

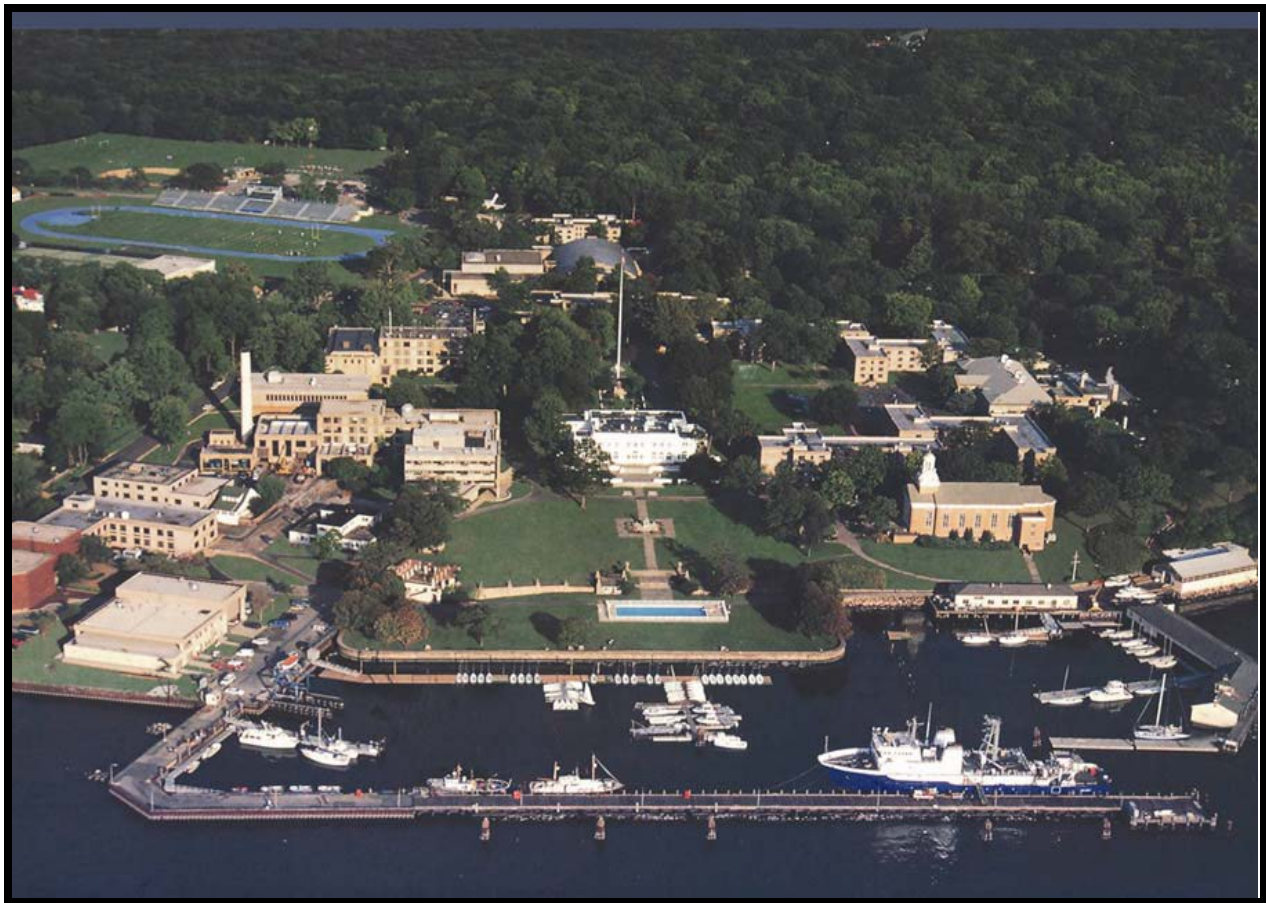


MARITIME ADMINISTRATION

UNITED STATES MERCHANT MARINE ACADEMY



CAPITAL IMPROVEMENT PROGRAM FY 2014 ANNUAL REPORT AND FY 2015-2019 PLAN



MARCH 31, 2014

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Executive Summary

This report provides information on the current status of: (1) the active Capital Improvement Program (CIP) projects; (2) the completed CIP projects; (3) a CIP appropriation history; and (4) the CIP five-year plan.

Background

The U.S. Merchant Marine Academy (USMMA) is one of the five federal service academies. Authorized by Congress in 1936, the Kings Point, New York campus was opened in 1943. The USMMA graduates approximately 200 Midshipmen annually who have earned a Bachelor of Science degree, a U.S. Coast Guard mariner's license, and a commission in the U.S. military. Graduates are obligated to serve a minimum of five years in the U.S. Merchant Marine while concurrently serving for five years in a reserve component of the U.S. Armed Forces. Alternatively, Midshipmen may serve five years in an active duty status with the U.S. Armed Forces, the National Oceanic and Atmospheric Administration (NOAA) uniformed service, or in Federal civil service within a national security program. The mariner license earned at graduation must be maintained in active status at least six years.

Providing support and oversight to renew and better manage USMMA campus infrastructure is a Maritime Administration (MARAD) management imperative and a priority of U.S. Transportation Secretary Anthony Foxx, who is continuing the improvement program started by former Transportation Secretary Ray LaHood. After taking office in 2009, then-Secretary LaHood directed MARAD to convene an independent "Blue Ribbon" advisory panel to study USMMA's infrastructure needs and to make recommendations on CIP priorities. In March 2010, the panel presented their findings to MARAD and then-Secretary LaHood.

Since that time, MARAD has completed a comprehensive Building Evaluation Report (BER) detailing the condition of each campus building. The BER findings will be incorporated into the CIP and will be used to identify efficiencies by reducing maintenance and repair work to buildings scheduled for renovation. The BER enables prioritization of CIP projects and facilitates identification of building problem areas that can be targeted for long-term repair.

The USMMA is also conducting a Space Utilization Study. The study will involve an examination of the current purpose and space requirements of USMMA buildings to determine if there is better utilization of the buildings and their space. The study will inform USMMA management on the best utilization of its space and may help to more clearly define the use of academic buildings with possible adjustments to their order in the CIP.

The CIP, BER, and Space Utilization Study will provide MARAD and USMMA with three very powerful tools to help reverse the long-term decline of the campus infrastructure and improve utilization of space. The goal is to ensure that USMMA facilities provide a safe and productive environment that enhances the quality of education for the Midshipmen, both now and in the future.

Establishment of USMMA CIP Senior Advisory Council and Working Group

In February 2012, then-Secretary LaHood established a USMMA CIP Senior Advisory Council to monitor progress on the current USMMA CIP projects. The Council is composed of the USMMA Superintendent; the DOT Assistant Secretary for Administration; the DOT Assistant Secretary for Budget and Programs and Chief Financial Officer; and the MARAD Administrator. The work of the Senior Advisory Council is supported by the CIP Working Group, which brings together MARAD and USMMA staff, along with staff from the budget, legal, and management offices in the Office of the Secretary, to regularly discuss and monitor the progress of USMMA's CIP projects. A tracking system was developed for all ongoing projects and the CIP Working Group meets together monthly to review the status and current issues affecting all CIP projects.

The work of the USMMA CIP Senior Advisory Council and the CIP Working Group has helped to ensure that USMMA CIP projects stay on track.

CIP Five Year Plan Goals

The CIP five-year plan was established to make the Midshipmen educational experience more productive by providing improvements and enhancements to the facilities where Midshipmen learn, live, eat, and study. It is expected to positively impact all USMMA performance measures for midshipmen academic performance, retention, and recruitment.

Consistent with the recommendations of the Blue Ribbon Panel Report, USMMA is taking a comprehensive approach to capital planning. As such, the sequential funding of CIP projects is focused on improving the quality of life for Midshipmen, enhancing academic services, and bolstering the support structure to the campus and non-academic functions.

The initial CIP focus is the renovation of all of the dormitories on campus. Midshipmen studies are facilitated by safe and modern living accommodations, and a modern barracks arrangement serves to encourage potential students to consider USMMA for higher education. To date, USMMA has successfully completed the renovation of five out of six dormitories. The fifth dormitory renovation project, Rogers Hall, was completed in July 2013. The sixth and last dormitory, Cleveland Hall, began renovations in August 2013 and is scheduled for completion in September 2014. This will complete the initial focus of the infrastructure improvements and will enable the USMMA to meet all current and future Midshipmen housing needs in a safe and secure environment that is also modern and up to date.

The second area of focus for the CIP is the academic areas including classrooms, laboratories, lecture halls, and faculty spaces on campus. In order to meet the goal to educate the future leaders of the maritime industry, USMMA requires updated and technologically advanced classrooms and lab spaces. Samuels Hall will be the first of four academic buildings to be renovated. The design will include the repurposing of Samuels Hall for use as computer simulator labs and Marine Transportation Department classroom and office space. The facility design will include full renovations and upgrades and will incorporate facility needs required by the academic department. The architecture and engineering (A&E) design phase is scheduled for contract award in September 2014.

The third section of the CIP focus is the supporting non-academic structures on campus such as dining, student services, warehouses, and staff spaces. Attention to these areas will improve student safety and morale and maximize space utilization for both students and staff. Progress has also been made in this focus area. Delano Hall is scheduled for completion in April 2014 and provides USMMA with an updated dining facility and kitchen. The new appliances and upgraded electrical and plumbing to support the modern facility will enhance safe food preparation, increase energy efficiency and promote the overall well being of students and staff. This project was executed in a phased approach to allow for continued operation of the facility during renovation and this method also resulted in significant cost savings.

Another major milestone is the completion of Mallory Pier, also scheduled for April 2014. The Mallory Pier replacement will replace an unsafe and deteriorating pier, and will allow berthing of training ships and other vessels used at USMMA. This will enhance safety and provide a modern platform for instructional, competitive and recreational waterfront activities for the Midshipmen. The zero deck renovation is another critical component of this phase. This is the interconnected area below-grade level (basement) of all six USMMA barracks and Delano Hall, encompassing approximately 90,000 square feet. The A&E design phase is scheduled for contract award in June 2014.

Interspersed throughout the plan are various infrastructure projects that are needed to upgrade the most basic of campus services, such as the water main, sewer system and electrical grid and power supply improvement. Modernization of these systems helps provide a safe environment and eliminates service disruptions to living accommodations and academic facilities, enabling Midshipmen to focus on regimental duties and studies. A modern suite of basic infrastructure services provides the foundation for any successful renovation plan and saves resources in the long run by reducing the need for emergency labor and material costs when a service disruption occurs.

Progress is also being made on these infrastructure improvements. Phase 1 and 2 of the water main replacement project is completed. The installation of the new 8" water main was completed in August 2012, and an upgrade of the existing water vault was completed in January 2013. The final phase, upgrade of the water distribution system throughout the campus, is scheduled for completion by March 2015. Additionally, the electric grid upgrade project completed the survey phase in February 2013 and the design phase is scheduled for completion in November 2014.

Section I

Capital Improvement Program (CIP)

Active Projects

Description and Fund Status as of January 31, 2014

CIP PROJECT #1: CLEVELAND HALL RENOVATION

Status: The A&E design and specifications study for Cleveland Hall dormitory was completed in May 2012. The construction for Cleveland Hall began August 2013, is currently underway and expected to be completed by September 2014. The renovation of Cleveland Hall will complete the last of the six dormitory renovations. Over the past year, demolition and asbestos abatement commenced on all decks of the barracks and geothermal drilling was completed. The government shutdown, unseasonable weather over this past winter, and unforeseen site conditions causing additional asbestos abatement to occur caused the estimated completion date to extend to September 2014. The class size for the incoming class year was reduced to accommodate all the students within the existing dorm capacity.

General Description: Cleveland Hall is one of six barracks (dormitory facilities) located at the USMMA. These six barracks house the entire on-campus regiment of approximately 750 Midshipmen in single, double and sometimes triple-bunked rooms. Cleveland Hall was built in 1942 and is the final building to be renovated in the USMMA dormitory renovation plan. The refurbishment of Cleveland Hall will include the replacement of the roof and parapet, upgrade of the mechanical room, installation of central heating and air conditioning systems, and replacement of the sanitary piping and fixtures. The outdated electrical service system will be upgraded, modern fire alarm/suppression/sprinkler systems will be installed and all corridor lighting will be replaced. The flooring, ceiling and signage will also be replaced and improved. Interior spaces will be modernized and exterior wall insulation will be replaced.



Project Goals: The USMMA requires dormitory facilities that meet all safety and security requirements and provide Midshipmen with the best possible living environment necessary to be successful during the course of their USMMA education. This project will include the installation of sprinkler systems and smoke and carbon monoxide detectors for increased safety for the students. This project will complete the renovation of all six dormitories on campus and meets all current and future housing requirements for the Regiment.

Benefits to be Achieved: The Cleveland Hall dormitory renovation will provide Midshipmen with a safe living environment as well as a modern facility. The renovated facility will improve energy efficiency through the use of new technology and modern fixtures and will promote the overall wellbeing of the Midshipmen. This project will complete the renovation of all six dormitories on campus to meet all current and future housing requirements for the Regiment.

CIP PROJECT #1: CLEVELAND HALL RENOVATION CONTINUED

Contract Award Date: August 2013

Construction Start Date: August 2013

Estimated Completion Date: September 2014

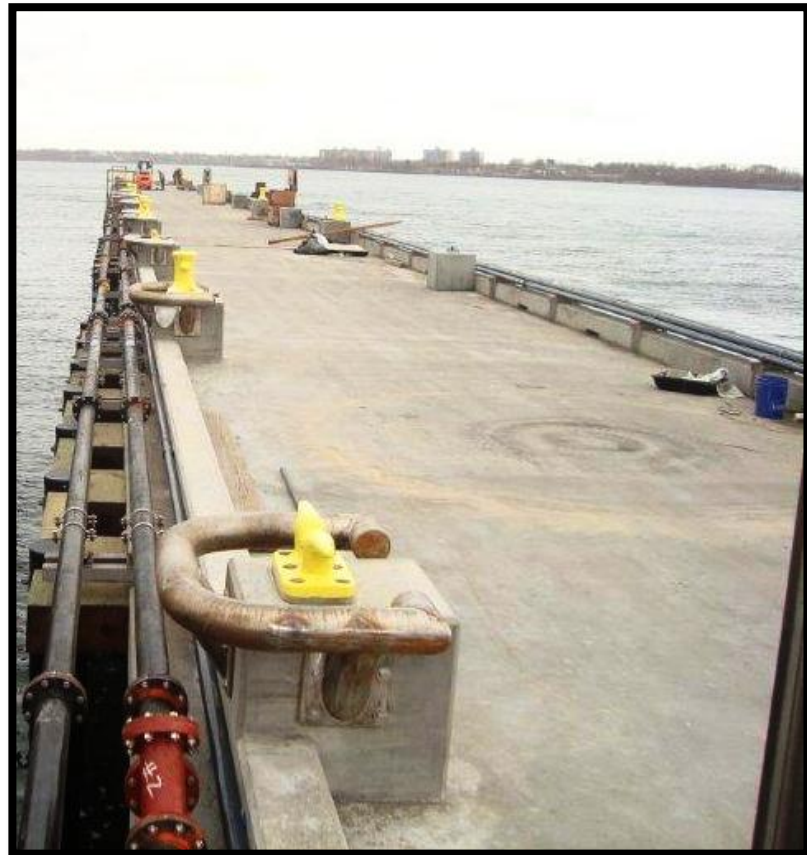
Funding Status:

Project Budget: \$ 15,000,000

Project Obligations: \$ 11,597,137

CIP PROJECT #2: MALLORY PIER REPLACEMENT (DESIGN/CONSTRUCTION)

Status: The Mallory Pier replacement project will be completed April 2014, on schedule and within budget. Over the past year, work on the project continued at a brisk pace. The wooden pier was demolished and removed and the concrete pier is now structurally complete with pile driving and installation of the deck panels completed over the past year. The wooden wave attenuation system or "wave wall" has been installed on the Long Island Sound side of the pier. The wooden fender system is being installed on the Hague Basin side of the pier and is nearing completion. New electrical equipment has been installed shore side. Electrical conductors are now being installed on the pier to provide power to the vessels and for lighting. Tasks that remain include installing mechanical and utility services, installing pier hardware, and relocating the floating docks.



General Description:

Mallory Pier is the USMMA's main waterfront pier for the berthing of training ships as well as mooring other vessels, floating docks, as well as providing waterfront infrastructure within the boat basin. The pier's pilings were over 60-years old, decomposing and unsafe. The deck of the now-demolished pier was constructed from wood, was 32-years old and deteriorating. The northern 390-foot section had been replaced in approximately 1970, and repairs were made in 2001. Fire suppression and waste removal were provided with hoses running from the previously replaced section of the pier.

CIP PROJECT #2: MALLORY PIER REPLACEMENT CONTINUED:

The USMMA previously contracted with the Naval Facilities Engineering Command (NAVFAC) to develop the initial architectural and engineering design and planned to use them for the construction of the concrete replacement pier. NAVFAC had designed the pier to DOD specification standards, which are more extensive than USMMA's requirements for a commercial-equivalent pier. USMMA engineers recommended a re-design of the pier to commercial pier standards based on the magnitude of projected cost savings.

The USMMA's agreement with NAVFAC ended on May 31, 2012. In its place, MARAD initiated a solicitation that used a negotiated procurement strategy for acquiring the construction services. The negotiated procurement approach allowed for negotiation of specific design requirements, evaluation of design-construction team capabilities and multiple design options, and contract award on the basis of best value. Through this process MARAD procured Russell Marine, LLC, as contractor for the project. MARAD also procured Whitman, Requardt and Associates, LLC, as a construction manager to provide oversight of construction and to work with USMMA staff as needed. MARAD's Office of Ship Operations staff assisted with the development of the acquisition strategy and are performing Contracting Officer Representative duties as a result of their previous pier construction experience in New Orleans and at the Beaumont Reserve Fleet site.

Project Goals: The wooden pier will be replaced with a new concrete pier including new electrical and mechanical utilities such as sewage system, potable water, lighting, and electrical facilities.

Benefits to be Achieved: The Mallory Pier replacement will replace an unsafe and deteriorating pier, and will allow berthing of training ships and other vessels used at USMMA. This will enhance safety and provide a modern platform for instructional, competitive and recreational waterfront activities for the Midshipmen.

Contract Award Date: September 13, 2012

Construction Start Date: January 7, 2013

Estimated Completion Date: April 2014

Funding Status:

Project Budget-Design: \$ 1,178,000

Project Obligation-Design: \$ 1,088,002

Project Budget-Construction: \$ 13,180,000

Project Obligations-Construction: \$ 12,524,366

CIP PROJECT #3: ROGERS HALL RENOVATION (DESIGN/CONSTRUCTION)

Status: The renovation of Rogers Hall dormitory was completed in July 2013, on schedule and within budget, in time for the start of the new academic year. The contractor is currently working to clear the remainder of the punch list items. This renovation completes the fifth of six dormitory renovations on campus and was completed within ten months.

General Description: Rogers Hall is one of six barracks (dormitory facilities) located at the USMMA. These six barracks house the entire on-campus regiment of approximately 750 Midshipmen in single, double and sometimes triple-bunked rooms. Rogers Hall was constructed in 1943 in an 18-month period and is approximately 42,000 square feet. This is the fifth barracks building renovation, leaving only Cleveland Hall to be renovated.

The architectural and engineering renovation design for both Rogers and Cleveland Hall was completed for \$325,000 in May 2012. The update to the current barracks design includes all the lessons learned from the past four renovations. Rogers Hall was renovated prior to Cleveland Hall because the majority of the infrastructure and utilities are housed in Rogers Hall. The renovation included new furniture layouts for two-person dormitory rooms, floor-mounted heat pump air conditioning and heating, wall partitions with reduced sound transmission and impact-resistant gypsum board. New toilet partitions, all new plumbing fixtures and accessories with new ceramic tiles and wall finishes have been installed in the community restrooms. A new fire protection system was installed throughout the building to include smoke and carbon monoxide detectors. Repair/replacement of the roof was completed and updates to the remaining areas of the facility bring it in compliance with all New York State building codes.



Project Goals: The USMMA requires dormitory facilities that meet all safety and security requirements and provide Midshipmen with the best possible living environment necessary to be successful during the course of their USMMA education. This project will include the installation of sprinkler systems and smoke and carbon monoxide detectors for increased safety for the students.

Benefits to be Achieved: The Rogers Hall dormitory renovation will provide Midshipmen with a safe living environment as well as a modern facility. The renovated facility will improve energy efficiency through the use of new technology and modern fixtures and will promote the overall well-being of the Midshipmen.

**CIP PROJECT #3: ROGERS HALL RENOVATION (DESIGN/CONSTRUCTION)
CONTINUED:**

Contract Award Date: September 2012

Construction Start Date: September 2012

Completion Date: July 2013

Funding Status:

Project Budget-Design: \$ 325,000

Project Obligations-Design: \$ 325,000

Project Budget-Construction: \$ 12,500,000

Project Obligations-Construction: \$ 11,086,062



CIP PROJECT #4: DELANO HALL RENOVATION (DESIGN/CONSTRUCTION)

Status: The Delano Hall renovation is nearing completion with the last remaining item, construction of the loading dock, currently underway. The Delano Hall renovation will be completed in April 2014, on schedule and within budget. Over the past year, construction of the food preparation and cooking area and tiling of the serving area were completed and are currently in use. All of the kitchen equipment, to include the zero deck refrigeration units has been installed and is currently being used. In order to keep the dining hall and food preparation area in continuous operation and to minimize disruption during the renovation, a carefully orchestrated phased approach was required that extended the original completion date.

The new streamlined design was delivered by the design firm Fletcher Thompson in early June 2012. The actual construction began November 2012. During 2013, the USMMA completed several smaller projects associated with the larger renovation effort, including fully refurbishing Delano Hall bathrooms to contemporary standards; refurbishing the refrigerator/ freezer; upgrading the water system, including installation of a new cooling tower; and connecting the refrigerator units to the new water cooling system. The new hood system over the cooking area was installed and provided the required fire suppression and venting for the kitchen.

General Description: Delano Hall is the USMMA's dining facility and is the center of many Midshipmen activities given its proximity to the barracks. It is a 50,000 square foot building, built in approximately 1942, that includes a food preparation center, a food storage center, and a dining area for Midshipmen that serves more than 2,000 meals a day. The Hall has adequate space and is situated in a good location on campus, but suffered from dated food preparation areas and storage equipment, ventilation issues, and outdated electrical and plumbing infrastructure that required costly and frequent maintenance.



CIP PROJECT #4: DELANO HALL RENOVATION (DESIGN/CONSTRUCTION) CONTINUED:

Previous designs to upgrade Delano Hall relocated the food preparation and kitchen areas to the basement of the building, and repositioned the walk-in-storage areas currently in the basement to the main level at an initial estimate of \$23 million. This design would have interrupted the continuity of food service and would have required constructing a temporary dining area at a cost of \$2 million.

In light of the significant costs and after consultation with the food service officer and staff, the CIP team determined that a simpler and more efficient design would best address Delano Hall's needs. The new design focused on upgrading the facility and using the same general layout currently in place with an estimated project budget of \$9 million. This is substantially less than the initial \$23 million project cost estimate and the CIP

team was able to keep the dining facility open and available for use by the Midshipman during the renovation

Project Goals: Renovation of the galley will include upgrade of all appliances, finishes and infrastructure as well as ensuring new equipment is fully functional within current space requirements. Electrical and plumbing upgrades will be included to support the modern facilities. This project was executed in a phased approach to allow for continued operation of the facility during renovation and this method also resulted in a significant cost savings.



**CIP PROJECT #4: DELANO HALL RENOVATION (DESIGN/CONSTRUCTION)
CONTINUED:**

Benefits to be Achieved: The Delano Hall renovation will increase energy efficiency, enhance safe food preparation, and promote the overall well-being of students and staff.

Construction Contract Award Date: September 2012

Construction Start Date: November 2012

Estimated Completion Date: April 2014

Construction Funding Status:

Project Budget: \$ 9,000,000

Project Obligations: \$ 7,679,524

CIP PROJECT #5: SAMUELS HALL RENOVATION (DESIGN/CONSTRUCTION)

Status:

Samuels Hall is the academic building that currently houses the Humanities/English Department. This will be the first of four academic buildings to be renovated. The design will include the repurposing of Samuels Hall for use as computer simulator labs and Marine Transportation office classroom and office space. The design will also include the Computer Aided Operations Research Facility (CAORF) side of the facility to accommodate the increased requirement for computer lab spaces. The Bowditch Hall design has been removed from this project due to the increased scope for Samuels Hall and will be addressed at a later date. The contract award date for the A/E design is estimated for September 2014.

General Description:

Samuels Hall is the first of four academic buildings that will be renovated to improve the academic environment on the USMMA campus. The architecture and engineering design phase will be comprised of a complete bid package for the facility. The package will include a complete set of drawings as well as a cost estimate, statement of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs required by the academic department. Additionally, the USMMA will repurpose Samuels Hall as a facility to house simulators and simulation equipment. The renovation will include the replacement of roof and parapet and upgrade of the mechanical room. The heating and cooling systems, along with the electrical and plumbing services will also be modernized. All classrooms will receive improvements to technology capabilities and updated interior finishes, and throughout Samuels Hall the lighting, flooring, ceiling and furniture will be modernized and improved.

Project Goals: Design the repurposing of Samuels Hall academic building to update the computer simulator labs, a critical component of the USMMA mission. Repurposing of the facility will include upgrades of all finishes and infrastructure as well as incorporating new instructional technology. Electrical and plumbing upgrades will be included to support the modern facility.



**CIP PROJECT #5: SAMUELS HALL RENOVATION (DESIGN/CONSTRUCTION)
CONTINUED:**

Benefits to be Achieved: The USMMA will provide improved education for the Regiment with up to date academic facilities that meets all fire and safety codes. This will allow the Midshipmen to receive the best education available in a safe environment with the facility modernized and comparable with civilian college campuses.

Design Contract Award Date:	September 2014
Construction Contract Award Date:	July 2015

Design Estimated Completion Date:	April 2015
Construction Estimated Completion Date:	July 2016

Design Funding Status:	
Project Budget:	\$ 1,000,000
Project Obligations:	\$ 0

Construction Funding Status:	
Project Budget:	\$ 6,000,000
Project Obligations:	\$ 0

CIP PROJECT #6: ELECTRIC GRID/POWER SUPPLY IMPROVEMENT (INVENTORY/DESIGN/CONSTRUCTION)

Status: This is a multi-phased project covering survey and inventory, design, replacement/construction of the USMMA electric grid and power supply improvements for the all the buildings on the entire campus. Phase 1 is the survey, inventory and map of the existing electric grid equipment and locations and was completed in February 2013. Over the past year, review of the survey was completed to direct the design and specification for Phase 2. The Statement of Work and the independent government cost estimate for Phase 2 design was also accomplished. A requisition is currently in place for the Phase 2 design that will provide a plan to replace any outdated components and upgrade the grid as a whole. Contract award for Phase 2 is estimated for May 2014.

General Description: The USMMA's electric grid is a compilation of multiple electric components from various properties that were acquired since the founding of USMMA. The electric equipment and wiring in some buildings is from the original 1943 construction. Some staff housing, Melville Hall, the student center and the museum are all of older vintage than the USMMA and still have their original electric equipment in use. As a result of the antiquated condition of the equipment and the high demand placed upon the current grid, frequent electrical outages occur. The existing electrical system and grid require an evaluation to determine the extent of deterioration and replacement of worn components is overdue. The consolidated properties that make up the campus are presently serviced from multiple feeders and these main electric feeders have never been properly evaluated for balancing the load and redundancy. The transformers and switch gear, which are the main components of the electric distribution system, are in desperate need of replacement as they have exceeded their original design life. The major underground electric distribution cables all need to be replaced, which may require extensive excavation and relocation of other underground utilities. The electric grid and power supply improvement project is a multi-phased project covering inventory, design, replacement and construction.

Phase 1 of this project is the survey, inventory and map of the existing electric grid equipment and locations. This phase will allow for a design to be properly solicited in order to address the existing conditions, develop a valid estimate for construction, and to solicit more reasonable and accurate bids from construction contractors. Phase 1 was completed in February 2013.

Phase 2 of this project is the design and specification phase that will provide a plan to replace any outdated components and upgrade the grill as a whole. Phase 2 is estimated to be completed by November 2014. Phase 3 is the replacement and construction phase. The estimated completion date is not yet determined and is dependent on the results of Phase 2.

Project Goals: The project will provide a modern electrical grid and power supply across the USMMA campus. This will replace antiquated electrical devices and eliminate significant potential for electrical fires and provide greater reliability of the electrical supply throughout the campus.

**CIP PROJECT #6: ELECTRIC GRID/POWER SUPPLY IMPROVEMENTS
(INVENTORY/DESIGN/CONSTRUCTION) CONTINUED:**

Benefits to be Achieved: The USMMA will have a modern electrical grid and electrical supply distribution system throughout the campus. This improvement will enhance student safety through the replacement of antiquated equipment, increase the reliability of the electric service across the campus, improve energy efficiency which should reduce utility costs, and promote the overall well-being of Midshipmen and staff by allowing a reliably continuous supply of electric power for support systems. The project increases the lifespan of the electric distribution systems and sensitive electronic equipment.

Contract Award Date: November 2012 for Survey (Phase 1)
May 2014 for Design (Phase 2)

Start Date: December 2012 for Survey (Phase 1)
May 2014 for Design (Phase 2)

Completion Date: February 2013 for Survey (Phase 1)

Estimated Completion Date: November 2014 for Design (Phase 2)
TBD for Replacement/Construction (Phase 3)

Funding Status: Project Budget: \$ 6,800,000¹
Project Obligations: \$ 62,110

¹ The project budget amount of \$6.8 million is the total CIP funds. Facilities, Maintenance, Repair and Equipment funds of \$2 million are also allocated to the project. The total project amount is \$8.8 million.

CIP PROJECT #7: ZERO DECK (DESIGN/CONSTRUCTION)

Status: Over the past year, the statement of work and the independent government cost estimate were developed for the Zero Deck A/E design. Additionally, a sole source justification was required because the original design was the intellectual property of the A/E contractor. The design project is currently in the process of contract award and is expected to begin in June 2014. The design cost estimate increased to \$600,000 as a result of additional mechanical, electrical, and plumbing designs that were required to accommodate planned future use of the zero deck area. The project construction start and completion dates will be dependent on completion and results of the A/E design.

General Description: Zero Deck is the interconnected below-grade level (basement) of all six USMMA barracks and Delano Hall, encompassing approximately 90,000 square feet. These are highly trafficked areas, particularly in poor weather conditions as the hallways allow for Midshipmen and staff to travel across a large portion of campus and remain indoors. Zero Deck also contains a number of support offices, including the Post Office and mail room, the Navy Exchange store, credit union, and sports equipment storage. The A/E design will include a plan for the reconfiguration and renovation of the basement area of each of the barracks. The renovation will provide upgrades to the major mechanical rooms and installation of modern heating and cooling systems where necessary. Additionally, the replacement of sanitary piping throughout and upgrade of electrical service and fire alarm suppression and sprinklers will complete the final phase of infrastructure replacement in multiple dormitories. This upgrade will include all corridor lighting, flooring, ceiling, signage and interior finishes (lighting fixtures, furniture, all office/club/storage spaces where necessary).



CIP PROJECT #7: ZERO DECK (DESIGN/CONSTRUCTION)
CONTINUED:

Project Goals: Zero Deck will continue to provide Midshipmen the interconnectivity below-grade level (basement) of all six USMMA barracks and Delano Hall in a safe and secure environment. The USMMA CIP requires support facilities for the Midshipmen that are up to date and meet all safety standards and also improve energy efficiency. This will adequately meet the needs of the Midshipmen during the course of their education, and provides the best possible working and living environment necessary to be successful.

Benefits to be Achieved: The Zero Deck renovation will provide updated facilities and infrastructure to enhance the safety and overall well-being of the Midshipmen. The renovation will also provide energy efficiency through the use of new technology and modern fixtures.

Design Contract Award Date:	June 2014
Construction Contract Award Date:	January 2015

Design Start Date:	June 2014
Construction Start Date:	January 2015

Design Estimated Completion Date:	September 2014
Construction Estimated Completion Date:	January 2016

Design Funding Status:	
Project Budget:	\$ 600,000
Project Obligation:	\$ 0

Construction Funding Status:	
Project Budget:	\$ 8,000,000 ²
Project Obligation:	\$ 0

² The construction project budget of \$8 million includes \$5 million of FY 2014 Capital Improvement Funds. The remaining \$3 million will be offset with cost savings from other projects and prior year funds.

CIP PROJECT #8: CROWNINSHIELD PIER (DESIGN/CONSTRUCTION)

Status: Environmental consultants were hired to assist in engaging with the New York State Office of Environment and Conservation in order to determine if an Environmental Impact Study (EIS) is required, and to assist in the development of the EIS if required. The construction contract award and construction start date will be based on the level of permit required. The completed acquisition strategy for Mallory Pier will also provide lessons learned that will guide future actions with this project. The permitting process is currently underway and is a very lengthy process. The two permits that are required are the Nationwide U.S. Army Corp of Engineers permit, and a New York State Department of Environmental Conservation permit.

Over the past year, the consultant developed the design and proposals for three different styles of breakwater options to replace Crowninshield Pier. The USMMA has selected one of the three proposed breakwater designs. Surveys, design narratives and cost estimates for each breakwater option have been completed. Of the three potential designs the costs for construction ranged from \$1.3M to \$4.8M. The \$1.3M option was chosen to continue with the preliminary permitting process. This cost estimate does not include demolition of the existing pier, detailed design for the chosen option, or any directed actions as a result of the permitting process. The estimated total cost of the project is \$3M. A detailed design will be executed concurrent with the continued effort to obtain the necessary permits which are expected to be issued in June 2015.



General Description: The southern boundary of Hague Basin is enclosed by Crowninshield Pier, which is a 355-foot

long, two-level timber structure with a roof covering for storage of life boats and work area for the waterfront. The entire understructure is compromised and requires replacement due to severe deterioration with many of the piles splintering. The pier itself is not utilized by the waterfront and will be replaced with a breakwater with floating docks for small vessels.



Project Goals: The pier will be replaced with a breakwater with floating docks for small vessels which will better meet the needs of the Midshipmen and waterfront programs.

**CIP PROJECT #8: CROWNINSHIELD PIER (DESIGN/CONSTRUCTION)
CONTINUED:**

Benefits to be Achieved: The project will enable the USMMA to continue to have Hague Basin protected by a structurally sound and safe breakwater. The USMMA will remove a severely deteriorated facility that is no longer used.

Design Contract Award Date:	August 2014
Construction Contract Award Date:	TBD

Design Start Date:	September 2014
Construction Start Date:	TBD

Design Estimated Completion Date:	June 2015
Construction Estimated Completion Date:	TBD

Funding Status:	
Project Budget:	\$ 3,000,000
Project Obligations:	\$ 48,001



CIP PROJECT #9: WATER MAIN REPLACEMENT (DESIGN/CONSTRUCTION)

Status: In conjunction with the Great Neck Water Authority, the USMMA completed the first two phases of the water main project and completed Phase 3A that comprised a USMMA-wide flow/pressure test of the water distribution system. All the phases were completed on schedule and within budget. Over the past year, all of the water main areas have been tested and the results showed no indication of severe leakage or weakness. Currently, a requisition is being processed for an upgrade to the distribution system (Phase 3B) throughout the USMMA that will complete the final phase. This upgrade will include modernization of the USMMA's individual distribution lines as well as installation of water meters throughout the USMMA to accurately track water usage.

The USMMA, with the assistance of the Great Neck Water Authority, increased the size of the water main feeding the campus and the new installation met all of the compliance requirements set forth by the Water Authority. The water vault and meter were also upgraded to provide the USMMA with increased pressure and flow throughout the distribution system.

General Description:

The USMMA water main, vault, and meters were outdated and undersized for the current and projected water demands on the system, including the fire suppression systems. This project is correcting these issues by replacing the existing undersized 4-inch water main with a larger 8-inch main and upgrading the water vault. These improvements will increase the overall water pressure across the campus and correct water distribution and capacity problems caused by the limitations of the old water supply system.



Phase 1 of this project included the upgrade of the water main running underneath Steamboat Road. The new 8-inch water main was installed by the Great Neck Water Authority, and was completed in August of 2012.

Phase 2 of this project was completed by USMMA and included the upgrade of the existing water vault. Previously, the larger water main entering the smaller vault caused the water to be restricted before it continued onto the distribution system. This severely limited the flow and pressure of the water and prevented adequate water distribution for the entire campus. This phase was completed in January 2013.

Phase 3 of this project is the upgrade of the water distribution system throughout the campus and this consists of two distinct parts. The first part is Phase 3A which was measuring the water pressure and volume throughout the campus to determine what changes the work completed

**CIP PROJECT #9: WATER MAIN REPLACEMENT (DESIGN/CONSTRUCTION)
CONTINUED:**

during phases 1 and 2 actually achieved. Phase 3A was completed in March 2013. Phase 3B is the installation of new water distribution piping throughout the campus to the buildings, structures, and hydrants that require additional water pressure or volume as determined from Phase 3A. The current estimated construction cost for Phase 3B installation of the new water distribution system throughout the campus is \$760,000. This will maximize water flow to buildings and fire hydrants throughout the campus and is estimated to be completed by March 2015.

Project Goals: To ensure that the USMMA has adequate water flow and pressure for all facilities and fire suppression systems throughout the campus. Increasing the main from an undersized 4-inch main to an 8-inch main will allow the flow and water pressure to meet or exceed the minimum requirements.

Benefits to be Achieved: The water main upgrade will enhance student safety and promote the overall well-being of Midshipmen and staff by ensuring all facilities have adequate water pressure and flow to all fire suppression systems throughout the campus.

Contract Award Date:	December 2011 for Water Main Design (Phase 1) June 2012 for Water Main Construction (Phase 1) September 2012 for Water Vault Construction (Phase 2) January 2013 for Distribution System Testing (Phase 3A) July 2014 for Water System Upgrade (Phase 3B)
Construction Start Date:	June 2012 for Water Main (Phase 1) September 2012 for Water Vault (Phase 2) February 2013 for Distribution System Testing (Phase 3A) July 2014 for Water System Upgrade (Phase 3B)
Completion Date:	August 2012 for Water Main (Phase 1) January 2013 for Water Vault (Phase 2) March 2013 for Distribution System Testing (Phase 3A)
Estimated Completion Date:	March 2015 for Water System Upgrade (Phase 3B)
Funding Status:	Project Budget: \$ 1,500,000 Project Obligations: \$ 658,964

CIP PROJECT #10: SAFETY ISSUES BARRACKS/FACILITIES

Status: The Safety and Environmental Protection Office determined the highest safety priority to be addressed was the installation of hard-wired carbon monoxide/smoke detectors in each dormitory room of the four older barracks. Because the existing Honeywell XBS platform system was installed approximately 25 years ago, installation of a Honeywell Building Integrator to support the installation of the new barrack combination carbon monoxide/smoke detection system is required. This installation also needs to be compatible with Rogers and Cleveland Hall dormitory renovations. The existing main fire alarm panels in the dormitories need to be replaced and require integration with the individual updated detectors in each dorm room. Additionally, the entire system needs to be interconnected to the updated 24 hour monitoring system at the Security Office station and the local police and fire department. Over the past year, the statement of work was developed together with the independent government cost estimate. The contract for the project was awarded to Honeywell Corporation in September 2013. The project delay was attributable to Honeywell's review and analysis of the compatibility of software to the existing wiring and systems. Additional time was required for Honeywell's engineers to devise a compatible plan. The demolition of the existing system and installation of the new system will be conducted in a carefully executed phased approach, floor by floor, to ensure the safety of the Midshipmen with functioning smoke and carbon monoxide detectors at all times. Work is currently underway and the project's estimated completion date is August 2014.

The USMMA is prioritizing other major safety requirements and will develop additional projects to correct deficiencies that are an immediate concern to the safety of the Midshipmen. The Safety and Environmental Protection Office is continuing to assess the conditions of the facilities and evaluating findings in the Building Evaluation Report (BER).

General Description: These funds are intended to address safety issues and major items as they are identified in the barracks and other USMMA facilities. Funding will enable the USMMA to immediately conduct any necessary, major replacements. These funds will facilitate completion of projects such as the replacement of the fire suppression system in Murphy Hall and installation of hard-wired carbon monoxide/smoke detectors in the barracks.

Project Goals: This project will ensure the safety of the Midshipmen in the barracks by facilitating immediate requirements in any area that is a hazard to the living facilities. Other less urgent or immediate safety issues will be incorporated into future CIP projects for the structure.

Benefits to be Achieved: This project will improve the safety of the Midshipmen who rely on the government to offer safe and reliable housing during their academic career at the USMMA. This project is intended to address immediate or urgent issues that are critical to Midshipmen safety and can be classified as a capital improvement on the structure.

Contract Award Date: September 2013

Construction Start Date: December 2013

Estimated Completion Date: August 2014

Funding Status:	Project Budget:	\$ 968,821
	Project Obligations:	\$ 228,595

CIP PROJECT #11: SEAWALL REPLACEMENT

Status: An assessment will be conducted to determine the most severely damaged section requiring immediate replacement.

General Description: The seawall provides protection for the USMMA waterfront and campus from the tides and waves from Long Island Sound. The seawall is comprised of four different sections. These sections are a gunite-coated (specialized mortar) section, a stone section, a steel sheet Z-pile shaped section and a wood fencing section totaling approximately 3,000 feet. All four sections are in various states of deterioration with some minor repairs having occurred in the past. This project is to replace the most severely damaged sections of seawall. An assessment will be made to determine the most severely damaged section as well as the most cost effective section to replace. The project as a whole is planned as a phased approach, until the entirety of the wall is stable and replaced.



Project Goals: The USMMA, as part of an ongoing phased approach, will work on replacing the most critical areas in order for the entire wall to regain its structural integrity while continuing to restore some of the less critical areas as a preventative measure.

Benefits to be Achieved: This project will replace one of the sections of seawall that is currently failing. This will stabilize the waterfront area and provide the required protection from the tidal and wave forces from the sound.

Contract Award Date: TBD

Construction Start Date: TBD

Estimated Completion Date: TBD

Funding Status:

Project Budget: \$ 500,000

Project Obligations: \$ 0

CIP PROJECT #12: GRENWOLDE LOOP PROJECT

Status: The Great Neck Water Pollution Control District (GNWPCD) has requested that the USMMA initiate a project to stop USMMA sanitary sewage from flowing off campus to their sewage treatment plant except through the USMMA sewage pumping station and to block off non USMMA sanitary sewage from flowing through the USMMA sewage pumping station.

General Description: Currently it is estimated that eleven privately-owned residences discharge their sanitary sewage to the USMMA for disposal to the GNWPCD treatment plant. The pipes from these houses direct their sanitary sewage to the US Government (USG) owned sewage pumping station. It is estimated that five USMMA structures currently discharge sanitary sewage off campus. The pipes from these five structures connect to sanitary pipes off campus. This situation is a vestige of the USMMA being built in the 1940s from a consolidation of various separate privately-owned properties located in a residential neighborhood.

Project Goals: Redirect all sanitary sewage from the five USMMA structures to the USMMA sewage pumping station. In coordination with the GNWPCD, project will redirect the sanitary flow of the off campus houses and satisfy the requests of the local public utility.

Benefits to be Achieved: The cost of treating the sanitary effluent from the off campus houses will no longer be billed to the U.S. government. All sanitary discharge from the U.S. government pumping station will be directly attributable to U.S. government activities and costs properly attributable to the taxpayer. The local utility will be able to bill the off campus homeowners directly for the use of their services.

Contract Award Date: August 2014

Construction Start Date: October 2014

Estimated Completion Date: March 2015

Funding Status:

Project Budget: \$ 350,000

Project Obligations: \$ 0

CIP PROJECT #13: MUSEUM BATHROOMS

Status: The project is expected to begin in June 2014. Over the past year, the Statement of Work and independent government cost estimate was developed. Additionally, research of the National Historic Building Registry for the museum building exterior was conducted and determined that there were no compliance requirements. Research of the museum interior on the National Historic Registry will need to be completed and may impact the current cost estimate and schedule. The original budget included the renovation of the first floor bathrooms and modifications for the public for Americans with Disabilities Act (ADA) access. The project budget was increased to also include piping replacement within the existing space for the remainder of the bathrooms in the building. This is necessary to prevent potential plumbing failures that may damage the historical artifacts.

General Description: The American Merchant Marine Museum serves as a repository for USMMA's extensive and valuable collection of marine art, ship models and nautical artifacts. It is intended to educate and inform visitors (both the regiment and the public) about the American Merchant Marine and promote public interest in, and understanding of, the nation's maritime service. The museum is housed in an original 1910 Arts & Crafts home built by electrical engineer and inventor William S. Barstow. While previous repairs and renovations have been completed in some parts of the museum, this project is part of a larger ongoing renovation of this historic structure. The first floor museum bathrooms, which currently remain in their original footprint, finishes, and fixtures, will be completely upgraded with modern piping, fixtures, lighting, flooring and partitions that will (in most cases) remain true to the period of the house. These first floor main bathrooms will be ADA compliant and provide adequate services for all visitors. The remainder of the bathrooms will have all piping replaced in order to ensure the protection of the historical artifacts. These additional bathrooms do not need ADA compliance as they are not within the public areas of the museum.

Project Goals: The first floor bathroom will be renovated to meet ADA compliance standards since the museum is frequently visited by the public. The renovations will provide new plumbing to replace the equipment and infrastructure that is currently beyond its useful life. Upgraded piping and fixtures will also ensure the safety of the items housed within the museum.

Benefits to be Achieved: The museum bathroom renovation will update the current bathrooms and allow appropriate ADA-compliant access. It will also help ensure the safety of the items housed within the museum.

Contract Award Date: June 2014

Construction Start Date: June 2014

Estimated Completion Date: December 2014

Funding Status:

Project Budget: \$ 300,000

Project Obligations: \$ 0

CIP PROJECT #14: ROAD AND SIDEWALK REPLACEMENT (CONSTRUCTION)

Status: An initial assessment of this project focused on identifying unsafe and hazardous sidewalk, curb and road conditions that require immediate replacement. The initial assessment is complete and over the past year, the statement of work and the independent government cost estimate was developed to address the potential safety issues. The project currently includes replacement of concrete sidewalks and curbs and replacement of the asphalt roads in the most severely deteriorated paved areas throughout USMMA. The contract award is estimated for May 2014 with the replacement to be completed by June 2014. Unseasonable winter weather conditions caused delays in the project. Further review of the road and sidewalk conditions and deterioration will identify the next phase of the project.

General Description: Existing asphalt roadways and concrete sidewalks throughout the campus have deteriorated and in some instances present safety issues. Many of the roads and sidewalks throughout the USMMA have reached the end of their useful life and are in need of replacement. Existing safety issues include catch basins in need of replacement, cracked sidewalks and broken curbs and pitted asphalt roads that require replacement. These problems are caused by age and harsh winter conditions, and USMMA roads and sidewalks are good candidates for a phased replacement program.



Project Goals: To replace deteriorating roadways and sidewalks to address potential safety concerns. The initial focus of the project is on the most severely deteriorated areas as part of an ongoing effort to replace outdated infrastructure.

Benefits to be Achieved: The condition of some of the roads, pathways, curbs and sidewalks poses a potential safety issue and will be addressed with this project. The replacement of the damaged roads and sidewalks will also add to the infrastructure improvement and appearance of the campus.

Contract Award Date: May 2014

Construction Start Date: May 2014

Estimated Completion Date: June 2014

Funding Status:

Project Budget: \$ 129,497

Project Obligations: \$ 0



Section II: Active Capital Improvement Program (CIP) Projects
As of January 31, 2014 (\$000)

Project	Original Project Budget	Project Budget Reported 2012	Project Budget Reported 2013	Project Budget Current 2014	Change from FY 2013 Project Budget	Project Obligation	Estimated Completion Date
1. Cleveland Hall Renovation	15,000	0	15,000	15,000	0	11,597	Sept 2014
2A. Mallory Pier - Design	2,300	1,178	1,178	1,178	0	1,088	May 2012 Completed
2B. Mallory Pier- Construction	14,000	10,000	13,180	13,180	0	12,524	April 2014
3A. Rogers/ Cleveland Hall Design	3,000	325	325	325	0	325	May 2012 Completed
3B. Rogers Hall Renovation	15,000	12,000	12,500	12,500	0	11,086	July 2013 Completed
4. Delano Hall Renovation	23,000	11,000	9,000	9,000	0	7,679	April 2014
5A. Samuels Hall Design	1,000 ⁴	N/A	N/A	1,000	N/A	0	April 2015
5B. Samuels Hall Renovation	6,000 ⁴	N/A	N/A	6,000	N/A	0	July 2016
6. Electric Grid/Power Supply Improvement ¹	4,000	2,000	2,000	6,800	4,800	62	Phase 1 Completed Feb 2012 Phase 2 Completed Nov 2014 Phase 3 - TBD
7A. Zero Deck Design	300	0	300	600	300	0	Sept 2014
7B. Zero Deck Construction ²	8,000 ⁴	N/A	N/A	8,000	N/A	0	January 2016
8. Crowninshield Pier	1,500	1,500	1,500	3,000	1,500	48	TBD
9. Water Main Replacement	700	700	700	1,500	800	659	Phase 1,2,3A Completed Phase 3B March 2015
10. Safety Issues Barracks/Facilities	2,000	969	969	969	0	229	August 2014
11. Seawall Replacement	500 ⁴	N/A	N/A	500	N/A	0	TBD
12. Grenwolde Loop Project	350 ⁴	N/A	N/A	350	N/A	0	March 2015
13. Museum Bathrooms	150	0	150	300	150	0	December 2014
14. Road and Sidewalk Replacement	129	129	129	129	0	0	June 2014
Totals	\$96,929	\$39,801	\$56,931	\$80,331	\$7,550³	\$45,297	

¹ Electric Grid/Power Supply Improvements project budget amount of \$6.8M is the total CIP funds. Facilities, Maintenance, Repair and Equipment funds of \$2 million are also allocated to the project. The total project amount is \$8.8 million.

² The construction project budget of \$8 million includes \$5 million of FY 2014 Capital Improvement Funds. The remaining \$3 million will be offset with cost savings from other projects and prior year funds.

³ Total amount represents "Project Budget Current 2014" column minus "Project Budget Reported 2013" column excluding new active project amounts (Samuels Hall, Zero Deck, Seawall and Grenwolde Loop).

⁴ New FY 2014 Projects.

Section III: Completed Capital Improvement Program (CIP) Projects
May 1, 2013 – January 31, 2014

Project	Description	Completed Project Amount (\$000)
Mallory Pier - Design	Design of Mallory Pier was completed in May 2012. Project budget amount totaled \$1,178,000 and the project was completed for \$1,088,002.	1,088
Rogers/Cleveland Hall Design	Design of Roger/Cleveland Hall was completed in May 2012. Project budget and completed amount totaled \$325,000.	325
Rogers Hall Renovation	Renovation of Rogers Hall dormitory was completed in July 2013 on schedule and within budget. Rogers Hall is the fifth of six barracks to be renovated. The renovation included installation of a new geothermal loop system and HVAC in every dorm room, new electrical and plumbing and new finishes throughout the building.	11,086
Water Main Replacement Phase 1 – Water Main Phase 2 – Water Vault Phase 3A – Distribution System Testing	The undersized water main for the USMMA was replaced in conjunction with the Great Neck Water Authority. Further, the USMMA replaced the vault where the main transitions to the distribution system for the campus. Finally, testing throughout the USMMA for the distribution system was completed in and the information gathered is being utilized for distribution system upgrades across the USMMA. Completion Dates: August 2012 for Water Main (Phase 1) January 2013 for Water Vault (Phase 2) March 2013 for Distribution System Testing (Phase 3A)	659
Electrical Grid/Power Supply Improvements Phase 1- Survey	An extensive survey was completed in February 2013 USMMA wide in order to allow for a design to be properly solicited to address the existing conditions, develop a valid estimate for construction, and to solicit more reasonable and accurate bids from construction contractors.	62
TOTAL		\$13,220

Section IV: Capital Improvement Program Appropriation History

(\$000)

Fiscal Year	Funded ¹
2001	13,000
2002	13,000
2003	12,855
Subtotal	<u>\$38,855²</u>
2004	13,419
2005	13,033
2006	14,850
2007	14,850
2008	14,139
2009	8,150
2010	15,000
2011	14,970
2012	17,000
2013	16,111
2014	<u>12,000</u>
Subtotal	<u>\$152,711</u>
GRAND TOTAL	\$191,566

¹ Funded amount reflects the total after rescission.

² Per "Addendum to the Ten-Year Improvement Plan for the United States Merchant Marine Academy - June 2005 Report to Congress," FY 2001-FY 2003 \$39 million spent to complete:

- \$2.2 million for design of 6 barracks renovation including geothermal heating and air conditioning system, asbestos and lead abatement, replacement of all potable water lines and utility conduits, for sprinklers, fire protection alarm system and insulation of the exterior walls
- \$400,000 for Jones Hall furniture
- \$2.9 million exterior waterproofing and roof replacement for Jones and Barry Barracks
- \$12.5 million renovation of Jones Hall
- \$3.7 million for OSHA, EPA, ADA and fire protection deficiencies
- \$7.2 m backlogged physical plant maintenance and structural projects to upgrade academic and administrative buildings (\$1.9 million for maintenance and dry docking of Kings Pointer)
- \$5.2 million to replace waterfront seawall and replacement of SOLAS lifeboat
- \$3 million for chapel renovation/repairs and ADA compliance

Section V: Five Year Planned Capital Improvement Program Projects

FY 2015 – FY 2019

The following lists all major projects currently planned for Fiscal Years 2015 through 2019. All requests for funding for the projects listed in FY 2015 and beyond are subject to Office of Management and Budget and Congressional review, as well as legislative enactment. Additionally, projects in FY 2015 and onward may be reevaluated based on the findings in the Space Utilization Study.

FY 2015 Major CIP Projects Planned (\$14.5M)

Bowditch Hall Renovation – Construction (\$13 million): The Bowditch Hall is the second academic building renovation. The Hall houses the Marine Transportation Department and the requested funds will replace or repair the roof and parapet, and upgrade and install the heating and cooling systems on all floors. This will include the installation of improved cooling systems for the top floor where major navigation simulators are housed, as well as the numerous servers and computer systems that must remain in a controlled temperature environment. Plumbing and electrical systems will be replaced and upgraded and corridor lighting improved. All finishes, flooring, ceilings, lighting fixtures and new furniture will be modernized as appropriate for the needs of the Marine Transportation Department.

Major Capital Repairs and Equipment Replacement – (\$1.5 million): Maintaining a dedicated funding source for planned as well as unplanned and emergency major capital repairs and equipment replacement makes good business sense. Because of facility deterioration due to age, emergencies and unforeseen mission-related physical plant projects emerge during the fiscal year and require immediate resolution. Maintaining a dedicated funding source for these unpredictable requirements provides the flexibility to meet critical needs as they occur.

Planned major capital repair/equipment replacement activities include the repair and/or replacement of the elevators across the USMMA. This will include full replacement of hydraulics and possible cab replacement for the most seriously degraded elevator, as well as provide replacement of parts for elevators throughout the USMMA. This work is part of an ongoing effort of preventive capital maintenance and reinvestment in the USMMA physical plant, and is necessary for the continued safe operation of the elevators.

Additionally, these funds will support continued roof repair and replacements. Several of the roofing systems at USMMA are approaching the end of their expected useful lives and will need to be replaced or substantially repaired. This project allows for the most severely degraded roofs to be replaced with a new system and will help maintain the USMMA physical plant as part of ongoing efforts to prevent further deterioration to the USMMA structures.

FY 2016 Major CIP Projects Planned (\$24 M)

Gibbs and Melville Halls Architecture and Engineering Design (\$3 million): Gibbs Hall is the third of four academic halls scheduled for modernization and renovation. Gibbs Hall houses the

Departments of Math and Science and requires specialized spaces for physics labs and other scientific areas. This design will incorporate input from the Math and Science Department faculty in order to ensure that their needs are fully addressed and the key requirements are considered before final design is complete. The design will include a complete set of drawings, cost estimates, statements of work, and specifications. This facilities design will include full renovation and upgrades. Melville Hall is a former visiting officer's quarters (condemned due to fire code violations) and community club. Renovation is intended to restore the visitor's quarters to full service to accommodate visitors from MARAD/DOT and VIPs. Included in the renovation will be restoration of the ground floor kitchen, large dining room, sitting room, and beverage area as well as the entire basement supporting infrastructure. The restored Melville Hall will provide what Land and Delano Halls cannot: a formal dining area for midshipmen to celebrate holidays, hold sponsor dinners, conduct meetings and hear lectures. In addition, Melville Hall will serve the staff and faculty by providing a place for conferences, department social activities and special lunches/dinners. These activities promote camaraderie and boost midshipmen and employee morale.

Gibbs Hall Renovation – Construction (\$15 million): Upgrades throughout the building will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the heating and air conditioning systems, complete interior and exterior painting, and upgrading the classroom technology systems. Additionally, the complete renovation of the classroom sections of the building will provide new flooring, ceiling replacement, and exterior paint. The chillers will also be replaced with corrosion controlled units to prevent salt air deterioration. The electrical system will be upgraded to include enough power for the loads of an academic building with more technology in use. All interior finishes, lighting, and furniture will be modernized and replaced.

Fulton Hall Architecture and Engineering (\$2 million): Fulton Hall is the main hall for the Department of Marine Engineering and the final of four academic buildings to be restored as part of the Academic renovation plan. This design will incorporate feedback from the Engineering Department to help determine the needs and requirements of the classrooms, laboratories, offices and simulator spaces. The final design will include a full set of drawings, cost estimates, statements of work, and other required specifications.

Melville Hall Renovation – Construction (\$4 million): Upgrades will bring the building into compliance with all fire, environmental and building codes and improve domestic water piping, the steam heating system, drainage systems, electrical systems and HVAC systems. The second floor requires an electrical upgrade with new lighting, switching controls and new electrical devices. The existing walls, moldings, and doors will be replaced and modified, new electronic locking systems installed, and carpet, window treatments and wall finishes installed in order to create a modern four room lodging facility. Renovation of the kitchen and basement areas will be in line with that necessary to perform catering and restaurant functions, with all new commercial kitchen appliances and supporting infrastructure to include upgraded electrical capacity, new potable water and drainage piping, and improved exhaust systems. The basement area will also require refurbishment of food storage areas. Additional first floor renovations will include modernization of the building manager's office, living room and beverage area, as well as replacement of all interior finishes, lighting and furniture in those areas and the dining room.

FY 2017 Major CIP Projects Planned (\$14.65M)

Fulton Hall Renovation- Construction (\$13 million): Fulton Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the heating and air conditioning, complete interior and exterior painting, and upgrading the classroom technology systems. Additionally, the complete renovation of the classroom sections of the building will provide new flooring, ceiling replacement and exterior paint. The electrical system will be upgraded to include enough power for the loads of an academic building with more technology in use. All interior finishes, lighting, and furniture will be modernized and replaced.

Road/Sidewalk Replacement (\$150,000): Existing asphalt roadways and concrete sidewalks throughout the campus have deteriorated and have reached the end of their useful life. They are good candidates for a phased replacement program and in some instances present safety issues. This project will replace the areas with the most deteriorated or degraded condition.

Seawall Repairs (\$500,000): These funds continue the phased approach to restoring the seawall as part of the ongoing effort to improve the USMMA physical plant. With these funds the most critical areas will be repaired while deteriorating areas needing preventive maintenance attention will continue to be restored in order to avoid further deterioration.

Fitch Hall Architectural and Engineering (\$1 million): Fitch Hall houses several administrative offices, mechanical and storage spaces and serves as central receiving for the entire campus. From here all deliveries are received sorted, and sent out to the designated building or office of the 42 buildings on campus. This design will upgrade the delivery receiving area and renovate the office and administrative spaces. It will include a complete bid package, and will comprise a complete set of drawings, cost estimates, statements of work and other specifications.

FY 2018 Major CIP Projects Planned (\$12.0M)

Fitch Hall Renovation- Construction (\$10 million): Fitch Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the heating and air conditioning, complete interior and exterior painting, reconfiguration of administrative spaces, and modernization of the campus central warehousing facility. Additionally, the complete renovation of the administrative sections of the building will provide new flooring, ceiling replacement and paint. The electrical system will be upgraded to include enough power for the loads of the new space assignments. All interior finishes, lighting, and furniture will be modernized and replaced.

Patten Hall Renovation Architectural and Engineering Designs (\$1.5 million): Patton Hall is the student health clinic. The architecture and engineering design will be comprised of a complete bid package for the facility. The package will include a complete set of drawings for the building as well as cost estimates, statements of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs as indicated by the specific requirements for student health services, the Joint Commission, and the facility director.

Wastewater Infrastructure Study (\$500,000): The wastewater system that services the USMMA campus is a compilation of multiple systems. Although the current condition of the wastewater system is adequate, it is old and the equipment and piping may not be compatible with updates made to other environmental systems on campus. This design will allow the USMMA to proceed with an upgrade to the system that will allow all current guidelines to be followed. This will also provide the USMMA a clear path for the use of newer technology that will help improve the wastewater infrastructure system. Additionally, this will enable the USMMA to determine and construct, under current standards, the correct sizes for all of the infrastructure and equipment throughout the wastewater system.

FY 2019 Major CIP Projects Planned (\$14.5M)

Patten Hall Renovation- Construction (\$11 million): Patton Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the heating and air conditioning, complete interior and exterior painting, reconfiguration of administrative spaces, and modernization of the health services areas in accordance with current health standards and requirements. Additionally, the complete renovation of the administrative sections of the building will provide new flooring, ceiling replacement and paint. The electrical system will be upgraded to include enough power for the loads of the new space assignments. All interior finishes, lighting, and furniture will be modernized and replaced.

Furuseth Hall Renovation Architectural and Engineering Designs (\$1.5 million): Furuseth Hall is the main administration building. The architecture and engineering design will be comprised of a complete bid package for the facility. The package will include a complete set of drawings for the building as well as cost estimates, statements of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs as indicated by the specific requirements for each individual area located within the facility.

Wastewater Infrastructure Upgrade (\$2 million): The wastewater system that services the USMMA campus is a compilation of multiple systems. Although the current condition of the wastewater system is adequate, it is old and the equipment and piping may not be compatible with updates made to other environmental systems on campus. This upgrade will allow the USMMA to improve upon the current system and replace some of the components that may be at the end of their life cycle.