

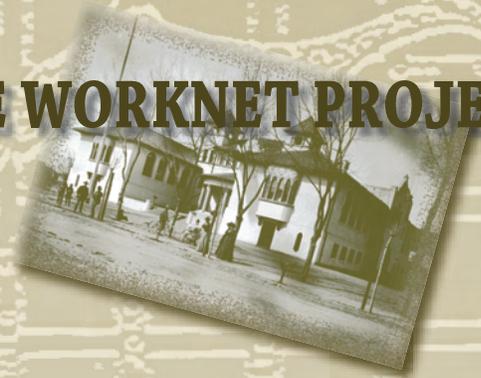
DATA RECOVERY REPORT FOR THE WORKNET PROJECT STOCKTON, CALIFORNIA

Prepared for:

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D R A F T

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List of Acronyms

City of Stockton	City
California Environmental Quality Act	CEQA
California Register of Historical Resources	CRHR
Stockton Waterfront Projects Archaeological Treatment Plan	Treatment Plan
health and safety plan	HSP
minimum number of individuals	MNI
white improved earthenware	WIE
automatic bottle machine	ABM
white improved earthenware	WIE

Chapter 1. Introduction, Project Description, and Regulatory Setting

This report presents the results of a cultural resources study undertaken by Jones & Stokes for the proposed Worknet office project in Stockton, California (Figure 1). The report was prepared to assist the City of Stockton (City) in fulfilling its responsibility to meet the cultural resources requirements in compliance with the California Environmental Quality Act (CEQA).

Ground-disturbing activities associated with the future construction of the Worknet office complex had the potential to affect anticipated historical archaeological resources that were potentially eligible for inclusion in the California Register of Historical Resources (CRHR). As a result, archaeological test excavations were undertaken. This report documents the archival, field, and laboratory findings of the data recovery excavation at the Worknet project site in downtown Stockton. The main focus is to present the findings and conclusions from the compressed approach to identification and evaluation of historic features within the project area. During the course of the project, archaeologists identified structural remains, including concrete foundations, bricks, and posts; infrastructure remains, including sewer and storm drains; and refuse deposits. Data recovery in the project area resulted in the identification of 39 individual features, many of which were related. Of the 39 features identified, only one feature was determined to be eligible for the CRHR and was subject to data recovery.

PROJECT DESCRIPTION

The Worknet Office Building project is located in downtown Stockton south of the Stockton Channel (Figure 2). It will be constructed on a 2.6-acre parcel bounded by Van Buren Street on the east, Lincoln Street to the west, south of abandoned Main Street and north of Market Street. The two-story building will be approximately 52,000 square feet and on-site parking will accommodate a total of 186 cars. The objective for the proposed project is to assist in the redevelopment and revitalization of the Stockton Waterfront area by encouraging new development to relocate to the area.

REGULATORY SETTING

California Environmental Quality Act

Because the project is funded by a public agency, CEQA requires the City to assess the effects of the project on cultural resources. Cultural resources are defined as buildings, sites, structures, or objects—each of which may have historical, architectural, archaeological, cultural, or scientific importance. Under CEQA, an impact on a cultural resource is considered significant if a project would result in an effect that may change the significance of the resource (Pub. Res. Code Section 21084.1).

Demolition, replacement, substantial alteration, and relocation of historic properties are actions that would change the significance of a historic resource. Before the level of significance of impacts can be determined and appropriate mitigation measures developed, the significance of cultural resources must be determined. The following steps normally are taken in a cultural resources investigation to comply with CEQA:

1. Identify cultural resources.
2. Evaluate the significance of the cultural resources.
3. Evaluate the effects of a project on all cultural resources.
4. Develop and implement measures to mitigate the effects of the project on significant cultural resources.

Significance Criteria

CEQA states that if a project results in adverse effects on significant cultural resources, then alternative plans or mitigation measures must be considered. CEQA guidelines define a significant historical resource as a resource listed or eligible for listing in the CRHR (Pub. Res. Code Section 5024.1). A historical resource may be eligible for inclusion in the CRHR if it

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction; or represents the work of an important creative individual or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history.

Chapter 2. Setting

The setting section has been adapted from the Chapter 2 of the *Stockton Waterfront Projects Archaeological Research Design and Treatment Plan* (Costello and Marvin 1999).

ENVIRONMENTAL SETTING

The project area is located in the Great Central Valley Belt (Storer and Usinger 1963), bounded on the east by the Sierra Nevada and the Coast Range on the west. The northern part of the valley, known as the Sacramento Valley, is drained by the Sacramento River and its tributaries, while the southern part of the valley, named the San Joaquin Valley, is drained by the San Joaquin River. The waters of the two rivers merge in the Sacramento–San Joaquin River Delta near Suisun Bay, passing through the Coast Range and into San Francisco Bay. The area has historically been quite hot in the summer and cold in the winter, with temperatures ranging from 105–34° F. Dense fogs, named tule fogs for the tules that grew in the lower areas of the Delta, form during the winter months.

Waters in central California generally flow westerly from the Sierra Nevada, through the foothills, and into the Central Valley. The Calaveras River, Littlejohn Creek, and other tributaries pass through San Joaquin County on their way to the San Joaquin River. The project area is located on the north and south sides of the Stockton Channel. Mormon Slough, which once coursed through the project area, has been truncated and filled-in to a great extent. The sloughs that once fed into the Stockton Channel have also been filled-in, except for a small arm of McLeod Lake.

In the prehistoric era, most of the land in the area would have been marshland and sloughs, but earthen mounds or rises may have existed. Bunchgrasses and reeds would be expected in the understory, with an overstory of valley oaks. The Central Valley was described by John C. Fremont in his 1845 *Report of the Exploring Expedition to the Rocky Mountains in the Year 1842, and to Oregon and North California in the Years 1843–1844*, as a land lush with grasses that supported flowers; massive oaks in groves; and deer, pronghorn, and elk grazing in the fields. Grizzly bear were also common in the brush and willow thickets (Davis- King 1998:2.9-3).

PREHISTORIC AND HISTORIC SETTING

Summaries of the prehistoric and historic periods are presented, followed by more detailed discussions of the historic-period themes that predominate in the project area.

Prehistoric Period

When the first Spanish explorers entered the San Joaquin Valley, they encountered several inhabited villages, located on low mounds that rose above the flat landscape. Village mounds located near the waterfront area include Pescadero mound (near Bethany on Union Island), Pool mound (9 miles southwest of Stockton), and Ott mound (southeast of Stockton and north of French Camp Slough). More than 100 Native American mounds, many of which have been excavated or studied, have been located within the boundaries of present San Joaquin County. The Stockton Channel mound, or Pasasimas village, was located between Edison and Harrison streets in Stockton, near the Site 1 Project area, and was probably the village described in detail by Padre Duran in 1817.

Little is known about the prehistory of the immediate area, however, because there have been few scientific excavations and very little information from archaeological surveys exists. Few ethnographic studies have been undertaken, and the sites investigated were looked at by untrained researchers. Nevertheless, it is likely that the prehistory of the project area is similar to that of nearby communities.

The San Joaquin Valley appears to have been settled relatively early in prehistory, certainly by at least 10,000 years ago. The Farmington Complex tools recovered on Littlejohn Creek at CA-STA-44 and other sites, just east of the community of Farmington, tentatively date to 7,000–9,000 years B.P. and are generally formed from "Farmington Chert," a metachert or greenstone found as cobbles in Littlejohn Creek.

In ethnographic times, the area occupied by the city of Stockton was occupied by the *Yatchicumne* (Yokuts). The ethnographic Yokuts (which means "people") were unusual among California groups in that they lived in true tribes with distinct dialects, territories, and names. The territory of the Northern Valley Yokuts extended from the Diablo Range in the west to the Sierra Nevada foothills in the east, with the San Joaquin River as the core area. The Yokuts arrived in the Central Valley about A.D. 1500, having exited their previous homeland due to environmental and other conditions.

The material culture, language, social lifeways, and customs of nineteenth and twentieth-century Yokuts have been documented in several monographs and overviews, but because this information was collected decades after the disruption of their precontact lifeways, these studies largely reflect the period when the Yokuts were transitioning to a European lifestyle.

Beginning with Spanish intrusions into the area in the mid-1700s, the traditional lifeways of both the Northern Valley and Foothill Yokuts were disrupted. The removal of many Native Americans to coastal missions and the contraction of imported diseases served to destroy large segments of their population and severely affected the practice of their native lifestyle. A malaria outbreak in 1833 wiped out whole tribes, while the ensuing years of the Gold Rush nearly extinguished the Central Valley tribes.

European Settlement

The first Anglo-European settlement in the Stockton area was located at French Camp, where a group of French-Canadian trappers employed by the Hudson's Bay Company established a camp in 1832. From 1832 to 1845, the site became the terminus of the Oregon Trail, after which the trappers abruptly departed the region. During their occupation, however, Captain Charles M. Weber visited the camp in the fall of 1841 on his way to California with the Bidwell-Bartleson party, one of the first overland parties to come to the San Joaquin Valley area intending to settle permanently.

Weber was impressed with the fertile lands and stately oaks on the lower banks of the San Joaquin River, but moved further west and, in 1842, settled in the Pueblo de San Jose, forming a partnership with William Gulnac. Gulnac was a blacksmith who had arrived in California in 1833, becoming a naturalized Mexican citizen and later marrying a *Californio*. In the spring of 1843, the two men formed a company of twelve and founded a colony at Campo de los Franceses (French Camp). Being a Mexican citizen, Gulnac petitioned for a land grant in July 1843, receiving a large tract that included both French Camp and the present site of Stockton in January 1844.

The first American to build a dwelling in what is now Stockton was Thomas Lindsay, who arrived with the first group of settlers led by Gulnac in August 1844. Lindsay built a tule hut at the west end of what is now East Lindsay Street, but was killed by Native Americans in the spring of 1845. Before long, Native Americans, illness, poor food, and primitive conditions took their toll, and Gulnac sold his lands and interest in the area to Weber for \$60, the amount of a grocery bill he owed.

Weber continued to reside at Pueblo de San Jose, occasionally traveling to his grant to bring supplies to his *vaqueros*, who ran cattle on the land. He continued his efforts to establish a settlement, however, offering much of his land at low prices to those who agreed to settle in the area. Free lots in town and acreage in the country were offered to those with no funds to purchase property. In 1847 he laid out the town of Tuleberg (later Stockton) and hired Jasper O'Farrell and Walter Herron to survey a block of lots bounded by Weber Avenue and Center, Main, and Commerce streets, with the head of the Stockton Channel as its focal point (Minnick 1988:30). More tule and log houses were built in the spring of 1848, and the small settlement had become "fair-sized." The first commercial establishment, Bussell's Tavern, became a favorite watering hole for travelers between Sacramento and San Jose. Wheat was planted—the beginnings of the San Joaquin Valley's vast agricultural legacy—often with seeds, horses, and agricultural equipment provided by Weber (Shleb 1993 :64).

Gold Discovery and Early Development

For the future of Stockton (and San Joaquin County), the most important event to occur in its early history was the discovery of gold on the American River on January 24, 1848. This

event set off a worldwide rush of people to the gold fields, the greatest mass migration in American history.

Recognizing that it would be more profitable to build a city to serve as a supply and shipping center for the southern mines than just an agricultural settlement, Weber took up residence in Tuleberg, resurveying and renaming it Stockton in 1849 in honor of Commodore Robert F. Stockton, whom Weber had earlier met and admired (Hoover et al. 1990:350). Situated at the head of the navigable San Joaquin River and heavily advertised in the San Francisco *Alta California*, Stockton had achieved a population of nearly 1,000 by late 1849, and a steamboat from San Francisco was making weekly trips. From Stockton, various trails led to the gold fields over roads named for their destinations: Mariposa, French Camp, Sonora, Mokelumne Hill, and Lockeford. Freight activities grew, and agriculture and stock raising increased to serve the goldseekers, establishing Stockton as a permanent settlement and one of the most important interior towns in California.

Bayard Taylor, a returning traveler, described the scene in 1849:

I found Stockton more bustling and prosperous than ever. The limits of its canvas streets had greatly enlarged during my week of absence, and the crowd on the levee would not disgrace a much larger place at home. Launches w\ere arriving and departing daily for and from San Francisco, and the number of mule-trains, wagons, etc., on their way to the various mines with freight and supplies kept up a life of activity truly amazing (Taylor 1988:76).

Although he went on to note the disadvantages of Stockton's location on the slough, especially in the wet season when the streets were awash with mud, Taylor correctly observed the following:

There seems, however, to be no other central point so well adapted for supplying the rich district between the Mokelumne and Tuolumne, and Stockton will evidently continue to grow with a sure and gradual growth (Taylor 1988:76).

Initially, only the downtown core around the Commodore's Levee and the head of the Channel was developed (Figure 3). But by the spring of 1849, the city of Stockton had outgrown the original O'Farrell and Herron map, and Weber commissioned Major Richard P. Hammond to resurvey the town in a grid pattern of his own design. Measuring one mile square, the survey, which became the base for the modern city, encompassed an area of 16 by 18 square blocks separated by sloughs, levees, and islands, with 17 blocks set aside for public lands and parks (Minnick 1988:33). Each block included 16 lots, six each on the north and south frontages and two each on the west and east (Figure 4).

As noted by journalist James M Hutchings, by December 1849 cloth tents and houses had sprung up "as if by magic" when the "'linen city" (named for the vast array of canvas tents) was swept away by fire at a loss of about \$200,000. A new and cleaner linen city, with a few wooden buildings, was soon erected in its place. By the following spring most of the cloth houses had been replaced by wooden structures, and the city grew "substantially in importance" (Olmstead 1962:378). By 1850 the population had increased to 5,000, and the bustling city was incorporated and had become the county seat (Gudde 1969:321-322; Hoover et al. 1990:348).

The same year that Stockton was incorporated, Charles Weber married Helen Murphy, the daughter of Martin Murphy, Sr., who had traveled overland to California with the Murphy-Stevens party in 1846 and settled in the Santa Clara Valley. The newlyweds made their residence in a large adobe and redwood house recently completed on what was known as "Weber Point," located adjacent to the project area.

Another fire, this time in 1851, nearly destroyed the entire city (at a loss of \$1,500,000) and resulted in a large number of the rebuilt structures being constructed of brick and stone. Successive fires in 1850, 1851, 1856, and 1862 burned the tents and frame buildings and created a need for more permanent structures, and brick and stone establishments were soon constructed in the commercial district, situated around Hunter Square and the court house. A new city hall was erected in 1852, as well as the south wing of what became the State Asylum for the Insane (Olmstead 1962:378).

When the Belgian argonaut Jean-Nicolas Perlot revisited Stockton in 1857 after an absence of seven years, he remarked upon its improvements:

It (the city) was already populated by twenty to twenty-five thousand inhabitants, had superb streets, drawn on the square (tires au cardeau), cutting each other at right angles, sixty feet wide with sidewalks twelve feet wide, and bordered by houses of two and three stories. But all this was of wood, even the sidewalks, even the pavements; some houses, however, formed an exception: some were of brick, others of iron. In the evening, gas lighted everything, the telegraph tied the city on one side to Sacramento, on the other to San Francisco. I marveled at everything I saw there: how many changes in seven years! [Perlot 1985:313].

By 1859 when journalist James Mason Hutchings visited the city he noted two daily newspapers, four public schools, four private seminaries, a fire department, and "Episcopal, Presbyterian, Methodist Episcopal, Catholic, Methodist Episcopal South, First and Second Baptist, Jewish Synagogue, German Methodist, and African Methodist" churches (Olmstead 1962:378). Stockton was indeed a cultural and religious melting pot.

Weber, ever a firm believer in the future of his burgeoning community, set up a real estate business and continued advertising lots for sale. By the early 1860s, however, with final confirmation of his land grant received, only three of the 17 public blocks given to the city had been developed (Shebl 1993: 11). Determined to develop a city modeled on the foreign cities he had known, Weber was often stymied by difficulties with squatters settling on his land, financial difficulties resulting from the defense of his land title, the failure of his efforts to improve flooding, and the lack of money in the city treasury to enable his plans to move forward (Shebl 1993: 112).

Weber's legacy, however, has given Stockton its wide streets, city parks, civic monuments, and numerous churches. As described by his longtime secretary, L. M. Cutting:

He gave all the park sites within the old city limits in order that the people might enjoy the open air and have breathing places in the heart of the city during all the coming generations. He donated sites to all the churches, regardless of creed, the Methodists, the Presbyterians, the Catholics and all the other congregations organized at that time. He gave the Jewish People their

cemetery. It did not make any difference to him what creed or faith people held. He served them all alike.

He gave the county the site for the court house, the city its waterfront, and the ground for the fire houses and other public buildings [1923 edition of the *Stockton Record*, in [Shebl 1993: 113].

When Taylor revisited Stockton ten years later, he described the "broad, cheerful, watered streets, suburban gardens, neat churches, and a glimpse of shipping in the tide-water slough" (Taylor 1951:127). Perhaps Weber's success was greater than he knew.

Residential Development

Residential development in Stockton was first scattered throughout the downtown core, with homes interspersed with business establishments and spreading north, east, and south. By the mid-1860s, however, separate residential neighborhoods began to be developed as the Weber family sold more of its land. Most of the original homes were one- and two-story frame dwellings with gable roofs; they were surrounded by trees and wooden fences and had sheds, stables, and privies in the backyards (Koch 1870; Sanborn 1883, 1895; San Joaquin County Assessment Plat 1867).

With its high water table, Stockton soon sprouted numerous windmills, earning the sobriquet "The Windmill City." Within the Site 2 South Project area, the R.F. Wilson Wind Mill and Tank Manufactory Company was established on the southwest corner of Lincoln and Main streets, while numerous residences sported both attached and separate windmills (Sanborn 1883, 1895).

Beginning in the 1860s, the city commenced work on numerous civic improvements. By 1867 Stockton possessed ten schools, 14 churches, and three volunteer fire companies. Public works, such as graveling and grading city streets as well as the construction of two turnpikes leading from town, cost over \$200,000 in 1867 (Minnick 1988:126). During another round of civic improvements in the mid-1880s and continuing through the 1890s, the Board of Public Works instituted a program of street improvements and sewer work throughout Stockton, resulting in the graveling of streets and the replacement of backyard privies (Sanborn 1917; *Stockton Evening Mail*, November 15, 1897).

South of the Channel

The residential area within the Site 2 South began to be developed during the mid-1860s, with homes constructed on Blocks H, I, and M by 1870 (City Directory 1871; Koch 1870; San Joaquin County Assessment Plat 1867). Over the succeeding years, the slough that had traversed the area was filled in and homes were constructed on Blocks K, N, and O (as well as others

within the project area) by the 1890s (City Directories 1888, 1893, 1900–1; Sanborn 1883, 1895) (Figure 5).

The residences in the area were both owner- and tenant-occupied, with some local homeowner owners owning several nearby rental homes. Most of the occupants were families, with blue-collar and lower-middle class white-collar workers predominating. Many worked in the nearby grain and woolen mills as clerks and laborers, and several were associated with the adjacent shipping industries. Those who resided in the neighborhood were of mixed ethnicity, with Anglo-American, European, Italian, Irish, German, and other nationalities residing side-by-side (City Directories 1883–4, 1888, 1893, 1900-1; San Joaquin County Assessment Plats 1881, 1895, 1901).

The only exception to this pattern, located immediately south of the project area, was the Colored School, established on the southeast corner of Washington and Monroe streets in 1868 and in operation until 1879. The school was operated by the Reverend Jeremiah Sanderson, an eastern-born African American minister-schoolteacher. Miss Susie Baxter succeeded Henderson as teacher and continued until the school was closed in 1879. Most of the African American families who resided in the neighborhood built their churches and residences south of Washington Street. In 1904 the Monroe School, designed by Louis Stone (who later designed many of the buildings at the University of the Pacific), was built on the site (Figure 6). The first Mission-Revival style school to be constructed in Stockton, it was planned to be the best school in the city and to provide schooling for the poorest children living in the worst neighborhood (Bonta and Spencer 1981:35–36; Donald Walker 1999).

During the 1880s and 1890s, the area on the southern edge of the channel began to be industrialized, with large grain mills and warehouses constructed on the waterfront and lumberyards and manufacturing plants nearby (Figure 7). Neighborhoods expanded northward from the Stockton Channel into areas that were formerly farmland. The lots in the Site 2 South area, however, continued to be primarily in residential use until the 1940s, when industrialization of the entire channel area caused an exodus of families. By the 1950s the neighborhoods had declined dramatically, and numerous inroads had been made by local industries (Sanborn 1946, 1950). The Crosstown Freeway project and redevelopment efforts have totally eliminated all the structures within the project boundaries.

Block Histories

Block 9 (Figure 8)

Many of the lot owners were merchants or capitalists of some note in the community. Biographical data on those mentioned in one or more of the various local histories is provided below.

Albert Gallatin Brown (1801–1884) was born in Maine and came to California via Cape Horn (1849). He operated a stage line in Stockton during the 1850s and was also for many years a Justice of the Peace. Brown was an active Mason and was Grand Master and Financial Secretary of the Odd Fellows Charity Lodge #6.

Benjamin Howard Brown (1822–1904) was born in Massachusetts and came to California via Cape Horn (1850). He was the first tailor in Stockton, and he made considerable money shortly after his arrival by selling suits and blue canvas overalls. In 1852 he opened the Blue Wing Oyster House and again was quite successful, although he lost everything in the fire of 1855. Next, Brown went into the grain business, operating the first feed store in Stockton and later branching out into produce. He was on the board of directors of the Pioneer Society (1868) and was elected to the city council (1873–1874). Brown was among the signers of an 1877 petition opposing the racial reintegration of the Stockton public schools.

Minnie Clements Brown was a daughter of Thomas Clements, founder of the northern San Joaquin County town that bears his name. She attended San Joaquin Valley College and married a Mr. Brown, about whom nothing is known. George Tinkham (*History of San Joaquin County* [1923]) states that she lived in Clements.

James Darcy is mentioned in Thompson and West's *History of San Joaquin County* (1879) as one of the founding members of the Irish American Benevolent Society (1869). He was a Stockton saloon owner for many years (U.S. Restaurant, 1871; Eureka, 1877; Peerless, 1892; Darcy & Finnan Liquors, 1901) and is mentioned by Tinkham as having lost his Stockton saloon in an 1864 fire. Peter F. Darcy, a renter on Block 179 and waiter at the U.S. Restaurant in 1871, was probably James Darcy's brother.

Moses Hammond (1800–1879) came to California from Rhode Island via Panama (1848). He was a Stockton lumber dealer during the 1850s, an alderman (1855), and subsequently an officer at the local Republican Party organizing convention (1860). Hammond farmed in O'Neal Township from 1857 until his death.

Oscar P. F. Kallenbach (1823–1910) was born in New Jersey and came to California via Panama (1849). He came to Stockton in 1861 and worked as pressman for the *Stockton Daily Independent* for 18 years.

William F. McKee (1824–1875) was born in Pennsylvania and came to California via Panama (1851). He worked in the Stockton post office for some years before becoming involved in the grocery business during the late 1850s. He and his partners built the McKee Building (1861) at the corner of Main and Centre streets. McKee was a Stockton alderman (1863–1864), a member of Morning Star Lodge of the Stockton Masons, and a founding member of the French Camp Toll Road Company (1867). After his death, Mrs. McKee continued to own his property on Block 179 throughout the remainder of the nineteenth century.

Information on the various renters is less easy to discover. Most of what is known comes from entries in the Stockton city directories dating irregularly from 1871 through 1900. There are no entries in either the 1852 or the 1856 Stockton directories for addresses on this block.

Although from 1878 onward directories express some street addresses in numbers, for the most part residents are said to live on “Market between Beaver and Elk” or on the “corner of Market and Beaver.” For this reason, one cannot always be sure whether persons named actually lived on the block in question or on the block across the street. Table 1 summarizes what is known about the renters on Block 9.

Block M (Figure 9)

As with other blocks in the project area, Block M was dominated by absentee landowners and occupied by working-class individuals. In the early 1880s, Lots 1 and 3 were owned by Antonio Rossi, who was a manufacturer of California wines and brandies. By 1895 a frame duplex, including a privy at the rear of the lot, was constructed on Lot 1. Maria Rossi eventually assumed ownership of the property, and by 1972 the structure had been demolished. By 1909 a frame duplex complete with outbuildings (similar to Lot 1) was constructed on Lot 2; this, too, was demolished by 1972.

In 1881 Alonzo Rhodes owned Lot 5, and by 1895 a frame dwelling was constructed on the property. Luigi Nave assumed ownership of the property in 1901 and continuously owned the property until the 1960s. By 1972 the dwelling was demolished.

Lot 7 was originally owned by Isabella Garwood, who sold the property to Mary Shea in 1895. The property remained vacant until Shea constructed a frame dwelling on the lot sometime between 1895 and 1909. Shea retained ownership of the parcel throughout the twentieth century and, according to the Sanborn maps, the building was identified as demolished by 1972.

The northern half of Lots 9 and 11 were owned by James Tuite by 1895 and then Anita Tuite by 1901. A framed dwelling, including privy, was present on the property by 1895 but was demolished prior to 1946. James and Anita Tuite also purchased Lot 11, which included a frame dwelling and privy on the northern half of the lot and a half frame dwelling on the southern half. By 1946 the dwelling on the north half of the lot had been demolished, and by 1972 the southern half-frame dwelling had also been demolished.

The southern half of Lots 9 and 11 were owned by Isabella Garwood in 1881 and inhabited by Patrick Garwood, Isabella, and their younger sons Alonzo and Walter. Patrick was listed in the census as a farmer originally from Arkansas. By 1893 the property was purchased by Rees Williams, a master mariner. By 1895 a frame dwelling with a tankhouse was constructed on the property, and by 1917 a second dwelling was constructed behind the tankhouse. By 1946 the dwellings had been demolished.

Lots 13 and 15 were owned by Aaron Eller and family from 1881 until the dwellings were demolished prior to 1972. On Lot 13 a frame house, shed, and hay barn had been erected by 1895 and were demolished prior to 1972.

Block I (Block 10)

Thomas Harter assumed ownership of Lot 6 by 1881. By 1895 a frame dwelling and six outbuildings had been constructed on the parcel, coinciding with the transfer in ownership to

Mrs. Marion Horton. Between 1895 and 1909, a bay window was added to the dwelling, and the outbuildings had been replaced by one frame carriage house.

In 1870 a residence was located on Lot 7; however, no ownership information is available for this dwelling. Tax assessment records indicate that by 1881 Mrs. M. Hurey owned the property, and the property was sold to John E. Gofield by 1893. Mr. Gofield was a roof painter who resided at 51 Main Street, just a short distance from his property. In 1901 the property once again exchanged hands and was purchased by D.M. and Julia Freitas. By 1909 the outbuilding once standing on the lot was replaced by another frame outbuilding in the southeastern portion of the rear lot. By 1972 all the structures on the property had been demolished.

Captain C.M. Weber owned Lot 9 in 1881. By 1895 a frame dwelling had been constructed on the parcel, and it was now owned by J.H. Tam. Sidney Newell purchased the property in 1901 and constructed a framed duplex on the parcel in 1917. By 1972 all the structures on the property had been demolished.

In 1870 a residence was located on the Lot 11; however, no ownership information is available for this domicile. John H. Barry, a carpet maker and fitter, purchased the property in 1872. Mr. Barry continued to own the property, and by 1895 a frame dwelling was established on the land. J.G. Gifford purchased the land in 1901, and by 1909 the land was vacant—the structures had been demolished sometime between 1895 and 1909.

In 1870 a residence was located on the Lot 15; however no ownership information is available for this dwelling. Rosa Robertson purchased the parcel prior to 1881 and eventually constructed a frame dwelling on the land prior to 1895. By 1972 all the structures on the property had been demolished.

Lot 16 was owned by Charles Lyons in 1881 and was then purchased by Peter Delsanto in 1893. A frame dwelling was constructed on the land by 1895, and a frame outbuilding was added to the rear of the lot prior to 1909. By 1972 all the structures on the property had been demolished.

Charles Lyons, a local laborer, owned Lot 12 in 1872. By 1884 the property had been transferred to Mrs. Lillie Lyons, Charles Lyons' widow. By 1895 a frame dwelling and tankhouse had been constructed at the rear of the property. Sarah E. Jackson purchased the property by 1901, at which time an outhouse was added to the property. The frame dwelling on the property was replaced by another frame dwelling at the north end of the lot sometime between 1895 and 1909. The new frame dwelling was converted to a two-story store by 1917 and then a boarding house between 1917 and 1946. By 1972 all the structures on the property had been demolished.

In addition to Lots 12 and 16, Charles Lyons was listed as the owner of Lot 10 in 1881. By 1893 a wood framed outhouse was located on the property. Mrs. Lillie Lyons assumed ownership of the parcel in 1893 following the death of her husband. In 1895 three new outbuildings, including one cistern, had been added to the property. Sometime between 1895

Table 1. Summary of Block 9 Residents

Renter's Name	Residence
Renters with firmly established addresses	
George Carlson (1883, 1887)	Stable at 248 Market
Peter F. Darcy (1871, 1873, 1877)	Waiter, barkeeper "res W side Beaver between Washington & Market"
Peter Esau (1878)	Barkeeper "res E side Elk between Market & Washington"
William Jones (1873)	wagonmaker at 246 Market
Other renters who may have lived on Block 9	
John H. Jones [African American] (1878)	Laborer "res cor Market & Beaver"
James E. Kidd (1878)	House painter "res Washington between Beaver & Elk"
Edward Maurer (1878)	Teamster "res Market between Beaver & Elk"
J. D. McDougald (1878)	Salesman "res Market between Beaver & Elk"

and 1909, all structures had been replaced by a frame dwelling and two frame outbuildings. By 1917 a new framed dwelling located at 415–417 W. Market had replaced the earlier structures, and by 1972 all the structures on the property had been demolished.

TRANSPORTATION

From its inception Stockton was, and remains so today, the central transportation hub of the San Joaquin Valley. From the Gold Rush years, when it was the transshipment point for goods and people from the waterways to the foothills, until its present role as the San Joaquin Valley's major agricultural shipping point, Stockton has served as the base for numerous shipping, freighting, staging, railroading, and automobile and trucking services.

The Inland Waterway: Shipping

From Asia, Europe, Australia and the Eastern United States, cargoes of people and goods were shipped to San Francisco's deep-water port for transport to the mines. With virtually no interior roadways, the inland waterways of the Sacramento and San Joaquin deltas became the primary mode of transportation to the interior of California.

The inland port city of Stockton, located at the terminus of a waterway navigable to San Francisco, was, for the first 15 years of its existence, the logical depot for all freight and passenger traffic between the coast and mining communities in Calaveras, Tuolumne, Merced, Mariposa, and Fresno counties. As its boosters touted, the "Gateway to the Southern Mines" rapidly developed as a supply and shipping center from the head of navigation on the San Joaquin River to the mining districts. Goods, food, supplies, equipment, machinery, and men were transported from the port of San Francisco through San Francisco Bay and the Carquinez Strait up the San Joaquin River to the Stockton Channel for transshipment to pack trains, stages, and freight wagons. As one of the three main interior towns of northern California (the other two were Sacramento and Marysville), Stockton shared a proximity to the gold fields and easy water access to San Francisco Bay.

When former soldier and converted miner James Carson returned to Stockton in May 1849, a year after his first visit, he remarked upon the changes that had come over the city:

The spiral masts of barques, brigs, and schooners were seen high pointed in the blue vault above while the merry "ye ho" of the sailor could be heard, as box, bale, and barrel were landed on the banks of the slough. A rush and whirl of noisy human beings were continually before the eye. The magic want of gold had been shaken over a desolate place, and on it a vast city had the bidding [Carson 1991:19].

In December of that same year a writer remarked that:

Stockton is situated on a slough of the same name, three miles from San Joaquin River, and seventy miles from New York of the Pacific. The slough is navigable for steamers and barges of

four hundred tons. The location is excellent, embracing the peninsula between the two principal sloughs, and extends south to Mormon Slough. Population about 3,000. It contains some good buildings, and presents the appearance of considerable business activity. It is the great depot for the southern mining region, and is destined to be a place of much importance [William A. Jackson, Appendix to the Map of the Mining District of California, in Perkins 1964:92].

Although sailing vessels were the first to access the inland ports, by mid-1849 numerous steamers and paddle wheelers were plying the waters between San Francisco and the Great Central Valley, completing the journey in seven to twelve hours. First-class passengers paid 25 cents for a cabin, while steerage cost 10 cents and freight from 30 to 40 dollars per thousand board feet for lumber (Minnick 1988:30). By April of 1850 steamers were leaving regularly from San Francisco to Stockton and returning at the same rate (Perkins 1964:148).

The accounts of diarists and others during the first years of the Gold Rush attest to the flotillas of abandoned ships lining Stockton's Channel, a problem that became so acute in 1850 that the merchants of the community petitioned Captain Weber to dispose of them. He accordingly had them towed to Mormon Slough where they were burned.

By the mid-1850s, a consolidation of the earlier shipping lines resulted in the formation of the California Steam Navigation Company, which thereafter dominated traffic on California's inland waterways. Nelson Anderson's California Transportation Company also ran a line of steamers from San Francisco and Stockton beginning in 1856 (Guinn 1909:327). In March 1856 alone, two ships of the California Steam Navigation Company unloaded 2,598 tons of freight at Stockton—including 235,000 feet of lumber, 50,000 shingles, and 4,000 bricks—during a period when as many as ten steamers made thrice-weekly runs between San Francisco and Stockton. Goods brought to Stockton on these vessels were taken by draymen to brick warehouses owned by Stockton commission merchants, who then hired local teamsters to transport the goods quickly to merchants in mountain locations.

In 1860 the population in the Southern Mines was over 100,000, and all of their food, clothing, tools, machinery, building materials, and furniture were shipped from San Francisco by way of Stockton. In 1867 the Stockton harbormaster's annual log showed 619 steamers and 447 sailing vessels entering Stockton's port and carrying a total of 147,000 tons of freight and passengers. Throughout the Civil War years, the bulk of the outgoing goods consisted of copper from the mines in Calaveras County, as well as grain and cordwood (Minnick 1988:126).

Mud and Dust: Trails, Roads, and Freighting

The transportation hub of Stockton, located at the head of Stockton Channel, quickly developed as the center of the freight and warehouse business. Livery stables, shipping companies, freight companies, stage lines, carriage makers, blacksmiths, railroad stations, and warehouses were established north, south, and east of the channel terminus.

Radiating eastward like spokes in a wheel, the earliest roads from Stockton reached into the Sierra Nevada foothills to the numerous gold camps and supply centers in the California Mother Lode. At first, following established Native American trails into the mountains, men on

foot, horseback, and pack trains traversed the plains and gentle slopes into the steep river canyons. Soon enterprising stagers and freighters established a series of improved routes to the Southern Mines, most of which were later accepted into the state highway system.

Weekly, about 200 tons of freight were packed on mules from Stockton to Calaveras, Tuolumne, Mariposa, and Tulare counties. Each train had 40 or 50 mules, mostly Mexican, each carrying from 300 to 350 pounds and traveling 25 to 35 miles per day (Olmstead 1962: 114). Visitor Bayard Taylor described the colorful scene in 1849:

All the roads from Stockton to the mines were filled with *atajos* of mules, laden with freight. They were mostly owned by Americans, many of them by former trappers and mountaineers, but the packers and drivers were Mexicans, and the *aparejos* [pack saddles] and *alforjas* [saddle bags] of the mules ere of the same fashion as those which, for three hundred years past, have been seen on the hills of Granada and the Andalusian plains. With good mule-trains and experienced packers, the business yielded as much as the richest diggings [Taylor 1988:75-76].

As the mining population expand, so did demands for food, mining supplies, and other merchandise. Wheeled vehicles were needed to deliver these materials to the developing towns, from where outlying camps and inaccessible mining districts were served by pack trains. From the head of Stockton Channel, stage lines and freight services spread out over the plains and into the mining regions. The California Stage Company consolidated most of the numerous small stage companies by 1854. The Concord coach, made at the Abbott, Downing & Company factory in Concord, New Hampshire, reached the peak of its utility by becoming the major carrier of goods to the foothills.

Wagon roads from the Southern Mines to the principal source of supply at Stockton were at first few and difficult. The life of a teamster in those early years was extremely disagreeable, as the grading of these earliest roads left much to be desired. They were narrow and rough, incredibly dusty in summer and full of mudholes in winter. Long detours were necessary around winter quagmires. A traveler who survived the stagecoach trip from Sonora to Stockton in the late summer of 1851 described the journey through the foothills as being fairly pleasant traveling, but went on to recount that:

...the most wretched part of the journey was when we re reached the plains. The earth was scorched and baked, the heat was more oppressive than in the mountains, and for about thirty miles we moved along enveloped in a cloud of dust, which soaked into one's clothes and hair and skin as it had been a liquid substance. On our arrival in Stockton we were of a uniform colour all over—all identity of person was lost as much as in a party of chimney-sweeps...[Borthwick 1948:307].

The fastest way to transport goods to the mountains was in a large wagon holding from 5 to 8 tons of freight and drawn by 16 mules. Fall was the busiest season for teamsters, since mountain storekeepers were obliged to lay in winter stocks before snow made travel difficult. During this season roads to the mines were so crowded that on one occasion as many as 70 freight wagons were counted within 15 miles of one another along the Sonora Road.

In 1859 James M. Hutchings described the traffic in the following way:

One of the principal features connected with the commerce of this city, is the number of large freight wagons; laden for the mines; these have, not inappropriately, been denominated "Prairie Schooners," and "Steamboats of the Plains." Some of these have carried as high as 32,000 pounds of freight [Olmstead 1962:379].

The 1852 Stockton Directory lists six commission merchants, 17 draymen, and eight teamsters while the 1856 Directory lists double those numbers. Most of the firms found in these directories maintained offices and warehouses along the Weber Avenue levee between Centre and Commerce streets. Several ethnic groups were prominent in the freighting business: Mexicans were most often in charge of mule pack trains while Italians J. D. Peters and the Capurro bothers, Irishman D.J. Oullahan, African-American Moses Hamilton, and others drove mule- powered freight wagons. While most of the commission merchants were Euro-American, Stockton historian George Tinkham noted that the Chinese had their own Stockton merchant, "China John," who chartered all mule teams delivering goods to Chinese miners (Donald Walker 1999).

Roads to the Mines

By the early 1850s numerous roads had been established from Stockton to all the major mining districts in the Southern Mines and to Sacramento, the largest inland city in California. Spreading north, east, and south from the inland port, the roads earned different sobriquets over their years of operation, defining their destinations during each period of time. Although roads were subsequently altered somewhat, and reengineered in modern times, they essentially follow the original Gold Rush era routes to a remarkable degree. (Except as otherwise noted, information on early roads was obtained from Hoover et al.1966.)

The Mokelumne Hill Road (Old Calaveras/Linden Road/Highway 26), along the Calaveras River was the earliest and most traveled route to the mines. It served camps along the way, camps on the Mokelumne River to the north, and Angels and Murphys camps through a branch stretching south from San Andreas. Another branch of the road passed through Jenny Lind and Salt Spring Valley, where it connected with the Stanislaus ferry roads (Fuller, Marvin, and Costello 1996:9). In the early years of its operation, when the Calaveras River crossing was made at the Davis and Atherton Ferry, 17 public houses lined the road.

The Waterloo Road (Lockeford Road/Highway 88) coursed northeasterly from Stockton through the community of Waterloo to Lockeford, laid out on the Locke ranch in 1859. Dr. Dean J. Locke had erected a log cabin there in 1851, envisioning the community as the future head of navigation on the Mokelumne River. Although he never fulfilled his dream, the road through Lockeford became one of the most: important routes from Stockton to Amador and Calaveras counties, continuing northerly to Jackson (present Highway 88) and branching easterly to Valley Springs and San Andreas (Highway 12). By the mid-1850s, it had supplanted the Mokelumne Hill/Old Calaveras Road as the major route to the northern diggings in Calaveras County.

The Copperopolis and Milton Road (Antelope Trail/Stanislaus Trail/Old Stockton Trail/Highway 4) was the most direct route from Stockton to the Stanislaus Diggings, known in

these early years as the Old Antelope Trail. Its use was promoted by Calaveras County Sheriff Ben Marshall in 1849, through Antelope Ranch (Marshall's) to Rock Creek, Salt Spring Valley, and over Bear Mountain to Angels Camp, Murphys, and the Stanislaus River ferries to Sonora and Jamestown (Fuller, Marvin, and Costello 1996:9). After copper was discovered at the present site of Copperopolis in 1860, the road was rerouted through that burgeoning community and over the Angels Road to the higher camps (Highway 4).

The Sonora Road to Knight's Ferry soon superseded the Old Stockton Trail to the upper Stanislaus River ferries. Established in 1849 by William Knight, the ferry was in use as early as 1850 by thousands of miners. From Knight's Ferry the road continued easterly to Chinese Camp, Woods Creek Diggings (Jamestown), Sonora, and Columbia (Highway 108). In later years the Sonora Road was renamed the Farmington Road, after the community that developed at its crossroads with the Escalon-Bellota Road. The first stopping place at what was to become Farmington was the "Oregon Tent," established by Nathaniel Harrold, who purchased the Oregon Ranch in 1852, building a large brick house there in 1862.

The Mariposa Road, radiating southeast from Stockton and also known as Lone Tree Road, was the main route to the Mariposa and Coulterville mines in the earliest years. In 1850, Dr. L. R. Chalmers, who had settled at the site of Colledgeville by 1850, persuaded the government teams en route to Fort Miller to pass by his establishment, thus ensuring its success. Numerous way stations, ranches, and small settlements grew up at intersections and branches along its route, as enterprising settlers established stores and stopping places for hungry and weary travelers to the Tuolumne River ferries.

The French Camp and Sonora Road, a wet-weather route to Sonora, was declared a public highway on December 3, 1850. It proceeded southeast then due east toward the county line (eventually passing the twentieth century town of Escalon), and finally heading south again to cross the Stanislaus River at Riverbank—a course followed more or less exactly by modern Highway 120. In 1852 the only building on this road between French Camp and Heath and Emory's Ferry on the Stanislaus was the Zinc House west of Atlanta. Even though not more than one-sixth of all the land on this route was occupied or under cultivation as late as 1859, the road was much appreciated since the sandy soil on which it was laid permitted teams to pass in winters when other routes to the mines became adobe quagmires (Donald Walker 1999).

The San Joaquin County leg of the Upper Sacramento Road was approved June 10, 1851, by the county court of sessions. It proceeded north from the intersection of American and Miner streets in Stockton, crossing the Calaveras River at Simpson's Ranch and the Mokelumne River at Weston and Staples' Ranch (east of modern Highway 99) to the county line. In 1852 the Court ordered that the road be 100 feet wide (Donald Walker 1999).

The Lower Sacramento Road segment within San Joaquin County was approved on June 10, 1851, at the instigation of Charles M. Weber and Thomas Baker. This route left Stockton via Beaver (later Madison) Street, proceeding north through the lands of C. M. Weber, crossing the Calaveras River at a place called "Sly's" and again proceeding north just west of the timber along Bear Creek (present Micke Grove) to a ferry on the Mokelumne River known as "Benedict's" (east of Cherokee Lane). The road then proceeded northwest to a place on the east bank of the

Mokelumne known as "Davis" and then due north to the county line at Liberty. This route was later modified through the initiative of Jeremiah Woods, founder of the town of Woodbridge, who erected a bridge at his townsite (1853) and influenced the county supervisors to direct the road's course from the Calaveras River due north to Woodbridge (Donald Walker 1999).

Cherokee Lane was declared a public road on June 5, 1861. It commenced at the Mokelumne River on the dividing line of the state land survey and proceeded southward to the Calaveras River where it joined the Upper Sacramento Road (Donald Walker 1999).

The Transportation Miracle: Railroads

The coming of the railroad was to forever alter California's established transportation patterns, replacing the huge freight and pack teams. Stockton, however, retained its position as one of the most important interior towns of California, shipping wheat, grains, nuts, fruit, and other crops to the cities and towns of California and the eastern United States, while importing hard goods and luxury items from worldwide markets. While the railroads reached up and down the valley, and even as far east as Milton by 1871 and Valley Springs by 1884, freight and stage lines still departed the port city daily for the more distant and less accessible regions.

The history of the Central, Southern, and Western Pacific Railroads has been recounted at length elsewhere, and will not be repeated here, but those lines have played an important role in the history of Stockton and the development of the central San Joaquin Valley. As the transportation hub of the region, Stockton was immensely attractive to the railroad entrepreneurs of the state. Almost immediately after the opening of the transcontinental link, completed in May of 1869, plans were afoot to extend the line to Stockton.

On August 12, 1869, the Central Pacific's "Governor Stanford" entered Stockton from Sacramento, the first excursion train to the city over the newly laid rails. By the first week of September, the extension of the line had been completed from Sacramento through Stockton to Oakland, and the port city had true transcontinental rail service (Wood and Covello 1977:27).

Although Stockton was the major city of the area, the first diversion point for the railroad was established at Lathrop, due to a dispute over free land for the station. The Central Pacific soon capitulated, building three consecutive passenger stations in downtown Stockton. The first Central Pacific depot was located on Sacramento Street, between Market and Washington streets. Taken over by the Southern Pacific in 1884, the railroad continued to serve the city. In 1909 the Southern Pacific constructed a new station, in the shingle style, 1 mile south of the present brick structure (located east of Aurora Street on the west side of the tracks, between Miner and Channel Streets), which was completed in 1930 (Wood and Covello 1977:36).

In addition to the Central Pacific/Southern Pacific line, Stockton boasted two other transcontinental railroads. The Santa Fe Railroad Company purchased the San Francisco and San Joaquin Valley Railroad in 1898 and built their Mission Revival station south and west of the Southern Pacific site, their tracks running in parallel lines north and south through the

community. In 1909 the Western Pacific purchased the Salt Lake City and San Francisco Line, thus establishing Stockton as a major railroad center in California.

When a large deposit of copper was found in the foothills east of Stockton in 1860, the mining boomtown called Copperopolis sprang up almost overnight. Throughout the Civil War as many as 6000 tons of copper ore per month was shipped through Stockton from the Calaveras foothills, and entrepreneurs like pharmacist E. S. Holden decided that this freight traffic could be handled more cheaply by rail. Holden and his partners obtained a railroad right-of-way by 1867, and by 1870 trains were proceeding from the Stockton & Copperopolis Railroad depot (corner of Weber and Center) east on Weber Avenue and out into the countryside. When the demand for copper diminished with the end of the war, the rail line nearly failed. It was later acquired by the Southern Pacific Railroad in 1888, and its depot and Weber Avenue tracts were subsequently removed at city expense in 1901. Within a year, however, local investors began a standard gauge trolley line on Weber, between Center and Aurora streets. This street railway was operated between 1906 and 1940 by the Central California Traction Company, which also offered electric rail service from Stockton to Lodi and Sacramento (Donald Walker 1999).

A Modern Machine: The Automobile

It was the automobile, however, that would most dramatically alter the nineteenth-century character of Stockton. The twentieth century brought the advent of the automobile and the need for good roads. In response, numerous Good Road clubs were formed in California in the 1910s and the years following World War I to improve the highway infrastructure. Shipping, freighting, and railroading were quickly supplanted by automobile and truck transportation, as the American public took to the roadways in droves in the 1920s. Although the transformation didn't take place overnight, Stockton's commercial center began to erode—spreading north and east, as did its expanding residential and commercial neighborhoods.

COMMERCE AND INDUSTRY

By 1854 Stockton had become the fourth largest town in California, and its population, as well as the vast hordes of people pouring through its doors, required numerous goods and services to sustain them. Business establishments were erected almost overnight—many were initially in tents (as was Weber's first store), but as the market and the city grew, frame, brick, and wooden buildings were constructed to house the merchants and commercial services. As is true for port cities, the first establishments in Stockton tended to be those which catered to travelers: liverys and stables, hotels and lodging houses, restaurants, bathhouses, saloons, and dry goods and produce stores. Situated at the head of the Stockton Channel, the land now occupied by Site 1 was rapidly developed in response to these needs.

Hotels and Lodging Houses

One of the first hotels in the area, the Stockton House (later St. Charles Hotel) was begun in the fall of 1849 and completed the following year by Messrs. Doak, Bonsell, and Scott at a cost of \$75,000. Located on the southeast corner of Channel and El Dorado (facing El Dorado), the three-story frame building was the first luxury hotel in Stockton. Visiting dignitaries, including Jacob Bachman in 1851 and Horace Greeley in 1859, stayed there when passing through the city. Renamed the St. Charles in 1854, it was the first building in Stockton to have gas lights (1859) installed. Running water was provided in 1861 because the mosquito problem was so bad in the area that it was thought discourteous to oblige guests to use an outside pump for bathing and ablutions. The hotel had become a rooming house by the time it burned to the ground on November 21, 1871 (*Stockton Evening Herald*, November 22, 1871; Donald Walker 1999).

Retail Establishments

Long-standing businesses in the area were located in the two-story brick building on the northwest corner of Channel and Hunter (Block 70 2/3, Lot 12), which was occupied as a residence by Charles and Catherine Brutschy from at least 1867. Brutschy, a saloonkeeper by trade, operated the Old Lodge Saloon on Main Street and the Courthouse Exchange with a man named Esbach. By 1888 Brutschy was deceased and the building was assessed to his wife. During the 1880s the lower corner story was occupied as the Depot Saloon, operated at that time by John Hoerl and in the 1890s by Henry Rohrbacher of the Willows Brewery. The adjoining storefront was occupied by Frank Sievers as a meat market (City Directories 1871–72; 1883–4, 1888, 1900–1; Sanborn 1883, 1895, 1917; San Joaquin County Assessment Plat Maps 1867, 1881, 1895, 1901). During the 1940s tenants of the building included a restaurant and store (Sanborn 1946).

Other occupants of Block 70 2/3 included the Stockton Milk Dairy on 225–231 Hunter Street (Lot 15), which was occupied by Mowrey's Livery and Feed in the 1910s. During the 1890s Willows Brewery Depot and Bottling Works, owned by Henry Rohrbacher, operated on the north side of Channel Street (Lot 8). Two Chinese laundries, discussed in the chapter below on Chinese ethnicity, were also located on the block (Lots 16 and 6) (Sanborn 1895, 1917). By the 1940s all the individual enterprises had been subsumed by the Hansel and Ortman automobile business (Sanborn 1946).

Grain and Industry

It was agriculture rather than gold that was to provide for the long-term development and success of Stockton. In describing the inducements for settling in the "Tulare Plains" in 1850, James Carson noted the agricultural opportunities of the fruitful valleys, as well as remarking that "[t]he rivers are highways to market, for all the produce raised in this section of country, and Stockton a market house for its reception" (Carson 1991:70).

By the time Charles Nordhoff published his guide to California in the early 1870s, the entire landscape between Stockton and Merced, 600 square miles, was planted in wheat. He described the scene in this way:

The railroad train runs through what appears to be an interminable wheat-field, with small houses and barns at great distances apart, and no fences, except those by which the company has guarded its trains against the cattle, which are turned into the fields after harvest to glean the grain and consume the stubble.

Wheat, wheat, wheat, and nothing but wheat, is what you see on your journey, as far as the eye can reach over the plain in every direction. Fields of two, three, and four thousand acres make but small farms; here is a man who "has in" 20,000 acres; here one with 40,000 acres, and another with some still more preposterous amount—all in wheat [Nordhoff 1973:182].

By the 1880s Stockton had become the wheat-processing center of the state, which led the nation in grain production, with the Sperry Flour Company on the Embarcadero operating the largest mill in California. The Crown Mills and others were located nearby. Stockton's merchants, manufacturing companies, farmers, and flour companies provided goods and produce, as well as jobs, to local, state, and national markets. Semi-skilled and blue-collar workers found an abundance of work in these industries, as did unskilled and common laborers in railroad construction, reclamation, public works, and farm labor work.

Numerous other important industries had been established by this period of abundance, including the Stockton Woolen Mills in 1870 and the California Paper Company in 1878, both located on Lincoln Street south of Mormon Slough. During this decade, four banks and three newspapers catered to the population of over 15,000. Other industries included an assortment of iron works, foundries, canneries, and lumber and planing mills.

The earliest industries to achieve national (and international) importance, however, were those that produced agricultural equipment. The Matteson Company had made farm plows as early as 1856, while by the 1870s six major implement manufacturing companies were in business producing reapers, harvesters, and gang plows. Included among these was the Stockton Wheel Company, founded in 1883, forerunner of the Holt Manufacturing Company (Minnick 1988:126–127).

ETHNIC DIMENSION

Ethnicity in the Site 2 South Project area was mixed from the time the first residences were constructed in the 1860s until the turn of the nineteenth century. As the second generation to settle in Stockton, those who resided in the area were natives of the United States, England, Ireland, Italy, and Germany.

German

As is the case for many patterns of migration, it may have been the Bavarian ancestry of Charles Weber that attracted so many of his countrymen to settle in Stockton. Certainly his knowledge of the language and affinity for those of his native land may have influenced the first German immigrants to stay, while they undoubtedly encouraged others of their nationality to immigrate and settle locally. In 1856 German immigrants built their Turnverein Hall on Hunter Street, adjoining the Chinese temple on its south side. Espousing ties of mutual aid and fellowship, the Turnverein facility had many similarities to the Chinese joss house next door (Minnick 1988:38).

URBAN DECLINE AND REDEVELOPMENT

As the transportation hub of the San Joaquin Valley, Stockton continued to grow both geographically and financially, until it became the burgeoning city of today. Home since 1924 to the University of the Pacific—the state's first chartered institution of higher education (1851)—Stockton is also an ethnically diverse area with over a quarter of a million inhabitants.

The decline of gold mining, the development of agriculture, and the coming of the railroads coincided to make Stockton the San Joaquin Valley's major agricultural shipping point. Because so many agricultural crops are transported through Stockton, it is also a center for migrants seeking employment in California's vast Central Valley (Johnson et al.: 1993:69).

Downtown Stockton today is experiencing a revitalization of its role as a transportation hub, as the deep water channel for large ships is providing an impetus for the development of intermodal and multimodal transit in the area (Figure 11). New developments planned for Stockton's downtown core bode well for the future of the Sunrise Seaport and the fulfillment of Weber's dream.

Chapter 3. Research Design

This chapter has been adapted from the *Stockton Waterfront Projects Archaeological Treatment Plan* (Treatment Plan) prepared by Foothill Resources Ltd. (1999). The Treatment Plan identified the project area as having high archaeological sensitivity. Data recovery strategies outlined in the plan were designed to test the historic backyards for intact archaeological deposits including refuse deposits and privies. When encountered, intact archaeological features were to be excavated and evaluated for their ability to address research themes identified in the Treatment Plan.

This chapter provides the framework used for evaluating the importance of historic-period archaeological remains in the Stockton Waterfront area. The focus of this section is to provide a theoretical basis for determining the significance of historic period resources expected to be found within the project area. This includes a discussion of the types of archaeological properties (specific types of remains and features) that we reencountered, how their integrity is assessed, and research themes and questions that guide the assessment of significance.

RESEARCH CONTEXT

An archaeological research design identifies important questions that (1) could be addressed by the kinds of data that the property is likely to contain and that (2) cannot be addressed using data from other sources. This research design relies heavily on the research designs that have been developed for the cities of San Francisco (Praetzellis and Praetzellis 1993), Sacramento (Praetzellis 1991), and Oakland (Praetzellis 1994). For more than a decade, adaptations of these research designs have been applied successfully to numerous urban California archaeological deposits, enlarging and building upon knowledge gained from each project.

The following sections summarize the research context for the downtown Stockton area. The waterfront area developed from sloughs and marshes to critical Gold Rush supply center to a modern commercial port. The final sections in this chapter present a series of research questions for the archaeological property types that the preceding historical, archival, and archaeological research has indicated may be present within Stockton's waterfront project areas.

Modernism, Victorianism, and Ethnicity

The history and archaeology of the project areas will be viewed within the framework of an issue important to social historians: the process by which people from traditional, premodern

cultures—both immigrant and native born—adapted to life in an industrial society (Gutman 1977).

Modernism

While the great exhibitions of the nineteenth century were displaying the newly available products of the Industrial Revolution, the very process of industrialization was transforming Western society and culture. In nineteenth-century America, this process involved a change from a traditional, “face-to-face” society (Redfield 1955) to one that emphasized rationality in economic relationships, specialization, and efficiency, and in which attainment of the goal of an improved future was to be measured by material progress (Brown 1976:29). Until as late as the 1970s, many economic historians conceived of a nineteenth-century modernization as a simple, linear process (Rostow 1960). According to this model, societies evolved in a straight-line path from traditional, agrarian-based communities, in which control was maintained by church, family, and inviolable social order, to industrialized ones in which centralization, bureaucratization, and role segmentation were the rule (Bender 1978:56).

A parallel interpretation, and one which has come to predominate in recent years, rejects the idea that all vestiges of the preindustrial past were shed by all segments of society undergoing urbanization. Glazer and Moynihan’s (1963) classic examination of the strength of immigrant culture in New York and studies of resistance to industrial culture on the part of workers (e.g. Hirsch 1978; Rodgers 1978) have contributed to the view of urban pluralism developed by Bender (1978). Bender proposed that the modernization of nineteenth-century American urban dwellers was multilinear and complex—multilinear because various class and ethnic groups participated to varying degrees and complex because individuals and families were simultaneously involved with both traditional and modern ways of life. Through the mechanism of family and social networks, national, religious, and ethnic ties remained strong and encouraged communal, traditional values and practices (Bender 1978:122; Haraven 1978). At the same time, industrial discipline, the cash economy, and relationships with government institutions necessitated that individuals be able to function within the modern order (Rodgers 1978).

It has been suggested that a set of cultural values, practices, and aesthetics known as “Victorianism” (Howe 1976; Wiebe 1967) came to predominate among the Euroamerican cultural and political establishment of this modern society. Victorianism is said to have been a “homogenizing force” (Hardesty 1980) upon immigrants and native-born–working-class culture alike, one that attempted to replace their traditional mores with modern values and patterns of behavior better suited to their roles in an industrial society. Archaeological research is in a unique position to measure both the relative pervasiveness of Victorianism as well as the degree of resistance to Victorian values as displayed by the development of a distinctive working-class culture.

Victorian Values and Practices

Victorian values had strong and clear behavioral and material correlates, many of which were displayed in the home (Praetzellis 1991). The essential moral quality of a Victorian family was expressed by the presentation of tasteful, Gothic-style artifacts in their appropriate context (Eastlake 1878). To maximize this effect, the home itself had to be of the correct style and internal arrangement. The relationship between Gothic architecture and mid-nineteenth-century Christian values has been examined by Clark (1976). This architectural form, with its church-like exterior and functionally discrete interior spaces, provided the ideal context in which highly formalized Victorian social interactions, dubbed “secular rituals” (Moore and Meyerhoff 1977), were carried out.

Household objects played an essential part in Victorian families’ household rituals. On the largest scale, Romantic revival houses were themselves designed to accommodate these rituals (Clark 1976:51–52). If a prospective visitor were allowed beyond the front stoop of a middle-class home, the hall stand would receive their visiting card. This piece of furniture was a veritable icon of respectable values because of its role in this highly formalized practice of social visiting, an essential part of nineteenth-century manners (Ames 1978; Lynes 1963:147). Proceeding through the hall, the new arrival would be ushered into the parlor. It was here that morning callers were received and afternoon tea parties and evening receptions were held. In the parlor, the guest would experience an environment created solely for such formal receptions; a room through whose embellishments was expressed the public face of both middle and working-class households (Cohen 1986). The parlor’s interior was a vision of respectable clutter: weighty dark-stained furniture shrouded in swags of heavy fabric; walls jammed with copies of famous works of art; and every flat surface home to some figurine or gilded trinket (Seale 1981; Vaux 1864:95–97). The expense of outfitting a middle-class parlor in 1877 was more than three times that of any other room (Lynes 1969:142). Only in the homes of the rich was it not maintained at the cost of some inconvenience, for this room took away space from a family’s informal living area. A suburban landlady, cited by Calvert Vaux, claimed that “all the best families lived in the basement” leaving the parlor, according to Vaux, as “a sort of quarantine in which to put each plaque of a visitor” (1864:97). The volume of good taste in the parlor was redundant to the point of being overwhelming, and its cultural significance was understood by all who entered (Grier 1988).

The dining room was also a public room in the Victorian house. The rules to be obeyed here were even more elaborate and intricate than in the parlor, and the display of fashionable items such as dinnerware was an equally important. This architectural form, with its church-like exterior and functionally discrete interior spaces, provided the ideal context in which highly formalized Victorian social interactions, dubbed "secular rituals" (Moore and Meyerhoff 1977), were carried out.

The best dinner service, crystal and silver were displayed in a dresser, while decorative platters and bric-a-brac ringed the wall on a shoulder-high plate rail. Under the popular "English" system of dining, serving vessels were passed from hand to hand around the table; plates never arrived preportioned from the kitchen in a well-regulated Victorian household. At a formal dinner, each table setting included several drinking vessels; until the rise of the

temperance movement in the 1880s, each course might be served with its own type of wine (Lynes 1963:176-199).

Nineteenth-century intellectuals from John Ruskin to Henry Ward Beecher fostered the belief that beautiful surroundings created people (McLoughlin 1970; Ruskin 1959; Watkin 1977). While tasteful design could educate, bad design was berated as an immoral influence (e.g., Beecher 1868). Starving a child's soul of beauty condemned it to an empty life of frustration and despair. Material culture had the power to improve and uplift, and reformers explicitly promoted specific decorative modes to achieve their religious and social ends. The moral connotations of material goods, however, shifted through time and according to the observer. Whereas the Gothic Revival inspired middle-class European and American consumers from the 1840s through the 1870s, the embellishments that had formerly designated comfort came to be seen as cluttered gaudiness, connoting sloth by the 1890s. The Arts and Crafts and Colonial Revival movements and the Centennial celebration inspired pride in America and its accomplishments. A "Buy America" campaign stressed not only products of local origin, but products along a certain line. These goods wedded the wonders of technology with the simplicity of nature, a marriage that can be seen most clearly in Craftsman-style architecture. According to Gustav Stickley, a proponent of things Craftsman, "Luxurious surroundings...suggest and induce idleness. Complex forms and costly materials have an influence upon life which tells a sad story in history. On the other hand, chasteness and restraint in form, simple, but artistic materials are equally expressive of the character of the people who use them" (cited in Cohen 1986:264). By the turn of the century, the American middle class had by and large rejected Victorian fashion and adopted a style of decor that was seen as simple, natural, and efficient (Cohen 1986:275).

Ethnic Display and Boundary Maintenance

Beliefs, cultural attitudes, and values are not directly accessible through archaeological data (Binford 1962, 1965). Nevertheless, Ian Hodder points out that ethnicity is an appropriate subject for archaeological studies if it is defined as the "*mechanism* by which interest groups use culture to symbolize their within-group organization in opposition to and in competition with other interest groups" (1979:452 emphasis in original). Ethnic groups cannot be defined by a cultural trait list and its material correlate because the system is changeable, not static, and the overt signs of a group may change without affecting that group's identity (Barth 1969; Spicer 1971:798). Ethnicity is a function of self-identification and ascription, not objective identification from outside (Barth 1969). Spicer points out that "what becomes meaningful is probably a function of the oppositional process" (1971:798), and Barth likewise places the emphasis on "the ethnic boundary that defines the group" (1969:15). Therefore, it is ethnic strategies, such as boundary maintenance, expressed in patterns of behavior that took material form that can be studied archaeologically.

Working-Class Cultures and Resistance

The modernization of the cultures of nineteenth-century urban dwellers neither proceeded uniformly across society nor immediately supplanted all preindustrial modes of life (Bender 1978). The meaning and value of material goods shifted for working-class urban dwellers as they did for members of the middle class.

The existence of an urban, distinctly working-class, culture in England was recognized by E.P. Thompson (1963) as an outgrowth of the Industrial Revolution. Although the traditional rights and responsibilities of craftsmen were being eroded by creeping industrialization, these values retained their strength and eventually jelled into the trades-union movement. Later writers have emphasized not only working-class political movements but also class-specific values and mores, often interpreting these as resistance to the Victorian values of the time. Stedman Jones, for example, points to the rise of a "working class culture which showed itself staunchly impervious to middle class attempts to guide it" (1974:462). The working class was said to be governed by "strict rules of propriety" (Booth 1902, cited in Stedman Jones 1974:463). However, these rules were not the same as those of the Victorian middle-class, who sought to reform the manners and morals of the working class through the medium of universal education. For example, unlike the middle class, working people did not save money to accumulate capital but rather to buy objects and clothing for display: "evidence about patterns of spending...suggest[s] that a concern to demonstrate self-respect" was more important than saving for the future (Stedman Jones 1974:473).

The continuance of barter in the face of the rise of a cash-based economy is another area in which nineteenth-century working-class resistance can be seen. Despite efforts at regulation, barter survived in urban areas in a vigorous trade in secondhand goods—ranging from household furnishings to clothing—supported by many working-class people. In junk stores, the money economy was suspended and barter was acceptable. Goods were exchanged for goods and bought or sold for cash or credit; the relationship between merchant and customer was intensely personal, and deals were highly negotiable.

As a mode of exchange, barter was still widespread well into the eighteenth century (Braudel 1975:328, 333), and products of the farm and forest were regularly exchanged for manufactured goods at many country stores in America throughout the nineteenth century (Carson 1954: 19-38). Cordwood was offered for sugar; embroidery could pay off a grocery bill. In this environment, obtaining goods was a face-to-face operation between buyer and seller in which the value of things was judged in relation to other things. When facing off, the actors knew each other's final condition, credit worthiness, and reputation as a bargainer. Was the cord of wood worth ten pounds of sugar to a local merchant, or twenty? The answer might depend as much on the bargainers' relationship as on the storekeeper's assessment of local needs.

By the mid-nineteenth century in the cities, however, economic relationships had become almost exclusively money-based. Until this time, transactions between urban merchants and their clients were personalized to the degree that credit was relatively easy to obtain, the price of merchandise was not marked on items, and their cost fluctuated with the customer's ability and

willingness to pay the asking price. By the 1870s, this old system was fading rapidly, and in urban areas the "cash store" predominated.

It was a short step from the one-price system to marketing on a national scale. Mass retailing—based on high turnover and low unit price, anonymity, and the one-price system—completed the depersonalization of the storekeeper/customer relationship and established the mode that has come to typify such relationships in mature capitalist economies. It was, in short, an inevitable part of the process of economic modernization

The noneconomic principles behind the one-price system were classically Victorian: the system was a rational one based on fixed standards, reproducible conditions, and efficiency (Brown 1976:42–43). It could be applied to all persons equally since the customer/merchant relationship was not interfered with by the individual's social role outside the transaction. Proponents conceived of it as yet another example of the evolution of nineteenth-century society, whereby the practices and methods of rationalized business "were a natural outgrowth of a general law of Progress" (Polanyi 1957:274).

While the use of secondhand stores was clearly motivated by economic concerns, it is also a clear example of resistance. The modes of barter and variable prices were embedded in community social relations and were precisely the kind of premodern arrangements that were contrary to all things Victorian. Where the Victorians had absolute values for things, the premodern system had negotiation and variability. Where the new way involved standardized, role-specific performances, the old way had complex, multilevel relationships that blurred the boundaries between Victorian social roles.

A market in secondhand clothing flourished in much of the nineteenth century due to the inability of manufacturers and retailers to produce and distribute clothing at prices working-class people could afford (Lemire 1988:23). Technological advances, however, eventually resulted in mass production of inexpensive goods, efficient distribution networks, and annual catalogues to accommodate and encourage changes in fashion influencing the purchasing patterns of many members of the working class. As the consumer revolution progressed, junk stores declined and the mass retailers, through their department stores and catalogues, came to serve as a sort of "cultural primer"—the source for ideas about how one should dress, furnish a home, and spend one's leisure time (Miller 1981:53, 183).

The consumer revolution and success of the labor movement increased the purchasing power of many late-nineteenth-century working-class households. Although these households may have accepted middle-class purchasing modes, they did not necessarily accept middle-class tastes or purchasing strategies. According to Cohen, the choices of working-class people in decorating their homes was not a "simple emulation of middle-class Victorian standards with a time lag due to delayed prosperity, but rather a creative compromise forged in making a transition between two very different social and economic worlds" (1986:274). Despite efforts by domestic reformers, these choices often centered on the comfortable, curtained, clutter of Victorian decor roundly rejected by this time by those in the vanguard of middle-class taste (Cohen 1986:274).

Archaeology and Material Culture Studies

The interpretive approach taken by archaeologists studying the employees of the Boott textile mills in Lowell, Massachusetts, is a good example of how archaeology can contribute to an understanding of the lives of working people. The approach, based on Antonio Gramsci's notion of cultural hegemony, allows "working-class ideology and working-class culture creative, active roles in the social process, rather than viewing them as dictated by and distilled from the ideologies and cultures of politically or economically dominant groups" (Beaudry, Cook, and Mrozowski 1991:165). Using this orientation, material remains are interpreted as derived from working-class culture per se, rather than as merely reflecting an attempt to emulate the middle class.

In their archaeological study of workers in the Boott mills, Beaudry, Cook, and Mrozowski (1991) identified specific types of activities, including public drinking and smoking, that served to enhance working-class solidarity and can be seen as a form of resistance to the imposed structures of domination. Paynter and McGuire cite malingering, "draft dodging," strikes, and revolution as examples of resistance that take the form of open defiance. They point out that archaeology has demonstrated its "special access to the resistance of everyday life" in studies of enslaved African Americans and mid-nineteenth-century industrial workers (Paynter and McGuire 1991: 11–16).

Archaeology is also one of the few sources through which the secular rituals practiced by many ordinary nineteenth-century families can be examined. Documentation of the American home found in studies of literature and art stress the practices of the social and intellectual elite; an exception is the innovative analysis of working-class homes by Lizabeth Cohen (1986). Similarly, as Dell Upton (1985) has pointed out, normative, prescriptive sources, such as manuals of household management and etiquette and advertising copy, have limited value as indexes to actual behavior.

Unlike literature and art, archaeological data are democratic in that poorer people and cultural minorities, who are meagerly represented in the written record, are as likely as the rich to have left archaeological remains. Equally significant is the ability of the archaeologist to associate remains with historically documented households of known ethnic, national, and economic characteristics. In this way, the archaeological data are sufficiently controlled to allow both synchronic and diachronic comparisons within and between these groups.

In predominantly working-class areas, it is postulated that some people maintained traditional practices while also conforming or converting to certain formal Victorian mores and tastes. Archaeological excavation, in combination with documentary evidence, can supply the specifics of the blend of Victorian and pre-industrial or ethnic modes that existed side-by-side in the pluralistic society that was nineteenth-century Stockton. The use of artifacts as material symbols to maintain social distance between these groups may also be visible in the archaeological record. Consumer behavior, fueled by the Industrial Revolution, presents numerous avenues of inquiry when it is informed by the ethnic, economic, and demographic characteristics of the household associated with each recovered archaeological deposit.

ARCHAEOLOGICAL FORMATION PROCESSES

It is essential to understand the processes by which cultural and natural strata are formed in order to interpret archaeological data and to evaluate their importance. When working in complex urban contexts, it is especially important to understand archaeological deposits in terms of the events that created them, not merely through the artifacts they contain. The excavation and recording system developed by Edward Harris (1979, 1989) aids in interpreting these events. Under this system, archaeologists must take note not only of solid features (such as walls) and negative features (such as pits), but also of contiguous interfaces that are created where stratigraphic units come into contact with one another. Thus, Harris recognizes layer interfaces, feature interfaces, and period interfaces—"a surface composed of a number of layer and feature interfaces" (1979:47). Leonard Wooley provides another definition of this concept: "the sum total of the ground surfaces which were ground levels in use at one and the same time" (1961:24).

Archaeological deposits reflect either periods of continuity or intervals of transition in site occupation or use. Continuous deposits are archaeological layers or living surfaces that become recognizable and distinct when buried by natural strata (i.e., flood silt, ash) or cultural strata (i.e., fill, roadway, building). Continuous deposits can form over periods of thousands of years, as on California prehistoric sites, or in just a few years, as in the sequence of fire, flood, and fill found in Sacramento. It is a natural or cultural transition that results in a layer interface and the sealing of a continuous deposit into an archaeological layer. A process of continuous discard produces "sheet refuse" or gradually fills hollows and negative features. Because they accumulate gradually, the strata are highly susceptible to depositional and post-depositional disturbance. Archaeologists employ assemblages recovered from stratified, continuous archaeological layers to examine a variety of research problems concerning changes through time.

Archaeological strata formed during incidents of transition accumulate very quickly, often through a single depositional event in response to an abrupt change in the nature of site occupation and use. Activities such as the creation of a new feature interface (the removal of strata—hole digging) or the deposition of materials within a previously existing feature interface (the addition of strata—hole filling) often mark intervals of transition. Such deposits are more likely to retain their integrity than continuous deposits and, therefore, possess greater visibility and focus in the archaeological record. In addition, deposits formed during intervals of transition may often be associated through historical research with specific households.

In urban areas, transitional feature interfaces and the strata that create them are often the result of changes on two levels: (1) those that result from the new use of a particular parcel due to the presence of a different commercial enterprise, occupant, or owner, or from modifications made by a continuing one; and (2) those produced by widespread responses to either natural disaster, such as floods or fires, or to municipal regulations governing sanitation practices, water delivery and storage, or street and lot improvements. More broadly, the latter transitions may be viewed as the movement by city governments away from unplanned growth and development toward urban planning.

PROPERTY TYPES

The definition of what constitutes "important" information is related to the property type being assessed. Each property type is composed of a number of individual resource types or archaeological features that contain important archaeological data. A property type is a grouping of properties that share some important characteristics, such as dwellings in the Queen Anne style or examples of rock-art form known as the California desert intaglio. Historical research suggests that examples of five historic-period archaeological property types may be present within the Stockton waterfront project areas. These property types are:

1. domestic occupation refuse (single and multifamily),
2. commercial refuse,
3. domestic and commercial architecture,
4. landfills.

The complex array of behaviors and functions represented by each property type is reflected in the individual resource types that comprise it.

Domestic Occupation Refuse

Examples of this property type—which largely occur in association with residences—may be expected to contain resource types that share the characteristic of being hollow features that, before the days of organized refuse collection, were used as receptacles for the by-products of everyday living: discarded ceramics, food bones, glass containers, broken personal items, etc. These hollow features include wells, cisterns, subterranean basements, outhouse pits, and lined reusable garbage pits and are all sources of assemblages of historic artifacts. Intact domestic occupation refuse feature likely contain research potential that would likely be significant for the CRHR .

In addition, domestic occupation sites frequently contain deposits of sheet refuse, upcast, and intentionally brought-in fill that accumulate on the horizontal plane and that sometimes build up to several feet in depth. Because they create sealed contexts for caches of artifacts, these deep sheet deposits often yield artifact assemblages that may be used for the same type of analysis as the discrete refuse caches described above. In addition, they can provide evidence of change over time in a way that discrete caches—often the result of sudden, transitional changes—cannot. The reconstruction of backyard use, functional layout, and vegetation may be possible by means of continuous pollen samples obtained from this type of archaeological deposit.

Commercial Refuse

Refuse caches and sheet deposits of refuse and fill, similar to resource types that occur on domestic sites, may also be expected on commercial sites. However, these artifact collections will reflect the orientation of the business that contributed to it. Two principal types of commercial establishments have been identified in the project area: retail stores and hotel/lodging houses. Collections related to retail stores may be expected to consist of broken or otherwise unsalable goods.

Domestic and Commercial Architecture

These are the architectural remains of residences, businesses, and outbuildings. For brick or earthen buildings, the remains would take the form of footings. Most wooden structures leave few remains except, perhaps, for discontinuous footings or posts dug into the ground. Buildings whose characteristics are known from the historic record would generally not be considered significant.

Landfills

Examples of this property type consist of material brought into the study area to fill the low ground of channels and sloughs around the waterfront area. Determining the eligibility of resources of this property type would depend upon the integrity of the landfill and its relationship to larger research issues.

INTEGRITY

Integrity refers to the degree a property has retained the character it possessed during its period of significance. The level of integrity that is necessary to qualify examples of various property types for the CRHR under Criterion Four is measured by the ability of the remains to contain the types of data necessary to answer questions identified in a formal research design. In this context, integrity means that the archaeological property is "sufficiently intact to yield the expected important information" (NPS 1991:23). Like the National Register of Historic Places, the CRHR recognizes seven types of integrity, each addressing a different component of this important quality: location, design, setting, materials, workmanship, feeling, and association. A property must possess integrity in those areas that are relevant to its area of importance

RESEARCH THEMES

All historic archaeological deposits possess information. The problem is to evaluate whether this information could be obtained in a more cost-effective and straightforward manner through the documentary record, oral history, or other non-archaeological data sources. To be effective, an archaeological research design should link archaeological deposits with historically documented events and processes so that significant archaeological research questions may be identified.

The research themes outlined below are currently being studied by historical archaeologists working in urban contexts. This version, largely written by Mary and Adrian Praetzellis, was published in the *Headquarters Facility Project Archaeological Research Design and Treatment Plan* (Costello et al 1996). The themes are broad and could be studied in most urban areas, given an adequate archaeological and documentary record. Some of these questions require the analysis of only one deposit; others must be viewed at the parcel block, neighborhood, city, or even intercity level. In addition, Theme E addresses interpretive potential and identifies those classes of resources important for their public values.

The research questions are phrased so that they may be used to evaluate the importance of archaeological deposits as they are encountered in the field. Within a contextual approach, questions will build upon each other as new data is gathered from the ground, the archives, maps and photographs, and oral history informants. The answers, when woven together, will provide a richer more human history of Stockton and a deeper understanding of the working-class people who once lived there.

Theme A: Consumer Behavior/Strategies

Question 1. *Does this resource enable us to describe the consumer practices and disposal behavior of a household or business with specific social, occupational, economic, and/or ethnic characteristics?*

This is one of the core questions of the research design. It identifies archaeological deposits created by the disposal of refuse. As in the present day, refuse includes the remains of food preparation and consumption (containers, leftovers, bones, seeds, spoiled food, etc.), as well as broken and unwanted household paraphernalia. Archaeologists study refuse deposits associated with specific households to understand the way of life of people in the past at a level that could never be achieved through the written record; some of the questions that may be answered by studying refuse deposits include:

- What did they eat?
- How did they allocate their money?

- Where did they shop?
- How was food prepared and served?
- Was dining formal or informal?
- How were they influenced by fashion, mass-marketing, and/or social movements?
- What household items did they consider disposable or unwanted?
- What medicines did they use and how do these correlate with gender-specific, age-specific, or occupation-specific epidemiology?

Home life is private and enables individual variation, even deviance, to exist behind public facades that appear similar. Strategies for living vary from family to family. They often adhere to tenants of regional or ethnic cultures but may vary markedly, depending upon the upward social and economic aspirations of particular households and their place within the family development cycle. Both family and individual behavior, however, is constrained by community values and access to resources, as well as by other influences, including personal choices, individual psychology, and historical change. Such behavior is enlarged by a breadth of imagination and a willingness to accept and try new strategies, products, and opportunities (Yentsch 1993a:278).

For example, from the refuse deposit associated with working-class Irish widow Mary Collins and her children in Sacramento around 1900, we learn that the family purchased inexpensive, brightly colored ceramics of the type marketed by Sears, Roebuck, & Co., as well as other widely distributed and advertised items sold by department stores and by mail. The family possessed attire for both everyday and special occasions and invested in personal grooming and hygiene products. The archaeological collection showed how solidly middle-class ideas about beauty had spread into the more generally accepted appearance and hygiene practices associated with all social classes and cultural backgrounds (Praetzellis and Praetzellis 1990a).

In the late nineteenth century, the Stockton waterfront area was occupied primarily by working-class families and individuals along with some middle-class merchants. Both economic groups came from a wide range of ethnic, regional, and national backgrounds, including immigrant Asians and Germans and native-born Americans of European decent. The ethnic and kin/non-kin mix varied considerably within the hotel, lodging houses, and family residences. Archaeological studies within the project area should attempt to elucidate the material correlates of working-class culture as this might have varied by ethnicity and occupation over time. Given the previous discussion of resistance to, modification of, or acceptance of middle-class values and material culture on the part of urban working people of various ethnicities and occupations, the consumer and disposal practices of Stockton residents would provide a wealth of comparative data from a wide range of household types that could make important contributions to the understanding of this important issue. Some important questions to consider include the following.

- Did households purchase new or used goods?
- Did they shop in junk stores or from mail-order catalogues?
- Were dwellings decorated with items that were currently fashionable among middle-class consumers or with outmoded items?
- Was cost, quality, fashion, or efficiency the prime influence on consumer choices?
- Did the interior decor and eating and serving habits of Stockton lodging houses reflect their varied inhabitants and exterior facades?
- Did the quality of food served correlate with Groth's (1983) classification of boarding house statuses?

Question 2. *Does this resource add to our knowledge of the availability of various classes of consumer goods at a specific place and point in time (i.e., material remains associated with a mercantile establishment)?*

The question of availability must be addressed along with that of consumer choice. In some contexts, the cost and availability of goods may have had the greatest influence on consumer choices. During the Gold Rush, for example, merchants from around the world are said to have dumped their obsolete and damaged merchandise on desperate Californians scrambling for scarce consumer goods. Archaeological excavations in the remains of the Warren and Cothrin stores that burned in Sacramento's great fire of 1852 support this proposition and show the relatively limited range of goods available in early Sacramento (Butler 1979). Likewise, excavations at the Pioneer Junk Store elucidate the range of goods available secondhand in turn of the century Sacramento and provide evidence of recycling (Praetzellis and Praetzellis 1990b).

Shops within the project area may have included general merchandise and saloons. Refuse deposits associated with these ventures would give a partial answer to the question of availability. It is possible that some merchants catered, in whole or in part, to specific ethnic groups selling exotic foodstuffs essential to the preparation of traditional ethnic meals.

Question 3. *Does this resource add to our knowledge of adaptive behavior in urban settings associated with the acquisition and consumption of foodstuffs or the organization and use of space?*

Although limited by factors of cost and availability, nineteenth-century urban dwellers had potentially good access to a variety of commercially supplied foodstuffs. The choices made by individual households in these and other purchasing decisions can be reconstructed through archaeology. The contribution to the urban diet through the efforts of individual householders can help us to gauge the level of reliance on commercial versus self-procured food resources.

While the yards of the merchant class may have been used more for aesthetic than economic purposes (Mrozowski 1987), those of artisans were sometimes used to produce food for the family (e.g., Praetzellis and Praetzellis 1989, 1992a). Pollen studies can often contribute to this work on a block or parcel level by providing evidence of vegetable gardens (Kelso and Beaudry 1990), whereas the discovery of the remains of noncommercially taken fish or evidence of animal husbandry could allow statements to be made about the food-acquisition practices of individual households. These approaches could contribute data to address Theme D by examining the data on a neighborhood level.

Urban householders frequently raised chickens and eggs in their backyards. A Sacramento family from around 1900, for example, developed a poultry sideline with limited capital outlay for poultry raising equipment by reusing household items, such as saucers and Mason jars for feeding and kerosene lamps for heating. Although apparently financially secure, the multigenerational family was large and growing. At the time of their poultry venture, the elder members may have passed their peak income years, while the younger members had yet to become established. The available labor within such a large household may have been considerable and was evidently used to undertake a small-scale agricultural endeavor. The backyard raising of chickens in urban settings may be a transitional activity, associated with large, multigenerational families in times of financial insecurity who needed additional income or nutrition (Praetzellis and Praetzellis 1992a).

The working-class residents of Stockton undoubtedly experienced periods of financial hardship. How did households balance their economic strategies? Did all available family members work outside the home or did some members contribute to the family livelihood by working at home (e.g., taking in laundry) or through backyard agriculture? Historical maps show a dense urban environment and many lots with numerous outbuildings to the rear. How did households use what yard space remained available to them? Did this vary by ethnicity or occupation? What can be learned about the daily diet from the assemblages recovered from various back lots? Did residents fish in the nearby San Joaquin River or hunt? Were any animals butchered on-site? Did the use of backyards change through time?

Question 4. *Does this resource, in combination with other classes of data, aid in the understanding of landscape alteration, water and waste management, outbuilding construction, and dwelling renovation as these relate to changes in household composition?*

For some years, archaeologists have recognized that household demographic events and processes affect the architectural and archaeological records (Brown 1987). These transitions are regarded as useful phenomena in that they often result in the creation of refuse-filled pits, drains, cisterns, and cellar holes that contain tightly dated, reliably associated assemblages of artifacts. By looking at the features themselves, however, one might ask how the use of space and facilities changed in response to documented changes in household composition or employment status. Was the conversion of a portion of a recreational garden to a vegetable patch a response to economic necessity due to unemployment? Or was it done because the resident family had become larger? Archaeology has the potential to examine various issues in relation to family change. In addition to the artifacts they contain, abandoned features themselves may have interpretive value as the actual products of transition.

Data Requirements

Archaeological: feature and/or layer interfaces, broad exposure

Historical: associated with specific household/business

Oral history: interviews with representatives of various ethnic groups to establish relevance of foodways and yard use in traditional behavior

Faunal remains: economic scaling and ranking of butchering cuts (Lyman 1987; Schulz and Gust 1983); frequencies of types—domestic/wild; presence/absence of types

Botanical remains: frequencies of types—domestic/wild; presence/absence of types

Ceramic and glass function: MNI (Minimum Number of Individuals) frequency/proportion

Social science: explicit social, economic, and status categories

Household demography: size, composition, life-course

Documentary: mail-order catalogues, advertisements, commercial inventories, merchants' and householders' accounts

Theme B: Ethnicity/Urban Subcultures

Question 1. *Does this resource reflect the rise or relative influence of Victorianism as a class-based ideology? Does this resource reflect resistance to Victorian or post-Victorian tastes and mores?*

Victorian values were the values of middle-class commercial and professional interests during much of the nineteenth century. Others have suggested that these characteristics included (in no particular order and with some redundancy): piety, purity, submissiveness, and domesticity in women (Welter 1966:152); rectitude, thrift, sobriety, and hard work in men (Wiebe 1967:4); self-discipline, temperance, and respect for authority (Mann 1982:210); and steady work, punctuality, and compulsive behavior in general (Howe 1976: 10). Apparent inconsistencies, such as hard-headed rationality along with drippy sentimentality, pervade the system. These inconsistencies emphasize the transitional quality of Victorianism, which sought to "soften the hard edges of modernization" with glances back to a bucolic, preindustrial past and visions of a better future through science, education, and progress (Brown 1976:31). Victorianism as a statement of fashion transformed into the Arts and Crafts movement; the values remained the same, but their appropriate material manifestation evolved to express the triumph of technology and progress.

As a multifaceted set of values that influenced the lives of its predominantly middle-class participants in many ways, Victorianism (and post-Victorianism) found its way into artifacts, behavioral patterns, and specific historical events and processes on numerous levels—from municipal public works to children's toys and decorations in ordinary families' homes to archaeological site structure and content (Praetzellis 1991).

Diana Wall (1991) has considered how ceramic assemblages varied from one neighborhood to another within lower Manhattan. She saw variations in wealth reflected in the ceramic assemblages; more importantly, she identified ways in which the use of tableware in

urban homes reflected a broader set of values developing within American culture. The separation of home and workplace with its concomitant enhancement of women's roles in the home can be seen in the archaeological record. The "cult of domesticity" was especially valued among middle- and upper-class families; its material expressions included social display, genteel entertaining, and, especially among women, the tea ceremony.

Conversely, the distinctiveness of working-class consumer practices, in spite of assimilative pressures from domestic reformers and from society at large, can be viewed as resistance to middle-class values. For many workers, efficiency, productivity, and modernization simply meant mechanization and depersonalization of the workplace and of the worker. Racism restricted the occupational opportunities and other choices for many ethnic groups and prevented participation in many middle-class activities.

Some forms of resistance may be visible in the archaeological record. For example, the discovery of 40 Vaseline jars among the refuse of Thomas Cook, an African-American barber, suggests that he engaged in barbering at home, perhaps on Sunday afternoons when his shop was closed by Sacramento city ordinance. Vaseline was a relatively inexpensive hair jell used to create the short cropped, slicked-down hair styles popular at the time. Given that Cook could not have served African Americans in his shop and survived as a business, his home customers were probably African Americans who could not be accommodated during normal business hours (Praetzellis and Praetzellis 1992b). In this case, resistance to the practice of segregation achieved middle-class fashionable attire beyond "one's place" in society. Assimilative hair styles can be viewed as contrary to contemporary racist stereotypes.

Archaeological deposits associated with mid-nineteenth-century households can be examined for evidence of their respective degrees of participation in or rejection of Victorian and post-Victorian patterns of domestic behavior. In particular, artifacts associated with formal entertaining can be examined for evidence that these practices became more important through time. The archaeological remains of landscape values and disposal practices of individual households can be viewed within their back lots. The survival of ethnic foodways and other practices can be studied in deposits associated with downtown Stockton's various ethnic groups, who lived in close proximity to each other at this time.

Question 2. *Can this resource help us to understand the dynamics of cultural pluralism and social stratification during the nineteenth and early twentieth centuries? Does this resource possess material remains that could elucidate the relative influences of economic distinctions and the development of mass production and world trade on the material manifestations (i.e., artifacts) of ethnic and subcultural distinctions?*

Analysis of the effects of ethnicity on material culture is more sophisticated than it was a decade ago (e.g., Schuyler 1980). Several newer studies are directly pertinent to looking at nineteenth- and early twentieth-century households in the study area. These include a study of Washington, D.C., neighborhoods that indicated that "ethnic-based differences could be isolated while economic-based differences could not" (Cheek and Friedlander 1990:34) and the contrary findings of O'Brien and Majewski (1989), who found that immigrant families from the American South were clearly distinguished in the archaeological record of Missouri based on wealth and

status. Stewart-Abernathy's work on rural families in Arkansas also yielded little indication that food use was an indicator of the ethnicity of a prominent Jewish household, whereas there were other definite and material signs of both religious conformity and a prosperous standard of living (Stewart-Abernathy and Ruff 1989; Stewart-Abernathy 1986).

A number of studies in the eastern United States suggest that ceramics, whose availability is determined by the marketplace and global-scale economics, reflect a dulling sameness within many working-class and middle-class households in the late nineteenth century (De Cunzo 1987; Cheek and Friedlander 1990). It is proposed here that the situation in nineteenth-century cities presented a range of options even for families at roughly the same social and economic level. For example, the range of ceramics recovered from the homes of small entrepreneurs in Sacramento indicates individual differences among these families; faunal analysis and preliminary linkage of its results to cooking techniques also indicates individual household behavior (Praetzellis 1991).

Within a contextual framework, artifacts take on meaning outside of their obvious physical characteristics. Comparison of two archaeological collections dating to around 1900 and associated with the Collins family (of Irish-American descent) and the Cook family (of African-American descent) showed that both households were very similarly appointed. Both families had comparable material goods and spent their money for food in similar ways, but there were differences between the meals served to the two families—if not in the plates from which they ate. These surface similarities, however, masked profound differences in their lives—although their plates were similar, the Cooks and the Collinses would not have eaten at the same table nor would they have had the same expectations or the same opportunities (Praetzellis and Praetzellis 1992b). The influences of racism and resistance, as discussed previously, were also visible in the Cook collection.

To best see the variation (or lack thereof) requires tying together ceramics, faunal remains, and other artifact classes by means of a contextual analysis. Considering the major artifact classes individually, combining these data to establish an archaeologically derived spectrum of lifeways, and then checking for interhousehold similarities or differences would illustrate how study-area households were like others in California (e.g., Sacramento and Los Angeles), in the West (Phoenix, San Diego, Seattle), in the Midwest, South, or in the East (Boston, New York). It is also a way to see if the city's public facade was paralleled by a similar unifying kinship through objects—household furnishings, utensils, daily foods—kept and used inside family homes (Yentsch 1993a:278).

Question 3. *Does this resource possess artifacts and/or faunal remains that could be used to elucidate the role of symbols in defining and maintaining boundaries between groups?*

Scholars have been suggesting for some time that archaeologists could make a contribution to the study of ethnic boundary maintenance (Brown and Bragdon 1982; Kelly and Kelly 1980; McGuire 1982). Social boundaries are marked by material symbols of ethnic differences known as style-bearing artifacts. The historic record of the Chinese community in the West, for example, shows that style was expressed through differences in landscape, public display, dress, and language. Although the latter two characteristics have left little or nothing for

the historical archaeologist to work with, historical studies of landscape and ethnically specific public display have been rewarding. For example, the site of the Sacramento Overseas Chinese community bordering Sutter Slough was geomantically favorable and provided the perfect stage for cultural displays, such as boat races. While collections of artifacts that include both Chinese and Euroamerican items are generally interpreted as evidence of acculturation on the part of the Chinese, a contextual approach provides an alternative explanation for this pattern in the 1850s Chinese merchant community in Sacramento. Here, the non-Chinese materials reflected the merchant household's superior access to goods compared with the nonmerchant population. Artifacts used by merchants themselves also may have served a stylistic function in boundary maintenance displays to emphasize the differences between themselves, as boundary people, and the Chinese community at large (Praetzellis, Praetzellis, and Brown 1987).

The varied ethnicities of the Stockton waterfront project area—particularly the Irish and Germans—may be expressed in material form on the landscape as gardens, fences, and in other forms of public display.

Data Requirements

This theme builds on an understanding of the data analyzed for Theme A.

Archaeological: period interface composed of feature and layer interfaces; many households

Historical: specific historical associations for each stratum

Documentary: understanding of ethnic foodways, style-bearing artifacts, etiquette books, fashion magazines

Archival: ethnic identification, historical background

Oral history: interviews with representatives of various ethnic groups to explore the relevance of traditional material culture, foodways, and community life

Ceramic, glass, metal containers: MNI frequency/proportion

Faunal Remains: frequencies of types—domesticates/wild; presence/absence of types; butchering cuts

Botanical remains: frequencies of types—domestic/wild; presence/absence of types

Theme C: Urban Geography

Question 1. *Does this resource help us to understand the characteristics of the natural environment and the landscape modifications made during the historic period? Does this resource aid in our understanding of the beginnings of urban planning and infrastructure—water supply and storage, trash and sewage disposal, fire protection, drainage—in this city?*

Civic improvements that are carried out by government agencies are generally planned and well documented. In western cities of the late nineteenth and early twentieth centuries, these projects were often undertaken on a large scale to overcome the natural disadvantages of the

city's site. Sacramento, for example, was a classic "instant city" that sprang up to take advantage of a particular historical phenomenon: the Gold Rush. Situated at the junction of two seasonally flooding rivers, the city was assaulted by several major floods that, for a time, threatened its status as regional commercial center and state capital. The city's reaction was to raise the level of its business district by as much as 16 feet.

The history of a city as seen through its fill is a history that "tells it like it was" (Geismar 1987). Filling took place for economic reasons, such as improving the value of property or making otherwise useless areas useful for everyday human activities. Yet, it is clear that the people of the nineteenth century had a passion for cutting, filling, and leveling land that went beyond rationality (Upton 1992; Yentsch and Kratzer n.d.), as can be seen in the histories of landscape alterations made to cities like Boston (Upton 1992:figure 3), San Francisco (Praetzellis and Praetzellis, eds., 1993), and Seattle (Ostrogorsky 1987). Sometimes the varied topography was seen as an "offense to the public," an element of the cityscape that they sought to displace. The history of the process by which the landscape was reformed can be read in sequences of purposeful fill (Yentsch 1993b:334).

The progress and process of street raising are generally well documented in contemporary primary and secondary sources (e.g., Lagomarsino 1969). The responses of the citizenry itself, however, are largely unknown since this level of activity occurred one parcel at a time and varied significantly throughout the city in spite of city ordinances that attempted to regulate them (Praetzellis 1991). Although Stockton was not subjected to such large-scale improvement projects as portions of Sacramento, laws and regulations were set up by the City regarding the filling of channels and sloughs that were imperfectly complied with and enforced. Archaeology is the only source through which we can examine the responses of individual residents to some legal norms established by the City. For example, in many cities "earth closets" (i.e., privies dug directly into the ground) were outlawed in the 1880s, and historic records document many sewer hook-ups at this time. Archaeological evidence, however, demonstrates that some urban households and neighborhoods continued to use earth privies well into the twentieth century (Praetzellis and Praetzellis 1992b). Similar examples of ad hoc drainage, fire protection, and refuse disposal have been discovered archaeologically. In the mixed-use neighborhood of the project area, how did residents respond to City ordinances? Did residents keep prohibited livestock engage in unlawful activities, build or use facilities that did not "meet code"?

Question 2. *Does this resource demonstrate the relationship between public perceptions of the environment and public policy? How did society's perceptions of the cultural landscape and modifications to the environment change over time?*

Joan Geismar has studied variability in fill sequences in New York City, viewing fill layers in tandem with city and state health legislation to ascertain the response of inhabitants to health regulations. By 1790, as medical knowledge of disease grew, city authorities began to link aspects of refuse disposal with the spread of diseases like yellow fever. Whereas waterfront fill in the mid-1700s included ship's ballast, abandoned ships, tannery refuse, butchery waste, construction debris, garbage from city food markets, and even human waste, refuse disposal became more highly regulated in the 1800s. During periods of yellow fever outbreak (or of similar contagious diseases), Geismar found that layers of fill deposited in city environs were

relatively sterile (i.e., contained very few or no artifacts). As the number of years after an outbreak increased, however, residents once more began to see filling activity on city lots as an opportunity to rid themselves of household and industrial wastes. Thus, alternate sequences of semisterile fill (what people of that era called "clean, wholesome sand") interspersed with sequences of refuse-laden fill can be read, in New York City, as a record of the health of city dwellers (Yentsch 1993b:333–334, citing Geismar 1983, 1986, 1987).

Question 3. *What information about neighborhood formation (i.e., residential differentiation and the emergence of homogeneous neighborhoods along social and economic lines) is available from this resource?*

It is not always possible, nor is it necessarily always desirable, to orient urban archaeological research to features within a particular parcel with well-defined historical associations and occupants. This theme directs research away from the household and asks what process differentiated neighborhoods from each other. Separating the influences of ethnicity and economics on a neighborhood level has proved difficult (Cheek and Friedlander 1990). Nevertheless, these methodological problems must be overcome in order to do what Salwen (1987) described as archaeology of the city rather than merely archaeology in the city.

The features examined in Question 1 may form the basis of comparisons between historically defined neighborhoods—as these data become available—to search for distinct patterns of behavior. Did, for example, certain neighborhoods move more quickly away from earthen privies and other features than others? The understanding of the material culture and adaptive strategies of individual households developed in Themes A and B will be combined to develop neighborhood characteristics.

Data Requirements

Archaeological: period interface composed of feature and layer interfaces

Historical: land-use study, patterning identified from archival sources

Archival: photographs and accounts of industrialization; information on legal statutes

Environmental: reconstruction of local vegetation based on pollen record

Faunal/Botanical remains: frequency of types; domesticates/wild; presence absence of types; paleontological remains

Theme D: Interpretive Potential

Question 1. *Does the resource have public interpretive potential for a museum or public display? For example, could the site provide information about the lifeways of a poorly documented ethnic or occupational group that can be used to better explain the group's position in the city's history to visitors and residents?*

The value of archaeologically derived materials for use in exhibits is beyond question. A carefully planned display of artifacts, text, and photographs can move and educate an audience. The lives of the people who once occupied the Stockton waterfront area were interesting and diverse, but how they constructed their material world has gone undiscussed. Results from the multidisciplinary investigation proposed herein could form the basis for a sensitive rendering of the mixed-use neighborhood that became downtown Stockton in a way that could not be accomplished without the active voice provided by the tangible objects of the past that now lie buried.

Question 2. *Does the resource contain artifacts that could be used to interpret the past as a tangible, hands-on component of a teaching unit developed for use in schools?*

The South Street Seaport Museum in New York City routinely uses archaeologically recovered artifacts from within the city in its exhibits, in its hands-on teaching program for students, in its public outreach, and as a means to illuminate different facets of history (Yentsch 1993a:279). The large volume of materials expected to have survived in the archaeological record of downtown Los Angeles could form the basis for type collections to be used by local public school teachers in their California history units. For example, a teaching unit focusing on the material culture of various ethnic or family groups residing in Los Angeles in the nineteenth century could be developed.

Data Requirements

Archaeological: artifacts and historical associations of interest to the public

Oral history: interviews to document the lifeways of poorly documented ethnic or occupational groups

Chapter 4. Methods

The scope of work necessary for identifying intact archaeological remains and assessing their eligibility for the CRHR involved conducting large scale excavation within three city blocks (Blocks 9, M, and I), where late nineteenth-century stores and individual residences once were located.

A *Compressed Approach* to CEQA compliance for historic period resources was implemented for the Worknet Office Project, and was described in the treatment plan (Costello and Marvin 1999). This approach allowed historic properties to be located, tested, and evaluated, and mitigation measures implemented, in one field phase. Particularly appropriate for urban sites, the Compressed Approach relies on extensive prefield documentary research, the development of a detailed research design, an emphasis on recovery of intact artifact assemblages from hollow filled features (wells, privies, and trash pits), and laboratory analysis guided by stratigraphic associations. The Compressed Approach procedures were developed by the Anthropological Studies Center of Sonoma State University for Caltrans' Cypress Replacement project in West Oakland (McIlroy et. al. 1995; Praetzellis et. al. 1994). The following methods/guidelines were adapted from those written by Anmarie Medin, then of Past Forward, for Caltrans' 1999 Guadalupe Parkway Project in San Jose.

Once historic ground surfaces were exposed by heavy machinery, the original lot lines were relaid over the excavation area. Backyard features of individual lots were then identified through shovel scraping and troweling. Field documentation used a feature-based system, where arbitrary individual numbers are assigned to each entity (e.g., foundation, pipe trench, road, privy). Layers within each feature were also assigned arbitrary numbers from a different sequence, and stratigraphic relationships were documented using the Harris Matrix (Harris 1979).

FIELD METHODS

Deep layers of post-depositional fill throughout a large portion of the project area dictated mechanical trenching as the only expedient means of investigating subterranean strata and potential archaeological features. Present ground surfaces in the proposed testing areas consisted of vacant lots and native soils, and historic surfaces were largely concealed by post-depositional fill containing inactive utilities.

Testing for historic archaeological remains in the Worknet project area consisted largely of an exploratory trenching program that ultimately served to expose the rear of historic lots identified on the Sanborn maps to identify potentially significant historic archaeological deposits.

Manual excavation by qualified archaeologists was used to characterize intact archaeological deposits identified during the trenching program.

All fieldwork for historical archaeology was conducted under the supervision of Julia Costello, Principal Investigator (Foothill Resources Ltd.), and Trish Fernandez, Field Director (Jones & Stokes). Jones & Stokes staff archaeologists for historical archaeology were Stacy Schneyder, Keith Syda, Maggie Craw, Gwyn Alcock, Ayako Walker, and Dylan Stapleton.

Mapping

Historic lot lines were laid out on each block prior to excavation to identify the precise placement of test area trenches such that the anticipated hollow filled features at the rear of the historic lots would be exposed. A total station was used to record the locations and depth of the test areas and all archaeological features.

Health and Safety

A health and safety plan (HSP) was prepared prior to commencing fieldwork. Jones & Stokes staff drafted the plan, and copies were distributed to all field personnel and acknowledged by each in writing. Required field meetings, or “tailgate meetings,” were held routinely during fieldwork to ensure that all applicable health and safety precautions were carried out on a daily basis.

Utilities

In any project involving excavations, subterranean utilities were located prior to subsurface excavation. On June 15, 2001, an Underground Services Alert (USA) was logged by Gwyn Alcock of Jones & Stokes, and a USA ticket (no. 185650) was granted. It was valid for work conducted between June 20 and June 29, 2001. Additionally, Lex Corrales of Siegfried Engineering—a subconsultant to the City of Stockton for the Worknet Office Project—indicated that utilities are present only in city street rights-of-way, not the interior of city blocks.

Mechanical Excavation

Identification/sampling methods were employed to strip away pavement, fill, and other modern intrusions and to expose historic ground surfaces. The process consisted of both vertical and horizontal excavation accomplished with the use of heavy equipment. Trenches are excavated with heavy equipment using a smooth bucket backhoe or an excavator with an extended arm. An intensive trenching program was implemented, entailing the excavation of

numerous trenches (test areas) within each block. The number of trenches per block was based on the potential for resources and the extent of previous disturbance.

In general, trenches were 25–200 feet long and 6–20 feet deep (where feasible). All trenches were excavated in successive, shallow sweeps so as not to gouge any cultural deposits or seriously damage any feature associations. Jones & Stokes complied with the federal safety standards for excavation including standards for stepping, sloping, and shoring trenches and excavations. Trenches did not exceed 20 feet in depth and had a 1:1 ratio of vertical walls to horizontal benches—with benches and walls measuring 4 feet. An archaeologist directed the trenching operation at all times to ensure that intact archaeological remains were not disturbed.

A total of six test area trenches were excavated within the three project blocks. In Block 9, Test Area A was strategically placed to identify archaeological features associated with Lots 1 and 3, and Test Area B was excavated to identify remains associated with Lot 7 (Figure 12). Test Area C was excavated on Block I to uncover subsurface materials associated with Lots 8 and 10 (Figure 13). In Block M, Test Area A was placed to identify features associated with Lots 3 and 13, Test Area B was excavated in the vicinity of Lots 3 and 5, and Test Area D was strategically placed to expose the rear of Lots 9 and 11 (Figure 14).

The objective of identification and sampling methods was to expose the layer of historic occupation surfaces and the location of intact features. Original lot lines (based on the Sanborn maps) were staked on each block in an attempt to associate archaeological deposits with specific households and/or businesses. Work on this phase concluded with plotting all resources identified and comparing their data potential with the research objectives outlined in the research design.

Manual Excavation

As archaeological features were discovered during backhoe trench explorations, they were exposed in plan view by hand. Each feature was probed with a 4-foot metal rod to determine its likely depth and was then described in terms of structural form and materials. Artifacts visible on the exposed surface of each feature were described and, when appropriate, researched to determine their date, manufacture, and contents. The Principal Investigator and the Field Director then used these data to determine if the feature was likely to contain important data relevant to the research themes presented in the Research Design using the QIVA criteria defined below. Features deemed likely to contain important data were then subjected to test excavation to evaluate their significance for the CRHR. If a feature was found to be significant, the feature was subject to data recovery excavation.

In general, each unit of manual excavation used stratigraphic techniques. The Harris-Matrix system, a strata identification system and relational analysis that charts the relationship between time and layers, is applicable in most urban contexts, including the Worknet excavation. Excavated materials from the unit were dry screened on site through ¼ inch mesh and were inventoried and identified as each layer was excavated. Excavation of the unit continued until

the nature and integrity of the debris deposit was sufficiently characterized. Features determined to lack archaeological significance and that were not eligible for listing in the CRHR did not undergo data recovery, and the collected materials were returned to the unit along with the backfill.

Selected artifacts and artifact samples collected during excavation were bagged according to provenience and the bags marked appropriately with the provenience, excavator's name, and date. Artifacts whose archaeological context was uncertain (unstratified finds) were not collected unless they were of exceptional value for public interpretation. Plan view drawings of all hand units were made; profile records were also produced when applicable.

Data Recovery Methods

Data recovery excavation methods were similar to those employed for test excavation and included stratigraphic excavation to recover materials associated with specific depositional events. What differed between testing and data recovery was the amount of data collected and how those data were ultimately used to address the research questions that are outlined in the research design. The size and relative rarity of the archaeological deposit determined the amount of data recovery necessary.

Excavations of hollow filled features were potentially vital sources of information for addressing research questions, because the contents can often be accurately dated and assigned to specific households. Intact features that possess a large quantity of artifacts representing a variety of functional types associated with a specific household or business are the most important types of archaeological features to recover during excavation. These features were excavated stratigraphically to the appropriate depth to document the depositional history of the feature in an attempt to examine change over time. Each stratum was carefully documented and artifacts recovered. Cross-sectioning of hollow filled features was necessary to view the overall structure and content of the feature and to assist in the stratigraphic excavation.

Overall, data recovery methods entailed recovering the appropriate amount of information from the archaeological deposits to fully address the research potential and answer specific research questions. This information included data describing the deposit's features, stratification, horizontal and vertical extent, and content (nature and quantity of artifacts).

Assessing Site Significance and Integrity

Significance assessments were based on the methods outlined in the Treatment Plan (Costello 1999) and employed manual sampling of features that appeared intact and capable of yielding data that could be used to address questions outlined in the research design. The majority of research issues developed in the research design required the discovery of portable artifacts; however, adequate archaeological context, strata, and interfaces between strata were

also desirable. Desirable features usually include pit features, defined as privies, wells, discrete trash pits, and other hollow filled features. Vertical and horizontal excavation methods are necessary to expose and adequately sample selected features. Excavation was conducted to extract the minimum amount of material to allow for an accurate assessment of CRHR eligibility, and to make a determination of whether data recovery of the feature or deposit was warranted. Manual excavation was curtailed in all cases where data potential was absent or where deposits were determined to lack integrity.

Once the features were excavated and their contents analyzed in the field, an assessment was made regarding their significance and the need for data recovery. One assessment method that has proved useful in correlating archaeological data potential with research objectives is the *QIVA criteria*. This evaluation method assesses the quantity of artifacts, the feature's integrity, the variety of associated artifacts, and the historical association. QIVA is an acronym as defined below.

- Q. *Quantity*. Does the archaeological deposit contain a high quantity of artifacts, including diagnostic items, to address research questions?
- I. *Integrity*. Is the archaeological deposit intact (including discrete layers that indicate depositional events) and has it not been highly disturbed?
- V. *Variety*. Is there a great deal of variety among the materials recovered from the test excavation, including different functional categories?
- A. *Association*. Is the feature clearly associated with a specific household, shop, service, person, and/or time period, or other characteristic (as defined by research design)?

According to Allen et al. (1999), any one of these criteria does not fully address the feature's potential significance; all four criteria must be examined to ensure a complementary evaluation of the archaeological deposit. These four criteria were considered as complementary lines of data, each considered in relationship to the others. At the conclusion of the testing phase, features determined to meet the CRHR significance criteria as outlined in the research design were subjected to subsequent data recovery.

LABORATORY METHODS

The following laboratory procedures are adapted from those presented in Costello et al. (1996); Costello et al. (1998); Costello et al. (1999); and Costello and Marvin (1999). These procedures were developed by the Anthropological Studies Center at Sonoma State University.

All artifacts were washed with water except the following materials, which were dry-brushed: bone, shell, metal, low-fired earthenware, wood, and structural materials such as plaster and earthen wall material. After initial washing and/or brushing, artifacts were sorted by feature,

context, and material type. The material for each provenience was described according to form, color, technological characteristics, size, decorative detailing, and chronologically sensitive aspects. Complete nails were sorted by type and counted. All other metal and amorphous materials were described according to material and function.

Soil samples of the earthen walls were dry-screened through stacked 2.36 mm, 2 mm, 1.18 mm, and 1 mm screens to ensure that all of the macro-organic and potential artifactual materials were retrieved. Retrieval of micro-organic materials was not conducted. Soil samples of the earthen walls and the wall treatments were described according to Munsell color codes, type and size of materials, thickness of the treatments, and physical characteristics of the treatment layers themselves. These characteristics were compared among the samples to determine if there were any likenesses among different earthen wall components and wall treatments that might suggest the same or differing construction methods, materials, or time periods.

All material types were then separated into single entity groups or types. For example, numerous pieces of clear window glass were grouped together, and several pieces of a green glass with hand painting on it were grouped together. The minimum number of individuals (MNIs) was determined and all artifacts were tabulated into a catalog according to each unit/feature. Some items were not assigned an MNI, such as window glass (because the size and placement of each window in the structure cannot be definitively determined) and amorphous materials (because the function and type cannot be determined). Each artifact (or MNI grouping) was assigned a sequential number and cataloged. The catalog number was composed of the unit letter, the context number, and the sequential number assigned to each MNI. No fragments of the same MNI were found in different contexts.

Each MNI-associated group of artifacts and each soil sample was stored in a 4-mil polyethylene plastic bag. Paper tags with provenience information, catalog number, and artifact description were printed on acid-free paper and placed in each bag. These bags were stored in larger plastic bags grouped by material type. These grouped bags were assembled by context and stored in standard curation boxes (15 by 12 by 10 inches) and permanently labeled with site and unit/feature numbers. Excavation records and the artifact catalog were copied on acid-free paper and placed in the appropriate curation box, along with the original photos and negatives placed in archival-quality protective sleeves. The boxes will be permanently archived at the ??????. All artifacts and excavation records will remain the property of the ??????.

DISCARD POLICY

A formal discard policy was prepared for this project. Two specific elements of the discard policy were relevant for fieldwork.

1. Glass and ceramic body fragments smaller than a quarter that have no unusual or distinctive qualities, and that lack markings or decoration, were not be collected.

2. A representative sample of chronologically diagnostic, marked, or unique examples of the following materials were retained and the remainder discarded: window glass, amorphous and fragmentary ferrous metal, brick, plaster, concrete, paving stone, mortar, sewer pipe, and similar construction material.

Artifacts from non-eligible features were discarded in the field.

Chapter 5. Findings and Results

A total of 39 features were exposed during the mechanical excavation on the three blocks located within the project area. Block 9 contained 18 features, only one of which was determined eligible for the CRHR (Figure 15). Six historical archaeological features were uncovered on Block I, and 15 were identified on Block M (Figures 15 and 16). Of the 39 features identified in the project area, only one feature, Feature 117, was considered eligible for the CRHR.

The majority of the features identified during the course of this study were discovered as a result of backhoe trench explorations. Some of the features, consisting of surface-visible structural remains, were discovered during a pedestrian survey of the blocks. These latter features did not meet the significance criteria as presented in the research design but were recorded as part of each overall site.

FEATURE DESCRIPTIONS

Ineligible Features

The Principal Investigator and Field Director determined that the features in this category were not likely to contain important data and were therefore not test excavated. Each of these features is herein described in terms of structural form and materials, visible surface artifacts, and probable depth. In addition, the rationale for determining that they were not likely to contain important data is presented. The features are presented according to their historic Block and property Lot location, and according to the archaeological test area in which they were identified.

Block I

Proposed testing for Block I targeted the identification of the historic back yards of Lots 8, 10, and 6 (Sanborn Lot Numbers). Block I is located closest to the railroad tracks and shows evidence of post-occupation fill. Two modern concrete footings are located in the northern portion of the block. This area has been the location of extensive artifact collecting for the past four decades.

Test Area C

Test Area C was originally designed to be a large L-shaped trench; however, a large tree prohibited full excavation of the trench and Test Area C became an irregularly shaped excavation area.

Subsurface Features

Feature 105. Feature 105 is located in Block I, Test Area C, Lot 10. It is a rectangular privy measuring approximately 2.5 by 3 feet in plan. The privy was filled with loose, silty soil and gravel. Located near the center of the feature were four red brick fragments, forming a relatively horizontal plane. Other surface artifacts included sparse amounts of glass bottle and flat glass fragments, stoneware and white improved earthenware (WIE) fragments, plaster fragments, ferrous metal can fragments, and shell fragments. There was also a moderate concentration of fragmentary mammal bone, a portion of which displayed saw marks. Probing revealed a subsurface deposit of only 9–12 inches throughout the feature, with minimal debris encountered.

Feature 106. Feature 106 is situated in Block I, Test Area C, Lot 10. This feature is a rectangular backhoe trench measuring approximately 5 feet 3 inches by 8 feet in plan. The east, west, and north edges of the feature are well defined; however, the southern boundary continues under the sidewall of the test area. Surface artifacts include sparse amounts of glass bottle and flat glass fragments, and brick fragments. Among the bottle fragments was a fragment of a Listerine bottle. Probing throughout the trench detected uneven areas and indicated a maximum subsurface depth of 4 feet. According to a City of Stockton employee, this backhoe trench was possibly a result of illicit artifact collecting that was reported to have occurred on the block in the 1980s.

Feature 111. Feature 111 is a rectangular privy located on Block I, Lot 8. The feature is 7 by 5.5 feet and approximately 2 feet deep. Probing revealed a dense concentration of subsurface artifacts, and the feature was selected for archaeological testing. Excavation encountered a twentieth-century deposit dating between 1900 and 1910, with few whole items present, suggesting a secondary deposit. Excavation was terminated at 2 feet below the surface because the feature did not contain nineteenth-century materials and because the deposit lacked a dense quantity of artifacts.

Surface Features

Feature 138. Feature 138 is located in Block I, Lot 7. This feature is a rectangular concrete footing measuring 8 by 16 feet on an east/west axis. The footing is 1 thick wide and is divided into two halves by a bisecting north/south interior footing. There are several pairs of ½-inch threaded bolts affixed to the superstructure. No associated artifacts are present, and the depth of the feature is unknown.

Feature 139. Feature 139 is located in Block I, Lot 7. This feature is a square concrete footing measuring 8 by 8 feet by 1 foot thick. Several pairs of ½-inch threaded bolts are affixed to the superstructure. No associated artifacts are present, and the depth of the feature is unknown.

Block M

This block has been extensively disturbed since demolition of the homes in the 1960s. The historic ground surface is approximately 2.5–3 feet beneath the present ground surface.

Test Areas A and B

Test Area A is approximately 48 feet by 21 feet in size and was excavated to expose the rear yards of Lots 1, 3, and 13. Test Area B is a rectangular shaped trench 90 feet (East-West) x 15 feet (North-South) and was designed to expose the corner of Lots 1 and 3.

Subsurface Features

Feature 102. Feature 101 is situated in Block M in the northeast corner of Lot 3. This feature is a backhoe trench measuring 1.5 feet wide by 5 feet long.

Feature 113. Feature 113 is located in Block M, Lot 5. This feature is an oval refuse pit measuring 18 inches (north-south) by 24 inches (east-west) by 8 inches deep. The pit is filled with a sandy loam and is bordered by hard-packed, dark native clay. The feature does not contain distinctive sides or a lining. Surface artifacts are limited to 12 or more aqua glass bottle fragments, all of which appear to be associated with one bottle. The bottle base fragment measures approximately 1 ¾ inch in diameter and contains no distinctive marks. Probing indicated that subsurface deposits were absent.

Feature 114. Feature 114 is a roughly square privy measuring 4 feet 6 inches by 4 feet 3.5 inches by 2 feet deep located on Block M, Lot 5. The feature contains a wood lining and has been filled with soft sandy soil. Surface artifacts included a WIE plate fragment and sparse amounts of wire nails and mammal bone. Excavation revealed that the feature contained 1920s-era fill. Excavation of the feature was terminated at 30 inches below the surface because of the sparse distribution of artifacts and the presence of twentieth-century materials.

Feature 115. Feature 115 is the remains of a square privy located on Block M, Lot 5. The feature is 4 feet by 3 feet 6 inches by 2.5 feet deep. It consists of a square wooden post located in the southeast corner of the feature along with a moderate amount of cultural materials including bottle glass and WIE fragments. Testing revealed the presence of mid-twentieth-century materials (screw caps and a clip-on pen cap). The Principal Investigator determined the deposit was too recent for significance, and excavation was terminated.

Feature 116. Feature 116 is a rectangular refuse pit measuring 5 feet 8 inches (north-south) by 3 feet (east-west) by 1 foot deep in Block M, Lot 3. The feature contains soft sandy soil and is bordered by hard-packed, dark native clay. The northwest side of the refuse pit is bordered by a 12 ¾-inch decomposing wood line of sawdust-like consistency. This sawdust-like substance is not congruous with that of a typical wood-lined refuse pit. Probing revealed a shallow subsurface deposit with a low density of artifacts. Subsurface artifacts included sparse amounts of glass tableware fragments, WIE fragments, and mammal bone fragments, one of which is burned. There are no diagnostic artifacts present.

Feature 120. Feature 120 is located in Block M, Lot 3. It is a rectangular, wood-lined privy measuring 5 feet (north-south) by 7 feet 3 inches (east-west). The feature is filled with soft sand and is bordered by hard-packed, dark native clay. The remnants of a wood lining, as well as two wooden posts, are visible along the south wall of the privy. The northwest corner of the feature also displays remnants of wood lining. Surface artifacts include sparse amounts of glass bottle fragments, WIE fragments, and wire nails. Nine out of 10 of the glass bottle fragments are derived from one vessel with an oblong base. Mammal bone is present in moderate amounts. Probing indicated no subsurface deposit.

Surface Features

Feature 101. Feature 101 is a linear feature located in Block M, Test Areas A and B, Lot 13. This feature is a fence that separates Lots 1 and 3 (on the north) from Lot 13 (on the south). The fence is made of boards set vertically into the ground and supported by posts approximately 2 feet apart. The posts are along the south side of the fence and are braced by other posts. These support posts are approximately 5–10 feet apart. The portion of the fence that is visible on the surface is 72 feet 4 inches long. It likely continues east and west.

Test Area D

Subsurface Features

Feature 103. This feature is an L-shaped, wood-lined privy pit measuring 4 feet (north-south) by 5 feet (east-west) in Block M, Lots 9 and 11. The ground surface of the feature is composed of dark mottled silty clay. The west and south sides of the privy pit are lined with a thin band of wood. There is a remnant of an upright wooden post a few inches north of the southwest corner. Surface artifacts include sparse amounts of buttons, fragmentary ferrous metal cans, and fragmentary mammal bone. Probing indicated no subsurface deposit. Feature 104, a backhoe trench, was cut into this feature and impaired the integrity of Feature 103. The feature appears to have been vandalized, and no intact subsurface deposits are present (indicated by the intrusion of Feature 104).

Feature 104. Feature 104 is an irregularly shaped backhoe trench with sharply defined edges in Block M, Lots 9 and 11. It measures a maximum of 7 feet 1 inch (north-south) by 12 feet 2 inches (east-west). Except for the southwest corner, the trench is bounded by sterile dark brown clay on all sides. The feature is filled with a moderate to firmly compacted clay/sand mixture of yellow-brown color. The southwest corner of the trench is bounded by the medium brown soil of Feature 103. Surface artifacts include sparse amounts of flat glass fragments, bottle glass fragments (ABM), Asian stoneware fragments, WIE fragments, cans, wire nails, hardware, wire, shell fragments, and fragmentary mammal bone. The artifacts date from the 1920s to the 1950s. Many of the artifacts are burned or charred. Flecks of charcoal and chunks of fire-fractured and melted glass are in abundance. The artifacts located in this feature appear to have been removed from Feature 103. Although the shape of the feature is irregular, it appears that there were at least four scrapes taken with a 3-foot-wide backhoe bucket.

Feature 135. Feature 135 is a ceramic sewer pipe in an east-west alignment in Block M, Lot 11 North. The exterior of the pipe measures 5.5 inches in diameter, while the interior measures 4.25 inches in diameter. The top of the pipe is 2.5 inches below ground surface. This feature is possibly associated with the adjacent well pipe, Feature 137. Features 135 and 136 are identical.

Feature 136. Feature 136 is a ceramic sewer pipe in an east-west alignment in Block M, Lot 11 South. The exterior of the pipe measures 5.5 inches in diameter, while the interior measures 4.25 inches in diameter. This feature is possibly associated with adjacent concrete footings, Features 132, 133, and 134. Features 136 and 135 are identical.

Feature 137. Feature 137 is a vertical well pipe measuring 2 inches in diameter in Block M, Lot 11 North. It. This feature is possibly associated with Features 135 and 136 (sewer pipes), and Features 132, 133, and 134 (concrete footings).

Surface Features

Feature 132. Feature 132 is a rectangular concrete footing measuring 18 feet (north-south) by 16 feet (east-west) by 1 foot thick in Block M, Lots 9 and 11 South. The feature is divided into halves by a bisecting north-south interior footing. Several pairs of ½-inch threaded bolts are affixed to the superstructure. Depth of the feature is unknown. This feature is possibly associated with nearby Features 133 and 134 and Features 138 and 139 in Block I, all of which are concrete footings.

Feature 133. Feature 133 is a square concrete footing measuring 8 feet by 8 feet by 1 foot thick in Block M, Lots 9 and 11 South. Several pairs of ¼-inch threaded bolts are attached to the footing. Depth of the feature is unknown. This feature is possibly associated with nearby Features 132 and 134 and Features 138 and 139 in Block I, all of which are concrete footings.

Feature 134. Feature 134 is a rectangular concrete footing measuring 16 feet (east-west) by 8 feet (north-south) in Block M, Lot 11 North. It. The footing is 1 foot thick and is bisected by an interior north-south footing. Several pairs of ¼-inch threaded bolts are affixed to the footing. Depth of the feature is unknown. The feature is possibly associated with nearby Features 132 and 133 and Features 138 and 139 in Block I, all of which are concrete footings.

Block 9

Proposed testing for Block 9 targeted the identification of the historic back lots of Lots 1, 3, 5, 7, 9, 11, 13, and 14. A large Z-shaped trench, 200 feet (east-west) by 60 feet (north-south) was excavated to remove the overburden and to expose the nineteenth-century living surface.

Test Area A

Feature 108. Feature 108 is a semi-rectangular backhoe trench measuring 1 foot 6 inches (north-south) by 5 feet (east-west) in Block 9, Lot 1 North. Surface artifacts consist of sparse amounts of cut nails, milled wood fragments, charcoal, and mammal bone fragments.

Feature 109. Feature 109 is a rectangular privy measuring 4 feet 5 inches (north-south) by 3 feet 5 inches (east-west) in Block 9, Lot 1 North. There are wooden posts in the northwest, southeast, and southwest corners of the privy. Surface artifacts consist of sparse amounts of glass bottle fragments, a complete IBC Root Beer bottle, cut nails, and a large piece of concrete. The feature is filled with soft silty soil. Probing indicated a depth of 3 feet 1 inch, at which point a hard clay pan was encountered.

Feature 110. Feature 110 is a square refuse pit measuring 3 feet by 3 feet in Block 9, Lot 3. This. The refuse pit is approximately 1 foot 2 inches from the sidewall of the Test Area A trench. Probing indicates a depth of approximately 2 feet 3 inches. The feature is filled with soft silty soil, intermixed with pockets of hard clay. The feature appears to continue into the sidewall of Test Area D. Surface artifacts consist of sparse amounts of glass bottle fragments and milled wood fragments.

Feature 112. Feature 112 is an oblong pit measuring 4 feet (north-south) by 7 feet 5 inches (east-west) in Block 9, Lot 3. The pit contains little soil and is filled with hundreds of sherry wine bottles, with paper labels still intact. "Franzia Brothers White Port 4/5 pint" is embossed around the paper labels. Also present are several quart-size green liquor bottles. All bottles have screw-top plastic closures. This feature may be related to Feature 119, a refuse pit to the north. The pit appears to date to the mid-twentieth century.

Feature 118. Feature 118 is a large, somewhat rectangular refuse pit measuring 9 feet 5 inches (north-south) by 5 feet (east-west) in Block 9, Lot 1 South. Probing revealed a depth of 2 feet 2 inches. Surface artifacts include sparse to moderate amounts of glass bottle fragments, aqua paneled bottles, mollusk shell fragments, leather fragments, cut nails, wood fragments, stoneware and WIE fragments, cans with paper labels, mammal bone fragments, pull tops from cans, and brick fragments. Also present are two small metal hoops, 1 glass button, and a cloth with synthetic fiber. The artifacts have a wide date range from the late nineteenth century to the mid-twentieth century.

Feature 119. Feature 119 is a rectangular refuse pit bordering Feature 112, another refuse pit. Located in Block 9, Lot 3, the pit measures 3 feet 6 inches (north-south) by 4 feet (east-west). Probing indicates a depth of approximately 1 foot 7 inches. Surface artifacts include sparse amounts of glass bottle fragments, WIE fragments, unidentified metal fragments, fragmentary mammal bone, and large rocks.

Feature 121. Feature 121 is a rectangular wood-lined privy measuring approximately 6 feet (north-south) by 2 feet 8 inches (east-west) in Block 9, Lot 3. The privy is filled with loose gray soil and is bordered by hard, compact native clay. It disappears under the north wall of the test area, so total length is unknown. Probing revealed a depth of 3 feet 5 inches and no

subsurface deposit. Surface artifacts include sparse amounts of glass bottle fragments, WIE fragments, leather, and fragmentary mammal bone. One of the glass bottle fragments is embossed and indicates it is part of a medicine bottle manufactured in Stockton.

Feature 122. Feature 122 is a square wood-lined refuse pit measuring 4 feet (north-south) by 3 feet (east-west) in Block 9, Lot 3. The feature is filled with loose gray soil and compact red soil. The gray soil is located primarily in the eastern portion of the feature and could be the result of a fire or burning event. Probing revealed a depth of 1 foot 7 inches to 2 feet and failed to indicate subsurface artifacts. Surface artifacts are limited to one flat glass fragment and a brick.

Feature 123. Feature 123 is a rectangular privy measuring 4 feet (north-south) by 6 feet (east-west) by 2 feet deep in Block 9, Lot 3. The feature is filled with ash and bordered by hard-packed native clay. Surface artifacts include sparse to moderate amounts of clear bottle glass (automatic bottle machine [ABM]) fragments, amber and green glass bottle fragments, clear paneled medicine bottle fragments, enamelware, wire nails, sewer pipe fragments, and a fragment of plastic. A dense concentration of unidentified corroded metal fragments is present throughout the feature. The chronology of the artifacts varies widely. Wire nails may indicate the deposition of demolished building materials into the privy, and the abundance of ash implies that the feature was used as a dump point for fireplace or stove ash. This feature resembles Feature 124, with the exception of the ash.

Feature 124. Feature 124 is a square wood-lined privy measuring 3 feet 6 inches by 4 feet by 6 inches deep in Block 9, Lot 3. The privy is filled with loose loamy soil and is bordered by dark compact native clay. Surface artifacts include sparse to moderate amounts of flat glass fragments, green and aqua glass bottle fragments, glass tableware fragments, WIE fragments, and fragmentary mammal bone. Also present on the surface are two clear medicine bottles with hand-applied lips and two beer mug bases. A dense concentration of wire nails and other small metal fragments is present throughout the feature. The majority of artifacts date to the mid-twentieth century. Probing indicates the presence of a subsurface deposit. It appears likely that there were multiple episodes of refuse disposal in this privy. This feature resembles Feature 123.

Feature 125. Feature 125 is a rectangular privy measuring 3 feet (north-south) by 3 feet 7 inches (east-west) by 3 inches deep in Block 9, Lot 3. The feature is filled with compact soil, and there is a slight ash layer around the perimeter. Dark red stained soil (the result of decomposing metal) is visible on the surface. Surface artifacts consist of sparse amounts of glass bottle fragments, miscellaneous metal fragments, charcoal fragments, and WIE fragments. The base fragment of a WIE plate has a “Royal Premium/Semi-Porcelain/T&R BOOTE/England” maker’s mark under a crest and crown. Probing revealed no sub surface deposit.

Feature 126. Feature 126 is a rectangular privy measuring 2 feet (north-south) by 4 feet 3 inches (east-west) in Block 9, Lot 3. Depth ranges from 1 foot 2 inches to 3 feet 6 inches. The feature is filled with loose gravelly loam and is bordered by hard-packed clay. Remnants of vertical redwood posts indicate the privy was once wood lined. Surface artifacts are limited to sparse amounts of glass bottle fragments, brick, modern concrete, miscellaneous metal fragments, mammal bone fragments, and a clear glass (ABM) bottle. Probing revealed the

presence of a low-density subsurface deposit. The concrete is probably from the demolition of surrounding buildings and structures.

Feature 127. Feature 127 is a large rectangular wood-lined privy measuring 6 feet (north-south) by 7 feet (east-west) at its widest point; it is located in Block 9, Lot 3. The original privy boundaries measured 6 feet by 3 feet, but have been altered by subsequent vandalism. The west wall and a portion of the north wall were likely cut into with a backhoe. Probing indicated a depth of 3 feet 2 inches. Surface artifacts include sparse amounts of glass bottle (ABM) fragments, porcelain fragments, cut nails, fragmentary mammal bone, charcoal fragments, and a clay pipe stem fragment. The backhoe trenching appears to be a result of illegal artifact collecting as evidenced by an aluminum Pepsi can found in the north corner of the trench, approximately 6 inches below the top of the wood lining of the privy.

Feature 131. Feature 131 is an oval ash pit measuring approximately 2 feet in diameter, and ranging in depth from 8 to 20 inches, in Block 9, Lot 1 North. A portion of this feature is cut into by the eastern wall of Feature 117 (privy). Artifacts from this feature were extracted during the excavation of Feature 117. These artifacts include sparse amounts of shell fragment, mammal bone fragments, and buttons, as well as moderate amounts of charcoal. This feature likely predates Feature 117.

Test Area B

Feature 128. Feature 128 is a semi-circular vandals pit, measuring 11 feet (north-south) by 5 feet 5 inches (east-west) in Block 9, Lot 7. Visible boundaries in the floor and sidewall were measured, but it is probable that the feature is considerably larger. Current depth is approximately 4 feet below ground surface (3 feet below the top of the clay layer). Artifacts include dense amounts of WIE fragments, moderate amounts of flat glass fragments, glass bottle (ABM) fragments, charcoal, and mammal bone fragments, as well as a sparse concentration of shell fragments. There is a concrete pylon in the sidewall. Overall, the feature consists of a scatter of primarily domestic debris, dense in the bottom few inches of the pit, and largely confined to the bottom 1.5 inches.

This feature was originally noted as a shallow lens of dark clay with a sparse amount of artifacts at the base of Test Area 9B, and in the western sidewall of Test Area 9B as a U-shaped pit.

The feature appears to have been excavated from the modern and not the historic ground surface. It also lacks a sufficient amount of artifacts to be a refuse pit. The pit has likely been excavated and backfilled recently, perhaps by vandals. It could possibly be related to the adjacent concrete footing.

Feature 129. Feature 129 is a large backhoe trench measuring approximately 6 feet (north-south) by 11 feet (east-west) in Block 9, Lot 7. Surface artifacts include sparse to moderate amounts of clear, aqua, and black glass bottle fragments, WIE fragments, cut nails, wire nails, mammal bone fragments, and a clear paneled medicine bottle. The material appears to date to the late nineteenth century. There is a backhoe cut on the west end of the feature,

which has been filled with disturbed surface refuse and is likely the result of vandalism. The east end of the feature may have been a rectangular privy pit; however, there are no wooden corner posts.

Feature 130. Feature 130 is a nearly square privy measuring 27 inches (north-south) by 23 inches (east-west) in Block 9, Lot 7. The pit consists of a dense concentration of large mammal bone. The surrounding soil is dark native clay. The bones are saw-cut; the majority of them are cow bones, although pig bones are present as well. Mandibles, long bones, vertebrae, as well as fused and unfused epiphyses constitute the bone assemblage. The bones in the center of the feature are not located within the soil matrix. No other artifacts were discovered. There is a concrete pylon immediately adjacent to the southwest corner of the feature. This is possibly the result of a single refuse disposal episode. The feature is possibly an abandoned privy, void of artifacts. The deposit cannot be dated and lacks integrity because the association and the variety are poor.

Archaeologists encountered numerous features during the course of the excavation; however, the majority of them were either disturbed by vandalism or contained later twentieth-century artifacts, could not address research questions in the research design, and were not deemed otherwise significant due to their late date.

CRHR Eligible Feature (Feature 117)

Feature 117 was identified in Block 9, Test Area A, Lot 1 North (Figure 19). It is a rectangular wood-lined privy approximately 2.5 by 4 feet in plan. Artifacts visible on the surface included sparse amounts of porcelain fragments and cut nails and wood and charcoal fragments. Archaeological testing revealed that Feature 117 contained a large quantity (Q) and variety (V) of artifacts and had not been affected by subsequent development of the block and/or vandalism; therefore it retained sufficient integrity (I). Additionally, archival research has identified several possible owners and occupants of the Lot 1 with whom the archaeological materials may be associated (A). Feature 117 was determined to meet the QIVA requirements outlined in the Research Design/Treatment Plan, was determined eligible for the CRHR, and was subsequently subjected to data recovery.

This entire feature was excavated to a depth of approximately 3 feet below the historic ground surface. Artifacts recovered date from approximately 1860 to 1935, with a tentative mean date of circa 1885. A total of nine stratigraphic layers were identified and are described below, from most recent to oldest.

Description of Stratigraphic Layers (Figures 20 and 21)

Layer 358. Nineteenth-century living surface.

Layer 338. Post-abandonment privy fill. 0–0.5 feet below surface. Loose, brown sandy soil with small rock and clay inclusions. Cultural materials indicate nineteenth-century use.

Layer 352. Post-abandonment privy fill. 0.5–1.5 feet below surface. Similar to Layer 338, except cultural materials are larger and many are nearly whole specimens. Arbitrary cut off to the next layer.

Layer 354. Post-abandonment privy fill. 1.5–2 feet below surface. Consolidated light brown soil with clay inclusions. Continuation of layers 338 and 352 above, difference being the change from loose to more consolidated density. Continuation of cultural materials as well.

Layer 377. Primary privy deposit. 2–3 feet below surface. Light brown/dark brown mottled. Very compact and dense. This represents the use of the feature as a privy. Very few cultural materials.

Layer 376. Builder’s trench backfill. Vertical layer, varies from 1–10 inches wide. Medium brown, compact, also contained a large amount of black clay. Sparse number of artifacts. Some of the soil samples obtained may include culturally sterile soil, as excavation was carried out past the visual line of the trench to ensure adequate delineation of this layer.

Layer 340. Wood lining. Thin (1/8–1/4 inch) vertical layer of reddish-brown wood, probably redwood. A few samples were collected.

Layer 117. Excavation interface of the privy. This is the pit dug historically into sterile soil to be used as a privy.

Layer 341. Culturally sterile native soil. Dark reddish brown, compact clay (hardpan) with calcite inclusions. Encountered at 3 feet below surface.

Soil Samples

Provenience	Volume	Description	Color (Munsell)
Layer 354	5.5 liters (1.5 gallons)	Loam	7.5 yr 4/2 brown
Layer 377	49.21 liters (13 gallons)	Clay	10 yr 4/1 dark gray
Layer 376	2 liters (0.5 gallon)	Clay	10 yr 3/1 very dark gray

RESULTS

Archaeological testing revealed only one intact archaeological feature eligible for the CRHR, Feature 117, a nineteenth-century privy, associated with the nineteenth-century neighborhood within the project area.

Documentary Evidence of Block 9, Lot 1 North

Feature 117 is situated in the southeast corner of Lot 1 North of Block 9. Lot 1 constitutes the northwest corner of Block 9, at West Market and South Monroe streets. This corner was also a small commercial center for the neighborhood and in the nineteenth century, this area was a low-rent residential neighborhood inhabited by laborers, barkeepers, painters, teamsters, and waiters. Owners of these lots in Block 9 were absentee landlords; that is, they rented out their properties to tenants who occupied them, but did not themselves live on the premises.

There are no archival records that explain the refuse disposal patterns of individual residents who occupied the block; however, documentary evidence does exist that lists the majority of occupants of Lot 1 North. Although there is not a clear association between any resident of Lot 1 north and Feature 117, historical information provides us with several possibilities.

In 1867, William Coan owned all of Lot 1. The 1895 Sanborn Insurance Map of the block shows the east side of the lot as 242 West Market Street, occupied by a wood-frame saloon and a one-story outbuilding in the southeast corner of the lot. The individuals who rented the property are not known, although a J. D. McDougall, a salesman living on this block of Market Street, was listed in the 1878 City Directory. In 1888, Maria Listner owned a commercial lot on the corner, and in 1897 an M. Lignegno owned the same; however, it is not clear who specifically owned Lot 1 North. By 1917 the saloon located on Lot 1 was a store and was 10 feet narrower and 40 feet longer than the previous saloon. In addition, no outbuildings are shown associated with the store. In 1918 the address changed to 246 West Market. This structural configuration of the east side of Lot 1 North remained unchanged at least until 1972, when the Sanborn Insurance Map of that year shows that the south 1/3 of the block had been removed to make way for State Route 4.

Archaeological Findings

Feature 117 was discovered in Block 9 (Figure 22). The assemblage represents the disposal of a single household's refuse that cannot be attributed to a specific individual or household because of a gap in the archival records and the lack of tightly datable artifacts from the specific cultural layers.

The feature was initially identified during mechanical excavation of the test area; archaeologists then used hand excavation techniques to expose the boundaries of the feature. Following the preliminary probing and surface artifact inventory of Feature 117, the Primary Investigator determined that the feature and artifact assemblage possessed all the QIVA attributes and should be subjected to data recovery using stratigraphic excavation techniques.

The feature included eight distinct cultural layers, including two cultural layers that likely represent several dumping episodes (Figure 23). Layers 338, 352, and 354 represent the post-abandonment privy fill and are located within the top 3 feet of the privy vault. Layer 338 contained a moderate amount of clear flat glass and mammal bone, with sparse amounts of glass tableware, lamp, and ABM glass present. Also present in sparse amounts in Layer 338 was WIE, clothing buttons, fish bone, and avian bone. Directly underneath, Layer 352 also represented post-abandonment privy fill. This layer was difficult to define and appears to be a continuation of Layer 338 except that the artifact assemblage is denser and contains larger intact items. Layer 354 likely represents the second dumping episode and consists of a light brown consolidated soil with a moderate amount of fragmentary artifacts. Artifacts located within Layer 354 include moderate amounts of mammal bone, glass tableware, ABM glass, and lamp fragments, and a sparse amount of stoneware, WIE, and can fragments. Also present in Layer 354 were a sparse amount of fish and avian bone.

Layer 377 was the primary privy deposit and consisted of 9 inches of dark brown compact organic soil. Layer 376 represents the builder's backfill, Layer 340 is the wood lining of the privy vault, Layer 117 is the excavation interface, and Layer 341 is the culturally sterile compact red clay soil, into which the privy vault was originally excavated.

Excavation of Feature 117 was terminated at 3.5 feet below the nineteenth-century surface when Layer 341, the culturally sterile soil, was encountered.

Artifact Assemblage

Artifacts located within the privy vault include a diverse array of artifacts largely dating between 1850 and 1890 (Table 2 and Figure 24). The large quantity of domestic artifact types, dating between 1850 and 1890, that were recovered during excavation suggests that the privy vault was in use during the late nineteenth century and was filled during the 1890s when the neighborhood was connected to the City sewer system (Figures 25–29). According to the documentary record, the post-abandonment fill may be associated with either the saloon patrons, J. D. McDougall, or Maria Listner. The wide variety of glass tableware, including cups, mugs, goblets, shot glasses, and tumblers, appears to be indicative of refuse associated with a nineteenth-century neighborhood saloon (Figures 30–33). Due to an incomplete chain of occupancy documented for the lot, it is not possible to firmly establish the association between the artifact assemblage and the saloon.

Stratigraphic excavation of Feature 117 indicated two discrete episodes of dumping that occurred in the privy (Layer 338/352 and Layer 354). Both cultural layers have approximately the same temporal range of artifacts, averaging between 1860 and 1890, and contain a dense amount of domestic artifacts, including food storage and food preparation/consumption items.

The excavation of privies within neighborhoods often allows archaeologists to move beyond looking at individual households and explore community/neighborhood analyses.

Table 2. Functional Classification of Artifacts from Feature 117

I. Personal			
A. Grooming Health	Container, jar	Earthenware	MNI=1
B. Medicinal/Health	Bottle, pharmaceutical, 1875-ca. 1890	Clear Glass	MNI=2
	Bottle, pharmaceutical, 1850-1920	Clear Glass	MNI=1
	Bottle, pharmaceutical (probably used for morphine), 1865-1890	Clear Glass	MNI=1
	Bottle, pharmaceutical, 1880-1890	Clear Glass	MNI=1
	Bottle, pharmaceutical, 1850-ca. 1920	Clear Glass	MNI=3
	Bottle, pharmaceutical (WT & CO.F), 1850- ca. 1935	Clear Glass	MNI=1
	Bottle, pharmaceutical, 1810-1880	Aqua Glass	MNI=1
	Bottle, bitters (SAL-MUSCATELLE), 1887-ca. 1907	Cobalt Glass	MNI=1
C. Accoutrements	Fastener, cufflink	Milk Glass	MNI=1
D. Social Drugs-Alcohol	Alcoholic Beverage Bottle	Olive Glass	MNI=5
	Alcoholic Beverage Bottle	Dark Olive Glass	MNI=1
	Alcoholic Beverage Bottle, flask	Clear Glass	MNI=2
	Alcoholic Beverage Bottle, flask (J.N. Wholesale Liquors/Stockton)	Clear Glass	MNI=1
Tobacco	Pipe, stem	Earthenware	MNI=2
	Pipe, bowl	Earthenware	MNI=1
E. Clothing/Footwear	Container, shoe-polish bottle (FRANK MILLER'S/CROWN/DRESSING/NEW YORK/U.S.A), 1880-1890	Aqua Glass	MNI=1
	Shoe	Leather	MNI=2
	Fastener, button	Milk Glass	MNI=14
	Fastener, button	Shell	MNI=2
	Tack, shoe	Non-Ferrous Metal	MNI=1
F. Miscellaneous Containers	Jar	Clear Glass	MNI=1
II. Domestic			
A. Food Preparation/ Consumption	Drinking Vessel, tumbler	Clear Glass	MNI=7
	Drinking Vessel, goblet	Clear Glass	MNI=4
	Drinking Vessel, mug	Clear Glass	MNI=1
	Drinking Vessel, shot glass	Clear Glass	MNI=1
	Drinking Vessel, cup	Clear Glass	MNI=1

	Tableware, plate	White Improved Earthenware	MNI=1
	Tableware, plate (Thomas Hughes)	White Improved Earthenware	MNI=1
	Tableware, plate (IRON STONE CHINA/KNOWLES, TAYLOR/AND/KNOWLES), 1870-1929	White Improved Earthenware	MNI=1
	Tableware, rim	White Improved Earthenware	MNI=1
	Tableware, bowl	White Improved Earthenware	MNI=1
	Serving, bowl (IRON STONE CHINA/THOMAS HUGHES), 1860-1894	White Improved Earthenware	Mni=1
	Serving, bowl top	White Improved Earthenware	MNI=1
	Serving, platter	White Improved Earthenware	MNI=1
	Serving, pie dish (WARRANTED)	Stoneware	MNI=1
Food Storage	Jar, canning (MASON'S/PATENT/NOV. 30 TH /1858), 1871-1882	Aqua Glass	MNI=1
	Jar, pickle	Aqua Glass	MNI=1
	Jug	Stoneware, Chinese Brown Glaze	MNI=1
	Jar	Aqua Glass	MNI=1
	Bottle, Olive Oil (1880-1890)	Aqua Glass	MNI=1
	Bottle, Mustard (1865-1890)	Clear Glass	MNI=1
	Can	Ferrous Metal	MNI=1
B. Food Refuse			
C. Cleaning and Maintenance			
D. Lighting	Chimney Glass Lamp	Clear Glass	MNI=7
<hr/>			
III. Structural			
<hr/>			
A. Building Materials	Window	Clear Glass	
	Brick		
	Plaster		
	Concrete		

	Cut nails	Ferrous Metal	MNI=41
	Wire Nails	Ferrous Metal	MNI=
<hr/>			
IV. Activities			
<hr/>			
A. Sewing	Pin	Non-ferrous	MNI=1
B. Games	Domino	Bone	MNI=2
C. Writing	Bottle, ink, 1865-1890	Aqua Glass	MNI=3
	Pencil Lead	Lead	MNI=1
	Tablet	Slate	MNI=1
<hr/>			
V. Indefinite	Misc. Bottle (McC), 1832-1886	Clear Glass	MNI=1
	Misc. Bottle	Amber Glass	MNI=1
	Misc. Bottle	Clear Glass	MNI=1
	Misc. Bottle (A.C.W.L), 1850-1920	Aqua Glass	MNI=1
	Misc. Bottle	Aqua Glass	MNI=4
	Misc. Bottle, 1820-1920	Clear Glass	MNI=1
	Misc. Bottle Base	Clear Glass	MNI=1
	Fabric (Purple)		
<hr/>			

Because the majority of the privy features located in the project area were severely vandalized, community/neighborhood analysis is not possible.

Interpretation

The nineteenth-century neighborhood that was once located in the Worknet project area was a modern community and a growing urban area. According to historical records, Block 9 comprised both residential and commercial buildings and was largely inhabited by the “renter” community. The artifacts left behind do not reflect the entire community and are only indicative of one feature most likely associated with either the saloon or a single tenant such as McDougall or Listner. Because of the small amount of materials recovered and that lack of comparative assemblages, Feature 117 has only a limited ability to address project research questions.

Overall, the collection resembles the refuse from a saloon that served both alcohol and food items to their customers. Saloons would have provided table settings to their customers along with social indulgences such as alcohol and tobacco, all of which are present in the archaeological assemblage (Figure 34). Personal items such as pharmaceuticals may have belonged to the hired help, a tenant who may have resided above the saloon, or the saloonkeeper and his family. Comparative analysis derived from Hannan’s Saloon in nineteenth-century Sacramento indicates that saloon operators frequently resided on the property along with their families, which often accounts for the abundance of domestic and personal artifacts found associated with saloon properties (Schultz and Gust 1983:46). In the case of Hannan’s Saloon, the property was leased to Owen Hannan who operated a saloon on the property for 18 years and resided there along with his family. The customers or tenants likely discarded or lost personal items such as buttons and shoe parts, which were either intentionally discarded or lost from their clothing and then swept off the floor and discarded. Domestic items such as tableware and drinking vessels were frequently broken and subsequently discarded (Figure 35). If this was the case, the saloon operator would have had large amounts of refuse to discard and would have taken advantage of open privy vaults that were soon to be filled and replaced by indoor plumbing.

The consumer behavior of the saloon occupants (including possible tenants) was that of middle-class society during the late nineteenth century. Occupants had access to the consumer market through local stores or by mail (Sears & Roebuck) (Figure 36). The majority of the artifact assemblage includes mass-produced items such as ironstone plates, stemware, pharmaceuticals, and ink jars that were widely distributed and available to local consumers (Figures 37 and 38). The presence of canning jars indicates a reliance on home-grown food products and on the ability of the occupants to either grow and preserve fruits and vegetables or obtain locally grown produce for later consumption. Analysis of the faunal remains indicates that the occupants purchased and likely consumed a variety of meat, including beef, chicken, lamb, and fish (Figure 34).

Additionally, artifacts associated with activities such as writing shed light on the daily lives of the inhabitants. The discovery of an ink well, slate tablet, and pencil lead is evidence

that one or more of the inhabitants were literate. Writing materials would have been necessary for the saloon operator to conduct accounting activities; these items may have been used for this task.

Although only one intact archaeological feature eligible for the CRHR was encountered during the project, several of the features identified on Blocks 9, I, and M contained early twentieth-century archaeological materials that provide socioeconomic information about the downtown Stockton community and data regarding urban geography. In fact, information obtained from the testing of several twentieth-century privies paints a different picture of the working class neighborhood than does the archival record. According to archival research, the neighborhood was connected to the city sewer system as early as 1890; however, newspaper articles from the late nineteenth and early twentieth century indicate that many owners failed to connect their downtown properties to the sewer system and the use of backyard privies persisted. Archaeological evidence derived from this project supports this conclusion and also demonstrates that the use of backyard privies persisted until as late as the 1920s and early 1930s.

Absentee landlords apparently failed to respond to the City ordinances and did not connect their rental properties to the city sewer system, likely because of the high costs associated with installing indoor plumbing and toilets into the neighborhood houses. Residents were likely forced to continue using outdoor facilities, because no other options were available until indoor plumbing was installed. A detailed description of the refuse/sewer problem was described in the *Stockton Daily Independent* in 1883.

The poisonous refuse is either thrown upon the ground to evaporate and vitiate the air or goes into the cesspools and seeps down into the lower strata of earth and poisons the water. During the winter this surface pestilence is soaked down by the rains and adds its quota of the essence of death to the water which is pumped up and drank every day.

The stench and filth described above create a sense of the sanitation crisis the city was experiencing in the late nineteenth century, necessitating civic improvements such as the installation of a municipal sewer system in the 1890s. Evidently, the city sewer system was not completely functional because, by the turn of the twentieth century, a 1902 headline in the *Stockton Evening Mail* read, “Thorough Sewer Inspection to be Made: Every House in Town is to be Examined and Connection with the Sewer System will be Ordered Under Penalty of Arrest.” It is evident from this headline that the entire city had not been connected to the sewer system and that many residents and businesses continued to use outdoor privies during the early twentieth century.

Archaeological evidence from this project indicates that several of the houses in the Worknet project area continued to use privies and dispose of refuse into their privy vault until the late 1920s, and perhaps even into the early 1930s. Working class residents were likely powerless to demand the installation of indoor privies and were completely dependent on their absentee landlords to install plumbing and complete the connection to the city sewer system.

Chapter 6. Conclusion

Numerous features were encountered during the course of the excavation; however, the majority of them were either disturbed by vandalism or contained later twentieth-century artifacts, could not address research questions in the research design, and were not deemed otherwise significant due to their late date. One intact nineteenth-century privy vault, Feature 117, was discovered and determined eligible for the CRHR and subsequent data recovery.

Analysis of the archaeological site structure and artifact assemblage revealed that the late nineteenth-century Stockton working class neighborhood in the Worknet project area was not a socially, economically, or culturally homogeneous group as suggested by the documentary record. The artifacts recovered during the course of this project, though sparse, do shed some light on the daily lives of the working class residents and their consumer behaviors. Thus, we conclude that given a larger sample of intact archaeological features, a broader comparison between features, lots, and neighbors may have been possible, which also would have provided more data applicable to the research questions posed for the neighborhood.

The nineteenth-century neighborhood that was once located in the Worknet project area was a modern community and a growing urban area. According to historical records, Block 9 comprised both residential and commercial buildings and was largely inhabited by the “renter” community. The artifacts left behind do not reflect the entire community and are only indicative of one feature most likely associated with either the saloon or a single tenant, such as McDougall or Listner. Because of the small amount of materials recovered and the lack of comparative assemblages, Feature 117 has only a limited ability to address project research questions.

Although the features identified during the course of the project had been severely affected by vandalism, and only one eligible feature was discovered, the discovery of several twentieth-century archaeological privies provided a rare view into the lives of the nineteenth-century working-class residents of the neighborhood. The neighborhood was likely an impoverished area within downtown Stockton, where residents were dependent on the absentee landlords for improvements such as the connection to the City sewer system (Figures 39 and 40). The delay in connecting this neighborhood to the municipal sewer prolonged the use of outdoor privies and refuse disposal systems.

The project was unsuccessful at identifying intact archaeological features with the ability to address research questions because of the widespread vandalism to the subsurface remains. However, the twentieth-century archaeological features and their contexts provided intriguing information on the socioeconomic lives of a renter community struggling to make a living in the 1920s and 1930s in downtown Stockton.

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PERSONAL COMMUNICATIONS

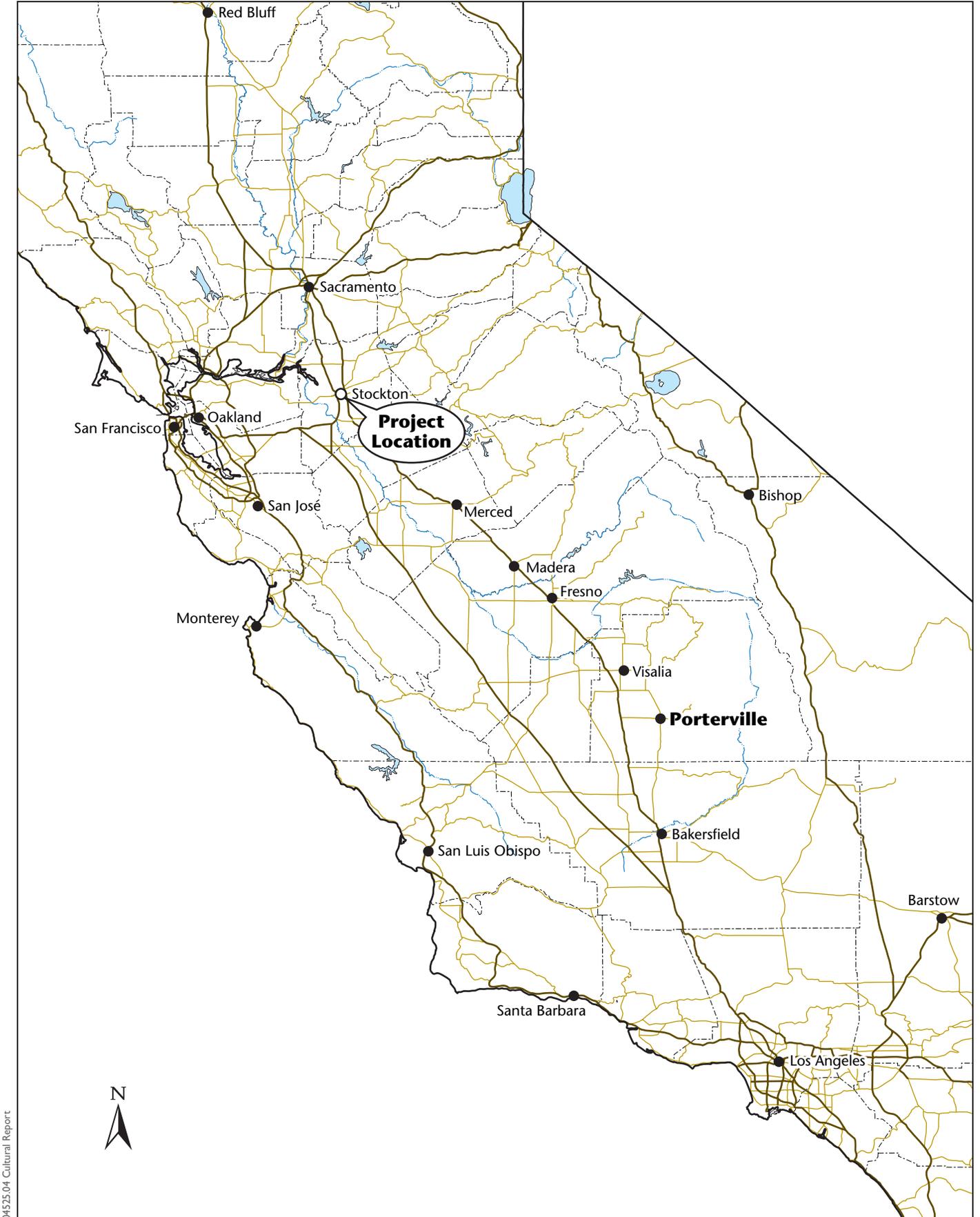
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Figures



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Figure 1
Regional Location



04525.04 Cult Report (4-05)

Figure 2
Project Area

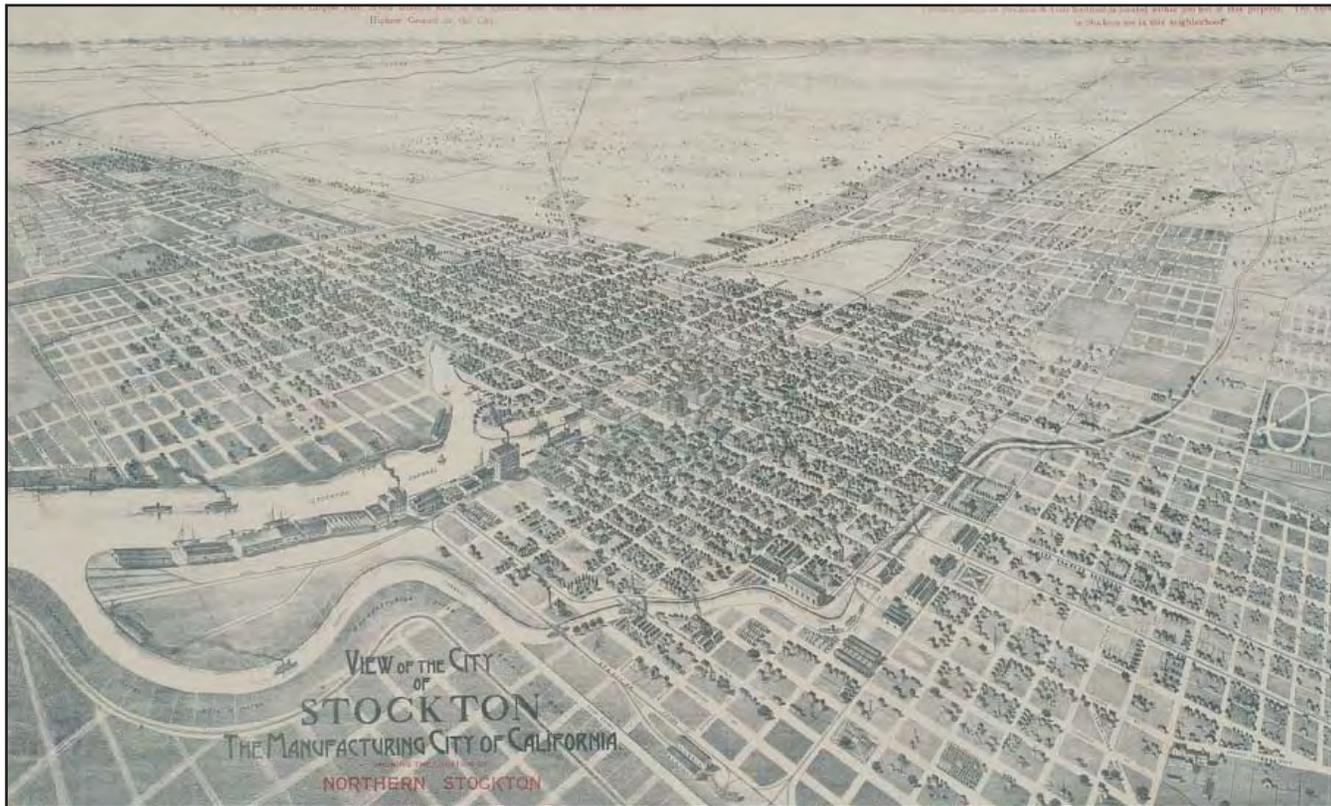
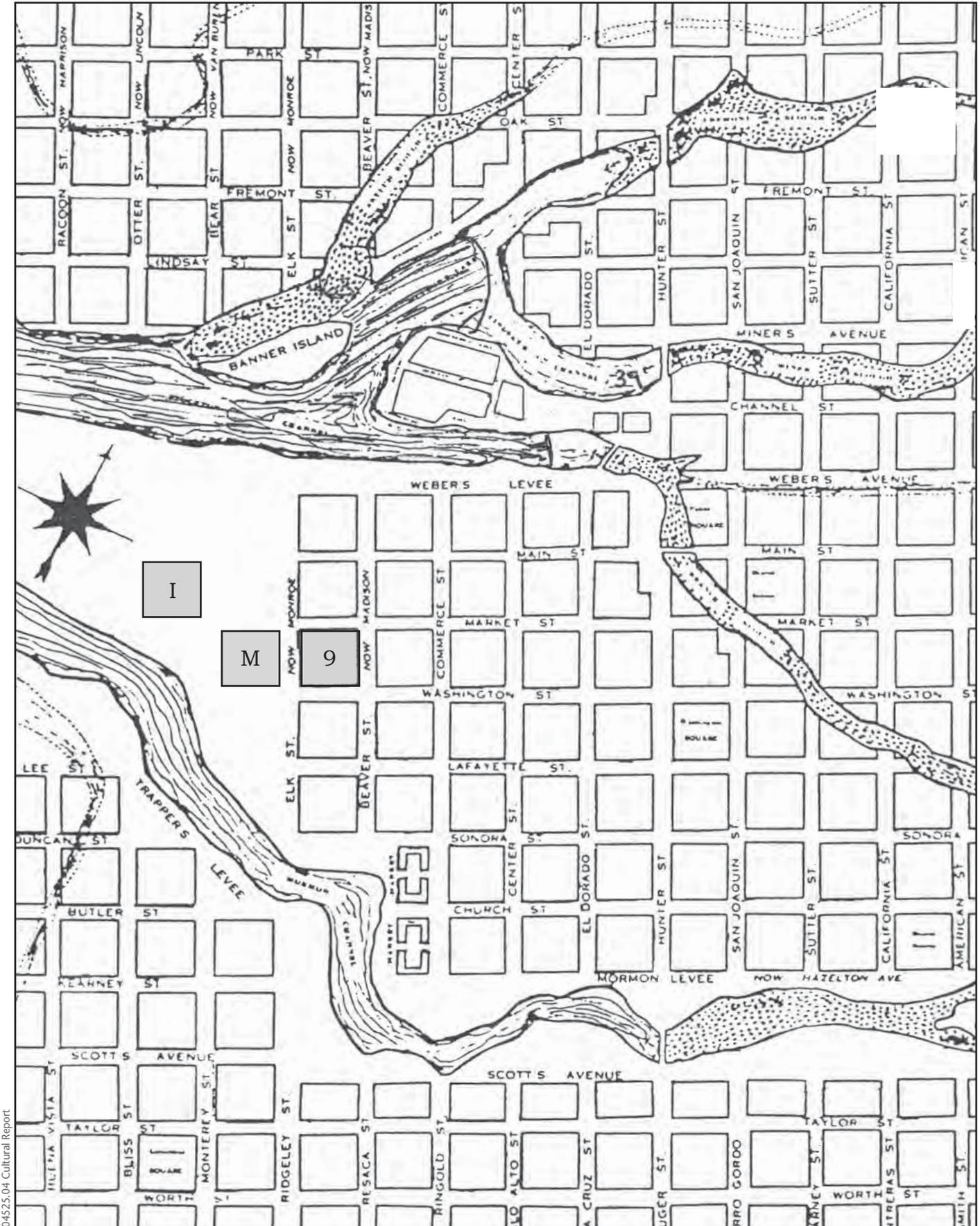
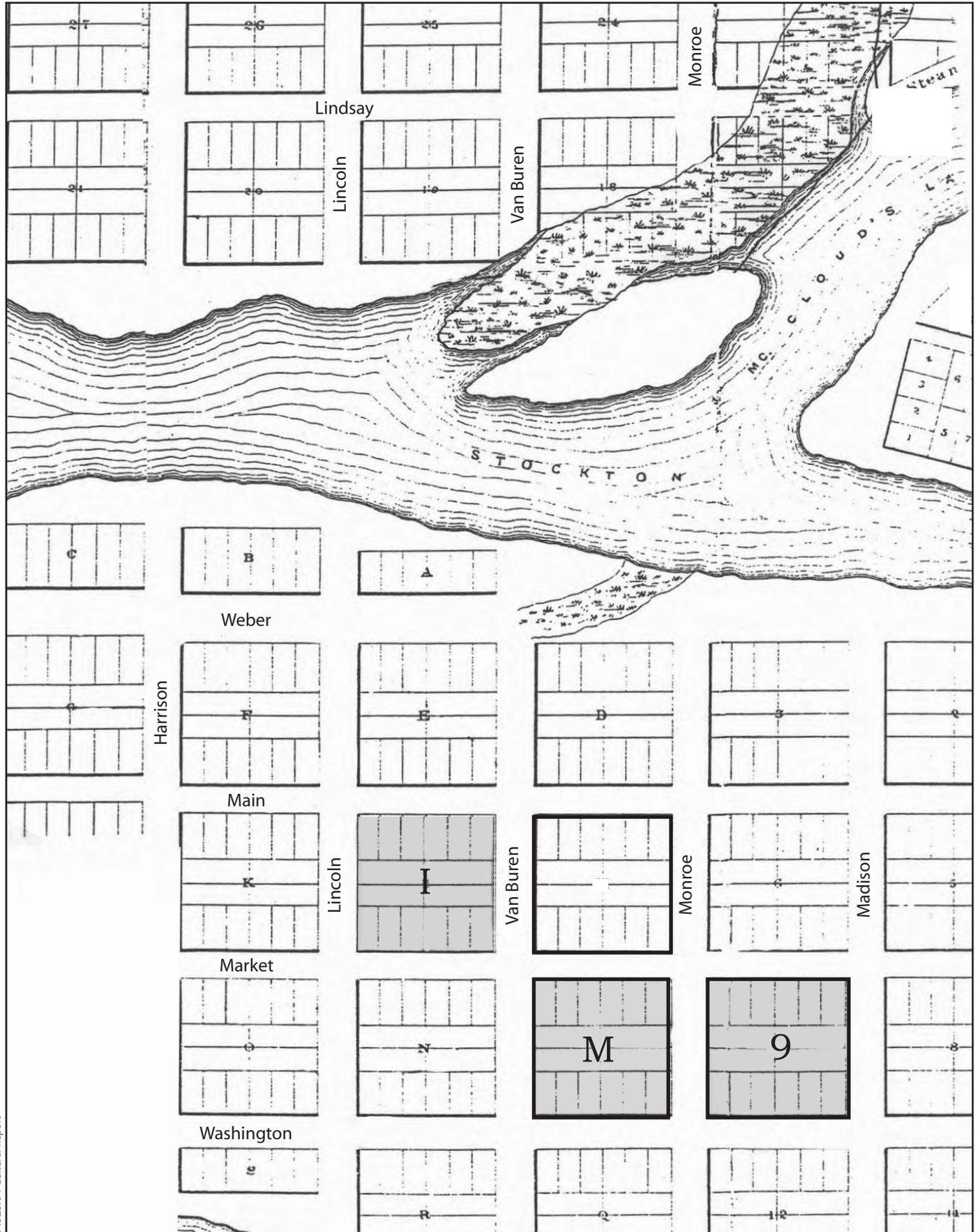


Figure 3
1870 Birds Eye View of Stockton (Alfred Koch)



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Figure 4
1849 Map of Stockton by Hammond
(Holt Atherton, University of the Pacific)



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Figure 5
1870 Circa, Project Vicinity



Monroe School, Circa 1910



ca.1950's school photo, Stockton (courtesy of James Fisher) from Worknet neighborhood



Figure 7
Close-Up of Project Area,
Birds Eye View of Stockton 1870
(Alfred Koch, on file at Holt Atherton, University of Pacific)

South Van Buren St.

West Washington St.

West Market St.

South Monroe St.

South Madison St.

9

Scale of feet.

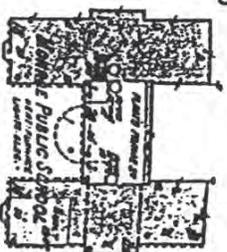


Figure 8
Block 9, Sanborn Map

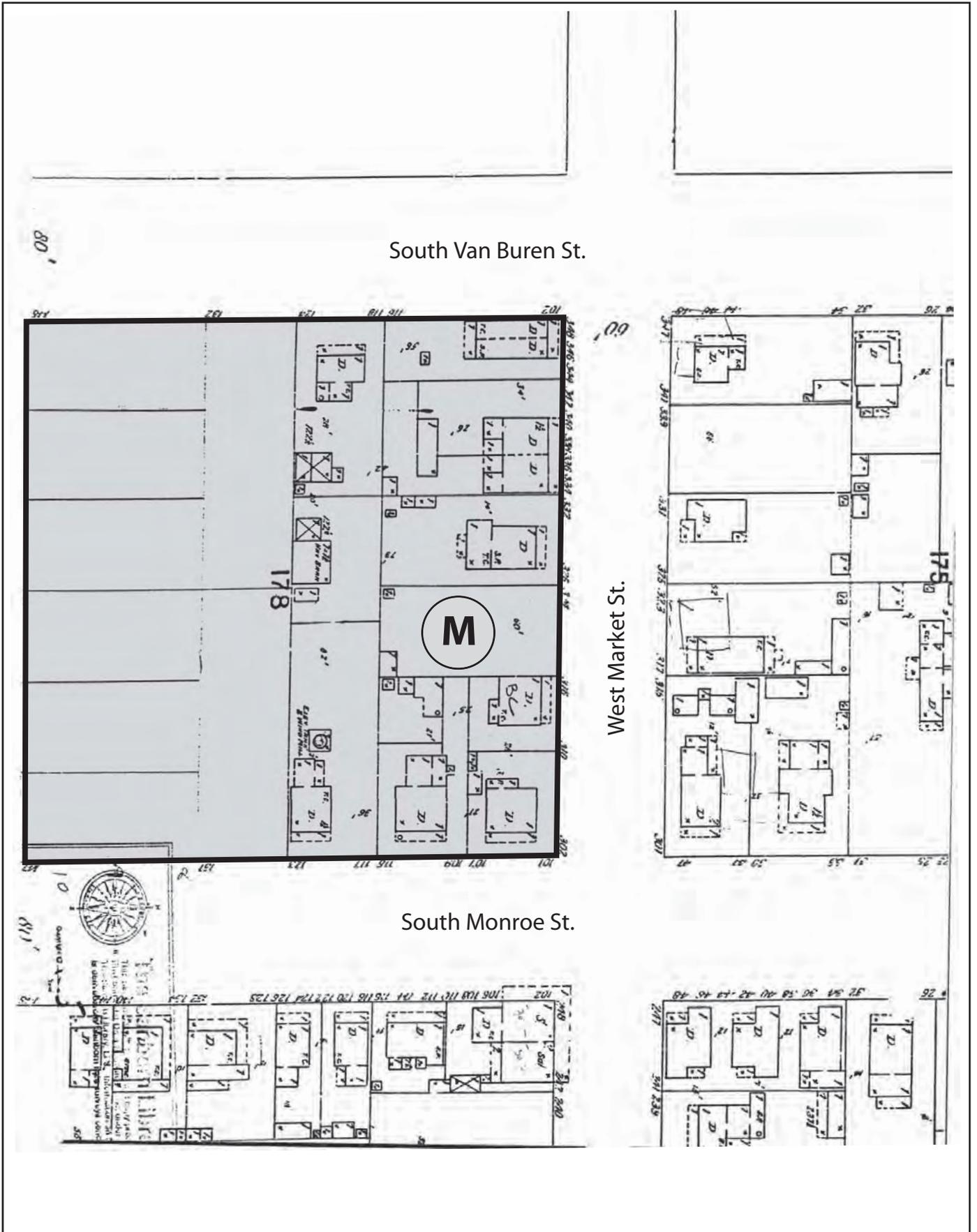


Figure 9
Block M, Sanborn Map

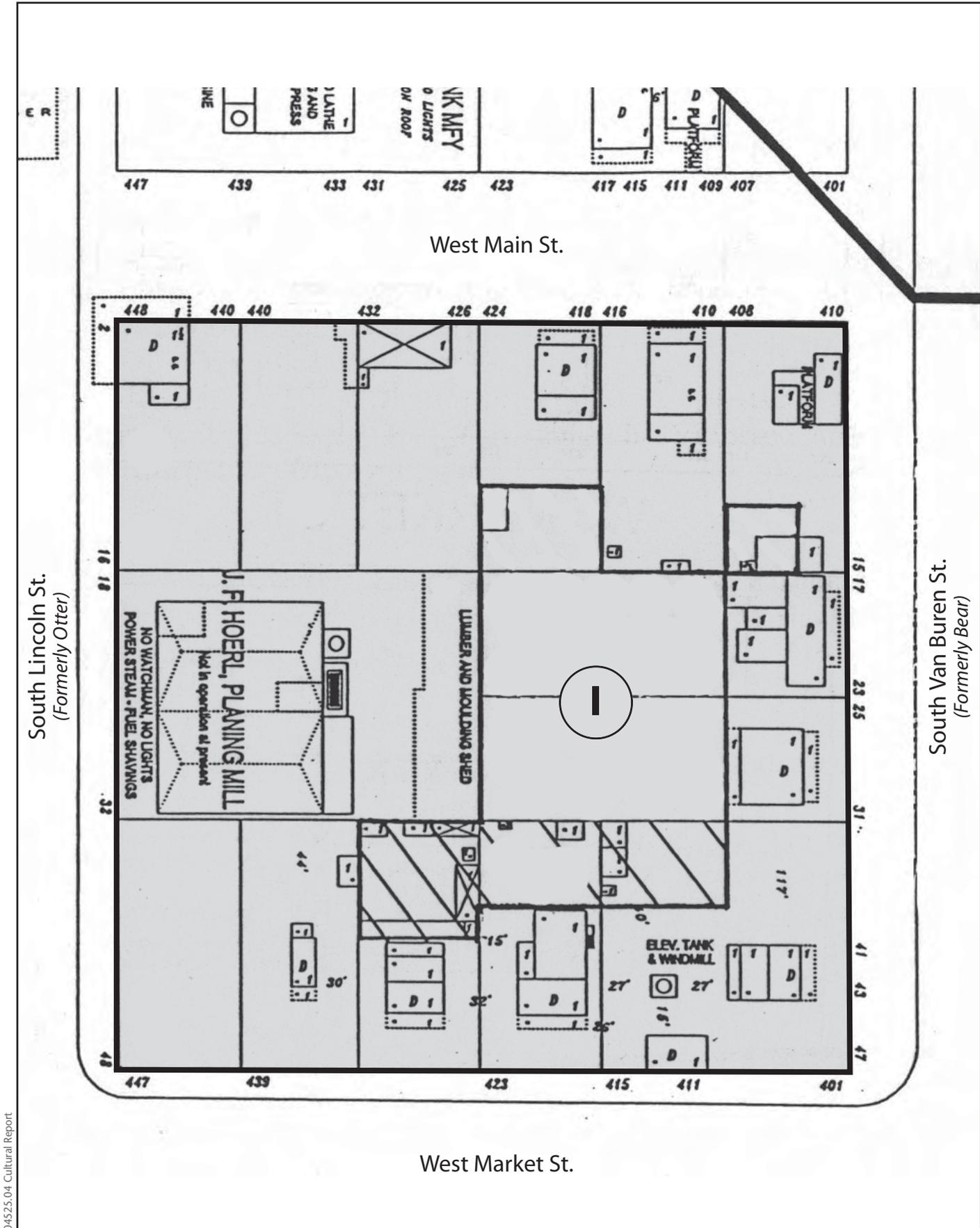


Figure 10
Block I, Sanborn Map



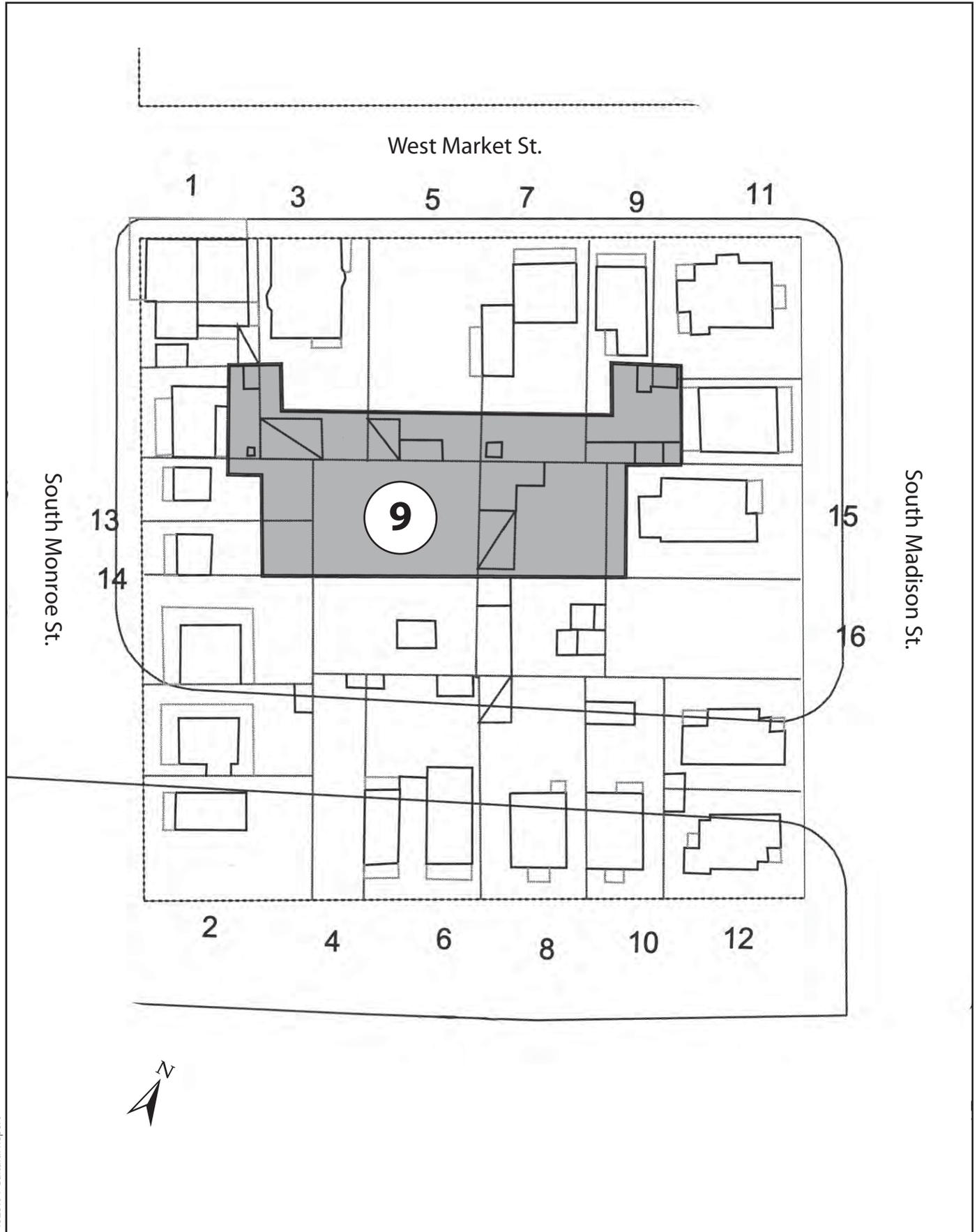
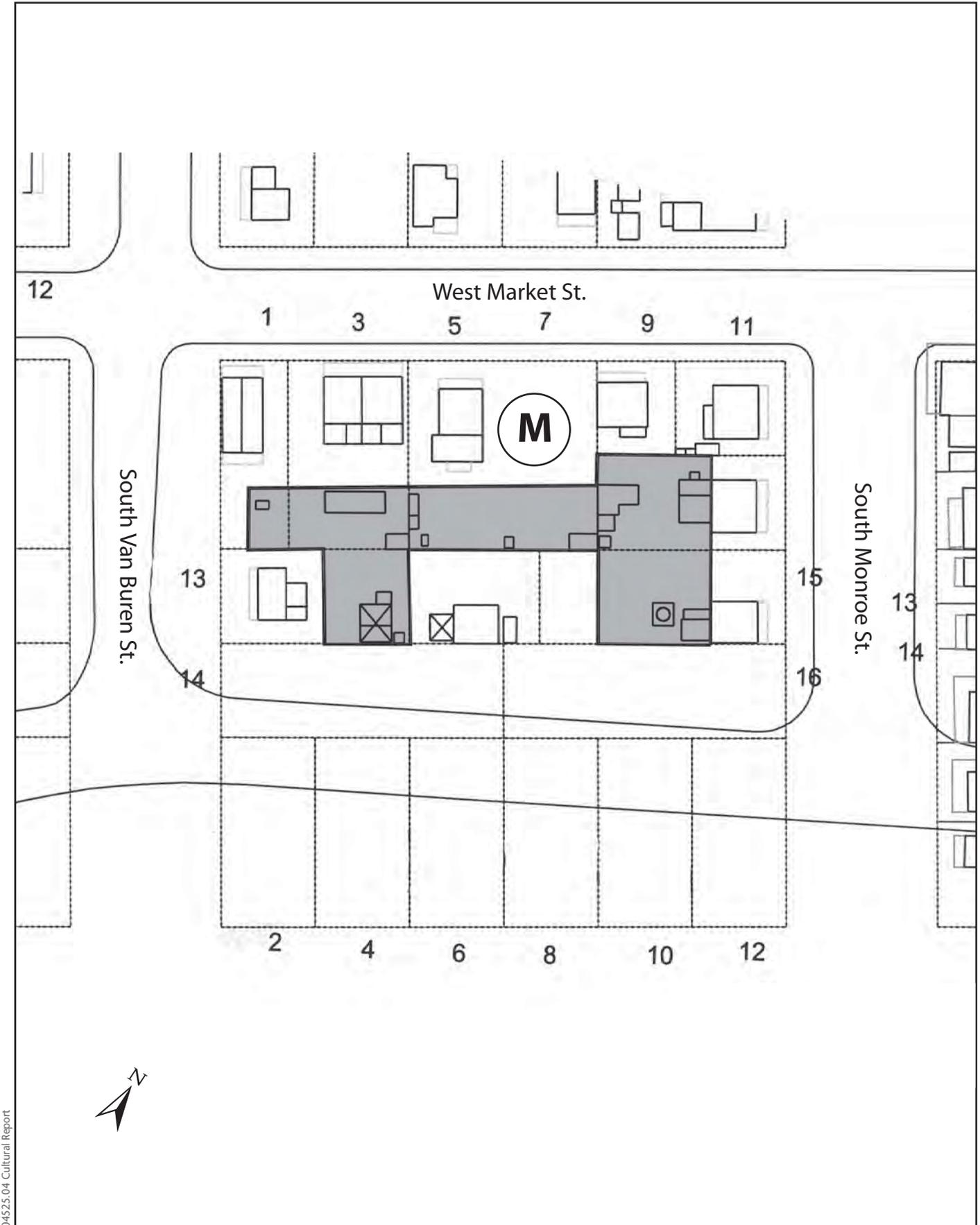




Figure 13
Block I, Test Area





Block 9 Overview



Block I Overview



Block M Overview



Block I Overview



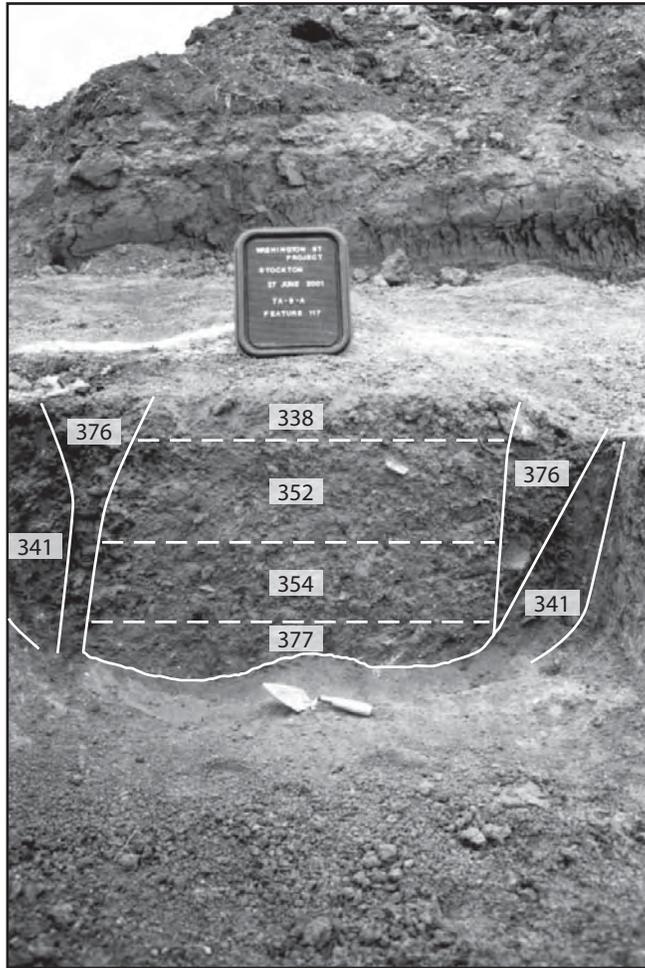




Block 9, Feature 117 Excavation



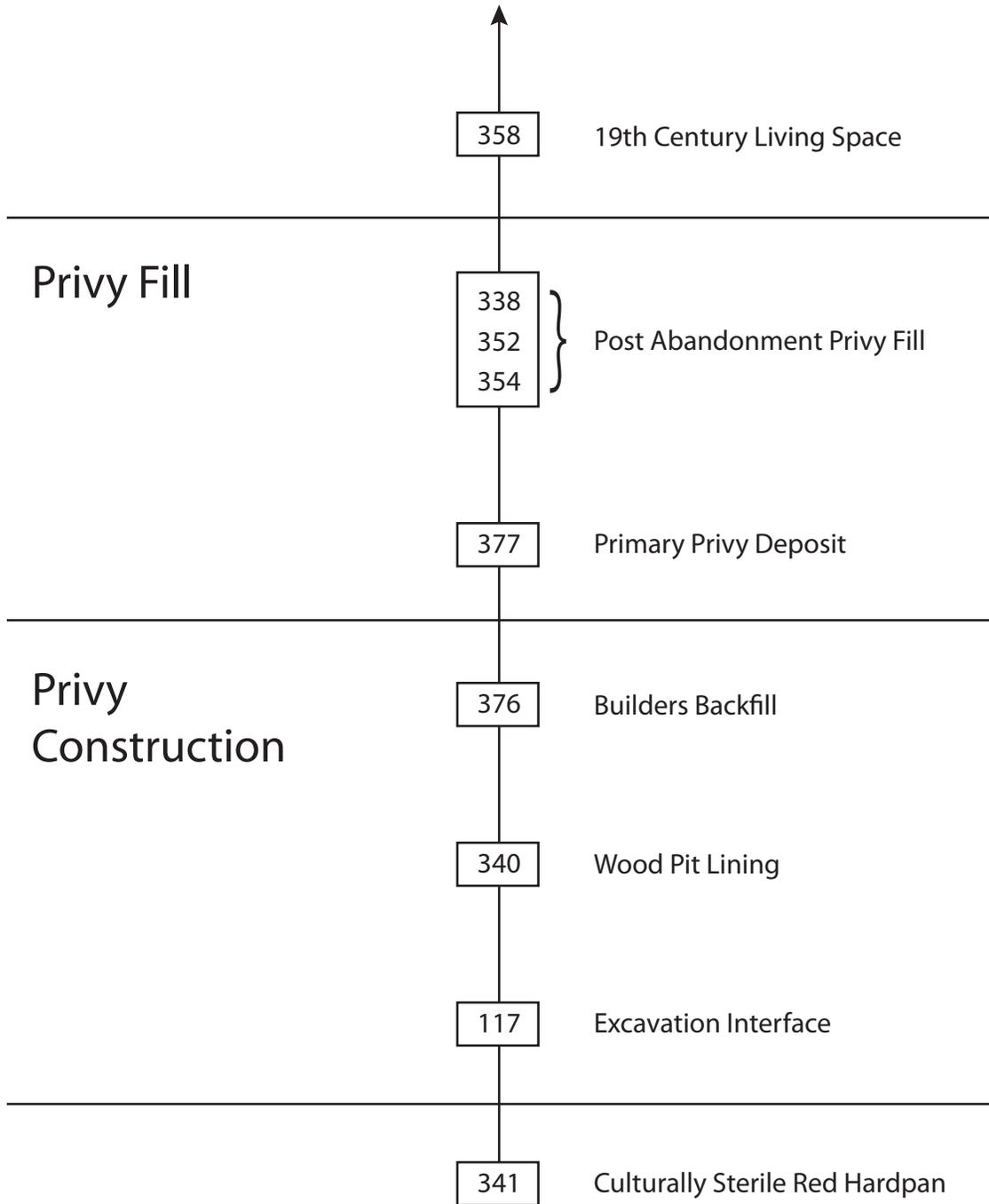
Block 9, Test Area



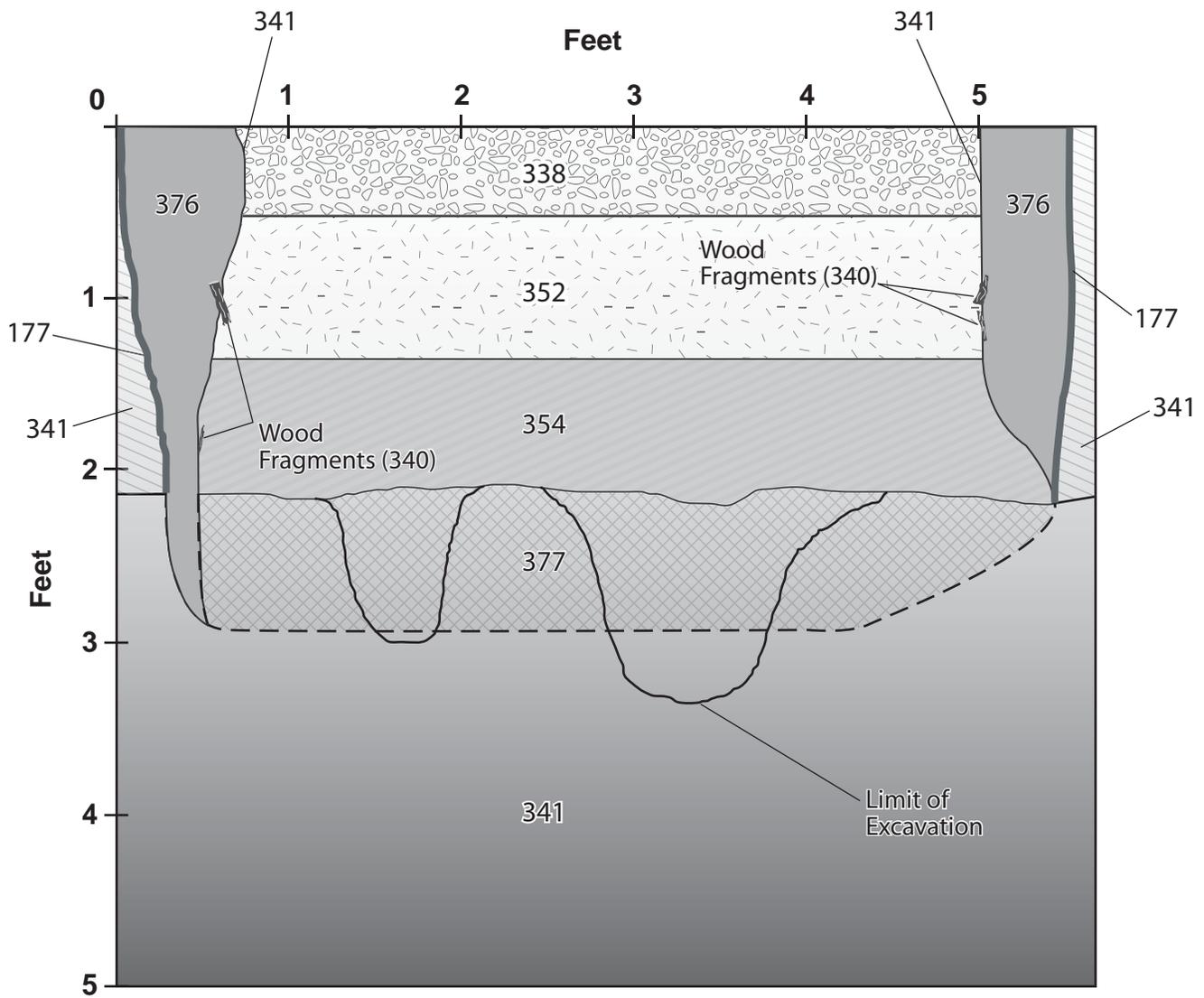
TA-9-A, Feature 117



TA-9-A, Feature 117







KEY	1" = 1'
117	- Excavation Pit Interface
338	- Pit Fill
340	- Wood Lining
341	- Red Hard Pan
352	- Pit Fill
354	- Pit Fill
376	- Pit Builders Back Fill (black soil)
377	- Primary Outhouse Deposit



Feature 117 collection



Feature 117 domestic and personal artifacts



Ironstone bowl



Ironstone serving bowl lid



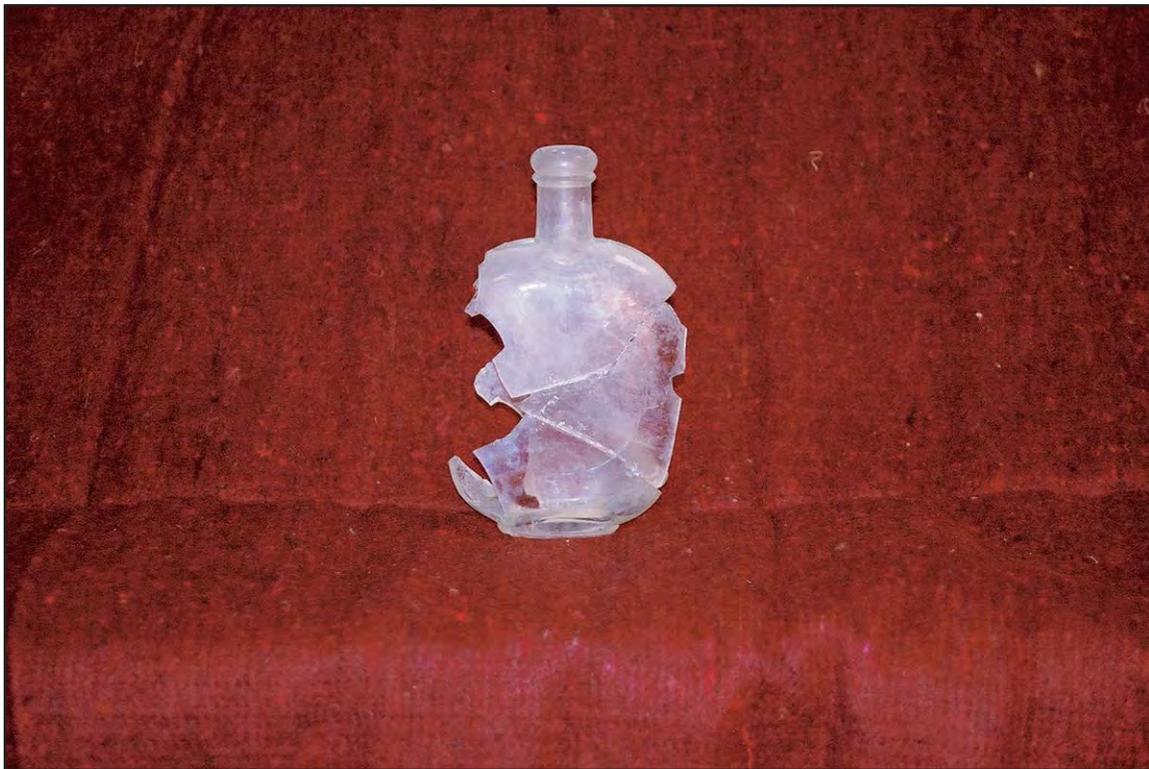
Hair dye bottle



Medicine bottle



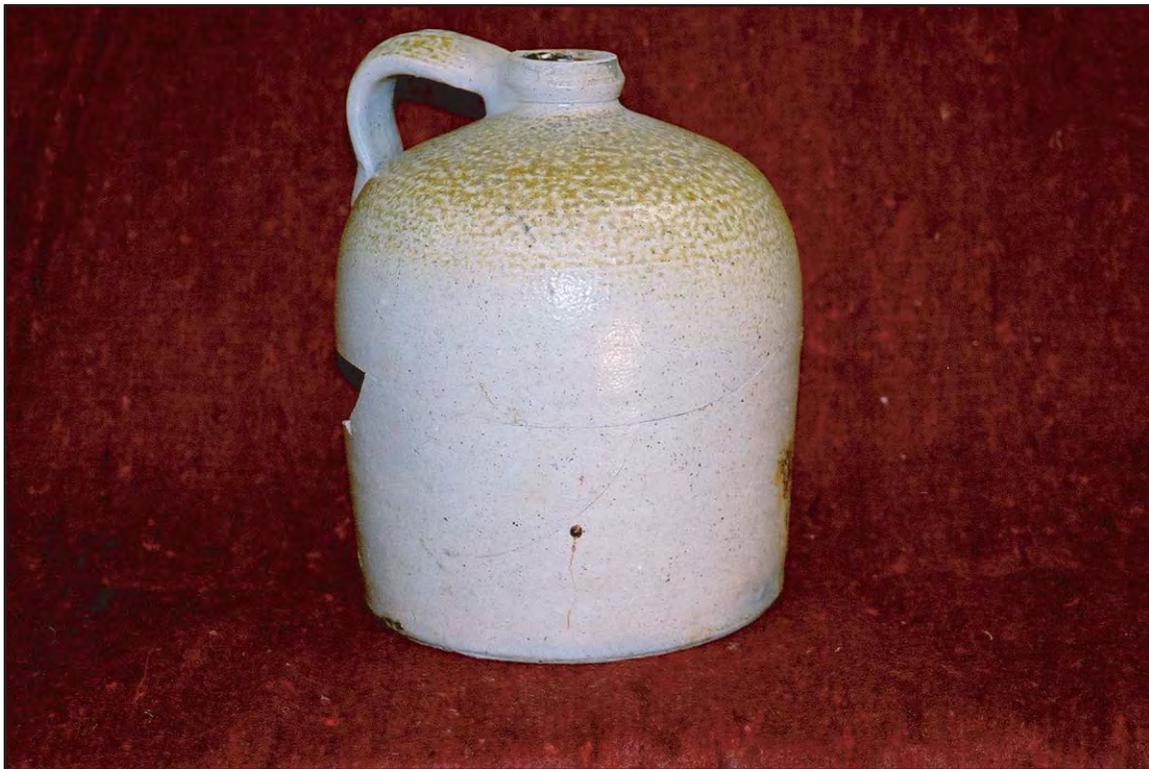
Mutard jar (1865-1890)



Picnic flask



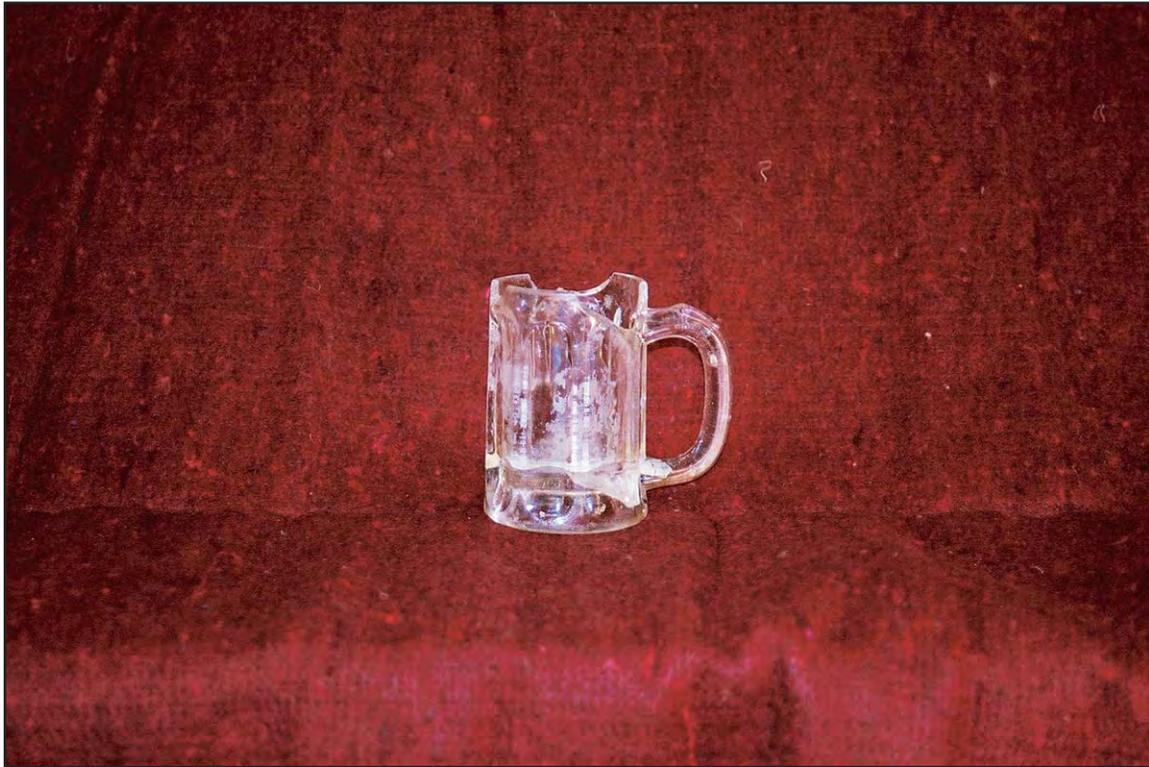
Ironstone serving platter



Stoneware whiskey jug



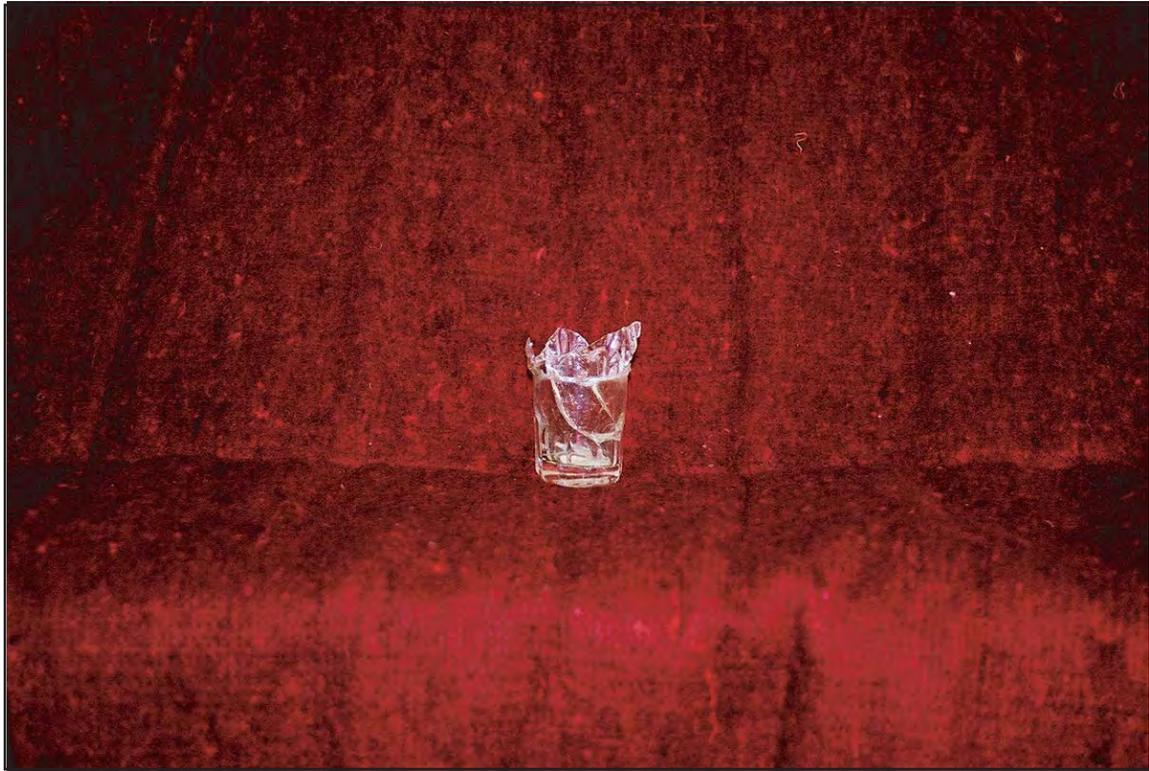
Earthenware pie dish



Beer mug



Liquor bottle

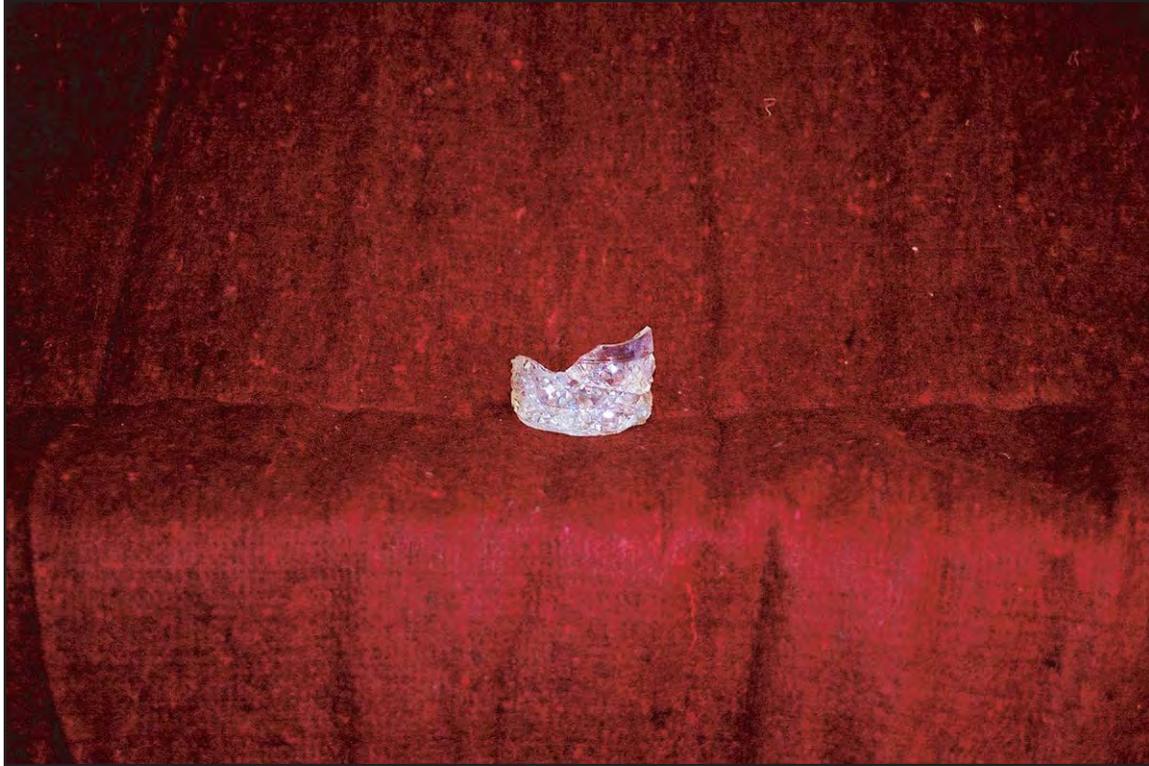




Ironstone mug



Ironstone cup





Mammal bone



Social drugs, alcohol



Drinking vessels



Miscellaneous glass artifacts

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Cut mammal bone



Rebecca by the well teapot (ca.1846-1880)



Personal artifacts



Food storage



Medicine bottle (ca. 1887-1907)



Porcelain jar

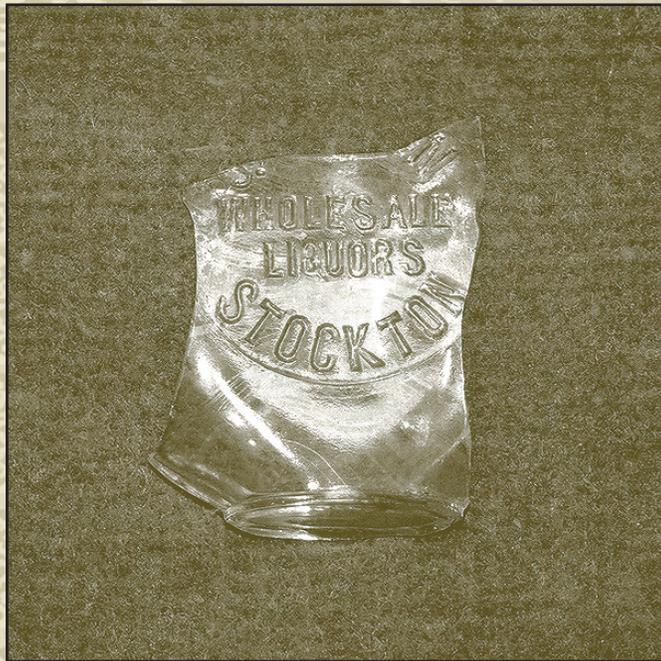


Figure 39
Buildings in the Project Area, ca. 1960's
(Haggin Museum, Stockton)



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Figure 40
Buildings in the Project Area, ca. 1960's
(Haggin Museum, Stockton)




Jones & Stokes