ARCHAEOLOGICAL INVESTIGATIONS

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Project History and Sequence of Field Investigation

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PROJECT HISTORY AND SEQUENCE OF FIELD INVESTIGATION

INITIAL RESEARCH STRATEGY

The investigation strategy used in the Golden Eagle site excavation was conceived in response to the presumed arrangement of historic buildings on the block. It is therefore important to specify what, during the first phase of the project, was believed to be their layout. Frequent reference to the plans and section drawings, especially to plan 1, is essential to the understanding of this section. As a preliminary step to the production of a research design, the City Museum and History Department authorized a team of historical researchers to conduct a study (McGowan et al. 1978), which traced the history of the block from 1850 to 1920. Using Assessor's Map Books and Tax Assessment Roles and City Directories, the researchers created a series of maps and plotted the ownership and occupants of each lot in chronological sequence. This report also included a list of 19th-century photographs of the project area.

With the benefit of this information, a research design was prepared for the study area by Archaeological Consulting and Research Services, Inc. (Schulz 1979). In this document, Schulz compiled some questions which he believed would help in the identification of sites "of high potential value." These questions are presented below:

1. Would the recorded use of the site have left significant quantities of durable evidence (either discarded material in waste areas or stock on hand or tools and furnishings in burned structures)?

2. Was that particular activity being carried out at the site at a given time when a contribution to the archaeological record is likely to have occurred?

3. Is there a possibility that augmentation of the record occurred through more than one process contemporaneously (e.g., both fire and trash deposits from the same business)?

4. Was the use of the site at the time in question sufficiently specialized to present a relatively clear picture of a given occupation or residence pattern?

5. Was the activity carried out over a long enough period that investigation could center on developments through time? (Schulz 1979:15).

Using the results of the historical research, a number of likely "targets" was established (Schulz 1979:16). Based on the criteria enumerated above, the areas that had been occupied by the Golden Eagle Hotel were determined to be, potentially, the most productive. The two lots to the west of the hotel site, which had been occupied for an extended period by a blacksmith and a stone worker, respectively, were ranked lower because of the
limited nature of these activities. Thus, the research design addressed
the Golden Eagle Hotel site exclusively, although general provisions were
made to alter this focus in the event that "the deposit there (or part
of it) had been too badly disturbed to repay investigation" (Schulz
1979:19).

Schulz's (1979:19) research goals, which are paraphrased below, were
devised for application to the Golden Eagle Hotel site:

1) detection of changes in the economic characteristics of the
establishment's clientele through time.

2) detection of social or economic differences among the
customers of the Golden Eagle, the Hotel de France, and
the K Street saloons.

3) elucidation of the role of ethnic differences in producing
the differences observed in the (4th and K Street) saloon material.

From the results of the McGowan et al. study (1978:4), Schulz (1979:18)
concluded that the Golden Eagle Hotel had occupied a wooden structure in
1851. This building was said to have burned twice, in 1852 and 1854, and
was subsequently rebuilt in brick. McGowan's interpretation of the 1856
Map Book shows the Golden Eagle Hotel's proprietor, D.E. Callahan, as the
owner of the five southeasternmost lots of the block, except for a plot
about 40 feet by 60 feet (12m by 18m) at the corner of 7th Street and
California Street (also known as Oak Avenue or Merchant's Street). By
1860 at the latest, Callahan apparently owned all of the five lots and
had also obtained more than half of the lot which, in 1856, had formed
his boundary to the west.

This information indicated that, after the latter of the two fires, Callahan expanded his premises to the east while rebuilding in brick.
Therefore, Schulz's (1979:18) suggestion that the final brick structure
(the limits of which are clearly shown at 179-191 K Street on the 1895
Sanborn Map, figure 1) may have been that erected to replace the razed
wooden building was justified.

A discovery made at the Fourth and K streets excavations in
Sacramento--that an open courtyard in an area of intense commercial ac-
tivity is likely to yield discrete refuse associations (Schulz 1979:8)--
provided the basis for part of the excavation strategy. It was known
from the 1895 Sanborn Map that the large brick hotel had been built around
a central courtyard and that this construction probably occurred in the
late 1850s. It was therefore reasoned that the Golden Eagle's courtyard
had good archaeological potential. Furthermore, the raising of
Sacramento's streets in the early 1860s suggested the potential of tightly
dated features, since privies or refuse disposal areas would likely have
become inaccessible at this time and would have been abandoned (Schulz
1979:14).

The investigation strategy which Schulz proposed can be divided
into two phases. The first phase involved the excavation of backhoe
trenches in both of the known locations of the Golden Eagle Hotel. This
work was to be done prior to any hand excavation, in order "...to ascertain the status and distribution of the relevant deposits" (Schulz 1979:19). The second stage, hand excavation, would concentrate initially on the burned layers of the first hotel building to determine distribution patterns of materials that might "...reveal activity areas within the structure"; secondly, the trash and privy deposits associated with the later building would be investigated (Schulz 1979:18).

In accordance with these general guidelines, a test-excavation strategy was devised (Fredrickson et al. 1979a: map 1). This plan involved the mechanical excavation of several backhoe trenches across the project area. It was intended that the first of these would completely bisect Callahan property, from east to west, passing through both the courtyard and the site of the earliest hotel building. Trenches would then be opened up across the northern (rear) portion of the parcel parallel to the first, in order to locate refuse and privy deposits which had been laid down prior to the construction of the later hotel building; additional trenches would be excavated at a right-angle to the first, in order to bisect the courtyard. If the features specified by the research design had been located, the arrangement of the trenches would have facilitated removing the large volume of post-demolition era fill soil which Schulz (1979:21) had identified as overlying the site.

FIELD RESEARCH

The test-excavation program was scheduled to begin on Monday, 9 July 1979. In preparation for this work, a backhoe-loader had been ordered for the day to excavate the trenches. On arrival at the site, the crew found that up to 10 feet (3 meters) of demolition fill which the Agency had agreed to remove was still being bulldozed and trucked off by a contractor via an access ramp at the northern end of the lot. At the western end of the project area, there was a 20 to 30-foot high (6 to 9 meters) pile of soil covering the entire width of the half-block. In addition, the southern 10 to 15 feet (3 to 4.5 meters) of the area to be investigated was being used for vehicular access to an adjacent construction site. Serious consideration was given at this time to postponing the start of the field work for a week or more until these problems had been resolved, but several factors suggested that this delay would be unwise. Most important was the project's schedule, which would not allow for any delay: The contract required vacation of the site by 15 August, and it was deemed unlikely that an extension would be granted. In addition, the excavation strategy required that a prodigious volume of soil was to be excavated by hand (Schulz 1979:21).

Thus, because of heavy equipment working immediately to the west, Trench A--originally intended to bisect the courtyard area--was placed slightly too far to the east and was irregularly aligned. Had this trench provided evidence of undisturbed deposits, a second cut would have been made later. This second trench would have been approximately parallel to the first, but further to the west, in accordance with the original testing strategy.

Trench A was excavated from as far north on the half-block as the position of the earth-moving contractor's access ramp would allow (see
plan 1). The trench was immediately realigned slightly to the east when it was discovered that its proposed orientation would have followed the north-south course of Wall B. The area around the northern end of Trench A was subsequently stripped of overburden, and the junction of walls A and B was exposed and investigated as Area III. Because of the size and orientation of Wall B, it was tentatively identified as a northern extension of the eastern wall of the Golden Eagle Hotel courtyard, which is shown on the 1895 Sanborn Map (figure 1). The size and characteristics of the construction of Wall A suggested that it had been an internal or partition wall. To the south, Trench A uncovered two substantial footings (C and Q), which ran east-west and formed a junction with Wall B. Although it is not known whether these walls extended to the west of Wall B, such an extension would have approximated the position of the northern courtyard wall. South of what would come to be its junction with Trench B, Trench A was once again realigned to avoid Wall B. The trench was excavated as far to the south as was possible—somewhat short of the southern edge of the block because of the construction site's access road mentioned previously.

During excavation, a large, filled feature (Feature 21/2) had been noted in the exposed sides of the middle and southern end of Trench A (see sections 1 and 7). A 3-foot by 15-foot (0.9 meter by 4.5 meter) trench (designated Area I) was hand-excavated into this deposit in order to determine the kind of activity that had formed it, since the feature's stratigraphic position indicated that it might have been of recent origin. If confirmed, this would not bode well for the integrity of the balance of the site.

Trench B was positioned so that it would both bisect the hotel courtyard and help determine the western extent of Feature 21/2. Working from east to west, the backhoe exposed the top of Wall B, of which even fewer footing courses remained than in Area III. Cutting deep into subsoil, no other substantial cultural deposits were uncovered along the remainder of the trench. As some thin layering was seen in the south side of Trench B, the overburden was stripped to allow testing of a portion of this deposit (Area II). The machine next excavated Trench C, roughly perpendicular to Trench B, to determine the extent of the Area II strata and to further investigate the courtyard (see section B). Once again, the southern limit of the trench was determined by the construction site's road. No refuse or privy features were found in this trench. Trench D, which was aligned east-west toward the northern edge of the project area, produced evidence of recent disturbance.

The evidence from the trenching was clear: The eastern 75 percent of the later hotel building and all of its courtyard had been heavily disturbed. With the possible exception of Area I, investigation of this portion of the half-block could not address the research questions outlined in the original design (Schulz 1979). Information that corroborated the archaeological evidence was gained from two visitors to the site. These men had known the demolition contractor and reported him to be an enthusiastic bottle collector who had developed several techniques of "pot-hunting" using heavy equipment. They suggested that our excavations were coming 15 years too late.
Based on the results from Trench B, it seemed unlikely that much stratigraphy relating to the 1851 to 1854 hotel (which, it will be recalled, had burned down) was likely to have survived. A section exposed in the cut for the contractor's access road, however, revealed that excellent, stratified deposits did exist in the two parcels to the west. Accordingly, at the request of the City Museum and History Department and the California State Historic Preservation Office, excavation strategies (Fredrickson et al. 1979a and b) were developed for the area of the first brick hotel and the two parcels to the west. These studies set forth the proposed field strategy for the test-excavation and data recovery phases, respectively, established priorities, and suggested research questions which would be applicable for the new areas.

In accordance with Schulz's original research design (1979:20-21), the testing strategy proposed that priority would be given to investigation of the site of the original hotel; if this area proved unproductive, emphasis would be moved to the lots to the west. The first of these parcels, according to the historical study, had been occupied by a sequence of stone masons from 1870 to 1885; it was selected by both McGowan et al. (1978) and Schulz (1979:16) as an area which would be "most likely to reward archaeological investigation." The western-most parcel had been the site of a blacksmith's shop from 1859 to 1890 and was also designated as an area of relatively high potential archaeological significance. These areas were made even more attractive by the evidence of good archaeological integrity shown in the soil section exposed by the contractor's excavations mentioned above (section 10). The following specific objectives of the testing program were listed in the Excavation Strategy:

1. To address the National Register eligibility of areas tested.

2. If possible, we will attempt to answer Schulz's (1979:18-19) original research questions. This would involve excavation of trash and privy features, and the burned layers associated with the early hotel.

3. Excavations in the blacksmith and/or marble and granite works will recover tools and waste materials from a specific occupation. A partial tool assemblage may be recovered for each, and it is possible that changes in the technologies of these two industries may be viewed over time. It is possible that an analysis of the blacksmith's shop may elucidate the influence of the Horse Market (Theodoratus and McBride 1978:10) on the commercial development of the neighborhood.

4. The first structure recorded on 617 K Street was occupied by a "sash maker" in 1854. This building may have been constructed before the fire of the same year. Evidence of the fire and the sash maker's burned possessions may be recovered archaeologically. No structures are recorded on 615 K Street parcel before 1859; at this date the lot was occupied by the premises of a horseshoer (McGowan et al. 1978). The historical record of Sacramento's beginnings and early development are sparse. Early uses of these "vacant" lots is not recorded. It is possible that these were used for trash disposal.
by neighboring establishments, or that they were used on an ad hoc basis. It is possible that archaeology in this area will supply evidence of early land use (Fredrickson et al. 1979a:6-7).

On 20 July 1979, the excavation of Trench E, in the southeastern portion of the project area, was begun. This constituted the start of the second stage of investigation. The plan was to strip the overburden along Trench E in a swath two buckets (6 feet) wide. In this way, a sufficient sample of the underlying deposits could be exposed for excavation. The positioning of the trench was determined on the basis of historical information, some of which later proved to be incorrect. The first objective of the testing was to locate the remains of the structures believed to have been burned in 1852 and 1854, which had occupied an area of 50 feet by 140 feet (15.2 by 42.6 meters) (Schulz 1979:20). The trench was positioned based on data taken from a map supplied to the field supervisors by the City Museum and History Department which showed the presumed location of the "1851-1854" hotel. (Historical research which was performed later showed that, in fact, the early hotel extended over only half the area which the map indicated. Thus, the trench was positioned so that only 9 feet or 2.7 meters of the earlier hotel site was investigated.) The test trench was placed as far to the south (the front of the lot) as possible in order to avoid the area which was known to be disturbed from previous trenching. Due to these considerations and because of the contractor's access way, it was necessary to begin the trench somewhat short of the eastern limit of the early hotel site.

Trench E was excavated from east to west. At the beginning, the machine operator was instructed to dig through the archaeological deposits that were immediately encountered, in order to determine the integrity, or even the existence, of the earlier "burn" layer. The trenching soon encountered a brick wall running north-south (Wall D), which was assumed, because of its correlation with the Sanborn maps, to have been related to a later phase of hotel construction (Figure 1). Since the exposed trench section showed no sign of a burned layer stratigraphically inferior to, or contiguous with, the top of the construction trench of Wall D, the specific search for this layer was effectively halted (see section 9). Moving westward, the machine uncovered Wall E, which ran east-west; at this time, the structure was assumed to have been a partition wall in the Golden Eagle Hotel. Lapping up against this to the south was an extensive feature containing oyster shell, beer bottles, and bones. This deposit was eventually sampled as Area IV.

During excavation of Trench E, it was noted that the depth of overburden was minimal, only 1 to 2 feet (0.9 to 1.8 meters). This finding suggested that the disturbance which had been encountered in trenches A, B, C, and D was limited to the central and northern portions of the half-block.

Trench E was continued to the west, exposing the archaeological deposits in a swath of from 6 to 9 feet (1.8 to 2.7 m) wide. Wall F was exposed in this way. The enormous amount of limestone waste that was found here confirmed that the area to the west of Wall F was indeed the lot which had been occupied by Aitken and Luce's Pioneer Marble Works at
one time. To determine the depth of the mason's refuse, the backhoe excavated to the bottom of this deposit at the west side of the half-block. The fill was found to be several feet deep and crumbly; for reasons of safety, therefore, hand excavation in this part of the lot (designated Area V), was limited to sampling the construction trench of Wall F. In investigating the depth of the limestone, Wall G, which ran north-south, was encountered. This structure was interpreted as having been a common wall between Area V and the blacksmith's parcel to the west (Area VI). Although it would have been desirable to have sampled all the deposits in Area VI by hand, after the mechanical excavation of the eastern half of the trench it became clear that the stratigraphy played out almost immediately to the north of the trench. Because of this, the western half of the area was tested by hand in the form of a trench, the western extension of Trench E, which bisected the lot.

In accordance with our testing strategy (Fredrickson et al. 1979a: map 3), Trench F was mechanically excavated in approximately the middle of the half-block, roughly parallel to Trench E. The results of this trenching affirmed the belief that the center of the project area had been thoroughly cleared out during site clearance in 1963. It was expected that this trench would expose in cross section the walls that had been encountered in Trench E. Instead, only two walls (Walls L and N), neither of which had been uncovered previously, were found in the area directly north of Area IV, together with what was assumed to have been the refuse-filled construction trench of one of these. One of these walls was believed to have been an earlier phase of Wall F, which separated areas IV and V.

Trench G was opened next in search of refuse and privy features which were commonly placed at the rear of a property. Survival of such features seemed likely, because they had probably been cut into subsoil rather than being deposited on its surface. This excavation revealed a similar situation as was found in Trench F: modern debris, including concrete, wood, and plastic, was distributed throughout the homogenous stratum which overlay the natural, flood-deposited silt (see sections 3 and 4).

Trench H was opened to the west of Trench G, approximately parallel to it. This trench was expected to confirm our assumption that the central and northern portions of the project area had been heavily disturbed to a considerable depth. Almost with the first bucketful, it became evident that a rich association of ceramics and glass was present. Consequently, a wide area (Area VII) to the east of this feature was opened up, and the trench was extended to the south. Later, the backhoe attempted to expose the western half of the feature, but this portion had been destroyed by construction. The exposed side of Trench H showed that the depth of disturbance increased from north to south.
The backhoe next removed more than 6 feet (1.8 meters) of overburden from above the walls which had been bisected by Trench F. What had appeared to be debris in the walls' construction trenches was shown to be refuse which had been purposefully dumped into two brick-lined pits. This newly exposed area, which was designated Area VIII, was believed to have been located, at least partially, in the small courtyard shown on the 1895 Sanborn Map (figure 1).

The field work was completed on 14 August 1979.
Wall Lines in Project Area as Shown on 1895 Sanborn Map
Scale 1" = 40'

Key:
177: Street Address of Lot
Courtyard

Figure 1
INVESTIGATION METHODS

The excavation techniques employed at the Golden Eagle site were in accordance with the recommendations made in the project's research design (Schulz 1979:21). Specifically, they involved treating each of the site's archaeological layers as the most basic unit of provenience and, therefore, excavation. Each of the archaeological layers was assigned a number according to the sequence in which it was encountered in the site. Since the numbers themselves do not reflect the site's stratigraphic sequence, but merely serve to identify individual layers, it is possible to conceive of a situation in which Layer 10 was stratigraphically inferior to Layer 20, which itself was inferior to Layer 30.

Horizontal control for the purposes of mapping the excavated areas was maintained by the use of a grid oriented to magnetic north which was imposed upon the site; an arbitrary point within the project area was used as its starting point. A staked grid was established with surveyor's tapes, using the principle of the 3/4/5 triangle. The grid was tied into the street plan by triangulating several reference points from a professionally surveyed 1"=20' map of the project area and its immediate environs which had been supplied by the City Redevelopment Agency. Elevations were measured using a simple builder's level. These readings were tied into a temporary bench mark established by the surveyors on a manhole cover on California Street, immediately to the north of the study area.

A great deal of emphasis was placed on recording the relationships of the layers that composed the site. To this end, excavation trenches were placed in such a way as to produce continuous, exposed soil sections. The Harris-Winchester matrix system was employed to allow better understanding of the site's stratigraphic sequence. This technique allows three-dimensional relationships to be expressed in two dimensions. If sufficient chronological control is available, the matrix can also illustrate the chronological dimension. Although the method was devised for use on complex, heavily stratified deposits (Cf. Harris 1974 and 1977), it is equally appropriate for generally simpler North American sites where, because of the sites' shorter occupation span, tight chronological control is crucial. Matrices are also more useful than section drawings as they may include stratigraphic relationships which occurred in, for example, the middle of a trench, and thus are not represented in the section.
In the matrix above (right) which corresponds to the section on the left, Layer 1 is stratigraphically superior to all others shown. Similarly, Layer 5 is stratigraphically inferior to all others. Layer 1 directly overlies Layer 2, which directly overlies both 3 and 4. The only known relationship between 3 and 4 is that they are both inferior to 2 and superior to 5. That the line which links 4 to 5 is joined by a horizontal line from 3 shows only that the latter is superior to 5, not that it is inferior to 4. Layer 3's inferiority cannot be inferred, since to do so would involve going in opposite vertical directions to solve a single problem, that is, down and across from 3 and then up to 4; to do this would be a misuse of the system. It is intended that the corresponding matrix be referred to each time section 9, 12, 13, 15 or 16 is consulted in order to aid in its interpretation; therefore, the matrices are not cited in text.

RECOVERY TECHNIQUES

All of the soil from the hand-excavated layers was examined for artifacts and ecofacts which would aid in site interpretation. The most common method used was to pass the soil through 6mm wire mesh screen and retrieve all archaeological materials. Since the strategy of artifact recovery in the field varied somewhat, techniques used are described by features.

Feature 6

This feature was composed largely of shells of the Atlantic Oyster (*Ostrea virginica*) in a layer up to 1-1/2 feet (45cm) thick. Although the soil interstices of this deposit were 6mm screened, only a sample (approximately 10 percent) of the shell was saved. Due to the overwhelming proportion of oyster, it was reasoned that the ratio between the total amount of oyster recovered and the other types of shell in the
feature—all of which were kept—would not be significantly altered by biasing the sample in this way. Although the above logic still holds, it is now recognized that the data recovery would have been improved had the discarded shells been counted.

Feature 15

Most of the fish bone recovered from the site was taken from this feature. The pit was cross-sectioned and each half was removed separately. The first half removed was 6mm mesh screened, while the second half was passed through 3mm screen. The change in method occurred when the project's ichthyologist advised that some fish remains were doubtless being lost because of the large-sized mesh.

Feature 20

All soil from Feature 20 was 3mm screened. This method seemed most appropriate here, since many tiny bird bones were found in this feature.

Feature 8

The method of excavation and artifact recovery employed in the excavation of this feature was less controlled than would have been desired under other circumstances. The upper layers of the pit fill were passed through a 6mm screen. Approximately 10 percent of each of the lower layers was sampled in this way and then given over to a variation on the shovel broadcast technique. The latter method was adopted when it became evident that the artifact yield from these layers would be very low, and that screening the wet soil would have required more time than was available. Unfortunately, the earlier phase of the feature's life was excavated together with the later phase (see section 16, fig. 2). Consequently, artifacts from the latter (layers 84 and 85) were bagged with those from the former (Layer 90).

Soil samples were taken from layers of each of the discrete trash associations (features 6, 15, 20 and 8). It was hoped that these samples would contain insect body parts which could aid in the interpretation of the features' archaeological context. The potential of such analysis was discussed in the revised excavation strategy:

The use of insect death assemblages (thanatocoenosis) will facilitate "the reconstruction of past events and ecological conditions, using the habitat requirements of preserved insects as evidence" (Kenward 1976:1). In this way, stenotopic insect species and communities are identified in the area's environment on the basis of samples taken from suitable archaeological deposits which can give a good indication of the local environment. The work of Kenward (1976) and Kenward et al. (n.d.) shows that numerous conclusions relating to the creation of local ecological environments by refuse disposal patterns can be made. Deposition characteristics including the following can be identified: the period which a refuse pit remained open before being capped; the state of decay of the refuse at the time of capping and its relative foulness; the probable original nature of the refuse (Fredrickson et al. 1979b:12).
The literature mentioned the importance of waterlogged conditions as a usual prerequisite for the survival of insect body parts. Within the Golden Eagle site's features, however, only Feature 8 could have been considered waterlogged. Thus, because it was felt that our efforts might not be successful, a 1-kilogram test batch of soil was processed from each layer. This method entailed soaking the soil in warm water until it disaggregated, and then, with the soil still immersed in a 1mm wire screen, gently agitating the slurry so that the soil fell through the mesh and the archaeological materials were retained.

If this trial had met with any success, the remainder of the samples would have been processed according to the method established by Kenward et al. (n.d.). Unfortunately, no insect parts were found. The soil samples which remained were carefully water-screened, using 3mm mesh as a control by which to measure the effectiveness of the field-recovery techniques. Fish bone was found to be the only commonly overlooked material (Schulz, this report: appendix 2.1).
SITE CONTENT AND STRUCTURE

DEMOLITION AND CLEARANCE

In 1963 the buildings which occupied the Golden Eagle project area were removed. This process involved a sequence of four phases of work: demolition, excavation, leveling, and filling. Elsewhere in this volume, Eisenman has described the scope of the demolition service for which the city contracted. The archaeological data revealed the degree to which the contract was actually carried out. The characteristics of these activities determined to a large degree which 19th-century deposits survived. Section drawings 1, 2, 3, and 4 are included in this report primarily to illustrate the stratigraphic arrangement which resulted from the site-clearance process.

The demolition process is represented by Layer 103, which appears in sections I, 5, and 6. The layer, composed of brick rubble with some iron structural reinforcement bars and faced wall plaster, directly overlay Wall B. The way in which Wall B was, at this stage in clearance, sheared off at the top of its footing courses was a common occurrence on the site. Other examples of this pattern were Walls C and Q, which were exposed by Trench A; a southern part of Wall B, uncovered by Trench B; walls K and L in Area VIII; and Wall F at the junction of areas IV and V. It is notable that walls E and K had also been demolished in this way, although at a much earlier period in the site's development. This finding suggests that removing only the wall courses has long been practiced as an expedient alternative to the more difficult process of total clearance. In addition, the salvage value of bricks, which can be dislodged individually from a wall, is relatively high. Conversely, bricks making up a solid foundation are likely to remain cemented together and are merely a liability to be disposed of.

The site was subject to a considerable amount of clearance-associated excavation, especially in the northern and central areas. The southern 30 feet (9.1 meters) of the western half of the project area was in almost pristine archaeological condition. Section 9 shows that much of this area was completely undisturbed. Yet less than 35 feet (10.6 meters) to the north, Trench F (depicted in section 3) reveals considerable disturbance. From 8 to 10 feet (2.4 to 3 meters) of deposit had been removed down to the pre-1860s ground level, which was approximated by the top of the footing courses of walls K and L in Area VIII. Similarly, sections 2 and 4 show—partly by the mere absence of 19th-century archaeological features—that the previous ground surface had been at least partially disturbed. A portion of the old ground surface appeared to have survived in Area III (see section 5), but it occurred infrequently elsewhere in the area sampled by trenches A, B, and, possibly, C. The horizontal layers which appeared at the extreme south end of Trench A (see section 1) were doubtless cultural depositions on top of the geological subsoil (Anderson personal communication 1979). As such, these layers, which presumably pre-dated the hotel, comprised the most intact stratigraphic association on the entire eastern side of the site.
It was apparently during the clearance process that the disturbance to the site—the result of bottle hunting—occurred (Eisenman, this volume). Oral history indicates that the demolition contractor, an enthusiastic collector, had devised some efficient methods of retrieving bottles from refuse-filled features which he encountered. One technique involved excavating the soil from around the features to form pedestals and then backblading them to expose the bottles. Alternatively, he trenched along wall lines, using a narrow bucket on the backhoe, since experience had shown that bottles were likely to be found in construction trenches.

An example of the latter technique was encountered in Area III (see section 6). Here, the compacted layer (105) immediately to the south of Wall A was the fill of such a trench, which can be seen to extend nearly to the wall's footing course. Only a few inches of the wall's construction trench and its fill remained (Layer 106). It is also possible that Layer 104, north of Wall A, was a result of bottle collecting.

In leveling the site, the contractor bulldozed the contents of trash features into low spots on the site after he had removed the whole bottles. Although the process by which the hollow Feature 21/2 was formed is not known, its fill almost certainly derived from several discrete refuse deposits and thus apparently represented the aftermath of the demolition contractor's collecting (see section 7). This large, filled pit appeared in the southern portion of Trench A, which partially bisected the feature. At its northernmost appearance, Feature 2 was seen to have been cut into the grey, silty-clay subsoil and had been sealed by the most recent phase of fill dumped on the site. At the southern end of the trench, however, the pit had been dug through three or four cultural layers of undetermined antiquity, as well as the geological deposit (see section 1). In the next section, the archaeological reflection of the clearance process which has just been outlined, will be described in detail.

PROJECT AREA – EAST

Area I

The fill of Feature 21/2 was sampled by means of a hand-excavated trench (Area I). This ran north-south, partially bisecting the feature, and was 15 feet (5.2 meters) long by 3 feet (90cm) wide. Filling the feature had been carried out in two phases (see section 7). The later phase was represented by layers 3 and 6. These strata, of a compacted, light brown silty-clay, and a similar layer containing brick fragments, ash, and charcoal, were designated Feature 21. The layers, both about 6 inches (15cm) thick, extended for the entire length of the trench. Beneath and contiguous with Layer 6 was a 1-1/2 inch (3.8cm) thick stratum of grey silt (Layer 11). This layer was foliated with thin lenses of fine silt or clay and a fine sand. Like the layers above it, Layer 11 extended the entire length of the trench. The earlier phase of filling (Feature 2) had a maximum depth of 2 feet (60cm) and was composed, from highest to lowest, of layers 4, 15, and 19, which were under Layer 11. These silty clay layers contained varying amounts of brick and other construction debris. Excavation of Area I was not completed, because it became clear that this feature was a recent association. The artifacts from both
above and below the silt layer dated from the middle to the end of the 19th century and were quite varied, including glass, ceramic, and shell. Among these artifacts, recent materials occasionally occurred. Most notable of these finds was a styrofoam cup which bore the legend "Harvey's," the name of a nearby restaurant. The extensiveness and internal homogeneity of the layers themselves indicated that the feature was the result of secondary deposition. Another clue to the recent origin of the deposit was its location. Had the pit indeed dated from the 19th century, it would have been created under the lowest floor of the Golden Eagle Hotel by an excavation into the subsoil. To have done this would have undermined the foundation of one of the building's most crucial structural walls, Wall B.

It was concluded that this pit had originally been excavated by the demolition contractor to gain access to trash-filled features. Having retrieved the bottles, the fill was pushed back into the depression, thus creating layers 4, 15, 19, and others below these strata which were not investigated. Layer 11, the foliated silt, developed while the site lay open over the winter. Later, layers 3 and 6 were pushed into the hollow, which may have settled during the winter, just before fill was brought in from elsewhere to level the lot.

The layer of trucked-in fill (Layer 101) was present throughout the site. In trenches A, B, C, and F, Layer 101 was found to be up to 6 feet (1.8 meters) deep (see sections 1, 2, 8, and 3), whereas in Trench E it occurred sporadically and was only a few inches thick. This distribution indicated that the soil had indeed been brought in to fill the hollow in the center of the site, which had been left by the demolition and excavation phases of site clearance.

Trenches B and C, and Area II

During the excavation of Trench B, several apparently cultural layers were observed in the exposed section. Since this area would have been inside the Golden Eagle Hotel's courtyard, the strata were further investigated to see if they were the remains of the courtyard's surface. Trench C (see section 6) was excavated to the south to determine the layers' extent, and a portion of the overburden (Layer 101) was stripped from an adjoining area to allow the strata to be sampled by hand. The resulting opened area, Area II, was 12 feet by 9 feet (3.6 meters by 2.7 meters). Four irregularly occurring and heavily compacted layers were sampled. The first of these, Layer 16, contained much decayed mortar, brick, and gravel; from the presence of modern refuse (pop-tops), this stratum was assumed to be associated with the site clearance. Layer 17 was, again, a thin deposit, but of dark grey, friable or silty clay. Embedded in this matrix were many decayed brick fragments. After removing this layer, several lenses of sand and grey-brown soil were encountered (layers 22 and 23). These contained a relatively large amount of iron, glass, ceramics, and other small artifact fragments.

The entire Area II association of layers, which from section 8 can be seen to extend for several feet to the south of the hand-sampled portion, was apparently a product of site clearance. This origin was
indicated by (1) the compacted condition of the layers; (2) the discontinuous nature of the layers; and (3) the presence of modern artifacts in Layer 16.

Trench A and Area III

Walls A, B, C, and Q were uncovered by Trench A. Wall B, oriented north-south, probably formed the eastern wall of the hotel's courtyard. The courtyard would only have been fully enclosed at the construction of the hotel's easternmost addition in 1869 (Pitti 1980:59). The location of this wall in relation to the contemporary street line was slightly at variance with the 1895 Sanborn map. The latter (figure 1) shows this wall positioned 3 feet (90cm) to the west of its position on plan 1. It is likely that the plan's respective makers each took a different point to be the western edge of 7th Street, resulting in this variation.

That Wall B was a structural, rather than a partition, wall is indicated by its width and number of footing courses. Like most walls on the site, B had a stepped, pyramidal foundation, which spread the weight of the superstructure and prevented the wall from subsiding. The foundation was six courses high, alternating header and stretcher courses. As was the demolition practice elsewhere on the site, the wall courses had all been removed. Consequently, it is not known whether Wall B was two or three courses thick; the former, however, seems more likely, since only two courses were used in the "common bond" arrangement elsewhere on the site.

In Area III, part of Wall B's construction trench (Feature 3) was uncovered and excavated (see section 5). This trench had been cut into the grey, silty clay subsoil to a depth of up to 1 foot (30cm). The fill (Layer 24), a homogeneous, grey-brown silty clay mixture, contained ceramic, glass, and metal artifacts. Among these objects was a transfer-printed, ceramic bowl bearing a registry mark, which provided a terminus post quem of 1849 for this layer. Above Layer 24, both sealing it and directly overlaying the subsoil, was a layer of decayed, salmon-colored brick dust and fragments (Layer 108). The particular post-construction event that this layer represented is unknown. As Wall B was constructed of well-fired, red brick, Layer 108 cannot have been related to its demolition.

That the layers above 108 were clearly post-demolition depositions could be seen by their stratigraphic position alone, since they all overlay the wall. The quantities of faced wall plaster in Layer 104 and the brick rubble and iron reinforcement bars in Layer 103 indicated that these strata were the result of the demolition of the hotel itself.

Wall A formed a slightly less than perfect right-angle at its junction with Wall B; significantly, perhaps, the former paralleled the alignment of Wall Q, 25 feet (7.6 meters) to the south. There is little doubt that both of these walls had been part of a structure which was present before the eastern wing of the hotel was built. Documentary evidence indicates that, during the construction of the northern extension of the hotel in 1856-1857, it was discovered that Randall, the owner of the parcel to the east, had inadvertently built the southern wall of his building on land
subsequently bought by Mr. Callahan of the Golden Eagle Hotel. Randall's building was either demolished or incorporated into the eastern wing of the hotel. Wall Q's location, 100 feet (30 meters) north of K Street, represents the remains of Randall's wall.

Wall A, having only three footing courses which were stepped inward, was almost certainly a partition wall. The wall was one "full course", one header and one stretcher wide. Its construction, however, consisted entirely of stretcher courses—an arrangement which would have inclined the wall to topple over or buckle because of its lack of transverse stability. This instability is another indication that Wall A had not been built to bear much weight. The bottom of Wall A's foundation trench, Feature 23, is shown in section 6 to be about 1 foot (90cm) below the surface of the grey clay subsoil; this was, presumably, the ground surface at the time of the wall's construction. Apparently it had been necessary to dig the trench to a standard elevation all along its length because of irregularities in the surface contour of the land.

The chronological relationship between walls A and B cannot be discerned from the archaeological data. Although plan 2 shows that the wall courses of Wall A overlay the stepped footings of Wall B, the historical record suggests that this arrangement was the result of secondary construction. If this assumption is correct, then Wall A was originally cut by Wall B and later repaired. The implication of this interpretation is that Randall's building (as represented by Wall A) was incorporated into the Golden Eagle Hotel during its 1857 expansion. Further support for this interpretation exists in the relationship between walls C and Q, which are believed to have been associated with Randall's and the Golden Eagle Hotel, respectively (plan 3). It is believed that Wall C extended to the west of Wall B and thus formed the northern wall of the courtyard of the Golden Eagle Hotel (fig. 1). As was common on the site, all wall courses had been removed, and only the lower courses of footings remained. Although the two foundations were contiguous, they were easily distinguished by differences in their construction. Wall C was the thicker and more massive of the two; six overlapping header courses remained. Wall Q had eight stretcher courses and part of what may have been a buttress on its south side. The reason that this portion of Randall's south wall had been replaced is, perhaps, indicated by its construction; as with Wall A, Q was built of stretcher courses which have an attendant risk of collapse. In addition, these major bearing walls had been built on a geologically unstable stratum (Anderson personal communication 1979), which might have inclined Randall's narrow footing to subside.

It is intriguing that the stratigraphic position of neither Wall C nor Wall Q (nor the southern appearance of B) can be determined. These footings were placed neither in construction trenches nor on any established land surface that could be discerned by the project's archaeologists or the consulting geologist. According to the latter, the stratum which both underlay and sealed the footings was probably a flood deposition (Anderson personal communication 1979).

It should be clear from the above discussion that site clearance severely impacted the archaeological integrity of the entire project area.
and the historical remains found in the eastern portion of the site. The western part of the site, however, produced some very important data. Since each parcel had its own established land-use history related to the ownership sequence, the archaeology of the site will be discussed by lot, from east to west.

Trench E

Trench E, which was excavated parallel to and 25 feet (7.6 meters) north of K Street, uncovered the footing and more than three feet (90 cm) of the north-south oriented Wall D (see frontispiece). The exposed cross section showed that this wall had been set in a shallow construction trench (Feature 24), which had been dug directly into the natural subsoil. The wall, which was nearly 2 feet (60 cm) thick, appears to have been built using a common bond method of alternative courses of header-stretcher rows. A thin, cultural layer sealed the trench fill and extended slightly over the lower stratum to the east of the wall; this layer was the only indicator of human activity on the plane of the ground surface at the time at which the wall was built. Measurements gleaned from historical documents, including title deeds and assessment records, indicated that Wall D was the western wall of the first brick phase of the Golden Eagle Hotel built in 1853 (Pitti 1980:6). This three-story wall, perpendicular to K Street, appears on a 1866 photograph of the area (plate 1). The structure of which this wall was a part was built to replace the wooden hotel that burned down in 1852. If evidence of the earlier building had survived, in the form of a layer of charcoal, ash, and burned debris similar to that found at the Cothron/Warren excavations (Butler 1979), it would have been exposed in the side of Trench E as a stratigraphically inferior layer to Wall D’s construction trench. Wall D was, therefore, the earliest structural feature discovered on the site which may be identified with the Golden Eagle Hotel.

Overlying the construction trench and lapping up against the wall was a thick (up to 2 feet, or 60 cm) homogeneous stratum of grey, silty clay, Layer 143, which is believed to have been a flood deposition (Anderson personal communication 1979). If it was indeed flood-related, the stratum was likely the product of the 1861-62 inundation which submerged much of the town. This event was represented elsewhere on the site by a similar stratum, Layer 70. Above this silt was a thin, but continuous, stratum of dark brown clay, Layer 117. As Layer 117 was situated above the 1861-1862 level and below a layer of faced plaster and brick debris which has been dated to the post-1880 period (see below), it represented the total accumulation in the basement of this part of the Golden Eagle Hotel during these 20 years. This finding is in marked contrast to the situation of the adjacent parcel, discussed below.

Area IV - Feature 6

For some 30 years after 1858, the lot to the west of the original Golden Eagle Hotel was owned by two separate parties. Callahan, the owner of the Golden Eagle Hotel, bought the northernmost two-thirds of the parcel in 1858 from Cross, who retained the southern one-third (Pitti 1980). Since most of the contributions to the archaeological record were made
after this date, the deposits to the north and to the south of the property boundary were associated with different business occupants and will be discussed separately where appropriate.

The first structure on the southern lot was apparently the single-story building, presumably erected by Cross, which is shown facing K Street on the 1866 Houseworth photo (Plate 1). The photograph shows that the building was quite shallow, extending only thirty feet (9m) or so into the lot. North of this building and enclosed by the Golden Eagle Hotel to the east and other brick structures on lots to the north and west, was an open yard which was about 450 square feet (42sq.m.) A comparison of Wall E's location on the ground with the 1866 photograph suggests that Wall E had been the northern wall of Cross's building. In addition, the photograph indicates that Cross's building abutted the Golden Eagle, a situation which was reflected, archaeologically in walls D and E. Furthermore, the archaeology demonstrates that the Golden Eagle Hotel and Cross's building shared a common wall, the western wall of the hotel.

The wall itself, of which two courses remained, was laid header-stretcher and was one full course thick. Its pyramidal foundation was four courses high. Interestingly, the footings were laid directly on the natural subsoil, without any preparation (section 11). Wall E spanned the parcel, abutting Wall D to the east. As the result of a secondary phase of construction, Wall E also overlay Wall F to the west. A rectangular feature, approximately 6 inches wide by 9 inches deep (15 by 22cm), was excavated immediately to the south of the footings and stratigraphically contiguous with them. This feature contained redeposited subsoil mixed with brick dust. Since it was not overlain by Layer 43--the construction layer associated with Wall E--it is believed to have been a scaffolding hole relating to the construction of this phase of Cross's building.

Unlike most other walls on the site, Wall E had not been disturbed during the recent demolition. In fact, archaeological and documentary evidence indicated that the wall went out of use and was dismantled between 1866 and 1874. The earlier date is established by the Houseworth photograph, which was taken in that year. The later terminus is the estimated latest date of deposition of Layer 35, which overlay the top of the dismantled wall (see section 11). This layer was composed of faced wall plaster and brick fragments, while its immediate inferior layer, 37, consisted of brick and mortar in a clay-loam matrix. The layers' constituents, extent, and provenience indicated that they were debris from the remodeling and northward expansion of Cross's building. These layers contained many of the shoe elements discussed elsewhere in this report (see Stanton), which are believed to have been associated with the shoemaker Hillebrand, who occupied the premises from circa 1868 to 1873 (Pitti, this report). The occurrence of leather waste in these layers indicated that they had been laid down after 1868, probably in 1874. This interpretation would place the deposition of the strata after the departure of Hillebrand and before the arrival of Cronin, represented by subsequent formation of Layer 27.

The above reconstruction is ultimately dependent on whether the attribution of Layer 27 to W. Cronin's Golden Eagle Oyster Saloon is correct.
Certainly, the artifactual evidence supports this assumption; glass and ceramic terminus post quem dates of 1873 and 1870, respectively, place the deposit in the occupation range of the saloon (1874-1878) (Pitti, this report). More suggestive are the very contents of the layer, of which approximately 70 percent was oyster shell (Davis, this report). Much of the remaining fill was composed of ceramic ale bottles (M. Praetzelis, this report; see plate 7.1). Soil constituted a very small proportion of the layer, consisting of tiny pockets distributed in the interstices of the shell matrix. Most of the spaces between the shells were void, which, together with the layer's homogeneity, suggested that it had been deposited continuously and over a short period.

Layers 37, 35, and 27 were collectively designated Feature 6. This feature therefore represented all of the debris which was deposited under the floor of Cross's building during both the remodeling (layers 37 and 35) and the operational (Layer 27) phases, even though these stages can be differentiated in the deposit.

Only a 6 foot by 8 foot (1.8 meter by 2.4 meter) sample of Feature 6 was excavated; the exact limits of the deposit to the south and east are not known. Only a single, irregular line of shell remained of Layer 27 where it was exposed in the eastern section of a sondage which had been placed at the junction of walls E and F. The layer was visible on the surface as far east as Wall D and to Wall E in the north. Workers on the adjacent construction site reported that excavation for the access road had revealed a large amount of oyster shell extending to the southern wall of a demolished building, presumably Cross's or its successor. Based on this information and the assumption that Layer 27 was of a fairly constant thickness, it is estimated that approximately 10 percent of the stratum was excavated.

Areas VIII and V

There is good evidence that Wall M, in Area VIII, was a southern wall of a building that formed the northern boundary of the yard on Cross's lot. This two-story, brick building is shown on the 1866 Houseworth photograph to the west of the Golden Eagle Hotel (plate 1). Its southern wall is shown on the 1895 Sanborn Map (fig. 1) 60 feet (18.2 meters) from the edge of K Street; a similar distance can be estimated for the southern wall shown on the Houseworth photograph. Remarkably, Wall M was almost exactly the same distance from the street. Although it is not clear from the 1866 photograph, Cross's lot was bounded to the west by a 27-foot by 60-foot brick structure which had been erected in 1857 and faced K Street (Sacramento Bee 23 May 1857). Wall K and its western return may have been the remains of this structure. This wall was certainly a bearing wall, for it has a substantial six-footing course (plan 4). At its junction with Wall M, Wall K had been partially removed to accommodate the former's northern return. Wall M was even more massive than K, having eight foundation courses.

A second contrast between walls K and M was the elevation at which their respective wall courses began. The difference was most noticeable at the southern side of their junction. K's wall courses commenced 5 inches (13cm) below those of Wall M. Interestingly, no construction trench cut
could be seen for Wall K in the southern half of Area VIII, suggesting that the ground level from which the trench had been dug was at a lower elevation than the plane which had been exposed by the excavation. This situation would have necessitated some soil deposition to raise the ground level; the 1861-1862 flood, whose effects were seen elsewhere on the site, might have accounted for the layer. This interpretation of the data, however, is not favored. It seems more likely that the trench, having been filled with redeposited soil, was simply not detected during the investigation. Similarly, Wall M's construction trench was also not located, although its trench was certainly cut either from the plane which was exposed during excavation or from a higher elevation. In the latter case, the trench would have been truncated but would still have shown up if the matrix had been at all dissimilar from its parent soil.

At the time that Wall M was built (after 1857, as M post-dates K), the land belonged to Callahan of the Golden Eagle Hotel. It is therefore probable that the building of which M was a part was the western addition to the hotel constructed in 1858-59 (Pitti 1980:22).

Features 15 and 20. The brick "linings" of features 15 and 20 were very similar to each other in composition and size (see pl. 3). Both were about 5 feet (1.5 meter) square and 2-1/2 feet (80 cm) deep (see plan 4). Two walls of each feature were each one offset-stretcher-course thick and had footings which were two courses high. These characteristics indicate that the walls were indeed linings, since neither could have borne a substantial superstructure.

Although several suggestions have been ventured, the original function(s) of these pits is unknown. It has been speculated that they were privy or refuse depositories which, being lined, could have been easily cleaned out and reused; or they may have served as cool storage places for perishable foods. Any speculation, however, must take into account that the features—for all their physical similarities—had been built on independently owned parcels of land and were separated by a large, brick wall. Indeed, if our interpretation is correct, Feature 15 would have been out-of-doors in Cross's yard, while Feature 20 would have been inside a building belonging to the hotel (see fig. 1).

This distinction, which was initially arrived at from documentary information, was also apparent through comparative analysis of the structure and content of the pits' fill. The earliest stratum deposited in Feature 15 was Layer 74, a black, organic humus (see section 13), which occurred around the feature's lining, adhering to it. The layer has been interpreted as the remains of a primary phase of deposition, most of which had been cleaned out. The soil was probably either privy fill (see Hall, this report) or decayed vegetable matter. This stratum was in marked contrast to the rest of the fill, indicating a change in the pit's function between the first and second phase of its use. The later fill, which occupied more than 90 percent of the pit's volume, was composed of several layers. These strata contained brick and mortar debris and a much greater proportion of artifacts than the earlier layer, all of which were set in a matrix of less manifestly organic soils. The top two layers, 53 and 72, contained all the oyster shell in the feature.
PLATE 3: Features 15 and 20 after excavation. Looking south; scale is three feet.
PLATE 4: Feature 20 after removal of Layer 82. Looking south; scale is three feet.
From an analysis of the artifacts and the fill pattern, it appears that the formation and deposition of layers 53, 59, and 72 were the responsibility of the Golden Eagle Oyster Saloon. This association can be seen in the similarity of certain classes of artifacts recovered from these layers with those of Feature 6. Mixed in with the oyster saloon remains, however, were some artifacts (notably ceramics, glass and metal) which were not compatible with the Feature 6 collection. These objects appear to have been items of personal property. The glass and ceramics, most of which can be dated, are notably older than the oyster saloon material from the same feature. Consequently, it is likely that they had belonged to the previous occupants of Cross's building. These items had been discarded during the "housecleaning" which surely accompanied the 1874 installation and earlier operation of the saloon. For more details about how the artifacts specifically support this interpretation, the reader is referred to the ceramic (M. Praetzelis), glass (Armstrong), and metal (Roscoe) chapters in this report.

The depositional history of Feature 20, the brick-lined pit located inside the Golden Eagle Hotel's western addition, was relatively simple. The feature had only three fill layers--82, 86, and 87--which, because of their physical similarities and the lack of variability in their artifact content, appear to have been deposited in rapid succession (see section 12). The principal components of the strata were brick, rubble, mortar, and ash. Cultural materials included food bone, ceramics, and glassware (see pl. 4). Dates derived from artifacts suggest that the feature had been filled around 1860.

From 1857, Wall K had served as a boundary between Cross's land and the parcel to the west. The wall apparently still functioned as late as the mid-1870s, when Feature 15, which backed up against it, was filled. At some time either during or after the occupation of the lot to the west by various marble works from 1870 to 1885 (Pitti 1980:103, 109), Wall K went out of use and was replaced by Wall F which followed the original alignment. It is evident that during the marble works' tenure, waste material in the form of limestone chips and dust (layers 120, 121, and 122) had been deposited in the excavated basement of the building in a manner similar to the filling of Feature 6 (section 11). In Area VIII, the limestone debris was seen to lie up against the western side of Wall K. In Area V, which was located toward the front of the same lot, this material was trenched to a depth of 4 to 5 feet (1.2 to 1.5 meters). Cut into Layer 120, the uppermost stratum of stone waste, was one side of the construction trench (Feature 11) of Wall F (see section 9). The western side of this feature was tested with a cross-section trench, in order to more accurately date it. It was found to contain a mixture of the limestone debris and brown silt, but no artifacts which would provide a better date for its deposition were present. During the excavation of Trench E, the western counterpart of Wall K was found and designated Wall G. Surprisingly, no signs of a mate for Wall F were evident, although such a wall had clearly not been removed during the site clearance.
Areas VII and IX - Features 8, 14, 16, and 27

On the westernmost lot in the project area, Trench H encountered a back-filled pit (Feature 8; see pl. 5) and a trench (features 14, 16, and 27) which fed it (see plan 1, sections 14, 15, and 16).

Feature 8. Unfortunately, it was not possible to examine more than approximately 60 percent of the fill of Feature 8. This pit had two phases of cut and fill. The earlier cut was relatively broad and shallow (7 feet in diameter by 5 feet deep--2.1 meters by 1.5 meters) and circular in plan view. There is no evidence to suggest that this phase had been lined. The fill, Layer 90, was a light, grey-green silty clay that contained few artifacts. The homogeneity of the layer suggested that it was filled by some continuous process; its structure indicated that the process was siltation. Overlying this phase of the pit was a 10-inch (25 cm) thick stratum of grey, silty clay--Layer 70. This stratum was apparently another occurrence of the 1861-62 flood silts which were also identified in the eastern end of Trench E (see section 9, Layer 143). Cut through this layer was a reexcavation of the undated Feature 8, of approximately the same diameter (see fig. 2). This new cut removed much of the fill of the earlier feature down to its original bottom. The sides of the new pit had been lined with wooden planks; the pit had been covered with some form of superstructure supported by wooden posts. Traces of the lining and the post holes ringing the feature's edge (see pl. 5) were discovered during the excavation. In addition, the mouth of the pit had been sealed with redwood planks; it is not known whether this covering was put down during the pit's functional life or after its abandonment.

The horizontal redwood planks formed a significant barrier between the dissimilar deposits above and below them. Layers 81 and 83, which overlay the planks, were made up of friable, brown loam and combined with a large amount of cultural material, notably glass and ceramics. These strata were continuous across the width of the feature. Below the planks, however, layers 84 and 85 occurred as angled lenses of clay-like, stained soil, and contained proportionally much fewer artifacts. Significantly, there were several cross-mends between ceramics recovered from above and below the boards. The deposition of the later phase of fill is dated to between 1862 (Layer 90, terminus post quem) and as late as 1870; by this time, Merchant's Street had been raised to grade, and the feature had become obsolete. This conclusion, derived essentially from historical documentation, is supported by artifact dates from the feature.

Feature 14. Feature 8, at least during its later phase, had been connected to a trench, Feature 14. This trench ran roughly north-south to the east of the pit and at a tangent to it. About 8 feet (2.4 meters) of this linear feature was excavated. It was approximately 15 inches (38 cm) wide by 10 inches (25 cm) deep and had been cut into Layer 70, the presumed 1861 to 1862 flood silt. As can be seen in section 14, Feature 14 reflected two phases of use and function. The first period was represented by what appeared to have been a simple wood-lined trench. This trench had probably been constructed as a four-sided, redwood drain, but it became distorted through compaction and disturbance from the later phase. The wooden drain was replaced by a 1-1/2 inch diameter iron pipe set in a trench which had been dug into the silted-up box. This complex represented a conversion from drainage to the introduction of an off-site utility, probably gas.
PLATE 5: Feature 8 half sectioned. Looking south; vertical scale is six feet, horizontal scale is three.
Golden Eagle Site
Figure 2
Feature 8 (Idealized Cross-Section
Showing Two Phases of Use)
Not To Scale

Key:
- Redwood Plank
- Edge of Feature
- Edge of Fill Layer Within Feature
- 70 Flooding Deposit
- 81 - 85 Late Phase of Fill
- 90 Early Phase of Fill
Features 16 and 27. To the south of this complex, a cross-section trench was excavated to further investigate Feature 14's stratigraphic relationship to Feature 8. The excavation uncovered a trench which was similar to Feature 14 but lacked a wooden lining. The bottom of this cut was lined with clean, yellow clay (see section 15). The technique of lining a drainage feature with clay to prevent seepage is not an uncommon find on medieval and earlier sites in Europe, and on 18th-century sites in the eastern United States. This will probably be identified elsewhere in Sacramento. The trench was designated Feature 16. As with the northern extension, Feature 16 was cut into Layer 70, the flood silt. Significantly, Layer 56, which sealed the feature, also overlay the top layer of Feature 8. A whole bottle recovered from this stratum provided it with a terminus post quem of 1864.

Under the silty fill of Feature 16, and partially overlain by Layer 70, was an earlier phase of the drain; this was designated Feature 27 (see section 15). In the 3 feet (90cm) of the length of this feature which was exposed, part of what was thought to have been a silt trap was discovered. This trap was simply a slightly wider and deeper portion of the drain, which had been designed to collect water-borne silt. With this contrivance, material had only to be cleaned out of the regularly spaced traps rather than from the entire length of the feature. The fill of the suspected trap, Layer 80, was noticeably siltier and more homogeneous than that of the drain proper, Layer 79. It is postulated that Feature 27 had been filled as a result of the inundation of the 1861-62 flood waters, which had swept nearby loose soil and debris into any available hollows before its own silts, Layer 70, were deposited.

In summary, then, an unlined sump (Feature 8 first phase) was excavated into the subsoil at some time before 1859-60. Since the earliest historical record of the lot's occupation is dated 1859 (McGowan et al. 1978), it is likely that Feature 8's construction occurred between these two dates. The pit was fed by an unlined drain (Feature 27), which ran roughly north-south and had probably been provided with a series of silt traps (Layer 80). During the winter of 1861-62, the town was inundated by flood waters from the nearby Sacramento and American rivers, which deposited a layer of silt (Layer 70) over Feature 27 and the first phase of Feature 8. After the flood waters had subsided, the pit was re-dug, lined with wood, and a superstructure supported by wooden posts was erected around it. Either during its working life or after its abandonment, the pit's opening had been covered with redwood planks. The feature was fed by a drain or drains (features 14 and 16). This drain(s) had been lined for part of its length with wooden planks; elsewhere, clay had been imported from off the site for the purpose.

There is no definite proof of the specific function of these associated features. It seems likely, however, that water which accumulated in the middle of the blacksmith's lot was drained off by a make-shift conduit (such as Feature 16) into the settling pool (Feature 8). From this point, however, a more efficient, lined drain (Feature 14) would have been necessary since it had to pass out of the lot and connect with the city sewer.

Feature 8 and its associated drains went out of use and were filled in the mid- to late 1860s. Refuse from both the blacksmith's shop
(Roscoe, this report), on whose parcel the pit was located, and from the Golden Eagle Hotel, had been dumped on top of the lined features. Some of this material had filtered through cracks or missing boards in the pit's covering, and the void below became filled.

**Area VI**

The final area to be described is the western end of Trench E on the blacksmith's lot, designated Area VI. The relatively complex stratigraphy encountered in this trench was interpreted by references to an exposed vertical section (see section 10), which the building contractor had excavated 10 feet (3 meters) to the south of, and roughly parallel to, Trench E. Certain crucial relationships, which could only have been inferred using data from Trench E, were explicit in section 10. This portion of the study area was unique in that it showed evidence of mid-19th-century, city-wide events which can be related to activities on the lot.

The fires of 1852 and 1854 decimated much of the city. The effects of one or the other of these events was apparently represented by Layer 134, a thin but continuous charcoal and nail stratum which extended west from Wall G for approximately 9 feet (2.7 meters). Although there is no artifactual evidence that would allow the assignment of the layer to this period, the construction trench for Wall G cuts through the layer, providing a useful terminus ante quem of 1857. Overlying the construction trench was a thick silt deposit (Layer 131); this stratum was of similar composition to deposits which have been associated with the 1861-62 flood elsewhere on the site. Unfortunately, most of the Area VI materials were recovered from above these tightly dated contexts.

The presence of the charcoal stratum, Layer 134, suggested that a structure had been burned on the lot during one of the great fires. This layer provided one of the few indications, either archaeological or documentary, of occupation on the lot before 1850-60, when horseshoer L. B. Wells opened his business there (McGowan et al. 1978).

As Wall J was stratigraphically superior to Layer 131 (the presumed 1861-62 flood deposit), it is probable that it was part of the structure shown on the 1866 Houseworth photo (pl. 1). This wall would have formed the western boundary of the parcel. It is regrettable that layers 50, 51, 52, and 60 (see section 9) cannot be more accurately placed in time. Their stratigraphic relationship to Wall J show them to be pre-1866 at the latest; no relationship was evident, however, by which they could be assigned to the period before the 1861-62 flood. If these data were available, the materials could have been used to address undocumented land use during the 1850s. The layers in question are particularly rich in organic material (wood and straw), suggesting an early link with the adjacent City Horse Market (Theodoratus and McBride 1978:5).

Evidence suggests that the depressions into subsoil which contained these deposits were not natural convolutions in the original ground surface but that 3 to 4 feet of soil had been removed from this area (see section 9). In other areas of the site where the original land surface had been exposed--notably to the east of Wall D and in Area VII--the terrain was as flat and featureless as one would expect on a flood plain. The
contour and elevation of subsoil at the east end of Area VI and to the east and west of Wall G (see section 10) further indicates that these convolutions were not natural. Since Wall J, which formed the legal edge of the lot, had apparently been constructed on top of the depression, one may assume that the excavation was done before any structure, which took up the width of the parcel, was built there. Although the function which this feature might have served is not known, it was almost certainly not intended for waste disposal. In most places along its length, only one-third to one-half of the depression had been filled in before the erection of Wall J. After the wall's construction, there was a consequent decrease in the rate of deposition, which is implied by the arrangement of layers that accumulated after the wall was built.

Since the depression had been dug before there was a building on the lot, the possibility exists that it was a linear feature, perhaps a drainage trench. If this is accurate, then the west half of Area VI would, in fact, not be cut perpendicular to the feature's axis, which archaeologists tend to assume on seeing a feature in section, but would be one along its long axis at an oblique angle. From the preceding evidence, it can be deduced that the feature was certainly formed before 1866 and probably before 1862.

The layers that accumulated after the construction of walls G and J and before the filling of the area with sand (Layer 30), were doubtless made up of waste materials produced by the blacksmiths and other metal workers who occupied the lot. Some archaeological evidence indicates that the basement, formed by the raising of the building, was used as a work area, at least for limited activities. During the hand excavation of Area VI, what appeared to have been a wood-lined pit (Feature 9) was discovered (see plan 5). This feature, cut from the surface of Layer 41, was 1 foot (30cm) deep by 4 feet 6 inches (1.3 meters) in length. Its width was never determined, as the feature extended into the north side of the trench. Feature 9 contained stratified deposits of heavily corroded metal lumps and nails in a friable matrix; the layers were very similar in composition to the soil that made up most of the Area VI deposit. It can be assumed that this lined feature had not been dug as a borrow or refuse pit. Considering the nature of the business being conducted, it is probable that Feature 9 served some industrial function associated with metal working. All that can be concluded with certainty about the use of this basement during the blacksmiths' tenure is that it was primarily used for refuse disposal and, to a limited degree, for some specific industrial purposes.

Layer 30 seemed to herald the change in the business orientation of the lot's occupant. The strata above this layer contrasted markedly with those below it in the high proportion of soil which the former contained. These stratigraphic data suggest that walls H and I were built after the blacksmiths' time. The mortar used in their construction is noticeably harder than any other on the site, suggesting a later date.

Also in Area VI was Feature 10, either a lined pit or a wide, thick pipe intruding into the layers below (see plan 5). The pipe was of a coarse, mineral-grittied stoneware, approximately 22 inches (56cm) in
diameter; it was found capped with concrete. From the presence of the cap, it was speculated that the feature had been a privy; however, the fill was an unprivy-like sandy soil, containing much brick rubble but no chronologically diagnostic artifacts. Its stratigraphic situation—cut into Layer 30—indicated that it was a late feature, probably not constructed until the turn of the 20th century or later.
Golden Eagle Site
Plan 4
Area VIII: Features 15 and 20
Scale: 1:12

81
Golden Eagle Site
Plan 5
Area VI: Location of Features 9 & 10
Scale: 1:24

See Plan 1 for Areal Locations of Section Points

Key
△ Section Point

H

Feature 9

Feature 10

0 1 2 3 Feet
0 .5 1 Metres

Wall

Edge of Trench
Golden Eagle Site
Section 2
Trench B: North Section
Scale: 1:96

Note: See Plan 1 for Areal Locations of Section Points
Golden Eagle Site
Section 3
Trench F: South Section
Scale: 1:60

Note: See Plan I for Areal Locations of Section Points

Key:
- Hand Excavated Layer
- Mechanically Excavated Layer
- Section Point
- Subsoil

0 1 2 3 4 Feet
0 .5 1 1.5 2 Meters
Golden Eagle Site
Section 4
Trench G: East Section
Scale: 1:30

Note: See Plan 1 for Areal Locations of Section Points

Key
--- Limit of Excavation
(109) Mechanically Excavated Layer
△ Section Point
Subsoil
Golden Eagle Site
Section 6
Area III: East Section
Scale: 1:18

Note: See Plan 1 for Area
Locations of Section Points

Key:
- Limit of Excavation
- Mechanically Excavated Layer
- Section Point
- Subsoil

Scale: 1:18
Golden Eagle Site
Section 7
Area 1: West Section (F.21/2)
Scale: 1:24

Note: 2nd Plan I for Areal Locations of Section Points

Layer Number (All Hand Excavated)
Golden Eagle Site
Section 9
Trench E: South Section
Figure 3

Matrix
Trench E: Incorporating Stratigraphic Data From Sections 9 and 10
Golden Eagle Site
Section II
Area IV: Feature 6
Scale: 1:24

Key:
- Limit of Excavation
- Hand Excavated Layer
- Mechanically Excavated Layer
- Section Point
- Subsoil

Note: See Plan 1 for Areal Locations of Section Points

KS/LENT 2/80
Golden Eagle Site
Section 12
Feature 20: South Section
Scale: 1:12

Key
99 Hand Excavated Layer

0 1 2 Feet
0 0 5 Meters

DATUM 9'0" EAST

WALL 'N'

DATUM 9'0" WEST

82

86

87

88
Golden Eagle Site
Section 14
Area VII: Feature 14
Scale 1:6

Note: See Plan 1 for Areal Locations of Section Points

Key

- Section Point
- Wood
- Iron Pipe
- Subsoil
- Hand Excavated Layer

West

East

0
0

Feet
Meters

AP/NT 3/80
APPENDIX 2

Layer Descriptions

Layers 1-91 were hand excavated, 101-165 were mechanically excavated, and 210-208 were outside the main project area.

Layer
1 - Same layer as 3
2 - Same layer as 6
3 - Reddish-brown silt with some brick fragments
4 - Grey ash and sand with flecks of charcoal, brick, and bone
5 - Same layer as 3
6 - Mix of yellow-grey sand, grey sand, charcoal, and white ash
7 - Same layer as 4
8 - Same layer as 4
9 - Same layer as 6
10 - Same layer as 11
11 - Laminated grey-brown silt
12 - Same layer as 4
13 - Same layer as 11
14 - Brown soil and brick rubble
15 - Light brown sandy loam with much brick rubble and charcoal
16 - Greenish-grey clay with some brick rubble and gravel
17 - Black friable soil with mix of clay and charcoal
18 - Yellow-brown sandy clay with decomposed brick and lime
19 - Mix of sand, lime and ash
20 - Light brown sand
21 - Several layers excavated together
22 - Grey-brown soil with decomposed brick
23 - Black silt with pockets of charcoal
24 - Dark brown sandy clay
25 - Brown-black silt with streaks of decomposed iron
26 - Sandy clay with brick rubble
27 - Oyster shell, brick, and lime dust
28 - Light sandy loam
29 - Blackish-brown soil with some iron fragments
30 - White and gold sand
31 - Grey sand with many coal fragments
32 - Two layers excavated together: blackish-brown clay-loam with coal, iron, and charcoal; silty clay with charcoal and coal and some iron
33 - Grey-brown soil with iron and coal fragments
34 - Three layers excavated together: dark brown sandy clay with iron, charcoal and brown clay; charcoal
35 - Two layers excavated together: grey-white ash with charcoal flecks; lenses of clay loam and plaster
36 - Part of Layer 41
37 - Black silty clay
38 - Brick rubble
39 - Brown clay-loam
40 - Friable grey-brown sandy soil with much brick rubble
41 - Grey rust-streaked clay with much iron
42 - Pale yellow sand
43 - Grey-yellow silty clay mix with brick rubble
44 - Limestone rubble
45 - Grey limestone dust and fragments
46 - Limestone rubble
47 - Mix of grey silt, brown clay and charcoal, and ash; much window glass
48 - Dark grey crumbly clay with rust streaks
49 - Grey-green clay
50 - Thin lens of dark grey crumbly clay
51 - Two layers excavated together: grey-green clay; green clay and decomposed wood
52 - Green clay, straw, and wood
53 - Loose mix of sand and lime-dust mortar with some brick rubble
54 - Altered subsoil: light grey clay stained green
55 - Laminated light golden-brown silt
56 - Fine black coal or coke dust
57 - Decomposed wood lining
58 - Medium brown sandy silt
59 - Black organic soil
60 - Green clay with decomposed wood
61 - Rusty brown soil with much iron
62 - Mix of ash, grey silt, brown clay, charcoal, and window glass
63 - Brownish grey silty clay with limestone rubble
64 - Brown sandy silt
65 - Yellow clay
66 - Green-yellow mottled clay with rust streaks
67 - Dark brown clay with much brick rubble
68 - Orange sandy soil with brick fragments
69 - Brown silty soil
70 - Grey silt
71 - Light brown silty soil
72 - Charcoal and orange-brown clay
73 - Grey clay with ash and charcoal
74 - Black organic humus-like soil
75 - Lens of decayed mortar and brick
76 - Light brown sandy soil
77 - Parts of layers 81 and 83, which were excavated together
78 - Brown sandy clay
79 - Brown sandy clay
80 - Grey-brown clay
81 - Friable brown loam with brick rubble
82 - Dark grey-brown clay with brick rubble
83 - Loose brown clay with lenses of green clay and decomposed wood
84 - Two layers excavated together: light brown-green clay; grey-green clay
85 - Numerous lenses and layers excavated together; in general, a fine, grey-brown silty clay
86 - White-grey ash
87 - Layer of sand, brick, and mortar
88 - Material bagged under this number came from layers 77, 81, 84, and 83
89 - Most material bagged under this number is from cleaning on top of features in Area III; some is from Layer 24
90 - Light green-grey silty clay with charcoal
91 - Brown crumbly soil with iron fragments

102a
101 - Light brown silty clay. Same layer as 146
102 - Brown silty clay-loom with rubble
103 - Heavy brick rubble in matrix of brown sandy mortar
104 - White faced wall plaster on backing of sandy mortar
105 - Compacted brown soil with brick rubble
106 - Two layers: brown silt and grey clay with brick fragments; mortar driven into subsoil
107 - Coal dust
108 - Decomposed salmon-colored brick
109 - Asphalt surface
110 - Pebbles and coarse sand
111 - Brick and plaster fragments in brown soil matrix
112 - Brick rubble in brown soil matrix
113 - Concrete surface
114 - Ash and charcoal
115 - Dark brown clay
116 - Wall plaster
117 - Dark brown clay
118 - Brown clay with brick fragments, plaster, and oyster shells and fragments
119 - Mix of grey-brown clay with charcoal and iron staining
120 - Limestone rubble and dust
121 - Coke dust
122 - Limestone rubble and dust
123 - Brown-grey clay with plaster and brick fragments
124 - Sandy brown-grey soil
125 - Compact brown sandy soil with streaks of iron
126 - Crumbly grey soil with slag fragments
127 - Sand with much rusted and burned metal
128 - Grey clay
129 - Brown sandy soil
130 - Grey-brown sandy soil
131 - Tan-grey silt
132 - Charcoal
133 - Tan-grey silt
134 - Charcoal
135 - Area of iron-stained subsoil
136 - Limestone rubble
137 - Charcoal and brick fragments
138 - Black burned soil
139 - Same layer as 70
140 - Yellow-grey silty clay with ash lenses
141 - Orange-grey sand
142 - Yellow-grey sandy clay
143 - Grey silty clay
144 - Limestone dust and fragments
145 - Brown clay with brick fragments, plaster, and oyster shell
146 - Same layer as 101
147 - Layer of decomposing grass
148 - Brown silt with brick, glass, and rock fragments
149 - Light brown sand
150 - Black-brown mottled clay
151 - Charcoal with iron fragments
152 - Dark brown clay with brick fragments. May be same layer as 22
153 - Charcoal
154 - Golden-brown sand with brick fragments
155 - Grey sandy silt with brick fragments
156 - Sand, ash, and charcoal
157 - Grey silty loam with brick fragments
158 - Pale grey silt
159 - Yellow-brown clay with brick fragments
160 - Sandy silt
161 - Grey micaceous silt
162 - Grey-brown silty clay
163 - Brick rubble, pebbles, and iron fragments
164 - Mix of sand, limestone dust/mortar, oyster shell, and brick fragments
165 - Grey silt

201 - Iron fragments and conglomerate in matrix of grey clay/soil (50%/50%)
202 - Grey sand
203 - Brown silty clay
204 - Brown sandy silt
205 - Coke fragments and dust
206 - Same layer as 131
207 - Coke dust and fragments
208 - Same layer as 128, but with glass fragments