APPENDIX F

Historical Resources Evaluation



Sperry Flour Company Site Vallejo, California

HISTORIC RESOURCES EVALUATION REPORT

November 10, 2014

INTRODUCTION

Carey & Co.'s assistance has been requested in evaluating a project at the former Sperry Flour Company Site in Vallejo, California. An earlier Carey & Co. report, dating from 2008, identified a number of structures as individual potential historic resources eligible for the National Register of Historic Places and California Register of Historical Resources. For this current report, Carey & Co. reassessed the historic significance of the property and its structures, updating and modifying the evaluation findings. Additionally, Carey & Co. assessed the impacts of the proposed project on the historic resources and recommended mitigation measures, as required. Also discussed are Project Alternatives.

METHODOLOGY

Carey & Co. prepared this evaluation by first reviewing the "Sperry Flour Company Site, Vallejo, California, Historic Resources Evaluation Report" finalized by Carey & Co. in 2008. On November 3, 2014, a visit to the site was undertaken to verify the current condition of the structures and to assess their physical integrity. While on site, up-to-date photography was completed for the structures identified as potential historic resources. Carey & Co. prepared California Department of Parks and Recreation (DPR) 523 survey forms for the seven buildings/structures that appear eligible for listing on the California Register of Historical Resources as contributing structures to a potential historic district.

This report includes five appendices:

- A. Matrix of Buildings and Structures Surveyed
- B. Survey Map
- C. Photographs of Buildings and Structures Surveyed
- D. DPR 523 Survey Forms
- E. Sanborn Fire Insurance Maps

SUMMARY OF FINDINGS

Carey & Co. has determined the former Sperry Flour Company Site potentially eligible for the California Register of Historical Resources (CRHR) as a historic district. The potential Sperry Flour Mill Historic District is comprised of seven structures – the flour mill, grain silos, administration building, garage, manager's house, barn and dock. Five of the buildings have distinct architectural styles: the manager's house is a good example of the Bay Area Tradition, while the flour mill, grain silos, administration building, and garage represent early examples of efforts in industrial architecture to meld function and beauty with reinforced concrete construction materials. More importantly, these buildings are associated with significant historical patterns, as all are intimately linked to World War I. As the war progressed, European allies increasingly came to rely upon the U.S. for flour supplies, increasing the demand for flour production in the States and prompting widespread construction, expansion, and modernization of American flour mills. Once the United States entered the war in 1917, the federal government sharply curtailed construction of buildings that did not contribute to the war effort. The oldest mill-related buildings on the project site, which were constructed between 1917 and 1920, are therefore intimately related to the increased demand for domestically-produced flour in the wake of WWI. While the Sperry Company had acquired the Vallejo site several years earlier, the plant's relationship to the war effort, its modern facilities, and production capacity made it the most important plant – of the most important milling company – on the Pacific Coast. A portion of the piles in the Mare Island Strait also date to this period of significance, with the remainder dating from at least the 1880s and possibly as early as 1869. Starr Mills occupied the site in the nineteenth century and was then the most important flour milling company in California.

Three other structures – the manager's garage, warehouse, and old bulkhouse – meet the fifty-year threshold for consideration on the CRHR, but fall outside the period of significance or do not retain the necessary integrity, rendering them ineligible for listing as contributing structures to the potential historic district. Six other structures on site do not meet the fifty-year threshold for the CRHR and do not exhibit any exceptional characteristics that would warrant their consideration for listing on the CRHR.

SITE DESCRIPTION

In 1869, Abraham Dubois Starr convinced the Southern Pacific Railroad to extend tracks to the current project area in Vallejo, on which Starr subsequently constructed a flour mill, dock, and warehouse. Starr deemed the site ideal for a flour mill because of its proximity to Mare Island and Mare Island Strait, which created easy access to both the San Francisco Bay and, hence, the Pacific Ocean, as well as to the San Joaquin Delta, which provided water access to inland California. The railroad extension connected the site to the newly completed transcontinental railroad, which, in turn, connected the mill to all points along that route, from the Pacific to the Atlantic. Only portions of the dock remain of the Starr Mill, but the site served continuously from 1869 to 2004 as one of the most important flour mills in California. Port Costa Flour Company bought the property in 1895, followed by Sperry Flour Company in 1910. At the time. Sperry Flour Company was the largest grain products and flour milling corporation on the Pacific Coast, and eventually the third largest flour company in the nation. Four of the historically significant buildings at the site - the mill, silos, administration building, and garage - were built during World War I in response to the Allies' significantly increased demand for American-made flour. Because it had the most modern facilities and participated in the wartime effort to supply flour to soldiers and civilians in the United States and abroad, the Vallejo plant was the most significant in the Sperry empire. The manager's house, a model of the First Bay Area Tradition, predated these buildings, but achieved its current form during this same period of wartime expansion. General Mills Corporation acquired Sperry Company and the Vallejo site in 1929 and made relatively minor changes to it. Apart from a few very brief stoppages, mills at the site continuously produced flour and feed for 135 years.

The project area includes sixteen structures, each of which is described below. A map of the site is included in Appendix B, while Appendix C includes photos of each structure. Current photographs are included of the structures determined to be contributing structures to the potential historic district. The residential complex, consisting of the manager's house, a garage, a barn, and a chicken coop, are located on the tree-lined hillside behind the plant's garage. The plant buildings, however, are all located on flat ground and solid bedrock next to Mare Island Strait to the west and at the base of the hills to the east. A large, single-story, fan-shaped warehouse and its adjacent bulkhouse stand at the northwest end of the site, nearest the entrance gate. Abutting the hills to the east of the warehouse are the single-story brick garage and two-story administration building. A cluster of seven buildings that range in height, materials, and function, occupy the southern portion of the site. They include the eight-story flour mill, with the eighty-foot tall grain silos and elevator to the east and metal bulkhouses to the west. Behind the mill and warehouse, to the south, stand the cylindrical silos of the mill run canopy and the three sheds that house

the forklift repair, welding shop, and pipe storage. At this end of the lot where the original Starr Mill stood, are the remnants – mostly pilings – of a dock.

Descriptions of each of the structures on site are included below, in order of (sometimes estimated) date of construction.

Wood Dock and Wood Pilings – c. 1869-1919

Pilings associated with the dock upon which the original Starr Mill warehouse stood run along the central western portion of the site. Horizontal planks cover the pilings at the most southwesterly corner and feature markings where railroad tracks once ended.

Manager's House – c. 1901, altered c. 1917 and after 1919

This two-story residential structure features multiple gables, a wide eave overhang, and a complex plan. Wood shingles clad the exterior, and scalloped asphalt shingles clad the roof. The northwest façade features a single-story, hipped entry porch with a small brick stoop, and the first story projects slightly from the main building at the northeast elevation. At the rear of the building, on the southeast elevation, is a second-story balcony with a high balustrade. Each elevation features wood-sash windows of various sizes. All of the windows have been removed from the first story, but the second story retains a few of its windows, which are primarily wood-sash, two-over-one, double-hung with vertical muntins in the upper sash and lamb's tongues detailing. Much of the window glazing is missing in the few remaining window sashes. The northeast elevation also features an exterior brick chimney covered in vines.

The driveway leading up to the manager's residential complex is lined with a rock wall on the north side. Rock walls flank both sides of the driveway entrance. It is unclear when the rock wall was constructed.

Manager's Garage – c. 1950s

The single-story garage is a wood-frame, rectangular-in-plan structure with a flat roof. Wood shingles clad the façade and side elevations, while vertical wood boards clad the rear elevation. A wood post divides the façade into two bays, and the southwestern elevation features two awning windows.

Barn – c. 1901-1919

The wood-frame barn is rectangular in plan and two stories in height (though it does not have two floors). The building has a gable roof clad in corrugated metal and a one-story extension on the eastern elevation with a shed roof clad in wood boards. The barn also features a wide eave overhang, exposed rafter tails, and corrugated metal cladding. The north elevation has five window openings, including one in the gable. Three openings retain their wood-sash, multi-lite windows, and one opening has been boarded over. This elevation also includes an entrance at its eastern edge. The eastern elevation features one window covered with a metal mesh screen and a hinged door constructed with horizontal wood boards. Two wood doors – one with inset panels and one with a boarded-over window – and two wood-sash, multi-lite fixed windows adorn the southern elevation. Four wood-frame window openings, including one that still retains its wood-sash multi-lite window, pierce the western elevation.

Grain Silos and Elevator – 1917

Construction on the grain silos and elevator began in 1917 and was completed the following year. This building is a reinforced concrete structure that consists of a head building measuring 48 feet by 51 feet and 124 feet, 6 inches high, behind which extends a 300-foot long section that once contained storage bins measuring fifteen feet in diameter and eighty feet in height. The approximately 10-story tall head building rises one story higher than the rest of the structure and has metal-sash, multi-lite industrial windows at the two top stories. The central lites originally formed an awning or pivot window and have been replaced with a slider window. The silos' concrete walls have been molded to follow the contours of the bins that were housed inside. One story, narrower than the width of the bins, tops the silo and runs the

entire length of the building. Like the head building, this story features metal-sash, multi-lite industrial windows. A window is centered directly above each rounded section of the silo, and the central, upper four lites form a slider or awning window. Guard rails line all of the rooftops, which also feature some enclosed mechanical units.

Administrative Building – 1917

This two-story building is a reinforced concrete structure with brick veneer cladding. The rectangular-inplan building has a concrete block projecting from the rear elevation. The flat roof has a stepped parapet with coping and a medallion with the company logo adorning the parapet's center. An embellished, projecting cornice with dentils below wraps around the building, and a decorative water table constructed of scored concrete wraps around the building's base. The façade features concrete, rectangular, flat arches that form five bays. Each bay contains two sets of metal windows, one set each at the first floor and second floor. A classical entryway located in the central bay and comprised of a pediment, projecting cornice, and pilasters completes the façade's decorative features. Originally, a series of ten wood-sash casement windows running along the façade and rear elevation, as well as a series of six similar windows on the side elevations provided natural light and ventilation. All of the wood-sash casement windows have been either bricked in or replaced with metal-sash sliding windows. The entrance door has also been replaced, and metal awnings are non-original.

Flour Mill – 1917

This reinforced concrete building is rectangular in plan with a flat roof and is oriented northwest to southeast. It has an 8-story, 54-foot wide by 150-foot long tower at the northwest end, with a two-story warehouse extending to the southeast. The warehouse stands two stories high, 100 feet wide at its widest point, and nearly 350 feet at its longest point. Evenly spaced concrete structural columns divide the elevations into bays consisting of brick veneer panels and windows. The windows have undergone significant alterations. Originally they were predominantly fixed, metal-sash, multi-lite units that filled the entire space between structural columns and featured a multi-lite awning window in the center. Some of these windows have been filled in entirely with bricks, while others have been partially filled in with brick, and partially filled with fixed metal-frame, glass block windows. Decorative features include a concrete stepped parapet and a slightly projecting cornice. Large mechanical units have been added to the rooftops, and flat metal awnings have been added to windows of the two-story section of the building.

Garage – 1918

Built in 1918, this garage is a reinforced concrete structure with brick veneer on the façade and a rectangular plan. The flat roof features a parapet with coping and two simply shaped sections at the northern and southern ends of the façade. The entablature includes a slightly projecting cornice, a frieze, and an architrave. Four metal roll-up doors dominate the façade, and a fifth bay has been bricked in entirely. A standard hinge door at the northern end and a metal-sash, multi-lite fixed window at the southern end complete this façade. The southern elevation also features an entrance.

Warehouse - 1947

This warehouse is a single-story, 42,500-square-foot, reinforced concrete, fan-shaped building with a flat roof and continuous fixed, corrugated fiberglass windows forming a clerestory. The building's three sides each have specific characteristics: the eastern elevation curves, while the western elevation is completely flat. The north elevation provides eleven access points to the interior of the building, including ten bays with roll-up metal doors and a ramp leading to a standard hinge door. An overhang supported by four metal posts and featuring an open-web truss and a corrugated metal frieze shelters this area. A covered conveyor belt connects the structure to the main mill and warehouse, and a mechanical unit is housed in a metal structure on top of the roof. These last two elements comprise the only alterations to this building since its construction in 1947.

Old Bulkhouse – c. 1957

A slightly-pitched gable roof covers this approximately sixty-foot tall building. A second, narrow gable projects slightly from the main part of the building and runs the entire height of the structure; its roof is flush with that of the main building. Shed roofs also cover single-story projections at the base of the building. A shed roof supported by metal posts creates a wide eave over the door to the bulkhouse. Corrugated asbestos cladding encases the steel-frame structure.

New Bulkhouse – c. 1965

Located directly behind the old bulkhouse, this reinforced concrete structure is rectangular in plan and rises to about eighty feet. It has a flat roof and a slightly slanted shed roof that covers a single-story projection at the back. The northeastern elevation features a ladder that climbs to the roof, which has a safety guard rail on all sides and a mechanical unit. A corrugated metal-clad conveyor shed connects the new bulkhouse to the mill and warehouse, and a smaller one connects it to the old bulkhouse.

Forklift Repair – c. 1985

This forklift repair is a small, gabled, one-story building clad entirely in corrugated metal and is square in plan. It has vinyl-sash slider windows on each side.

Welding Shop – c. 1985

This shed is a single-story windowless structure constructed of corrugated metal and situated on a concrete slab foundation. It is square in plan and has a gable roof.

Pipe Storage – c. 1985

This concrete block structure is square in plan and features a flat roof constructed of wood with metal coping. The roof extends beyond the building to create a slight overhang. Metal mesh covers a gap between the roof and structure, while plywood sheets hide the bay that a roll-up metal door once occupied.

Mill Run Canopy – 1986

Three cylindrical silos top this rectangular in-plan, reinforced concrete and corrugated metal structure. The central part of the building has a flat roof and metal coping, while the front and rear feature slightlypitched gables. A roll-up metal door also adorns the front gable, and a lattice beam structure connects the mill run canopy to the main warehouse. A single-story gabled shed with metal slider windows stands adjacent to the mill run canopy.

Bakery Bulkhouse – 1992

Adjacent to the southwest corner of the bakery warehouse stands the bakery bulkhouse, an approximately eighty-foot tall, reinforced concrete structure. It lacks decorative details, but features two balconies and three hinge doors on the southwestern elevation, which one reaches via a series of ladders. Guard rails surround the balconies, platforms outside the doors, and the roof. A single-story unit with a roll-up metal door projects southwest from the main building, and an identical unit extends from the main building to the northwest. The northwest elevation also has a single-story concrete block addition that has a metal shed roof and a single hinge door. This addition attaches the bulkhouse to the bakery warehouse, as does a single-story, flat-roofed concrete block addition along the southeastern side of the bulkhouse.

SITE HISTORY

The Sperry Flour mill at Vallejo has a storied past. While traveling through Vallejo in 1880, writer and poet Robert Lewis Stevenson commented on the mills in the distance. At the time, they were Starr Mills, and they were already notable landmarks. California's most famous woman architect, Julia Morgan, has connections to the site as well: She designed homes for Walter A. Starr, Starr Mills founder and Abraham

Dubois Starr's nephew; the George W. McNear family, who owned Port Costa Flour Company and became the second owners of the site in 1895; and Dunning Rideout, who was one of the vice presidents of Sperry Company when the main buildings were constructed at Vallejo in 1917. The site can even claim a Hollywood connection: Boris Karloff, most famous for portraying Frankenstein and other monsters in early horror films, once worked at the Vallejo mill.¹ None of these associations, however, alone imbue the Sperry Flour Company site with particular historic significance. Instead, the site's architecture, along with its nearly 150-year associations with flour milling for the most powerful flour companies in California and the nation and its intimate associations with World War I render the Sperry Flour Company a valuable historic resource.

California Agriculture

Early American settlers of California waxed poetic about the potential for the state to yield a republican society of independent farmers who, because of their self-sustaining fields on privately-owned land, would never succumb to the corrupting influences of politics, political parties, or big business. This agrarian ideal never materialized. Instead, commercial agriculture dominated the state's economy from the 1850s onward. Though California eventually became the nation's leading producer of fruits, fresh vegetables, and nuts, wheat and its milled offspring, flour, created the state's first agricultural bonanza.

Flour milling was one of the first large-scale manufacturing industries to succeed in California, and it brought the state into the world of international trade. During the 1840s, California had but a few small flour mills. The most famous of these was John Sutter's mill on the American River, not far from present-day Sacramento. Sutter never completed this mill, however, and never produced much flour. In January 1848, one of Sutter's employees, a man by the name of John Marshall, discovered gold. News of Marshall's discovery spread like wildfire and soon, as the saying goes, the world rushed in. In the following year, half of the people who populated California in 1848 descended upon the foothills of the Sierra, and they were soon joined by tens of thousands of people from the East Coast and around the globe. This rapid influx of people quickly strained California's agricultural production and exposed its inability to provide enough food – particularly breadstuffs – to the miners and other settlers. Despite the potential of California's rich soil to feed the masses, the territory and young state depended heavily on imports. It received most of its flour from Chile.²

These circumstances rendered flour a valued commodity and led to high rates of inflation. In San Francisco, the price per barrel of flour in 1850 was \$15. Two years later that number rose to \$42 per barrel. Settlers in more remote locations suffered under much higher prices. In Columbia, a mining town in the Sierra foothills, for example, a barrel of flour cost as much as \$80. Tensions flared under these circumstances and caused miners and other residents of Mariposa to organize a meeting in 1852 to protest against the foreign-controlled flour monopoly.³

Ever opportunistic settlers sought to remedy California's dependence on imported flour. A number of small mills cropped up throughout northern California during the early 1850s; however, San Francisco, by virtue of its proximity to the largest market and easy access to arable land across the bay in Alameda County, established its position as the leader in flour production and retained this position for decades. The Sacramento Valley proved a decent competitor to San Francisco from the outset, but production in

¹ Sarah Boutelle, Julia Morgan, Architect rev. ed. (New York: Abbeville Press,

^{1995);} Anne Roller Issler, *Stevenson and Silverado: The Life and Writing of Robert Louis Stevenson in the Napa Valley, California, 1880* (Fairfield, Calif., 1996), 5; "Scrapbook of the Sperry Century," Sperry Flour Company, Vallejo Maritime and History Museum.

² Paul N. Woolf, "A Historical Appraisal of the Flour Milling Industry in California," (Ph.D. diss., University of California, Berkeley, 1939), chapter 1, pp. 1-4.

³ Ibid., 4-5.

other regions remained relatively small until the 1880s. More important to Californians than which region produced the most flour was the fact that by 1853 the state had relinquished its dependence on imported flour. Prices fell accordingly.⁴

Two key factors during the 1870s led to the robust development of California's flour industry: improved transportation routes and increased demand by foreign countries. Specifically, the 1860s saw the construction and completion of the transcontinental railroad, followed by several smaller routes within the state during the 1870s. Better transportation routes both diminished the importance of a flour milling company's proximity to wheat fields and increased the geographical scope of a company's market. California's foreign export trade peaked during the 1880s when it included Europe, Asia, Mexico, Central America, and the Pacific Islands.⁵

During the 1880s, Abraham Dubois Starr established himself as the most powerful man in California's flour milling industry. Born in Ohio in 1830, Starr journeyed to California in 1849 and tried his luck with gold mining along the Feather River. By 1868 he had become a director of the California Pacific Railroad. That year, he arranged with the railroad to acquire land in Vallejo, a town thirty miles northeast of San Francisco, where he intended to build a flour mill on the isthmus directly across from Mare Island, home to the United States Navy. The Navy yard prompted the creation of a shipbuilding industry in Vallejo, and the prospect of a railroad attracted breweries and lumber mills to the city during the 1860s. These factors established Vallejo's status as an industrial center by 1870, and, combined with Vallejo's deep water channels and proximity to the San Francisco Bay and the San Joaquin Delta, which provided a continuous water route from the Pacific Ocean to Stockton, made the city an ideal site for a flour mill. The mill opened in 1869 with a production capacity of 200 barrels per day. Starr and his brother, who joined the business in 1870, acquired a second mill in Marysville, north of Sacramento, during the 1870s. By the mid-1880s their mills were producing over two thousand barrels of flour per day and the Starr Corporation had become the largest commercial milling establishment on the Pacific Coast.⁶



Meyer Straus, "Starr Flouring Mills," Vallejo, c. 1878. Courtesy of the David Rumsey Map Collection.⁷

⁴ Ibid., 7-12, chapter 2, p. 11.

⁵ Ibid., chapter 8, p. 13.

⁶ Ibid., chapter 3, p. 10; Walter A. Starr, "Abraham DuBois Starr: Pioneer California Miller and Wheat Exporter," *California Historical Society Quarterly*, 27 (September 1948), 193-197.

⁷ Meyer Straus, "Starr Flouring Mills," in Thompson & West, *Historical atlas map of Solano County, California* (San Francisco: Thompson & West, 1878), 21; David Rumsey Map Collection, www.davidrumsey.com, accessed July 18, 2007.

Starr embarked upon an ambitious scheme to expand his empire in 1884 by building a "very large" mill in Crockett, a town located six miles to the south of Vallejo. Wheatport, as the mill in Crockett was known, included wharves that allowed for the unloading of six to eight ships at once, a storage capacity of 125,000 tons of grain, and a production capacity of 6,000 barrels per day. According to Abraham Starr's nephew, Walter A. Starr, the foundations for the mill – concrete arches set in bedrock – marked "the first time a concrete foundation was significantly placed under water construction." Wheatport was, by far, the largest flour mill on the Pacific Coast, but it proved to be Starr's folly. Milling did not begin until 1891, and then only at a rate of 700 barrels per day. A financial panic then swept the country in 1893 and hit Starr's empire particularly hard. In 1893 Wheatport shut down and Starr declared bankruptcy. He died in 1894. The Starr Corporation owned the Vallejo mills until 1895, however, and continued to produce more than two thousand barrels of flour a day at those facilities.⁸

By the time Starr's empire fell in 1893, California's entire wheat and flour industry had begun to decline more generally. Ironically, the two factors that led to the expansion of California's flour industry – foreign trade and railroad expansion – also led to its demise. California producers flooded the foreign market with flour, which led to price deflation. Just as the transcontinental railroad opened California's opportunity to trade in American markets beyond the Sierra, so too could other states introduce their products to the California market. Midwestern and Plains states took advantage of this opportunity, especially Minnesota and Kansas. In addition, overproduction of the wheat fields in California depleted the soil and rendered the crops both harder to grow and lesser in quality. As a result, California agriculture came to focus on more diversified crops that required less overhead capital and yielded higher profits. Fruit and nut orchards came to dominate California's agricultural landscape, but other specialized crops like asparagus and barley, which was popular among European beer producers, replaced wheat fields as well.⁹

George Washington McNear took advantage of the depressed market to expand his family's business. To date, McNear devoted his business to shipping grain from the Port Costa warehouse, one of the many grain warehouses located along the Carquinez Strait. He appropriated as much surplus grain as possible to save his business in 1893. With so much surplus grain at hand and two vacated mills nearby, McNear entered the milling industry and in 1895 purchased both Wheatport and the Starr Mills in South Vallejo. McNear's son, Seward, a recent Harvard graduate, soon took over management and implemented important changes. He introduced a chemist to develop a method to reduce emissions from the milling process. This led to the establishment of a chemical laboratory, the main function of which was to determine which blend of grains produced the most highly desired flour.¹⁰

Sperry Flour Company

The Sperry Flour company stands out as one of the largest and most enduring flour milling companies in the state of California. Founded as a small barley producing mill in Stockton in 1852 by Austin Sperry, the Sperry Four Company grew to become the state's most important flour milling and feed producer by 1894. The company acquired the Vallejo site in 1910 and, apart from one fourteen-month period between 1924 and 1925, the Vallejo mill never shut down. It stood as a tribute to a company that consistently defied larger trends in the overall decline of the California flour industry during the twentieth century.

⁸ Woolf, "Flour Milling Industry," chapter 2, p. 11, 22; chapter 3, p. 10; Walter A. Starr, "Abraham Dubois Starr: Pioneer California Miller and Wheat Exporter," *California Historical Society Quarterly*, 27 (September 1948), 197.

⁹ Woolf, "Flour Milling Industry," chapter 8; Marguerite Hunt and Harry Lawrence Gunn, *History of Solano County* and Napa County: From their Earliest Settlement to the Present Time (Chicago, 1926), 101-106.

¹⁰ In 1897 McNear sold Wheatport to what became C. & H. Sugar. The site has functioned as a sugar refinery ever since then. Starr, "Abraham Dubois Starr," 200; James Gray, *Business without Boundary: The Story of General Mills* (Minneapolis, 1954), 111-112; Bert d. Ingels, "The Functions of the Sperry Lab," *Sperry Family*, 1 (Jan. 1917), 12-13.

Austin Sperry was born in Cabot, Vermont, in 1819. He boarded the *Pharsalia* in 1849 and set sail for California where he opened a general store in Stockton. After the store burned down in 1851, Sperry decided to try his luck at milling. In 1852 he opened a small barley mill that was housed in a frame building and which used cordwood to fire a steam engine. The mill provided ground and supplied feed for horses and mules that carried commodities to miners. A year later, Sperry turned to flour milling instead. Sperry initially engaged in custom milling, turning wheat that farmers brought to him into flour. As a rule, farmers received six barrels of flour and 600 pounds of grain for every ton of wheat that they presented to Sperry for milling. When Sperry switched to commercial production, he could sell a sack of flour for forty dollars, a price he labeled as "XXXX" below the name on every bag.¹¹

The Sperry Flouring Company quickly grew. Franklin Mills had also opened in 1853 and, combined, the two mills soon produced enough flour to meet the demands of the mining settlements. They began to export their product to San Francisco. In 1856 Sperry purchased Franklin's equipment, increased production, and effectively monopolized flour production in Stockton. Austin Sperry died in 1881, but his brother, Samuel, assumed leadership of the company and incorporated it under California state law in 1884. George Sperry, Samuel's son, served as the corporation's first president. For reasons mentioned earlier, the next decade saw a precipitous decline in California's wheat and flour industry, which forced mills to either consolidate or close. Mills in San Jose, Santa Clara, Los Gatos, Hollister, Salinas, and Paso Robles consolidated in the late 1880s to form the Central Milling Company. Sperry then combined forces with another milling giant, Horace Davis's Golden Gate mill in San Francisco, and absorbed the Central Milling Company in 1892. The resulting flour combine incorporated as the Sperry Flour Company and "embrace[d] practically all the flour milling interests of California." Crown Mills in Stockton and the Starr Mills in Vallejo remained Sperry's only significant competitors. When financial panic hit in 1893, Davis ruthlessly closed down what he deemed superfluous mills, including his own and all but three of the thirteen in the combine, which allowed the company to weather the storm and emerge as the nearly uncontested leader in California's flour industry when the Starr Corporation collapsed in 1894. Indeed, Sperry Company claimed domain over "a territory larger than two states."¹²

Sperry's competitive practices carried into the twentieth century. The Pacific Northwest posed the first threat to the California giant when mills in Oregon and Washington began to garner significant export business to Asia. In response, Horace Davis began to invest in warehouse and milling facilities in Tacoma, Washington. By 1906, Sperry Company bought the Tacoma facilities outright, a merger that warranted national headlines. Davis also saw potential in Los Angeles, where the population was beginning to grow rapidly. Sperry Company built a mill in that region in 1904.¹³ Vallejo came next.

Sperry Family, Vallejo

The second decade of the twentieth century marked Sperry Company's greatest period of expansion and dominance on the West Coast. Vallejo is central to that story. In 1910, Sperry Company acquired Port Costa Milling Company including the former Starr Mills facility in South Vallejo. Seward McNear, who had been managing the mill since his father acquired it in 1895, had made few improvements to the

¹¹ Woolf, "Flour Milling Industry," chapter 4, pp. 1-6; "Norman F. d'Evelyn, "Sperry Put the 'ton' in Stockton," *Sperry Family*, vol. 1 (Jan. 1917), 16-17; Gray, *Business without Boundaries*, 107.

¹² Woolf, "Flour Milling Industry;" "A Territory Larger than Two States," *Sperry Family*, 2 (Nov. 1918), 1-2; Gray, *Business without Boundaries*, 108-109; "A Flour Combine," *Los Angeles Times*, august 9, 1892, p. 1; "Closed Down," *ibid.*, February 22, 1895, p. 2.

¹³ Gray, *Business without Boundaries*, 110-111; "Flour Mill Consolidation," *New York Times*, March 5, 1902, p. 2; "Branch Mills for Sperry," *Los Angeles Times*, January 29, 1903, p. 20.

facilities, save the construction of a small a manager's house around 1901 and a building in 1908 to house a chemical laboratory.¹⁴



Sperry Flour Company, Vallejo facility, sometime between 1910 and 1916. Original Starr Mill and warehouse at left, new bulk house, which burned down in 1934, at right. A water tower stands atop the hill overlooking the site, a grain warehouse stands at the base of the hill, and just to the left of the old mill is the manager's house. Courtesy Floyd Miller and the Quarter-Century Club, General Mills.

Sperry Company soon embarked upon modernizing the facilities. The mammoth 500-foot long and 200foot wide storage warehouse, which dated at least to the 1880s, reflected California millers' reluctance to adopt the grain elevator system widely used in the midwestern and eastern parts of the country. Whereas a warehouse stored individual sacks of grain, an elevator system stored masses of grain that arrived in bulk via box cars or barges until the plant was ready to mill it. Farmers loathed the elevator system for a variety of reasons, but eastern capitalists found it to be more efficient and profit yielding. Charles Wheeler, an eastern capitalist, tried to introduce the newer system to Vallejo in 1869 when he constructed an elevator that towered above the city. Local grain growers did not take kindly to the eastern system, however, so Wheeler used the elevator as a traditional warehouse until it came crashing down into the Carquinez Straits in 1872. Vallejo did not see another grain elevator until Sperry Flour introduced one between 1910 and 1916. At that point, the company constructed a four-story, 83-foot by 173-foot structure (see above photo) on an asphalt-covered timber deck, just to the south of the old mill. The building held heavily timbered bins, was clad in galvanized iron sheeting, and was topped by a fifty-foot tower. Thus the Vallejo mill entered modern milling in a monumental way.¹⁵

The morning of August 29, 1916, changed the landscape of the Sperry Company's Vallejo site in dramatic fashion. That day, defective wiring in the mammoth grain warehouse ignited the "worst conflagration in the history of Vallejo." Before fire boats from Mare Island could douse the flames, 125,000 sacks of flour, thirteen Southern Pacific Railroad box cars, five automobiles, and the warehouse were completely destroyed. Initially, spokesmen for the mill stated that a replacement structure would

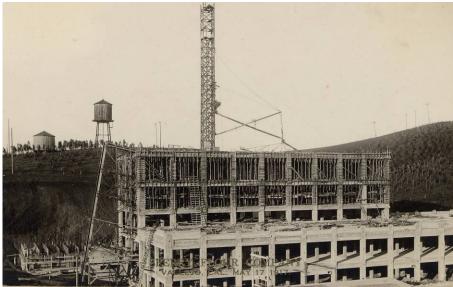
¹⁴ "Vallejo Sperry Family News," *Sperry Family*, 1 (Dec. 1917), 20; Sanborn Fire Insurance Co., Vallejo (1889), map no. 25; (1901), map no. 34; (1919), map no. 40.

¹⁵ For more on grain elevators, grain futures, and the opposing viewpoints of capitalists and farmers, see William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1992), 97-147; Jim Ritch, "Sperry Fire Loss Set at \$300,000," *Vallejo Times-Herald*, August 31, 1934, p. 1, 2; "\$500,000 Fire at Sperry Flour Mills," *Vallejo Evening Chronicle*, August 29, 1916, pp. 1, 8; Marguerite Hunt and Harry Lawrence Gunn, *History of Solano County and Napa County: From their Earliest Settlement to the Present Time*, Vol. 1 (Chicago, 1926), 105.

take several weeks to build, but Sperry's modernization impulse combined with world events to result in an entirely new plant that would take years to complete.¹⁶

World War I placed new demands on American flour producers, including Sperry Company. While China – and more accurately, Hong Kong – accounted for one third of the company's export business before the war broke out in 1914, European allies increasingly depended on imported flour. France and England, in particular, lowered their import rates to encourage foreign trade. The United States government also increasingly restricted the geographic scope of exports, eventually forcing U.S. companies to trade almost exclusively with allied nations. Sperry's trade with Asia steadily decreased, then came to a halt with America's entry into the war in 1918, at which point the federal government commandeered trade ships to transport men and supplies to Europe. These restrictions did not reduce Sperry's productivity; on the contrary, demand for flour increased significantly during wartime and California produced ten percent of the flour exported from the United States in 1918. Sperry Company exported its "American Indian" brand to Europe. As a token of appreciation, empty sacks embroidered by Belgian women came back to Sperry Company.¹⁷ At least in the public literature, Sperry Company took great pride in its patriotic duties.

Two other events directly impacted the growth and importance of Sperry Company at this time. A worldwide crop failure in 1917 created a flour shortage and prompted volunteer rationing, at least in the United States. Australia stored surpluses of grain, but had inadequate facilities to process it; thus, California received the foreign crop, processed it, and distributed it. According to Walter A. Starr, "Sperry Vallejo contributed greatly" to this effort and helped save a potentially disastrous situation.¹⁸ Road improvements further added to Sperry's expansion in 1917. That year, the Great Delta Highway opened. It essentially followed today's Highway 4, connecting Contra Costa County in the west to San Joaquin County in the east, and facilitated the metropolitan growth of the region. Similarly, with a larger population to serve and no longer bound by the rigid route of the railroad or hampered by rough roads connecting the two counties, demand for and the geographical distribution of Sperry Company's products could grow too. Vallejo, again, would play a prominent role.¹⁹



New silo (foundation completed at left), mill and warehouse under construction, May 17, 1917.

¹⁶ "\$500,000 Fire."

¹⁷ Woolf, "Flour Milling Industry," chapter 8, p. 4; E. A. Parker, "Foreign Trade," *Sperry Family*, 1 (December 1917), 4; Gray, *Business without Boundary*, 112-113; Starr, "Abraham Dubois Starr," 200-201.

¹⁸ Starr, "Abraham Dubois Starr," 201.

¹⁹ Sperry Family, 1 (January 1917), 18.

Courtesy of Floyd Miller and the Quarter-Century Club, General Mills.

More importantly, increased demands for flour products required larger production facilities. Beginning in 1917, Sperry Company expanded its Vallejo facilities. As the federal government sharply curtailed any construction that did not contribute to the war effort, these buildings could only be constructed because of their importance to America's involvement in World War I. Sperry hired civil engineer Maurice C. Couchot (1871-1933) to design the new plant facilities. Couchot emigrated from France as a teenager in 1888 and came to some local prominence as a civil engineer in the San Francisco Bay Area following the earthquake and fires of 1906. Some of his more notable projects include a public swimming and recreation complex in Alameda (1915), Broadway Spring Street Mercantile Arcade in Los Angeles (1923), the Southern Pacific Railroad Depot in Glendale (1925), and the Bishop Theater in Oakland, which was designed in 1914 by Edward T. Foulkes, cost an estimated \$100,000, and was touted as "one of the most modern and elaborate in Oakland... a class A structure."²⁰ At Vallejo, Couchot oversaw the construction of an eight-story flour mill and warehouse, a monumental grain elevator and storage bins, a two-story administration building, and a multi-use garage, each of which remains on the site today.



Completed mill, warehouse, and storage bins, ca. 1920. Courtesy Floyd Miller and the Quarter Century Club, General Mills.

Couchot applied to these buildings the most modern design and construction methods available. Ernest Ransome had built the first concrete warehouse in California in the 1880s for borax mining magnate, Francis Marion Smith. It was located in city of Alameda. Only after Ransome patented a new construction method in 1902, however, did reinforced concrete become more widely used. Still, as preeminent industrial architect Albert Kahn noted in 1918, architects and engineers rarely saw beyond the functional possibilities of concrete and rarely saw its aesthetic possibilities. Couchot's design for the mill and associated buildings marked an early effort to fuse the functional and aesthetic potential of the most modern reinforced concrete construction methods available. He created a reinforced concrete skeletal form, which allowed him to maximize the amount of natural light that penetrated the building by installing large, multi-lite windows between the structural columns. The windows also created aesthetic

²⁰ "Natatorium to be City Project," *Oakland Tribune*, April 18, 1914, p. 9; "Plans for New Bishop Theater are Filed," *ibid.*, August 22, 1915, p. 22; M. C. Couchot, "A Pictorial Record of the Results of Earthquake and Fire in San Francisco," *Engineering Record*, 53 (May 5), 577–578; ArchitectDB,

https://digital.lib.washington.edu/php/architect/, accessed August 9, 2007; United States Census, 1920; California Death Index, 1930-1939, vitalsearch.com, accessed August 9, 2007.

interest, as did the brick veneer applied to the exterior walls, a shaped parapet, and a projecting cornice. Awning windows provided ventilation for the otherwise hot and noisy confines of the mill. A two-story warehouse extended the bottom of the mill by 200 feet to the south and 46 feet to the west. Behind these buildings stood the silo, a reinforced concrete structure that consisted of a head building measuring 48 feet by 51 feet and 124 feet 6 inches high, and a series of storage bins totaling a 1 million bushel capacity. Thirty circular bins measuring 15-feet in diameter and 80 feet high combined with twenty-two intermediate bins to provide storage space for over 11 thousand tons of grain; they were arranged in rows of three. Together, the mill, warehouse, and silo formed a balanced composition as viewed from Mare Island Strait. The silo's wall of windowless, rounded concrete balanced the flat, rectilinear form of the mill and its walls of windows. Similarly, the long horizontal plane of the warehouse provided balance to the vertical plane of the bins and mill, while the three buildings resulted in a pleasantly proportioned stepped massing.²¹

Practical concerns and location undoubtedly informed Couchot's design and plan for the new mill, but his attempt to create an architecturally interesting industrial form resulted in a significant honor for an engineer: the compliments of the architectural world. *Architect and Engineer*, the most prestigious architectural journal published on the West Coast, included an article by aforementioned Albert Kahn in its September 1918 edition. Kahn had risen to prominence as the architect of automobile factories in Detroit and for bringing a high level of aesthetic value to the functional industrial form, and he designed the Ford Motor Company Assembly Plant in Richmond, California, in 1930. In this article, Kahn called upon fellow architects to bring their refined sense of beauty to the industrial landscape. Editors of *Architect and Engineer* included photographs of industrial architecture in California that they deemed worthy of distinction according to Kahn's standards, and the images included two of Maurice Couchot's designs: the building for the National Carbon Co. in San Francisco, and the Sperry Flour Company's new plant in Vallejo.²²

The new plant included several smaller buildings as well. The most prominent of these was, and is, the administration building. This two-story building has a reinforced concrete frame and floor, brick walls, and wooden partitions with metal lath and plaster. A series of ten wood frame casement windows along both the front and rear elevations, as well as a series of six similar windows along the sides of the buildings provided natural light and ventilation. While the administration building complemented the mill and warehouse, it featured several more decorative elements that lend the structure a classical style and signaled its status as the business and science center of the mill, including a stepped parapet, embellished cornice, and Classical entryway. A medallion with the company logo adorns the center of the parapet.

²¹ Sanborn maps indicate that the silos contained sixty bins, which would make sense given the math of twenty rows of three bins. Historic documentation does not account for the difference in the enumeration of bins provided by Sperry Flour Company in 1917 and the number of bins suggested by the historical maps and the bays of the extant structure. Woolf, "Flour Milling Industry," chapter 4, pp. 9-11; *Sperry Family*, 2 (February 1918), special issue devoted to the new Vallejo facilities; Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (New York, 1999), 156-160, 201-223, 240-242; Peter Collins, *Concrete: The Vision of A New Architecture* (Montreal, 2004), 61-64; Sanborn Fire Insurance Co., Vallejo, Solano County, California (1919 & 1950), map no. 40.

²² "The Architect in Industrial Building," *Architect and Engineer*, 54 (Sept. 1918), 101-109; Henry Jonas Magaziner, "Working for a Genius: My Time with Albert Kahn," *APT Bulletin*, vol. 32 no. 2/3 (2001), 59-64; Alan Conant to Editor, *ibid.*, vol. 18, no. 3 (1986), 3; Betsy Hunter Bradley, "Industrial Modernism: Architecture and Ideology," *Journal of the Society of Architectural Historians*, 54 (December 1995), 508-510.



Administration building and garage, c. 1920. The manager's house is perched on the hillside above. Courtesy of Floyd Miller and Quarter Century Club, General Mills.

The administration building served two functions: a business office on the ground floor and a lab on the second floor. The Business offices included executive offices, a general office, a consultation room, the vault, and restrooms, while the laboratory included such things as an experimental bakery, a mill room, grain room, research laboratory, and chemical storage facilities. Equipped with "water, gas, electric current, compressed air, vacuum, high and low pressure steam, and plenty of sinks and drains," the Sperry company boasted that the laboratory and bake shop were "up to the minute in every respect." Notably, men and women worked side by side at all the tasks in the lab, be them strictly scientific or simply baking. The lab relocated to the second story of the mill during late 1960s or early 1970s.²³

Construction of the new plant had begun in January of 1917 and though labor shortages related to wartime activities presented certain obstacles to completing the project, the new mill and warehouse opened for production in November of that year, and the monumental bins were ready by August of 1918. The new mill produced 1,800 barrels of flour on its first day. Functioning at capacity, it soon produced 3,500 barrels per day, which, combined with the 1,500 barrels per day that the original Starr mill produced, totaled 5,000 barrels per day. Sperry Company leaders referred to the new Vallejo facilities as "our crowning achievement," "the king of all Sperry mill," and "one of the best illustrations to show the rapid progress made by our Company during the past six years."²⁴

During this period of construction and expansion, Sperry also made alterations and additions to the manager's house located on the hillside above the garage. Sanborn maps indicate that a house had been constructed at the site by 1901, and photographs show that it remained unchanged until World War I. At that time, Sperry enclosed the front porch and added a second story above it that extended nearly the length of the house. Sperry also added a cross gable to the southeastern elevation of the house and changed the window configuration of the original gable and front elevation to create a more fluid relationship between the indoors and outdoors. New landscaping included two palm trees and a pond from which a stream flowed downhill. In the middle of that stream stood a miniature decorative mill

²³ Bert D. Ingels, "The New Office and Laboratory," *Sperry Family*, 2 (Feb. 1918), 19-20, 22-23; Floyd Miller, interview with Karen McNeill, July 26, 2007, General Mills Plant, Vallejo, Calif.

²⁴ "Out Company Moves Forward," *Sperry Family*, 2 (Feb. 1918), 8; photos of old and new Vallejo mills, *ibid*. (July 1918), 20-21.

reminiscent of early nineteenth-century, water-powered mills. Though the landscaping is largely overgrown and the windows and doors of the house have been stripped, it looks today much like it did when these alterations were made around 1917.²⁵

The sylvan setting and casual, rustic aesthetic of the house make it a good example of the First Bay Tradition. This domestic style of architecture was begun in the Oakland hills during the 1880s by amateur architect and minister, Joseph Wurster. Such renowned architects as Bernard Maybeck, Coxhead and Coxhead, Willis Polk, Walter Ratcliff, Jr., and Julia Morgan popularized it during the 1890s and 1900s as an alternative vision of the modern urban landscape, one that stood in direct opposition both to industrial buildings and to the dirty, cramped, and tall buildings of cities like New York, Chicago, or Pittsburg. It drew its inspiration from nature – climate, topography, landscape – and relied upon natural materials like unpainted shingles and decorative plants. This tradition influenced Bay Area architecture for nearly a century and constitutes one of the most comprehensive examples of regional expressionism.²⁶

Between 1918 and 1920, the Vallejo plant made several additions, mostly in response to the increased traffic and productivity that the new mill and silos created. Maurice Couchot designed at least two of the new buildings and additions. In 1918, Sperry ordered the construction of a small warehouse and tin shop. This single-story frame building had no ornamentation and stood directly to the southeast of the new mill and warehouse. It was completed in 1919 and later served as a cafeteria, then as a site for company functions (holiday parties, etc.), until General Mills demolished the factory during the mid-1980s. Couchot also designed a single-story garage for Sperry in 1918. Like the mill, warehouse, and administration building, this reinforced concrete structure had a brick veneer, a parapet with coping, and a projecting cornice. Behind its rollup metal doors, one would find space to store automobile accessories, water for radiators, gas and distillate tanks, pumps, and air compressor for filling tires, a work bench for addressing small repairs, and an oil room. Increased traffic at the wharf rendered the original Starr mill and warehouse inadequate, so Sperry filled in the wharf where there was a gap between the Starr warehouse and the site of the iron-clad bulkhouse, then built a two-story, continuous door and hatch addition along a 320-foot stretch of the wharf. The hatch windows on the second floor allowed laborers to use slings to unload ships. A reinforced concrete bag factory that included printing and engraving facilities, completed this period of significant expansion.²⁷

General Mills

The 1920s brought significant changes to the Sperry Flour Company. It remained the industry powerhouse on the Pacific Coast and one of the three most powerful milling companies in the nation, but the robust growth that characterized 1910-1920, and especially 1917-1920, slowed. In 1924, the Vallejo plant had to shut down temporarily. As mentioned earlier, California's flour industry was well past its prime by then, and wartime expansion had left the nation – let alone California – with too many mills when demand decreased during the postwar period. Roy Bishop, president of Sperry Company, worked to consolidate the Pacific Coast market, but he was also looking to sell the corporation. Meanwhile, James F. Bell and Harry Bullis, of the newly formed General Mills Corporation in Minneapolis, had their eye on Sperry Company and virtually all the other important flouring corporations in the country. They, too, saw the importance of consolidation in the postwar era and created General Mills as a holding company under

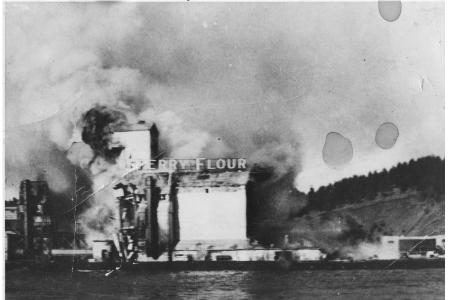
²⁵ Historic photos, Quarter Century Club scrapbook; Sanborn Fire Insurance Company, (1889), map no. 25; (1901), map no. 34; (1919 and 1950), map no. 40.

²⁶ For more on the First Bay Tradition, see Richard Longstreth, *On the Edge of the World: Four Architects in San Francisco at the Turn of the Century* (Cambridge, 1983); Leslie M. Freudenheim, *Building with Nature: Inspiration for the Arts & Crafts Home* (Salt Lake City, 2005); and Lance V. Bernard, *Architecture and Regional Identity in the San Francisco Bay Area, 1870-1970* (Lewiston, NY, 207).

²⁷ Images from Quarter Century scrapbook; M. C. Couchot, "New construction," *Sperry Family*, 2 (Nov. 1918), 10-11; *ibid.*, 3 (June 1919), 26; "Vallejo's Automatic Grain 'Traffic Squad," *ibid.* (Dec. 1919), 31; Interview with Floyd Miller.

which affiliates would function with relative autonomy. Sperry Flour Company thus became a subsidiary of the General Mills Corporation in May of 1929.²⁸

Few changes occurred to the landscape of the Sperry Flour Company before World War II. The one exception came in 1934, almost eighteen years to the day that the old bulk house burned down: During the afternoon of August 30, 1934, the bulk house dating to between 1910 and 1916 burned in dramatic fashion. Three fire departments and tug boats fought the blaze for three hours, but could not save the structure or the 6000 tons of wheat, corn, barley, and oats that it contained.²⁹



Bulkhouse aflame, 1934. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

World War II marked another milestone in the history of General Mills and the Vallejo plant. Production increased, much as it did during World War I, and corporations were expected to forsake personal profit for the greater good of the country – to be patriotic corporate citizens. The corporation expanded in entirely new directions as well, becoming weapons developers. Harry A. Bullis, who became president of General Mills in 1942, also anticipated an economic downturn once the war ended, just like in 1920, but intended that his company not experience such a slump. Well before the war ended in 1945, Bullis prepared a postwar economic plan that sought to increase production by developing a greater variety of products, cheaper products, and modern, efficient plants.³⁰

²⁸ Gray, *Business without Boundary*, 129-154, esp. 147-151; N.E. DeMarais to S. Frandsen, May 17, 1930, Quarter Century Club scrapbook, c/o Floyd Miller.

²⁹ Jim Ritch, "Sperry Fire Loss Set at \$300,000," Vallejo *Times Herald*, August 31, 1934, p. 1, 2.

³⁰ Gray, Business without Boundary, 234-241.



New feed warehouse, under construction, 1947. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

Several aspects of this restructuring plan directly affected the Vallejo site. General Mills no longer acted simply as a holding company with autonomous members who operated under their own brand names; thus, "General Mills" replaced "Sperry Flour" on the grain silos. Bullis also temporarily closed down many of the corporation's facilities for upgrading and restructuring. Citing a grain shortage, rather than the implementation of a plan that had been conceived of more than a year earlier, General Mills announced that it would close the Vallejo plant for two weeks in May of 1946 and, upon reopening, operate it at reduced capacity. The landscape of the plant changed that year too. In November, the former site of the Sperry recreational facilities gave way to a single story, 42,500 square-foot reinforced concrete feed warehouse. Railroad tracks that ran through the property dictated that this building take a fan shape, which was certainly unique to the site and unusual for industrial architecture in general. A clerestory of continuous corrugated fiberglass windows constitutes the building's most notable feature.³¹ The new warehouse was completed in 1947 and a conveyor shed connected it to the old Starr Mill. The relationship between the two buildings only lasted for about a decade, however, as the Starr Mill and warehouse succumbed to fire around 1957.³²



General Mills, Vallejo plant, c. 1947. The old Starr Mill stands near the bottom of the photo, while the new feed warehouse is located at the far left and the bag factory is located at the far right. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

³¹ L. V. Gagin, "Development of Fiber Glass: A History of Glass Compositions and Materials," *Canadian Clay and Ceramics Quarterly*, vol. 53, no. 4 (1980), 10-14.

³² "Local News," *Oakland Tribune*, May 20, 1946, p. 11, historic photos in Quarter Century Scrapbook.

Notably, following the 1957 fire, General Mills did not decide to rebuild on any scale approaching that of the old mill. Instead, the only new addition at this time was a relatively modest bulkhouse encased in corrugated asbestos – a building material touted for its fireproof qualities.³³ While the Vallejo plant continued to mill grain for nearly fifty years, its heyday as the jewel the crown of a milling dynasty had long since passed. Today, a portion of the dock and piles on which the mill and warehouse stood are all that remain of the old Starr Mill.



General Mills plant shortly following the destruction of the Starr Mill, c. 1957. The asbestos-clad bulkhouse stands next to the 1917 warehouse. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

New construction at the Vallejo plant has been minimal during the last half century. The "new bulkhouse" joined the old one in 1965 and both the tin shop/cafeteria and bag factory were demolished during the 1980s. While three relatively small structures – the welding shop/pipe storage warehouse, forklift repair building, and the mill canopy run – have been built on or near the site of the old tin shop/cafeteria, the bag factory site remains empty. Prompted by the increased rate of production that resulted from a long-term changeover to a pneumatic conveyance system, General Mills constructed a bulkhouse next to the feed warehouse in 1992. The completion of that building marked the last major architectural change to the site.³⁴

EVALUATION

California Register of Historical Resources

The criteria to be used when establishing the significance of a property for listing on the California Register of Historical Resources include those below. A resource may be listed in the California Register of Historical Resources if it meets any of the following Criteria for Designation:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or

³³ Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (New York, 1999), 121.

³⁴ See historic photos in Quarter Century Scrapbook; interview with Floyd Miller.

- 2. It is associated with the lives of persons important to local, California, or national history; or
- 3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
- 4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.³⁵

Evaluation for eligibility to the California Register requires an establishment of historic significance before integrity is considered. There are seven aspects of integrity including the following: location, design, setting, materials, workmanship, feeling, and association.

California's list of special considerations includes some allowances for moved buildings, structures, or objects, as well as lower requirements for proving the significance of resources that are less than 50 years old and a more elaborate discussion of the eligibility of reconstructed buildings.

In addition to separate evaluations for eligibility to the California Register, the state will automatically list resources if they are listed or determined eligible for the National Register of Historic Places through a complete evaluation process.³⁶

Integrity

For a property to qualify under the California Register's Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance."³⁷ While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance."³⁸ To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity, which the California Register closely follows: ³⁹

Location is the place where the historic property was constructed or the place where the historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

Setting is the physical environment of a historic property.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

³⁵ California Office of Historic Preservation, *California Register and National Register: A Comparison*, Technical Assistance Series 6, (Sacramento, 2001), 1.

 ³⁶ All State Historical Landmarks from number 770 onward are also automatically listed on the California Register. [California Office of Historic Preservation, *California Register of Historical Resources: The Listing Process*, Technical Assistance Series 5, (Sacramento, n.d.) 1.
 ³⁷ United States Department of the Interior, *How to Apply the National Register Criteria for Evaluation*, National Register

³⁷ United States Department of the Interior, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin, No. 15, (Washington, D.C., 1997): 3.

³⁸ United States, How to Apply the National Register Criteria for Evaluation: 44.

³⁹ United States, *How to Apply the National Register Criteria for Evaluation*: 1.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property.⁴⁰

Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.⁴¹

California Historical Resource Status Codes

The California Historic Resource Status Codes (status codes) are a series of ratings created by the California Office of Historic Preservation (SHPO) to quickly and easily identify the historic status of resources listed in the state's historic properties database. These codes were revised in August 2003 to better reflect the many historic status options available to evaluators. The following are the seven major status code headings:

- 1. Properties listed in the National Register or the California Register.
- 2. Properties determined eligible for listing in the National Register or the California Register.
- 3. Appears eligible for National Register or California Register through Survey Evaluation.
- 4. Appears eligible for National Register or California Register through other evaluation.
- 5. Properties recognized as historically significant by local government.
- 6. Not eligible for listing or designation.
- 7. Not evaluated for National Register or California Register or needs revaluation.

Evaluation

Carey & Co. has concluded that seven structures – the flour mill, grain silos, administration building, garage, manager's house, barn and dock – on the property of the former Sperry Flour Company Site appear to be contributing buildings to a potential historic district which may be eligible for listing on the California Register of Historical Resources; three additional structures meet the fifty-year threshold for consideration as historical resources, but the structures were not built within the period of significance. A historic district is comprised of contributing resources includes buildings, structures and objects which define the historic integrity and physical character that make a historic district eligible for listing in the California Register of Historical Resources. Contributing properties are integral parts of the district's historic context and key to a historic district's historic associations, feeling, setting, and its historic architectural qualities. The complex of seven former Sperry Flour Company buildings creates an

⁴⁰ United States, *How to Apply the National Register Criteria for Evaluation*: 44-45.

⁴¹ The term "condition," as used by Carey & Co. in relation to a structure and its corresponding elements, refers only to the physical state of the building materials and features as surveyed and analyzed by a qualified professional. The assessment of a material's condition is not founded upon historical significance or integrity, but rather on the technical observations of the material's physical status in reference to issues such as deterioration, structural stability or failure thereof, corrosion, water damage etcetera. A building may be determined to be in overall poor physical condition, while exhibiting historical features and physical characteristics that lend to the separate determination of a structure's historical significance and integrity.

industrial site dating to World War I during which time the site experienced expansion. Individual evaluations for all ten of these structures follow.

The site has six additional structures – the newer bulkhouse, the welding shop, the pipe storage shed, the forklift repair shop, and the mill run canopy – that do not meet the fifty-year threshold and do not bear any characteristics that would warrant their listing on the California Register. These structures do not exhibit exceptional architectural merit, any intimate association with a major historical event or pattern, or any association with a historical person. They are also unlikely to yield information that is important to history or prehistory.

While the history of this site in the flour milling industry dates back to 1869, its period of significance extends from 1917 to 1920, being the period when the flour milling facility was greatly expanded in response to the increased demand for American flour spurred by World War I. The United States government strictly curtailed construction activities during World War I to projects that directly benefited the war effort, and increased national and international demand for flour during the war prompted the construction of the mill, silos, administration building, and garage at Sperry's Vallejo site. In keeping with its newly achieved status as the mill of greatest importance within the Sperry Flour Company empire, the company also remodeled the manager's house, enlarging it and designing it to conform with the then popular Bay Tradition style of domestic architecture. Increased production capacity at the mill rendered the original Starr Mill and warehouse inadequate, so the company also added on to the warehouse and wharf. Although that building and warehouse disappeared long ago, the extant pilings and dock date at the latest to this period of significance. Some of the pilings may date to as early as 1869. The Vallejo site's importance within the Sperry Flour Company had waned by the mid-1920s.

Flour Mill

Architecturally, the building is a relatively early example of reinforced concrete skeletal frame construction, which allowed for more windows and, therefore, natural light and ventilation in a factory environment. The brick cladding, entablature, and parapet also reflect an effort to combine aesthetics with function in industrial design, as well as experimentation with the aesthetic potential of concrete itself. The building's relationship to the mill further enhanced the architectural composition of the mill. Located directly in front of the silos and with a hillside serving as a backdrop, the mill not only functioned together to produce flour, but created an unusually picturesque statement for industrial architecture. The mill is also significant for its association with World War I, a defining event of the twentieth century and an event of international importance. Since the federal government curtailed most construction not related to the war effort, it is entirely likely that the mill would not have been built if it had not been for the importance of American grain milling capacity during that period. Whereas the Sperry Company initially intended to build a simple warehouse for its old mill, demand for flour during wartime prompted the company to build the most modern facility possible, which allowed it to mill grain at a rate necessary to feed American and European soldiers and civilians alike. Subsequent to the war, the new mill also catapulted the Vallejo plant to the most important position in the pantheon of the most powerful Pacific Coast milling company's numerous facilities.

The building has undergone some alteration. Almost all of the windows are non-original, as are the metal awnings, rooftop mechanical units, a conveyor shed from the mill to the bakery warehouse, and a partially enclosed passageway supported by metal posts and clad with corrugated fiberglass sheets that is located at the northwest end of the building. The conveyor shed at the northwest end of the building dates to the construction of the mill, but does not retain a high level of integrity; it has been truncated and reclad.

While these alterations affect the mill's integrity of materials, design and workmanship, the mill retains sufficient integrity to convey its architectural and historic significance. Alterations have occurred mostly to secondary features and nearly all are reversible. Moreover, the building retains its original scale, plan,

and overall design. In addition, the building has not been moved, and its setting, on the narrow strip of bedrock next to the Mare Island Strait with the silos and hillside serving as backdrop, has changed little, leaving the building with integrity of location, setting, feeling and association. These factors enable the mill's ability to express its aesthetic intent, its function as a mill, and its historic role as the most important mill in the Sperry Flour Company during World War I and its immediate aftermath. The flour mill appears to be eligible for the California Register under criteria 1 and 3 as a contributing building to the potential historic district.

Grain Silos

Like the mill, the silos derive historical significance from their association with World War I and the emergence of the Vallejo plant as the most important facility in the most important grain milling corporation of the Pacific Coast. These silos, built in the most modern methods, allowed the mill to store the grain necessary to produce flour for American and European soldiers and civilians, and their monumental scale speaks to massive quantity of flour that the mill was expected to produce. The location of the silos, directly behind the mill, further underscores the intimate relationship between the two buildings and their common function to produce flour on an unprecedented scale for both the Vallejo mill and the Sperry Flour Company.

Also like the mill, the silos retain a high level of integrity. With the exception of metal slider windows replacing some multi-lite awning windows within the large, multi-lite fixed metal windows of the top stories of the building, the silo remains virtually unchanged since its construction in 1917-1918. This lends the silos integrity of design, materials, and workmanship. The scale and location of the silos directly behind the mill remains intact as well, fostering integrity of setting, association, and feeling. This high level of integrity enables the silo to convey its historic relationship to the mill, their collective contribution to World War I, and the significance of the Sperry Flour Company in California and the grain industry. The grain silos appear to be eligible for the California Register under criterion 1 as a contributing structure to the potential historic district.

Administration Building

Built in 1917, the administration building belongs to the site's period of significance (1917-1920) and reflects the significant growth of the plant both in size and prestige within the Sperry Flour Company and milling industry. Like the mill and silos, the administration building reflects a relatively early example of reinforced concrete construction. Even more than do the mill and silos, this building demonstrates early efforts to use concrete for aesthetic purposes rather than just functional ones. Particularly notable elements include the raised relief on the cornice, the inset panels on the window surrounds, molded detailing at the base of the building, and the pilasters, pediment, and entablature of the entry surround. These classical features also contribute to the historic feeling of the building.

The building retains a high level of integrity. It has not moved and its surroundings have changed little since it was constructed, lending the building integrity of location, setting, and association. The building has undergone some alterations, including the addition of metal awnings, filling in of some rear windows, and replacement of the front door and windows. While these alterations affect integrity of materials, and workmanship, they are easily reversible and do not affect integrity of design, scale, plan, or overall expression of the aesthetic and historic feeling of the building. The building retains sufficient integrity to convey its historic significance. The administration building appears eligible for the California Register under criteria 1 and 3 as a contributing building to a potential historic district.

Garage

The garage is the fourth and last structure on site to be built specifically in response to wartime demand for flour in the United States and Europe. Increased production at the plant due to its central role in flour production for the Sperry Flour Company required the construction of expanded maintenance and storage facilities. Like the mill and administration building, it is a reinforced concrete structure that combines aesthetic and functional considerations.

The building retains a high level of integrity. Alterations include non-original roll-up doors, and bricking in of one bay. Both of these alterations are reversible. Otherwise, the structure retains integrity of location, design, setting, materials, and workmanship, which contributes to its ability to express the aesthetics of the period in which it was built and its association with Sperry Flour Company's expansion at the Vallejo plant in the wake of increased demand for flour during World War I. The garage appears eligible for the California Register under criteria 1 and 3 as a contributing building to a potential historic district.

Manager's House

The manager's house dates to the early 1900s. The current look and plan of the building date to around 1917, during the period of significance for the site. Sperry Flour Company enlarged the house to accommodate a manager of the then most important facility within the company's flour empire. The house also embodies defining characteristics of the Bay Area Tradition, a regional style that influenced domestic architecture for nearly a century and which contributed to the emergence of a regional identity. Set apart from the industrial buildings, the house creates a sylvan contrast to the modern industrial landscape. Clad with unpainted brown shingles and adorned with no exterior decoration, the house blends into the landscape and allows the natural setting to provide ornamentation.

The manager's house has undergone numerous alterations. Sanborn maps and historical photos indicate that the structure dates to at least 1901, when it first appeared on a map, and was altered incrementally over a fifty-year period. The most extensive renovations took place between 1901 and 1919, and most likely in 1917 when the new mill, warehouse, silos, administration building, and garage were built. At that point, the owners enclosed the front porch, adding a second story on top of part of it to create a second gable and leaving a smaller section as just one story to create a new entryway. A third window was added to the second story of the original gable and a three-panel picture window was added to the first story. Other additions included a southerly extension to the front façade, ultimately creating a two-story cross gable plan. At the rear of the house, the gables did not meet, resulting in a U-shape plan. Between 1919 and 1950, that changed. The owners extended the rear wall of the second story to close the U-shape plan, added a second story to the rear part of the house, which created a fourth gable, added a slightly projecting single-story extension to the northern façade of the house, and created a back porch. Since 1950, the rear porch has either been demolished and replaced or closed in and roofed to make way for a second story balcony. Most of the windows, exteriors doors, and interior fixtures were removed during the 1990s.

Despite these changes, Carey & Co. has determined that this structure retains sufficient integrity to convey its historic significance. Alterations to the structure are not obvious upon viewing it; Carey & Co. had to compare Sanborn maps to periodize them and figure out how exactly the building changed over time. The earliest images of this building indicate that it has always been clad with unpainted wood shingles, making it an early example of the First Bay Area Tradition. Subsequent alterations have always respected this historical precedent, allowing the building to continue to express historical character. Moreover, the most significant alterations were made ninety years ago and the structure as it appeared then remains largely uncompromised. Apart from the missing windows and doors, which do adversely affect the integrity of the structure, all of the alterations since 1919 were made towards the rear of the building, making them unobtrusive and only moderately visible. This house, therefore, exudes an overall historical character that dates to World War I, the period of significance to which the other historical buildings at the plant belong. The manager's house appears to be eligible for the California Register under criteria 1 and 3 as a contributing structure to a potential historic district.

The construction date of the rock walls at the entry to the driveway and lining the north side of the driveway have not been determined. Thus, the rock walls may or may not have been constructed within the period of significance. Since no definitive construction date of the walls was found, they are not a contributing resource to the potential historic district.

Dock

Sanborn maps indicate that the portion of the dock that retains the highest level of integrity, meaning the most southwesterly section that still has horizontal boards atop the piles and where remnants of the railroad track exist, was completed by November of 1889. The piles immediately adjacent to it date to 1919, when Sperry Company expanded the wharf and warehouse to accommodate increased traffic that the new mill and silos prompted. Exactly how far that extension was is unclear; beyond it, the piles may date to as early as 1869, though probably a bit later. The dock retains integrity of location, setting, association, having never been moved and being still adjacent to an industrial site. While the dock's integrity of design, materials, workmanship and feeling have been partially compromised by the loss of considerable material, this loss does not prevent this simple dock structure from conveying its historic significance. This dock conceivably tells a story of the mill site from its earliest days in 1869 and appears to be eligible for the California Register under criterion 1 as a contributing structure to a potential historic district.

Barn

Sanborn maps indicate that the barn was constructed between 1901 and 1919. The barn was part of the manager's residential complex on the site. The corrugated metal cladding may not be original to the structure, but the building retains sufficient integrity with its wood sash windows and overall form. Since the barn is directly linked to the residential complex of the site manager and was used by the site manager during the heyday of the plant's operation, the building may be eligible for the California Register under criterion 1 as a contributing structure to a potential historic district.

Manager's Garage

Sanborn maps indicate that a structure was built at this location between 1901 and 1919 and that this structure had an L-shaped plan. Its date of origin may therefore fall within the period of significance for the site of the former Sperry Flour Company mill. The current structure has a rectangular plan, suggesting that it has been altered significantly or is non-original and dates to some point after 1950. These factors, alone, highly compromise the historic integrity of the building. It does not retain sufficient integrity to convey its historical significance and Carey & Co. has determined that it is ineligible for the California Register.

Warehouse

Although this building was completed in 1947 and therefore falls within the fifty-year threshold for consideration for California Register, it falls well outside the period of historical significance of the mill site. Its style reflects post-World War II industrial architecture, but is not the work of a master or a rare and/or exceptional example of such postwar architecture that it conveys a significant level of historical feeling in and of itself. As the architectural style does not conform to that of the property's period of historical significance, it does not contribute to the historical feeling of the site. The building retains a high level of integrity, having undergone few significant alterations. The conveyor shed and bulkhouse adjacent to the building detract, however, from its historical integrity, as the former originally connected the building to the old Starr Mill and warehouse, while the latter did not exist until 1992. Because it is not associated with the site's period of historic significance, this building does not appear to be eligible for the California Register.

Old Bulkhouse

The old bulkhouse is fifty years old, just meeting the age requirement for the California and National

Registers. It has one notable feature: corrugated asbestos cladding. However, this material was not new to industrial design and otherwise the building does not exhibit architectural distinction, is not associated with the life of an important person, will not yield information important to prehistory or history, and is not associated with significant events in the life of the property, city, state, or country. Therefore, Carey & Co. has determined that the structure is not eligible for the California Register.

BIBLIOGRAPHY

Periodicals

Architect and Engineer Los Angeles Times The Millwheel Oakland Tribune The Sperry Family Vallejo Evening Chronicle Vallejo Herald-Tribune Vallejo Times Herald

Articles, Books, and Manuscripts

Bernard, Lance V., Architecture and Regional Identity in the San Francisco Bay Area, 1870-1970 (Lewiston,

NY: The Edwin Mellen Press, 2007).

Bradley, Betsy Hunter, *The Works: The Industrial Architecture of the United States* (New York: Oxford University Press, 1999).

California Office of Historic Preservation, California Register of Historical Resources: The Listing Process,

Technical Assistance Series 5 (Sacramento, CA: California Department of Parks and Recreation, n.d.

California Office of Historic Preservation, *California Register and National Register: A Comparison*, Technical Assistance Series 6 (Sacramento, CA: California Department of Parks and Recreation, 2001).

California Office of Historic Preservation, User's Guide to the California Historical Resource Status Codes

& *Historic Resources Inventory Directory*, Technical Assistance Bulletin 8 (Sacramento, CA: California Department of Parks and Recreation, 2004).

- Cronon, William, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton Press, 1992).
- Freudenheim, Leslie M., *Building with Nature: Inspiration for the Arts & Crafts Home* (Salt Lake City: Gibb Smith, 2005).

Gray, James, *Business without Boundary: Story of General Mills* (Minneapolis: University of Minneapolis Press, 1954).

Historic USGS Topographical Maps, Benicia Quadrant (1950, 1959, 1968, 1980).

Hunt, Marguerite, and Harry Lawrence Gunn, *History of Solano County and Napa County: From their Earliest Settlement to the Present Time*, Vol. 1 (Chicago: S. J. Clarke Publishing Co., 1926).

Issler, Anne Roller, Stevenson at Silverado: The Life and Writing of Robert Louis Stevenson in California's Napa Valley, 1880 (Fairfield, Calif.: James Stevenson Publisher, 1996).

- Kahn, Albert, "The Architect in Industrial Building," *Architect and Engineer*, vol. 54 (September 1918): 101-109.
- Longstreth, Richard, On the Edge of the World: Four Architects in San Francisco at the Turn of the Century (Cambridge: MIT Press, 1983).
- Miller, Floyd, interviews with Karen McNeill, July 26 and August 13, 2007, Vallejo, C.
- National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, (Washington, DC: United States Department of the Interior, 1997).

National Park Service, *How to Complete the National Register Registration Form*, National Register Bulletin

16A, (Washington, DC: United States Department of the Interior, 1997).

- "Scrapbook of the Sperry Century," Sperry Flour Company, Vallejo Mare Island and Historical Society.
- Sanborn Fire Insurance, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

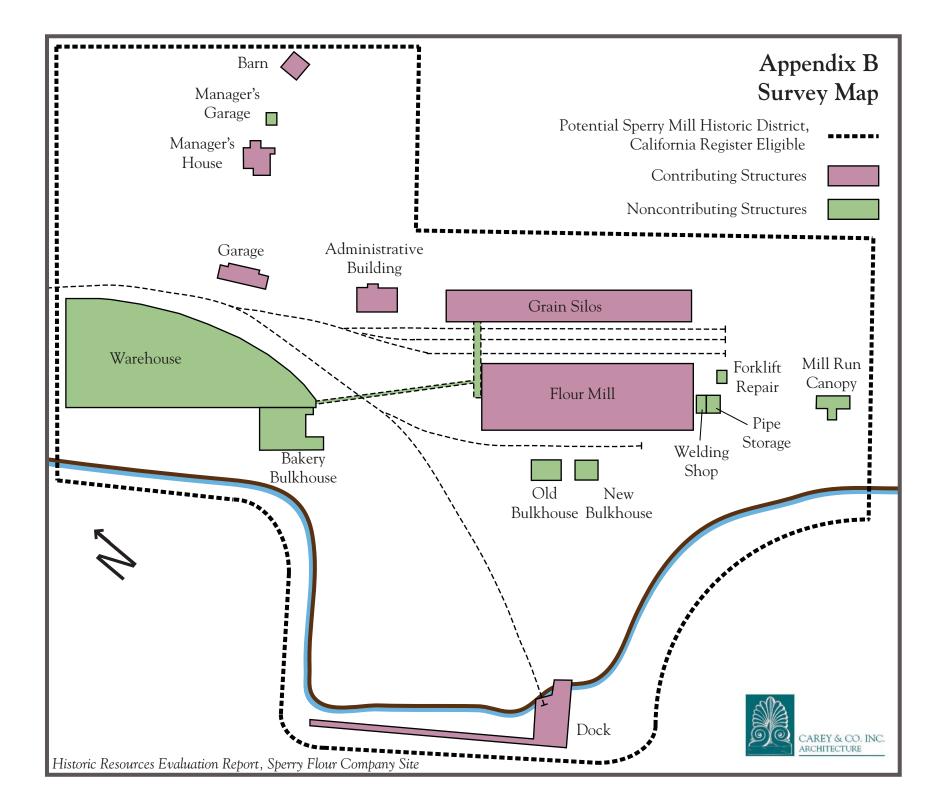
"Sperry Co. at 88th Birthday," Oakland Tribune, April 19, 1940, p. 29.

- Starr, Walter A., "Abraham Dubois Starr: Pioneer California Miller and Wheat Exporter," *California Historical Society Quarterly*, 27 (September 1948): 193-202.
- U.S. Department of the Interior, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (Washington, DC: United States Department of the Interior, 1995).
- Woolf, Paul Nicholas, "A Historical Appraisal of the Flour Milling Industry in California (Ph.D. diss., University of California, Berkeley, 1939).

			Significance	Carey
Description	Year Built	Source for Estimate	Determination	Rating*
Administrative Building	1917	Sperry Family, historic photos	Historic	3CD
Bakery Bulkhouse	1992	City of Vallejo planning permits	Not historic	6Z
Barn	c. 1901-1919	Sanborn maps	Historic	3CD
Dock	c. 1869-1919	Sanborn maps, historic photos, Sperry Family	Historic	3CD
Flour Mill	1917	Sperry Family, historic photos	Historic	3CD
Forklift Repair	c. 1985	Interview with Floyd Miller, historic maps and photos	Not historic	6Z
Garage	1918	Sperry Family, historic photos	Historic	3CD
Grain Silos	1917	Sperry Family, historic photos	Historic	3CD
Manager's Garage	c. 1950s	Sanborn maps	Not historic	6Z
Manager's House	c. 1901, altered c. 1917 and after 1919	Sanborn maps, historic photos	Historic	3CD
Mill Run Canopy	1986	City of Vallejo planning permits	Not historic	6Z
New Bulkhouse	c. 1965	Interview with Floyd Miller, historic photos	Not historic	6Z
Old Bulkhouse	c. 1957	Sanborn Maps, historic photos	Not historic	6Z
Pipe Storage	c. 1985	Interview with Floyd Miller, historic photos	Not historic	6Z
Warehouse	1947	Oakland Tribune, historic photos	Not historic	6Z
Welding Shop	c. 1985	Interview with Floyd Miller, historic photos	Not historic	6Z

Appendix A: Matrix of Buildings and Structures Surveyed

*For an explanation of the historic resource status codes, please see the California Office of Historic Preservation's "User's Guide to the California Historical Resource Status Codes & Historic Resources Inventory Directory" (Technical Assistance Bulletin 8, Sacramento, CA: California Department of Parks and Recreation, 2004).





Sperry Flour Company Site Vallejo, California

Historic Resources Evaluation Report

April 15, 2008

INTRODUCTION

Brooks Street has engaged Carey & Co. Inc. to prepare a historic resources evaluation report (HRER) of the former site of the Sperry Flour Company in Vallejo, California. This report provides Brooks Street with a historical summary of the site and a description of the site today, including a preliminary evaluation of the historic significance of each building on the site.

METHODOLOGY

Carey & Co. prepared this evaluation by first reviewing documents, studies, plans, and other information related to historic resources associated with the Sperry Flour Company and General Mills. This included review of the structural report completed by Biggs Cardoza Associates and the state historic inventory forms recorded by Don Napoli. Carey & Co. then conducted reconnaissance level surveys of the site on July 25, 2007 and August 13, 2007. During these site visits Carey & Co. evaluated the existing conditions, historic features, and architectural significance of the buildings on site. Carey & Co. then undertook archival research at local and regional repositories to develop a general context statement for the site and Sperry Flour Company, as well as descriptions of the historic use of each building. To complete the research, Carey & Co. consulted the following sources: permits from the City of Vallejo Building and Planning Department, Sanborn Fire Insurance Maps, archival photographs, newspaper articles, oral interviews, a ten-year run of the Sperry Company's monthly newsletter, city directories, the United States Census, and archival materials at both the Vallejo Maritime and History Museum and the Bancroft Library at the University of California, Berkeley. Carey & Co. completed California Department of Parks and Recreation (DPR) 523 survey forms for the six buildings/structures within the project area that appear eligible for listing on the National Register of Historic Places.

This report includes five appendices:

- A. Survey Matrix of Buildings and Structures in the Project Area
- B. Map of the Project Area
- C. Photographs of Buildings and Structures in the Project Area
- D. DPR 523 Survey Forms
- E. Sanborn Fire Insurance Maps of the Project Area

SUMMARY OF FINDINGS

Carey & Co. has determined that six structures on the Sperry Flour Company Site appear eligible for the National Register of Historic Places. Five of the buildings have potential architectural merit: the manager's house is a good example of the Bay Area Tradition, while the flour mill, grain silos, administration building, and garage represent early examples of efforts in industrial architecture to meld function and beauty with reinforced concrete construction materials. More importantly, these buildings are associated with significant historical patterns, as all five are intimately linked to World War I. As the war progressed, European allies increasingly came to rely upon the U.S. for flour supplies, increasing the demand for flour production in the States and prompting widespread construction, expansion, and modernization of American flour mills. Once the United States entered the war in 1917, the federal government sharply curtailed construction of buildings that did not contribute to the war effort. The oldest mill-related buildings on the project site, which were constructed between 1917 and 1920, are therefore intimately related to the increased demand for domestically-produced flour in the wake of WWI. While the Sperry Company had acquired the Vallejo site several years earlier, the plant's relationship to the war effort, its modern facilities, and production capacity made it the most important plant – of the most important milling company – on the Pacific Coast. A portion of the piles in the Mare Island Strait also date to this period of significance, with the remainder dating from at least the 1880s and possibly as early as 1869. Starr Mills occupied the site in the nineteenth century and was then the most important flour milling company in California.

Four other structures – the barn, manager's garage, warehouse, and old bulkhouse – meet the fifty-year threshold for consideration on the California and National Registers, but do not exhibit sufficient historical significance or integrity to merit historic designation. The six structures on site that do not meet the fifty-year threshold for the California and National Registers do not exhibit any exceptional characteristics that would warrant their consideration for listing on the California or National Registers.

SITE DESCRIPTION

In 1869, Abraham Dubois Starr convinced the Southern Pacific Railroad to extend tracks to the current project area in Vallejo, on which Starr subsequently constructed a flour mill, dock, and warehouse. Starr deemed the site ideal for a flour mill because of its proximity to Mare Island and Mare Island Strait, which created easy access to both the San Francisco Bay and, hence, the Pacific Ocean, as well as to the San Joaquin Delta, which provided water access to inland California. The railroad extension connected the site to the newly completed transcontinental railroad, which, in turn, connected the mill to all points along that route, from the Pacific to the Atlantic. Only portions of the dock remain of the Starr Mill, but the site served continuously from 1869 to 2004 as one of the most important flour mills in California. Port Costa Flour Company bought the property in 1895, followed by Sperry Flour Company in 1910. At the time, Sperry Flour Company was the largest grain products and flour milling corporation on the Pacific Coast, and eventually the third largest flour company in the nation. Four of the historically significant buildings at the site – the mill, silos, administration building, and garage – were built during World War I in response to the Allies' significantly increased demand for American-made flour. Because it had the most modern facilities and participated in the wartime effort to supply flour to soldiers and civilians in the United States and abroad, the Vallejo plant was the most significant in the Sperry empire. The manager's house, a model of the First Bay Area Tradition, predated these buildings, but achieved its current form during this same period of wartime expansion. General Mills Corporation acquired Sperry Company and the Vallejo site in 1929 and made relatively minor changes to it. Apart from a few very brief stoppages, mills at the site continuously produced flour and feed for 135 years.

The project area includes sixteen structures, each of which is described below. A map of the project site is included in Appendix B, while Appendix C includes photos of each structure. The residential complex, consisting of the manager's house, a garage, a barn, and a chicken coop, are located on the tree-lined hillside behind the plant's garage. The plant buildings, however, are all located on flat ground and solid bedrock next to Mare Island Strait to the west and at the base of the hills to the east. A large, single-story, fan-shaped warehouse and its adjacent bulkhouse stand at the northwest end of the site, nearest the entrance gate. Abutting the hills to the east of the warehouse are the single-story brick garage and two-story administration building. A cluster of seven buildings that range in height, materials, and function, occupy the southern portion of the site. They include the eight-story flour mill, with the eighty-foot tall grain silos and elevator to the east and metal bulkhouses to the west. Behind the mill and warehouse, to the south, stand the cylindrical silos of the mill run canopy and the three sheds that house the forklift repair, welding shop, and pipe storage. At this end of the lot where the original Starr Mill stood, are the remnants – mostly pilings – of a dock.

Descriptions of each of the structures on site are included below, in order of (sometimes estimated) date of construction.

Wood Dock and Wood Pilings - c. 1869-1919

Pilings associated with the dock upon which the original Starr Mill warehouse stood run along the central western portion of the site. Horizontal planks cover the pilings at the most southwesterly corner and feature markings where railroad tracks once ended.

Manager's House - c. 1901, altered c. 1917 and after 1919

This two-story residential structure features multiple gables, a wide eave overhang, and a complex plan. Wood shingles clad the exterior, and scalloped asphalt shingles clad the roof. The northwest façade features a single-story, hipped entry porch with a small brick stoop, and the first story projects slightly from the main building at the northeast elevation. At the rear of the building, on the southeast elevation, is a second-story balcony with a high balustrade. Each elevation features wood-sash windows of various sizes. All of the windows have been removed from the first story, but the second story retains most of its windows, which are primarily wood-sash, two-over-one, double-hung with vertical muntins in the upper sash and lamb's tongues detailing. The northeast elevation also features an exterior brick chimney.

Manager's Garage - c. 1950s

The single-story garage is a wood-frame, rectangular-in-plan structure with a flat roof. Wood shingles clad the façade and side elevations, while vertical wood boards clad the rear elevation. A wood post divides the façade into two bays, and the southwestern elevation features two awning windows.

Barn – c. 1901-1919

The wood-frame barn is rectangular in plan and two stories in height (though it does not have two floors). The building has a gable roof clad in corrugated metal and a one-story extension on the eastern elevation with a shed roof clad in wood boards. The barn also features a wide eave overhang, exposed rafter tails, and corrugated metal cladding. The north elevation has five window openings, including one in the gable. Three openings retain their wood-sash, multi-lite windows, and one opening has been boarded over. This elevation also includes an entrance at its eastern edge. The eastern elevation features one window covered with a metal mesh screen and a hinged door constructed with horizontal wood boards. Two wood doors – one with inset panels and one with a boarded-over window – and two wood-sash, multi-lite fixed windows adorn the southern elevation. Four wood-frame window openings, including one that still retains its wood-sash multi-lite window, pierce the western elevation.

Grain Silos and Elevator - 1917

Construction on the grain silos and elevator began in 1917 and was completed the following year. This building is a reinforced concrete structure that consists of a head building measuring 48 feet by 51 feet and 124 feet, 6 inches high, behind which extends a 300-foot long section that once contained storage bins measuring fifteen feet in diameter and eighty feet in height. The approximately 10-story tall head building rises one story higher than the rest of the structure and has metal-sash, multi-lite industrial windows at the two top stories. The central lites originally formed an awning or pivot window and have been replaced with a slider window. The silos' concrete walls have been molded to follow the contours of the bins that were housed inside. One story, narrower than the width of the bins, tops the silo and runs the entire length of the building. Like the head building, this story features metal-sash, multi-lite industrial windows. A window is centered directly above each rounded section of the silo, and the central, upper four lites form a slider or awning window. Guard rails line all of the rooftops, which also feature some enclosed mechanical units.

Administrative Building – 1917

This two-story building is a reinforced concrete structure with brick veneer cladding. The rectangular-inplan building has a concrete block projecting from the rear elevation. The flat roof has a stepped parapet with coping and a medallion with the company logo adorning the parapet's center. An embellished, projecting cornice with dentils below wraps around the building, and a decorative water table constructed of scored concrete wraps around the building's base. The façade features concrete, rectangular, flat arches that form five bays. Each bay contains two sets of metal windows, one set each at the first floor and second floor. A classical entryway located in the central bay and comprised of a pediment, projecting cornice, and pilasters completes the façade's decorative features. Originally, a series of ten wood-sash casement windows running along the façade and rear elevation, as well as a series of six similar windows on the side elevations provided natural light and ventilation. All of the wood-sash casement windows have been either bricked in or replaced with metal-sash sliding windows. The entrance door has also been replaced, and metal awnings are non-original.

Flour Mill – 1917

This reinforced concrete building is rectangular in plan with a flat roof and is oriented northwest to southeast. It has an 8-story, 54-foot wide by 150-foot long tower at the northwest end, with a two-story warehouse extending to the southeast. The warehouse stands two stories high, 100 feet wide at its widest point, and nearly 350 feet at its longest point. Evenly spaced concrete structural columns divide the elevations into bays consisting of brick veneer panels and windows. The windows have undergone significant alterations. Originally they were predominantly fixed, metal-sash, multi-lite units that filled the entire space between structural columns and featured a multi-lite awning window in the center. Some of these windows have been filled in entirely with bricks, while others have been partially filled in with brick, and partially filled with fixed metal-frame, glass block windows. Decorative features include a concrete stepped parapet and a slightly projecting cornice. Large mechanical units have been added to the rooftops, and flat metal awnings have been added to windows of the two-story section of the building.

Garage - 1918

Built in 1918, this garage is a reinforced concrete structure with brick veneer on the façade and a rectangular plan. The flat roof features a parapet with coping and two simply shaped sections at the northern and southern ends of the façade. The entablature includes a slightly projecting cornice, a frieze, and an architrave. Four metal roll-up doors dominate the façade, and a fifth bay has been bricked in entirely. A standard hinge door at the northern end and a metal-sash, multi-lite fixed window at the southern end complete this façade. The southern elevation also features an entrance.

Warehouse – 1947

This warehouse is a single-story, 42,500-square-foot, reinforced concrete, fan-shaped building with a flat roof and continuous fixed, corrugated fiberglass windows forming a clerestory. The building's three sides each have specific characteristics: the eastern elevation curves, while the western elevation is completely flat. The north elevation provides eleven access points to the interior of the building, including ten bays with roll-up metal doors and a ramp leading to a standard hinge door. An overhang supported by four metal posts and featuring an open-web truss and a corrugated metal frieze shelters this area. A covered conveyor belt connects the structure to the main mill and warehouse, and a mechanical unit is housed in a metal structure on top of the roof. These last two elements comprise the only alterations to this building since its construction in 1947.

Old Bulkhouse – c. 1957

A slightly-pitched gable roof covers this approximately sixty-foot tall building. A second, narrow gable projects slightly from the main part of the building and runs the entire height of the structure; its roof is flush with that of the main building. Shed roofs also cover single-story projections at the base of the building. A shed roof supported by metal posts creates a wide eave over the door to the bulkhouse. Corrugated asbestos cladding encases the steel-frame structure.

New Bulkhouse - c. 1965

Located directly behind the Old Bulkhouse, this reinforced concrete structure is rectangular in plan and rises to about eighty feet. It has a flat roof and a slightly slanted shed roof that covers a single-story projection at the back. The northeastern elevation features a ladder that climbs to the roof, which has a safety guard rail on all sides and a mechanical unit. A corrugated metal-clad conveyor shed connects the new bulkhouse to the mill and warehouse, and a smaller one connects it to the old bulkhouse.

Forklift Repair – c. 1985

This forklift repair is a small, gabled, one-story building clad entirely in corrugated metal and is square in plan. It has vinyl-sash slider windows on each side.

Welding Shop – c. 1985

This shed is a single-story windowless structure constructed of corrugated metal and situated on a concrete slab foundation. It is square in plan and has a gable roof.

Pipe Storage - c. 1985

This concrete block structure is square in plan and features a flat roof constructed of wood with metal coping. The roof extends beyond the building to create a slight overhang. Metal mesh covers a gap between the roof and structure, while plywood sheets hide the bay that a roll-up metal door once occupied.

Mill Run Canopy – 1986

Three cylindrical silos top this rectangular in-plan, reinforced concrete and corrugated metal structure. The central part of the building has a flat roof and metal coping, while the front and rear feature slightlypitched gables. A roll-up metal door also adorns the front gable, and a lattice beam structure connects the mill run canopy to the main warehouse. A single-story gabled shed with metal slider windows stands adjacent to the mill run canopy.

Bakery Bulkhouse - 1992

Adjacent to the southwest corner of the bakery warehouse stands the bakery bulkhouse, an approximately eighty-foot tall, reinforced concrete structure. It lacks decorative details, but features two

balconies and three hinge doors on the southwestern elevation, which one reaches via a series of ladders. Guard rails surround the balconies, platforms outside the doors, and the roof. A single-story unit with a roll-up metal door projects southwest from the main building, and an identical unit extends from the main building to the northwest. The northwest elevation also has a single-story concrete block addition that has a metal shed roof and a single hinge door. This addition attaches the bulkhouse to the bakery warehouse, as does a single-story, flat-roofed concrete block addition along the southeastern side of the bulkhouse.

SITE HISTORY

The Sperry Flour mill at Vallejo has a storied past. While traveling through Vallejo in 1880, writer and poet Robert Lewis Stevenson commented on the mills in the distance. At the time, they were Starr Mills, and they were already notable landmarks. California's most famous woman architect, Julia Morgan, has connections to the site as well: She designed homes for Walter A. Starr, Starr Mills founder and Abraham Dubois Starr's nephew; the George W. McNear family, who owned Port Costa Flour Company and became the second owners of the site in 1895; and Dunning Rideout, who was one of the vice presidents of Sperry Company when the main buildings were constructed at Vallejo in 1917. The site can even claim a Hollywood connection: Boris Karloff, most famous for portraying Frankenstein and other monsters in early horror films, once worked at the Vallejo mill.¹ None of these associations, however, alone imbue the Sperry Flour Company site with particular historic significance. Instead, the site's architecture, along with its nearly 150-year association with flour milling for the most powerful flour companies in California and the nation and its intimate associations with World War I render the Sperry Flour Company a valuable historic resource.

California Agriculture

Early American settlers of California waxed poetic about the potential for the state to yield a republican society of independent farmers who, because of their self-sustaining fields on privately-owned land, would never succumb to the corrupting influences of politics, political parties, or big business. This agrarian ideal never materialized. Instead, commercial agriculture dominated the state's economy from the 1850s onward. Though California eventually became the nation's leading producer of fruits, fresh vegetables, and nuts, wheat and its milled offspring, flour, created the state's first agricultural bonanza.

Flour milling was one of the first large-scale manufacturing industries to succeed in California, and it brought the state into the world of international trade. During the 1840s, California had but a few small flour mills. The most famous of these was John Sutter's mill on the American River, not far from present-day Sacramento. Sutter never completed this mill, however, and never produced much flour. In January 1848, one of Sutter's employees, a man by the name of John Marshall, discovered gold. News of Marshall's discovery spread like wildfire and soon, as the saying goes, the world rushed in. In the following year, half of the people who populated California in 1848 descended upon the foothills of the Sierra, and they were soon joined by tens of thousands of people from the East Coast and around the globe. This rapid influx of people quickly strained California's agricultural production and exposed its inability to provide enough food – particularly breadstuffs – to the miners and other settlers. Despite the

¹ Sarah Boutelle, Julia Morgan, Architect rev. ed. (New York: Abbeville Press,

^{1995);} Anne Roller Issler, Stevenson and Silverado: The Life and Writing of Robert Louis Stevenson in the Napa Valley, California, 1880 (Fairfield, Calif., 1996), 5; "Scrapbook of the Sperry Century," Sperry Flour Company, Vallejo Maritime and History Museum.

potential of California's rich soil to feed the masses, the territory and young state depended heavily on imports. It received most of its flour from Chile.²

These circumstances rendered flour a valued commodity and led to high rates of inflation. In San Francisco, the price per barrel of flour in 1850 was \$15. Two years later that number rose to \$42 per barrel. Settlers in more remote locations suffered under much higher prices. In Columbia, a mining town in the Sierra foothills, for example, a barrel of flour cost as much as \$80. Tensions flared under these circumstances and caused miners and other residents of Mariposa to organize a meeting in 1852 to protest against the foreign-controlled flour monopoly.³

Ever opportunistic settlers sought to remedy California's dependence on imported flour. A number of small mills cropped up throughout northern California during the early 1850s; however, San Francisco, by virtue of its proximity to the largest market and easy access to arable land across the bay in Alameda County, established its position as the leader in flour production and retained this position for decades. The Sacramento Valley proved a decent competitor to San Francisco from the outset, but production in other regions remained relatively small until the 1880s. More important to Californians than which region produced the most flour was the fact that by 1853 the state had relinquished its dependence on imported flour. Prices fell accordingly.⁴

Two key factors during the 1870s led to the robust development of California's flour industry: improved transportation routes and increased demand by foreign countries. Specifically, the 1860s saw the construction and completion of the transcontinental railroad, followed by several smaller routes within the state during the 1870s. Better transportation routes both diminished the importance of a flour milling company's proximity to wheat fields and increased the geographical scope of a company's market. California's foreign export trade peaked during the 1880s when it included Europe, Asia, Mexico, Central America, and the Pacific Islands.⁵

During the 1880s, Abraham Dubois Starr established himself as the most powerful man in California's flour milling industry. Born in Ohio in 1830, Starr journeyed to California in 1849 and tried his luck with gold mining along the Feather River. By 1868 he had become a director of the California Pacific Railroad. That year, he arranged with the railroad to acquire land in Vallejo, a town thirty miles northeast of San Francisco, where he intended to build a flour mill on the isthmus directly across from Mare Island, home to the United States Navy. The Navy yard prompted the creation of a shipbuilding industry in Vallejo, and the prospect of a railroad attracted breweries and lumber mills to the city during the 1860s. These factors established Vallejo's status as an industrial center by 1870, and, combined with Vallejo's deep water channels and proximity to the San Francisco Bay and the San Joaquin Delta, which provided a continuous water route from the Pacific Ocean to Stockton, made the city an ideal site for a flour mill. The mill opened in 1869 with a production capacity of 200 barrels per day. Starr and his brother, who joined the business in 1870, acquired a second mill in Marysville, north of Sacramento, during the 1870s. By the mid 1880s their mills were producing over two thousand barrels of flour per day and the Starr Corporation had become the largest commercial milling establishment on the Pacific Coast.⁶

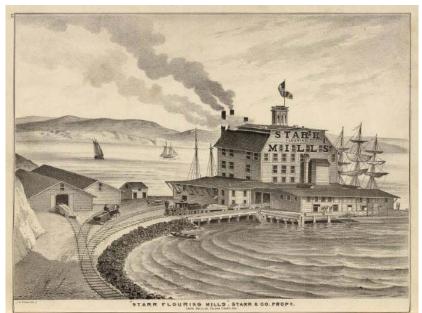
² Paul N. Woolf, "A Historical Appraisal of the Flour Milling Industry in California," (Ph.D. diss., University of California, Berkeley, 1939), chapter 1, pp. 1-4.

³ Ibid., 4-5.

⁴ Ibid., 7-12, chapter 2, p. 11.

⁵ Ibid., chapter 8, p. 13.

⁶ Ibid., chapter 3, p. 10; Walter A. Starr, "Abraham DuBois Starr: Pioneer California Miller and Wheat Exporter," *California Historical Society Quarterly*, 27 (September 1948), 193-197.



Meyer Straus, "Starr Flouring Mills," Vallejo, c. 1878. Courtesy of the David Rumsey Map Collection."

Starr embarked upon an ambitious scheme to expand his empire in 1884 by building a "very large" mill in Crockett, a town located six miles to the south of Vallejo. Wheatport, as the mill in Crockett was known, included wharves that allowed for the unloading of six to eight ships at once, a storage capacity of 125,000 tons of grain, and a production capacity of 6,000 barrels per day. According to Abraham Starr's nephew, Walter A. Starr, the foundations for the mill – concrete arches set in bedrock – marked "the first time a concrete foundation was significantly placed under water construction." Wheatport was, by far, the largest flour mill on the Pacific Coast, but it proved to be Starr's folly. Milling did not begin until 1891, and then only at a rate of 700 barrels per day. A financial panic then swept the country in 1893 and hit Starr's empire particularly hard. In 1893 Wheatport shut down and Starr declared bankruptcy. He died in 1894. The Starr Corporation owned the Vallejo mills until 1895, however, and continued to produce more than two thousand barrels of flour a day at those facilities.⁸

By the time Starr's empire fell in 1893, California's entire wheat and flour industry had begun to decline more generally. Ironically, the two factors that led to the expansion of California's flour industry – foreign trade and railroad expansion – also led to its demise. California producers flooded the foreign market with flour, which led to price deflation. Just as the transcontinental railroad opened California's opportunity to trade in American markets beyond the Sierra, so too could other states introduce their products to the California market. Midwestern and Plains states took advantage of this opportunity, especially Minnesota and Kansas. In addition, overproduction of the wheat fields in California depleted the soil and rendered the crops both harder to grow and lesser in quality. As a result, California agriculture came to focus on more diversified crops that required less overhead capital and yielded higher profits. Fruit and nut orchards came to dominate California's agricultural landscape, but other specialized

⁷ Meyer Straus, "Starr Flouring Mills," in Thompson & West, *Historical atlas map of Solano County*, *California* (San Francisco: Thompson & West, 1878), 21; David Rumsey Map Collection, www.davidrumsey.com, accessed July 18, 2007.

⁸ Woolf, "Flour Milling Industry," chapter 2, p. 11, 22; chapter 3, p. 10; Walter A. Starr, "Abraham Dubois Starr: Pioneer California Miller and Wheat Exporter," *California Historical Society Quarterly*, 27 (September 1948), 197.

crops like as paragus and barley, which was popular among European beer producers, replaced wheat fields as well.⁹

George Washington McNear took advantage of the depressed market to expand his family's business. To date, McNear devoted his business to shipping grain from the Port Costa warehouse, one of the many grain warehouses located along the Carquinez Strait. He appropriated as much surplus grain as possible to save his business in 1893. With so much surplus grain at hand and two vacated mills nearby, McNear entered the milling industry and in 1895 purchased both Wheatport and the Starr Mills in South Vallejo. McNear's son, Seward, a recent Harvard graduate, soon took over management and implemented important changes. He introduced a chemist to develop a method to reduce emissions from the milling process. This led to the establishment of a chemical laboratory, the main function of which was to determine which blend of grains produced the most highly desired flour.¹⁰

Sperry Flour Company

The Sperry Flour company stands out as one of the largest and most enduring flour milling companies in the state of California. Founded as a small barley producing mill in Stockton in 1852 by Austin Sperry, the Sperry Four Company grew to become the state's most important flour milling and feed producer by 1894. The company acquired the Vallejo site in 1910 and, apart from one fourteen-month period between 1924 and 1925, the Vallejo mill never shut down. It stood as a tribute to a company that consistently defied larger trends in the overall decline of the California flour industry during the twentieth century.

Austin Sperry was born in Cabot, Vermont, in 1819. He boarded the *Pharsalia* in 1849 and set sail for California where he opened a general store in Stockton. After the store burned down in 1851, Sperry decided to try his luck at milling. In 1852 he opened a small barley mill that was housed in a frame building and which used cordwood to fire a steam engine. The mill provided ground and supplied feed for horses and mules that carried commodities to miners. A year later, Sperry turned to flour milling instead. Sperry initially engaged in custom milling, turning wheat that farmers brought to him into flour. As a rule, farmers received six barrels of flour and 600 pounds of grain for every ton of wheat that they presented to Sperry for milling. When Sperry switched to commercial production, he could sell a sack of flour for forty dollars, a price he labeled as "XXXX" below the name on every bag.¹¹

The Sperry Flouring Company quickly grew. Franklin Mills had also opened in 1853 and, combined, the two mills soon produced enough flour to meet the demands of the mining settlements. They began to export their product to San Francisco. In 1856 Sperry purchased Franklin's equipment, increased production, and effectively monopolized flour production in Stockton. Austin Sperry died in 1881, but his brother, Samuel, assumed leadership of the company and incorporated it under California state law in 1884. George Sperry, Samuel's son, served as the corporation's first president. For reasons mentioned earlier, the next decade saw a precipitous decline in California's wheat and flour industry, which forced mills to either consolidate or close. Mills in San Jose, Santa Clara, Los Gatos, Hollister, Salinas, and Paso Robles consolidated in the late 1880s to form the Central Milling Company. Sperry then combined

⁹ Woolf, "Flour Milling Industry," chapter 8; Marguerite Hunt and Harry Lawrence Gunn, History of Solano County and Napa County: From their Earliest Settlement to the Present Time (Chicago, 1926), 101-106.

¹⁰ In 1897 McNear sold Wheatport to what became C. & H. Sugar. The site has functioned as a sugar refinery ever since then. Starr, "Abraham Dubois Starr," 200; James Gray, *Business without Boundary: The Story of General Mills* (Minneapolis, 1954), 111-112; Bert d. Ingels, "The Functions of the Sperry Lab," *Sperry Family*, 1 (Jan. 1917), 12-13.

¹¹ Woolf, "Flour Milling Industry," chapter 4, pp. 1-6; "Norman F. d'Evelyn, "Sperry Put the 'ton' in Stockton," Sperry Family, vol. 1 (Jan. 1917), 16-17; Gray, Business without Boundaries, 107.

forces with another milling giant, Horace Davis's Golden Gate mill in San Francisco, and absorbed the Central Milling Company in 1892. The resulting flour combine incorporated as the Sperry Flour Company and "embrace[d] practically all the flour milling interests of California." Crown Mills in Stockton and the Starr Mills in Vallejo remained Sperry's only significant competitors. When financial panic hit in 1893, Davis ruthlessly closed down what he deemed superfluous mills, including his own and all but three of the thirteen in the combine, which allowed the company to weather the storm and emerge as the nearly uncontested leader in California's flour industry when the Starr Corporation collapsed in 1894. Indeed, Sperry Company claimed domain over "a territory larger than two states."¹²

Sperry's competitive practices carried into the twentieth century. The Pacific Northwest posed the first threat to the California giant when mills in Oregon and Washington began to garner significant export business to Asia. In response, Horace Davis began to invest in warehouse and milling facilities in Tacoma, Washington. By 1906, Sperry Company bought the Tacoma facilities outright, a merger that warranted national headlines. Davis also saw potential in Los Angeles, where the population was beginning to grow rapidly. Sperry Company built a mill in that region in 1904.¹³ Vallejo came next.

Sperry Family, Vallejo

The second decade of the twentieth century marked Sperry Company's greatest period of expansion and dominance on the West Coast. Vallejo is central to that story. In 1910, Sperry Company acquired Port Costa Milling Company including the former Starr Mills facility in South Vallejo. Seward McNear, who had been managing the mill since his father acquired it in 1895, had made few improvements to the facilities, save the construction of a small a manager's house around 1901 and a building in 1908 to house a chemical laboratory.¹⁴



Sperry Flour Company, Vallejo facility, sometime between 1910 and 1916. Original Starr Mill and warehouse at left, new bulk house, which burned down in 1934, at right. A water tower stands atop the hill overlooking the site, a grain warehouse stands at the base of the hill, and just to the left of the old mill is the manager's house. Courtesy Floyd Miller and the Quarter-Century Club, General Mills.

¹² Woolf, "Flour Milling Industry;" "A Territory Larger than Two States," Sperry Family, 2 (Nov. 1918), 1-2; Gray, Business without Boundaries, 108-109; "A Flour Combine," Los Angeles Times, august 9, 1892, p. 1; "Closed Down," *ibid.*, February 22, 1895, p. 2.

¹³ Gray, Business without Boundaries, 110-111; "Flour Mill Consolidation," New York Times, March 5, 1902, p. 2; "Branch Mills for Sperry," Los Angeles Times, January 29, 1903, p. 20.

¹⁴ "Vallejo Sperry Family News," Sperry Family, 1 (Dec. 1917), 20; Sanborn Fire Insurance Co., Vallejo (1889), map no. 25; (1901), map no. 34; (1919), map no. 40.

Sperry Company soon embarked upon modernizing the facilities. The mammoth 500-foot long and 200foot wide storage warehouse, which dated at least to the 1880s, reflected California millers' reluctance to adopt the grain elevator system widely used in the midwestern and eastern parts of the country. Whereas a warehouse stored individual sacks of grain, an elevator system stored masses of grain that arrived in bulk via box cars or barges until the plant was ready to mill it. Farmers loathed the elevator system for a variety of reasons, but eastern capitalists found it to be more efficient and profit yielding. Charles Wheeler, an eastern capitalist, tried to introduce the newer system to Vallejo in 1869 when he constructed an elevator that towered above the city. Local grain growers did not take kindly to the eastern system, however, so Wheeler used the elevator as a traditional warehouse until it came crashing down into the Carquinez Straits in 1872. Vallejo did not see another grain elevator until Sperry Flour introduced one between 1910 and 1916. At that point, the company constructed a four-story, 83-foot by 173-foot structure (see above photo) on an asphalt-covered timber deck, just to the south of the old mill. The building held heavily timbered bins, was clad in galvanized iron sheeting, and was topped by a fiftyfoot tower. Thus the Vallejo mill entered modern milling in a monumental way.¹⁵

The morning of August 29, 1916, changed the landscape of the Sperry Company's Vallejo site in dramatic fashion. That day, defective wiring in the mammoth grain warehouse ignited the "worst conflagration in the history of Vallejo." Before fire boats from Mare Island could douse the flames, 125,000 sacks of flour, thirteen Southern Pacific Railroad box cars, five automobiles, and the warehouse were completely destroyed. Initially, spokesmen for the mill stated that a replacement structure would take several weeks to build, but Sperry's modernization impulse combined with world events to result in an entirely new plant that would take years to complete.¹⁶

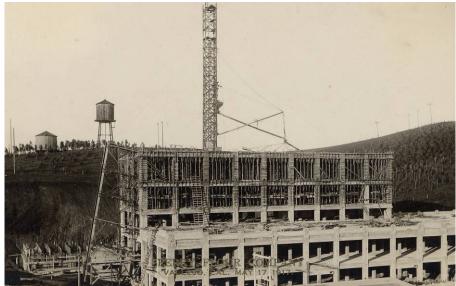
World War I placed new demands on American flour producers, including Sperry Company. While China – and more accurately, Hong Kong – accounted for one third of the company's export business before the war broke out in 1914, European allies increasingly depended on imported flour. France and England, in particular, lowered their import rates to encourage foreign trade. The United States government also increasingly restricted the geographic scope of exports, eventually forcing U.S. companies to trade almost exclusively with allied nations. Sperry's trade with Asia steadily decreased, then came to a halt with America's entry into the war in 1918, at which point the federal government commandeered trade ships to transport men and supplies to Europe. These restrictions did not reduce Sperry's productivity; on the contrary, demand for flour increased significantly during wartime and California produced ten percent of the flour exported from the United States in 1918. Sperry Company exported its "American Indian" brand to Europe. As a token of appreciation, empty sacks embroidered by Belgian women came back to Sperry Company.¹⁷ At least in the public literature, Sperry Company took great pride in its patriotic duties.

Two other events directly impacted the growth and importance of Sperry Company at this time. A worldwide crop failure in 1917 created a flour shortage and prompted volunteer rationing, at least in the United States. Australia stored surpluses of grain, but had inadequate facilities to process it; thus, California received the foreign crop, processed it, and distributed it. According to Walter A. Starr,

¹⁵ For more on grain elevators, grain futures, and the opposing viewpoints of capitalists and farmers, see William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1992), 97-147; Jim Ritch, "Sperry Fire Loss Set at \$300,000," *Vallejo Times-Herald*, August 31, 1934, p. 1, 2; "\$500,000 Fire at Sperry Flour Mills," *Vallejo Evening Chronicle*, August 29, 1916, pp. 1, 8; Marguerite Hunt and Harry Lawrence Gunn, *History of Solano County and Napa County: From their Earliest Settlement to the Present Time*, Vol. 1 (Chicago, 1926), 105.

¹⁷ Woolf, "Flour Milling Industry," chapter 8, p. 4; E. A. Parker, "Foreign Trade," Sperry Family, 1 (December 1917), 4; Gray, Business without Boundary, 112-113; Starr, "Abraham Dubois Starr," 200-201.

"Sperry Vallejo contributed greatly" to this effort and helped save a potentially disastrous situation.¹⁸ Road improvements further added to Sperry's expansion in 1917. That year, the Great Delta Highway opened. It essentially followed today's Highway 4, connecting Contra Costa County in the west to San Joaquin County in the east, and facilitated the metropolitan growth of the region. Similarly, with a larger population to serve and no longer bound by the rigid route of the railroad or hampered by rough roads connecting the two counties, demand for and the geographical distribution of Sperry Company's products could grow too. Vallejo, again, would play a prominent role.¹⁹



New silo (foundation completed at left), mill and warehouse under construction, May 17, 1917. Courtesy of Floyd Miller and the Quarter-Century Club, General Mills.

More importantly, increased demands for flour products required larger production facilities. Beginning in 1917, Sperry Company expanded its Vallejo facilities. As the federal government sharply curtailed any construction that did not contribute to the war effort, these buildings could only be constructed because of their importance to America's involvement in World War I. Sperry hired civil engineer Maurice C. Couchot (1871-1933) to design the new plant facilities. Couchot emigrated from France as a teenager in 1888 and came to some local prominence as a civil engineer in the San Francisco Bay Area following the earthquake and fires of 1906. Some of his more notable projects include a public swimming and recreation complex in Alameda (1915), Broadway Spring Street Mercantile Arcade in Los Angeles (1923), the Southern Pacific Railroad Depot in Glendale (1925), and the Bishop Theater in Oakland, which was designed in 1914 by Edward T. Foulkes, cost an estimated \$100,000, and was touted as "one of the most modern and elaborate in Oakland... a class A structure."²⁰ At Vallejo, Couchot oversaw the construction of an eight-story flour mill and warehouse, a monumental grain elevator and storage bins, a two-story administration building, and a multi-use garage, each of which remains on the site today.

¹⁸ Starr, "Abraham Dubois Starr," 201.

¹⁹ Sperry Family, 1 (January 1917), 18.

²⁰ "Natatorium to be City Project," Oakland Tribune, April 18, 1914, p. 9; "Plans for New Bishop Theater are Filed," *ibid.*, August 22, 1915, p. 22; M. C. Couchot, "A Pictorial Record of the Results of Earthquake and Fire in San Francisco," *Engineering Record*, 53 (May 5), 577–578; ArchitectDB,

https://digital.lib.washington.edu/php/architect/, accessed August 9, 2007; United States Census, 1920; California Death Index, 1930-1939, vitalsearch.com, accessed August 9, 2007.



Completed mill, warehouse, and storage bins, ca. 1920. Courtesy Floyd Miller and the Quarter Century Club, General Mills.

Couchot applied to these buildings the most modern design and construction methods available. Ernest Ransome had built the first concrete warehouse in California in the 1880s for borax mining magnate, Francis Marion Smith. It was located in city of Alameda. Only after Ransome patented a new construction method in 1902, however, did reinforced concrete become more widely used. Still, as preeminent industrial architect Albert Kahn noted in 1918, architects and engineers rarely saw beyond the functional possibilities of concrete and rarely saw its aesthetic possibilities. Couchot's design for the mill and associated buildings marked an early effort to fuse the functional and aesthetic potential of the most modern reinforced concrete construction methods available. He created a reinforced concrete skeletal form, which allowed him to maximize the amount of natural light that penetrated the building by installing large, multi-lite windows between the structural columns. The windows also created aesthetic interest, as did the brick veneer applied to the exterior walls, a shaped parapet, and a projecting cornice. Awning windows provided ventilation for the otherwise hot and noisy confines of the mill. A two-story warehouse extended the bottom of the mill by 200 feet to the south and 46 feet to the west. Behind these buildings stood the silo, a reinforced concrete structure that consisted of a head building measuring 48 feet by 51 feet and 124 feet 6 inches high, and a series of storage bins totaling a 1 million bushel capacity. Thirty circular bins measuring 15-feet in diameter and 80 feet high combined with twenty-two intermediate bins to provide storage space for over 11 thousand tons of grain; they were arranged in rows of three. Together, the mill, warehouse, and silo formed a balanced composition as viewed from Mare Island Strait. The silo's wall of windowless, rounded concrete balanced the flat, rectilinear form of the mill and its walls of windows. Similarly, the long horizontal plane of the warehouse provided balance to the vertical plane of the bins and mill, while the three buildings resulted in a pleasantly proportioned stepped massing.²¹

²¹ Sanborn maps indicate that the silos contained sixty bins, which would make sense given the math of twenty rows of three bins. Historic documentation does not account for the difference in the enumeration of bins provided by Sperry Flour Company in 1917 and the number of bins suggested by the historical maps and the bays of the extant structure. Woolf, "Flour Milling Industry," chapter 4, pp. 9-11; *Sperry Family*, 2 (February 1918), special issue devoted to the new Vallejo facilities; Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (New York, 1999), 156-160, 201-223, 240-242; Peter Collins, *Concrete: The Vision of A New Architecture* (Montreal, 2004), 61-64; Sanborn Fire Insurance Co., Vallejo, Solano County, California (1919 & 1950), map no. 40.

Practical concerns and location undoubtedly informed Couchot's design and plan for the new mill, but his attempt to create an architecturally interesting industrial form resulted in a significant honor for an engineer: the compliments of the architectural world. *Architect and Engineer*, the most prestigious architectural journal published on the West Coast, included an article by aforementioned Albert Kahn in its September 1918 edition. Kahn had risen to prominence as the architect of automobile factories in Detroit and for bringing a high level of aesthetic value to the functional industrial form, and he designed the Ford Motor Company Assembly Plant in Richmond, California, in 1930. In this article, Kahn called upon fellow architects to bring their refined sense of beauty to the industrial landscape. Editors of *Architect and Engineer* included photographs of industrial architecture in California that they deemed worthy of distinction according to Kahn's standards, and the images included two of Maurice Couchot's designs: the building for the National Carbon Co. in San Francisco, and the Sperry Flour Company's new plant in Vallejo.²²

The new plant included several smaller buildings as well. The most prominent of these was, and is, the administration building. This two-story building has a reinforced concrete frame and floor, brick walls, and wooden partitions with metal lath and plaster. A series of ten wood frame casement windows along both the front and rear elevations, as well as a series of six similar windows along the sides of the buildings provided natural light and ventilation. While the administration building complemented the mill and warehouse, it featured several more decorative elements that lend the structure a classical style and signaled its status as the business and science center of the mill, including a stepped parapet, embellished cornice, and Classical entryway. A medallion with the company logo adorns the center of the parapet.



Administration building and garage, c. 1920. The manager's house is perched on the hillside above. Courtesy of Floyd Miller and Quarter Century Club, General Mills.

The administration building served two functions: a business office on the ground floor and a lab on the second floor. The Business offices included executive offices, a general office, a consultation room, the

²² "The Architect in Industrial Building," *Architect and Engineer*, 54 (Sept. 1918), 101-109; Henry Jonas Magaziner, "Working for a Genius: My Time with Albert Kahn," *APT Bulletin*, vol. 32 no. 2/3 (2001), 59-64; Alan Conant to Editor, *ibid.*, vol. 18, no. 3 (1986), 3; Betsy Hunter Bradley, "Industrial Modernism: Architecture and Ideology," *Journal of the Society of Architectural Historians*, 54 (December 1995), 508-510.

vault, and restrooms, while the laboratory included such things as an experimental bakery, a mill room, grain room, research laboratory, and chemical storage facilities. Equipped with "water, gas, electric current, compressed air, vacuum, high and low pressure steam, and plenty of sinks and drains," the Sperry company boasted that the laboratory and bake shop were "up to the minute in every respect." Notably, men and women worked side by side at all the tasks in the lab, be them strictly scientific or simply baking. The lab relocated to the second story of the mill during late 1960s or early 1970s.²³

Construction of the new plant had begun in January of 1917 and though labor shortages related to wartime activities presented certain obstacles to completing the project, the new mill and warehouse opened for production in November of that year, and the monumental bins were ready by August of 1918. The new mill produced 1,800 barrels of flour on its first day. Functioning at capacity, it soon produced 3,500 barrels per day, which, combined with the 1,500 barrels per day that the original Starr mill produced, totaled 5,000 barrels per day. Sperry Company leaders referred to the new Vallejo facilities as "our crowning achievement," "the king of all Sperry mill," and "one of the best illustrations to show the rapid progress made by our Company during the past six years."²⁴

During this period of construction and expansion, Sperry also made alterations and additions to the manager's house located on the hillside above the garage. Sanborn maps indicate that a house had been constructed at the site by 1901, and photographs show that it remained unchanged until World War I. At that time, Sperry enclosed the front porch and added a second story above it that extended nearly the length of the house. Sperry also added a cross gable to the southeastern elevation of the house and changed the window configuration of the original gable and front elevation to create a more fluid relationship between the indoors and outdoors. New landscaping included two palm trees and a pond from which a stream flowed downhill. In the middle of that stream stood a miniature decorative mill reminiscent of early nineteenth-century, water-powered mills. Though the landscaping is largely overgrown and the windows and doors of the house have been stripped, it looks today much like it did when these alterations were made around 1917.²⁵

The sylvan setting and casual, rustic aesthetic of the house make it a good example of the First Bay Tradition. This domestic style of architecture was begun in the Oakland hills during the 1880s by amateur architect and minister, Joseph Wurster. Such renowned architects as Bernard Maybeck, Coxhead and Coxhead, Willis Polk, Walter Ratcliff, Jr., and Julia Morgan popularized it during the 1890s and 1900s as an alternative vision of the modern urban landscape, one that stood in direct opposition both to industrial buildings and to the dirty, cramped, and tall buildings of cities like New York, Chicago, or Pittsburg. It drew its inspiration from nature – climate, topography, landscape – and relied upon natural materials like unpainted shingles and decorative plants. This tradition influenced Bay Area architecture for nearly a century and constitutes one of the most comprehensive examples of regional expressionism.²⁶

²³ Bert D. Ingels, "The New Office and Laboratory," *Sperry Family*, 2 (Feb. 1918), 19-20, 22-23; Floyd Miller, interview with Karen McNeill, July 26, 2007, General Mills Plant, Vallejo, Calif.

²⁴ "Out Company Moves Forward," Sperry Family, 2 (Feb. 1918), 8; photos of old and new Vallejo mills, *ibid*. (July 1918), 20-21.

²⁵ Historic photos, Quarter Century Club scrapbook; Sanborn Fire Insurance Company, (1889), map no. 25; (1901), map no. 34; (1919 and 1950), map no. 40.

²⁶ For more on the First Bay Tradition, see Richard Longstreth, On the Edge of the World: Four Architects in San Francisco at the Turn of the Century (Cambridge, 1983); Leslie M. Freudenheim, Building with Nature: Inspiration for the Arts & Crafts Home (Salt Lake City, 2005); and Lance V. Bernard, Architecture and Regional Identity in the San Francisco Bay Area, 1870-1970 (Lewiston, NY, 207).

Between 1918 and 1920, the Vallejo plant made several additions, mostly in response to the increased traffic and productivity that the new mill and silos created. Maurice Couchot designed at least two of the new buildings and additions. In 1918, Sperry ordered the construction of a small warehouse and tin shop. This single-story frame building had no ornamentation and stood directly to the southeast of the new mill and warehouse. It was completed in 1919 and later served as a cafeteria, then as a site for company functions (holiday parties, etc.), until General Mills demolished the factory during the mid-1980s. Couchot also designed a single-story garage for Sperry in 1918. Like the mill, warehouse, and administration building, this reinforced concrete structure had a brick veneer, a parapet with coping, and a projecting cornice. Behind its rollup metal doors, one would find space to store automobile accessories, water for radiators, gas and distillate tanks, pumps, and air compressor for filling tires, a work bench for addressing small repairs, and an oil room. Increased traffic at the wharf rendered the original Starr mill and warehouse inadequate, so Sperry filled in the wharf where there was a gap between the Starr warehouse and the site of the iron-clad bulkhouse, then built a two-story, continuous door and hatch addition along a 320-foot stretch of the wharf. The hatch windows on the second floor allowed laborers to use slings to unload ships. A reinforced concrete bag factory that included printing and engraving facilities, completed this period of significant expansion.²⁷

General Mills

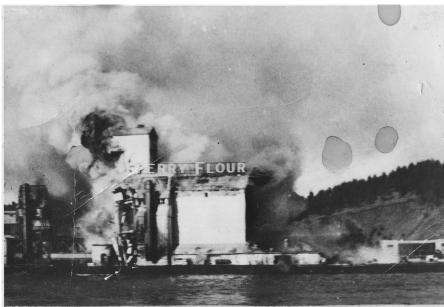
The 1920s brought significant changes to the Sperry Flour Company. It remained the industry powerhouse on the Pacific Coast and one of the three most powerful milling companies in the nation, but the robust growth that characterized 1910-1920, and especially 1917-1920, slowed. In 1924, the Vallejo plant had to shut down temporarily. As mentioned earlier, California's flour industry was well past its prime by then, and wartime expansion had left the nation – let alone California – with too many mills when demand decreased during the postwar period. Roy Bishop, president of Sperry Company, worked to consolidate the Pacific Coast market, but he was also looking to sell the corporation. Meanwhile, James F. Bell and Harry Bullis, of the newly formed General Mills Corporation in Minneapolis, had their eye on Sperry Company and virtually all the other important flouring corporations in the country. They, too, saw the importance of consolidation in the postwar era and created General Mills as a holding company under which affiliates would function with relative autonomy. Sperry Flour Company thus became a subsidiary of the General Mills Corporation in May of 1929.²⁸

Few changes occurred to the landscape of the Sperry Flour Company before World War II. The one exception came in 1934, almost eighteen years to the day that the old bulk house burned down: During the afternoon of August 30, 1934, the bulk house dating to between 1910 and 1916 burned in dramatic fashion. Three fire departments and tug boats fought the blaze for three hours, but could not save the structure or the 6000 tons of wheat, corn, barley, and oats that it contained.²⁹

²⁷ Images from Quarter Century scrapbook; M. C. Couchot, "New construction," *Sperry Family*, 2 (Nov. 1918), 10-11; *ibid.*, 3 (June 1919), 26; "Vallejo's Automatic Grain 'Traffic Squad," *ibid.* (Dec. 1919), 31; Interview with Floyd Miller.

²⁸ Gray, Business without Boundary, 129-154, esp. 147-151; N.E. DeMarais to S. Frandsen, May 17, 1930, Quarter Century Club scrapbook, c/o Floyd Miller.

²⁹ Jim Ritch, "Sperry Fire Loss Set at \$300,000," Vallejo *Times Herald*, August 31, 1934, p. 1, 2.



Bulkhouse aflame, 1934. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

World War II marked another milestone in the history of General Mills and the Vallejo plant. Production increased, much as it did during World War I, and corporations were expected to forsake personal profit for the greater good of the country – to be patriotic corporate citizens. The corporation expanded in entirely new directions as well, becoming weapons developers. Harry A. Bullis, who became president of General Mills in 1942, also anticipated an economic downturn once the war ended, just like in 1920, but intended that his company not experience such a slump. Well before the war ended in 1945, Bullis prepared a postwar economic plan that sought to increase production by developing a greater variety of products, cheaper products, and modern, efficient plants.³⁰



New feed warehouse, under construction, 1947. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

Several aspects of this restructuring plan directly affected the Vallejo site. General Mills no longer acted simply as a holding company with autonomous members who operated under their own brand names;

³⁰ Gray, Business without Boundary, 234-241.

thus, "General Mills" replaced "Sperry Flour" on the grain silos. Bullis also temporarily closed down many of the corporation's facilities for upgrading and restructuring. Citing a grain shortage, rather than the implementation of a plan that had been conceived of more than a year earlier, General Mills announced that it would close the Vallejo plant for two weeks in May of 1946 and, upon reopening, operate it at reduced capacity. The landscape of the plant changed that year too. In November, the former site of the Sperry recreational facilities gave way to a single story, 42,500 square-foot reinforced concrete feed warehouse. Railroad tracks that ran through the property dictated that this building take a fan shape, which was certainly unique to the site and unusual for industrial architecture in general. A clerestory of continuous corrugated fiberglass windows constitutes the building's most notable feature.³¹ The new warehouse was completed in 1947 and a conveyor shed connected it to the old Starr Mill. The relationship between the two buildings only lasted for about a decade, however, as the Starr Mill and warehouse succumbed to fire around 1957.³²



General Mills, Vallejo plant, c. 1947. The old Starr Mill stands near the bottom of the photo, while the new feed warehouse is located at the far left and the bag factory is located at the far right. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

Notably, following the 1957 fire, General Mills did not decide to rebuild on any scale approaching that of the old mill. Instead, the only new addition at this time was a relatively modest bulkhouse encased in corrugated asbestos – a building material touted for its fireproof qualities.³³ While the Vallejo plant continued to mill grain for nearly fifty years, its heyday as the jewel the crown of a milling dynasty had long since passed. Today, a portion of the dock and piles on which the mill and warehouse stood are all that remain of the old Starr Mill.

³¹ L. V. Gagin, "Development of Fiber Glass: A History of Glass Compositions and Materials," *Canadian Clay and Ceramics Quarterly*, vol. 53, no. 4 (1980), 10-14.

³² "Local News," Oakland Tribune, May 20, 1946, p. 11, historic photos in Quarter Century Scrapbook.

³³ Betsy Hunter Bradley, The Works: The Industrial Architecture of the United States (New York, 1999), 121.



General Mills plant shortly following the destruction of the Starr Mill, c. 1957. The asbestos-clad bulkhouse stands next to the 1917 warehouse. Courtesy of Floyd Miller and the Quarter Century Club, General Mills.

New construction at the Vallejo plant has been minimal during the last half century. The "new bulkhouse" joined the old one in 1965 and both the tin shop/cafeteria and bag factory were demolished during the 1980s. While three relatively small structures – the welding shop/pipe storage warehouse, forklift repair building, and the mill canopy run – have been built on or near the site of the old tin shop/cafeteria, the bag factory site remains empty. Prompted by the increased rate of production that resulted from a long-term changeover to a pneumatic conveyance system, General Mills constructed a bulkhouse next to the feed warehouse in 1992. The completion of that building marked the last major architectural change to the site.³⁴

REGULATORY FRAMEWORK

The following identification of potential historic resources is based primarily on architectural evaluation and general history of the subject area. The regulatory background provided below offers an overview of local, state, and federal criteria used to assess historic significance. In determining potential historic resources within the study area, Carey & Co. applied the lowest threshold for significance offered by state and local criteria for designation.

Federal Criteria

National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context."³⁵ The National Register identifies four possible context types, of which at least one must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these are:

A. Property is associated with events that have made a significant contribution to the broad patterns of our history.

³⁴ See historic photos in Quarter Century Scrapbook; interview with Floyd Miller.

³⁵ National Park Service, National Register Bulletin 15, 3.

- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.³⁶

Second, for a property to qualify under the National Register's Criteria for Evaluation, it must also retain "historic integrity of those features necessary to convey its significance."³⁷ While a property's significance relates to its role within a specific historic context, its integrity refers to "a property's physical features and how they relate to its significance."³⁸ To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity:

Location is the place where the historic property was constructed or the place where the historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

Setting is the physical environment of a historic property.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property. $^{\mbox{\tiny 39}}$

Since integrity is based on a property's significance within a specific historic context, an evaluation of a property's integrity can only occur after historic significance has been established.⁴⁰

Evaluation

See evaluation following state criteria below.

³⁶ National Park Service, National Register Bulletin 16A, 75

³⁷ National Park Service, National Register Bulletin 15, 3.

³⁸ Ibid, 44.

³⁹ Ibid, 44-45.

⁴⁰ Ibid, 45.

State Criteria

California Office of Historic Preservation's Technical Assistance Series #6, *California Register and National Register:* A *Comparison*, outlines the differences between the federal and state processes. The context types to be used when establishing the significance of a property for listing on the California Register are very similar, with emphasis on local and state significance. They are:

- 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- 2. It is associated with the lives of persons important to local, California, or national history; or
- 3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
- 4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.⁴¹

Like the NRHP, evaluation for eligibility to the California Register requires an establishment of historic significance before integrity is considered. California's integrity threshold is slightly lower than the federal level. As a result, some resources that are historically significant but do not meet NRHP integrity standards may be eligible for listing on the California Register.⁴²

California's list of special considerations is shorter and more lenient than the NRHP. It includes some allowances for moved buildings, structures, or objects, as well as lower requirements for proving the significance of resources that are less than 50 years old and a more elaborate discussion of the eligibility of reconstructed buildings.⁴³

In addition to separate evaluations for eligibility to the California Register, the state will automatically list resources if they are listed or determined eligible for the NRHP through a complete evaluation process.⁴⁴

California Historical Resource Status Codes

The California Historic Resource Status Codes (status codes) are a series of ratings created by the California Office of Historic Preservation (SHPO) to quickly and easily identify the historic status of resources listed in the state's historic properties database. These codes were revised in August 2003 to better reflect the many historic status options available to evaluators. The following are the seven major status code headings:

- 1. Properties listed in the National Register or the California Register.
- 2. Properties determined eligible for listing in the National Register or the California Register.
- 3. Appears eligible for National Register or California Register through Survey Evaluation.
- 4. Appears eligible for National Register or California Register through other evaluation.
- 5. Properties recognized as historically significant by local government.

⁴¹ California Office of Historic Preservation, Technical Assistance Series 6, 1.

⁴² Ibid, 1.

⁴³ Ibid, 2.

⁴⁴ All State Historical Landmarks from number 770 onward are also automatically listed on the California Register. (California Office of Historic Preservation, Technical Assistance Series 5, 1.)

- 6. Not eligible for listing or designation.
- 7. Not evaluated for National Register or California Register or needs revaluation.

Evaluation

Carey & Co. has concluded that six structures on the property of the former Sperry Flour Company site appear eligible for listing on the California and National Registers; four additional structures that meet the fifty-year threshold for consideration as historical resources do not merit such distinction. Individual evaluations for all ten of these structures follow.

The site has six additional structures – the new bulkhouse, the welding shop, the pipe storage shed, the forklift repair shop, and the mill run canopy – that do not meet the fifty-year threshold and do not bear any characteristics that would warrant their listing on the California or National Registers. These structures do not exhibit exceptional architectural merit, any intimate association with a major historical event or pattern, or any association with a historical person. They are also unlikely to yield information that is important to history or prehistory.

While the history of this site in the flour milling industry dates back to 1869, its period of significance extends from 1917 to 1920, being the period when the flour milling facility was greatly expanded in response to the increased demand for American flour spurred by World War I. The United States government strictly curtailed construction activities during World War I to projects that directly benefited the war effort, and increased national and international demand for flour during the war prompted the construction of the mill, silos, administration building, and garage at Sperry's Vallejo site. In keeping with its newly achieved status as the mill of greatest importance within the Sperry Flour Company empire, the company also remodeled the manager's house, enlarging it and designing it to conform with the then popular Bay Tradition style of domestic architecture. Increased production capacity at the mill rendered the original Starr Mill and warehouse inadequate, so the company also added on to the warehouse and wharf. Although that building and warehouse disappeared long ago, the extant pilings and dock date at the latest to this period of significance. Some of the pilings may date to as early as 1869. The Vallejo site's importance within the Sperry Flour Company had waned by the mid-1920s.

Flour Mill

The Flour Mill appears to be eligible for the California and National Registers under criteria A/1 and C/3. Architecturally, the building is a relatively early example of reinforced concrete skeletal frame construction, which allowed for more windows and, therefore, natural light and ventilation in a factory environment. The brick cladding, entablature, and parapet also reflect an effort to combine aesthetics with function in industrial design, as well as experimentation with the aesthetic potential of concrete itself. The building's relationship to the mill further enhanced the architectural composition of the mill. Located directly in front of the silos and with the mountain serving as a backdrop, the mill not only functioned together to produce flour, but created an unusually picturesque statement for industrial architecture. The mill is also significant for its association with World War I, a defining event of the twentieth century and an event of international importance. Since the federal government curtailed most construction not related to the war effort, it is entirely likely that the mill would not have been built if it had not been for the importance of American grain milling capacity during that period. Whereas the Sperry Company initially intended to build a simple warehouse for its old mill, demand for flour during wartime prompted the company to build the most modern facility possible, which allowed it to mill grain at a rate necessary to feed American and European soldiers and civilians alike. Subsequent to the war, the new mill also catapulted the Vallejo plant to the most important position in the pantheon of the most powerful Pacific Coast milling company's numerous facilities.

The building has undergone some alteration. Almost all of the windows are non-original, as are the metal awnings, rooftop mechanical units, a conveyor shed from the mill to the bakery warehouse, and a partially enclosed passageway supported by metal posts and clad with corrugated fiberglass sheets that is located at the northwest end of the building. The conveyor shed at the northwest end of the building dates to the construction of the mill, but does not retain a high level of integrity; it has been truncated and reclad.

While these alterations affect the mill's integrity of materials, design and workmanship, the mill retains sufficient integrity to convey its architectural and historic significance. Alterations have occurred mostly to secondary features and nearly all are reversible. Moreover, the building retains its original scale, plan, and over all design. In addition, the building has not been moved, and its setting, on the narrow strip of bedrock next to the Mare Island Strait with the silos and mountain serving as backdrop, has changed little, leaving the building with integrity of location, setting, feeling and association. These factors enable the mill's ability to express its aesthetic intent, its function as a mill, and its historic role as the most important mill in the Sperry Flour Company during World War I and its immediate aftermath. The mill thus appears to be eligible for the National and California Registers under criteria A/1 and C/3.

Grain Silos

The grain silos appear to be eligible for the California and National Registers under criterion A/1. Like the mill, the silos derive historical significance from their association with World War I and the emergence of the Vallejo plant as the most important facility in the most important grain milling corporation of the Pacific Coast. These silos, built in the most modern methods, allowed the mill to store the grain necessary to produce enough flour for American and European soldiers and civilians, and their monumental scale speaks to massive quantity of flour that the mill was expected to produce. The location of the silos, directly behind the mill, further underscores the intimate relationship between the two buildings and their common function to produce flour on an unprecedented scale for both the Vallejo mill and the Sperry Flour Company.

Also like the mill, the silos retain a high level of integrity. With the exception of metal slider windows replacing some multi-lite awning windows within the large, multi-lite fixed metal windows of the top stories of the building, the silo remains virtually unchanged since its construction in 1917-1918. This lends the silos integrity of design, materials, and workmanship. The scale and location of the silos directly behind the mill remains intact as well, fostering integrity of setting, association, and feeling. This high level of integrity enables the silo to convey its historic relationship to the mill, their collective contribution to World War I, and the significance of the Sperry Flour Company in California and the grain industry.

Administration Building

Built in 1917, the Administration Building belongs to the site's period of significance (1917-1920) and reflects the significant growth of the plant both in size and prestige within the Sperry corporation and milling industry. Like the mill and silos, the administration building reflects a relatively early example of reinforced concrete construction. Even more than do the mill and silos, this building demonstrates early efforts to use concrete for aesthetic purposes rather than just functional ones. Particularly notable elements include the raised relief on the cornice, the inset panels on the window surrounds, molded detailing at the based of the building, and the pilasters, pediment, and entablature of the entry surround. These classical features also contribute to the historic feeling of the building.

The building retains a high level of integrity. It has not moved and its surroundings have changed little since it was constructed, lending the building integrity of location, setting, and association. The building

has undergone some alterations, including the addition of metal awnings, filling in of some rear windows, and replacement of the front door and windows. While these alterations affect integrity of materials, and workmanship, they are easily reversible and do not affect integrity of design, scale, plan, or overall expression of the aesthetic and historic feeling of the building. The building retains sufficient integrity to convey its historic significance and thus appears eligible for the California and National Registers under criteria A/1 and C/3.

Garage

The garage is the fourth and last structure on site to be built specifically in response to wartime demand for flour in the United States and Europe. Increased production at the plant due to its central role in flour production for the Sperry Flour Company required the construction of expanded maintenance and storage facilities. Like the mill and administration building, it is a reinforced concrete structure that combines aesthetic and functional considerations. Alone, however, the building does not achieve architectural significance.

The building retains a high level of integrity. Alterations include non-original roll-up doors, and bricking in of one bay. Both of these alterations are reversible. Otherwise, the structure retains integrity of location, design, setting, materials, and workmanship, which contributes to its ability to express the aesthetics of the period in which it was built and its association with Sperry Flour Company's expansion at the Vallejo plant in the wake of increased demand for flour during World War I. The building thus appears to be eligible for the California and National Registers under criterion A/1.

Manager's House

The Manager's House appears to be eligible for the California and National Registers under criteria A/1 and C/3. It dates to about 1900 or the late 1890s, but achieved is current aesthetic and plan around 1917, during the period of significance for the mill, silos, administration building, and garage. Sperry Flour Company enlarged the house to accommodate a manager of the then most important facility within the company's flour empire. The house also embodies defining characteristics of the Bay Area Tradition, a regional style that influenced domestic architecture for nearly a century and which contributed to the emergence of a regional identity. Set apart from the industrial buildings, the house creates a sylvan contrast to the modern industrial landscape. Clad with unpainted brown shingles and adorned with no exterior decoration, the house blends into the landscape and allows the natural setting to provide ornamentation.

The manager's house has undergone numerous alterations. Sanborn maps and historical photos indicate that the structure dates to at least 1901, when it first appeared on a map, and was altered incrementally over a fifty-year period. The most extensive renovations took place between 1901 and 1919, and most likely in 1917 when the new mill, warehouse, silos, administration building, and garage were built. At that point, the owners enclosed the front porch, adding a second story on top of part of it to create a second gable and leaving a smaller section as just one story to create a new entryway. A third window was added to the second story of the original gable and a three-panel picture window was added to the first story. Other additions included a southerly extension to the front façade, ultimately creating a two-story cross gable plan. At the rear of the house, the gables did not meet, resulting in a U-shape plan. Between 1919 and 1950, that changed. The owners extended the rear wall of the second story to close the U-shape plan, added a second story to the rear part of the house, which created a fourth gable, added a slightly projecting single-story extension to the northern façade of the house, and created a back porch. Since 1950, the rear porch has either been demolished and replaced or closed in and roofed to make way for a second story balcony. Most of the windows, exteriors doors, and interior fixtures were removed during the 1990s.

Despite these changes, Carey & Co. has determined that this structure retains sufficient integrity to convey its historic significance. Alterations to the structure are not obvious upon viewing it; Carey & Co. had to compare Sanborn maps to periodize them and figure out how exactly the building changed over time. The earliest images of this building indicate that it has always been clad with unpainted wood shingles, making it an early example of the First Bay Area Tradition. Subsequent alterations have always respected this historical precedent, allowing the building to continue to express historical character. Moreover, the most significant alterations were made ninety years ago and the structure as it appeared then remains largely uncompromised. Apart from the missing windows and doors, which do adversely affect the integrity of the structure, all of the alterations since 1919 were made towards the rear of the building, making them unobtrusive and only moderately visible. This house, therefore, exudes an overall historical character that dates to World War I, the period of significance to which the other historical buildings at the plant belong.

Dock

This dock conceivably tells a story of the mill site from its earliest days in 1869 and appears to be eligible for the California and National Registers under criterion A/1. Sanborn maps indicate that the portion of the dock that retains the highest level of integrity, meaning the most southwesterly section that still has horizontal boards atop the piles and where remnants of the railroad track exist, was completed by November of 1889. The piles immediately adjacent to it date to 1919, when Sperry Company expanded the wharf and warehouse to accommodate increased traffic that the new mill and silos prompted. Exactly how far that extension was is unclear; beyond it, the piles may date to as early as 1869, though probably a bit later. The dock retains integrity of location, setting, association, having never been moved and being still adjacent to an industrial site. While the dock's integrity of design, materials, workmanship and feeling have been partially compromised by the loss of considerable material, this loss does not prevent this simple dock structure from conveying its historic significance.

Barn

Sanborn maps indicate that the barn was constructed between 1901 and 1919, placing it well above the 50-year-old threshold for consideration for the California and National Registers. Age alone, though, does not automatically make a structure historically significant. Nothing links the barn to the period of significance for the former Sperry Flour Company mill site. Moreover, the barn, which is poor condition, does not retain sufficient integrity to convey its potential historical significance as an example of a particular type of architecture. In particular, the corrugated metal siding, which clads the entire building, is not original and irreversibly obscures the original design. The barn does not appear eligible for the California or National Registers.

Manager's Garage

Sanborn maps indicate that a structure was built at this location between 1901 and 1919 and that this structure had an L-shaped plan. Its date of origin may therefore fall within the period of significance for the site of the former Sperry Flour Company mill. The current structure has a rectangular plan, suggesting that it has been altered significantly or is non-original and dates to some point after 1950. These factors, alone, highly compromise the historic integrity of the building. It does not retain sufficient integrity to convey its historical significance and Carey & Co. has determined that it is ineligible for the California and National Registers.

Warehouse

Although this building was completed in 1947 and therefore falls within the fifty-year threshold for consideration for the National and California Registers, it falls well outside the period of historical significance of the mill site. Its style reflects post-World War II industrial architecture, but is not the

work of a master or a rare and/or exceptional example of such postwar architecture that it conveys a significant level of historical feeling in and of itself. As the architectural style does not conform to that of the property's period of historical significance, it does not contribute to the historical feeling of the site. The building retains a high level of integrity, having undergone few significant alterations. The conveyor shed and bulkhouse adjacent to the building detract, however, from its historical integrity, as the former originally connected the building to the old Starr Mill and warehouse, while the latter did not exist until 1992. Because it is not associated with the site's period of historic significance, this building does not appear to be eligible for the California or National Registers.

Old Bulkhouse

The old bulkhouse is fifty years old, just meeting the age requirement for the California and National Registers. It has one notable feature: corrugated asbestos cladding. However, this material was not new to industrial design and otherwise the building does not exhibit architectural distinction, is not associated with the life of an important person, will not yield information important to prehistory or history, and is not associated with significant events in the life of the property, city, state, or country. Therefore, Carey & Co. has determined that the structure is not eligible for the California or National Registers.

BIBLIOGRAPHY

Periodicals

Architect and Engineer Los Angeles Times The Millwheel Oakland Tribune The Sperry Family Vallejo Evening Chronicle Vallejo Herald-Tribune Vallejo Times Herald

Articles, Books, and Manuscripts

- Bernard, Lance V., Architecture and Regional Identity in the San Francisco Bay Area, 1870-1970 (Lewiston, NY: The Edwin Mellen Press, 2007).
- Bradley, Betsy Hunter, The Works: The Industrial Architecture of the United States (New York: Oxford University Press, 1999).
- California Office of Historic Preservation, California Register of Historical Resources: The Listing Process, Technical Assistance Series 5 (Sacramento, CA: California Department of Parks and Recreation, n.d.
- California Office of Historic Preservation, California Register and National Register: A Comparison, Technical Assistance Series 6 (Sacramento, CA: California Department of Parks and Recreation, 2001).
- California Office of Historic Preservation, User's Guide to the California Historical Resource Status Codes & Historic Resources Inventory Directory, Technical Assistance Bulletin 8 (Sacramento, CA: California Department of Parks and Recreation, 2004).

- Cronon, William, Nature's Metropolis: Chicago and the Great West (New York: W. W. Norton Press, 1992).
- Freudenheim, Leslie M., Building with Nature: Inspiration for the Arts & Crafts Home (Salt Lake City: Gibb Smith, 2005).
- Gray, James, Business without Boundary: Story of General Mills (Minneapolis: University of Minneapolis Press, 1954).
- Historic USGS Topographical Maps, Benicia Quadrant (1950, 1959, 1968, 1980).
- Hunt, Marguerite, and Harry Lawrence Gunn, History of Solano County and Napa County: From their Earliest Settlement to the Present Time, Vol. 1 (Chicago: S. J. Clarke Publishing Co., 1926).
- Issler, Anne Roller, Stevenson at Silverado: The Life and Writing of Robert Louis Stevenson in California's Napa Valley, 1880 (Fairfield, Calif.: James Stevenson Publisher, 1996).
- Kahn, Albert, "The Architect in Industrial Building," Architect and Engineer, vol. 54 (September 1918): 101-109.
- Longstreth, Richard, On the Edge of the World: Four Architects in San Francisco at the Turn of the Century (Cambridge: MIT Press, 1983).
- Miller, Floyd, interviews with Karen McNeill, July 26 and August 13, 2007, Vallejo, C.
- National Park Service, How to Apply the National Register Criteria for Evaluation, National Register Bulletin 15, (Washington, DC: United States Department of the Interior, 1997).
- National Park Service, *How to Complete the National Register Registration Form*, National Register Bulletin 16A, (Washington, DC: United States Department of the Interior, 1997).

"Scrapbook of the Sperry Century," Sperry Flour Company, Vallejo Mare Island and Historical Society.

- Sanborn Fire Insurance, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.
- "Sperry Co. at 88th Birthday," Oakland Tribune, April 19, 1940, p. 29.
- Starr, Walter A., "Abraham Dubois Starr: Pioneer California Miller and Wheat Exporter," California Historical Society Quarterly, 27 (September 1948): 193-202.
- U.S. Department of the Interior, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (Washington, DC: United States Department of the Interior, 1995).
- Woolf, Paul Nicholas, "A Historical Appraisal of the Flour Milling Industry in California (Ph.D. diss., University of California, Berkeley, 1939).

Appendix A

Survey Matrix of Buildings and Structures in the Project Area

Historic Resource Evaluation Report, Sperry Flour Company Site Carey & Co., Inc.

			Significance	Carey
Description	Year Built	Source for Estimate	Determination	Rating*
Administrative Building	1917	Sperry Family , historic photos	Historic	3S
Bakery Bulkhouse	1992	City of Vallejo planning permits	Not historic	6Z
Barn	c. 1901-1919	Sanborn maps	Not historic	6Z
Dock	c. 1869-1919	Sanborn maps, historic photos, Sperry Family	Historic	3S
Flour Mill	1917	Sperry Family, historic photos	Historic	3S
Forklift Repair	c. 1985	Interview with Floyd Miller, historic maps and photos	Not historic	6Z
Garage	1918	Sperry Family, historic photos	Historic	3S
Grain Silos	1917	Sperry Family, historic photos	Historic	3S
Manager's Garage	c. 1950s	Sanborn maps	Not historic	6Z
Manager's House	c. 1901, altered c. 1917 and after 1919	Sanborn maps, historic photos	Historic	3S
Mill Run Canopy	1986	City of Vallejo planning permits	Not historic	6Z
New Bulkhouse	c. 1965	Interview with Floyd Miller, historic photos	Not historic	6Z
Old Bulkhouse	c. 1957	Sanborn Maps, historic photos	Not historic	6Z
Pipe Storage	c. 1985	Interview with Floyd Miller, historic photos	Not historic	6Z
Warehouse	1947	Oakland Tribune, historic photos	Not historic	6Z
Welding Shop	c. 1985	Interview with Floyd Miller, historic photos	Not historic	6Z

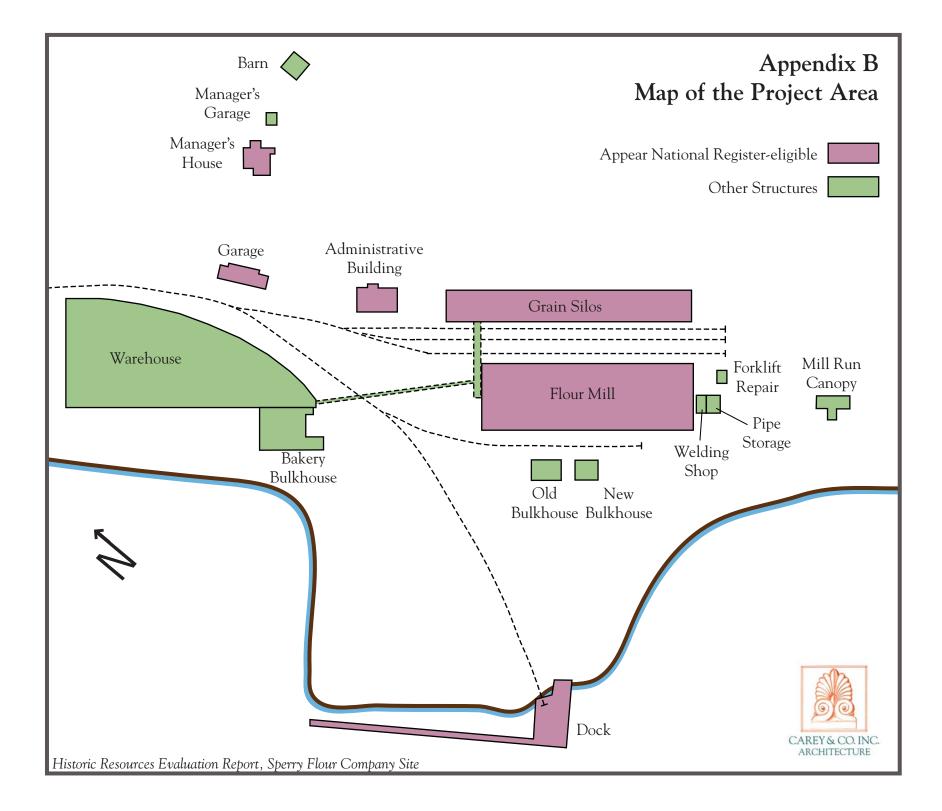
Appendix A: Survey Matrix of Buildings and Structures in the Project Area

*For an explanation of the historic resource status codes, please see the California Office of Historic Preservation's "User's Guide to the California Historical Resource Status Codes & Historic Resources Inventory Directory" (Technical Assistance Bulletin 8, Sacramento, CA: California Department of Parks and Recreation, 2004).

Appendix B

Map of the Project Area

Historic Resource Evaluation Report, Sperry Flour Company Site Carey & Co., Inc.



Appendix C

Photographs of Buildings and Structures in the Project Area

Historic Resource Evaluation Report, Sperry Flour Company Site Carey & Co., Inc.



Aerial Photo. Courtesy of Local.live.com



View from dock. Carey & Co., Inc., 2007.



Bakery warehouse, bulkhouse, and conveyor belt shed. Carey & Co., Inc., 2007.



Warehouse. Carey & Co., Inc., 2007.



Plant garage, with administration building, mill, and grain elevator in view. Carey & Co., Inc., 2007.



Plant garage. Carey & Co., Inc., 2007



Administration Building, front elevation. Carey & Co., Inc., 2007.



Administration building, rear elevation. Carey & Co., Inc., 2007.



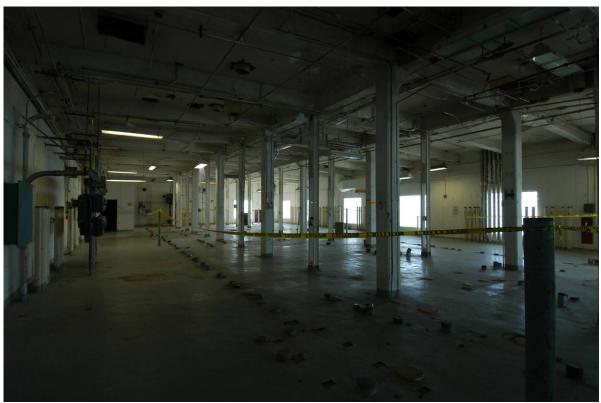
Flour mill and warehouse, west elevation. Carey & Co., Inc., 2007.



Flour mill and warehouse with top of silos in background. Carey & Co., Inc., 2007.



Mill, ground floor interior. Carey & Co. Inc., 2007.



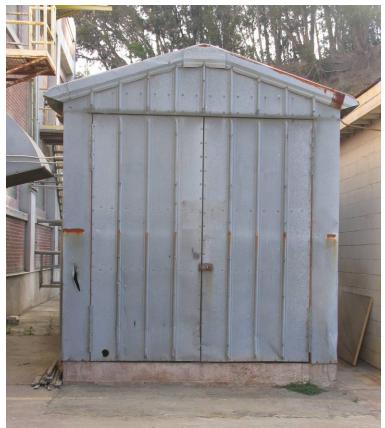
Mill, interior. One of the processing floors. Carey & Co. Inc., 2007.



"Old" and "New" bulkhouses. Carey & Co., Inc., 2007.



"New bulkhouse." Carey & Co., Inc., 2007.



Welding shop. Carey & Co., Inc., 2007.



Pipe Storage. Carey & Co., Inc., 2007.



Forklift repair. Carey & Co., Inc., 2007.



Mill run canopy. Carey & Co., Inc., 2007.



Head house, grain elevator. Carey & Co., Inc., 2007.



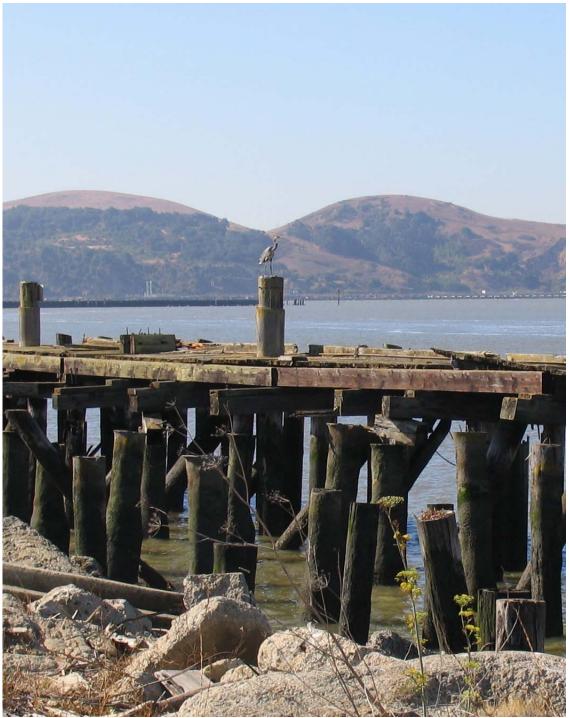
Grain silos. Carey & Co., Inc., 2007.



Dock. Carey & Co., Inc., 2007.



Dock with traces of railroad tracks. Carey & Co., Inc., 2007.



Representative example of piles and dock (with great heron). Carey & Co., Inc., 2007.



Manager's House, ca. 1915. Note the porch. Courtesy of Floyd Miller, Quarter Century Club, General Mills.



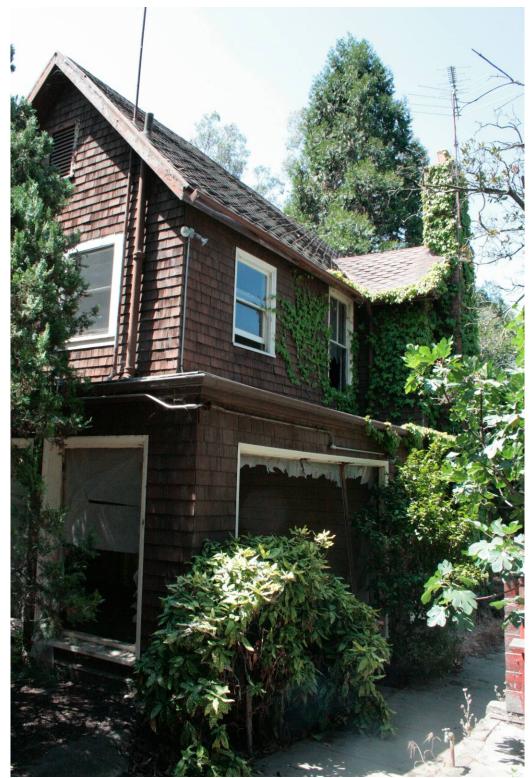
Sperry Flour Co., ca. 1910-1916. Note single-gable house next to mill. Courtesy of Floyd Miller, Quarter Century Club, General Mills.



Manager's House, front (west) elevation. 1917 additions to left and right of central gable. Carey & Co., Inc. 2007.



Manager's House, rear (southeast) elevation. Large gable is addition dating to 1919-1950. Second-story porch is post-1950 addition. Rear of garage in foreground. cCarey & Co., Inc., 2007.



Manager's House, side (northeast) elevation showing 1919-1951 alteration to first story. Carey & Co., Inc., 2007.



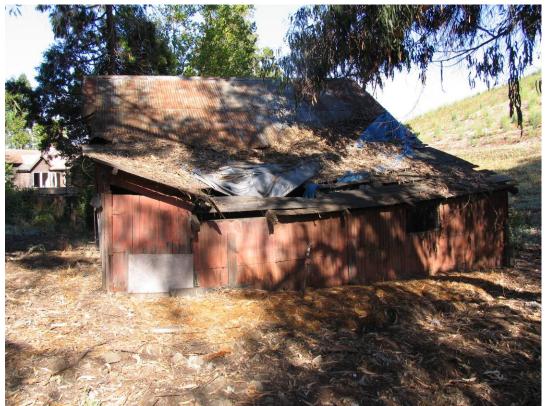
Garage. Carey & Co., Inc., 2007.



Barn, west elevation. Carey & Co., Inc., 2007.



Barn, north elevation. Carey & Co., Inc., 2007.



Barn, east elevation. Carey & Co., Inc., 2007.



Barn, south elevation. Carey & Co., Inc., 2007.

Appendix D

DPR 523 Survey Forms

Historic Resource Evaluation Report, Sperry Flour Company Site Carey & Co., Inc.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #	
PRIN	IARY RECORD	Trinomial	
		NRHP Status Code	
	Other Listings		
	Review Code	Reviewer Date	
Page	1 of 3 *Resource Name or #: (/	Assigned by recorder) Flour Mill	
P1	Other Identifier: Sperry Flour Company/General M		
* P2 .	Location: Not for Publication Unrestric		
*a.	County Solano	and (P2c, P2e, and P2b or P2d. Attach a Location Map as nec	essary.)
*b.		; R ; □ of □ of Sec; City Vallejo Zip 94590	B.M.
c.	Address 800 Derr Avenue	City Vallejo Zip 94590	
d.	UTM: (Give more than one for large and/or linear resources)	Zone 10, 566093 mE/ 4215125 mN	
e.	Other Locational Data: (e.g., parcel #, directions to resour APN: 0061160090	xe, elevation, etc., as appropriate)	
*P3a.	Description: (Describe resource and its major elements. In	clude design, materials, condition, alterations, size, setting, and b	oundaries)
	This reinforced concrete building is rectangular in plan w	th a flat roof and is oriented northwest to southeast. It has an 8	3-story,

This reinforced concrete building is rectangular in plan with a flat roof and is oriented northwest to southeast. It has an 8-story, 54-foot wide by 150-foot long tower at the northwest end, with a two-story warehouse extending to the southeast. The warehouse stands two stories high, 100 feet wide at its widest point, and nearly 350 feet at its longest point. Evenly spaced concrete structural columns divide the elevations into bays consisting of brick veneer panels and windows. The windows have undergone significant alterations. Originally they were predominantly fixed, metal-sash, multi-lite units that filled the entire space between structural columns and featured a multi-lite awning window in the center. Some of these windows have been filled in entirely with bricks, while others have been partially filled in with brick, and partially filled with fixed metal-frame, glass block windows. Decorative features include a concrete stepped parapet and a slightly projecting cornice. Large mechanical units have been added to the rooftops, and flat metal awnings are non-original.

*P3b. Resource Attributes: (List attributes and codes) HP8

*P4.Resources Present: <u>√</u> Building	Structure _	Object ∡_Site _	District	Element of DistrictOther (Isolates, etc.) P5b. Description of Photo: (view, date,
				accession #) warehouse and mill from southwest, August 13, 2007 *P6. Date Constructed/Age and Source: ✓ Historic Prehistoric Both 1917, Sperry Family, historic photos *P7. Owner and Address: Brooks Street 900 Walnut Avenue, Quarters D Mare Island, Vallejo, CA 94592 *P8. Recorded by: (Name, affiliation, and address) Carev & Co., Inc. 460 Bush St. San Francisco, CA 94108 *P9. Date Recorded: 4/15/2008 *P10. Survey Type: (Describe) intensive

*Attachments: _	_NONE	🖌 Location Map 🖌	Continuation Sheet 🧹 Bui	Iding, Structure, and Object	t Record
Archaeological	Record	District Record _	_Linear Feature Record _	_Milling Station Record _	_Rock Art Record
Artifact Record	dPho	tograph Record	_Other (List):		

			*NRHP Statu	s Code 3S		
Page	of	*Resource Name or	r # (Assigned by rec	order) Flour	Mill	
B1.	Historic Name: Sperry I	Flour Company/General	Mills			
B2.	Common Name: General	l Mills				
B3.	Original Use: <u>flour mill</u>	and warehouse	B4.	Present Use	e: vaca	nt
*B5.	Architectural Style: ind	ustrial				
*B6.	Construction History: (Construction date, alterations	, and date of alteration	ons)		
	built 1917; windows repl	aced 1980s				
*B7	Moved? √ No Yes	Unknown Date:		Oric	ninal I o	cation.
	Moved?	_Unknown Date:		Oriç	ginal Lo	cation:
	Related Features:	_Unknown Date:		Oriç	ginal Lo	ocation:
		_Unknown Date:		Orig	ginal Lo	ocation:
*B8.	Related Features: conveyor shed				-	
* B8. B9a.	Related Features: conveyor shed Architect: Maurice Court	chot, C.E.			<u>W.S.</u> D	Dinwiddie, Dinwiddie Construction
*B8.	Related Features: conveyor shed Architect: Maurice Court	chot, C.E.			-	
* B8. B9a.	Related Features: conveyor shed Architect: Maurice Court	chot, C.E. industrial development	Property Type	b. Builder:	<u>W.S.</u> D	Dinwiddie, Dinwiddie Constructi

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

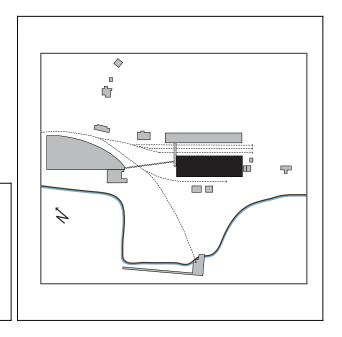
B11. Additional Resource Attributes: (List attributes and codes) HP8

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The Resources A DEPARTMENT OF PARKS AND RECR		Primary # HRI#
CONTINUATION SHEET		Trinomial
Page 3 of 3 *Res	Source Name or # (Assigned by	recorder) Flour Mill

*Date: 4/15/2008

X Continuation

□ Update

B10. Significance:

*Recorded by: Carey & Co., Inc.

The Flour Mill appears to be eligible for the California and National Registers under criteria A/1 and C/3. Architecturally, the building is a relatively early example of reinforced concrete skeletal frame construction, which allowed for more windows and, therefore, natural light and ventilation in a factory environment. The brick cladding, entablature, and parapet also reflect an effort to combine aesthetics with function in industrial design, as well as experimentation with the aesthetic potential of concrete itself. The building's relationship to the mill further enhanced the architectural composition of the mill. Located directly in front of the silos and with the mountain serving as a backdrop, the mill not only functioned together to produce flour, but created an unusually picturesque statement for industrial architecture. The mill is also significant for its association with World War I, a defining event of the twentieth century and an event of international importance. Since the federal government curtailed most construction not related to the war effort, it is entirely likely that the mill would not have been built if it had not been for the importance of American grain milling capacity during that period. Whereas the Sperry Company initially intended to build a simple warehouse for its old mill, demand for flour during wartime prompted the company to build the most modern facility possible, which allowed it to mill grain at a rate necessary to feed American and European soldiers and civilians alike. Subsequent to the war, the new mill also catapulted the Vallejo plant to the most important position in the pantheon of the most powerful Pacific Coast milling company's numerous facilities.

The building has undergone some alteration. Almost all of the windows are non-original, as are the metal awnings, rooftop mechanical units, a conveyor shed from the mill to the bakery warehouse, and a partially enclosed passageway supported by metal posts and clad with corrugated fiberglass sheets that is located at the northwest end of the building. The conveyor shed at the northwest end of the building dates to the construction of the mill, but does not retain a high level of integrity; it has been truncated and reclad.

While these alterations affect the mill's integrity of materials, design and workmanship, the mill retains sufficient integrity to convey its architectural and historic significance. Alterations have occurred mostly to secondary features and nearly all are reversible. Moreover, the building retains its original scale, plan, and over all design. In addition, the building has not been moved, and its setting, on the narrow strip of bedrock next to the Mare Island Strait with the silos and mountain serving as backdrop, has changed little, leaving the building with integrity of location, setting, feeling and association. These factors enable the mill's ability to express its aesthetic intent, its function as a mill, and its historic role as the most important mill in the Sperry Flour Company during World War I and its immediate aftermath. The mill thus appears to be eligible for the National and California Registers under criteria A/1 and C/3.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #
PRIN	ARY RECORD	Trinomial
		NRHP Status Code
	Other Listings	
	Review Code	Reviewer Date
Page	1 of 3 *Resource Name or #: (A	ssigned by recorder) Grain Silos and Elevator
P1.	Other Identifier: Sperry Flour Company/General M	ills, 800 Derr Avenue
* P2 .	Location: Not for Publication Unrestric	ted
*a.	County Solano	and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
*b.	USGS 7.5' Quad <u>Benicia</u> Date <u>1980</u>	T; R; I of I of Sec;B.M.
С.	Address 800 Derr Avenue	City Vallejo Zip 94590
d.	UTM: (Give more than one for large and/or linear resources)	Zone <u>10</u> , <u>566365</u> mE/ <u>4214846</u> mN
e.	Other Locational Data: (e.g., parcel #, directions to resource APN: 0061160090	e, elevation, etc., as appropriate)
*P3a.	Description: (Describe resource and its major elements. In	clude design, materials, condition, alterations, size, setting, and boundaries)
	concrete structure that consists of a head building measurin 300-foot long section that once contained storage bins mea approximately 10-story tall head building rises one story h windows at the two top stories. The central lites originally	and was completed the following year. This building is a reinforced ag 48 feet by 51 feet and 124 feet, 6 inches high, behind which extends a suring fifteen feet in diameter and eighty feet in height. The igher than the rest of the structure and has metal-sash, multi-lite industrial formed an awning or pivot window and have been replaced with a slider low the contours of the bins that were housed inside. One story, narrower

than the width of the bins, tops the silo and runs the entire length of the building. Like the head building, this story features

*P3b. Resource Attributes: (List attributes and codes) HP8

metal-sash, multi-lite industrial windows. (See continuation Sheet)

*P4. Resources Present: <u> Building</u> Structure	Object ✓ Site District Element of DistrictOther (Isolates, P5b. Description of Photo: (view, accession #) view from southwest	
	 accession #) view from southwest August 14, 2007 *P6. Date Constructed/Age Source: ✓ Historic Prehistoric Both 1917, Sperry Family, historic photos *P7. Owner and Address: Brooks Street 900 Walnut Avenue, Quarters D Mare Island, Vallejo, CA 94592 	and
	*P8. Recorded by: (Name, affiliand address) Carey & Co., Inc. 460 Bush St. San Francisco, CA 94108 *P9. Date Recorded: 4/15/2008 *P10. Survey Type: (Describe) intensive	ation,

*Attachments:NONE	✓ Location Map ✓	Continuation Sheet 🧹 Buil	lding, Structure, and Objec	t Record
Archaeological Record	District Record	_Linear Feature Record _	_Milling Station Record _	_Rock Art Record
Artifact RecordPho	otograph Record	Other (List):		

				*NRHP Statu	is Code 3S		
Page	2 of 3		*Resource Name or	+ # (Assigned by rec	order) Grain	Silos an	d Elevator
B1.	Historic Name:	Sperry F	Flour Company/General I	Mills			
B2.	Common Name:	General	Mills				
B3.	Original Use: gr	ain silo		B4.	Present Us	e: vaca	nt
*B5.	Architectural St	yle: mod	dern industrial				
*B6.	Construction Hi	story: (0	Construction date, alterations	, and date of alterati	ons)		
	built 1917						
			_Unknown Date:		Ori	ginal Lo	cation:
	none						
B9a.	Architect: Maur	rice Couc	hot, C.E.		b. Builder:	W.S. D	Dinwiddie, Dinwiddie Construction
*B10.	Significance: 1	Theme	industrial development			Area	Vallejo, CA
	Period of Signi	ficance	1917-1920	Property Type	industrial		Applicable Criteria A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

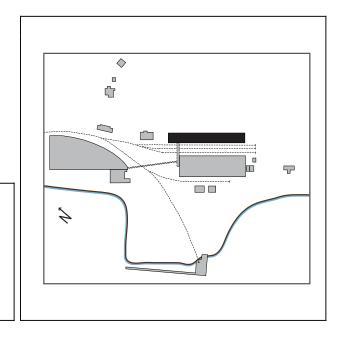
B11. Additional Resource Attributes: (List attributes and codes) HP8

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The DEPARTMENT OF PARKS	5,	Primary # HRI#		
CONTINUATION	SHEET	Trinomial		
Page 3 of 3	*Resource Name or # (A	ssigned by recorder) Grain Silos ar	nd Elevator	
*Recorded by: Carey &	Co., Inc.	*Date: 4/15/2008	X Continuation	□ Update

P3a. Description:

A window is centered directly above each rounded section of the silo, and the central, upper four lites form a slider or awning window. Guard rails line all of the rooftops, which also feature some enclosed mechanical units.

B10. Significance:

The grain silos appear to be eligible for the California and National Registers under criterion A/1. Like the mill, the silos derive historical significance from their association with World War I and the emergence of the Vallejo plant as the most important facility in the most important grain milling corporation of the Pacific Coast. These silos, built in the most modern methods, allowed the mill to store the grain necessary to produce enough flour for American and European soldiers and civilians, and their monumental scale speaks to massive quantity of flour that the mill was expected to produce. The location of the silos, directly behind the mill, further underscores the intimate relationship between the two buildings and their common function to produce flour on an unprecedented scale for both the Vallejo mill and the Sperry Flour Company.

Also like the mill, the silos retain a high level of integrity. With the exception of metal slider windows replacing some multi-lite awning windows within the large, multi-lite fixed metal windows of the top stories of the building, the silo remains virtually unchanged since its construction in 1917-1918. This lends the silos integrity of design, materials, and workmanship. The scale and location of the silos directly behind the mill remains intact as well, fostering integrity of setting, association, and feeling. This high level of integrity enables the silo to convey its historic relationship to the mill, their collective contribution to World War I, and the significance of the Sperry Flour Company in California and the grain industry.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #		
PRIN	IARY RECORD	Trinomial		
		NRHP State	us Code	
	Other Listings			
	Review Code		Reviewer	Date
Page	1 of 3 *Resource Name or #: (A	ssigned by reco	order) Administration Buil	ding
P1.	Other Identifier: Sperry Flour Company/General M			
* P2.	Location: Not for Publication Unrestrict			
*a.	County Solano	and (P2c, P2e	e, and P2b or P2d. Attach a Loo	cation Map as necessary.)
*b.	USGS 7.5' Quad Benicia Date 1980	т	; R ; 🗉 of 🗏 of	f Sec ; B.M.
C.	Address 800 Derr Avenue	City Valle		Zip 94590
d.	UTM: (Give more than one for large and/or linear resources)	Zone 10, t	566365 mE/ 4214846	mN
e.	Other Locational Data: (e.g., parcel #, directions to resource APN: 0061160090	e, elevation, etc	., as appropriate)	
*P3a.	Description: (Describe resource and its major elements. In	clude design, m	aterials, condition, alterations, s	size, setting, and boundaries)
	This two-story building is a reinforced concrete structure w concrete block projecting from the rear elevation. The flat		6	1 0

concrete block projecting from the rear elevation. The flat roof has a stepped parapet with coping and a medallion with the company logo adorns the parapet's center. An embellished, projecting cornice with dentils below wraps around the building, and a decorative water table constructed of scored concrete wraps around the building's base. The façade features concrete, rectangular, flat arches that form five bays. Each bay contains two sets of metal windows, one set each at the first and second floors. A classical entryway located in the central bay and comprised of a pediment, projecting cornice, and pilasters completes the facade's decorative features. Originally, a series of ten wood-sash casement windows running along the façade and rear elevation, as well as a series of six similar windows on the side elevations provided natural light and ventilation. They have all been either bricked in or replaced with metal-sash sliding windows. The entrance door has also been replaced, and metal awnings are non-original.

*P3b. Resource Attributes: (List attributes and codes) HP6

*P4.Resources Present: <u>✓</u> Building Structure Object	✓ Site District Element of DistrictOther (Isolates, etc.) P5b. Description of Photo: (view, date,
	accession #) <u>northwest facade</u> , <u>June 15, 2007</u> *P6. Date Constructed/Age and Source: ✓ Historic Prehistoric Both <u>1917, Sperry Family, historic</u> photos
	*P7. Owner and Address: Brooks Street 900 Walnut Avenue, Quarters D Mare Island, Vallejo, CA 94592 *P8. Recorded by: (Name, affiliation, and address) Carev & Co., Inc. 460 Bush Street San Francisco, CA 94108 *P9. Date Recorded: 4/15/2008 *P10. Survey Type: (Describe) intensive

*Attachments:NON	E 🖌 Location Map 🖌	Continuation Sheet 🧹 Bui	Iding, Structure, and Objec	t Record
Archaeological Recor	dDistrict Record	_Linear Feature Record _	Milling Station Record	_Rock Art Record
Artifact RecordI	Photograph Record	_ Other (List):		

	*NF	RHP Status Code 3S
Page	e 2 of 3 *Resource Name or # (Assi	gned by recorder) Administration Building
B1.	Historic Name: Starr Mills, Sperry Flour Company, Ger	neral Mills
B2.	Common Name: General Mills	
B3.	Original Use: abministration building, laboratory	B4. Present Use: vacant
*B5.	Architectural Style: italianate, classical revival	
*B6.	Construction History: (Construction date, alterations, and dat	e of alterations)
	built 1917; windows and front door replaced (n.d.); metal	awnings (n.d.)
	······································	· · · · · · · · · · · · · · · · · · ·
	Moved?	Original Location:
*B8.	Related reatures:	
	none	
B9a.		
D5a.		b. Builder: W.S. Dinwiddie, Dinwiddie Construction
* B10 .	· · · · · · · · · · · · · · · · · · ·	b. Builder: W.S. Dinwiddie, Dinwiddie Construction Area Vallejo, CA
	Significance: Theme Industrial development	

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

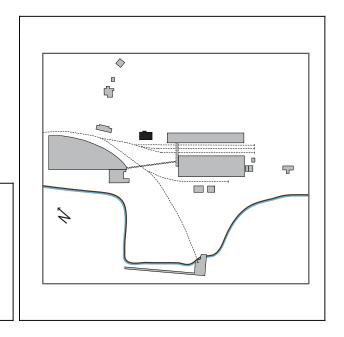
B11. Additional Resource Attributes: (List attributes and codes) HP6

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The Resourd DEPARTMENT OF PARKS AND R CONTINUATION SHEI	ECREATION	Primary # HRI# Trinomial
Page 3 of 3	*Resource Name or # (Assigned by	recorder) Administration Building

*Recorded by: Carey & Co., Inc.

*Date: 4/15/2008 X Continuation □ Update

B10. Significance:

Built in 1917, the Administration Building belongs to the site's period of significance (1917-1920) and reflects the significant growth of the plant both in size and prestige within the Sperry corporation and milling industry. Like the mill and silos, the administration building reflects a relatively early example of reinforced concrete construction. Even more than do the mill and silos, this building demonstrates early efforts to use concrete for aesthetic purposes rather than just functional ones. Particularly notable elements include the raised relief on the cornice, the inset panels on the window surrounds, molded detailing at the based of the building, and the pilasters, pediment, and entablature of the entry surround. These classical features also contribute to the historic feeling of the building.

The building retains a high level of integrity. It has not moved and its surroundings have changed little since it was constructed, lending the building integrity of location, setting, and association. The building has undergone some alterations, including the addition of metal awnings, filling in of some rear windows, and replacement of the front door and windows. While these alterations affect integrity of materials, and workmanship, they are easily reversible and do not affect integrity of design, scale, plan, or overall expression of the aesthetic and historic feeling of the building. The building retains sufficient integrity to convey its historic significance and thus appears eligible for the California and National Registers under criteria A/1 and C/3.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

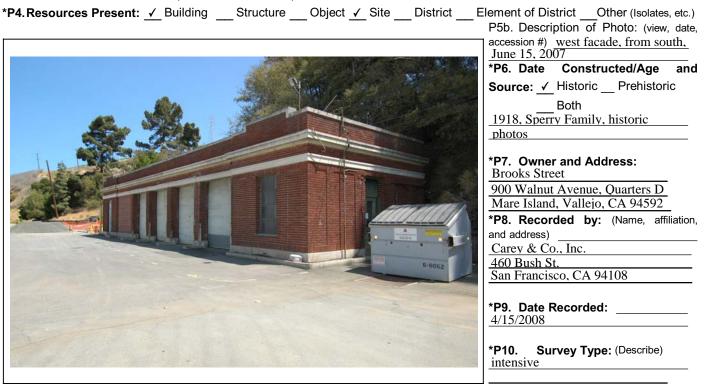
Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #	
PRIM	MARY RECORD	Trinomial	
		NRHP Status Code	
	Other Listings		
	Review Code	Reviewer	Date
Page _	1 of 3 *Resource Name or #	(Assigned by recorder) Garage	
P1.	Other Identifier: Sperry Flour Company/General	Mills, 800 Derr Avenue	
* P2 .	Location: Not for Publication Unrest	ricted	
	County Solano	and (P2c, P2e, and P2b or P2d.	Attach a Location Map as necessary.)
*b.	USGS 7.5' Quad Benicia Date 1980	T;R; 🗉	of 🗏 of Sec;B.M.
с.	Address 800 Derr Avenue	City Vallejo	Zip 94590
d.	UTM: (Give more than one for large and/or linear resource	s) Zone <u>10</u> , <u>566365</u> mE/	<u>4214846</u> mN
e.	Other Locational Data: (e.g., parcel #, directions to rese APN: 0061160090	urce, elevation, etc., as appropriate)	

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Built in 1918, this garage is a reinforced concrete structure with brick veneer on the façade and a rectangular plan. The flat roof features a parapet with coping and two simply shaped sections at the northern and southern ends of the façade. The entablature includes a slightly projecting cornice, a frieze, and an architrave. Four metal roll-up doors dominate the façade, and a fifth bay has been bricked in entirely. A standard hinge door at the northern end and a metal-sash, multi-lite fixed window at the southern end complete this façade. The southern elevation also features an entrance.

*P3b. Resource Attributes: (List attributes and codes) HP8



***P11. Report Citation**: (Cite survey report and other sources, or enter "none.") Carey & Co., Inc., "Sperry Flour Company Site, Vallejo, California; Historic Resources Evaluation," April 15, 2008.

*Attachments: __NONE _✓ Location Map _✓ Continuation Sheet _✓ Building, Structure, and Object Record __Archaeological Record __District Record __Linear Feature Record __Milling Station Record __Rock Art Record __Artifact Record __Photograph Record __Other (List): _____

	*NRHP Status Code 3S
Page	2 of 3 *Resource Name or # (Assigned by recorder) Garage
B1.	Historic Name: Starr Mills, Sperry Flour Company, General Mills
B2.	Common Name: General Mills
B3.	Original Use: automobile and maintenance garage B4. Present Use: vacant
*B5.	Architectural Style: classical revival and industrial
*B6.	Construction History: (Construction date, alterations, and date of alterations)
	built 1918; bay bricked in, n.d.
	ount 1910, oug offened in, ind.
	Moved? ✓_NoYesUnknown Date: Original Location: Related Features:
	none
B9a.	Architect: Maurice Couchot, C.E. b. Builder: W.S. Dinwiddie, Dinwiddie Construction
*B10.	Significance: Theme industrial development Area Vallejo, CA
	•
	Period of Significance <u>1917-1920</u> Property Type <u>industrial</u> Applicable Criteria A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

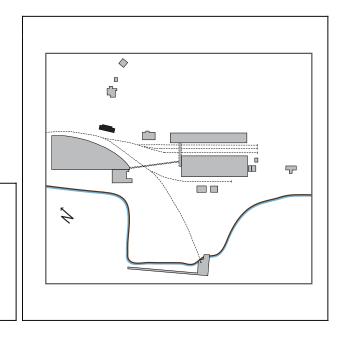
B11. Additional Resource Attributes: (List attributes and codes) HP4, HP8

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION		Primary # HRI#	
CONTINUATION	SHEET	Trinomial	
Baga 2 of 3	*Basoures Name or # /	Assigned by reserver) Carago	

Page 3 of 3

*Resource Name or # (Assigned by recorder) Garage

*Recorded by: Carey & Co., Inc.

*Date: 4/15/2008 X Continuation

nuation Dupdate

B10. Significance:

The garage is the fourth and last structure on site to be built specifically in response to wartime demand for flour in the United States and Europe. Increased production at the plant due to its central role in flour production for the Sperry Flour Company required the construction of expanded maintenance and storage facilities. Like the mill and administration building, it is a reinforced concrete structure that combines aesthetic and functional considerations. Alone, however, the building does not achieve architectural significance.

The building retains a high level of integrity. Alterations include non-original roll-up doors, and bricking in of one bay. Both of these alterations are reversible. Otherwise, the structure retains integrity of location, design, setting, materials, and workmanship, which contributes to its ability to express the aesthetics of the period in which it was built and its association with Sperry Flour Company's expansion at the Vallejo plant in the wake of increased demand for flour during World War I. The building thus appears to be eligible for the California and National Registers under criterion A/1.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #
PRIM	MARY RECORD	Trinomial
		NRHP Status Code
	Other Listings	
	Review Code	Reviewer Date
Page	1 of 3 *Resource Name or #:	. (Assigned by recorder) Manager's House
P1	Other Identifier: Sperry Flour Company/General	
* P2.		
	County Solano	and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
*b.	USGS 7.5' Quad Benicia Date 1980	T ; R ; ☐ of
C.	Address 790 Derr Avenue	City Vallejo Zip 94590
d.	UTM: (Give more than one for large and/or linear resources	s) Zone 10, 566365 mE/ 4214846 mN
e.	Other Locational Data: (e.g., parcel #, directions to reson APN: 0061160090	urce, elevation, etc., as appropriate)
*P3a.	Description: (Describe resource and its major elements.	Include design, materials, condition, alterations, size, setting, and boundaries)

This two-story residential structure features multiple gables, a wide eave overhang, and a complex plan. Wood shingles clad the exterior, and scalloped asphalt shingles clad the roof. The northwest façade features a single-story, hipped entry porch with a small brick stoop, and the first story projects slightly from the main building at the northeast elevation. At the rear of the building, on the southeast elevation, is a second-story balcony with a high balustrade. Each elevation features wood-sash windows of various sizes. All of the windows have been removed from the first story, but the second story retains most of its windows, which are primarily wood-sash, two-over-one, double-hung with vertical muntins in the upper sash and lamb's tongues detailing. The northeast elevation also features an exterior brick chimney.

*P3b. Resource Attributes: (List attributes and codes)_HP2

*P4.Resources Present: <u>✓</u>	BuildingStructure	Object ∡ Site	_ District E	P5b. Description of Photo: (view, date,
				accession #) west facade, from south, June 15, 2007 *P6. Date Constructed/Age and Source: ✓ Historic _ Prehistoric Both c. 1901/1917, Sanborn maps, historic photos *P7. Owner and Address: Brooks Street 900 Walnut Avenue, Quarters D Mare Island, Vallejo, CA 94592
				*P8. Recorded by: (Name, affiliation, and address) Carey & Co., Inc. 460 Bush St San Francisco, CA 94108 *P9. Date Recorded: 4/15/2008 *P10. Survey Type: (Describe) intensive

*Attachments:	NONE	✓ Location Map ✓	Continuation Sheet _	uilding, Structure, and Object	t Record
Archaeological F	Record	District Record	Linear Feature Record	Milling Station Record	_Rock Art Record
Artifact Record	Pho	tograph Record	Other (List):		

	*NR ⁱ	HP Status Code 3S	
Page	2 of 3 *Resource Name or # (Assig	ned by recorder) Manager's Ho	buse
B1.	Historic Name: Starr Mills, Sperry Flour Company, Gene	eral Mills	
B2.	Common Name: General Mills		
B3.	Original Use: manager's house	B4. Present Use: vaca	int
*B5.	Architectural Style: First Bay Area Tradition		
*B6.	Construction History: (Construction date, alterations, and date	e of alterations)	
	built c. 1901; significant alterations c. 1917; altered c. 191	9-1950; gutted, windows and	doors removed c. 1992
*B7. *B8.	Moved?	Original Lo	ocation:
		Original Lo	ocation:
	Related Features:	Original Lo	ocation:
*B8.	Related Features: trees, shrubs		
* B8. B9a.	Related Features: trees, shrubs Architect: unknown	b. Builder: unknor	wn
*B8.	Related Features: trees, shrubs Architect: unknown		

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

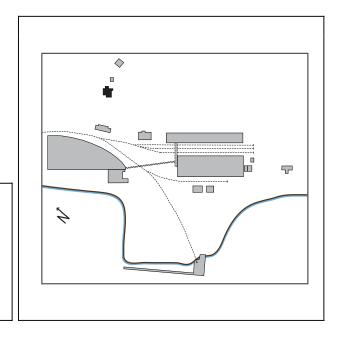
B11. Additional Resource Attributes: (List attributes and codes) HP2

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION CONTINUATION SHEET		Primary # HRI# Trinomial	

*Recorded by: Carey & Co., Inc.

*Date: 4/15/2008 X Continuation □ Update

B10. Significance:

The Manager's House appears to be eligible for the California and National Registers under criteria A/1 and C/3. It dates to about 1900 or the late 1890s, but achieved is current aesthetic and plan around 1917, during the period of significance for the mill, silos, administration building, and garage. Sperry Flour Company enlarged the house to accommodate a manager of the then most important facility within the company's flour empire. The house also embodies defining characteristics of the Bay Area Tradition, a regional style that influenced domestic architecture for nearly a century and which contributed to the emergence of a regional identity. Set apart from the industrial buildings, the house creates a sylvan contrast to the modern industrial landscape. Clad with unpainted brown shingles and adorned with no exterior decoration, the house blends into the landscape and allows the natural setting to provide ornamentation.

The manager's house has undergone numerous alterations. Sanborn maps and historical photos indicate that the structure dates to at least 1901, when it first appeared on a map, and was altered incrementally over a fifty-year period. The most extensive renovations took place between 1901 and 1919, and most likely in 1917 when the new mill, warehouse, silos, administration building, and garage were built. At that point, the owners enclosed the front porch, adding a second story on top of part of it to create a second gable and leaving a smaller section as just one story to create a new entryway. A third window was added to the second story of the original gable and a three-panel picture window was added to the first story. Other additions included a southerly extension to the front façade, ultimately creating a two-story cross gable plan. At the rear of the house, the gables did not meet, resulting in a U-shape plan. Between 1919 and 1950, that changed. The owners extended the rear wall of the second story to close the U-shape plan, added a second story to the rear part of the house, which created a fourth gable, added a slightly projecting single-story extension to the northern façade of the house, and created a back porch. Since 1950, the rear porch has either been demolished and replaced or closed in and roofed to make way for a second story balcony. Most of the windows, exteriors doors, and interior fixtures were removed during the 1990s.

Despite these changes, Carey & Co. has determined that this structure retains sufficient integrity to convey its historic significance. Alterations to the structure are not obvious upon viewing it; Carey & Co. had to compare Sanborn maps to periodize them and figure out how exactly the building changed over time. The earliest images of this building indicate that it has always been clad with unpainted wood shingles, making it an early example of the First Bay Area Tradition. Subsequent alterations have always respected this historical precedent, allowing the building to continue to express historical character. Moreover, the most significant alterations were made ninety years ago and the structure as it appeared then remains largely uncompromised. Apart from the missing windows and doors, which do adversely affect the integrity of the structure, all of the alterations since 1919 were made towards the rear of the building, making them unobtrusive and only moderately visible. This house, therefore, exudes an overall historical character that dates to World War I, the period of significance to which the other historical buildings at the plant belong.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

	of California The Resources Agency RTMENT OF PARKS AND RECREATION	Primary # HRI #		
PRIN	ARY RECORD	Trinomial		
		NRHP Statu	us Code	
	Other Listings			
	Review Code		Reviewer	Date
Page _	1 of <u>3</u> *Resource Name or #: (A	ssigned by reco	order) Dock	
P1.	Other Identifier: Sperry Flour Company/General M		Avenue	
* P2 .	Location: Not for Publication Unrestrict	ted		
*a.	County Solano	and (P2c, P2e	, and P2b or P2d. Attach a Lo	ocation Map as necessary.)
*b.	USGS 7.5' Quad Benicia Date 1980	т	; R ; 🗏 of 🗏 d	of Sec ; B.M.
C.	Address 800 Derr Avenue	City Valle	io	Zip 94590
d.	UTM: (Give more than one for large and/or linear resources)	Zone 10, 5	566093 mE/ 4215125	mN
e.	Other Locational Data: (e.g., parcel #, directions to resource APN: 0061160090	e, elevation, etc.	., as appropriate)	
*P3a.	Description: (Describe resource and its major elements. In	clude design, ma	aterials, condition, alterations,	size, setting, and boundaries)

The dock rests next to an asphalt topped area that is now used as a parking lot at western edge of the mill site and consists of a many vertical wood posts piled into the waters of Mare Island Strait. The southernmost section of the wharf retains a sizeable section of horizontal beams as well, and portions of a narrow strip of floor beams exist along the western edge of the dock.

Resource Attributes: (List attributes and codes) AH13 *P3b. *P4. Resources Present: 🖌 Building _____ Structure ____ Object 🖌 Site ____ District ____ Element of District ____ Other (Isolates, etc.) P5b. Description of Photo: (view, date, accession #) west facade, from south, June 15, 2007 *P6. Date Constructed/Age and Source: ✓ Historic Prehistoric Both c. 1869-1919, Sanborn maps, photos, illustrations, Sperry Family *P7. Owner and Address: **Brooks Street** 900 Walnut Avenue, Quarters D Mare Island, Vallejo, CA 94592 *P8. Recorded by: (Name, affiliation, and address) Carey & Co., Inc. 460 Bush St., San Francisco, CA 94108 *P9. Date Recorded: 4/15/2008 *P10. Survey Type: (Describe) intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.") Carey & Co., Inc., "Sperry Flour Company Site, Vallejo, California; Historic Resources Evaluation," April 15, 2008.

*Attachments: __NONE _✓ Location Map _✓ Continuation Sheet _✓ Building, Structure, and Object Record __Archaeological Record __District Record __Linear Feature Record __Milling Station Record __Rock Art Record __Artifact Record __Photograph Record __Other (List): _____

DPR 523A (1/95)

*Required information

	*NRHP Statu	s Code 3S	
Page	2 of 3 *Resource Name or # (Assigned by rec		
B1.	Historic Name: Starr Mills, Sperry Flour Company, General Mills		
B2.	Common Name: General Mills		
B3.	Original Use: dock B4.	Present Use: none	
*B5.	Architectural Style: industrial		
*B6.	Construction History: (Construction date, alterations, and date of alterations)		
	built ca. 1869-1919; fire damage ca. 1957		
*B7. *B8.	Moved? ✓_No _Yes _Unknown Date: Related Features:	Original Location:	
	none		
B9a.	Architect: unknown	b. Builder: unknown	
*B10.	Significance: Theme industrial development	Area Vallejo, CA	
	Period of Significance <u>1869-1920</u> Property Type	dock Applicable Criteria A	

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Flour mills operated almost continuously for nearly 150 years at this site, including three of the most important state or national mills. Starr Mills opened a mill here in 1869, during the height of California's importance in the wheat and flour industry, and rose to become the largest flour company in California. Port Costa Flour company acquired the property in 1895, followed by Sperry Flour Company in 1910. Sperry was then the most important flour company on the Pacific Coast, and eventually the third most important in the country. General Mills acquired Sperry in 1929 and went on to become the largest flour and grain products corporation in the nation.

Flour shortages in Europe during World War I increased demand for flour from the United States. Consequently, the United States had to expand its facilities to accommodate this demand. The main buildings at the Vallejo mill site were built during this time and in direct relationship to the war effort, for the federal government sharply curtailed construction that was not related to the war. Vallejo's new facilities and key role in flour production during the war made it the "crown in the jewel" of the Sperry empire. Not only are the buildings linked to a historic event, they also represent relatively early examples of efforts to combine function with aesthetics in reinforced concrete construction and industrial design.

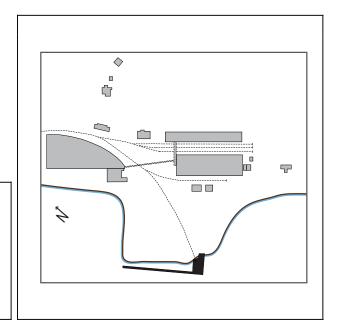
B11. Additional Resource Attributes: (List attributes and codes) AH13

*B12. References:

See continuation sheet

B13. Remarks:

*B14. Evaluator: <u>Karen McNeill</u> *Date of Evaluation: 4/15/2008



State of California — The Resourd DEPARTMENT OF PARKS AND R	0 ,	Primary # HRI#
CONTINUATION SHEE	ET	Trinomial
Page 3 of 3	*Resource Name or # (Assigned by	recorder) Dock

*Recorded by: Carey & Co., Inc.

*Date: 4/15/2008 X Continuation

ation Dupdate

B10. Significance:

This dock conceivably tells a story of the mill site from its earliest days in 1869 and appears to be eligible for the California and National Registers under criterion A/1. Sanborn maps indicate that the portion of the dock that retains the highest level of integrity, meaning the most southwesterly section that still has horizontal boards atop the piles and where remnants of the railroad track exist, was completed by November of 1889. The piles immediately adjacent to it date to 1919, when Sperry Company expanded the wharf and warehouse to accommodate increased traffic that the new mill and silos prompted. Exactly how far that extension was is unclear; beyond it, the piles may date to as early as 1869, though probably a bit later. The dock retains integrity of location, setting, association, having never been moved and being still adjacent to an industrial site. While the dock's integrity of design, materials, workmanship and feeling have been partially compromised by the loss of considerable material, this loss does not prevent this simple dock structure from conveying its historic significance.

B12. References

Historic Photos, Quarter Century Club Scrapbook.

Historic Topo Maps, Benicia Quadrant, 1950, 1959, 1968, 1980.

Sanborn Maps, "Vallejo, California," (1886), map nos. 2, 3; (1889), map no. 25; (1901), map no. 34; (1919), map no. 40; (1950), map no. 40.

Appendix E

Sanborn Fire Insurance Maps of the Project Area

Historic Resource Evaluation Report, Sperry Flour Company Site Carey & Co., Inc.

