NJ)

ASHE, Healthcare Construction Certificate

Safety Assessment Program Evaluator – CA Governor's Office of Emergency Services

PROFESSIONAL ORGANIZATIONS

American Institute of Architects (AIA)

American Society for Healthcare Engineering (ASHE)

AIA Academy of Architecture

SCUP (Society for College and University Planning)

Mr. Gottschalk is an accomplished architect/planner with extensive experience in leading complex planning and capital initiatives in both healthcare and higher education. For the past 25 years, he has served in many technical and leadership roles with Aramark as an owner's representative and director of capital programs. He is an effective communicator and understands the roles and responsibilities of top administrators, other stakeholders and has experience reconciling their needs and expectations. He has had primary responsibility for leading projects through planning and zoning and has demonstrated experience in coordinating and facilitating a broad span of projects from concept to occupancy.

His extensive experience in the initiation and delivery of capital programs, as well as adaptability and ability to work with all campus constituencies serve his clients well. Mr. Gottschalk has demonstrated success in leading project management staff, developing programs, budgets, schedules and coordinating the project work with Facilities Operations departments.

Carl also served as the Chair of Design Committee for the Regional Water Authority, New Haven, CT for the replacement water treatment facility in an historic residential neighborhood. The Committee selected Steven Holl Architects and Michael Van Valkenburgh Landscape Architect. The result was the award-winning Whitney Water Purification Facility which has been reported about and published nationally and internationally.

Prior to his career with Aramark, Mr. Gottschalk practiced Architecture with Warren Platner Associates, an internationally known architecture and interior design firm and was Project Architect on many published projects.

SELECT PROJECT EXPERIENCE:

Albert Einstein College of Medicine, Bronx, NY
Barnard College, New York, NY
Berklee College of Music, Boston, MA
Blue Ridge Healthcare, Morgantown, NC
California Pacific Medical Center, San Francisco, CA
Christus Santa Rosa Westover Hills Hospital, San Antonio, TX
Connecticut Children's Medical Center, Hartford, CT
Florida State Hospital, Chattahoochee, FL
Harvard University, Cambridge, MA
Merrill Lynch Conference Center, Princeton, NJ
Susquehanna Health, Williamsport, PA
Tufts Medical Center, Boston, MA
Vassar College, Poughkeepsie, NY
University of the Sciences, Philadelphia, PA
University of Virginia Alumni Association, Charlottesville, VA

CHRISTOPHER SKALSKI,
P.E., LEED AP, BCxP
Cx Senior Manager
Aramark Engineering Solutions

TOTAL GSF COMMISSIONED

8 Million

TOTAL COMMISSIONING PROJECTS

150 Projects
75 Projects – Project Manager

EDUCATION

Pennsylvania State University
Bachelor of Science
Mechanical Engineering

Bloomsburg University
Bachelor of Arts
Physics

CERTIFICATIONS

Professional Engineer (State of PA)

LEED Accredited Professional

Building Commissioning Professional (BCxP)

OSHA 10

Mr. Skalski is a Professional Engineer and LEED Accredited Professional with more than 22 years of experience as a building commissioning agent, including extensive experience in HVAC and plumbing systems design, building automation, and DDC systems. On behalf of Aramark, Mr. Skalski is the commissioning team leader for several of Aramark's higher education clients. His responsibilities include engineering design reviews, installation quality assurance, pre-functional/performance testing, initiation of corrective actions, and operator training.

Mr. Skalski previously served as the commissioning team leader for such LEED projects as University of Pennsylvania Stemmler Laboratory Renovations, Neural and Behavioral Sciences Building, Horticulture Center at the Morris Arboretum, Aramark Headquarters Tenant Improvement, Neumann University Center for Sport, Spirituality and Character Development, Pennsylvania State University (PSU) CBEI Navy Yard Building 661, 7R, PSU Berks campus classroom laboratory building, and Franklin and Marshall College New College House dormitories.

Additionally, Mr. Skalski serves as a member of our facility condition assessment team focusing on HVAC and control systems. His experience includes participating in strategic master plans for campus utilities at various higher education institutions.

COMMISSIONING EXPERIENCE:

Aramark Headquarters Tenant Improvement 2400 Market Street, Philadelphia, PA 19103 Core and Shell - $100M, 280K GSF

Air Products Global Headquarters, Allentown, PA – Administration building, Research & Development Building, Central Utility Plant, Parking Garage – $300M+, 700K+ GSF

PA DGS – West Chester University
- Mitchell Hall Renovation – $8M, 38K GSF
- Academic Classroom and Office Complex – $14.4M, 100K GSF
- Student Recreation Center – $21M, 72K GS

Penn State University –
- Forest Resources Building – LEED Certified – $27.5M, 98K GSF
- School of Arch. and Landscape Design – LEED Gold – $27M, 111K GSF
- EEB Hub Philadelphia Navy Yard, Building 661, 7R – Pursuing LEED Gold, $25M, 60k GSF
- Wilkes-Barre – Academic Commons – LEED Certified – $8.5M, 33K GSF

University of Pennsylvania
- FY23 Retro-Commissioning (9 Buildings) – 1.1M GSF
- FY24 Retro-Commissioning (4 Buildings) – 410KGSF
- FY25 Retro-Commissioning (12 Buildings) – 1.7M GSF
- Houston Hall Market Renovation, $9.3M, 17K GSF
- Houston Hall ATC Upgrade – 45K GSF, $350K
- Low Rise Residence Hall AC upgrades – Kings Court building, English House, Dubois College House – 216K GSF, $5M
- Stephen Levin (NBS) Building – $45M, 78K GSF
- Vance Hall 3rd & 4th Floor Interior Renovation - $2.5M, 27K GSF