

Reuse and the Benefit to Community A Beneficial Effects Economic Case Study for the Davisville Naval Construction Battalion Center Superfund Site

# Introduction

Starting in 1942, the Davisville Naval Construction Battalion Center (NCBC) in North Kingstown, Rhode Island, provided mobilization support to U.S. Naval construction forces. In the late 1960s, the base was home to about 8,500 military personnel. Base operations contaminated area soil and groundwater, resulting in the site's listing on the Superfund program's National Priorities List (NPL) in late 1989. Closure of the base in 1994 had a major impact on the local economy, echoing the closure of the adjacent Naval Air Station (NAS) at Quonset Point in the mid-1970s. State agencies and local governments focused on long-term planning to help the area transition from military uses to uses with an economically sustainable future. Early reuse planning and cooperation between the U.S. Environmental Protection Agency (EPA), the Rhode Island Department of Environmental Management (RIDEM), the U.S. Navy (Navy), the Quonset Development Corporation (QDC), business owners and area communities resulted in the transformation of this military property into a thriving economic hub.

Superfund site restoration and reuse can revitalize local economies with jobs, new businesses, tax revenues and local spending. Cleanup may also take place while active land uses remain on site. Today, the site is home to part of Quonset Business Park – one of the largest and most energy-efficient business parks in the Northeast. While only part of the business park is located on site, the site cleanup set the stage for the larger development. Cleanup has also resulted in the creation of open space and recreation amenities for area communities. This case study explores the cleanup and reuse of the Davisville NCBC site, illustrating the beneficial effects of Superfund redevelopment.

# **Beneficial Effects**

Site businesses employ almost 1,500 people, providing estimated annual employment income of nearly \$64 million and generating about \$254 million in annual sales revenue.

Site properties are currently valued at over \$187 million and generate nearly \$823,000 in annual property tax revenues.

Renewable energy sources provide 100 percent of the power needed to run the QDC's operations.

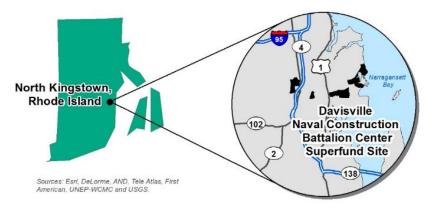


Figure 1. The location of the Davisville NCBC Superfund site in North Kingstown, Washington County, Rhode Island.

# **Site History**

The Davisville NCBC site is located primarily in North Kingstown, 18 miles south of Providence, Rhode Island, along Narragansett Bay in Washington county. Current property features include commercial and industrial facilities, parking areas and open space. The site has three primary areas: the Main Center, which covers 839 acres and includes site Zones 1-4; the 70-acre West Davisville Area; and Camp Fogarty, a 375-acre training facility located about 4 miles west of the Main Center (see Figure 2). Camp Fogarty is located in East Greenwich, in Kent County.

Land uses surrounding the site include mostly residential areas to the north and some commercial and light industrial areas to the south and west. Narragansett Bay borders the site to the east. The decommissioned NAS at Quonset Point is located next to the site's southern boundary. The Navy transferred the decommissioned facility to the Rhode Island Economic Development Corporation and other organizations between 1974 and 1978. According to the 2017 Census, about 26,000 people live in North Kingstown.

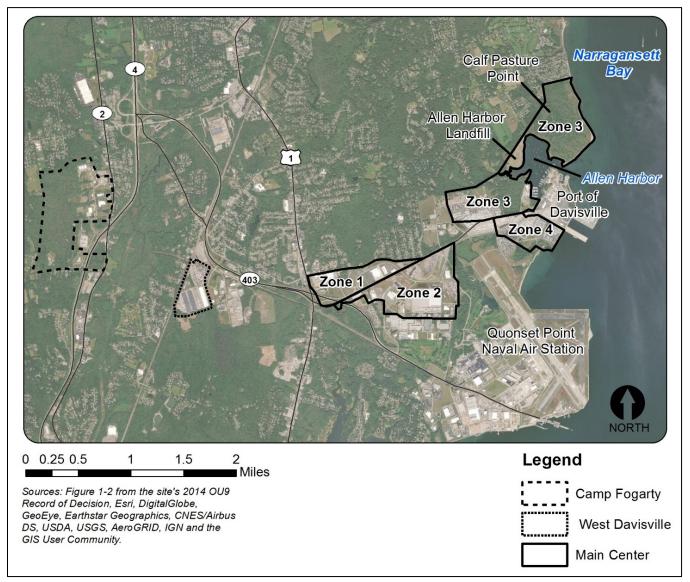


Figure 2. Key site areas and nearby features.

In 1939, the Navy acquired Quonset Point to establish an NAS. Construction began in 1940. In February 1942, the Navy acquired about 840 acres just north of Quonset Point and established the first Advance Base Depot at what would later become the Davisville NCBC. As the need for new facilities continued to grow, the base expanded to encompass 1,892 acres. Later in 1942, Camp Endicott was established as the Naval Construction Training Center. Camp Endicott was located on 475 acres of the Advance Base Depot. It specialized in training the Navy's construction battalions, or "Seabees," to meet the challenges of building new

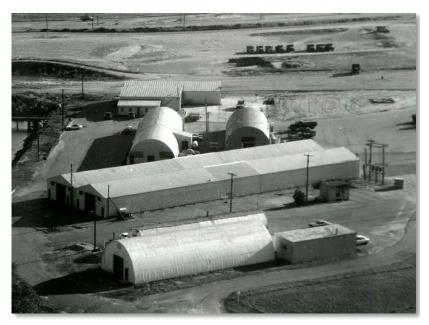


Figure 3. Aerial view of Davisville NCBC during operations. Image source: U.S. Navy.

bases, often in remote oversea locations. Davisville NCBC was thus the birthplace of the Seabees – navy personnel tasked with building bases, creating roadways and airstrips, and leading a wide range of other construction projects during conflicts.

After World War II, Davisville NCBC's function shifted several times to meet the changing needs of the Navy. During the Vietnam War, it became the home port of the Atlantic Fleet Seabees, including 10 Seabee construction battalions and about 8,500 military personnel. The base shipped over 450,000 tons of equipment over the course of the conflict. Through the 1970s and 1980s, activity gradually tapered off as the military's strategic focus shifted to the Pacific Ocean. Davisville NCBC was selected for closure during the Base Realignment and Closure (BRAC) program and decommissioned in March 1994. It officially closed on April 1, 1994.

Operations and waste disposal practices at the site resulted in widespread soil and groundwater contamination. Operations also contaminated surface water in nearby Allen Harbor. In 1989, EPA placed the site on the NPL.

# Site Cleanup

The Navy is responsible for site cleanup, pursuant to CERCLA and a Federal Facilities Agreement entered into by the Navy, EPA and RIDEM in 1992. Across the site's three primary site areas – the Main Center (Zones 1-4), the West Davisville Area and Camp Fogarty – there are 10 operable units and several subsites and study areas. The Navy and EPA have selected long-term remedies for most site areas through several Records of Decision. From the early 1990s to 2016, several removal actions also addressed immediate threats to human health and the environment.

As of 2018, cleanup is nearing completion. EPA has successfully partnered with the Navy and RIDEM under BRAC to clean up this former military base and facilitate its return to beneficial use. The sections below describe key cleanup activities that have been completed across different parts of the site.

#### The Main Center (Zones 1-4)

#### Calf Pasture Point (Zone 3)

Calf Pasture Point is a peninsula on the northeast part of the site, alongside Allen Harbor. A tidal estuary was filled with dredged material during World War II to create the land area. From the early 1940s to the mid-1970s, the southeast part of Calf Pasture Point, referred to as Site 07, was used for training Seabees in the use of heavy construction equipment. The area previously included three munitions bunkers. Sometime between 1968 and 1974, in the area south of the former bunkers, a trench was filled with cans containing Decontaminating Agent Non-Corrosive solution. source А area investigation in 2011 discovered the trench and cans. The chemicals buried in the



Figure 4. Current view of Calf Pasture Point.

trench are the source of groundwater contamination at Site 07. Cleanup of the area included removal of the cans and about three tons of contaminated soil. The long-term remedy includes groundwater monitoring and land use restrictions. Land use restrictions are in place and long-term monitoring is ongoing.

#### Allen Harbor Landfill (Zone 3)

Between 1946 and 1972, the Navy disposed of wastes generated by the Davisville NCBC facility and the NAS at Quonset Point at the 15-acre Allen Harbor Landfill (see Figure 2). Wastes disposed of in the landfill included municipal-type waste, construction debris, preservatives, paint thinners, solvents, polychlorinated biphenyl (PCB) oil, asbestos, ash, sewage sludge and waste fuel oil. Disposal activities usually included burning the waste and covering it with soil. In 1972, the Navy closed the landfill and placed a 2-foot soil cover over the fill materials.

The Navy and EPA selected a remedy for the landfill in 1997. It included removal



Figure 5. Current view of the revetment wall and wetland at Allen Harbor Landfill.

and/or covering of landfill debris from the landfill shoreline, landfill capping, land and groundwater use restrictions, cap vegetation, a stone revetment along the shoreline to protect the landfill face from wave action,

and long-term monitoring. Cleanup also included construction of a breakwater structure and a wetland area to buffer waves and reduce wave energy. A removal action in the spring of 1999 addressed PCB-contaminated soil discovered at the northern end of the landfill and included PCB removal and a northerly extension of the soil cap and the revetment. Remedy construction finished in August 1999. Long-term monitoring is ongoing.

Allen Harbor is almost entirely surrounded by the Davisville NCBC site. In 1984, RIDEM closed Allen Harbor to shellfishing due to suspected contamination from several sources, including the Allen Harbor Landfill. The shellfishing ban is still in place.

# Construction Equipment Division Area (Zone 3)

From 1945 to 1955, the Davisville NCBC Construction Equipment Division (CED) operated on site. The 163-acre area was used to train Seabees in the operation and maintenance of construction equipment. The Navy completed investigations of four CED areas in 2016. The Navy led removal actions at two of those areas in 1996. The removal actions included the removal of over 197 tons of contaminated soil. Investigations also found that that area groundwater is contaminated by chlorinated solvents.



Figure 6. Cleanup efforts to address drums and contaminated soil on site. Image source: U.S. Navy.

However, base-related contamination at the CED Area is mixing with contamination from an off-site source area managed by the U.S. Army Corps of Engineers. The Navy and EPA will select a cleanup approach after the U.S. Army Corps of Engineers selects a plan to address the off-site groundwater source area.

The Navy currently leases the CED property to the QDC. Any construction in the area must be approved by EPA and the Navy and is subject to the QDC's soil management plan. The QDC works with EPA and the Navy to make sure that any development activities follow the plan closely. The lease arrangement allows some development to take place while remaining investigations and cleanup are ongoing. Following cleanup, the Navy plans to convey the property to the QDC for port facility-related uses.

# Fire Fighting Training Area, Solvent Disposal Area and Disposal Area Northwest of Buildings W-3, W-4 and T-1 (Zone 2, Sites 06, 11 and 13)

The Navy reportedly used Site 06 from 1970 to 1972 for the disposal of waste solvents. Site 11 was reportedly used between the mid-1940s and 1955 as a firefighting training area, where waste oil was poured on the ground, ignited and extinguished. Site 13 activities included vehicle and equipment overhaul and repair, storage of waste oil, paint thinner and solvents in drums, and the spreading of waste oil on fields. A removal action by the Navy in 1997 dug up over 2,200 tons of PCB-contaminated soil from Site 13 and disposed of the material off site. The risk assessments for these site areas found that they do not pose unacceptable risks to human health or the environment. The Navy and EPA selected a "No Further Action" remedy for sites 06, 11 and 13 in 1998.

Creosote Dip Tank and Fire Fighting Training Area (Zone 3, North-Central Area)

Creosote dipping of wood pilings took place here during the late 1960s. The wood pilings were dipped into tanks containing creosote and staged in the area to dry before being loaded onto ships. In the early 1990s, an upended creosote dip tank was discovered in the Reportedly, structures area. were constructed, doused with flammable materials, set on fire, and extinguished as part of fire-fighting training exercises at the Fire Fighting Training Area during the late 1960s. The Navy and EPA's cleanup plan for the area called for removal of contaminated soil and groundwater treatment. In 2015, the Navy treated



Figure 7. Current view of the North Central Area Fire Fighting Training Area.

contaminated groundwater, excavated 2 feet of contaminated soil from the area and backfilled the area. Land and groundwater use restrictions are in place and long-term monitoring is ongoing.

#### Camp Fogarty (Site 10)

The Camp Fogarty area was originally known as Sun Valley and included more than 6,000 acres which were taken by eminent domain. During World War II, it was used for training of Navy personnel. Following the war, all but 375 acres were transferred back to the original owners. Seabee training took place at the remaining 375-acre area until 1974. The property was transferred to the U.S. Army in December 1993. Since then, Camp Fogarty has been used mostly by the Rhode Island National Guard.

Site 10, the Camp Fogarty Disposal Area, is located within Camp Fogarty and consists of three depressions between firing range berms that once contained construction debris. In the mid-1990s, the Navy led a removal action to address lead-contaminated soil. After the cleanup, the site's risk assessment and remedial investigation concluded that the area did not pose unacceptable risks to human health or the environment. In 1998, the Navy and EPA selected a remedy of "No Further Action" for Site 10.

## West Davisville

This area includes several buildings on a 70-acre parcel of land between Camp Fogarty and the Main Center. The Defense Property Disposal Office (DPDO) Film Processing Disposal Area is located next to Building 314, the DPDO warehouse. Early investigations identified the area as a possible hazardous waste disposal location. Later investigations found that the area posed no unacceptable risks to human health or the environment. In 1998, the Navy and EPA selected a "No Further Action" remedy for the area.

The Navy previously stored electrical transformers in Building 316 of the DPDO. In 1977, a transformer containing PCB oil was accidentally punctured in the building. After initial cleanup efforts in 1991, the Navy and EPA selected

a long-term remedy in 1993. It included removal and off-site disposal of contaminated concrete flooring and subgrade soil. Cleanup finished in 1997.

# Base Closures and Reuse Planning – Setting the Stage for Redevelopment

In the mid-1970s, the NAS at Quonset Point closed and operations at Davisville NCBC were curtailed. The state of Rhode Island established the Rhode Island Economic Development Corporation and the Rhode Island Port Authority. The organizations were tasked with the economic development of the NAS at Quonset Point properties, and later, of the Davisville NCBC properties.

In the spring of 1992, after the Navy first announced the coming closure of Davisville NCBC, the Navy asked the community to establish a Community Base Reuse Committee. Its purpose was to assist with the transition of the base to civilian use. The Committee included representatives from the state, the town of North Kingstown, the Rhode Island Port Authority and Economic Development Corporation, and the Narragansett Indian Tribe. The Navy worked with the Committee to develop a land use plan for former base areas. This collaboration included several public meetings where local residents and business owners shared ideas and provided feedback on the Committee's work.

This process resulted in the creation of the Comprehensive Reuse Plan for Davisville NCBC. Reuse goals and priorities identified in the 1994 plan included the allocation of over half of the property for economic development and remaining areas for use as open space for conservation, buffer and park purposes. The plan served as the community's initial road map for returning the former base property to productive and beneficial use. Additional

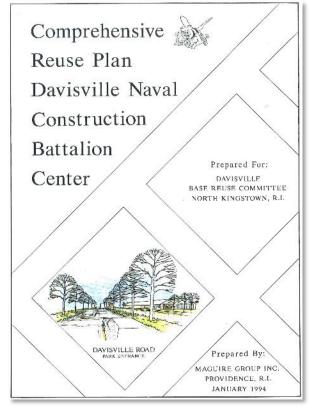


Figure 8. Cover of the 1994 Comprehensive Reuse Plan.

comprehensive planning to integrate both the Davisville NCBC and NAS at Quonset Point properties back into civilian use began in 1998.

Following base closure, the Davisville NCBC property that was transferred out of Navy control was managed and developed by various state entities until 2005, when the Rhode Island General Assembly established the Quonset Development Corporation (QDC). The QDC is a quasi-state agency, established as a special purpose subsidiary of the Rhode Island Commerce Corporation. It is a real estate development and management company responsible for developing and managing site development efforts. The QDC is governed by a Board of Directors, that includes community and business representatives, and designees of local elected officials.

The QDC documented its vision for a large business park on the former Davisville NCBC property in its 2008 Business Park Master Land Use and Development Plan. The 2008 plan considered and integrated aspects of the original 1994 plan. Cooperation and coordination between the town of North Kingstown and the QDC ensured that the 2008 plan was consistent with and supported the original Comprehensive Reuse Plan.

Community reuse priorities were also reflected in the 2008 plan. The plan called for office buildings and retail development to create a buffer between the neighborhood north of the site and industrial businesses in the heart of the proposed business park. It also set aside over 500 acres of open space, wetlands and other natural areas for preservation and additional buffer areas. In 2010, the QDC and the town of North Kingstown signed the first Municipal Services Agreement outlining responsibilities for road and utility maintenance and wastewater services. The QDC also put a set of development regulations and protocols in place to guide commercial development at the site.



Figure 9. QDC's 2008 Business Park Master Land Use and Development Plan.

# **Transferring Site Properties, Addressing Liability Concerns**

Following the cleanups, the Navy conveyed or sold site properties to different entities. In 1993, the Navy conveyed the 375-acre Camp Fogarty property to the Army for use in training the Rhode Island National Guard. The Rhode Island Economic Development Corporation (RIEDC), now known as the QDC, conducted reuse planning for the remaining property and served as the local redevelopment authority. The Navy transferred other site parcels to RIEDC through negotiated sales and a U.S. Department of Transportation Maritime Administration Public Benefit Conveyance. The 205 acres that include Calf Pasture Point and the Allen Harbor Landfill were transferred to the town of North Kingstown through a National Park Service Public Benefit Conveyance; land uses on that property are restricted to open space and passive recreational uses.

For each site property transferred, the Navy prepared a Finding of Suitability to Transfer. These documents summarized investigations for the properties and documented that cleanup goals had been met and that the property was suitable for transfer and development. EPA supported the property transfer process by reviewing the Findings of Suitability to Transfer prior to the property transfers. This process addressed QDC liability concerns and set the stage for the site's redevelopment.

# **Beneficial Effects**

Cooperation among EPA, the Navy, RIDEM, the QDC and several other stakeholders has resulted in the transformation of this contaminated military base into Rhode Island's leading economic development and job growth engine. Today, the site is home to part of the Quonset Business Park, one of the premier business parks in New England and leading engine of job growth and economic development in Rhode Island. Site businesses include a wide range of commercial, industrial and public service industries. These organizations bolster the local economy and help generate local and state tax revenues. The site also provides recreation and cultural amenities

and supports several alternative energy projects. This section describes some of the beneficial effects of reuse at the site.

Federal Facility	Businesses	Total Employees	Total Annual Employee Income	Total Annual Sales	Total Market Value Land & Improvement	Total Property Tax	
Davisville NCBC	72	1,487	\$63,744,876	\$253,969,334	\$187,395,700	\$822,931.43	
<sup>a</sup> See Technical Appendix for more details.							

Table 1. Site Business/ Economic Summary Information (2017/2018)<sup>a</sup>

# **Commercial and Industrial Reuse – Quonset Business Park**

Much of the Davisville NCBC site is located within the larger Quonset Business Park. While not all of the Quonset Business Park businesses are located within the Davisville NCBC site boundaries, the cleanup of the site was crucial to the development of the larger business park. The 3,200-acre Quonset Business Park is home to over 200 companies and employs 12,000 people in full-and part-time jobs across a variety of industries, including one out of seven manufacturing jobs in the state.<sup>1</sup> The site's location and modernized infrastructure make it an ideal option for businesses looking to move to the area or expand their facilities. Centrally located in southern New England, 35 million people live within a three-hour drive of the site. The business park offers corporate aviation facilities, freight rail access, easy access to major airports and direct intermodal connections through the Port of Davisville. Some of the businesses operating on different parts of the site and associated beneficial effects are highlighted below.

"World-class infrastructure has been a key to the success of Quonset Business Park. Our history as a former naval base has laid the groundwork for this success, including the large amount of land left to us by the Navy and the pre-existing rail and airport infrastructure. We have prioritized the maintenance of over 500 acres of open space and continue to develop amenities to remain Rhode Island's signature economic development success."

- Steven J. King, Managing Director, Quonset Development Corporation

# The Main Center

# Finlays

This business is a leader in the development and distribution of tea and coffee extracts. The company's new, 28,800-square-foot research and development center at Quonset Business Park drew local and state officials for a ribbon-cutting ceremony in April 2018. The company has completed its first phase of on-site development, with another phase planned for the future. The final project is expected to cover 93,800 square feet at a cost of \$54.3 million and employ more than 70 people. The new facility also supports the park's renewable energy goals with a 140-kilowatt rooftop solar array.

<sup>&</sup>lt;sup>1</sup> <u>http://www.quonset.com/about-the-park</u>



**Figure 10. The April 2018 ribbon-cutting ceremony for Finlays' global research and design center and manufacturing plant.** From left, Steven J. King, managing director of Quonset Development Corp., governor Gina M. Raimondo, Steve Olyha, CEO of Finlay Extracts & Ingredients USA, Stefan Pryor, Rhode Island commerce secretary, and Richard A. Welch, president, North Kingstown Town Council. Image source: QDC.

# **Ocean State Oil**

In 1996, this distributor of lubricants for automotive, transportation and industrial uses relocated to a historic Quonset-style warehouse building in Quonset Business Park. The company's state-of-the-art facility provides 50,000 square feet of space and over a half-million gallons of indoor bulk storage. The company strives to develop its product lines and customer base in an environmentally responsible manner. This on-site business contributes nearly \$2.8 million in estimated annual employee income and generates \$13 million in annual sales.

# Seabee Museum and Memorial Park

Davisville NCBC was the historic home of the Seabees. Today, the site's unique military history is preserved at the Seabee Museum and Memorial Park. The mission of the museum and park is to recognize the thousands of men and women who served at Davisville NCBC from 1942 to 1994, to preserve the historic site, and commemorate that significant period of Rhode Island history. The museum and park include several vintage Quonset Huts, artifacts, archives, the Seabee-built Chapel in the Pines, a store and the iconic "Gate Bee" statue. Quonset Huts, the famous round-top buildings closely associated with the Seabees since World War II, were also originally designed and manufactured at Davisville NCBC. Built by Seabees and operated by Seabees, the museum provides a unique educational experience for students, teachers, scouting groups, veterans and history buffs.



Figure 11. Built and run by Seabees, the Seabee Museum and Memorial Park is committed to keeping the proud history of the Navy Seabee's accomplishments alive at their original home.

# North Atlantic Distribution, Inc. (NORAD)

NORAD is one of the largest auto importers in North America, serving as a port of entry, processing center, and distribution hub for imported and domestic vehicles. The business uses large parts of the site to park and store cars that arrive by boat and rail; its main business offices are located just off site. The cars in the NORAD parking lots are moved to facilitate sampling and other remedy-related operations and maintenance activities. The Navy coordinates with NORAD to schedule those activities around car deliveries to minimize the impact on business operations. In the past, the Navy communicated with the business on a sometimes-daily basis to adjust fieldwork, as possible, to minimize business disruption. That coordination and cooperation was especially critical during remedy construction, when the Navy had to move large well-drilling rigs onto the property amid thousands of brand-new parked cars.



Figure 12. NORAD vehicles parked on site.

# Ocean State Job Lot, Inc.

This business is the largest closeout retailer in the Northeast; its company headquarters are located in the center of Quonset Business Park. Since opening its first store in North Kingstown in 1977, the business went on to be recognized by Forbes as one of America's best midsize employers in 2017. That same year, the company expanded its on-site distribution center, resulting in a total facility footprint of 1.2 million square feet. Philanthropic community support is an integral company value. The Ocean State Job Lot Charitable Foundation was created to reinforce the company's commitment to communities where its stores are located. The company's charitable efforts include medical and educational program assistance, disaster relief efforts, support for active-duty military and veterans, special needs and foster children, support for area food banks, and literacy initiatives. In 2017, the

Foundation donated over 120,000 books to financially challenged elementary schools and distributed 200 tractortrailer loads of food to 21 food banks across the Northeast. This on-site business provides nearly \$13 million in estimated annual employee income and generates \$110 million in annual sales revenue.

#### Edesia

Since production began on site in 2010, this company's lifesaving foods have reached over 5.5 million children in over 50 countries. This nonprofit organization makes specialized, ready-touse foods for humanitarian organizations and non-profits. Each year millions of "miracle packets" leave Edesia's factory, ready for delivery to malnourished children all over the world. Since 2010, Edesia has responded to humanitarian crises across the globe, including the 2010 earthquake in Haiti, Pakistan floods in 2010 and 2011, and the ongoing Syrian refugee crisis. The organization collaborates on research and development to improve distribution systems and optimize the use of ready-to-use foods and also



Figure 13. Edesia's on-site manufacturing facility.

supports local producers of ready-to-use foods in the developing world. Additional efforts include education and advocacy to raise the profile of global malnutrition in the United States. The company's on-site workforce hails from 23 countries. Business operations generate an estimated \$8.3 million in estimated annual employee income and \$22 million in annual sales revenue.

#### The Shops at Quonset Point

The gateway to Quonset Business Park, this 400,000-square-foot shopping center supports a range of retail businesses. Kohl's and Dave's Fresh Marketplace serve as the anchor tenants. Other businesses include Verizon, Subway, Supercuts, Central Nails, Sally Beauty, HomeGoods, PetValu and BankNewport. Together, these businesses employ nearly 200 people and contribute over \$4 million in estimated annual employment income. In 2017, combined sales for the businesses at the Shops at Quonset Point exceeded \$23 million.



Figure 14. Entrance to The Shops at Quonset Point.

# Quonset Davisville Navy Yacht Club and Mill Creek Marine

Situated on Allen Harbor's picturesque waterfront, the Quonset Davisville Navy Yacht Club and Mill Creek Marine provide services and opportunities for local boating enthusiasts. The yacht club provides boating experiences for military and non-military patrons and hosts several sailing races throughout the summer months. Adjacent to the club, Mill Creek Marine provides boat service and repair, boat sales, and indoor and outdoor boat storage. Together, these businesses employ about 20 people and generate nearly \$1.6 million in combined annual sales revenue.



Figure 15. Mill Creek Marine on Allen Harbor.

# West Davisville

West Davisville is the westernmost district of Quonset Business Park. Located off the Route 403 interchange, the development benefits from direct highway access and a central location. The area is also next to an Amtrak rail yard, enabling business park tenants to easily access Quonset's intra-park railroad, operated by Seaview Transportation. West Davisville includes the West Davisville Small Business Center at 355 Compass Circle, West Davisville Commons at Quonset Point, which occupies 338 and 342 Compass Circle, as well as several other businesses. Together, the businesses on the West Davisville part of the site employ about 250 people, generating \$14.5 million in estimated annual employee income and nearly \$32 million in combined annual sales revenue. The beneficial effects of several West Davisville businesses are highlighted below.

# **Nantucket Sinks**

This business sells luxury kitchen and bathroom sinks made with materials such as stainless steel, porcelain, stone, copper and brass. They also carry sink accessories and offer features such as handmade copper sink aprons. The company, which operates at the West Davisville Commons at Quonset Point, generates over \$244,000 in estimated annual employee income and \$1.4 million in annual sales.

#### **Fresh Mode Screen Printing**

This business specializes in custom screen printing, embroidery and contract printing of t-shirts, sweatshirts, sport shirts, bags, pants, hats and other apparel. With over 20 years of experience, the company runs all production at the on-site location. Business operations generate an estimated \$55,000 in annual employee income.

#### **Polymershapes LLC**

This business is a distributor of plastic sheet, rod, tube, film and associated products. These products are used in range of applications across the aerospace, automotive, building and construction, chemical processing, oil and gas, and electronics industries. The company's network of stocking facilities, located throughout the Americas, provides customers access to extensive inventory. The on-site business branch operates at the West Davisville Commons at Quonset Point, generating about \$840,000 in estimated annual employee income and nearly \$2.7 million in annual sales.



Figure 16. West Davisville Commons is home to a range of commercial and light industrial businesses.



#### Antique Furnishings, Inc.

Located in the West Davisville Small Business Center at 355 Compass Circle, this company has specialized in antique restoration and sales

for over 30 years. All restorations are done using traditional hand joinery techniques. Hand-planing, re-sawing, mortice and tenon joints, hand-dovetailing, and carving are all performed using traditional hand tools. Company craftsmen can also make doors, moldings, desk lids, panels, new tops or bases, or any other elements needed to repair antique furniture. The business generates over \$150,000 in annual sales revenues.

#### Camp Fogarty – Continued Military Use

Camp Fogarty is the westernmost part of the site, located in East Greenwich, Kent County, Rhode Island. Its mission is to provide command, support and training facilities to support the Rhode Island National Guard as well as civilian organizations. The facility has several tactical training areas, including firing ranges, a rappelling tower, a confidence course and a fitness center. Jobs at Camp Fogarty generate nearly \$3 million in estimated annual employee income.



Figure 18. Camp Fogarty entrance.

In November 2017, a ground-breaking ceremony at the facility marked the beginning of construction of a Rhode Island Army National Guard Readiness/Reserve Center. The center will be a state-of-the-art, consolidated command headquarters facility and include administrative, training and logistics offices for the Rhode Island Army National Guard and the Rhode Island Air National Guard. It will cover 22 acres and consolidate personnel currently located in the Command Readiness Center and the Schofield Armory. The facility will also include technology-

Figure 17. Fresh Mode Screen Printing is part of the West Davisville Commons development.

enhanced classrooms and training facilities, including a large multi-purpose room and a 450-person auditorium for training, ceremonies and briefings that will also serve as an operations information center during severe weather or other catastrophic events. The auditorium will also be available for use by local community and governmental agencies. The 81,000-square-foot facility is projected to support 220 full-time soldiers and airmen as well as the 3,000 men and women of the Rhode Island National Guard.

## **Renewable Energy at the Site**

Quonset Business Park is not only the state's leading economic development hub; it also leads by example in energy efficiency. Rhode Island has a renewable energy goal of achieving 1.000 megawatts of clean energy projects by 2020, which the QDC supports through several renewable energy projects across the business park. For example, the former Navy Seabee buildings, located on the West Davisville part of the site, now host two of the most powerful rooftop solar installations in New England. QDC previously sold two of the West Davisville buildings – Buildings 316 and 317-to a private owner. In 2013, the



Figure 19. Ground-mounted solar installation along Davisville Road.

owner installed a 2.4-megawatt rooftop solar array on both buildings. It covers more than 8 acres of roof and is virtually unnoticeable to passersby at ground level. The project was one of the first and largest to be built under Rhode Island's groundbreaking Distributed Generation Standard Contracts program, which promotes cost-effective, locally sourced renewable energy. Under the program, all power is sold through a 15-year power purchase agreement to National Grid, the local utility. The system supplies enough clean electricity to power 500 Rhode Island homes and results in an estimated annual carbon dioxide reduction of more than 4 million pounds.

In August 2018, a new 2.24-megawatt solar array started operating on two QDC-owned West Davisville buildings – Buildings 314 and 315. The buildings' lightweight concrete plank construction required a special ultralight installation. Under a virtual net metering program, the rooftop arrays provide 100 percent of the power needed to run the QDC's main office and annex buildings, along with the port operations office, water distribution system, wastewater collection and treatment system, and streetlights across the business park. The system will provide nearly 3 million kilowatt hours of electricity annually to the business park.

Finally, a 500-kilowatt, ground-mounted solar installation along Davisville Road serves as a buffer between industrial businesses at the park and on off-site residential area north of the site. The QDC leases the property to a solar development company, which sells the power back to the grid. Expansion plans to add an additional 170-kilowatt installation are under development. Several businesses at the park also support renewable energy through the use of roof-mounted solar arrays. In May 2018, the Rhode Island Office of Energy Resources recognized the QDC's efforts to integrate renewable energy resources throughout the business park at the Leading by Example Energy Awards ceremony at the Rhode Island State House.

# **Recreational and Ecological Benefits**

Calf Pasture Point, the area once used by the Navy to train construction battalions in the use of heavy construction equipment, is now home to a nature preserve and Calf Pasture Point Beach. One of the bay's most pristine beaches, it reaches for almost a mile along the 189-acre peninsula. Calf Pasture Point, now a nature preserve that includes forest, grasslands and waterfront, is home to a wide range of wildlife and native plants.

The Quonset Davisville Bike Path in North Kingstown was built by the Rhode Island Department of Transportation and the QDC. It opened to the public in July 2009 and is managed by the town of North Kingstown and QDC. The combined QDC and town bike path runs 3.75 miles through Quonset Business Park to the Calf Pasture Point nature area. Fitness areas along the path include equipment that trail visitors can use to stretch and exercise. The bike path, beach and nature area are valued recreation amenities for people who work at the business park as well as nearby residents and visitors.

Cleanup of the Allen Harbor Landfill included construction of a wetland area to help reduce wave energy reaching the revetment. The wetland area also serves as a natural resource and habitat improvement. Today, site wetlands are populated with abundant vegetation and provide valuable habitat for a wide range of wildlife, including ospreys, double-crested cormorants and American egrets. Allen Harbor is also used for recreational boating and supports two marinas.



Figure 20. Calf Pasture Point Beach.



Figure 21. Quonset Davisville Bike Path.



Figure 22. A fitness station along the Quonset Davisville Bike Path.

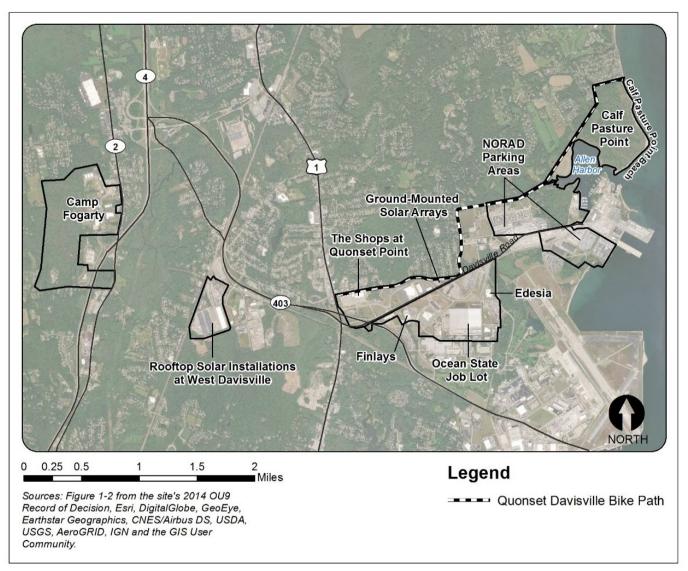


Figure 23. Examples and locations of some of the reuses at the site.

# **Continued Development Expansion**

The future of the site looks bright. Quonset Business Park continues to be a key driver of economic development in the area, with new companies continuing to locate there. The QDC has several properties available for ground lease and building lease in the park, and actively markets those properties to attract new businesses to the area. Several building projects are underway or recently completed. For example, construction for phase 2 of the West Davisville Small Business Center at 345 Compass Circle recently finished. The development is marketed as a small business incubator and includes several condominium units. Construction of a new phase of Gateway Offices along Romano Vineyard Way also recently finished.



Figure 24. QDC staff and local leaders pose at the groundbreaking for the Gateway Office facility. Image source: QDC.



Figure 25. Signage for the new Gateway Office development.

On-site properties help generate property tax revenues that support local government and public services. Today, site properties have a combined value of over \$187 million and generate nearly \$823,000 a year in total property tax revenues. On-site businesses also generate tax revenues through the collection of sales taxes, which support state and local governments.<sup>2</sup>

# Conclusion

Collaboration and cooperation among EPA, the RIDEM, the Navy, the QDC, local governments and business owners was vital to the successful cleanup and beneficial reuse of the Davisville NCBC Superfund site. The early initiative taken by stakeholders to develop a shared vision for the future of the site resulted in the economic revitalization of this once-contaminated military property. Quonset Business Park is a model of what can happen when cleanup and redevelopment are approached holistically. EPA and the Navy worked together early on to address liability concerns and the Navy continues to coordinate with site businesses to minimize the impacts of remedy-related activities on company operations. The QDC is also committed to ensuring that site development continues to be as environmentally sustainable as possible.

Today, the site provides a wide range of employment options as well as ecological and recreational amenities. It also hosts command and training facilities to support the Rhode Island National Guard. On-site businesses support local economic growth, providing almost 1,500 jobs and nearly \$64 million in estimated annual employee income. In 2017, on-site businesses generated about \$254 million in sales revenue. Site cleanup was also crucial to the development of the larger Quonset Business Park, which is home to over 200 companies and employs 12,000 people. The continued growth of Quonset Business Park illustrates the long-term benefits of collaborative planning focused on cleanup and redevelopment.

<sup>&</sup>lt;sup>2</sup> The Rhode Island sales tax rate is 7 percent. That is the total of state, county and city sales tax rates. For more information, see <u>http://www.tax.ri.gov/help/faq.php</u>.



Figure 26. View of Allen Harbor, with Allen Harbor Landfill in the background.

For more information about EPA's Superfund Redevelopment Initiative, visit: <u>https://www.epa.gov/superfund-redevelopment-initiative</u>.

Any mention of trade names, manufacturers or products in this document and its appendices does not constitute an endorsement by the United States Government or the U.S. Environmental Protection Agency. EPA and its employees do not endorse any commercial products, services or entities.



In May 2017, EPA established a task force to restore the Superfund program to its rightful place at the center of the Agency's core mission to protect health and the environment. epa.gov/superfund/superfund-task-force



Reuse and the Benefit to Community A Beneficial Effects Economic Case Study for the Davisville Naval Construction Battalion Center Superfund Site

# **Technical Appendix**

# **Employment Information for On-Site Jobs**

EPA obtained the data included in this appendix directly from reputable sources and reported the data as presented by those sources. Information on the number of employees and sales volume for on-site businesses came from the Hoovers/Dun & Bradstreet (<u>D&B</u>) database.<sup>1</sup> EPA also gathered information on businesses and corporations from D&B. D&B maintains a database of over 300 million businesses worldwide.

When Hoovers/D&B database research was unable to identify employment and sales volume for on-site businesses, EPA used the ReferenceUSA\_database.<sup>2</sup> These databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting.

## Wage and Income Information for On-Site Jobs

EPA obtained wage and income information from the U.S. Bureau of Labor Statistics (BLS). Part of the U.S. Department of Labor, the BLS is the principal federal agency responsible for measuring labor market activity, working conditions and price changes in the economy. All BLS data meet high standards of accuracy, statistical quality and impartiality.

EPA used the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for businesses at the Davisville Naval Construction Battalion Center Superfund site. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes for each type of business with weekly wage data for corresponding businesses in Washington and Kent Counties. If weekly wage data were not available at the county level, EPA sought wage data by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, EPA used higher-level (less-detailed) NAICS codes to obtain the wage data.

To determine the annual wages (mean annual) earned from jobs generated by each of the selected businesses at the Davisville Naval Construction Battalion Center Superfund site, EPA multiplied the average weekly wage figure by the number of weeks in a year (52) and by the number of jobs (employees) for each business.

<sup>&</sup>lt;sup>1</sup> <u>http://www.dnb.com</u>

<sup>&</sup>lt;sup>2</sup> <u>http://resource.referenceusa.com</u>

On-Site Business	NAICS Code <sup>a</sup>	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
Advanced							
Communications							
Technology Inc		All Other Miscellaneous					
(Verizon Wireless		Store Retailers (except					
Zone)	453998	Tobacco Stores)	7	\$493	\$25,636	\$179,452	\$1,200,000
Antique Furnishings		Reupholstery and					
Inc	811420 <sup>e</sup>	Furniture Repair	3 <sup>f</sup>	\$525	\$27,300	\$81,900	\$151,000
Applied Radar, Inc.	541330	Engineering Services	25	\$1,500	\$78,000	\$1,950,000	\$5,100,000
B.E. Publishing	511199	All Other Publishers	4	\$465	\$24,180	\$96,720	\$432,000
BankNewport	522110 <sup>g</sup>	Commercial Banking	5 <sup>g</sup>	\$1,074	\$55,848	\$279,240	\$1,490,000 <sup>g</sup>
		Wired					
Broadband Access		Telecommunications					
Services Inc	517110	Carriers	58	\$1,610	\$83,720	\$4,855,760	\$2,800,000 <sup>h</sup>
		Highway, Street, and					
Cardi Corporation	237310 <sup>e</sup>	Bridge Construction	NA	\$1,444	\$75,088	NA	NA
Central Nails	812113 <sup>g</sup>	Nail Salons	1 <sup>g</sup>	\$395	\$20,540	\$20,540	\$45,000 <sup>g</sup>
Christine W Ariel							
Esquire	541110	Offices of Lawyers	2	\$1,463	\$76,076	\$152,152	\$241,000
		Specialized Freight					
Commodity Haulers		(except Used Goods)					
Express Inc	484220	Trucking, Local	15	\$1,216	\$63,232	\$948 <i>,</i> 480	\$1,700,000
Crestwood Equity							
Partners LP							
(Crestwood							
Davisville Terminal)	454310	Fuel Dealers	1	\$997	\$51,844	\$51,844	\$3,166,667 <sup>i</sup>
Crown Seafood		Fish and Seafood					
Company, LLC	424460	Merchant Wholesalers	4	\$940	\$48,880	\$195,520	\$446,000
		Showcase, Partition,					
Custom Design		Shelving, and Locker					
Incorporated	337215	Manufacturing	49	\$1,108	\$57,616	\$2,823,184	\$4,400,000

On-Site Business	NAICS Code <sup>a</sup>	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
Dave's Marketplace							
of North Kingstown,		Fruit and Vegetable					
Inc	445230	Markets	20	\$441	\$22,932	\$458,640	\$769,000
Diversified Mobile		General Automotive					
Services, Inc.	811111	Repair	7	\$791	\$41,132	\$287,924	\$400,000
		Pharmaceutical Preparation		4			
Edesia, Inc.	325412	Manufacturing	70	\$2,281	\$118,612	\$8,302,840	\$22,000,000
Elco Painting Inc	238320	Painting and Wall Covering Contractors	20	\$794	\$41,288	\$825,760	\$1,400,000
		Industrial Machinery and Equipment Merchant					
Express Parts Inc	423830	Wholesalers	2	\$1,299	\$67,548	\$135,096	\$259,000
Failure Analysis &							
Prevention, Inc.	541330	Engineering Services	1	\$1,500	\$78,000	\$78,000	\$190,000
		Other Grocery and Related Products					
Finlays	424490 <sup>e</sup>	Merchant Wholesalers	NA	\$1,286	\$66,872	NA	NA
Fix A Nix	811111 <sup>g</sup>	General Automotive Repair	1 <sup>g</sup>	\$791	\$41,132	\$41,132	\$427,000 <sup>g</sup>
Fresh Mode Screen Printing	323113 <sup>g</sup>	Commercial Screen Printing	2 <sup>g</sup>	\$530	\$27,560	\$55,120	\$54,000 <sup>g,h</sup>
Homegoods, Inc.	442299 <sup>g</sup>	All Other Home Furnishings Stores	20 <sup>g</sup>	\$470	\$24,440	\$488,800	\$4,643,000 <sup>g</sup>
Hope Valley Industries	441310 <sup>g</sup>	Automotive Parts and Accessories Stores	1 <sup>g</sup>	\$509	\$26,468	\$26,468	\$3,813,000 <sup>g</sup>
Imperial Auto Solutions	811121 <sup>e</sup>	Automotive Body, Paint, and Interior Repair and Maintenance	NA	\$909	\$47,268	NA	NA
ISD Industrial (Industrial Sales and	011121	All Other Support			,,200		
Distribution)	561990	Services	1	\$917	\$47,684	\$47,684	\$28,000 <sup>h</sup>

On-Site Business	NAICS Codeª	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
		Computer and Computer					
Jordan, Apostal,		Peripheral Equipment					
Ritter Associates,		and Software Merchant					
Inc.	423430	Wholesalers	3	\$1,821	\$94,692	\$284,076	\$800,000
Kohl's Department		Discount Department					
Stores, Inc.	452112	Stores	123	\$379	\$19,708	\$2,424,084	\$13,666,667 <sup>i</sup>
LJM Packaging Co.,		Corrugated and Solid					
Inc.	322211	Fiber Box Manufacturing	55	\$1,024	\$53,248	\$2,928,640	\$16,000,000
M & D		Freight Transportation					
Transportation, Inc.	488510	Arrangement	7	\$1,328	\$69,056	\$483,392	\$1,900,000
Marriott							
International, Inc.							
(Towneplace Suites							
by Marriott North		Hotels (except Casino					
Kingstown)	721110	Hotels) and Motels	14	\$651	\$33,852	\$473 <i>,</i> 928	\$3,027,000 <sup>g</sup>
McKay's Furniture	442110 <sup>e</sup>	Furniture Stores	NA	\$808	\$42,016	NA	NA
Michaelson &							
Michaelson	541110	Offices of Lawyers	2	\$1,463	\$76,076	\$152,152	\$130,000 <sup>h</sup>
Mill Creek Marine,							
Inc.	441222	Boat Dealers	10	\$980	\$50,960	\$509,600	\$1,200,000
North Atlantic							
Distribution, Inc.		All Other Automotive					
(NORAD)	811198	Repair and Maintenance	NA	\$783	\$40,716	NA	NA
North Kingstown		Elementary and					
School Department	611110	Secondary Schools	4	\$1,146	\$59,592	\$238 <i>,</i> 368	NA
Ocean State Job Lot,		All Other General					
Inc.	452990	Merchandise Stores	500	\$498	\$25,896	\$12,948,000	\$110,000,000 <sup>i</sup>
Ocean State Marine		Navigational Services to					
Towing Inc.	488330	Shipping	3	\$1,026	\$53,352	\$160,056	\$92,000 <sup>h</sup>

On-Site Business	NAICS Codeª	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
		Petroleum and					
		Petroleum Products					
		Merchant Wholesalers					
		(except Bulk Stations and					
Ocean State Oil, Inc.	424720	Terminals)	42	\$1,272	\$66,144	\$2,778,048	\$13,000,000
Ocean State		Automotive Parts and					
Performance	441310	Accessories Stores	1	\$509	\$26,468	\$26,468	\$115,000
PetValu	453910 <sup>g</sup>	Pet & Pet Supplies Stores	1 <sup>g</sup>	\$476	\$24,752	\$24,752	\$452,000 <sup>g</sup>
		Plastics Materials and					
		<b>Basic Forms and Shapes</b>					
Polymershapes LLC	424610	Merchant Wholesalers	16	\$1,011	\$52,572	\$841,152	\$2,685,000 <sup>g</sup>
Proscape							
Landscaping							
Management, Corp.		Landscape Architectural					
(Terra Verde)	541320	Services	39	\$545	\$28,340	\$1,105,260	\$2,800,000
		All Other Amusement					
Quonset Davisville		and Recreation		4			
Navy Yacht Club	713990	Industries	11	\$489	\$25,428	\$279,708	\$377,000
		Lessors of					
Quonset Motor	5244209	Miniwarehouses & Self-	4 9	éroc	620 472	620 472	¢ c2, 000%
Sport	531130 <sup>g</sup>	Storage Units	1 <sup>g</sup>	\$586	\$30,472	\$30,472	\$63,000 <sup>g</sup>
		Printing Machinery and					
R & D Technologies, Inc.	333244	Equipment Manufacturing	18	\$1,111	\$57,772	\$1,039,896	\$3,900,000
	555244	Motorcycle, ATV, and All	10	\$1,111	357,772	\$1,039,690	\$3,900,000
Razee Motorcycle		Other Motor Vehicle					
Center Inc	441228 <sup>e</sup>	Dealers	NA	\$871	\$45,292	NA	NA
Rhode Island	441220	Dealers			773,232	INA.	
Computer Museum	712110 <sup>g</sup>	Museums	1 <sup>g</sup>	\$339	\$17,628	\$17,628	NA
		Ornamental and		, , , , , , , , , , , , , , , , , , ,	<i></i> ,	<i>\\\\\\\\\\\\\</i>	
		Architectural Metal					
Roberts Customs	332323 <sup>e</sup>	Work Manufacturing	2	\$1,074	\$55,848	\$111,696	\$34,000 <sup>h</sup>

On-Site Business	NAICS Codeª	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
		Plastics Materials and					
		Basic Forms and Shapes					
RPM Liquidation, Inc.	424610	Merchant Wholesalers	8	\$1,011	\$52,572	\$420,576	\$2,200,000
Rt Group, Inc.	541330	Engineering Services	5	\$1,500	\$78,000	\$390,000	\$636,000
		Cosmetics, Beauty					
Sally Beauty Supply		Supplies & Perfume					
LLC	446120	Stores	5	\$437	\$22,724	\$113,620	\$754,000 <sup>g</sup>
Sampson's		General Automotive					
Automotive	811111 <sup>g</sup>	Repair	2 <sup>g</sup>	\$791	\$41,132	\$82,264	\$285,000 <sup>g</sup>
		Recreational Vehicle					
Sberry RV & Boat	441210 <sup>g</sup>	Dealers	1 <sup>g</sup>	\$871	\$45,292	\$45,292	\$1,551,000 <sup>g</sup>
Seabee Museum and							
Memorial Park	712110	Museums	3	\$339	\$17,628	\$52,884	\$58,000
Seena Stone LLC		All Other Home					
(Nantucket Sinks)	442299	Furnishings Stores	10	\$470	\$24,440	\$244,400	\$1,400,000
		Other Commercial and					
		Service Industry					
		Machinery					
Serec Corporation	333318	Manufacturing	20	\$1,440	\$74,880	\$1,497,600	\$3,000,000
Specialty Diving		Other Heavy and Civil					
Services, Inc.	237990	Engineering Construction	15	\$1,171	\$60,892	\$913,380	\$448,000 <sup>h</sup>
		Limited-Service					
Subway	722513	Restaurants	9	\$298	\$15,496	\$139,464	\$222,000
Sunshine Early Child							
Care Center	624410	Child Day Care Services	34	\$413	\$21,476	\$730,184	\$1,600,000
Supercuts	812112 <sup>g</sup>	Beauty Salons	6 <sup>g</sup>	\$413	\$21,476	\$128,856	\$266,000 <sup>g</sup>
		Site preparation					
The Lightship Group	238910 <sup>g</sup>	contractors	1 <sup>g</sup>	\$929	\$48,308	\$48,308	\$868,000 <sup>g</sup>
Tradesmen		Employment placement					
International	561311 <sup>g</sup>	agencies	2 <sup>g</sup>	\$656	\$34,112	\$68,224	\$344,000 <sup>g</sup>

On-Site Business	NAICS Code <sup>a</sup>	NAICS Title	Number of Employees <sup>b</sup>	Average Weekly Wage (2017) <sup>c</sup>	Annual Wage (Mean Annual) per Employee	Total Annual Employee Income <sup>d</sup>	Annual Sales (2017) <sup>b</sup>
		Unlaminated Plastics					
		Film and Sheet (except					
Trico Specialty Films,		Packaging)					
LLC	326113	Manufacturing	15	\$1,216	\$63,232	\$948 <i>,</i> 480	\$3,500,000
		Specialized Freight					
Truckers America		(except Used Goods)					
Corp	484220	Trucking, Local	25	\$1,216	\$63,232	\$1,580,800	\$862,000 <sup>h</sup>
U.S. Naval Sea							
Cadets of Rhode							
Island	928110 <sup>e</sup>	National Security	2	\$1,481	\$77,012	\$154,024	\$42,000 <sup>h</sup>
		All other miscellaneous					
Ultra Scientific	339999 <sup>g</sup>	manufacturing	49 <sup>g</sup>	\$915	\$47,580	\$2,331,420	\$4,443,000 <sup>g</sup>
United States							
Department of the							
Army (Camp Fogarty							
- Rhode Island							
National Guard)	928110	National Security	45	\$1,267	\$65 <i>,</i> 884	\$2,964,780	NA
Walgreen Eastern							
Co., Inc. (Electric		Pharmacies and Drug					
Boat Pharmacy)	446110	Stores	29	\$628	\$32,656	\$947,024	\$3,504,000 <sup>g</sup>
West Davisville		Offices of Real Estate					
Realty Co., LLC	531210	Agents and Brokers	3	\$874	\$45,448	\$136,344	\$190,000
		Printing Machinery and					
		Equipment					
White Machine Inc	333244	Manufacturing	5	\$1,111	\$57,772	\$288 <i>,</i> 860	\$400,000
Wide World of		Fitness and Recreational					
Indoor Sports	713940 <sup>e</sup>	Sports Centers	21	\$255	\$13,260	\$278 <i>,</i> 460	\$2,000,000
Total			1,487			\$63,744,876	\$253,969,334

<sup>a</sup> NAICS code provided in the D&B database, unless otherwise noted.

<sup>b</sup> Data are from the D&B database.

<sup>c</sup> Average weekly wage per employee based on BLS 2017 Average Weekly Wage data.

<sup>d</sup> Total annual employee income figures derived by multiplying "Number of Employees" by "Annual Wage (Mean Annual) per Employee."

<sup>e</sup> NAICS code assumed, based on business type.

<sup>f</sup> Employee number obtained from business website: <u>http://antiquerestorationri.com</u>.

<sup>g</sup> Information obtained from the ReferenceUSA database.

<sup>h</sup> While sales values typically exceed estimated totals of annual employee income, annual reported sales can sometimes be lower than estimated annual income. This atypical condition of estimated income exceeding sales can be a result of business conditions, estimated business wages not accurately reflecting actual wages for the site-specific business, annual sales being under-reported, a business loss for the year or a combination of those factors. <sup>i</sup> Annual sales value calculated using the "Sales Per Employee" method. In cases where information sources do not provide annual sales data, an estimated annual sales value was calculated using the "Sales Per Employee Method". This method involves dividing the company-wide sales value by the number of employees that work at all branches of the business. That value equals an estimated business sales value per employee for the entire company. That value is then multiplied by the number of employees at the on-site business location to calculate an estimated annual sales value for the site-specific business location.

NA = Not available

# Property Values and Local Tax Revenue Generated from Property Taxes

EPA obtained data on the most recently assessed values for property parcels at the Davisville Naval Construction Battalion Center Superfund site in August 2018 through property records accessible through North Kingstown and East Greenwich online property appraisal databases.<sup>1</sup> EPA also obtained 2018 property tax information for the site parcels through tax records accessible through North Kingstown and East Greenwich online property tax databases.<sup>2</sup>

Parcel ID No.	Total Market Value of Land and Improvements (2018)	Total Property Tax (2018) <sup>a</sup>
017 018 095 0000	\$670,500.00	\$0.00
011 018 016 0000	\$4,528,000	\$0.00
017 018 063 0000	\$3,775,400	\$0.00
023 018 011 0000	\$21,611,500	\$0.00
11414	\$8,048,400	\$153,643.96
100898	\$7,392,200	\$0.00
184464	\$160,300	\$3,060.13
184458	\$160,300	\$3,060.13

# Table 2. Property Value and Tax Summary for Taxes Payable in 2018

<sup>&</sup>lt;sup>1</sup> North Kingstown online property appraisal database: <u>http://gis.vgsi.com/northkingstownri/Search.aspx.</u>

East Greenwich online property appraisal database: <u>http://www.nereval.com/Search.aspx?town=East+Greenwich.</u>

<sup>&</sup>lt;sup>2</sup> North Kingstown online property tax database: <u>https://northkingstown.munisselfservice.com/citizens/RealEstate/Default.aspx?mode=new.</u> Property tax searches can be performed by searching by parcel address, which can be obtained from the North Kingstown online property appraisal database.

East Greenwich online property tax database: https://www.eastgreenwichri.com/153/Tax-Assessor-Information.

Parcel ID No.	Total Market Value of Land and Improvements (2018)	Total Property Tax (2018) <sup>a</sup>
184457	\$160,300	\$3,060.13
184456	\$160,300	\$3,060.13
184455	\$160,300	\$3,060.13
184454	\$160,300	\$3,060.13
184453	\$160,300	\$3,060.13
184452	\$160,300	\$3,060.13
184451	\$160,300	\$3,060.13
184450	\$160,300	\$3,060.13
184465	\$160,300	\$3,060.13
184463	\$160,300	\$3,060.13
184462	\$160,300	\$3,060.13
184461	\$160,300	\$3,060.13
184460	\$160,300	\$3,060.13
184459	\$160,300	\$3,060.13
180-037	\$0.00	\$0.00
100873	\$615,100	\$0.00
100883	\$291,800	\$0.00
184930	\$18,067,600	\$0.00
11433	\$4,498,600	\$72,593.54
185168	\$199,800	\$0.00
185167	\$246,300	\$0.00
11434	\$168,600	\$0.00
101264	\$257,100	\$0.00
184976	\$570,400	\$0.00
184975	\$141,100	\$0.00
100822	\$1,216,500	\$23,222.99
184974	\$175,800	\$0.00
182-018	\$175,100	\$0.00

Parcel ID No.	Total Market Value of Land and Improvements (2018)	Total Property Tax (2018) <sup>a</sup>
182-019	\$180,300	\$0.00
185551	\$2,777,500	\$0.00
184973	\$282,600	\$0.00
184929	\$6,709,900	\$0.00
184981	\$7,205,900	\$113,745.86
184982	\$195,600	\$0.00
184980	\$291,600	\$0.00
100961	\$2,015,400	\$38,473.99
100950	\$339,600	\$0.00
185734	\$5,002,800	\$73,099.43
100949	\$1,478,300	\$28,220.75
100947	\$401,100	\$0.00
100945	\$1,466,100	\$27,987.85
100934	\$801,500	\$0.00
185124	\$315,600	\$0.00
100933	\$5,161,900	\$0.00
100964	\$249,600	\$0.00
100963	\$252,600	\$0.00
100972	\$228,600	\$0.00
100965	\$354,600	\$0.00
185733	\$260,300	\$4,969.13
100907	\$735,600	\$14,042.60
11438	\$401,700	\$7,668.45
11440	\$756,400	\$14,439.68
11455	\$322,200	\$6,150.80
11442	\$437,100	\$8,344.24
11454	\$484,300	\$9,245.29
11443	\$354,600	\$6,769.31

Parcel ID No.	Total Market Value of Land and Improvements (2018)	Total Property Tax (2018) <sup>a</sup>
11441	\$294,200	\$5,616.28
11444	\$1,711,200	\$32,666.81
100930	\$418,800	\$7,994.89
100920	\$216,600	\$0.00
11461	\$222,600	\$0.00
100929	\$535,400	\$10,220.79
183-044	\$0	\$0.00
185173	\$502,100	\$9,334.04
185176	\$447,000	\$8,533.23
185175	\$491,400	\$9,380.83
185174	\$440,500	\$8,409.15
100974	\$25,855,800	\$37,961.06
100966	\$1,141,200	\$0.00
184994	\$277,800	\$0.00
184993	\$249,300	\$0.00
184992	\$249,300	\$0.00
184991	\$249,300	\$0.00
184990	\$249,300	\$0.00
11525	\$1,037,100	\$0.00
184985	\$204,300	\$0.00
184986	\$198,300	\$0.00
184988	\$564,300	\$0.00
184983	\$256,200	\$0.00
185003	\$232,200	\$0.00
185002	\$213,600	\$0.00
101622	\$526,800	\$0.00
185001	\$2,805,000	\$0.00
184998	\$223,200	\$0.00

Parcel ID No.	Total Market Value of Land and Improvements (2018)	Total Property Tax (2018) <sup>a</sup>
185000	\$2,157,100	\$23,322.25
101686	\$1,897,400	\$17,912.15
184999	\$841,200	\$0.00
11534	\$6,308,000	\$0.00
11533	\$9,403,300	\$0.00
185578	\$21,000	\$0.00
185575	\$279,600	\$0.00
185577	\$21,000	\$0.00
185572	\$186,700	\$0.00
185579	\$1,463,400	\$0.00
11539	\$1,057,500	\$0.00
11545	\$382,200	\$0.00
11550	\$8,886,600	\$0.00
Totals	\$187,395,700	\$822,931.43

<sup>a</sup> Parcels without property tax values are exempt from property tax.