

EXECUTIVE SUMMARY

The *United States Coast Guard Shipyard Infrastructure Optimization Plan* (“Plan”) presents a long-term strategy for the United States Coast Guard (USCG) Yard (“Yard”) to optimize industrial production and project support facilities for its current mission while considering the future mission.

The Yard is a critical maintenance asset supporting the USCG fleet. USCG is in the midst of a ship acquisition program to transition the fleet to new classes of larger, more technologically advanced ships. Recapitalizing Yard facilities and infrastructure is essential to maintaining USCG organic depot maintenance capabilities to support the Fleet, particularly in light of a diminishing commercial industrial base throughout the nation. As one of the only five remaining public shipyard in the United States the Yard provides not only a unique capability supporting the Coast Guard but also the National Fleet to include NOAA, the U.S. Navy, U.S. Army, and other government agencies. Separate from this study but integral to the overall plan, the Yard is evaluating docking capabilities and waterfront and utilities infrastructure to support the future fleet.

Existing production resources are situated in aging facilities scattered around the Yard. Many of these World War Two-era (WWII) structures are over 70 years old and increasingly obsolete for their current and future mission. The T. Roland Lewis Shiplift system is the core asset of the Yard, capable of docking up to four ships, including all existing classes of USCG cutters except the National Security Cutter (NSC), Offshore Patrol Cutter (OPC), or its heavy and medium icebreaking cutters. The majority of shipboard work occurs at this location, including the removal of major component systems.

The scattered configuration of facilities results in extensive movements for large components during availabilities and satellite production facilities

providing duplicate capabilities within shops. Resources supporting shipboard work regularly travel across the Yard to waterfront work sites.

Many production shops are undersized and poorly configured, constraining throughput and requiring extensive workarounds. Lack of storage facilities result in shop spaces and temporary facilities being used for storage. Inadequate staging areas in shops result in transportation workarounds when space is not available to receive and hold items on a timely basis. The awkward configuration of roads results in additional logistics to move oversized components. All of this raises shipyard production costs today and has a continued negative impact on out-year product costs. This Plan corrected this current deficiency.

The Plan focuses on redeveloping three sites at the industrial core of the Yard and reusing two existing building complexes (Buildings 78/80 and 8/8A/58/58A). The plan consolidates direct project support functions onto these five sites. A fourth redevelopment area at the west end of the Yard is created through the demolition of the existing Paint and Blast complex (Building 32/34/90) and will be used to support future Fast Response Cutter (FRC) Recurring Depot Availability Program (RDAP) work.

An extension of Hotel Street creates a central corridor connecting the west and east ends of the Yard. This provides direct routes between production shops and waterfront work sites. A summary picture can be found in Figure ES-1.

Purpose-built facilities are proposed for shops with significant capacity and configuration gaps. Retained facilities are adapted for functions suitable to their configuration and location. Multi-story facilities are proposed to position supporting resources near waterfront work sites. The plan proposes

to construct five new buildings totaling 220,970 gsf and demolish over 18 buildings totaling 166,317 gsf. See Figure ES-2.

The Plan's total cost of construction is \$344 million (mil, FY28). The Plan is executed in six-phases with costs varying from \$16 mil to \$140 mil per phase.

In advance of the current study, USCG had initiated the process to fund the acquisition of a \$114 mil (FY22) major cutter floating dry dock. This acquisition is consistent with the Plan's objectives and increases the total investment to recapitalize the Yard to \$458 million.

The Yard has a unique opportunity that is not often found in any comprehensive recapitalization program. One of the most valuable redevelopment sites is ideally situated to support long-term optimization and is also minimally developed and available for a first phase construction effort with negligible disruptions to ongoing operations. This benefit creates an easier to execute path for the overall shipyard optimization effort.

The phasing strategy enables the Yard to flexibly proceed as funding becomes available without being sub-optimized at any point.

Optimization of the Yard is achieved through collocating production capabilities, right-sizing facilities, and positioning project resources near work sites. The plan increases the productive capacity of shops, improves staging and transport logistics support, and reduces the need for temporary facilities.

Consolidating shops and supporting facilities within a compact industrial core and opening direct routes across the Yard results in an estimated 50 to 60 percent reduction in large component movement during a vessel's depot maintenance availability. For shipboard-oriented work, the consolidation of shops and supporting facilities result in an estimated 20 to 30 percent

reduction in the movement. This reduction will result in a real financial savings.

Leveraging an approach similar to that used by the United States Navy (USN) in assessing their shipyard infrastructure at their four shipyards, the USCG Plan builds on this sound foundation. The Plan considers the USCG's current mission support demands and future mission changes driven by the USCG's new cutters. The Plan proposes a flexible, phased approach to invest in optimizing industrial production and project support facilities to meet these critical organic depot maintenance USCG missions.

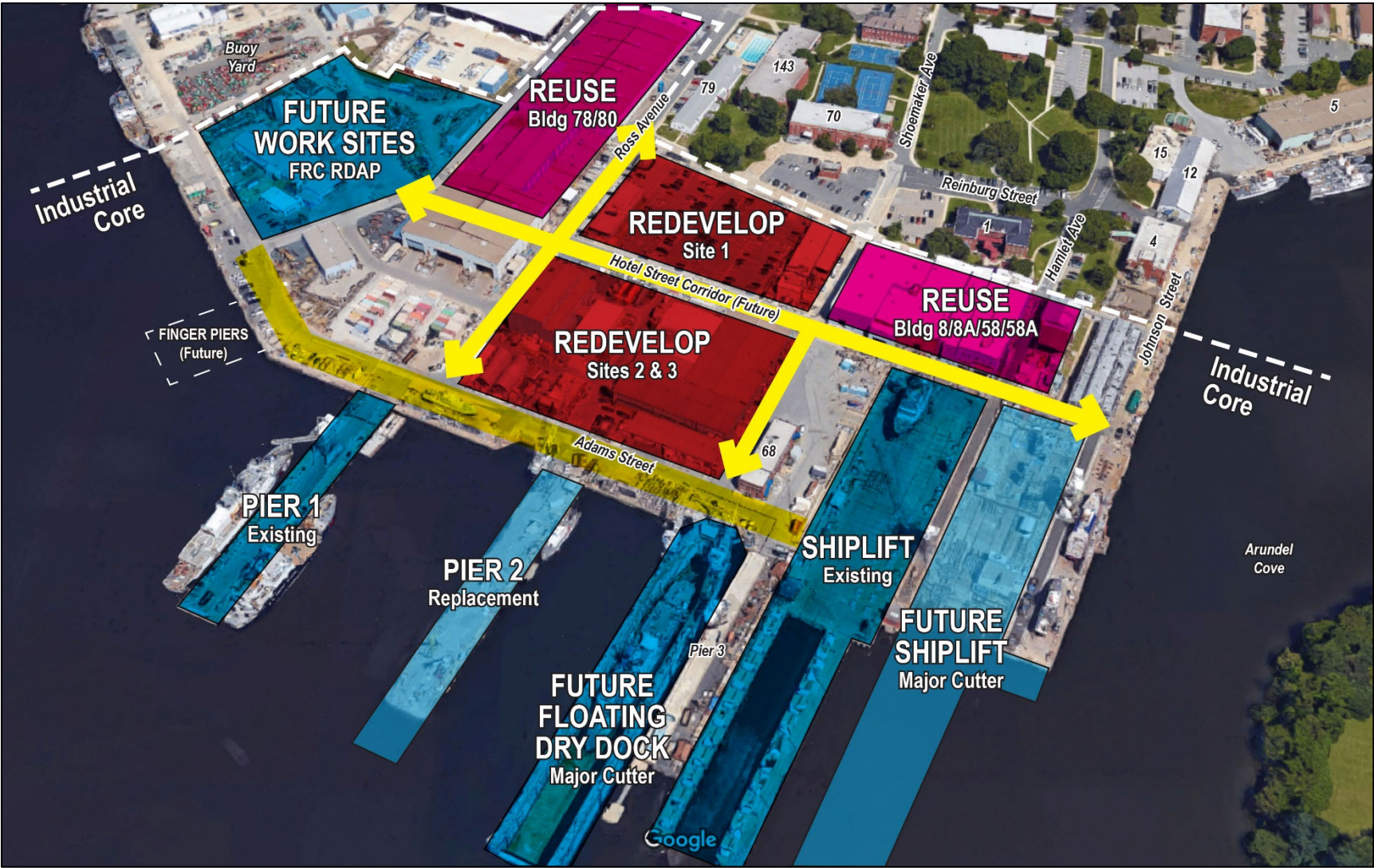


Figure ES-1: Coast Guard Yard-Industrial Core Concept Diagram

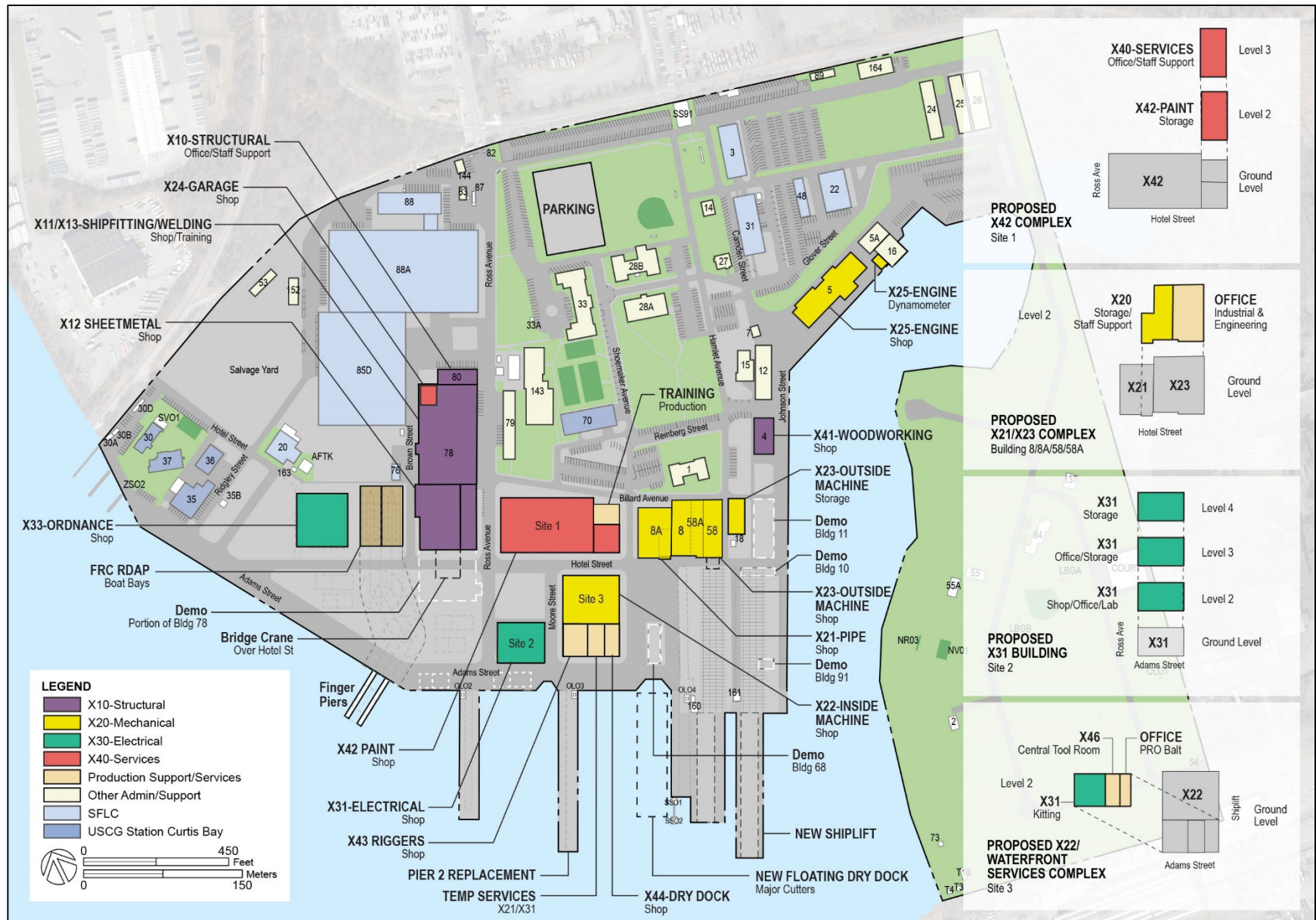


Figure ES-2: Coast Guard Yard Optimization Plan