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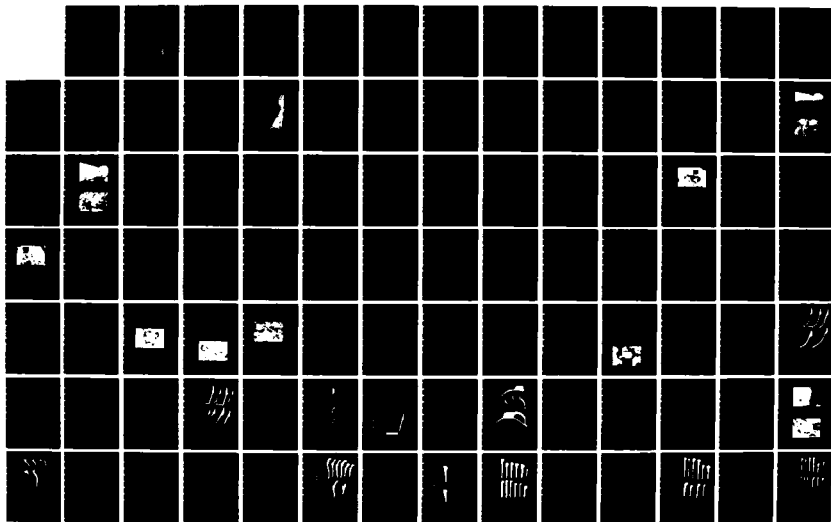
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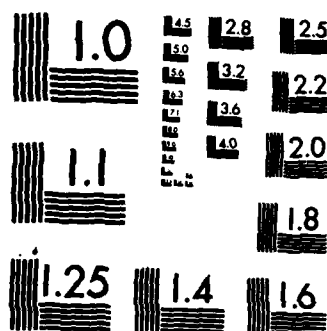
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AN INTENSIVE CULTURAL RESOURCE SURVEY
FOR THE BANK STABILIZATION PROJECT

NCROD-S-070-0X6-1-103490

Rip-Rap Construction

Bonaparte, Iowa

PREPARED BY

Anton Till

Principal Investigator

Cultural Resources Surveys

Fairfield, Iowa

November, 1983

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The Cultural Resource Survey of the Iowa Area XV Regional Planning Commission conducted reconnaissance and intensive surveys (with testing) at a 19th century stoneware manufacturing site in Bonaparte, Iowa under contract with the Corps of Engineers in the fall of 1983. This was done to determine the nature and extent of waster deposits associated with a standing pottery works structure, the former of which would be affected by the City of Bonaparte's plan to rip rap and landscape the bank of the Des Moines River for erosion control. The Iowa SHPO determined the site eligible for listing in the National Register; hence,			

the investigations were conducted to recover a sample of materials before project construction could proceed under a Department of the Army permit. The Iowa SHPO and the Advisory Council agreed that the rip rapping project would protect the remaining portions of the waster dump and a determination of No Adverse Effect was derived. Over 1,000 ceramic sheds and furniture items were analyzed, clarifying production and trade features of this pottery industry in southeastern Iowa.

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Additionally, a special thanks is forwarded to Mr. and Mrs. E.O. "Junior" Teeter, owners of the Bonaparte Lumberyard, who never failed to assist us in our research efforts and volunteered invaluable information for this study.

I wish to acknowledge the assistance of the members of the Bonaparte Historical society, who allowed me the opportunity to examine artifacts from the Bonaparte Pottery and Mr. and Mrs. Herbert K. Redhead of Bentonsport, who allowed study of their personal pottery collection.

And finally, a special thank you to Julie Bibby, who dedicated many hours to typing the Final Draft of this Report.

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Fairfield, Iowa
November, 1983

ABSTRACT

Anton Till
Principal Investigator

In October 1979, the Archaeological Survey staff of the Area XV Regional Planning Commission's Cultural Resources Surveys Program engaged in preliminary archaeological reconnaissance of a Late Nineteenth Century stoneware pottery manufacturing site, designated 13VB200, located within the corporate boundaries of the river community of Bonaparte, Van Buren County, Iowa. As a result of the preliminary survey, an extant ceramic fabrication structure was identified (previously designated Architectural Site 89-006-093, Area XV Cultural Resources Survey Inventory, Bonaparte, Iowa), including an extensive ceramic midden situated contiguous to the Des Moines River.

In May 1983, the City of Bonaparte made application to the U.S. Army Corps of Engineers, Rock Island District, for a Section 10 and Section 404 permit to provide riprap protection along the left bank of the Des Moines River in Section 8, Township 68 North, Range 8 West within the corporate limits of the city, Van Buren County, Iowa.

Following agency review, in July 1983, the Iowa State Historical Department, Office of Historic Preservation, notified the Rock Island District Archaeologist of the presence of 13VB200 within the proposed project corridor.

Subsequently, on-site investigation of the site area by District staff and representatives of the Office of Historic Preservation and the Area XV Regional Planning Commission resulted in mutual determination that an intensive survey (including preliminary subsurface testing) would be appropriate to ascertain the site's potential

eligibility for inclusion in the National Register of Historic Places.

On September 20, 1983, the U.S. Army Corps of Engineers, Rock Island District, entered into an agreement with Anton Till, independent contractor, to provide an intensive cultural resource assessment (with subsurface testing) of 13VB200 within the proposed riprapping and bank stabilization corridor for the Bonaparte Flood Protection Project. This action is essential for compliance with the National Historic Preservation Act of 1966 (as amended), Executive Order 11593, The Archaeological and Historic Preservation Act of 1974, 33CFR305, ER1105-2-50, and 36CFR (Parts 60-66 and 800, as appropriate).

On October 6 through October 9, 1983, the preliminary archaeological assessment was conducted. The following report details the results of that investigation.

PROJECT DESCRIPTION:

Project NCROD-S-070-OX6-1-103490 consists of a riprap and bank stabilization action for the Bonaparte Local Flood Protection Project on the north bank of the Des Moines River near River Mile 35, in portions of the south $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 8 and in portions of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 8, Township 68 North, Range 8 West, within the corporate boundary of the City of Bonaparte, Van Buren County, Iowa (Figure 1). The project will involve the placement of riprap protection along approximately 3,100 feet (914.4 meters) of riverbank. The existing bank will be prepared and graded to a 2:1 slope and dressed with six inches of bedding stone and 18 inches of riprap stone. Approximately 400 cubic yards of bedding stone and 1,200 cubic yards of riprap stone will be required to complete the project.

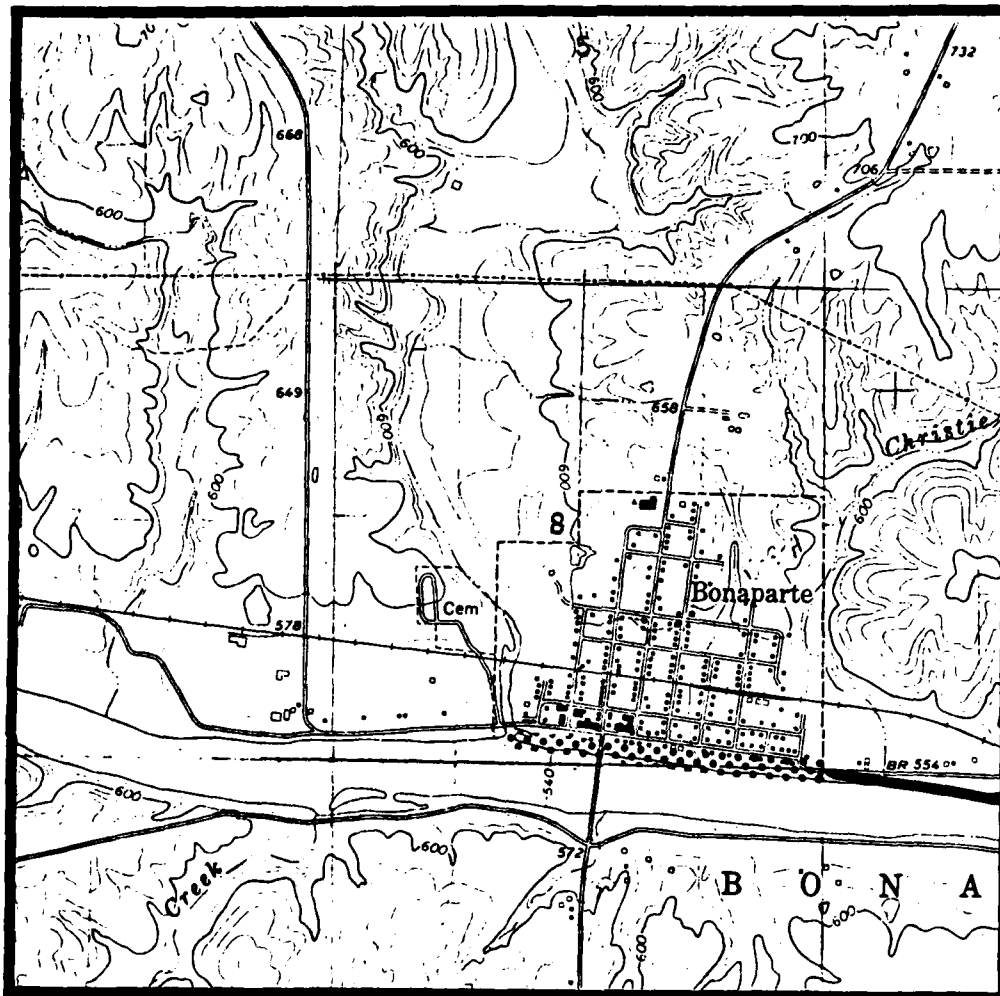
PROJECT SETTING:

The proposed project is located in Van Buren County (89), which is in the second position west of the Mississippi River along the extreme southern tier of counties in southeast Iowa. The county has an area of approximately 487 square miles, arranged in sixteen (16) surveyed townships, or about 311,680 acres (Dietz and Hidlebaugh 1962:1). The county seat is Keosauqua; platted in 1839 and incorporated in 1842, and is situated centrally on the Des Moines River.

CLIMATIC:

Van Buren County has a continental climate which often fluctuates throughout the year. This seasonal variation is a major characteristic due to the state's latitude and interior continental location (Waite, 1967:657). The summer months are generally warm and the winter months cold. The climatological standard normals for the State are estimated from the true mean obtained from a 30-year sample record

Range 8 West



Township 68 North

PROPOSED PROJECT
CORRIDOR

Map Segment from Bonaparte Quadrangle,
Iowa - Van Buren County.
7.5 Minute Series (Topographic)

FIGURE 1

between the years 1931-1960 (U.S. Department of Commerce 1962:ii).

Obtained from this arithmetic mean of this period, the monthly average temperature of the county ranges from 77°F in July to approximately 25°F in January. Extreme temperatures of -36°F on January 22, 1930 and 115°F on August 9, 1934 were recorded by the U.S. Weather Bureau (Dietz and Hidlebaugh 1962:65).

The mean annual precipitation based on a period between 1931-1955 is 34 inches (Waite 1967: 670), while approximately two-thirds of the annual precipitation occurs in a period from April to September (Dietz and Hidlebaugh 1962:65). The average growing season for the county lasts about 173 days with the average first frost occurring on October 14 and the last by April 24 (IBID: 66).

VEGETATIONAL:

Prior to the first settlement of the county by Euro-Americans in the 1830's, the county region was characterized by an extensive mosaic of floodplain forest, upland forest and prairie communities. The floodplains, both restricted and expansive portions, were populated by sedge (Carex sp.), common reed (Phragmites communis), common cattail (Typha Latifolia), and Boggrass (Dietz and Hidlebaugh 1962:66). Also occurring in abundance were florae such as Lambsquarter (chenopodium), smartweed (polygonum), and marsh alder (alnus). These were associated with varieties of walnut, willow, maple, sycamore, and elm peripheral to lowland drainages (Preston, 1966).

The encompassing upland directly peripheral to the county's tributary drainages and major fluvial systems was dominated by deciduous vegetation. Species of oak, white and red elms, shagbark hickory, and green ash were well established on the landscape.

PHYSIOGRAPHIC:

Van Buren County is situated within the loess-capped till prairie of the Central Lowland Province (Raisz 1957:Map) or, commonly termed, the Southern Iowa Drift Plain, the most extensive landform region in the State (Figure 2).

The topography of this landform area, as is found adjacent to the project location, can be described as an area of extreme sloping hills inserted at intervals between somewhat uniform alluvial valleys and level upland divides (Prior 1976:45).

The present landscape is dominated by drift, a mass deposit containing clay, sand, gravel and boulders, that was transported by glacial ice associated with Pre-Illinoian stages of glaciation (Figure 3).

Following the deposition of Pre-Illinoian drift, the landscape was exposed to geologic erosion, which includes weathering (accretion), alluvial cutting, soil genesis and loess deposition (IBID:47). Currently, the only remnants of the extensive Pleistocene (3.0 million years before the present) drift plain can be found on the tabular land and drainage divides, located particularly in the northeast quadrant of the county.

The rate of the geologic processes intensified during the Wisconsin Glacial Period (14,000 to 16,000 years ago) (Oschwald et al 1965:9). During the last part of the Pleistocene, loess, a wind-deposited sediment of silt-sized particles covered the old land surface (paleosol) that had developed during Yarmouth-Sangamon times. Most of the loess deposited in the county derived from the Missouri Alluvial Trench, and in northcentral Iowa on the Des Moines Lobe (Dietz and Hidlebaugh 1962:71).

Subsequent erosional sequences occurring during post-Wisconsinan time, and within the Holocene period, etched the loess-capped landscape and fashioned the present dendritic drainage net.

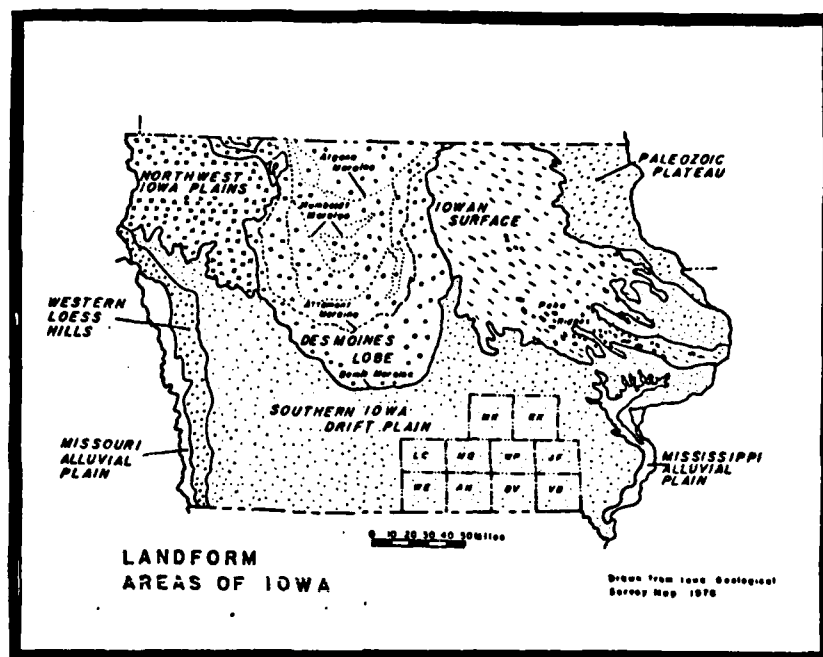


FIGURE 2: The Landform Regions of Iowa.

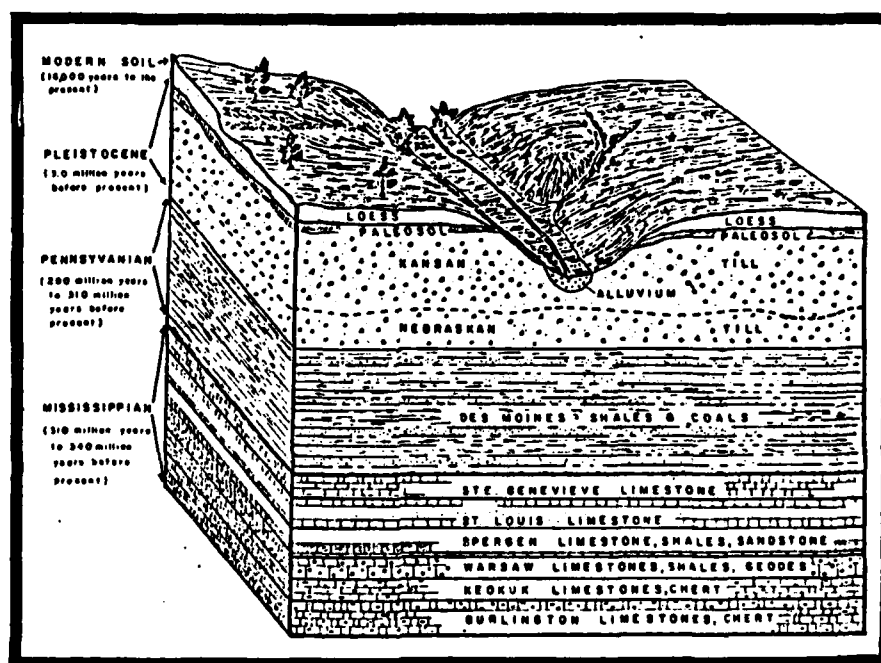


FIGURE 3: A Schematic of Van Buren County Geology.

The major drainage systems that transverse the county: the Des Moines and Fox Rivers; Big Cedar Creek, Chequest and Big Indian Creeks, to name a few, have over the past 14,000 years, cut through the horizons of loess, paleosol and glacial deposits, and now often bed on the sedimentary bedrock units of Pennsylvanian and Mississippian Age (Figure 3).

PALEO-ENVIRONMENTAL

The main body of our knowledge concerning the post-glacial vegetational and climatic sequences of the area is provided by previous pollen and stratigraphic sampling of bogs in central Iowa (Walker, 1966). Resulting from these investigations, it is hypothesized that forest regimes were bountiful along upland positions from the recession of the Wisconsin Glaciation in Iowa (ca. 13,000 years BP), through the Pre-Boreal and Boreal (ca. 8,000 years BP) climatic episodes of the Holocene (Bryson, et al. 1970).

During these episodes, the expansive coniferous forests changed to a more mixed coniferous-deciduous regime. The spruce and white pines finally retreated, eventually replaced by a deciduous forest that was dominated by the beech and hickory families. As the Atlantic Climatic episode (ca. 6,000 years BP) approached, the deciduous species were replaced by tall and mid-grass prairie on the more uniform drainage divides and tablelands. Tension zones were commonplace between these two major floral communities as they fought for dominance.

Well into the Atlantic episode (6,000-4,000 years BP), shorter species of prairie grasses emerged and influenced the landscape. Following this period, a stabilization of the biomes, geomorphic features and climatic regime occurred. The sub-Atlantic (ca. 3,000 years BP) and following episodes are distinguished by oak-hickory forests invading the prairie subclimax (Fenton 1972:10).

PEDOLOGIC:

The proposed project lies directly along the bank of the Des Moines River, within the Alluvial Soils on Stream Bottoms Association. Representing the Alluvial soil group of the Azonal soil order, the Nodaway series of soils dominates the proposed riprap project (Figure 4). This moderately dark to light colored soil formed from recent (Holocene) sediments consisting of overbank wash or vertically accreted silts, clays, and fine sands, deposited over a finer textured, older alluvium (Dietz and Hidlebaugh 1962:27). The Nodaway silt loam mapping units occur often adjacent to soils of the Chequest series, represented by generally dark and poorly drained bottom soils formed in alluvium under the influence of trees (IBID:10). Lying just north of the proposed project, and adjacent to the Nodaway mapping unit, a unit of Dickinson Sandy Loam dominates, extending along the southern margin of Bonaparte. Along the escarpment of a somewhat elevated terrace extending east to the Bonaparte Corporate Boundary, and westward to the east margin of Coates or Honey Creek, a major third-order tributary of the Des Moines River flows (Figure 4). The Dickinson soils developed from generally sandy, vertically accreted sediments formed under the influence of bottomland prairie vegetation. North of the Dickinson Sandy Loam unit, Olmitz and Gravity soils comprise a large unit encompassing the majority of Bonaparte. These soils formed from alluvial material washed from the uplands under the influence of prairie grass (IBID:28-29).

ARCHAEOLOGY

Previous Investigations

In October 1979, the Area XV Regional Planning Commission Cultural Resources Survey staff conducted an intensive archaeological pedestrian sample within portions of the Coates or Honey Creek Drainage located along the western margin of the Corporate Limits of the community of Bonaparte, Van Buren County, Iowa (Figure

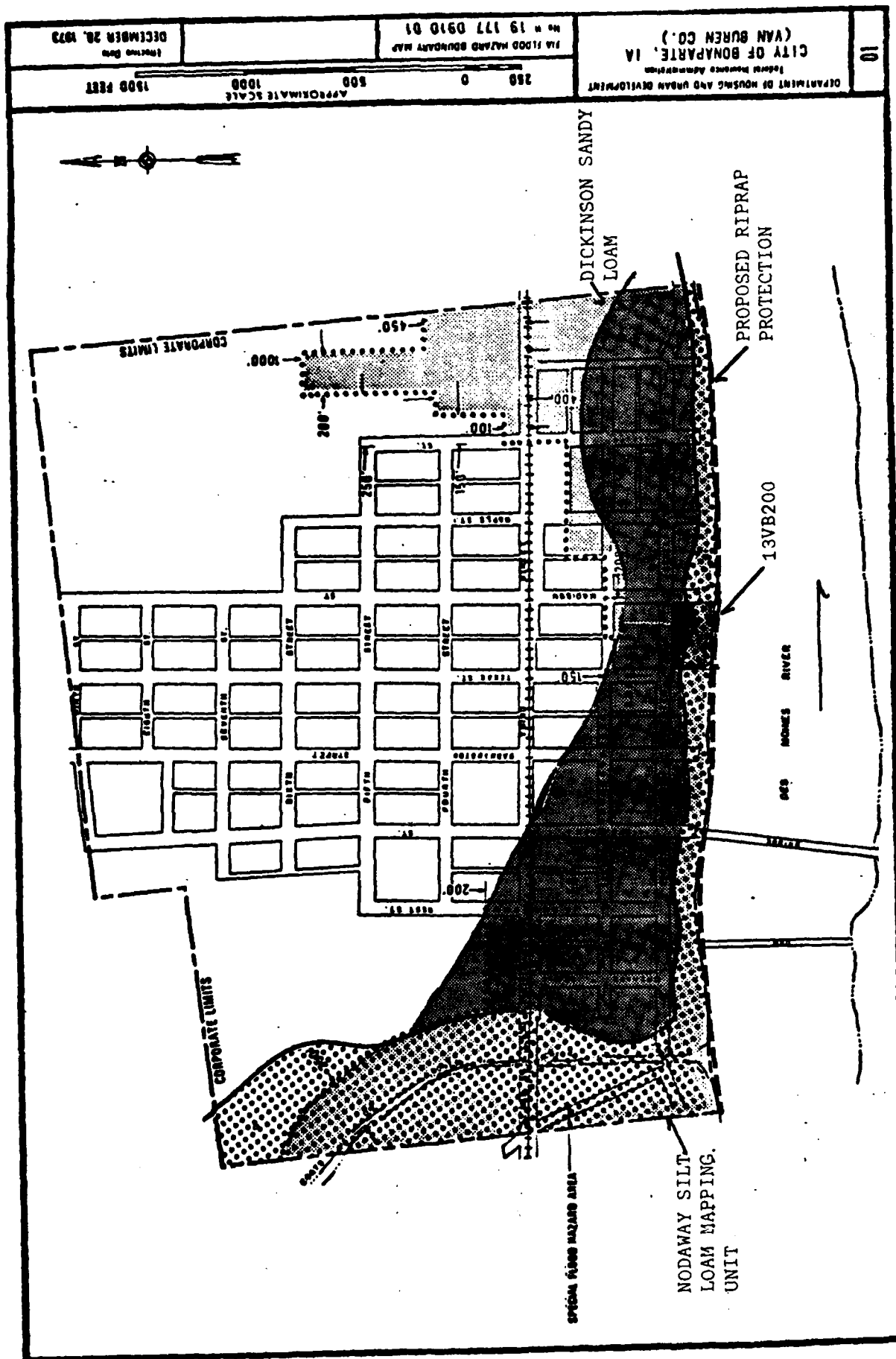
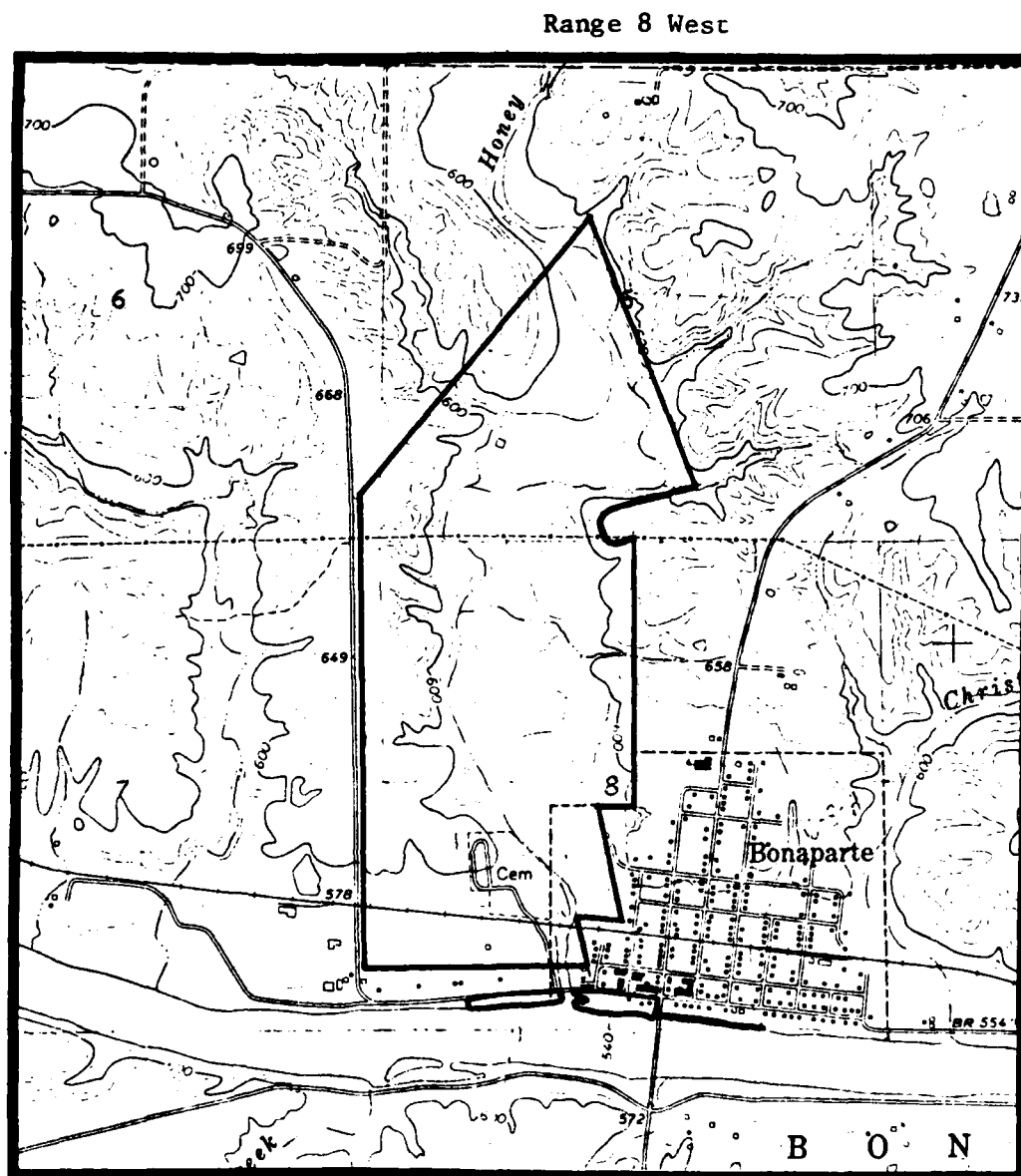


FIGURE 4

5). Designated sample area 89-12-B-1 of Mapping Unit 89-12-1, it contained 17 previously unrecorded archaeological sites (Till and Nansel 1979:Volume 2). During the course of the sample area investigation, portions of the Des Moines River Bank were examined, extending from the mouth of Coates or Honey Creek eastward, including the Historic Des Moines River Improvement Project's Lock Number 5. This National Register site represents one of two known extant lock structures remaining on the Des Moines River, a result of efforts commencing in 1846 to transform the Des Moines River into a navigable waterway from its mouth to the city of Des Moines. Although only three lock systems were designed and constructed, one at Bentonsport (non-extant) and one at Keosauqua (extant - joint NR nomination) a total of 28 lock and dam systems were planned (Muessig 1977). However, due to calamitous floods, mismanagement, and shift in commerce to railroad transportation, the project was abandoned in 1858 (The Iowa State Historical Department, Office of Historic Preservation 1981:110). Surfacially apart from sample area 89-12-B-1 and lying east of the Highway 79 Bridge, a limited corridor of exposed river bank was evaluated. This included portions contiguous to the present Bonaparte Lumber Yard, occupying outlot 8 and Lots 1 and 2 between Texas and Madison Streets (Figure 6). This property also contains an extant pottery manufacturing building first reported in 1977 (Van Buren County Historical Inventory, Van Buren County Bicentennial Committee, Inventory Number 60) and resurveyed by the Area XV Architectural survey in February 1980 and designated Iowa State Inventory number 89-006-093 (Area XV RPC, Architectural Survey, Bonaparte [89-006]). This official Iowa State Inventory form is included in Appendix A of this report.

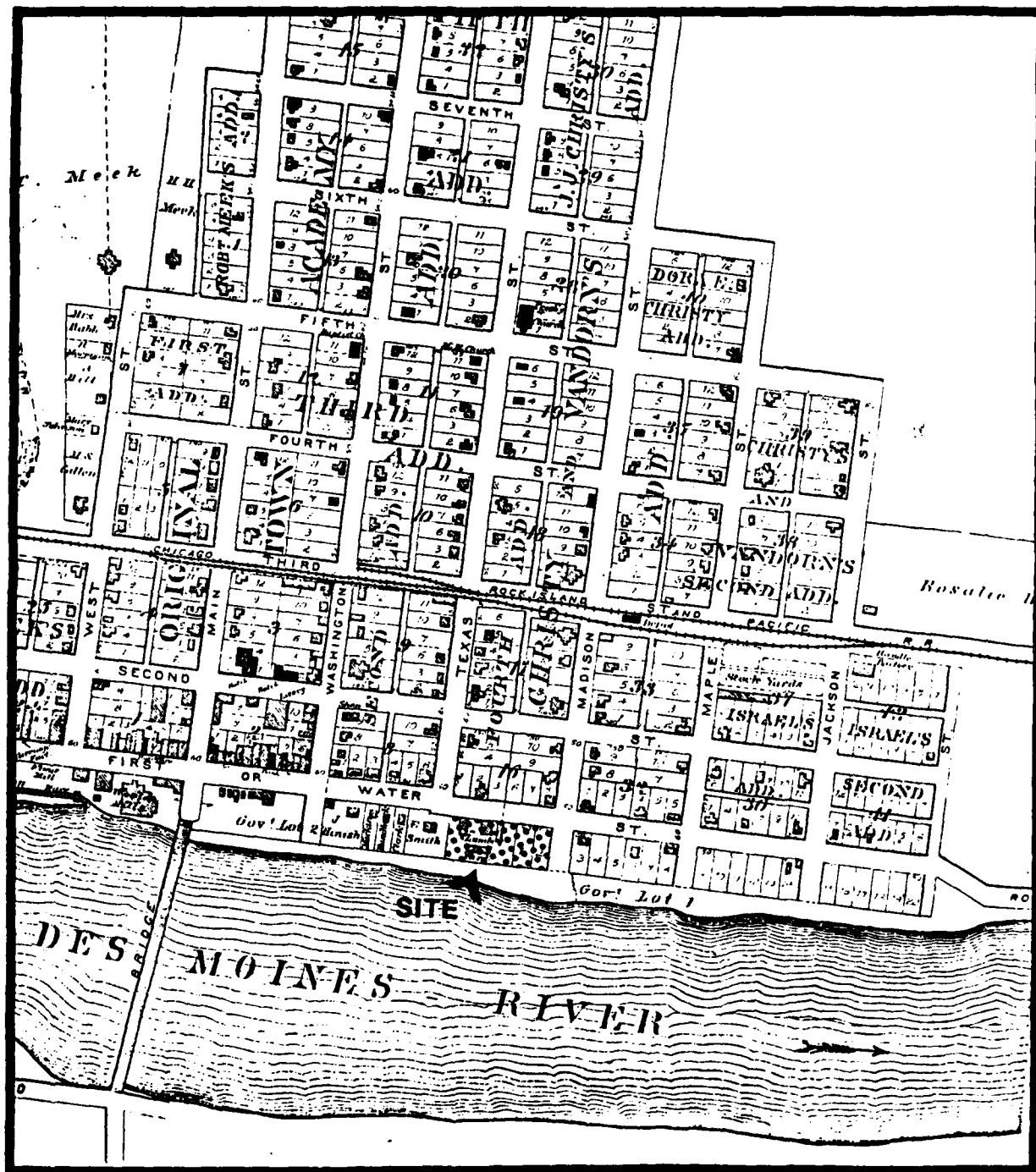
As a result of the preliminary pedestrian investigation in 1979, the Area XV Survey staff designated the site of the former Parker and Hanback Pottery Company Archaeological Site 13VB200. The Area XV Archaeological Inventory Record Sheet



Northwestern Portion of Mapping Unit 89-12-1
 Sample Area 89-12-B-1 Including portions of
 Sections 5 and 8, T68N-R8W, Van Buren County, Iowa

Map Segment from Bonaparte Quadrangle, Iowa- Van Buren
 County. 7.5 Minute Series (Topographic)

FIGURE 5



Reduced

BONAPARTE, IOWA
 From Plat Book of Van Buren Count
 Northwest Publishing Co., 1897.

FIGURE 6

is included in Appendix B of this report. During the initial investigation, a sample collection of ceramics from the extensive pottery midden was taken. Stoneware and kiln furniture recovered by this investigation are listed in Figure 7. The limited sample collection consists of stoneware ceramics in various vessel forms including wheel-thrown cylinder and molded globular vessel forms. The predominate surface treatment appears to have been slip glazing, with light brown to reddish brown color variations most frequently appearing.

PRESENT INVESTIGATION:

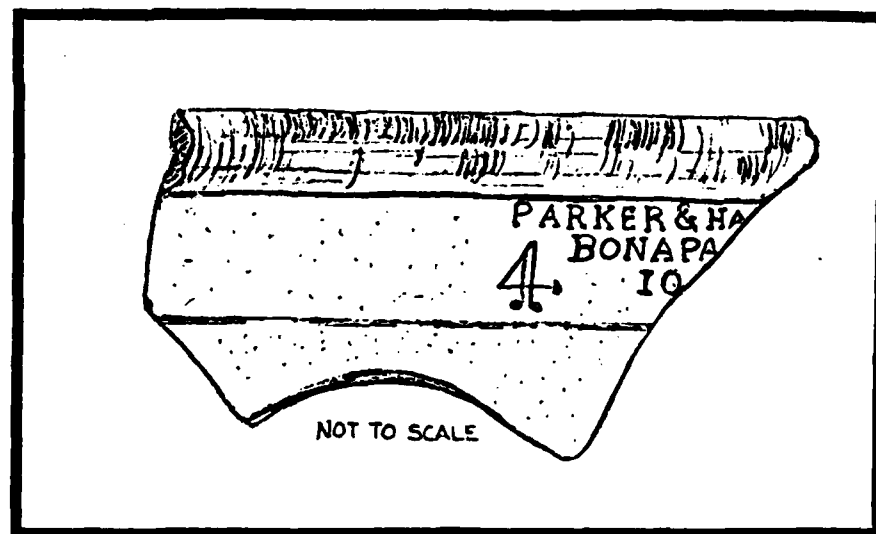
On September 20, 1983 the U.S. Army Engineer District, Corps of Engineers, Rock Island, Illinois, contracted with Anton Till, independent contractor, for an intensive archaeological survey (with testing) of the Nineteenth Century stoneware manufacturing site 13VB200; the Bonaparte Pottery. The purpose of this contractual agreement is to provide sufficient archaeological data to permit the Iowa State Historic Preservation Officer and the U.S. Army Engineer District to comment on the potential eligibility of 13VB200 for inclusion on the National Register of Historic Places.

Additionally, the present investigation will provide archaeological analysis and interpretation of the ceramic assemblage obtained, and will address the chronological seriation of vessel types represented by the sample. Additionally, an Historic assessment of the manufacturing site will be included, with emphasis in its role in regional historic development. The current study was conducted in October 1983, including archaeological testing and Historical documentation.

METHODOLOGY:

The present investigation involved intensive pedestrian surface sampling as well

<u>CATALOGUE NUMBER</u>	<u>SPECIMEN</u>	<u>NUMBER</u>
989-200-1	Stamped crock rimsherd "Parker & Ha" "4 Bonapa"	1
989-200-2,3	Stoneware crock rimsherds w/gallon stamps	2
989-200-4	Stoneware jug neck, canning jar neck	2
989-200-5,9	Stoneware crock rimsherds, 1 bowl 5 specimens w/handles, 5 unmarked	10
989-200-6,8	Kiln furniture (wads & chucks)	6
989-200-7	Vessel base, jug or small crock	1
989-200-10	Stoneware bodysherd (unmarked)	1



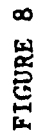
A Stamped rimsherd of a 4 Gallon Crock.

as limited subsurface excavation within a limited corridor contiguous to the proposed Bonaparte Riprap/Bank Stabilization Project (Figure 8, Site Plan Sheet). This study area comprises a narrow, primary bottom adjacent to the north bank of the Des Moines River and south of the extant Bonaparte Lumber Company.

The study area extends over an approximate area of 140 feet (42.7 meters) linearly and 40 feet (12.1 meters) transversely. Within this corridor, a 160-foot long survey baseline was established approximately on an east-west axis (N2°W). Along this baseline eight (8) stations were established, twenty (20) feet apart. All surficial and subsurface sampling activities conducted, including all physical and cultural features delineated, were oriented to the baseline (Figure 8, Site Plan, Sheet 1). All site measurements, excluding test unit excavation measure are of the U.S. customary system. All test excavation measurement was of the metric system. The excavation technique employed included shovel skimming when possible, and hand trowelling. The excavation fill was not screened. As a supplement to hand-excavated test units, minor subsoil investigation was effected with an Oakfield soil probe, standard core. Standard archaeological laboratory procedures were employed for the curation of the artifact assemblage.

DATA RECOVERY PLAN:

The present investigation employed a data recovery methodology designed to sample the Bonaparte Pottery's ceramic waste deposit, surficially and subsurficially, to ascertain the horizontal spatial limits and the vertical extent of this dense-pack ceramic midden within the proposed project corridor. This sampling scheme would provide a representative sample assemblage allowing for possible chronological seriation of the vessel types represented and the ceramic manufacturing processes employed during the Pottery's operation in the latter half of the Nineteenth Century.



As a supplement to the recovery plan, examination of local collections containing complete vessels and manufacturing paraphernalia from 13VB200 was effected. In addition, intensive inspection of the extant pottery manufacturing building situated adjacent to the study area was completed, providing serviceable data complementing the archeological sample assemblage.

Essential to the recovery plan is a comprehensive historical assessment of 13VB200, addressing key historical themes, including the commercial and technological aspects of this industry in southeast Iowa, and its role in historic lifeway development in the midwestern, post Civil War, agrarian frontier. The historical assessment also provides biographical insights pertaining to those persons responsible for the establishment of this local industry and its subsequent operation. Biographical analyses often provide invaluable data defining personalization in the skilled trades. As witnessed in carpentry, brick and stone masonry, and glassmaking, individual idiosyncrasies, acquired through apprenticeship, ethnic background, or technological experimentation, may manifest as distinguishing traits, providing researchers important interpretive clues defining distribution, chronological context, and technological adaptations employed during the construction or manufacture of products.

SAMPLING DISTRIBUTION

Surface Sampling:

Within the study area, two (2) pedestrian sample areas were defined. The first pedestrian sample is located directly abreast the present Des Moines River Bank and extends down bankslope approximately three meters. Midden trailings, somewhat unattached from the bank, escarpment deposit, although partially obscured by a dense patchwork of grass, maple and willow saplings (Figure 9) appears to extend linearly approximately 120 feet (36.6 meters). The deposit surficially contains a



Figure 9. 13VB200, View Northeast Toward
River Bank, Surface Sample 1.

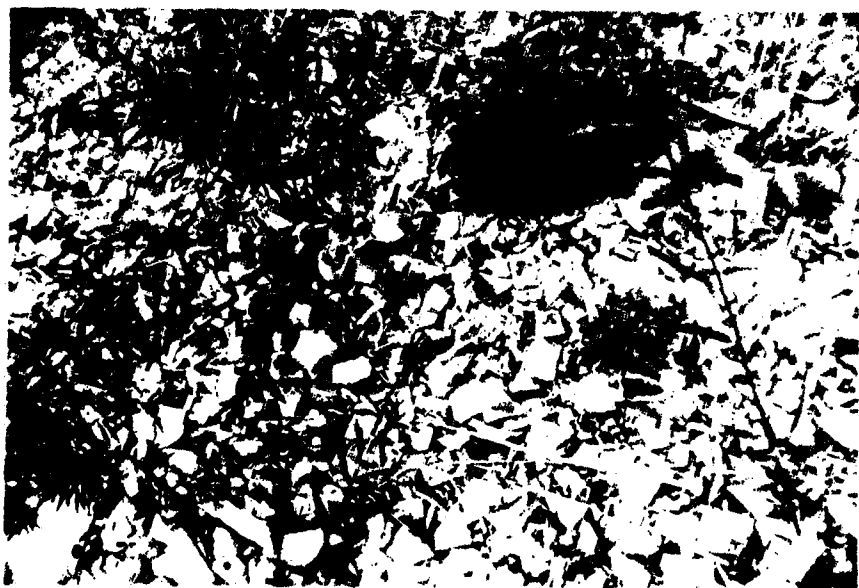


Figure 10. 13VB200, Surface Dense-Pack
Midden Exposed along River Bank.
Surface Sample 1.

conglomeratic deposit of stoneware sherds and kiln furniture (Figure 10). The midden density was so extreme, bank stabilization was effected. The ceramic material, although limited in size and weight, appears to be exceedingly resistant to fluvial erosion, perhaps due to its tabular form and ability to interlock closely, cemented with silty alluvium.

The second pedestrian sample is located just south of an extant lumber storage building and yard, and occupies an elevated escarpment or berm, with an approximate sideslope gradient of 60%. This berm is planoconvex in cross-section, tapers slightly toward the east and west, and is positioned approximately parallel to the existing river bank escarpment (Figure 11). The berm surface, as was the case with the river bank surface deposit, is a dense-pack midden. However, the ceramic materials present, especially stoneware sherds, appear greater in dimension, with partial vessels present (Figure 12). In addition, the midden deposit contained a greater percentage of silty loam and humic matrix than was present in surface sample 1. This surface deposit extended linearly approximately 85 feet (26 meters) north-south, and parallel to the extant lumberyard storage complex and established testing baseline (Figure 8, Site Plan, Sheet 1).

Subsurface Sampling:

The subsurface sampling strategy employed three (3) testing procedures: soil probing, controlled shovel testing, and unit excavation. A series of subsurface probes were made in the southeastern quadrant of the study area and situated ten feet south of baseline stations 1 through 4 (Figure 8, Site Plan, Sheet 1). This procedure provided supplemental data, delineating the subsurface extent of the ceramic midden. In conjunction with the probes, a series of four (4) shovel tests were conducted adjacent to the baseline. Designated T-1 through T-4, these



Figure 11. View Northeast Toward
Surface Sample 2, Berm Sideslope.



Figure 12. Close View of Berm Sideslope,
Examination of Crock Sherds, Surface
Sample 2.

30 x 30 centimeter units were dug to an approximate depth of 60 centimeters. These limited test units provided data on the horizontal extent of the midden deposit, its vertical stratigraphy, and potential differentiation of midden contents.

The final subsurface excavation consisted of a one (1) by five (5) meter test trench situated one (1) meter west of baseline station 6 and oriented approximately north-south. This unit extended one (1) meter south of the baseline and four (4) meters north of the baseline. The location selection criteria employed were based on the unit's position in relation to the elevated berm deposit and adjacent bank midden to effect stratigraphic evaluation and sampling. In addition, the test unit would provide a cross-section of a city sewerline excavation trench lying parallel to, and between both midden exposures. A determination of extent of impact by this excavation is basic to determining the deposit's archaeological integrity.

SAMPLING RESULTS

Surface Sample One: The River Bank

The pedestrian survey of the ceramic midden situated along the river bank escarpment resulted in the recovery of a representative ceramic collection containing 68 specimens. This includes sherds and kiln furniture described in greater detail later in this report. The artifact collection method employed selective sampling due to the profusion of ceramic materials encountered. This selection strategy allowed recovery of diagnostic vessel forms, kiln furniture or other ceramic artifacts. During the survey, over 1000 individual ceramic artifacts were examined, the majority having been broken into relatively small segments, rather limiting their potential research value. Specimen selection was based on achieving sample diversity in vessel forms, and variants of each form class. As an example, rims from cylinder crocks varied greatly, in terms of lip finish, profile and surficial treatments.

Only through careful examination of many crock rim sherds was a representative collection effected for this vessel form class. Additional emphasis was placed on vessel segments that could provide complete profiles, enhancing the overall sample potential in formulating a chronological seriation of the assemblage. Other artifacts selected, especially those related to the manufacturing processes embraced by the Bonaparte Potters were earnestly sought. Kiln furniture in particular can provide valuable interpretation of methods utilized in charging or placing a kiln with pottery. Although some forms of kiln furniture were subsequently reused, most forms were discarded following the drawing of the kiln (Webster 1971:50, illustrations 30-31).

The river bank deposit, as described earlier in this report, extends over approximately 120 feet (36.6 meters). There is supportive evidence, based on field observations, that the ceramic midden may have originally extended a considerable distance beyond the present river bank. Evidence of stoneware trailings were observed during the field study extending approximately 25 feet (7.6 meters) south of the bank escarpment. Intermixed with limestone rubble (derived from exposed bedrock in the riverbed) miscellaneous stoneware segments were observed, although somewhat obscured by recent silt coating. This evidence suggests the waster deposit was considerably more extensive in the past than it appears currently.

Surface Sample Two: The Berm

As described earlier, this surface scatter encompasses an area approximately 85 feet (26 meters) linearly, and parallel to the Bonaparte Lumberyard and testing baseline. The width of the deposit varies, but generally extends approximately ten feet (3 meters) north and south and tapers to the east and west about two feet (.61 meters) in width. The berm, viewed from the river bank northward,

appears plano-convex in cross section, similar to a noslope backslope transected and graded by road construction. Toward the river and at the toe of the berm, the primary bottom is generally uniform, and appears as if previously graded, perhaps preceding excavation for the city sewer main located just to the south, and near the foot of the deposit (Figure 8, Site Plan, Sheet 1). Topographic observation suggests the berm deposit may have previously extended southward toward the river with a gradual, uninterrupted slope. Subsequent terrain modification may have removed this portion of the waster and redeposited its contents along or within the Des Moines River.

The pedestrian survey of this feature resulted in the recovery of a representative ceramic collection containing 62 specimens. The sample comprised stoneware and kiln furniture. This material culture inventory will be discussed in detail later in this report.

SUBSURFACE TESTING PROCEDURE 1:

Soil Probes

Located within the southeastern quadrant of the study area, a series of subsurface test probes was conducted. The eastern tests were situated 10 feet (3 meters) south of the testing baseline on stations 1 through 4 (Figure 8, Site Plan, Sheet 1). The results of each probe are presented in Figure 13.

The test probes, limited to a subsurface depth of 70 centimeters, indicate clearly the spatial limits of the midden deposit located in this quadrant of the study area. Test probe one was considered negative, exhibiting no evidence of buried cultural deposits. However, test probe two indicated a slight, compact coal layer, and cinder stratum approximately 20 centimeters below surface. This particular stratum

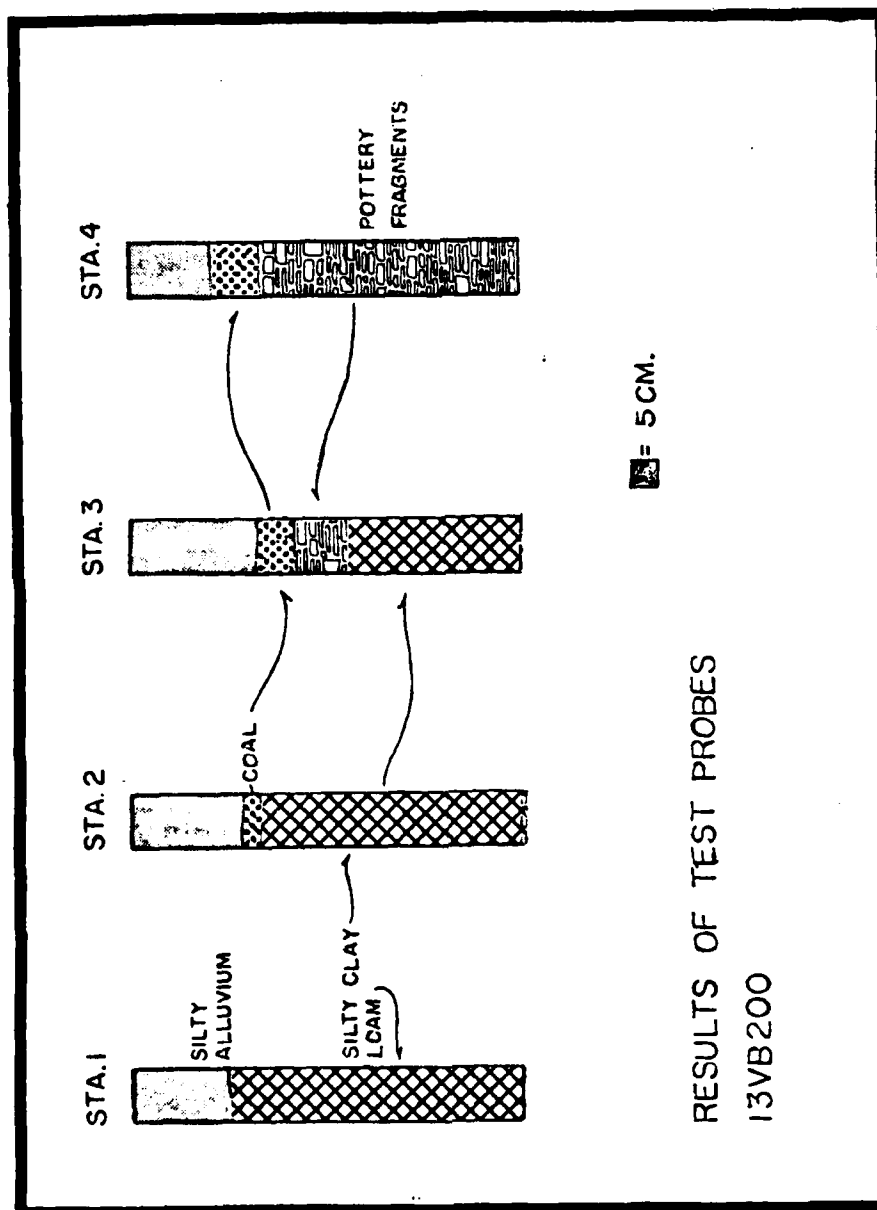


FIGURE 13: Results of Test Probes

also appears at similar depths in test probes three and four. This coal and cinder deposit may be related to the Bonaparte Pottery, especially if steam-powered equipment or coal heating was employed during its term of operation. Only within test probes three and four does ceramic midden appear. Profile four, a difficult test to perform, resulted in more densely-packed ceramics. The material present represented small stoneware and brick fragments intermixed somewhat with coal, cinders and ash.

SUBSOIL TESTING PROCEDURE 2:

Shovel Tests

A total of four (4) 30 x 30 centimeter shovel tests were excavated within the study area. The results of each test are provided in Figure 14. The first unit excavated (T-1) was positioned 2 meters north of baseline station 2, lying near the toe of the east margin of the berm. This unit was excavated to a depth of approximately 70 centimeters. The profile obtained from the north wall of this test indicated a mixed stratum of silty loam and stoneware sherds from surface to 15 centimeters. From 15 centimeters to an estimated depth of 57 centimeters a dense-pack ceramic deposit was encountered. Below 60 centimeters, more random sherds, including kiln furniture were present intermixed with silty loam.

Shovel test T-2 was positioned 2 meters north of station 3 and situated along the toe of the berm and just south of a large tree stump and cluster of small trees. sherds and a quantity of kiln brick were observed a few meters north of the shovel test.

This excavation yielded a limited stratum consisting of silty loam and random sherds and brick from surface to a depth of 10 centimeters where more compacted

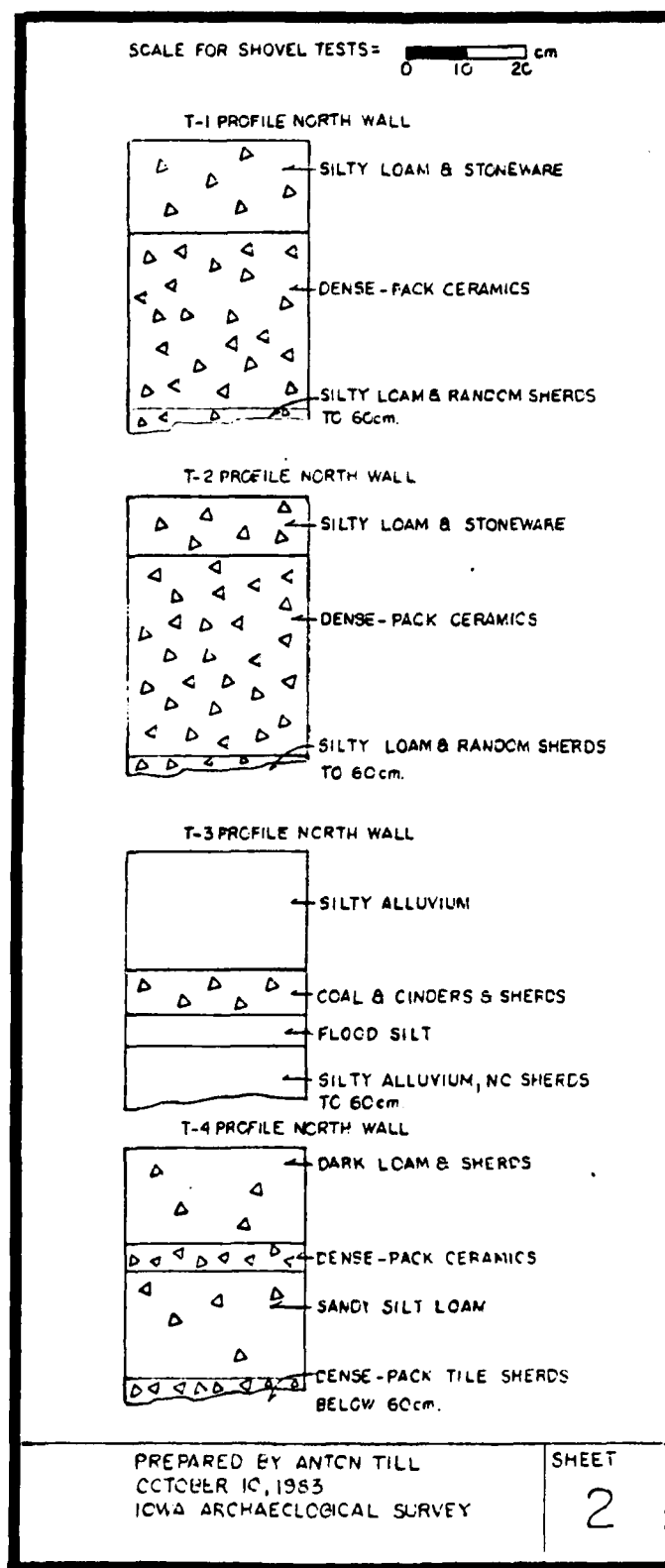


FIGURE 14: The Results of Shovel Tests

ceramic material was observed. This midden deposit extended to approximately 50 centimeters where it became less compact and more intermixed with soil matrix. The lower stratum continued beyond 75 centimeters, the limit of excavation. Shovel test T-3, was situated 4 meters south of the testing baseline just north of dense vegetation skirting the river bank. This unit indicated relatively recent silty alluvium to a depth of 20 centimeters where an 8-centimeter stratum of densely packed coal, cinders, and small sherds appeared. Directly below this deposit, a 5-centimeter thick band of flood sediment, comprised of sand and silt was encountered. Beneath this stratum, and extending beyond 60 centimeters, a horizon of silty alluvium containing no cultural material was positioned outside the spatial limits of 13VB200.

The last shovel test, designated T-4 was located 6 meters north of testing baseline station 8 in the northwestern portion of the study area. The unit was positioned just south of a poured concrete building foundation and near the shoulder of the berm. This test indicated a dark, loamy soil matrix extending from surface to approximately 15 centimeters in depth. Within this stratum, scattered stoneware sherds were present. Directly below and extending approximately 5 centimeters beneath this stratum, a somewhat compact layer of stoneware was recorded. Sandy silty loam appeared directly below the pottery layer and extended to approximately 37 centimeters. This stratum generally lacked ceramic or other cultural material. However, at a depth of approximately 40 centimeters a relatively compact layer of stoneware tile was uncovered. This extended to and beyond 60 centimeters. Of interest, surface materials observed encompassing the shovel test represented mainly drainage tile segments of various diameters. This could possibly indicate the overall ceramic midden may be comprised of subdeposits representing selective disposal of defective or broken products. The definition of these potential subdeposits,

could provide insights into organizational aspects of the manufacturing site, including estimated centers of particular manufacturing activities, i.e. stoneware production versus drainage tile production, or kiln location.

SUBSOIL TESTING PROCEDURE 3:

Test trench 6-1

Prior to the excavation of test trench 6-1, a series of at least three excavation units was considered within the proposed project area. However, upon excavating the first test trench, the ceramic midden proved to be compacted to such a degree that excavation time required to complete two additional units negated their inclusion in the sampling plan.

The results of the excavation of unit 6-1 are presented in Figure 15. This includes appropriate distributional horizontal and vertical data to a depth of 30 centimeters. In addition, the northern 1-square meter (6-1N2), and the southern 1-square meter (6-1S2) of unit 6-1 were excavated to depths of 145 centimeters for 6-1N2, and 175 centimeters for 6-1S2. Their vertical profiles are presented in Figure 17.

Unit 6-1 was positioned just west of baseline station 6 and extended one (1) meter south of baseline and four (4) meters north of baseline adjoining the footslope of the extensive waster berm deposit. this unit effectively transected the city sewer excavation trench, and was positioned to obtain significant vertical excavation of the berm midden deposit. The test trench was initially excavated in 10-centimeter levels to a uniform depth of 30 centimeters. This exposed and defined the limits of the sewerline excavation (Figure 15) comprising disturbed soil and ceramic materials. In addition, a discarded implement tire was exposed imbedded in the mixed fill, substantiating this interpretation. At the terminus of level one (10 centimeters below surface), within the south square meter an in-situ stoneware concentration was revealed. This concentration contained stoneware vessel sherds and assorted kiln

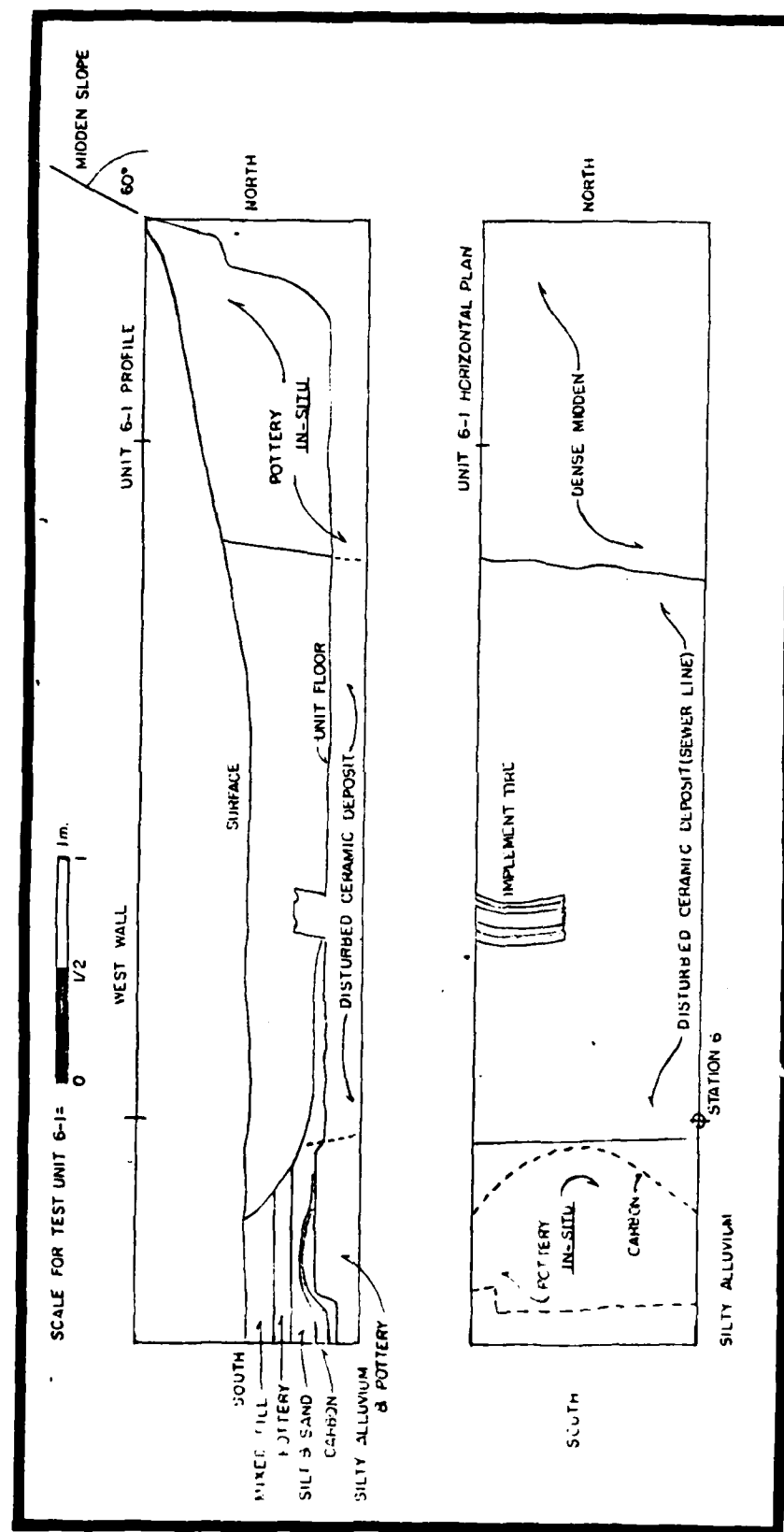


FIGURE 15: The Test Trench 6-1

furniture compactly cemented by silt (Figure 16).



Figure 16. Ceramics in situ,
Sample 6-1S2, view South.

This was also true for the north square meter, where dense ceramic midden was in evidence, however somewhat less compact. To effect sampling in these apparent undisturbed areas of trench 6-1 and to ascertain their vertical limits, each square meter was designated a sample area, 6-1N2 for the north square and 6-1S2 for the south. These two sample areas were further excavated, to 145 centimeters for 6-1N2, and 175 centimeters for 6-1S2. Vertical provenience control was maintained from present ground surface at baseline station 6. Vertical profiles were recorded from the north and south walls of each square meter unit (Figure 17).

6-1S2

The in-situ pottery that appeared in Figure 16 was removed, and excavation

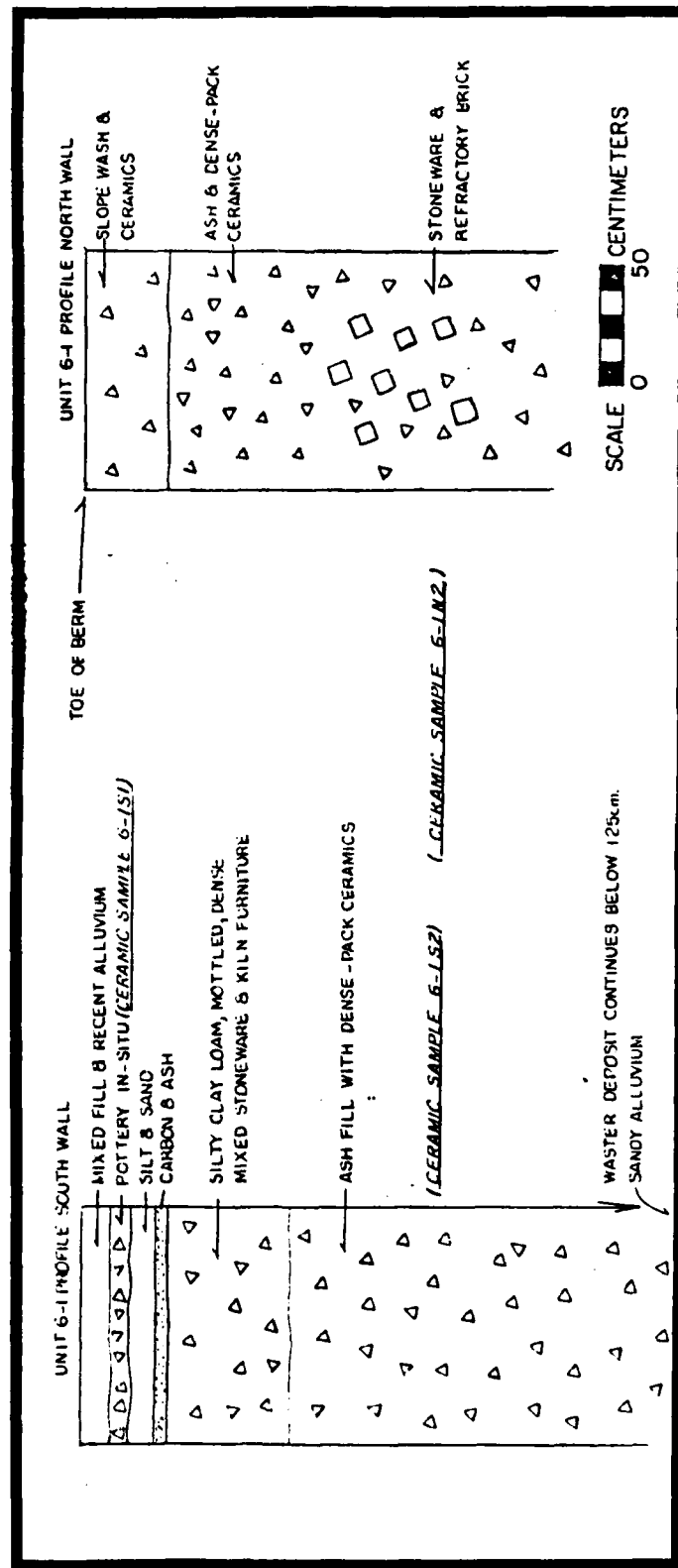


FIGURE 17: Wall Profiles Obtained From 6-1S2&6-1N2

initiated. Lying below this compacted ceramic deposit, a ten-centimeter stratum of flood sediments appeared.

At 30 centimeters, a 5-centimeter band of carbon and ash was encountered, essentially capped by the flood sediments above. Beneath the carbon and ash stratum at 35 centimeters, and extending to approximately 85 centimeters, a somewhat dense, mottled silty clay loam was present, intermixed with stoneware and kiln furniture. Beyond this stratum and extending past 175 centimeters (approximate limit of excavation) dense-pack ceramic midden was encountered. This stratum provided the majority of the sample, with partial or near complete vessels present. The pottery uncovered was intermixed with ash matrix and carbon, possibly representing many years of kiln fire-box deposits. Excavation below 175 centimeters was attempted, but was unsuccessful due to limitations posed by the unit dimensions. However, troweling slightly below the 175-centimeter level, more sandy alluvium with mixed ceramics appeared. Probing deeper was considered, but also provided unsuccessful due to the concentration of ceramic material.

It is possible that the waster deposit may extend beyond two meters below the present surface.

6-1N2

The excavation of the north meter square indicated an amalgamation of stoneware sherds, and kiln furniture with dark, silty loam (perhaps slope wash) from surface to approximately 40 centimeters. Below this stratum, dense-pack midden was uncovered comprised of predominately stoneware sherds and ash matrix (Figure 18). At a depth approximately one meter below surface, concentrated deposits of refractory brick mixed with vessel fragments occurred.

The excavation continued to approximately 145 centimeters, where midden continued.



Figure 18. Ceramics in situ,
6-IN2, view North.

THE MATERIAL CULTURAL INVENTORY

INTRODUCTION:

In Iowa, there is a general paucity of analytic study of the Nineteenth Century utilitarian ceramic industry. Researchers from Iowa State University, Department of Sociology and Anthropology, initiated the first essays into the industry in the Des Moines River Valley, and established a tentative chronological seriation of Wares (Reynolds 1969MS) (Schulte 1974MS).

Additional efforts to document this industry were made by Tandarich (1977) following archaeological investigations at the site of the Ottumwa Generating Station, Chillicothe, Wapello County, Iowa. Tandarich, with the assistance of the author, attempted the location of several Nineteenth Century pottery manufacturing sites in the Ottumwa vicinity. This search located an extensive works in Dahlonga, Dahlonga Township, Wapello County. This site, designated 13WP107, provided a limited surface assemblage containing various stoneware sherds and kiln furniture (IBID:83). Historical documentation undertaken by Tandarich indicates that the Dahlonga works operated approximately contemporaneously with the Bonaparte Pottery (IBID:87).

Within Van Buren County, the first attempts to record pottery manufacturing sites as archaeological sites were undertaken by the Area XV Cultural Resources Surveys Project, Area XV Regional Planning Commission, Ottumwa, Iowa. This inventory project, funded by the U.S. Department of Interior, and through the Iowa State Historical Department, Office of Historic Preservation, conducted comprehensive archaeological sampling in the county, and recorded numerous Nineteenth Century pottery manufacturing sites including 13VB200 (Till and Nansel 1981 MS). More recent studies (Miller 1982MS) have concentrated on historical inventory and description of Nineteenth Century potteries that operated in the county, with less

emphasis placed on morphological analyses and technological processes.

The present investigation utilizes terminology that is historically consistent with the North American Ceramic Industry, and that employed by Guappone (1977), Nelson (1978), Webster (1971), and Lawrence and West (1982). This includes descriptions of vessel forms and manufacturing processes commonly used during the Nineteenth and Twentieth Centuries. To facilitate ceramic analysis, categorization of the sample assemblage into divisions, classes, and sub-classes was performed. The analysis of the material culture inventory by sampling unit is presented in the following portion of this report.

THE ARTIFACT ASSEMBLAGE

Surface Sample One: River Bank

This selective sample contains 69 specimens of clay-bodied artifacts, including kiln furniture and fabric. A general description of specimens contained in this surface collection is presented in Figure 19, Table One. Included are appropriate remarks indicating distinguishing characteristics.

Surface Sample Two: Berm Deposit

This selective sample obtained from the surface of the berm sideslope and shoulder contains 64 specimens of clay-bodied artifacts. A general description of the artifacts collected is provided in Figure 20, Table Two.

Subsurface Sample

Test Trench 6-1, 0-30 centimeters

The following inventory of artifacts was obtained from test trench 6-1 from the surface to a depth of 30 centimeters. Only diagnostic specimens were retained

FIGURE 19, TABLE 1. SPECIMEN ANALYSIS, SAMPLE AREA ONE: RIVER BANK

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
2	Kiln brick	Molded	Earthenware	Some external salt	No	No	---	Inner course brick and kiln wall section - refractory mortar
6	Cockspurs & Wads	Hand-modeled	Stoneware	Some external salt	Fingerprints	No	---	5 elongated 1 flat
3	Saggars	Thrown	Stoneware	Thick external salt	No	No	Yes	Partial vessels, 1 rim with pugging attached
8	Maturity bars Pugging (Saggar seals)	Pressed	Stoneware & Bisque	No	Striations	No	---	Seldom straight, often curved
12	Bowls or Pans	Slip cast	Stoneware	Slip & salt	No	Yes 2	All	Rim exteriors often salt over slip
1	Pot	Slip cast	Bisque	No	No	Yes	Yes	Flower pot
1	Jug - round shoulder	Thrown	Stoneware	Slip & salt	No	Yes	Yes	Albany slip interior, black exterior
1	Preserve jar	Thrown & Cast	Stoneware	Slip & salt	No	Yes	Yes	Gray exterior, Albany slip interior Round shoulder
35	Cylinder Vessels Cocks	Thrown	Stoneware	Slip & salt	Yes 5-capacity stamps 2-maker's marks	Yes 19	All	Various sub-classes represented

FIGURE 20, TABLE 2. SPECIMEN ANALYSIS, SAMPLE AREA TWO: BERN

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
1	Wad	Hand modeled	Stoneware	Some external salt	Fingerprints	No	No	
3	Chuck	Thrown	Stoneware	Some external salt & slip	No	Yes 1	Yes 3	2 specimens have wads attached to foot. Orange core macro-temper
3	Tile - Body	Molded or pressed	Bisque	No	No	No	No	Walls 1" to 1 11/16" thick Red to reddish brown
4	Bowls	Slip cast	Stoneware	Slip & salt	No	Yes 2	Yes 2	2 body sherds with nodes Rim exterior-salt over slip Albany slip
3	Pans	Slip cast	Stoneware	Slip & salt	No	Yes 3	Yes 3	Salt over Albany slip - exterior rim
1	Pot/pan	Slip cast	Stoneware	Salt & slip	Hole in body	Yes	Yes	3/4" orifice, sinuous border in vessel wall
7	Jugs	Thrown	Stoneware	Salt exteriors, slip (Albany)	No	Yes 3	Yes 3	3 sub-classes represented: 1 base 2 handles 1 partial shoulder
2	Preserve jars	Thrown - 2 piece	Stoneware	Salt over slip exterior Albany interior	Joint seam	Yes 2	Yes 2	2 sub-classes represented
1	Churn lid	Thrown	Stoneware	Slip glazed	Stamped "3"	Yes 1	Yes 1	1/2 segment of lid
39	Cylinder Vessels Crocks	Thrown	Stoneware	Salt & slip	9 stamped capacity	Yes 12	Yes 39	5 sub-classes represented
64								

for laboratory analysis. This generally included vessel rims, or miscellaneous clay-bodied materials, kiln furniture or fabric. Small, non-diagnostic vessel segments, kiln furniture or fabric were discarded at the excavation site. Following laboratory study, additional specimens, consisting of 386 clay-bodied materials were also discarded. The remaining assemblage, comprising 224 clay-bodied specimens, 10 metal artifacts and 7 segments of glass were retained and are described in Figure 21, Table Three.

Subsurface Sample 6-1N2

Test Trench 6-1, 30-145 centimeters

This subsurface sample contains 123 clay-bodied artifacts including 1 partially restored cylinder crock. All specimens were recovered in situ within the dense-pack midden. Appropriate descriptions of the sample collection are presented in Figure 22, Table Four.

Subsurface Sample 6-1S2

Test Trench 6-1, 30-175 centimeters

Subsurface sample 6-1S2 provided 396 clay-bodied artifacts including 1 complete vessel and 10 partially restored vessels. All specimens were obtained from an undisturbed context. Artifact descriptions are presented in Figure 23, Table Five.

CULTURAL INVENTORY SUMMARIES

The Surface Samples

The present artifact inventory from surface samples one and two comprises 133 clay-bodied specimens. Of this number, 2 specimens represent kiln fabric and 21 specimens kiln furniture. The remaining 110 specimens consist of various vessel segments.

FIGURE 2A, TABLE 3. SPECIMEN ANALYSIS: TEST TRENCH 6-1 (0-30 centimeters)

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
9	Cockspurs & Wads	Hand modeled	Stoneware	Salt	Fingerprints	No	No	
5	Chucks	Thrown	Stoneware	Salt	No	Yes 1	Yes 5	Salt glaze appears on exteriors of rims. 3 specimens have wads attached 1 specimen has wad and vessel attached
3	Saggars	Thrown	Stoneware	Thick salt exteriors	No	No	Yes 1	Heavy salt-glazed exteriors, macro-temper - refractory
4	Pugging (saggar seals) maturity bars	Pressed	Stoneware & Bisque	No	Striations	No	No	Seldom straight - often curved
1	Block clay - possible maturity bar	Pressed	Stoneware & Bisque	Salt	Striations	No	No	Function uncertain
1	Tile - body	Molded or pressed	Bisque	No	No	No	No	
3	Bowls	Slip cast	Stoneware	Salt & slip	No	Yes 2	All	Predominately Albany slip
2	Pans	Slip cast	Stoneware	Salt & slip	No	Yes	All	Predominately Albany slip
62	Bowls or pans	Slip cast	Stoneware	Salt & slip	Holes Nodes	No	All	Various rim heights, decorated rims - relief & impressed
1	Pot or pan	Slip cast	Bisque porous body	No	No	Yes 1	Yes	Perhaps flower pot
10	Jugs	Thrown	Stoneware	Salt over slip exterior Albany slip interiors	No	Yes	2-complete 3-partial	5 partial handles
7	Preserve jars	Thrown & molded	Stoneware	Salt over slip exterior slip interior	No	Yes 2	Yes 6	

FIGURE 21, TABLE 3: CONTINUED

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
104	Cylinder vessels - crocks	Thrown	Stoneware	Salt over slip exterior slip interior	4 capacity stamps	Yes 2	All	10 rims with handles 1 rim attached to chuck Various sub-classes represented
12	Segmented sheet - formed clay on wire screen	Pressed/ molded	Bisque	No	No	No	No	Function uncertain
224								
								<u>MISCELLANEOUS ARTIFACTS</u>
							3	Steel ribbing tools
							1	Beer can top
							5	Cut nails
							1	Watch balance wheel
							4	Bottle segments
							1	Pane glass
							2	Decorative glass
							17	

FIGURE 22, TABLE 4. SPECIMEN ANALYSIS: SAMPLE 6-1N2

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
15	Saggars	Thrown	Stoneware	Thick salt on exteriors	No	No	No	Macro-temper Refractory
17	Kiln brick	Molded	Earthenware & stoneware	Salt on exteriors	No	No	No	Often thick salt glaze on one exterior surface; partial segments
21	Pugging (saggar seals) maturity bars	Pressed	Stoneware & Bisque	No	Striations	No	No	Often curved
3	Tile	Molded or pressed	Bisque	No	No	No	No	Red clay - 1 specimen may represent tile block
3	Bowls	Slip cast	Stoneware	Slip & salt	No	Yes 2	All	
6	Pans	Slip cast	Stoneware	Slip & salt	No	Yes 1	All	
10	Bowls or Pans	Slip cast	Stoneware	Slip & salt	No	No	All	1 specimen with hole in body wall
4	Flower pot	Slip cast	Bisque	No	No	Yes 1	Yes 3	1 foot & base segment 1 decorated rim
2	Jugs	Thrown	Stoneware	Salt over slip	No	Yes 1	Yes 1	1 handle segment 1 rim
2	Preserve jars	Thrown & Molded	Stoneware & Bisque	Salt over slip	No	Yes 1	Yes 1	1 bisque body
40	Cylinder vessel corks	Thrown	Stoneware	Salt & slip	5 specimens w/capacity stamps	Yes 9	Yes 22	1 partial crock 18 body or base sherds Various sub-classes

FIGURE 23, TABLE 5. SPECIMEN ANALYSIS: SAMPLE 6-152

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
4	Wads and Cockspurs	Hand modeled	Stoneware	Some salt on exteriors	Fingerprints	No	No	
4	Chucks	Thrown	Stoneware	Salt exterior	No	No	All	
1	Tile	Pressed or molded	Bisque	No	No	No	No	
42	Bowls	Slip cast	Stoneware	Slip & salt	No	Yes 2	All	5 partial vessels
3	Pans	Slip cast	Stoneware	Slip & salt	No	Yes 1	All	
137	Bowls & Pans	Slip cast	Stoneware	Slip & salt	No	No	Yes 72	65 body and base segments
5	Preserve jars	Thrown and molded	Stoneware	Slip & salt	No	No	Yes 1	4 complete bases with partial bodies 1 complete jar, damaged lip
200	Cylinder vessels corks	Thrown	Stoneware	Slip & salt	6 capacity stamps 9 handles	Yes 10	Yes 72	96 body sherds 32 foot and base segments Various sub-classes 1 partly restored crock

The Subsurface Samples

A total of 1,129 clay-bodied specimens were recovered from test trench 6-1 at all levels. Of this total, 386 specimens (from 0-30 cm) were eventually discarded following appropriate evaluation. The classes of clay-bodied specimens comprising this segment of the total subsurface assemblage and presented in Figure 24, Table 6.

The entire subsurface assemblage is represented by two major divisions of clay-bodied artifacts, those relating to firing processes, and those of the ceramic ware. A minor third division includes non-ceramic artifacts associated with the midden deposit. Of the total sample inventory, 38 specimens (3.37%) consist of kiln fabric, represented by "common reds" and refractory brick. Kiln furniture, represented by 168 specimens (14.9%) is distinguished by four classes of artifacts. These include wads, cockspurs, setting tiles, 70 specimens or 6.2%; 55 chucks or 4.87%; 18 saggar segments or 1.59%; and 25 examples of pugging lengths or maturity bars, or 2.21%. Both kiln fabric and furniture comprise 206 specimens or 18.25% of the total assemblage.

The second division of the total sample includes nine classes of wares. These include field drainage tile, 5 specimens or .44%; bowls, 48 examples or 4.25%; pans, 11 examples or .97%; bowls or pans (5 decorative), 472 or 41.81%; pots, 5 specimens or .44%; jugs, 12 specimens or 1.06%; canning or preserve jars, 14 specimens or 1.24%; cylinder crocks, 344 examples or 30.47%; and 12 miscellaneous ceramic specimens or 1.06%. This division comprises 81.74% of the total subsurface sample.

The third minor division consists of 17 non-ceramic artifacts, or 1.51% of the total subsurface sample. The non-ceramic sample includes 3 possible ribbing tools, or .27%; 5 cut nails, or .44%; 1 beer can top (0-30cm), or .089%; 1 watch balance wheel (brass), or .089%; and 7 glass segments or .62%.

FIGURE 24, TABLE 6. GENERAL DESCRIPTIONS OF DISCARDED CLAY-BODY SPECIMENS FROM TEST TRENCH 6-1, 0-30 centimeters

NUMBER OF SPECIMENS	FORM OR FUNCTION	MANUFACTURE TECHNIQUE	FIRING CLASS	GLAZING	MARKS	PROFILES DRAWN	RIMS	REMARKS
21	Kiln brick	Molded	Earthenware	Some salt on exterior	Minor mold marks	No	No	All specimens are fragmentary. Macro-tempered - refractory or soft cored
46	Chucks	Thrown	Stoneware	External salt on wall rim - often thick	No	No	Yes all	0.D. Diameters 12 $\frac{1}{4}$ ", 11 $\frac{1}{4}$ ", 9 $\frac{1}{4}$ ", 8 $\frac{1}{4}$ " Rim thickness varies - 5/8", 11/16", 3/4"
56	Wads Cockspurs Setting tiles	Hand modeled	Stoneware	Some salt	Finger marks	No	No	Various shapes and sizes, often irregular Thick lumps of clay Palm pressed
263	Bowls or pans	Slip cast	Stoneware	Slip & salt glazed. Salt or metallic oxide on rim exteriors	No	No	All	83 sherds with rim height of 2" 151 sherds with rim height of 1 3/4" 27 sherds with rim height of 1 $\frac{1}{2}$ " 2 sherds with rim height of 1"

THE MATERIAL CULTURE INVENTORY

DESCRIPTIONS AND INTERPRETATION

This portion of the report presents a descriptive as well as interpretive discussion of the total sample obtained from the surface and subsurface collection areas according to division, class, and sub-class. As discussed earlier, terminology employed is historically consistent with the North American Ceramic Industry. Terms pertinent to class and sub-class may vary somewhat, reflecting the technical evolution of the industry through the Nineteenth and into the Twentieth Centuries. Additionally, sub-class categorization may reflect purely morphological determinants.

Division One: Kiln Fabric and Firing Accoutrements

Class One: Kiln Fabric

The most essential article of equipment to the ceramic industry is the kiln. The class of kiln utilized by a pottery manufacturer was dependent upon the types of wares produced, and the availability of raw materials for kiln construction. The kiln class or type employed was not a random decision, but a fundamental step in the overall planning for a viable pottery operation.

The North American Ceramic Industry utilized three basic kiln designs (Ruscoe 1948:102-104). The first, often termed cassel kilns, employed an elongated chamber with a firebox on one end and vent chimney on the other (IBID:103). However, this design was fuel inefficient and provided irregular firing heats.

The most common type of kiln utilized, especially in the Nineteenth Century, was the round up-draught, or rectangular up-draught (IBID:103). This type, often beehive in form, could be used for firing bisque and glazed wares. This design allows more efficient firing, especially of stoneware bodies (Viel 1977:10). This kiln often has two internal, hatched compartments, central flue, and between three to nine

fire holes. With this design, flames from the burning fuel (generally wood) entered the fire holes located at the bottom of the kiln, rose among the stacked wares, and eventually existed through the roof vents or central chimney (Cox 1926:153). This beehive updraft kiln was often used by early to mid-Nineteenth Century potters because of its flexibility in adapting to production needs, and the raw materials utilized in its construction.

Early Nineteenth Century updraft kilns used in Pennsylvania by the Dutch and German potters were relatively small, often about seven feet high in the center, and were constructed of local brick and stone (Bucks County Historical Society 1972:15). A general profile view of a typical updraught kiln based on the Jessiah Diehl Kiln, Quakertown, Pennsylvania, is presented in Figure 25. This particular kiln utilized local stone exterior walls with a refractory brick-lined interior. The iron bands attached to the kiln's exterior prevented the walls from cracking due to expansion during firing (IBID:17). Generally, if this type of kiln is used in production, bungs of saggars are needed to protect the firing ware. If flame intensity is extreme due to kiln design, often bags or small columns of brick were placed in front of the bungs to protect the saggars from warping (Cox 1926:153).

The third type of kiln employed, especially during the Twentieth Century, is the rectangular or round down-draught kiln. This design, made popular through natural gas use as a fuel (Nelson 1978:232), provides uniform firing and fuel economy. With this design, flames travel upward through fire box vents to a domed roof, where deflection occurs, and are then drawn downward through floor vents, and eventually discharged via a main flue attached to an external stack (IBID:232).

It is not certain what kiln design was used by the Bonaparte Pottery. However, it apparently was of a round design and 30 feet in height, as indicated by an 1893

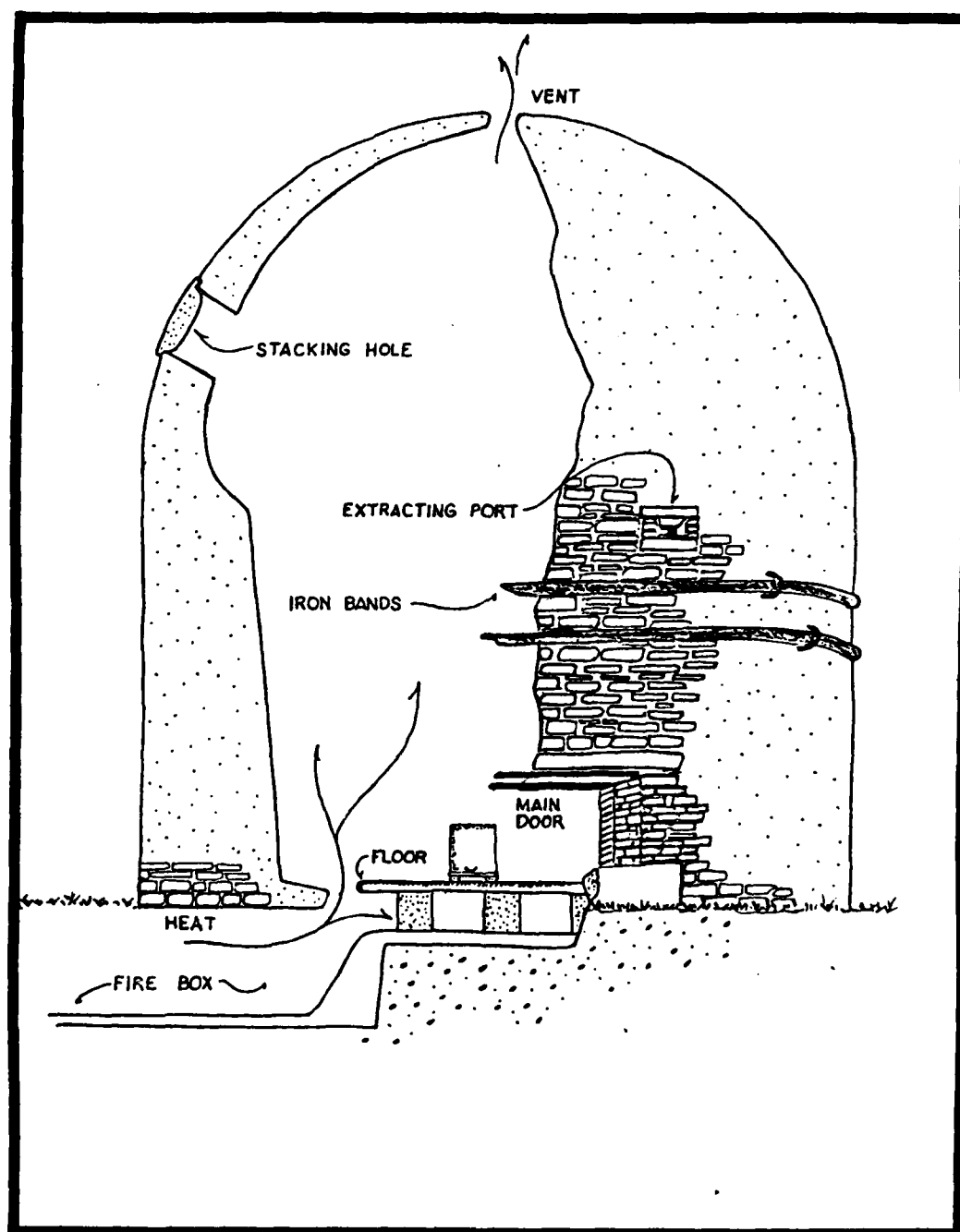


Figure 25: A Typical Nineteenth Century Updraft Kiln,
Based on the Jessiah Diehl Kiln, Quakertown,
Pennsylvania.

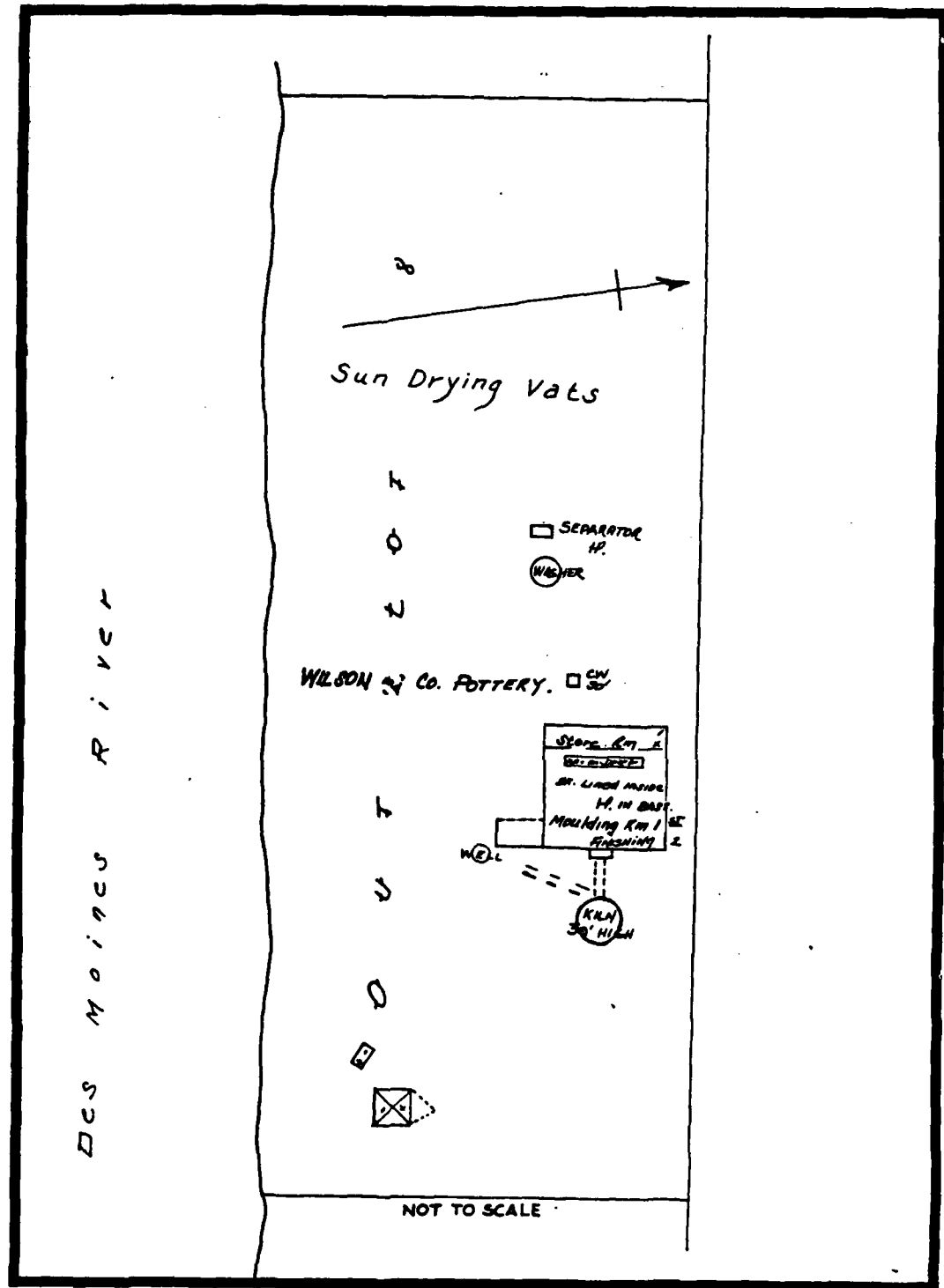


Figure 26: The Bonaparte Pottery, Redrawn From 1893 Fire Insurance Map, Bonaparte, Iowa. The Sanborn Map Company, New York, New York.

Sanborn Fire Map (Figure 26).

The kiln fabric contained in the archaeological assemblage comprises mainly brick, with examples of refractory as well as common red soft-core specimens. Along the eastern portion of the midden berm, a large segment of kiln wall was located (Figure 27).



Figure 27. A Segment of Interior Kiln Wall,
Bonaparte Pottery.

This specimen consists of macro-tempered, refractory or fire bricks cemented by refractory matrix. It appears this portion was part of the interior masonry of the kiln, due to the thick salt glaze puddling observed along its margin. It is evident that the Bonaparte works used a brick structured kiln, with soft-core, common red

brick exterior courses, and refractory brick interior. The kiln foundation may have consisted of limestone rubble, or perhaps cut and dressed stone. However, only tabular limestone rubble was observed on the site surface, similar to rock found in the foundation walls of the extant pottery building.

Examination of the non-extant Dickson Pottery Works at Vernon (13VB427), located about 2½ miles northwest of Bonaparte, indicates kiln types employed at the site were beehive, updraught varieties built of common reds and refractory brick. This pottery manufacturing site operated contemporaneously with the Bonaparte Pottery (Miller 1982MS) from 1852 to approximately 1902. Unlike the Bonaparte operation, Dickson utilized two kilns situated adjacent to an excavation which may have served as the fuel loading area for the kiln's fireboxes. The kiln's only floors extant (Figure 28), were constructed of common red and fire brick, and laid similarly



Figure 28. Dwight Miller, Archivist, examines kiln wall segment from the Dicksons Pottery (13VB427) Vernon, Iowa.

to the Bonaparte specimen (Figure 27). Also, close examination of the kiln walls at 13VB427 reveals kiln furniture still fused to the brick surface by thick salt glaze (Figure 29).



Figure 29. A close view of brick wall construction of a Dickson kiln. Note setting wedges or cockspurs attached to wall surface.

Class Two: Firing Accoutrements

This class is composed of a number of sub-classes, all representing kiln furniture used during charging a kiln with ware. The present sample contains four major sub-classes: setting tiles, cockspurs and wads; chucks; saggars; and pugging and maturity bars. Each form had a specific function in the ware stacking process, and preparing the charged kiln for firing.

The loading of a kiln and subsequent firing of the ware is the most important

step in ceramic manufacturing (Nelson 1978:235). An improperly stacked load could prove to be a disaster, and a considerable financial loss to the potter. Therefore, precision was employed to insure that all wares were stacked properly, level and stable on the kiln floor.

To assure stability and prevent vessels from touching, small lumps of raw clay were pressed by hand between the vessels. These irregularly shaped objects are termed setting tiles, cockspurs, or wads. Setting tiles and cockspurs are irregularly flat pieces of clay, often rectangular in form (Webster 1971:50), and used in balancing the ware. If the pottery stack was not properly balanced, numerous vessel bodies would crack during cooling of the kiln due to contraction (Guappone 1977:8). Wads, as well as setting tiles, wedges, and other raw-formed clay objects could be used only once, then discarded in the nearby waster (Webster 1971:50). All forms commonly found associated with the stacking process are present in the artifact assemblage except for linear and relatively flat setting tiles. The setting tiles recovered from 13VB200 are much thicker and more irregular than those portrayed in Webster (1971:50), or those that are contained in Area XV collections from other pottery sites that date earlier than 13VB200 (Sites 13VB376, 13VB425, 13VB433). This may simply reflect technological improvements adopted by the Bonaparte Pottery. The present assemblage also contains examples of wedges and cockspurs still attached to stoneware bodies, especially chucks, another important sub-class of kiln furniture.

Chucks, or chums, are flat, shallow pans that appear similar to livestock feeding vessels. Most authorities suggest that chucks were primarily used to attach to the potter's wheel prior to throwing a vessel. The chuck would provide support for the heaviest vessels and also could be used later in foot trimming (Guappone 1977:10). However, at the Bonaparte works, chucks may have played an important role in the

stacking process. The majority of the specimens examined exhibit thick salt layering along the exterior walls and various vessel sherds attached to the top of the rim. This suggests chucks were repeatedly exposed to sodium in the kiln until broken and discarded. One specimen examined (6-1, 0-30cm), not only has a cockspur attached basally, but also a foot sherd from a cylinder crock, perhaps indicating its use as a stacking foundation for vessels. Another interesting observation is the chuck outside diameters have a range between $12\frac{1}{4}$ and $8\frac{1}{4}$ inches, and rim thicknesses between $\frac{5}{8}$ and $\frac{3}{4}$ inches. It is evident that chucks were thrown in different sizes to conform to specific vessel rim diameters. Their use for throwing supports is probable, yet there is substantial evidence indicating that plaster bats were extensively employed at the Bonaparte works for this use. A number of extant specimens were examined by the author, and many still lie among debris within the pottery building basement. Bats are generally round, flat plaster slabs used to support pottery while it's being thrown, or during drying in greenware cabinets. Plaster bats also aid in clay drying by absorbing moisture from vessel bases (Nelson 1978:329).

The third sub-class of kiln accoutrements consists of a form known as saggars or seggars. Saggars are simply refractory vessels or containers of various shapes and sizes which function to protect greenware or slipped ware from flying ash or detrimental atmospheric gases while firing (Ruscoe 1948:112). Saggars are often stacked together in "bungs" within the kiln, and sealed with rope-like raw clay termed pugging (Cox 1926:158). Pugging is generally infusible clay composed of ground sherds, marl, or non-vitreous dust (IBID:158). An example of pugging used in conjunction with a round sagger is presented in Figure 30.

Examination of the sagger fragments indicate round vessels were used at the Bonaparte Pottery. The sherds are thick-walled, with coarsely ground refractory temper consisting of fragments of fire brick. The exteriors have thick, greenish salt coatings, and irregular wall surfaces. One specimen, recovered from the river

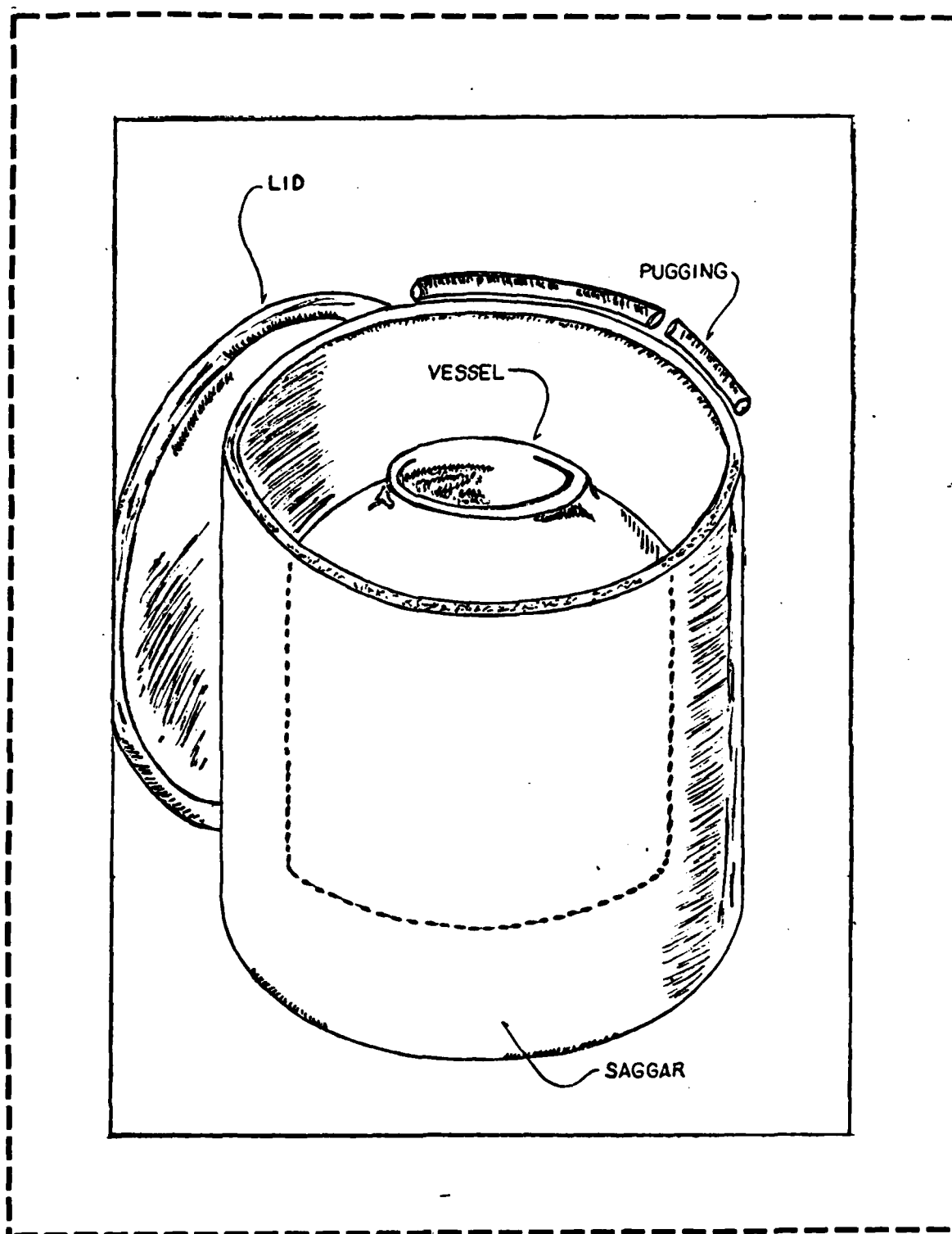


Figure 30. Use of a saggar in kiln stacking, showing vessel and pugging placement.

bank sample, has a length of pugging attached to the saggar rim. Fragments of saggars, chiefly body sherds, were found in all sample areas, including in the deepest excavations in test trench 6-1. It appears that saggars played an important role in this pottery's operation, perhaps in protecting greenware or slip-coated wares.

As previously mentioned, pugging segments were also recovered during this study. Specimens of this remaining sub-class appeared both on the site's surface as well as below surface within test trench 6-1 (0-30cm). However, as observed with chucks, these lengths of clay may have had several functions in the pottery manufacturing process. Examination of the specimens recovered reveals consistent diameters (9/16 of an inch), and external striations, suggesting pugging was mechanically formed, perhaps extruded from a press through a die. All specimens lack external coating by slip or salt, and are slightly curved. The curvature of the specimens is consistent with their function as seals for saggars, conforming to rim curvatures. However, Guappone (1977), suggests lengths of raw bar clay functioned as maturity bars. Those portrayed in Plate 11A (IBID:11) appear similar to the ones recovered from 13VB200. Maturity bars were placed in the kiln following charging, resting on and between two supports. A series of pyrometric cones was placed in close proximity. When the kiln approached vitrifiable heat, this bar of clay would bend, indicating to the kiln tender that the clay used in the stacked vessels was at maturity. As soon as the bars sagged, the tender examined the pyrometric cones, each marked, to determine the exact kiln temperature. If the clay was at maturity, the kiln fires were turned to prevent overheating and melting of the kiln contents (IBID:11).

The curvature of the pugging specimens may reflect the sagging between supports at maturity heat. One thing is certain, following firing they were discarded in the waster; their possible function beyond the use as firing furniture in a raw

state, was as stock clay for vessel handles, especially those used on cylinder crocks. Examination of a number of crock rims with handles attached indicates a general consistency in handle diameters and lengths. Although hand-modeled and somewhat outward tapered, handles are often between 7/16 and 9/16 of an inch in thickness. This falls within the diameter of the pugging obtained from 13VB200.

Summary: Division One

All classes and sub-classes of division one provide an illuminating insight into the firing processes employed at the Bonaparte works. The steps constituting preparation and completion of the products were probably the most important in guaranteeing a successful pottery business, and essential in interpreting the ceramic technology adopted during the latter half of the Nineteenth Century.

The size of the kiln employed (30 feet high) at the Bonaparte works could contain a considerable number of vessels at any given firing, assuring quantity in gallonage per year. Due to the high volume production, careful measures were taken in charging the kiln and subsequent firing.

Division Two: Clay-bodied Wares

This division represents the majority of the total sample recovered from 13VB200, and is comprised of 8 major classes of ceramic wares including various sub-classes.

Class One: Drainage Tile

The production of drainage tile became an important line of operation to southeastern Iowa potteries by 1880, and reached a peak prior to 1910 (Page 1980:162). This was due to the expansion of agricultural production to the tabular prairie divides and uplands where natural surface drainage often was poor. In Jefferson County,

as may be true in Van Buren, the last government lands sold for settlement were the prairie lands, and these were the last areas to be brought under the plow (IBID: 160). This agricultural expansion created a need for subsurface drainage, as could be provided by hollow tiling systems. As a result, a number of existing pottery operations, including the Bonaparte Pottery, began tile production to gain the advantage of the expanding tile market. By 1878, the Bonaparte Pottery was in hollow tile production with a net capacity of 6,000 linear feet per day (Western Historical Company 1878:486). Additionally, the operation employed steam power (IBID:486), perhaps for a mechanical tile press.

The sample assemblage, although containing limited examples of tile (5 specimens) does substantiate this documentation. One specimen, a surface find, NW quadrant of the study area, not only indicates the presence of drainage tile in the ceramic midden, but more importantly, demonstrates the stacking procedure used prior to kiln firing. Another specimen, somewhat incomplete, also indicates stacking methods employed (Figure 31).

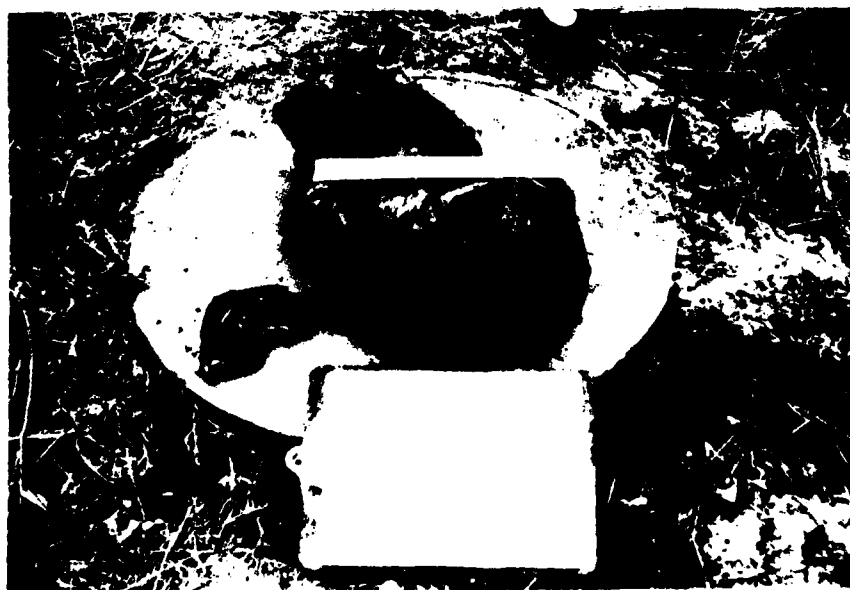


Figure 31. Melted tile stack with leveling tile attached (surface find).

The largest specimen (Figure 31) consists of three tiles, 2 inch, 4 inch and 6 inch sizes, melted into a mass due to kiln overheating. The tiles rest upon a formed setting tile exhibiting a one-and-one half-inch diameter central orifice. This stacking device, unlike those described earlier in this report, appears to have been thrown on a wheel and trimmed for uniformity. Both examples portrayed in Figure 31 exhibit Albany slip exteriors, although irregular in hue. The remaining specimens are not slipped and consist of bisque-fired wall sherds. All specimens examined are made from earthenware clay that often contains considerable mineral impurities, especially iron oxide. This enables the clay to hard fire around 950° to 1100° Centigrade (Rhodes 1974:22) and, due to oxidation, turn reddish in color. The majority of brick, tile, and additional heavy clay products are manufactured from earthenware clays (IBID:22). The general paucity of tile obtained from the test units may reflect, as stated earlier, selective dumping of defective ware in the overall midden. The specimens that appear in Figure 31 were observed on the surface, in close proximity to shovel test 4, near the shoulder of the berm, and just south of a building foundation. The results of the shovel test also indicate that this portion of the berm is dominated by deposits of tile fragments.

Class Two: Bowls

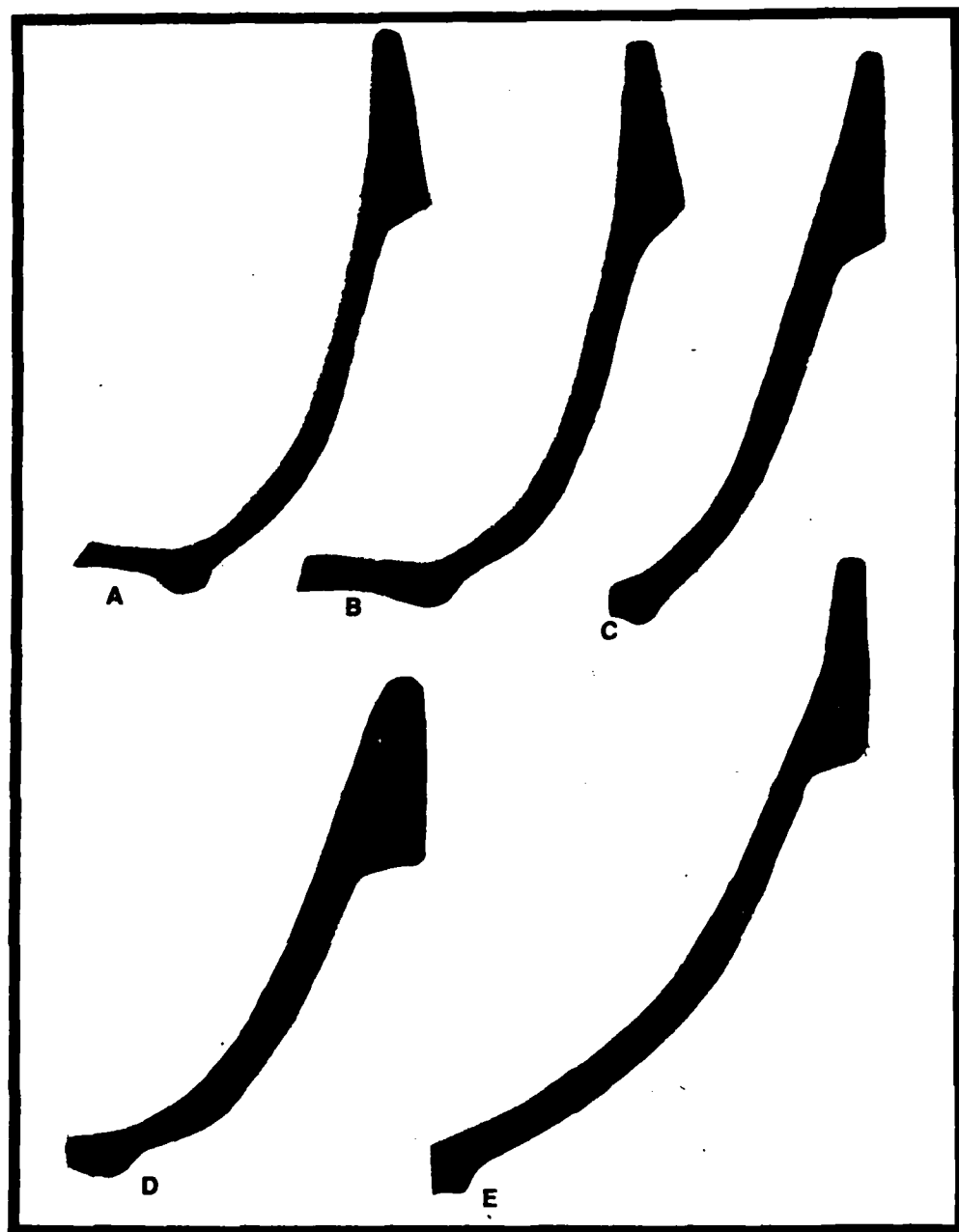
For this study, bowls consist of concave, hemispherical vessels with tapered rims. Basally, a slightly extended foot, generally flattened and beveled or slightly rounded, may be present. The bottom of the vessel may be flat and slightly recessed, or completely round. This class is similar to examples portrayed by Viel (1977) representing vessels produced by the Red Wing Union Stoneware Company, Red Wing, Minnesota between 1894 and 1906. Bowls, like pans, were manufactured in various sizes based on volume and were designated to stack in sets or nests (IBID:39). The size of each vessel in a nest often had a specific utilitarian function in the kitchen.

The smallest of the bowls, not more than 7 inches wide and 3 3/4 inches high, were used for separating eggs, while the largest specimens, with diameters of 24 inches and body heights of 12 inches, found utility as bread dough bowls (IBID). Examination of several billheads printed by Nineteenth Century potters and listed by Webster (1971:208-214), indicates that the terms bowl and pan were often used synonymously. As an example, milk bowls were often referred to as milk pans, although they appear physically similar.

Contained in the entire sample assemblage, a total of 61 bowl segments were examined. Of this number, 48 specimens were recovered from test trench 6-1 at all depths. All sample specimens appear to have been slip cast in a plaster case or mold, and lack maker's stamp or any other type of distinguishing mark.

The exteriors of vessels appeared to have been predominately Albany slip-glazed, with colors ranging from light brown matte to reddish brown glossy. A few of the vessels exhibit matte black exteriors (perhaps lead or Albany slip with cobalt, manganese, or iron oxide additive) (Rhodes 1974:270). However, all rim specimens studied lack external englobes or soda-alumina-silicate coating on rim tops or undersides, to allow kiln stacking.

Generally, salt over englobe, often exhibiting a metallic luster, appears on the external surface of the rims. The englobes, or slips, may have been carefully applied to the outer rim surface by brushing, or by use of a sponge while the vessel is slowly turned on the wheel. This side slip banding of the rims provides a considerable range in colors, from greenish-brown to greenish-yellow. This color variation may be a result of the addition of numerous oxides to a basic englobe, perhaps Albany slip (Nelson 1978:114). A total of four profiles were obtained from the surface assemblage, and four from test trench 6-1. Examples of profiles are presented in Figure 32.



BOWL PROFILES

- Specimen A: Surface of Berm, Rim Height $1\frac{1}{2}$ ", Vessel Height $4\frac{1}{2}$ ", Albany Slip Body, Salt over Slip Exterior of Rim.
- Specimen B: Surface of Berm, Rim Height $1\frac{1}{2}$ ", Vessel Height $4\frac{1}{2}$ ", Albany Slip Body, Salt over Slip Exterior of Rim.
- Specimen C: Riverbank Sample, Rim Height $1\frac{3}{4}$ ", Vessel Height $4\frac{1}{2}$ ", Matte Albany Slip Interior/Exterior.
- Specimen D: Sample 6-1-S-1, Rim Height $1\frac{3}{4}$ ", Vessel Height $3\frac{1}{4}$ ", Albany Slip Interior/Exterior, Yellowish-Green Salt over Slip Exterior Rim.
- Specimen C: Sample 6-1-S-1, Rim Height $1\frac{3}{4}$ ", Vessel Height $5\frac{1}{2}$ ", Albany Slip Interior/Exterior, Metallic Brown Salt over Slip Exterior Rim.

Figure 32.

The ceramic analysis of this class concluded that certain vessel measurements and observations have diagnostic merit, while others do not. The wall thickness of all bowls examined, including to some extent rim thickness, varies considerably, a result of the method of manufacture employed. The slip casting method, extensively used at the Bonaparte works, allowed for variations in wall thickness over the entire clay body due to the time factor involved in removing still liquid slip from plaster cases. On the other hand, the molding case will provide consistent dimensions to external surfaces, including overall vessel diameters and heights. Although clay shrinkage occurs prior to removal of the cast vessel from the case, this shrinkage would be uniform from vessel to vessel.

It appears that the height of bowl rims, as is true with pans, class three, does directly coincide with vessel size or capacity. The measurement of 263 specimens of rims from test unit 6-1 (0-30cm), which may represent bowls or pans, indicated four basic rim height variations; 1 inch, 1½ inch, 1 ¾ inch and 2 inches respectively. Study of one partly restored bowl, Cat. #161, indicates a 1 ¾ inch rim height, and a vessel diameter at the rim of approximately 10½ inches (I.D.), while 1½ inch rimmed vessels have approximate inside diameters of 8 inches.

An important observation for this vessel class suggests that there are no appreciable differences, other than minor variations in body profile or size, with bowls recovered from the surface collection versus the subsurface collection areas. All examples examined were products of slip-casting, with Albany slipped surfaces dominating.

Also included in the bowl sample, two small body sherds exhibiting nodes were recovered. At the time of the excavation, it was uncertain what vessel type was suggested by these fragments. However, additional examination of the extant pottery

building resulted in locating a plaster case mold for a large bowl exhibiting a completely round base and three nodal depressions. These noded sherds matched the case mold depressions. The function of the three nodes was to support the round base of this bowl form.

Class Three: Pans

Pans, unlike bowls, have flat and tapering walls with flat bases, and are more shallow in cross-section. Two basic profiles of a bowl and pan are presented in Figure 33.

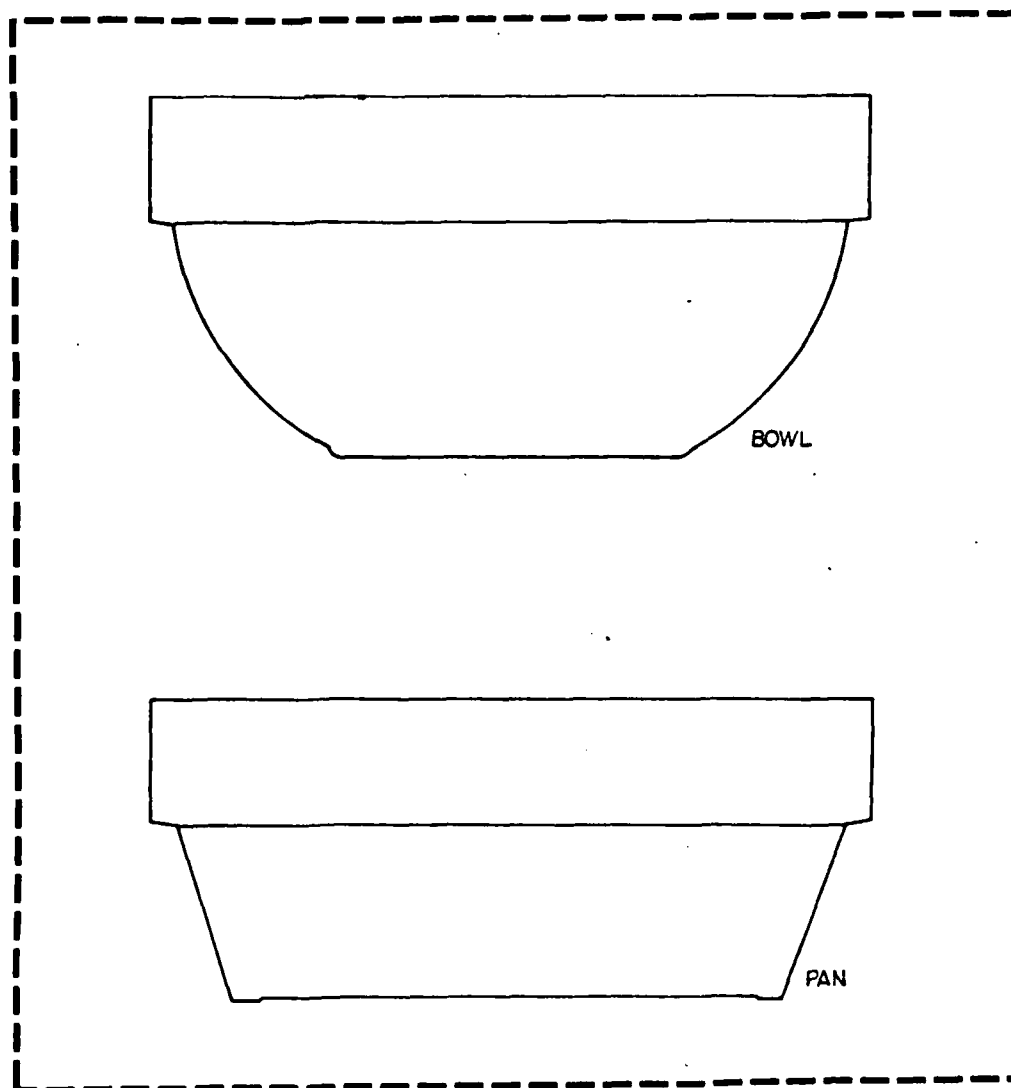


Figure 33. Basic Profiles of a Bowl and Pan.

A total of 14 rims, including partial vessels, are contained in the total sample assemblage. The rim heights are similar in form and dimension to bowls. In order to differentiate between bowls and pans, a considerable portion of the vessel wall must be intact. This fact limited the number of specimens in this class. A total of 474 rims contained in the total sample from 13VB200 could not be classified as either bowls or pans, but all represent the same tapered rim form and were slip-cast. Examples of pan profiles are portrayed in Figure 34.

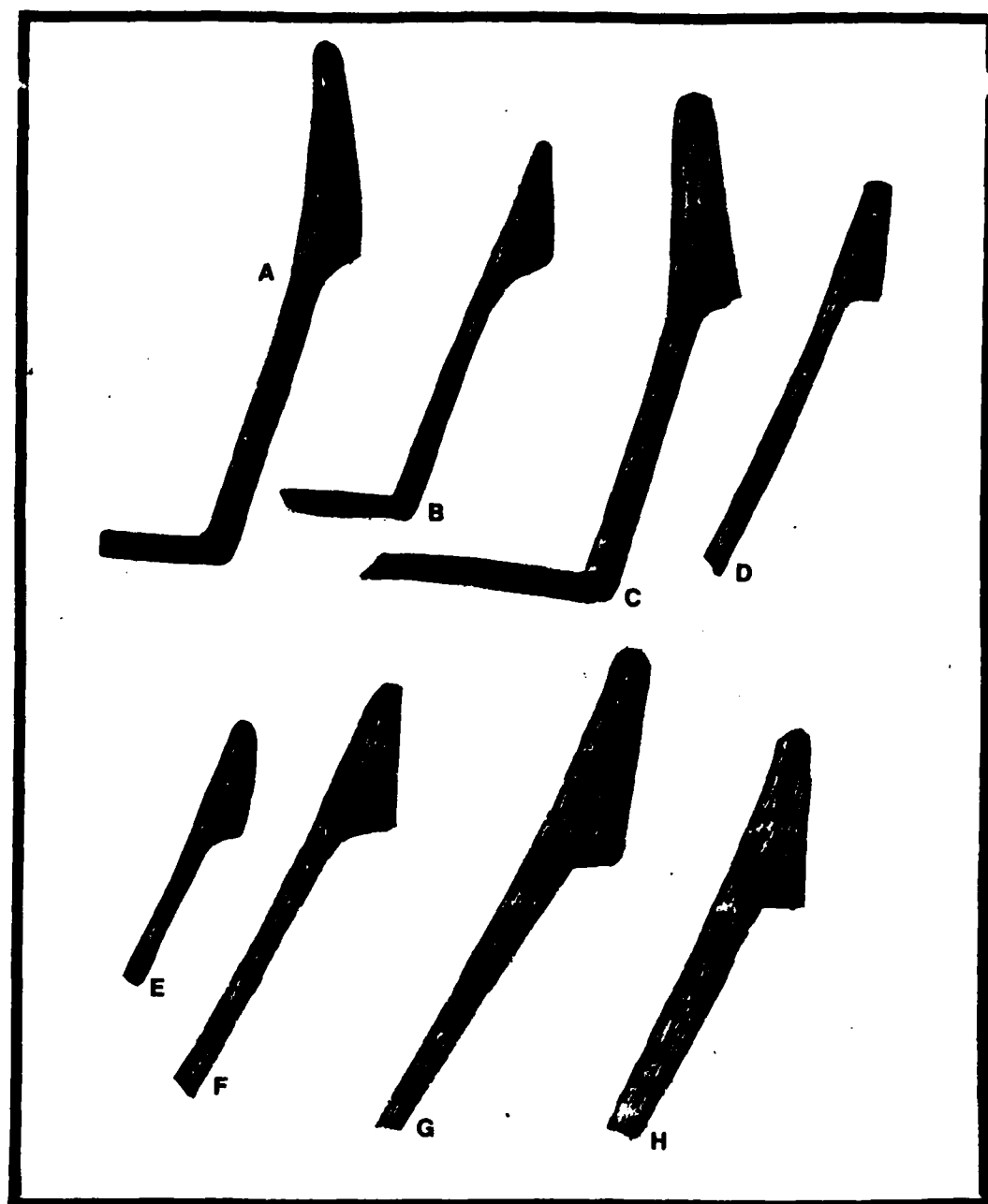
Sub-Class One: Pans

Within Class Two, sub-class one consists of pan rims exhibiting holes in the body walls below the rim bases. The holes are somewhat irregular, and were apparently cut with a potter's knife while the clay body was green. The function of this orifice is presently unknown. The specimens of this sub-class were recovered from test trench 6-1 near the 30 centimeter level.

Class Four: Bowls or Pans and Decorative Specimens

This class is represented by 347 specimens within the entire assemblage. Of this number, 5 specimens exhibit mold decorated exteriors, and may represent bowls or pans. Examples of these specimens are provided in Figure 35. All the specimens, except for Figure 35A, are bisqueware. Figure 35A is represented by two specimens of a slip-cast bowl or pan. These decorated sherds were recovered on the collection area surface or below surface in test trench 6-1. The functions of the vessels represented by the specimens may have been purely decorative, perhaps for containing house plants or flowers. The remaining 342 rims represent various rim sherds that are indistinguishable as either bowls or pans.

Class Five: Slip Cast Pots



PAN PROFILES

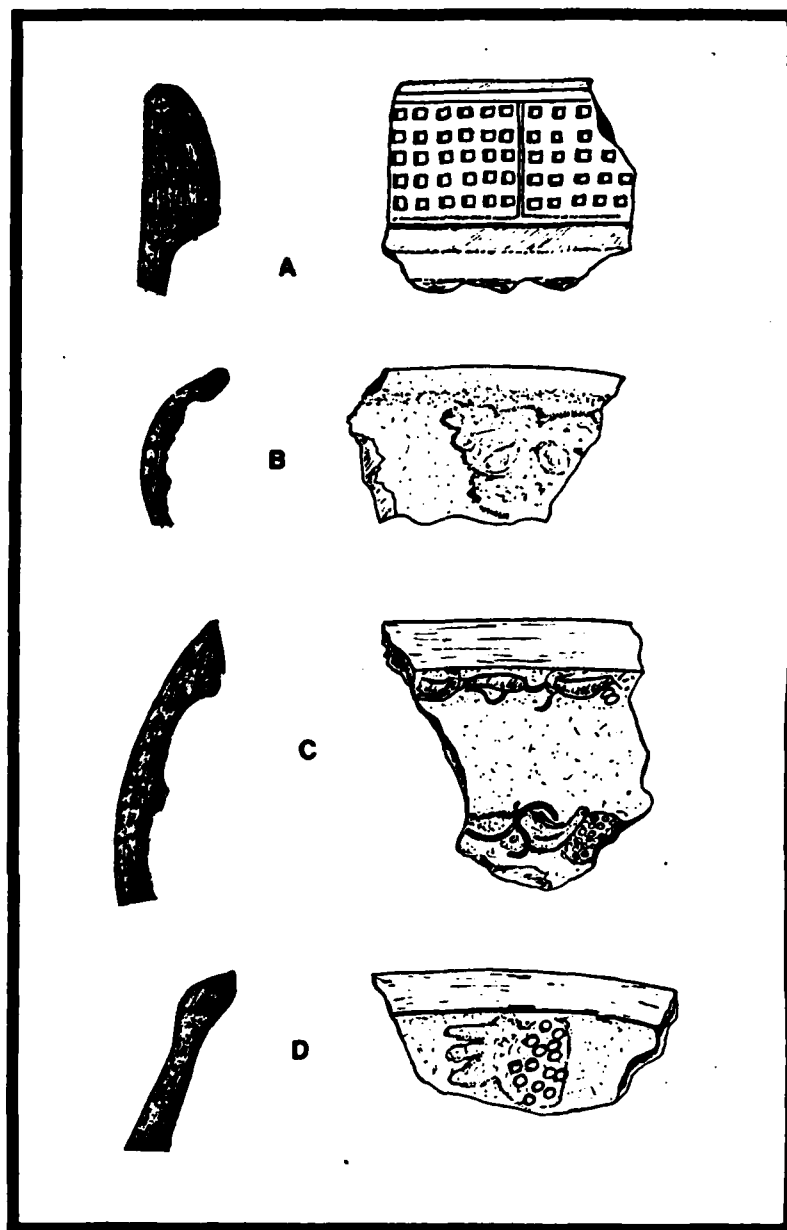
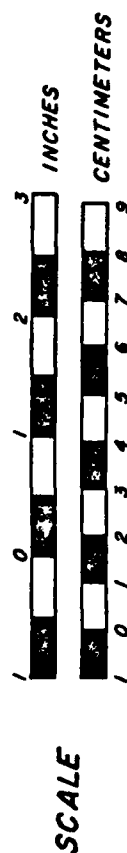
- Specimen A: Surface of Berm, Rim Height 2", Vessel Height 4 3/8", Albany Slip Body with Salt over Slip on Rim.
- Specimen B: Surface of Berm, Rim Height 1 1/4", Vessel Height 3 1/2", Light Albany Slip Body.
- Specimen C: Surface of Berm, Rim Height 2", Vessel Height 4 3/8", 7" Base, Albany Slip Body, Salt over Rim.
- Specimen D: Riverbank, Rim Height 1 1/8", Reddish-Brown Albany Body.
- Specimen E: Sample 6-1-N-1, Rim Height 1", Albany Slip Body.
- Specimen F: Sample 6-1-S-1, Rim Height 1 1/2", Albany Slip Body.

Figure 34.

SUB-CLASS ONE:

Specimen G: Surface of Berm, Rim Height 2", Irregular Hole, 3/4" Diameter,
1" Below Rim Base, Greenish Exterior, Mottled Brown-Green Interior

Specimen H: Sample 6-1-N-1, Rim Height 1 5/8", Irregular Hole, 3/4" Diameter,
1 1/2" Below Rim Base, Light Albany Interior, Moss-green Exterior.



DECORATED PANS OR BOWLS

- Specimen A: Thick Rim Segment of Bowl or Pan With waffle-zoned Decoration, Albany Slip Glazed. Two specimens Recovered from 6-1-S-2, Ca. 1m. depth.
- Specimen B: Surface of Berm, Bisqueware, Light Red, Molded Decoration just Below Rim Base.
- Specimen C: Sample 6-1-N-1, Bisqueware, Greyish-Red, Grapevine Pattern, Molded.
- Specimen D: Sample 6-1-N-2 Bisqueware, Grape Cluster Pattern Below Rim, Molded.

Figure 35.

This class is represented by 5 specimens of pots, consisting of 2 body and 3 rim sherds. For this study, a pot is similar in form to a pan, except that the vessel is narrower in diameter and taller. Pot forms generally function as flower and plant containers and are bisque fired and unglazed to insure body porosity. These "clay pots" often were fitted with a low-rimmed saucer that would match the pot size (Viel 1977: 40). An example of a pot and saucer is presented in Figure 36, based on vessel segments recovered during testing. Comparative study of this limited class grouping allows limited discussion on potential temporal placement in the operation of the Bonaparte Pottery.

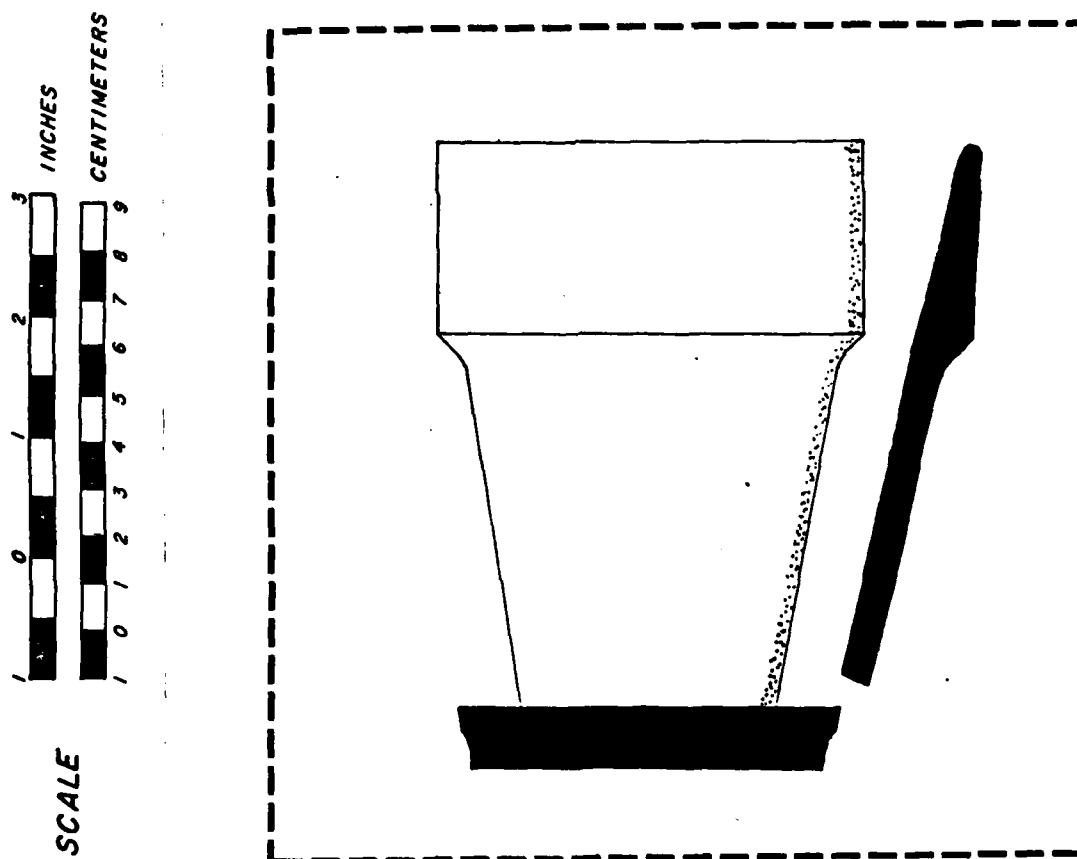


Figure 36. Bisque Flower Pot with Saucer, based on rim and body sherds recovered from riverbank and test trench 6-1.

Class Six: Jugs

There are 20 segments of stoneware jugs in the study assemblage, representing all sample areas. Analysis of the seven jug rims and shoulders indicated the presence of five possible sub-classes. Profiles obtained from each sub-class are portrayed in Figure 37.

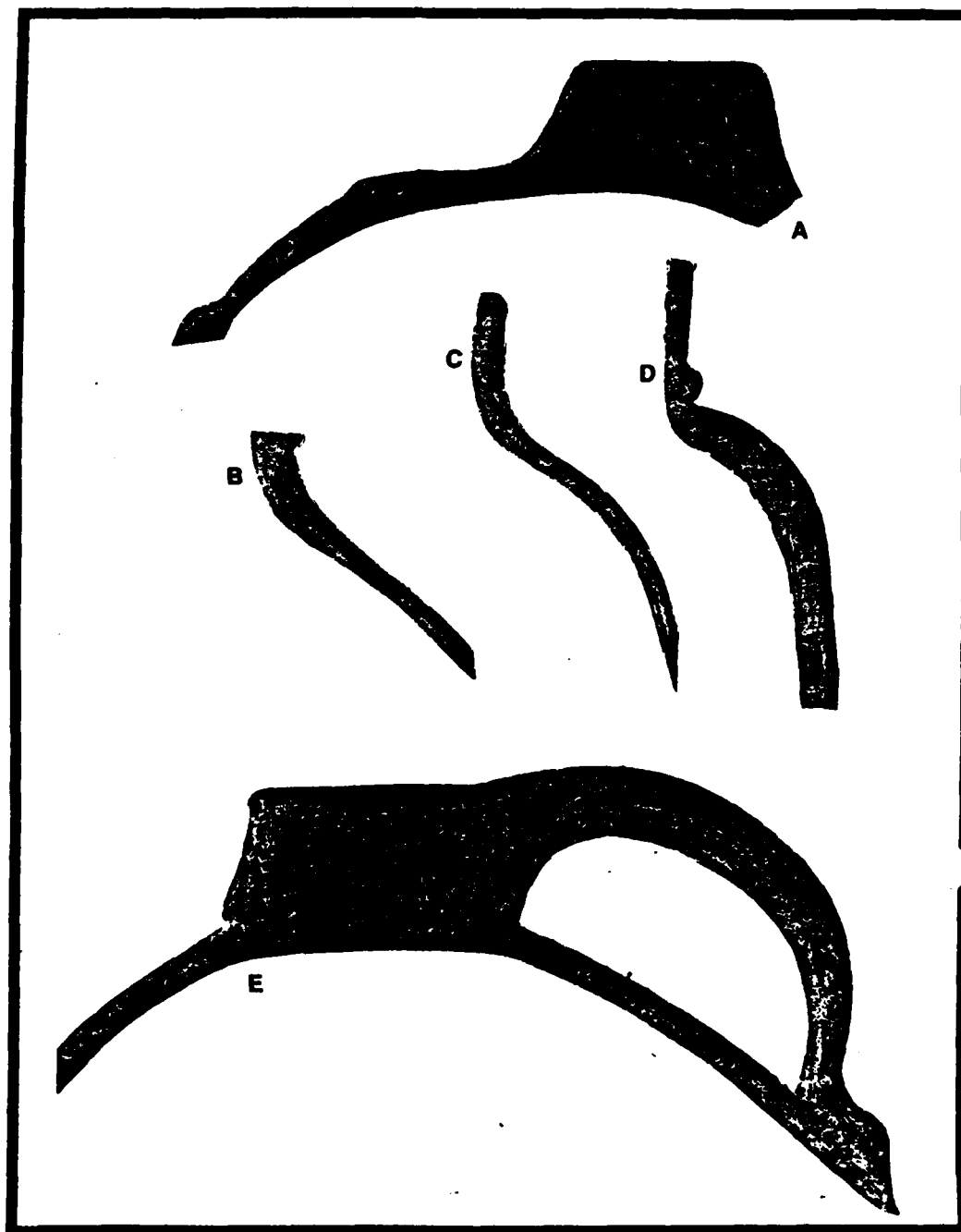
Sub-class one (Specimen A) of class six is represented by a crown segment of a shoulder jug. Although the top of the specimen is much lower in profile than true shoulder jugs, which are simply cylinder crocks with conical tops (Viel 1977:29), it does not fall into the range of forms associated with "true" jugs that are "beehive" in shape (IBID:31). Probably this specimen was produced by drawing up the vessel to the shoulder, then applying the crown, or top, in a separate operation.

Sub-class two of jugs (Specimen B) exhibits a generally flat lip, extending slightly past the rim. The wall angle suggests it may represent a shoulder jug form or a modified beehive form.

Sub-class three (Specimen C) represents a narrow, round shouldered form with a simple lip. The wall angle indicates a narrower (6 inch diameter), and perhaps taller vessel than preceding specimens.

Specimen D, representing sub-class four, is a vessel similar in form and size to specimen C. However, the shoulder wall is more massive and it exhibits a pronounced ring at the base of the spout rim. This ring addition may have provided additional support for the rim.

The last sub-class, represented by specimen E, is a round-shouldered jug with a massive applied handle. The vessel was totally thrown, spout and handle applied. This specimen was recovered fairly deep within the dense pack midden, and may



CLASS SIX: THROWN JUGS, PROFILES.

- Specimen A: Riverbank, Orifice Diameter 1 1/2", Spout Diameter 2 1/16", Shoulder Stepped, Handle Snapped, Albany Slip Interior, Mottled Brownish-Black Exterior, (sub-class one).
- Specimen B: Surface of Berm, Spout Diameter 2", Orifice Diameter 1 1/8", Black Metallic Interior, Albany Slip Exterior, (sub-class two).
- Specimen C: Surface of Berm, Spout Diameter 1 9/16", Orifice Diameter 1 1/16", Body Diameter ca. 6", Loop Handle with Thumb Weld, Albany Interior Metallic Brown Exterior.(sub-class three).
- Specimen D: Surface of Berm, Spout Diameter 2", Orifice Diameter 1 5/16", Ring at Base of Rim, Thick Shoulder, Black Interior & Exterior Slip, (subclass four).

Figure 37.

Specimen E: Sample 6-1-S-2, 1.15m, Orifice Diameter 1 1/8", Heavy Handle
with Wide Thumb Print, Albany Slip. (sub-class five).

represent an earlier form produced at the Bonaparte works. The shapes of jugs can be useful in tentative dating of stoneware potteries.

Late Eighteenth to mid-Nineteenth Century manufactured jug forms were greatly influenced by the Classical Revival in America (Webster 1971:21). This revival of classical forms and style not only affected in American architecture and the arts, but also the American Ceramic Industry. Prior to the Civil War, jugs exhibited ovoid forms and cyma curves (IBID:21), with bases narrower than the vessel shoulders, and thinner rims or spouts. By the Civil War, jug forms changed to the basic cylinder form with round shoulders (similar to sub-class five, specimen E). This modification in shape was in part reflective of the need to produce more utilitarian wares for growing markets (IBID:22). These jugs retained a "beehive" appearance and represent true jugs (Viel 1977:31). The domed forms continued to be popular until the 1880's, when advanced technology resulted in changes in jug form and manufacturing processes (Raycraft 1982:57).

Instead of a totally thrown jug, vessel bodies were molded, and only tops turned on a wheel. This form is known as a "shoulder" jug, and continued in production into the first quarter of the Twentieth Century (IBID:57). Although jugs comprise a small part of the study assemblage, the vessels represented are consistent with forms commonly produced after the Civil War and prior to molding of the vessel bodies. Late forms may exist, perhaps within the basement fill in the extant Pottery building or within other portions of the waster deposit. Brief inspection of the building basement did provide two partial, domed jugs with bases missing which are similar in form to specimen E, Figure 37.

Chronology of jug forms based on specimens portrayed by Webster (1971) and Viel (1977) is provided in Figure 38.

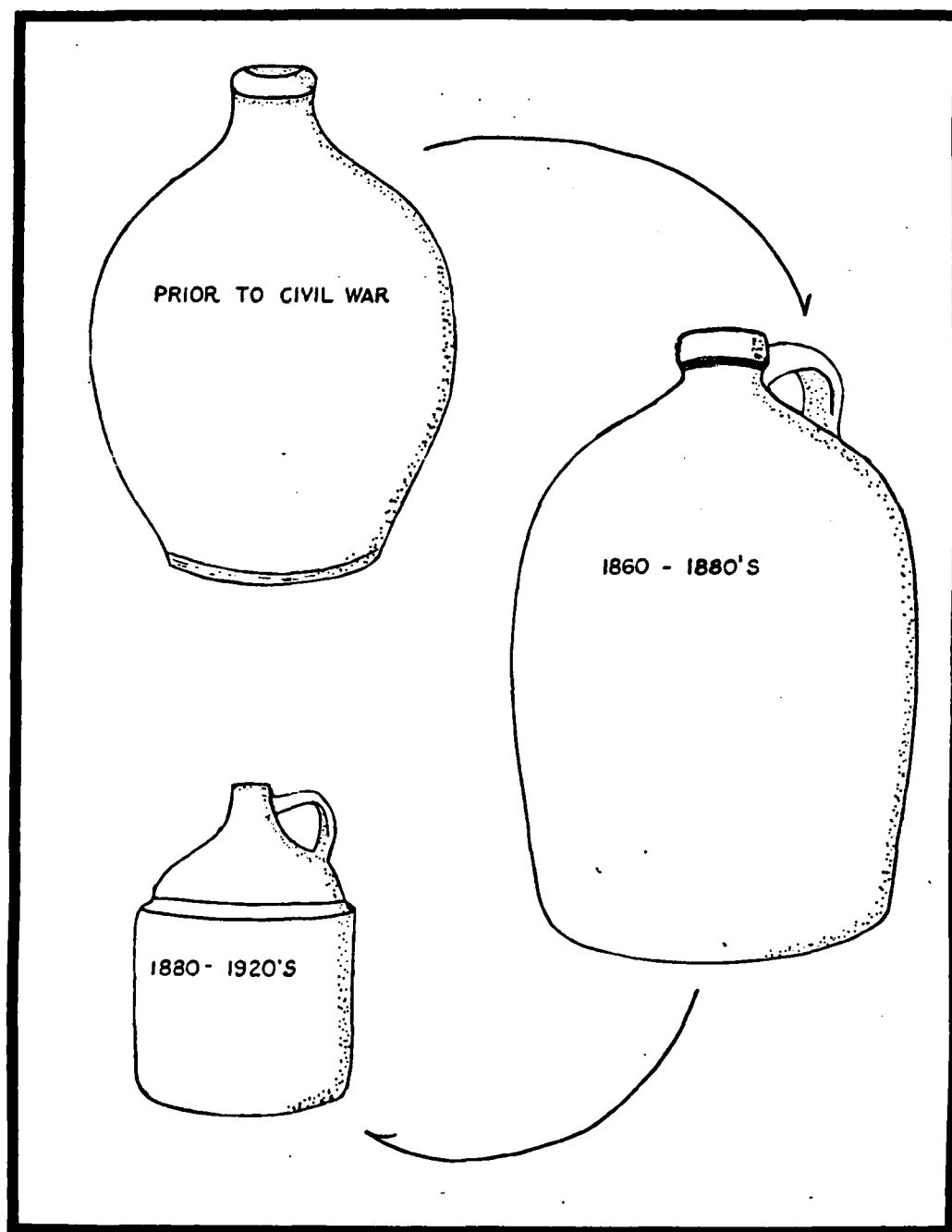


Figure 38: A Chronology of Stoneware Jug Forms.

Class Seven: Canning or Preserve Jars

This assemblage contains 17 specimens, including a complete vessel, all of which are classified as canning or preserve jars. Vessels of this class are generally cylindrical in form with round or square shoulders, and possess a double rim for sealing with a ceramic lid or a tin sealer. These vessels were often made in two pieces, and attached at the center of the body or near the shoulder. Based on the specimens from 13VB200, some forms, perhaps the earliest, are $\frac{3}{4}$ thrown cylinders with attached tops that appear to have been molded. Other examples are thrown or molded in two equal parts and attached with a band-weld. These are either round or have dodecagonal bodies. The dodecagonal vessels contained in private collections exhibit a molded inset relief maker's mark (Figures 39 and 40). Preserve jars were made in sizes of $\frac{1}{4}$, $\frac{1}{2}$, 1, and up to 4-gallon capacity (Webster 1971:Billhead from Syracuse Stoneware Co., 1899:213).

Analysis of the jar segments from 13VB200 indicates five possible sub-classes based on variations in rim and shoulder profiles that appear in Figure 41.

Sub-class one, (Specimen A, Figure 41) exhibits a round shoulder and somewhat square sealer rim and moderately thick bodywall. This vessel may have had a two-piece body with molded top.

Sub-class two (Specimen B, Figure 41) also has a round shoulder, but an outward flaring sealer rim, and deeper sealing trough. This vessel represents a two-piece body with wide, weld, horizontal band. The entire body was probably slip-cast.

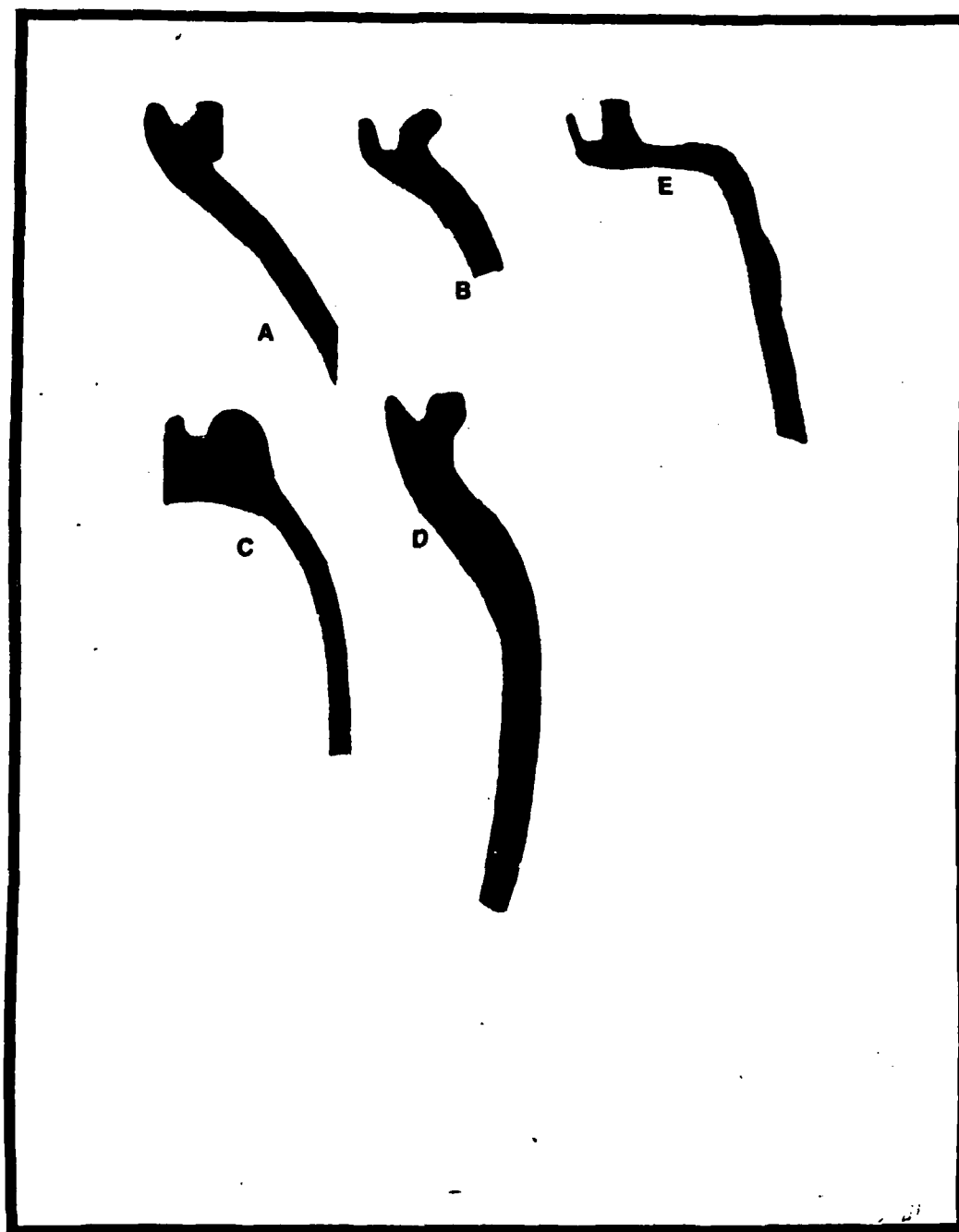
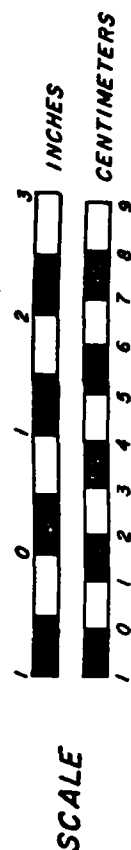
Sub-class four (Specimen D, Figure 41) is similar in rim form to sub-class two, specimen B, but its body wall thickness is greater. Also, the interior rim lip is flatter and slopes inward to the orifice.



Figure 39. Side View of Preserve Jar, from collections of Herbert and Burretta Redhead, Bentonsport, Iowa.



Figure 40. Basal View of Above Vessel.



CLASS SEVEN, CANNING OR PRESERVE JARS

- Specimen A: Riverbank, rim height $\frac{1}{2}$ ", gray mottled exterior, Albany slip interior.
- Specimen B: Surface of berm, rim height $\frac{5}{16}$ ", diameter at lip $3 \frac{7}{8}$ ", greenish-brown exterior, Albany slip interior.
- Specimen C: Surface of berm, rim height $\frac{3}{4}$ ", orifice diameter $2 \frac{3}{8}$ ", Albany slip glazed exterior, Albany slip interior.
- Specimen D: Sample 6-1N-1, rim height $\frac{1}{2}$ ", orifice diameter $2 \frac{1}{8}$ ", diameter at lip $3 \frac{1}{2}$ ", mottled brown exterior, Albany slip interior.
- Specimen E: Surface of berm, rim height $\frac{1}{2}$ ", orifice diameter $1 \frac{5}{8}$ ", diameter at lip $3 \frac{1}{4}$ ", vessel I.D. ca. $4 \frac{11}{16}$ ", body seam weld lies $1 \frac{3}{8}$ " below shoulder, Albany exterior with salt, Albany interior.

Figure 41.

The last sub-class, represented by specimen E, Figure 41, has a square shoulder, a $\frac{3}{4}$ thrown body and $\frac{1}{4}$ molded top. A rounded seam weld protrudes from the vessel body $\frac{1}{16}$ of an inch.

The specimens comprising this class constitute variegated body forms that may imply vessel form alteration through technological innovations adopted at the Bonaparte works. One vessel form, almost complete, was recovered from sample 6-1S-2 at an approximate depth of 1.37 meters. This form incorporates a $\frac{3}{4}$ thrown body and a molded top, and may represent an earlier form manufactured at the Bonaparte Pottery. This vessel, along with two others, one obtained from the surface of the Pottery building's basement, and the other contained in a private collection, are exhibited in Figure 42. The vessels are arranged in postulated chronological order. The documentation presented in the historical assessment of this report suggests that variations in vessel form, especially dodecagonal jars, may be the result of Wilson's influence. Wilson, who came to Iowa from Peoria, Illinois, apprenticed at the Peoria Pottery Company, established in 1859 by Daniel Greatback, Decius Clark, and Christopher W. Fenton (Raycraft 1982:69). At the Peoria works, preserve jars with molded dodecagonal bodies, very similar to vessel C, Figure 42, were manufactured between 1890 and 1902 (IBID:68). These vessels had impressed maker's marks similar to the Bonaparte Pottery stamp depicted in Figure 40 of this report.

Other preserve jar forms produced at Peoria are similar in size and shape to specimen B, Figure 42 (IBID:68), except that the Peoria jars are completely slip-cast, and not partially as is the case with the Bonaparte specimens. However, Albany slip appears to have been the predominate surface treatment employed at both potteries for canning or preserve jars (IBID:68-69). Based on the Peoria specimens portrayed in Raycraft (1982), totally slip-cast ware predominates by 1890, and

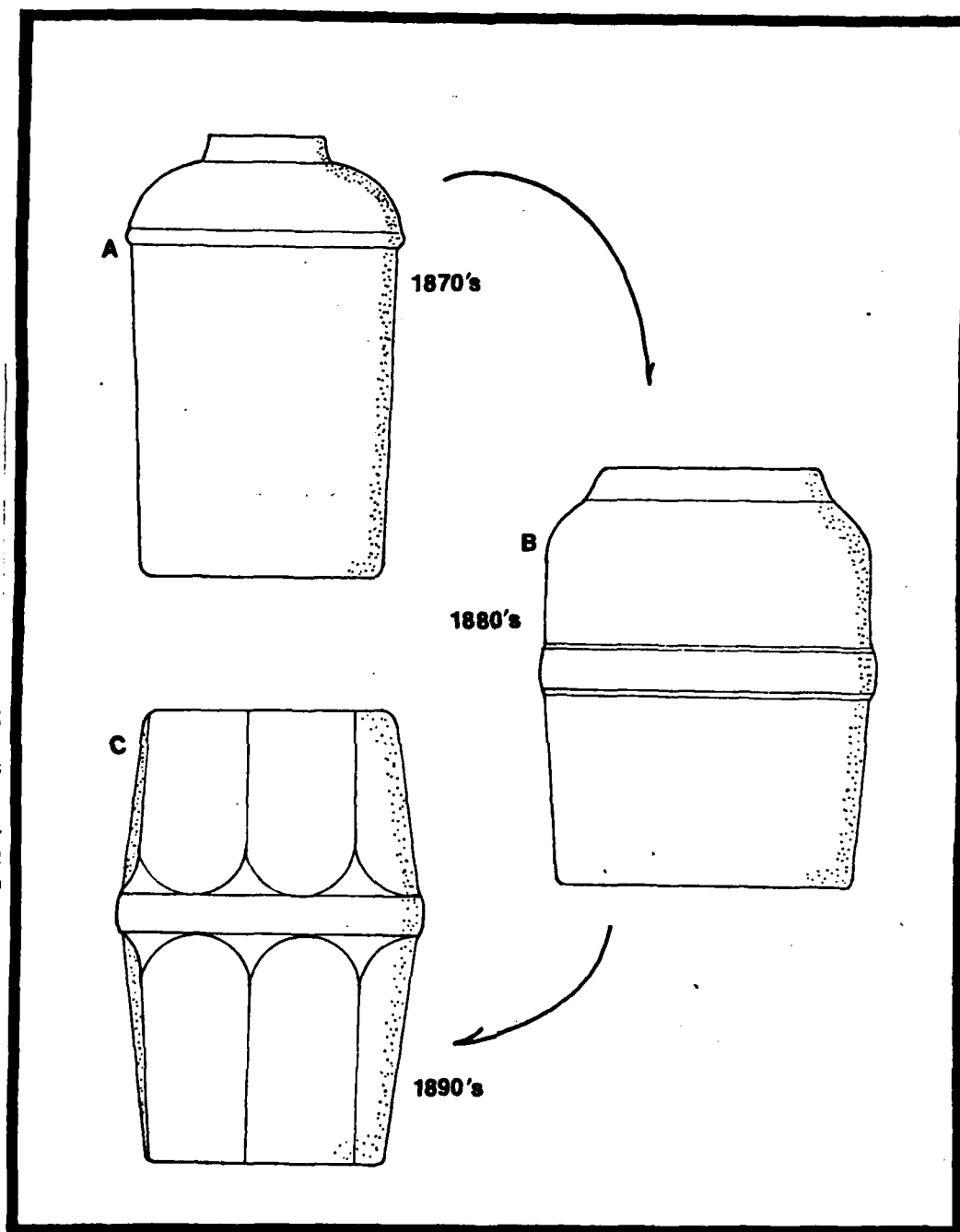
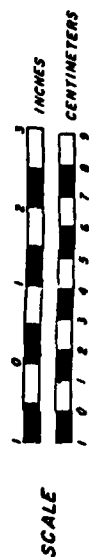


Figure 42. Postulated Chronological Placement of Preserve Jars from 13VB200.

continues until the pottery closed in the early 1900's, perhaps suggesting a temporal parallel with the Bonaparte jar forms. However, additional research, perhaps archaeological testing within the basement area of the extant pottery building, will provide supplemental interpretation for more accurate chronological placement of the Bonaparte jars.

Class Eight: Cylinder Vessels (Crocks)

This class, representing the second largest portion of the total sample assemblage, is comprised of 418 specimens recovered from all collection areas. Of this number, 344 specimens were obtained in test trench 6-1, within the dense-pack ceramic midden.

For this study, crocks consist of generally thick-walled, straight sided vessels with flat bottoms and bolstered rims. Both interior and exterior surfaces are coated with engobe, and salt glaze often appears on the exteriors, providing the vessels with a varnished appearance. Slip, or salt glaze is generally lacking at the foot or top of the rims to allow kiln stacking.

Analysis of this class concluded the presence of thirteen (13) sub-classes based on vessel rimsherd profiles. Appropriate sub-class descriptions, and examples of vessel profiles are provided below.

Sub-Class One: Lidded crocks

This sub-class is comprised of 18 specimens, 7 specimens obtained from test trench 6-1, 3 from the riverbank, and 8 from the surface of the berm. This category of rims has interior shelves that are positioned below the lip. The rims are often outward-flaring, extending beyond the body wall. This sub-class represents stoneware churns and, perhaps, water jars. Each vessel was originally equipped with a

stoneware lid or cover to protect its contents. Examples of rim profiles in this sub-class are presented in Figure 43.

Sub-Class Two: Crocks

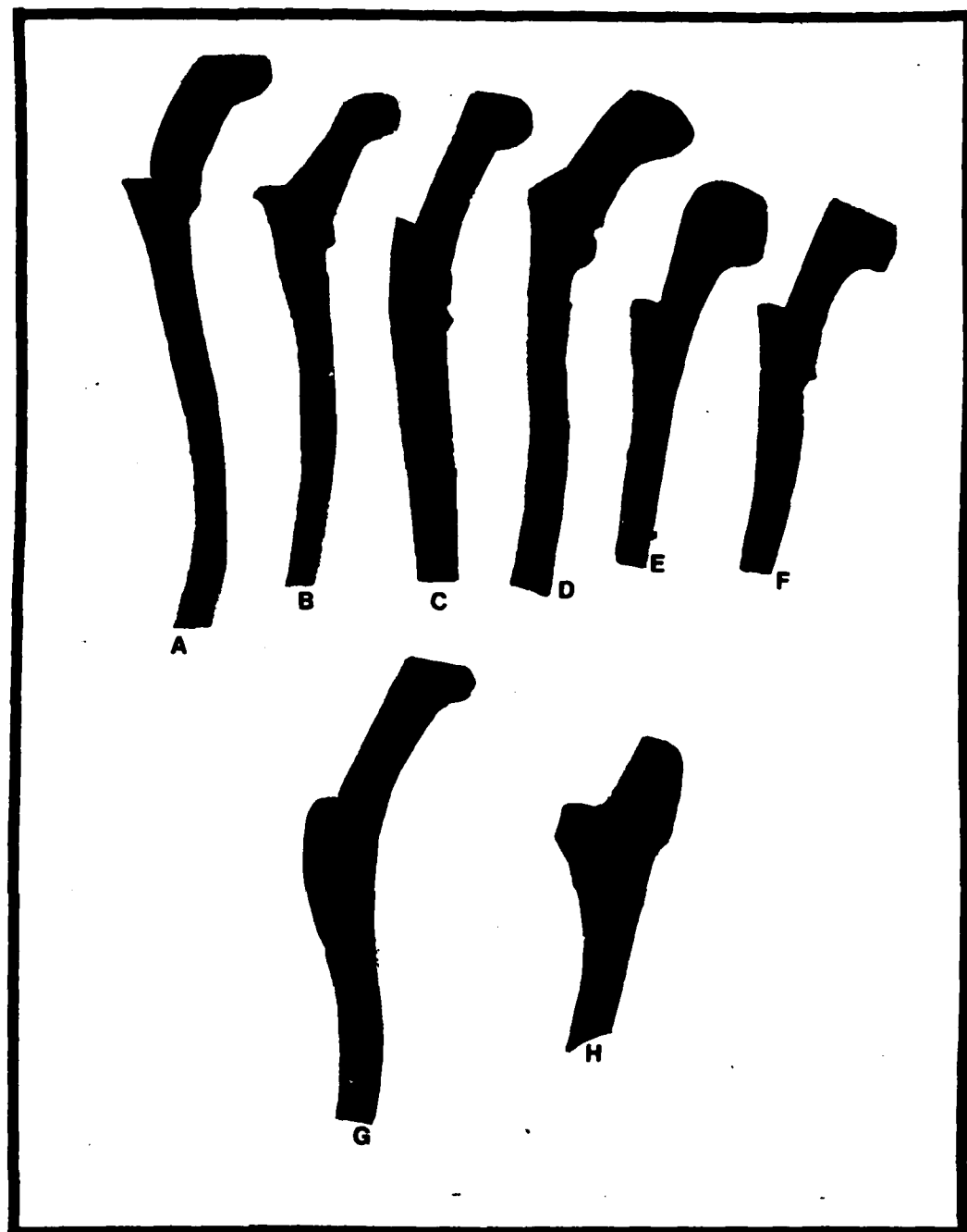
This sub-class represents generally large cylindrical vessels, with reinforced, rope-like rims. The base of the lip often sharply joins the vessel body at an approximate 45° angle. The body walls are often thick and massive, and exhibit external rib marks, or incised trim lines situated at variable distances below the lip. The outer surfaces of the lips are round, or slightly tapered, with slightly rounded interior lip surfaces. These rims often have semi-circular handles and capacity stamps. Two specimens, recovered from the riverbank, have partial maker's marks and capacity stamps. Both rims bear the mark "Parker & Hanback, Bonaparte, Iowa," and may represent the earliest crock forms produced at the Bonaparte Pottery (see Figure 44). Other examples of this sub-class are presented in Figure 45, A through F.

Sub-Class Three: Crocks

This sub-class is similar to the previous sub-class in body thickness and the rope-like appearance of the rims. However, the lower portion of the rims at body attachment slope upward and have a less acute angle. Lips are generally round to the interior lip. Specimens exhibit semi-circular handles and exterior rib incising. Examples of profiles in this category are provided in Figure 45, specimens G through L.

Sub-Class Four: Crocks

This sub-class represents vessels with somewhat triangular rims that flare inward and outward, with lips generally rounded. The body walls are generally thinner than those of the previous sub-classes. Sample profiles of this sub-class are



CLASS EIGHT, SUB-CLASS ONE PROFILES

- Specimen A: Surface of berm, external rib $1 \frac{3}{8}$ " below lip, salt over Albany slip, semicircular handle.
- Specimen B: Surface of berm, external rib $1 \frac{1}{2}$ " below lip, light salt over Albany slip on exterior, Albany slip interior.
- Specimen C: Surface of berm, external rib 2" below lip (incised trim line). Albany slip interior, salt exterior.
- Specimen D: Riverbank, external rib $1 \frac{3}{8}$ " below lip, Albany slip interior, grayish-white-yellow exterior under salt, tapered interior shelf. Matches rim angle of churn lid.

Figure 43.

Specimen E: Riverbank, exterior rib $3\frac{1}{4}$ " below lip, lip somewhat flat, Albany interior and exterior.

Specimen F: Riverbank, exterior rib $1\frac{11}{16}$ " below lip, greenish-brown interior, tannish-gray exterior.

Specimen G: Sample 6-1-S-2 below 30 centimeters, external incising (rib) $1\frac{3}{4}$ " below lip. Dark Albany slip interior, yellowish-orange. Brown mottles on exterior with salt. Exterior stamp "6"

Specimen H: Sample 6-1-N-1, 0-30 centimeters. Semi-circular handle $1\frac{1}{4}$ " below lip, Albany slip interior, black-brown exterior under salt.

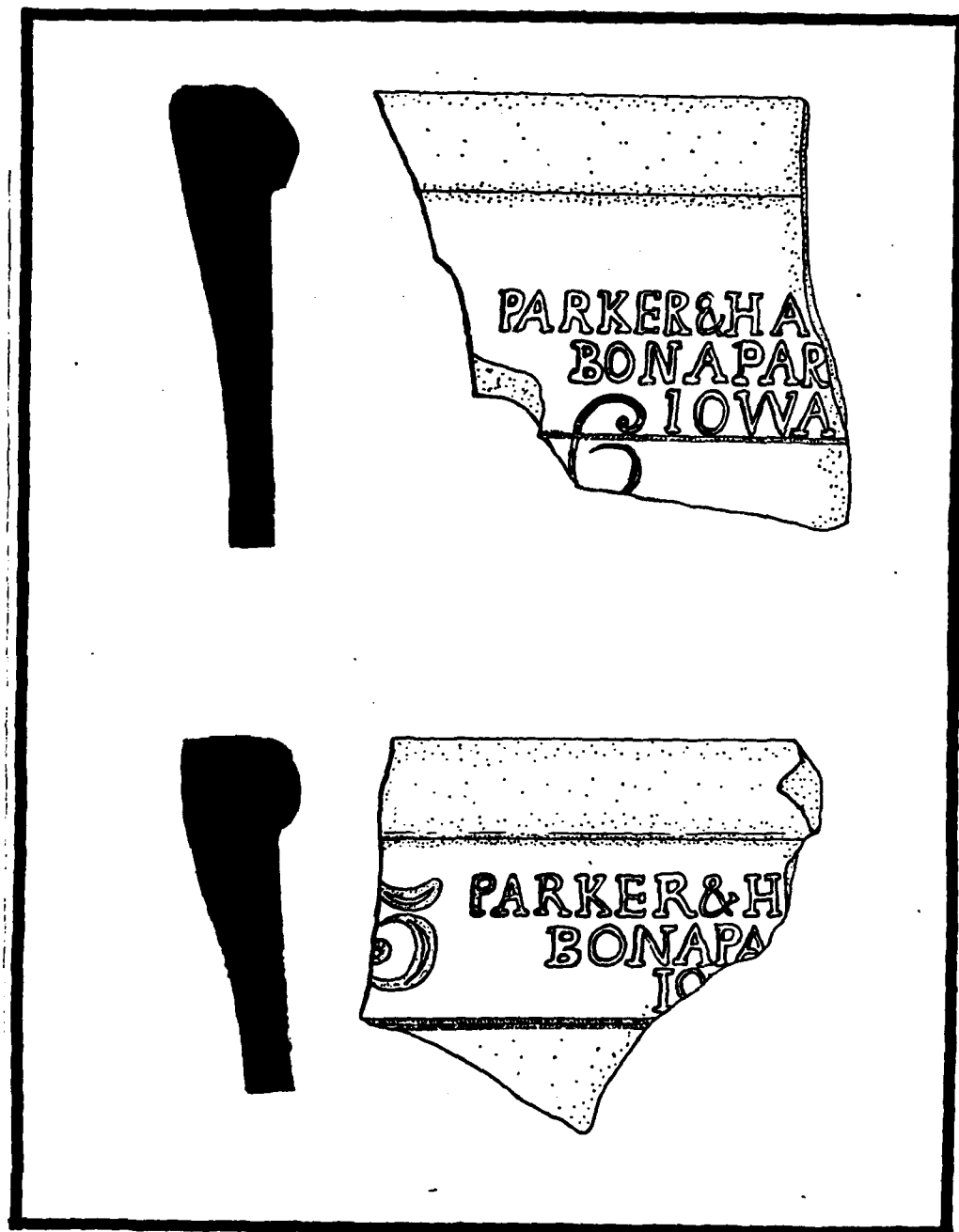
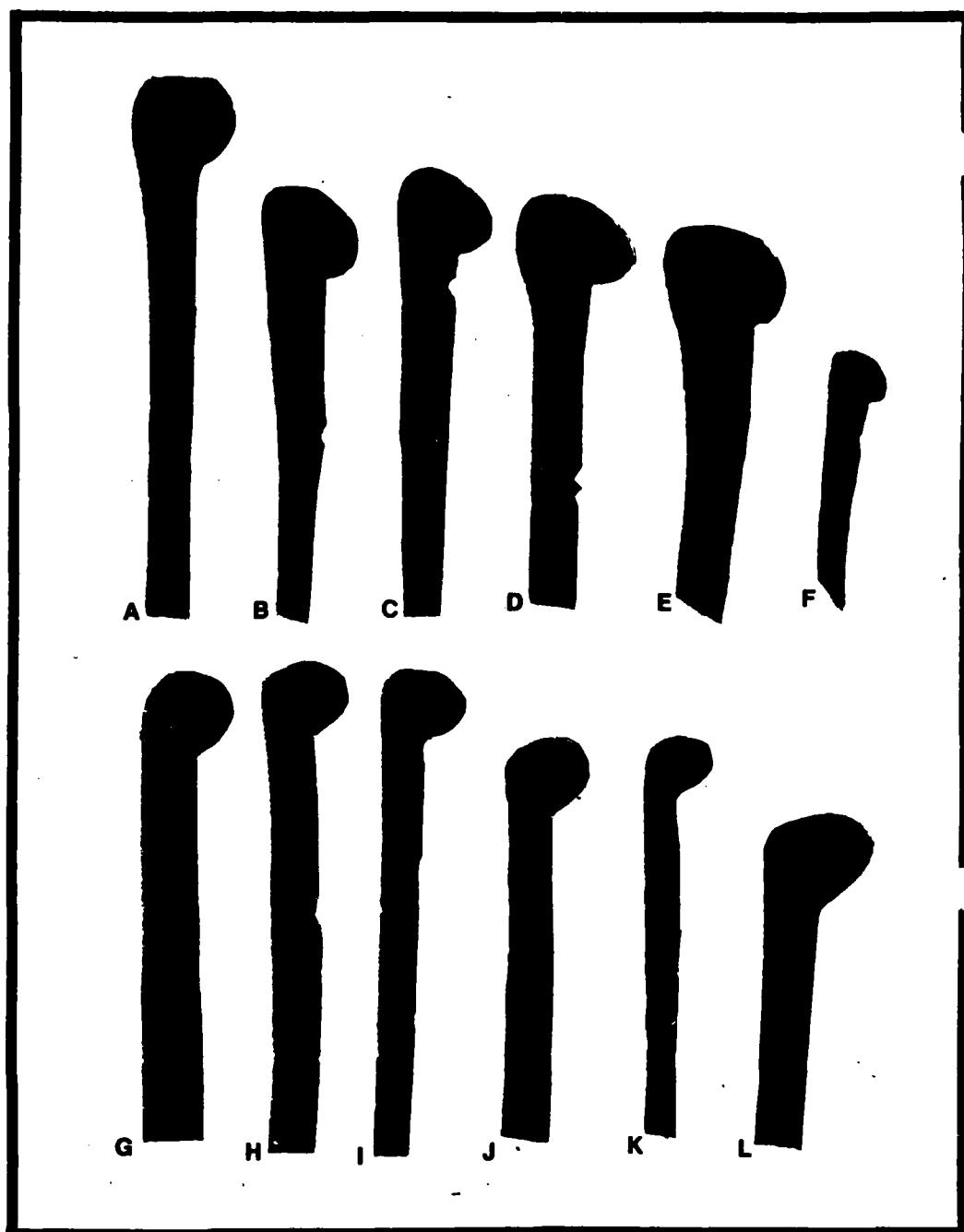


Figure 44. Stamped Rims, sub-class Two, from River bank 13VB200.



CLASS EIGHT, SUB-CLASS TWO PROFILES

- Specimen A: Surface of berm, straight wall, Albany slip interior, salt exterior, semi-circular handle. Rim height 13/16".
- Specimen B: Riverbank, external rib 2 1/4" below lip, rim height 7/8", Albany slip interior, tan-gray exterior.
- Specimen C: Sample 6-1-N-1 (0-30 centimeters). External rib 1 1/8" below lip, Albany slip, stamped "5" on approximate 10° angle. Rim height 13/16".
- Specimen D: Sample 6-1-N-2, external rib 1 7/8" below lip (incised channel), rim height 13/16", Albany slip interior, mottled brown interior. Stamped "5"; 11/16" number size, set on ca. 13° angle.

Specimen E: Riverbank, no external rib, rim height $7/8$ ", Albany interior, salt exterior.

Specimen F: Sample 6-1-N-1 (0-30 centimeters), smaller crock, rim height $7/16$ ", Albany slip interior and exterior.

CLASS EIGHT, SUB-CLASS THREE, CROCKS

Specimen G: Riverbank, rim height $3/4$ ", semi-circular handle, stamped "6", Albany slip interior/exterior.

Specimen H: Surface of berm, rim height $9/16$ ", external rib mark $2\ 5/16$ " below lip. Mottled brown-green exterior, Albany interior.

Specimen I: Riverbank, rim height $11/16$ ", semi-circular handle, grayish-brown interior, metallic brown exterior, no rib marks.

Specimen J: Sample 6-1-S-2, rim height $3/4$ ", mottled greenish-yellow exterior, brownish-yellow interior.

Specimen K: Sample 6-1-S-2, rim height $1/2$ ", no marks, metallic brown salt exterior, brownish-gray interior.

Specimen L: Sample 6-1-N-2, rim height $7/8$ ", Albany slip interior/exterior.

presented in Figure 46 A through F.

Sub-Class Five: Crocks

Sub-class five consists of thick-walled, large capacity vessels with pronounced rims with somewhat beveled lips. While seven specimens comprise this sub-class, four examples are provided in Figure 46, G-J.

Sub-Class Six: Crocks

This sub-class is represented by moderate capacity vessels with less bulbous rims than previous sub-classes. Eleven specimens comprise this category. Appropriate profiles are provided in Figure 47 A through F.

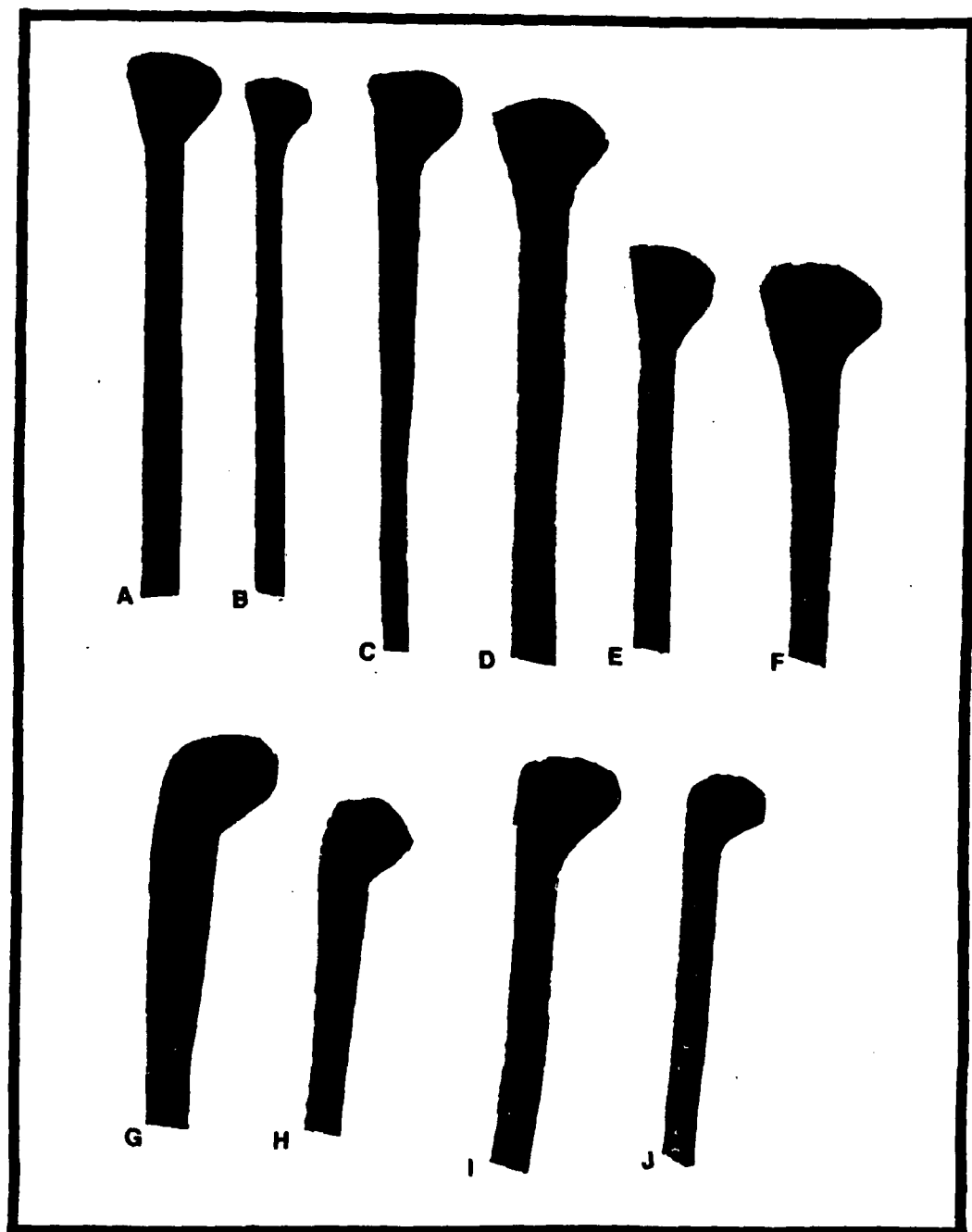
Sub-Class Seven: Crocks

Consisting of five specimens, this category represents small, straight-sided vessels with lobate rim forms. Four of the specimens have a diagnostic train consisting of the absence of slip along a band on the upper portion of the lip. The exposed clay is oxidized red, providing a considerable contrast to the Albany slipped bodies. These vessels may have functioned as butter pots, also known as butter jars (Viel 1977:120, Red Wing Stoneware Company Catalogue). Examples of this category are presented in Figure 37, G through J.

Sub-Class Eight: Crocks

This category of rim forms is similar to sub-class five rims. They have generally flat lips and somewhat tapered rims. The three specimens contained in the sample are portrayed in Figure 47, J through L.

Sub-Class Nine: Crocks



CLASS EIGHT, SUB-CLASS FOUR: CROCKS

Specimen A: Sample 6-1-S-2, ca. 1.4 meters, partial vessel, height $6 \frac{3}{4}$ ", diameter (I.D.) 9", rim height $\frac{13}{16}$ ", Albany slip interior/exterior. No marks, probable butter crock.

Specimen B: Surface of berm, rim height $\frac{5}{8}$ ", Albany slip interior/exterior, no marks, probable butter crock.

Specimen C: Surface of berm, rim height $\frac{13}{16}$ ", Albany slip interior/exterior. No marks.

Figure 46.

Specimen D: Surface of berm, partial vessel. Height $7\frac{1}{4}$ ", rim height $7/8$ ", Albany interior, metallic brown exterior with salt. No marks.

Specimen E: Sample 6-1-S-1 0-30 centimeters, rim height $7/8$ ", Albany interior/exterior. No marks.

Specimen F: Sample 6-1-S-2, rim height $15/16$ ", lip width $1\frac{1}{8}$ ". Albany interior, mottled Albany exterior. No marks.

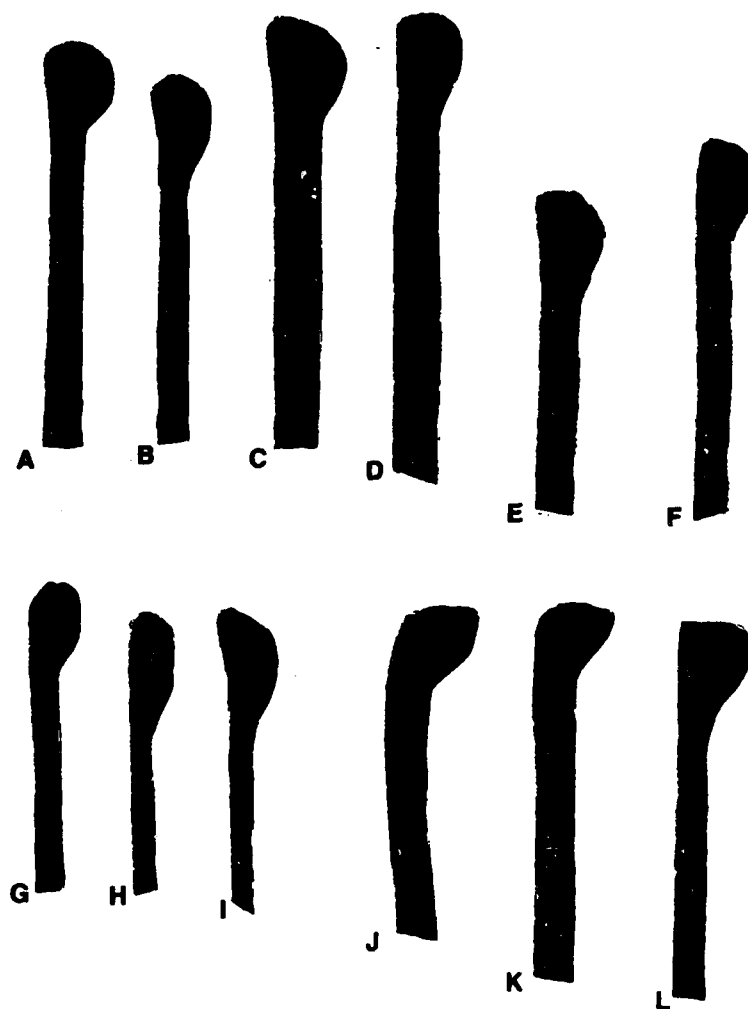
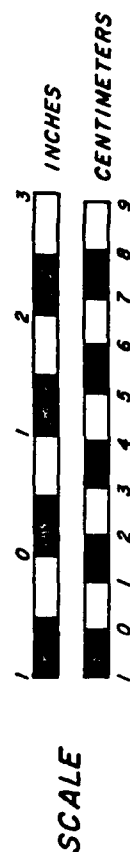
CLASS EIGHT, SUB-CLASS FIVE: CROCKS

Specimen G: Riverbank, rim height $15/16$ ", Albany interior, Albany exterior body with grayish-yellow rim with salt glaze. No marks.

Specimen H: Riverbank, rim height $3/4$ ", Albany interior/exterior, no slip on upper surface of rim. No marks.

Specimen I: Riverbank, rim height $7/8$ ", beveled lip, reddish-brown interior, light brown exterior, no marks.

Specimen J: Sample 6-1-S-1, 0-30 centimeters, rim height $5/8$ ", yellowish-green exterior, light Albany interior - salt glazed exterior.



CLASS EIGHT, SUB-CLASS SIX: CROCKS

Specimen A: Riverbank, rim height $3/4$ ", Albany slip interior/exterior, no marks.

Specimen B: Riverbank, rim height $15/16$ ", no slip applied from interior lip to half-way down lip exterior, grayish-brown Albany interior/exterior, possible salt crock. No marks.

Specimen C: Surface of berm, rim height $7/8$ ", Albany slip interior/exterior, no marks.

Specimen D: Surface of berm, rim height $7/8$ ", Albany slip interior, grayish-brown exterior, no marks.

Figure 47.

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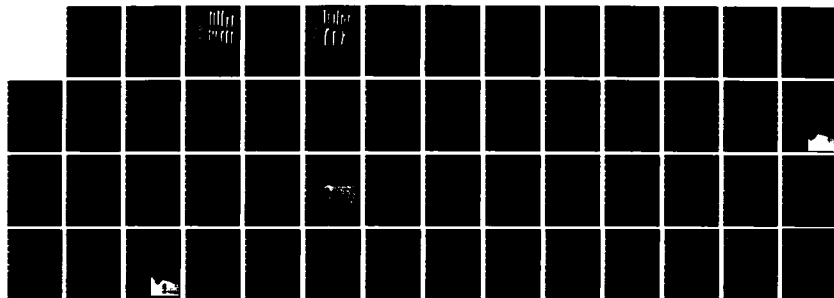
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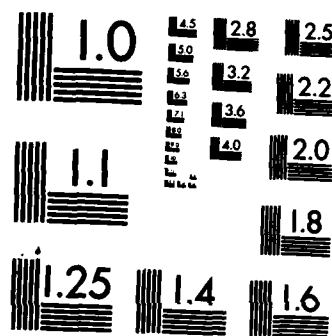
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UNCLASSIFIED

F/G 5/6

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Specimen E: Sample 6-1-N-2 (deep), rim height 7/8", Albany slip interior/
exterior, no slip on top of rim. No marks.

Specimen F: Sample 6-1-S-2, rim height 7/8", Albany slip interior/exterior.

CLASS EIGHT, SUB-CLASS SEVEN: CROCKS

Specimen G: Sample 6-1-N-2, rim height 13/16", no slip on top of rim,
Albany slip interior/exterior.

Specimen H: Riverbank, rim height 1", no slip on upper rim surface,
Albany slip interior/exterior. No marks.

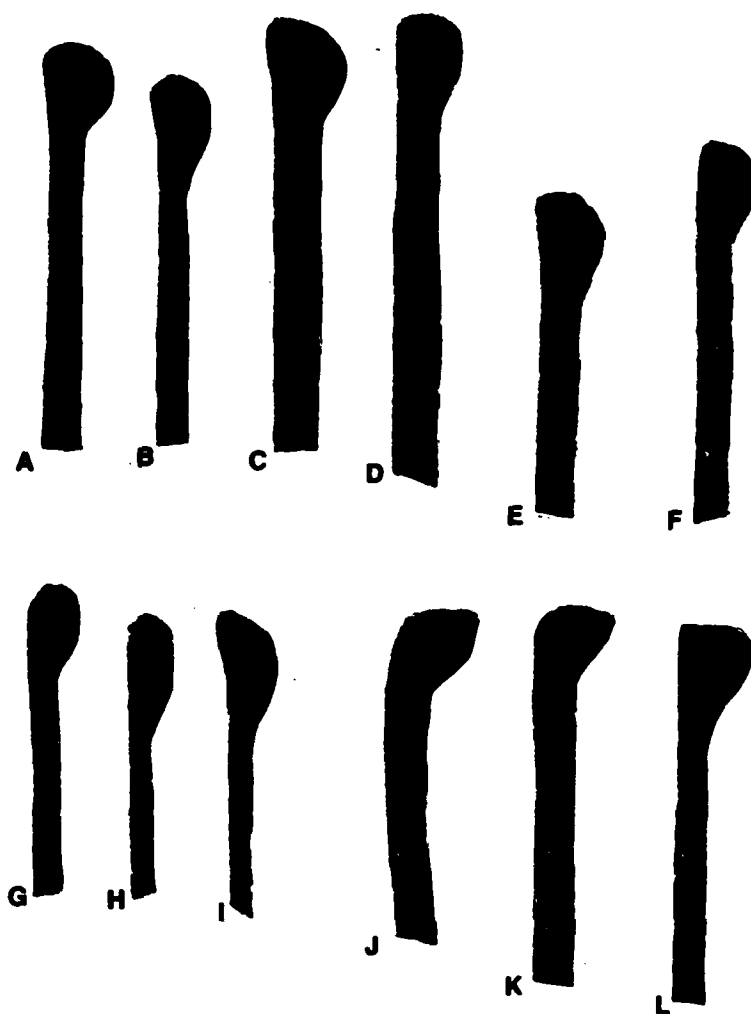
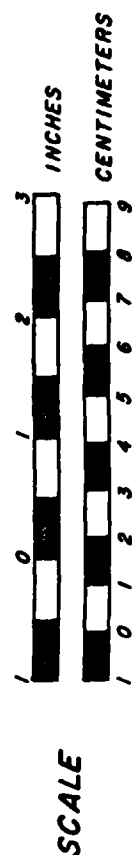
Specimen I: Sample 6-1-S-1, rim height 1", Albany slip interior/exterior.
No marks.

CLASS EIGHT, SUB-CLASS EIGHT: CROCKS

Specimen J: Riverbank, rim height 3/4", wall slightly outward sloping,
reddish brown interior, mottled brown exterior.

Specimen K: Riverbank, rim height 5/8", reddish brown interior, Albany
exterior under salt glaze. No marks.

Specimen L: Surface of berm, rim height 15/16", straight wall, Albany
slip interior/exterior. No marks.



CLASS EIGHT, SUB-CLASS SIX: CROCKS

- Specimen A: Riverbank, rim height $3/4$ ", Albany slip interior/exterior, no marks.
- Specimen B: Riverbank, rim height $15/16$ ", no slip applied from interior lip to half-way down lip exterior, grayish-brown Albany interior/exterior, possible salt crock. No marks.
- Specimen C: Surface of berm, rim height $7/8$ ", Albany slip interior/exterior, no marks.
- Specimen D: Surface of berm, rim height $7/8$ ", Albany slip interior, grayish-brown exterior, no marks.

Figure 47.

This category comprises generally round rimmed, small capacity vessels with thin walls. The vessels represented probably were low butter pots or crocks, and may have been produced in sets. Profiles are presented in Figure 48, A through F, and indicate considerable form variation between specimens, resulting from the use of numerous ribbing tools, perhaps over a long time span at the Bonaparte Pottery. This category consists of nine specimens.

Sub-Class Ten: Crocks

This category is represented by one specimen. The rim form is similar to rims included in sub-class seven, except that the top of the rim is flat. This specimen probably represents a low butter crock or pot. The profile of this specimen is presented in Figure 48, G.

Sub-Class Eleven: Crocks

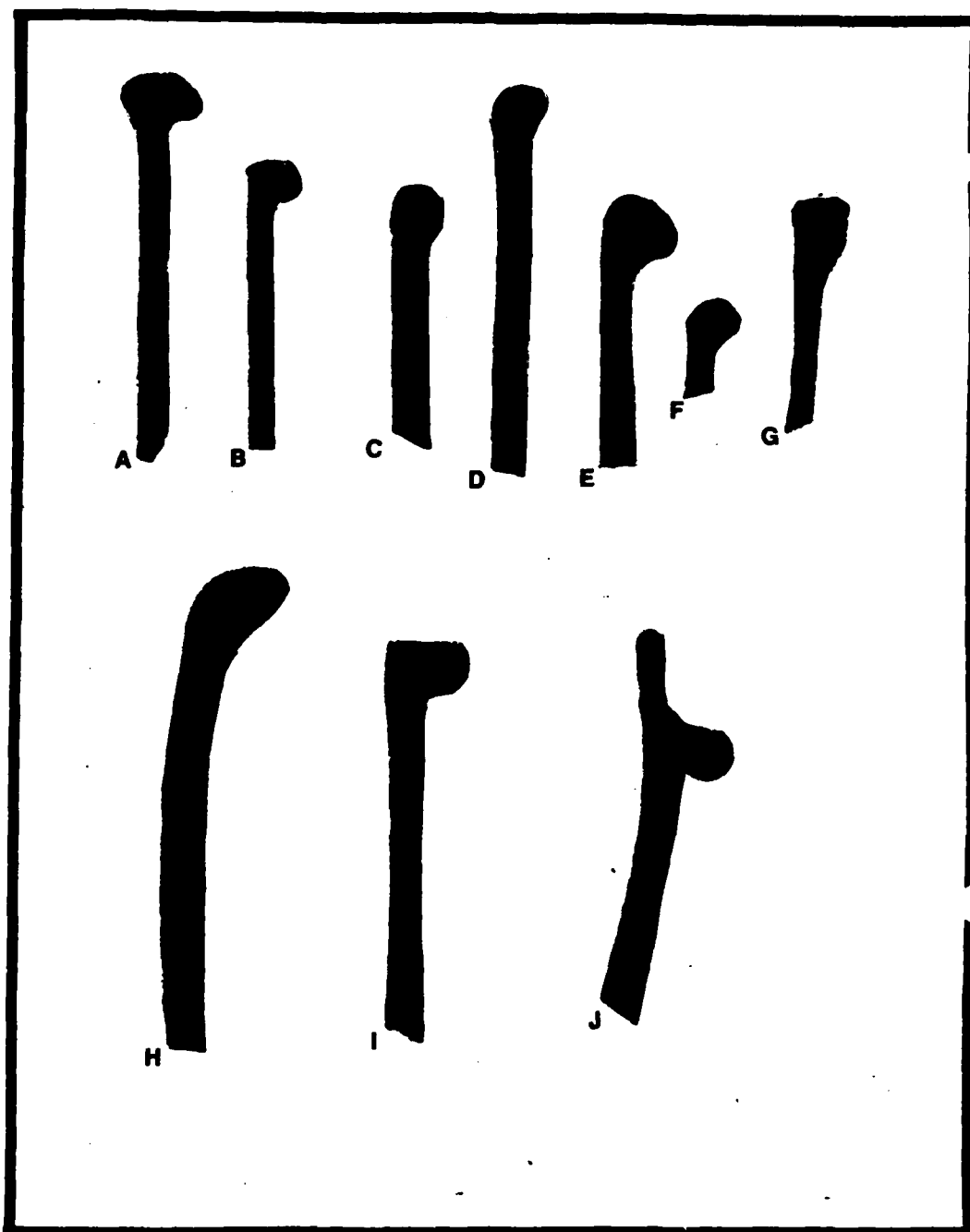
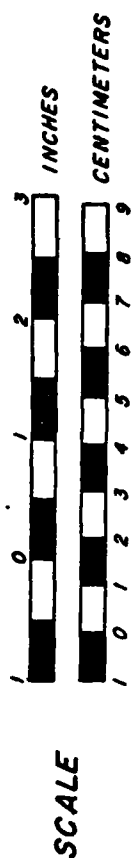
This category consists of one specimen (Figure 48, H), representing an outward flaring rim with a rounded lip. The vessel form is unknown.

Sub-Class Twelve: Crocks

This sub-class is represented by one specimen recovered from the riverbank sample area. This form exhibits straight body wall and square rim. The specimen has been bisque fired and lacks slip or salt glaze. A profile of this specimen appears in Figure 48, I.

Sub-Class Thirteen: Crocks

This sub-class is represented by one specimen recovered from the riverbank area within the project area. The form is somewhat aberrant from other specimens of the class. The specimen exhibits an additional lip surface extending vertically from the primary rim, and may have functioned as an interlocking



CLASS EIGHT, SUB-CLASS NINE: CROCKS

- Specimen A: Sample 6-1-N-1, height of rim $\frac{1}{2}$ ", Albany slip interior/exterior. No external marks.
- Specimen B: Sample 6-1-N-1, rim height $\frac{7}{16}$ ", Albany slip exterior, black interior. No external marks.
- Specimen C: Surface of berm, rim height $\frac{9}{16}$ ", Albany slip interior/exterior, no external marks.
- Specimen D: Riverbank, rim height $\frac{7}{16}$ ", Albany interior/exterior. No external marks.

Figure 48.

Specimen E: Sample 6-1-N-2, rim height 3/4", Albany slip interior/exterior.
No external marks.

Specimen F: Riverbank, rim height 9/16", Albany slip interior & exterior.
Body wall flares outward below rim. No external marks.

CLASS EIGHT, SUB-CLASS TEN: CROCKS

Specimen G: Sample 6-1-S-1, rim height 3/4", Albany slip interior/exterior.
No external marks.

SUB-CLASS ELEVEN: CROCKS

Specimen H: Riverbank, rim height 7/8", reddish brown interior and exterior. Body outward sloping ca. 12°. No external marks.

SUB-CLASS TWELVE: CROCKS

Specimen I: Riverbank, rim height 1/2", flat top, bisque fired - no englobe or salt. Thrown body.

SUB-CLASS THIRTEEN: CROCKS

Specimen J: Riverbank, rim height 1 5/16", gray exterior with no salt, no slip on interior and protruding lip surface. No external marks.

foundation for a ceramic lid or cover. The vessel form is unknown.

Class Summary

The specimens that comprise class eight represent a wide range of cylindrical vessel forms with body walls generally perpendicular to flat bases. As was true in the case of class six, jugs, earlier forms manufactured prior to the Civil War had more curvilinear body walls, and bases much narrower than the shoulders. The sample assemblage provides no evidence of this earlier form at the Bonaparte Pottery. It appears that thrown cylindrical forms were produced in quantity, second only to slip-cast bowls and pans. Comparative analysis of the specimens recovered from various collection areas suggests a general uniformity in surface treatments, lip finished, and a consistency in the range of vessel types present. The Bonaparte works produced a full line of vessel types from large capacity crocks to smaller, shallow ones often classified as butter pots or crocks. The variations in lip/rim shapes finishes utilized at the outset of the pottery in 1867, may have been produced by wooden ribs, similar to those portrayed in Webster 1971:46. However, as time passed, more semi-mechanical tooling devices may have been employed in order to produce more vessels in less time to meet the growing market. These mechanical tooling pieces were perhaps purchased from ceramic supply houses along with other equipment, including potter's wheels.

Another consistency observed with this class is handle forms appearing on large crocks and churn rims. These handles are semi-circular in shape and are positioned about one inch below the ovolo-appearing rims, and generally extend $\frac{1}{2}$ " from the vessel body. This consistency may be the result of the use of a clay press and forming dies to produce clay rope, similar to saggar seals as previously described. This formed clay would be cut to desired lengths and attached to green bodies by slip welding (Webster 1971:48).

A number of the specimens examined in this class exhibit exterior rib marks or incising. This treatment is often confined to large vessels and may appear as single or double channels that range from slight striations to shallow grooves up to 1/32" in depth. Additionally, handles if present, were attached following the cutting of the incised lines, because they often were applied over the channels. The function of these lines may have been purely decorative, however, the deeper channels, especially ones positioned near the rim, may have functioned as foundations to attach cords around the vessels to secure cloth covers protecting the vessel contents (Viel 1977:95).

Specimens in this class also exhibit numerical and identifying stamps along the exteriors of the rims. Two examples, the only ones recovered during this study, are presented in Figure 44 of this report. Both examples were found along the riverbank where the ceramic midden is exposed. The stamps, consisting of capacity numbers in gallons, are positioned on the left or lower left side of the manufacturer's stamp. The lettering and numerical style employed are similar in both specimens, probably impressed in the body with a lead printer's type block. However, the number stamp used appears to have been a separate type block. Examination of other crock rims, indicates the presence of additional numerical stamps representing a different type style. A representative sample of these stamps is portrayed in Figure 49.

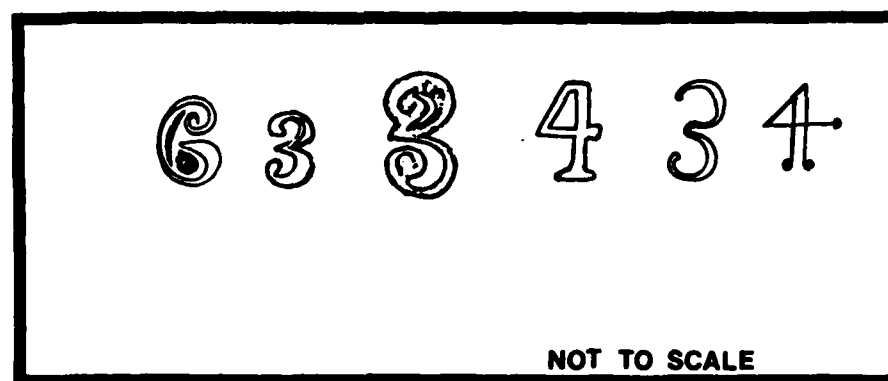
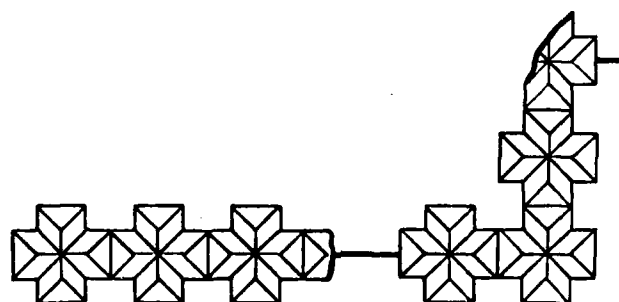


Figure 49. Capacity stamps from Class 8 specimens, from 13VB200.

Class Nine: Miscellaneous Ceramic Specimens

This class is represented by 12 specimens of molded ceramic bodies, the function of which is uncertain. The specimens, consisting of molded cruciforms that are prismatic in cross-section, were originally arranged in a lattice, with each form interconnected with wire. The specimens were recovered in sample 6-1-S-2 approximately 1 meter below surface along the south wall of the test trench.

Their original function may have been purely decorative. However, a molded stoneware washboard portrayed in Raycraft (1982:77) appears similar to the configuration suggested by these problematic bodies. The specimens examined are bisque fired with no external engobe applied. A small segment of these forms still attached to a wire is presented in Figure 50.



NOT TO SCALE

Figure 50. Problematic ceramic lattice fragment from 13VB200.

Division Three: Non-Ceramic Artifacts

This division comprises 17 non-clay-bodied specimens that were recovered from all testing units. The division is subdivided into three classes: ceramic tools, miscellaneous metal, and glass artifacts.

Class One: Ceramic Tooling Devices

This class comprises three portions of metal lipping tools, all of which were recovered in test trench 6-1 at the 0-30 centimeter depth. These tools probably represent commercially manufactured devices employed for rim/lip finishing on cylindrical vessels, especially crocks with bolstered rims. The three specimens consist of curved sheet metal forms similar in appearance to narrow, linear shoehorns, two of which remain attached, by a stove bolt to a $\frac{1}{2}$ -inch iron rod. This rod, slightly curved, is inset within a rectangular iron block, which in turn is positioned on the terminus of a tubular pipe and held stationary by a handled nut. This configuration would allow variable positioning of the tool according to the piece being worked. The tubular pipe extends $2\frac{1}{2}$ " perpendicular to a longer ($16\frac{1}{2}$ ") pipe which may have functioned as the device's foundation, attached directly on the frame of the potter's wheel. An example of a complete specimen of this class is portrayed in Figure 51.

This particular specimen is equipped with a forming tool for ca. $5/8$ " diameter rim lips. The remaining specimens, although rusted and deformed through damage, are very similar in dimensions. It is hoped that further archaeological inquiry at 13VB200 may provide additional specimens of tooling devices utilized at the Bonaparte Pottery.

Class Two: Miscellaneous Metal Artifacts

This class is represented by seven specimens comprising three sub-classes of metal artifacts.

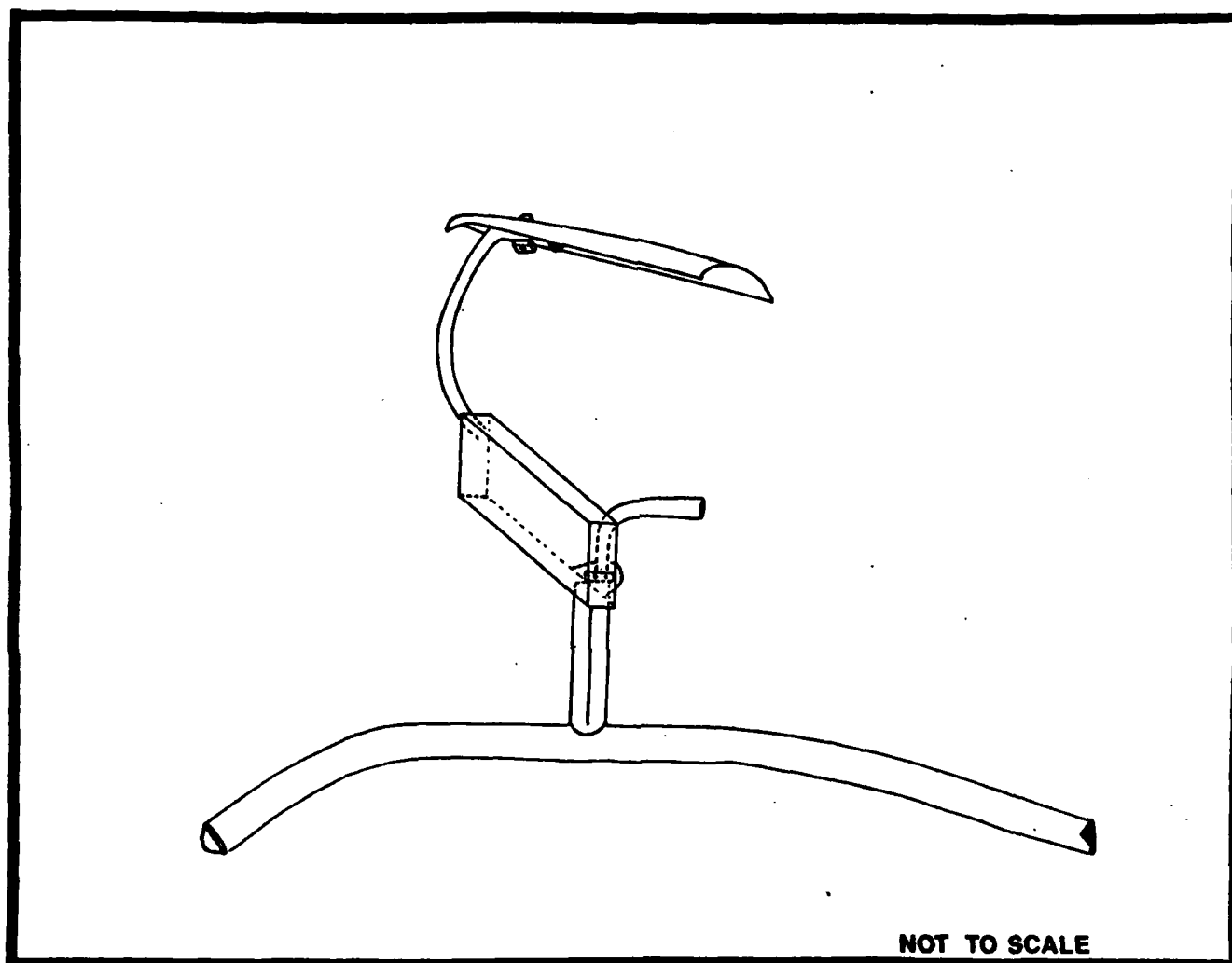


Figure 51. Reconstruction of possible lipping tool recovered from 13VB200.

Sub-Class One: Nails

This sub-class comprises 5 iron nails that range in size from 20-pennyweight to 6-pennyweight. All specimens represent cut nails and would date to the last half of the Nineteenth Century.

Sub-Class Two: Possible Watch Parts

One specimen obtained from test trench 6-1 (below 30 centimeters) represents a possible balance wheel for a watch or small clock. The specimen has a diameter of 7/8" and is 1/16" thick. The origin of artifact is uncertain.

Sub-Class Three: Metal Containers

One specimen of a metal can top comprises this sub-class. Although fragmentary and severely rusted, the artifact appears to represent a beer or soda can with pierced top. The specimen may be intrusive to the midden deposit due to its provenience within test unit 6-1 in close proximity to the city sewerline trench.

Class Three: Miscellaneous Glass Artifacts

This class is comprised of seven fragments of glass representing two sub-classes.

Sub-Class One: Bottle Glass

This sub-class contains four segments of bottle glass represented by one shoulder/neck segment, 2 fragmentary bases (embossed) and one partial shoulder/body with seam mark, all suggesting the presence of four separate vessels. The neck segment exhibits a lip/neck finish similar to that which occurs on shoo-fly flasks (Berkow 1973:29).

Sub-Class Two: Window Glass

Three specimens comprise this sub-class. One specimen, consists of a 1/8" thick segment of a clear windowpane, while another is a 7/32" thick segment of plate glass. The remaining specimen, a 5/32" thick plate glass piece, has a sunburst pattern of embossing on one surface and may represent a segment of a privacy window. This specimen may date from the 20th Century. All of the above specimens

were located within the southern portion of test trench 6-1 (0-30 centimeters).

DISCUSSION:

The material culture inventory obtained from the present investigation, although somewhat limited in scope, has provided a diversity of analytic and descriptive data allowing comprehensive interpretation of ware types present, and manufacturing processes employed at 13VB200. Although the majority of the clay-bodied artifacts represent waster specimens, discarded due to imperfections or damage, collectively they serve as indicators of the level of technology adopted in the ceramic industry in Iowa during the latter half of the Nineteenth Century.

This report has been generally restricted to discussion regarding materials recovered during testing within the proposed project area, comprising the pottery's ceramic dump. However, this consists of a small portion of the total manifestation. Based on preliminary investigation encompassing the extant pottery factory building and vessels contained in private collections, a storehouse of data remains to be addressed. This would include the archaeology contained within the basement deposits of the Pottery building, as well as the architectural fabric present. Collectively, this data could provide a significant contribution to interpreting this phase of Iowa's historic industrial development during the Nineteenth Century.

As discussed previously, the ceramic inventory recovered as a result of this study indicates the technological innovation expressed by the Bonaparte potters, brought about by economic necessity in competing for expanding local and regional markets. Prior to the Civil War, stoneware potteries in Iowa, predating 13VB200, appear to have catered to more localized markets, and within a relatively short period of operation saturated them with their wares. As a result, many of the earlier Nineteenth Century ceramic craftsmen were a migratory lot, often following

waves of settlement into the states' interiors. This assessment is supported by the historical research of Tandarich (1977) and Miller (1982) in their efforts to trace the locations of potters in Wapello and Van Buren Counties. Generally, the pre-war potters produced stoneware completely by hand, often utilizing home-made ceramic tools, including wheels (Webster 1971:39). This method of production limited the quantity of vessels available for the marketplace. However, the improvements in regional transportation played an important role in the gradual shift from hand-built wares to more mechanical production techniques around the mid-Nineteenth Century. In Iowa, as was the case in the northeastern United States, river transportation became one of the most important factors in determining the success or failure of the earlier potteries (IBID: 38). The efficient transport of wares, including ceramic supplies, enabled small, localized operations to expand into more viable commercial enterprises.

With the coming of rail transportation to southeast Iowa in the 1850's, especially the Keokuk, Fort Des Moines, and Minnesota Railroad, (Ryan, 1978:22) new markets were made available for local craftsmen. Also, certain clay products, especially Albany slip from Albany, New York, could be purchased and transported to mid-western potteries more efficiently, enabling the manufacture of more consistent, high volume products. The expanding markets necessitated employment of more modern, semi-mechanical production techniques at local potteries, including hiring more workers. Economic expansion of the industry in Iowa seems to have occurred following the Civil War, and reached its zenith in the 1880's. This appears to be true with the Bonaparte Pottery, although established during the onset of market expansion. This economic growth allowed Sydney Parker and Thomas A. Hanback, both former apprentices of Robert M. Dickson of Vernon, to establish the Bonaparte works in 1866-1867 (see Historical Assessment of this report,

Appendix 2).

As to the ceramic assemblage obtained from the site's dense-pack waster midden, tentative conclusions concerning possible chronological seriation of the Bonaparte wares can be forwarded.

There appears to be a general consistency in many of the vessel forms produced at 13VB200, especially in the case of bowls, pans, and perhaps crocks. It appears that slip-casting methods played a major role in the pottery's operation, enabling the mass-manufacture of bowls, pans, and, to a lesser degree, canning or preserve jars. This may have occurred by the mid-1870's, as indicated by dates incised on large, plaster block molds presently contained in collections maintained by the Bonaparte Historical Society, Aunty Green Hotel Museum, Bonaparte, Iowa. These somewhat massive forms, three in number, functioned as master molds from which numerous case molds could be reproduced (Ruscoe 1948:36). In addition, over fifty plaster case molds, representing an assortment of bowl, pan, and pot vessel forms still remain stored in the upper story of pottery's factory building. Several of these case molds were donated for research by the current owner of the Bonaparte Lumberyard, E.O. Teeter, Jr. In addition to the production of slip-cast vessels, thrown vessels, mainly cylinder crocks, appear consistently throughout the sample assemblage.

There are several observations regarding crocks that could form a foundation for supplemental study. It appears that stamping crocks with the manufacturer's names, "Parker and Hanback," and place of business, "Bonaparte, Iowa," was not a common practice as is suggested by Miller (1982). The sample collection contains only two examples of stamped rimsherds, both on large capacity crocks. Another stamped rim was obtained earlier during the initial phase one survey of 13VB200, and represents a rimsherd of a probable churn. However, the latter

example was found on the surface of the berm and the remaining specimens along the riverbank exposure, adding somewhat to the confusion as to the temporal placement of the specimens. Also, there appears to be a total absence of stamped sherds indicating the proprietorship of Robert E. Wilson, from 1873 on (see Historical Assessment for this report [Appendix 2]). Another observation concerning crocks and other vessels, involves an apparent absence of cobalt blue slip decoration on vessel exteriors, although Miller (1982) indicates the opposite. The use of surface-glazed coloring, especially containing cobalt oxide, replaced the earlier, Eighteenth Century decorating technique of incising, and by the early 1830's brush painting of cobalt slip was popular (Raycraft 1982:4).

By the late 1870's, this method of decorative application waned, and was gradually replaced by stenciling in the 1880's (IBID). To date, no cobalt decorated Bonaparte vessels have been identified by the author.

An important observation concerning the aforementioned stamped rims involves the exterior surface treatments present on all three specimens. All specimens have gray, grayish brown, or grayish-yellow interiors. They basically can be categorized as gray wares which have salt glaze applied directly over the clay body without underlying englobe (Webster 1971:20).

The gray wares became popular during the last quarter of the Eighteenth Century, gradually replacing the earlier English and German Rhenish brown stonewares (IBID), and continued into production well past the mid-Nineteenth Century. However, examination of sherds from Van Buren Potteries that predate 13VB200, shows primarily gray wares, with minor use of exterior slip. This may suggest that the stamped rims described above represent earlier forms produced at 13VB200, perhaps prior to 1873.

Analysis of the recovered canning or preserve jars from 13VB200 indicates a potential temporal range based on vessel form, and most importantly, manufacturing processes employed. The postulated earlier forms, generally recovered deep within the ceramic midden, were produced almost entirely on the wheel, while later examples (Figure 39 & 40 of this report) are completely slip-cast. However, the absolute dating of these vessel types can not be addressed until further archaeological as well as archival research is performed.

EVALUATION OF THE ARCHAEOLOGICAL DEPOSIT

As discussed earlier in this report, the ceramic waster deposit associated with the Bonaparte Pottery is more extensive than preliminary surface observations indicated. The test trench 6-1 provided a vertical view of the deposit indicating a stratigraphy consisting of densely compacted pottery with considerable wood ash fill, extending perhaps well over two meters below the present riverbank surface. Additional testing units and probes indicate the waster deposit is generally confined to an area approximately 140 feet long and 40 feet wide situated directly south of the Bonaparte Lumberyard. It may extend further north beneath Lumberyard storage buildings. The testing also concluded that the midden is relatively undisturbed below surface except for a narrow sewerline trench excavation near its center, and transecting the deposit linearly. It appears that considerable surface disturbances occurred during excavation for this trench, including perhaps grading the entire lower portion of the floodplain. However, considering the extent of the deposit and its potential depth and volume the sewerline disturbance seems somewhat incidental. This midden extent can be understood in terms of potential tonnage of broken sherds present at 13VB200. If only an area 140 feet by 40 feet and 6 feet deep is comprised of deposit, 33,600 cubic feet of pottery is present.

Laboratory analysis concluded one cubic foot of stoneware weighs approximately 20 pounds, suggesting at least 336 tons of ceramic materials lie buried within the project area. However, this appears insignificant when compared to the waster deposit associated with the Red Wing Pottery of Goodhue County, Minnesota, that covers an approximate area of eighty acres, 10 feet deep in sherds (Viel 1977:107).

The anticipated impact posed by the proposed rip-rap bank stabilization project would certainly affect the surface portions of the midden deposit exposed along the riverbank. However, as previously mentioned, the deposit extent is remarkable, and considering this, the projected impact again seems inconsequential.

The proposed project will have no effect upon the remaining portions of 13VB200, including the extant pottery.

RECOMMENDATIONS:

Based on the archaeological evidence obtained by this investigation, and supplemental data obtained through ancillary documentation, the Bonaparte Pottery (13VB200) appears to meet the criteria of eligibility for nomination to the National Register of Historic Places.

The Bonaparte Rip-Rap and Bank Stabilization Project will have an adverse impact to a limited portion of the ceramic midden deposit associated with the site. However, in consideration of the deposit's extent and remaining research potential, it is recommended that no further sub-surface archaeological inquiry be performed within the project corridor. In evaluation of project impacts, the project could be considered more beneficial to the site than detrimental, by preventing erosion of the archaeological deposit by potential floodwaters.

GLOSSARY

- Albany slip: A fine clay, first mined from the Hudson River Valley near Albany, New York. The clay, mixed in solution with water, was used to coat interior surfaces of greenware prior to decorating or firing. This brown to blackish-brown slip was employed as a wash solution or an interior sealer for almost all North American stoneware after 1800.
- Bags: Walls made of firebrick that protect stacked ware in the kiln from direct flames and gases from the kiln firebox. A bag can also represent an open flue which also functioned as a flame deflector.
- Bat: A round slab of plaster, fireclay or clay pancake that could be used to turn vessels, performing as a platform, or used to stack greenware on drying shelves.
- Bisque: or Biscuit. Term first applied to first fired ware lacking glaze. Earthenware bisque has a firing range from 1080°C to 1180°C.
- Block: The plaster mold made from the original vessel model. A block consists of the reverse impression of the model and allows plaster casting of the positive impression of the model. The positive forms are termed case molds.
- Bowl: A concave, hemispherical vessel. Bowls have round body walls and generally low vessel heights. The base of a bowl can be round with projecting nodes that function as supports or flat bottoms with raised foot rings.
- Bung: A stack of ware or saggars containing vessels within a kiln.
- Case: The plaster mold made from a block mold. Case molds form the actual vessel in the slip-casting process.
- Cassel: A potter's kiln employing an elongated chamber with a firebox on one end and vent chimney on the other.
- Chuck: A round block of wood or hard clay used to support vessels for turning on the wheel. Some, shaped like shallow, livestock feeding pans, could also be used to stack ware in the kiln.
- Chum: A hollow cylinder of clay used to support narrow-necked vessels during turning on the wheel. This term is also applied to chucks.
- Cockspur: A lump of raw clay, roughly formed by hand, employed as a separator between vessels stacked for firing.
- Earthenware: All clay wares which are porous under the glaze.
- Englobe: Any coloring or decorative material, often slip, applied to bisque-fired or greenware before glazing.

<u>Kiln Furniture:</u>	Support and protection devices used to stack ware in the kiln prior to firing. Kiln furniture may include props, wads, shelves and saggars.
<u>Maker's Mark:</u>	A symbol or identification of the manufacturer stamped, incised or slip-applied to the exterior of a vessel. Stamped marks could be produced with lead printers' type, fired clay blocks, or wooden print blocks.
<u>Maturity Bar:</u>	A round or flat length of raw clay placed on two supports within a kiln prior to firing. As the kiln temperature reaches the proper firing heat, the maturity bar will bend, indicating to the kiln tender to slow the kiln fires to prevent overheating of the stacked ware.
<u>Pan:</u>	A shallow, round vessel with flat bottom and tapered body walls.
<u>Pots:</u>	A round vessel with tapered body walls and flat bottom. The vessel height is often greater than the orifice diameter.
<u>Pugging:</u>	Round lengths of raw clay often formed by a press and used to seal stacked saggars containing greenware. Also, a term indicating mixing and working wet clay to make it more homogenous.
<u>Rib:</u>	Made of wood or metal, ribs were used for a variety of forming and shaping operations by the potter during throwing of wares. Ribs were used for smoothing the angle between the interior foot and body wall of vessels or for scraping and forming the rims of crocks or lips of bottles.
<u>Ribbing tool:</u>	Similar in function to a rib, but often attached to a work arm for proper positioning. Ribbing tools in the latter half of the Nineteenth Century often were made of metal and were purchased through supply houses.
<u>Saggers:</u>	or Saggars. Fireclay boxes of various shapes and sizes, which protect the wares contained during firing. Saggars also aid in stacking ware in tall columns.
<u>Salt glaze:</u>	A method of producing a glaze on clay bodies by introducing common salt into the kiln where it volatilizes and reacts with the surface of the ware to form a sodium-alumina-silicate coating.
<u>Setting tiles:</u>	Flat or doughnut-shaped masses of raw clay used to stabilize and level ware stacked in the kiln prior to firing.
<u>Sherds:</u>	or Shard. A piece or fragment of a pottery vessel.
<u>Shoo-Fly Flask:</u>	A coffin-shaped flask that often contained whiskey. Neck finish often exhibits a ring below the lip. Usually dates prior to 1880.

<u>Shoulder jug:</u>	A stoneware jug form with a square shoulder and open and applied top.
<u>Slip:</u>	Liquid clay.
<u>Slip-casting:</u>	The process involving pouring clay slip into plaster molds to form various vessel shapes.
<u>Slip-glazing:</u>	Subjecting applied slip to a glazing heat.
<u>Stoneware:</u>	A type of earthenware fired at greater heat producing a vitreous body, but not translucent like porcelain.
<u>Wads:</u>	or Cockspurs. Hand-molded lumps of raw clay used to separate or stabilize stacked ware in the kiln. Once used, they were thrown away along with broken pottery, in the waster.

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APPENDIX 1A:
The Architectural Inventory

Iowa Site Inventory

Office of Historic Preservation
Iowa State Historical Department
East 12th & Grand Avenue
Des Moines, Iowa 50319

Site Number 89-006-093
District Name _____
Map Reference # 89-12-8-G

Identification

1. Site Name "The Parker and Hanback Pottery Works"
2. Village/Town City Bonaparte Township Bonaparte County Van Buren
3. Street Address First Street (SW corner of Madison and First Street
4. Legal Location Original Town Out Lot 8 and Lots 1&2 463 009
Urban Rural subdivision township block range parcel section subparcel
5. UTM Location: zone _____ easting _____ northing _____ Acreage _____
6. Owner(s) Name Edward A. & Esther E. Thornburg & Elbert Teeter
7. Owner(s) Address Bonaparte, Iowa
Street address City State Zip
8. Use: Present Material Storage Original Pottery Factory then Lumber storage

Description

9. Date of Construction Ca. 1876 Architect/Builder Thomas Hanback
10. Building Type:
☐ single-family dwelling ☐ industrial ☐ other institutional ☐ religious
☐ multiple-family dwelling ☐ educational ☐ public ☐ agricultural
☒ commercial
11. Exterior Walls: ☐ clapboard ☐ stone ☐ brick ☒ board and batten ☐ shingles ☐ stucco
☐ other Vertical boards(battens removed from facade)
12. Structural System: ☒ wood frame with interlocking joints ☐ wood frame with light members (balloon frame)
☐ masonry load-bearing walls ☐ iron frame ☐ steel frame with curtain walls ☐ reinforced concrete
☐ other Internal structure consists of heavy post-beam with brick in-fill. Also
roof system with rod and beam floor supports. Limestone foundation.
13. Condition: ☐ excellent ☒ good ☐ fair ☐ deteriorated
14. Integrity: ☒ original site ☐ moved—if so, when? Original building destroyed by fire (1876)
Notes on alterations, additions (with dates and architect, if known) and any other notable features of building and site:
East exterior remains original. Interior exhibits details from pottery operation.
15. Related Outbuildings and Property: ☐ barn ☐ other farm structures ☐ carriage house ☐ garage ☐ privy
☒ other Other linear storage buildings and wings attached to E&W elevations
16. Is the building endangered? ☒ no ☐ yes—if so, why? _____
17. Surroundings of the building: ☐ open land ☐ woodland ☐ scattered outbuildings ☐ densely built-up ☐ commercial
☐ industrial ☒ residential ☒ other Des Moines River lies just to the south.

18. Map

19. Photo

Roll _____ Frame _____ View looking SE



Significance

(Indicate sources of information for all statements)

20. Architectural significance

- ☒ a. Key structure individually may qualify for the National Register
☐ b. Contributing structure
☐ c. Not eligible/intrusion

A. Portions of this 2½ story gable roof frame and beam structure appear to be original (interior as well as exterior). Purely functional design for a commercial structure, located next to a water source (river). The surrounding area appears basically unchanged. Viewed with site #69 directly across the street, this is a good example 19th Century logic in placing house and business close together. Architecturally, both structures are good examples of 19th Century architecture in its simplest, most functional form.

21. Historical Significance

Theme(s) _____

- ☐ a. Key structure individually may qualify for the National Register
☐ b. Contributing structure
☐ c. Not eligible/intrusion

Gertrude Whiteley's list of dates & events for 1866 indicates "Pottery started by Parker & Handback." 1876 reads "Pottery burned. Rebuilt at once". Shown on 1893 Sanborn Map but called "The Wilson & Co. Pottery", frame structure w/brick interior. Kiln to the East labelled 30 feet high. By 1898, pottery has become the W.D. Smith Lumber yard- 30 foot high kiln gone. See Continuation sheet.

22. Sources (for primary and secondary sources, give complete facts of publication: author, title, place of publication, date, etc.):

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(Bonaparte file, Iowa City)

Prepared by D.C. & L.VR, Molly Naumann Date February 1980
Address Ottumwa, Iowa Telephone _____
Organization Area XV Cultural Resources Surveys Project, Area XV Regional Planning Commission

For Office of Historic Preservation Use Only

1. Office Information Sources on this Property

- ☐ County Resource File
☐ Windshield Survey
☐ National Register
☐ Grants-In-Aid: _____
☐ Determination of Eligibility

☐ Review and Compliance Project

- ☐ Other _____
☐ Other _____
☐ Other _____

2. Subject Traces

- a. _____
b. _____
c. _____
d. _____
e. _____

3. Photo Images

- _____

Iowa Site Inventory

Division of Historic Preservation
Iowa State Historical Department
26 E. Market St., Iowa City, Iowa 52240

Site Number 89-006-093

District Name _____

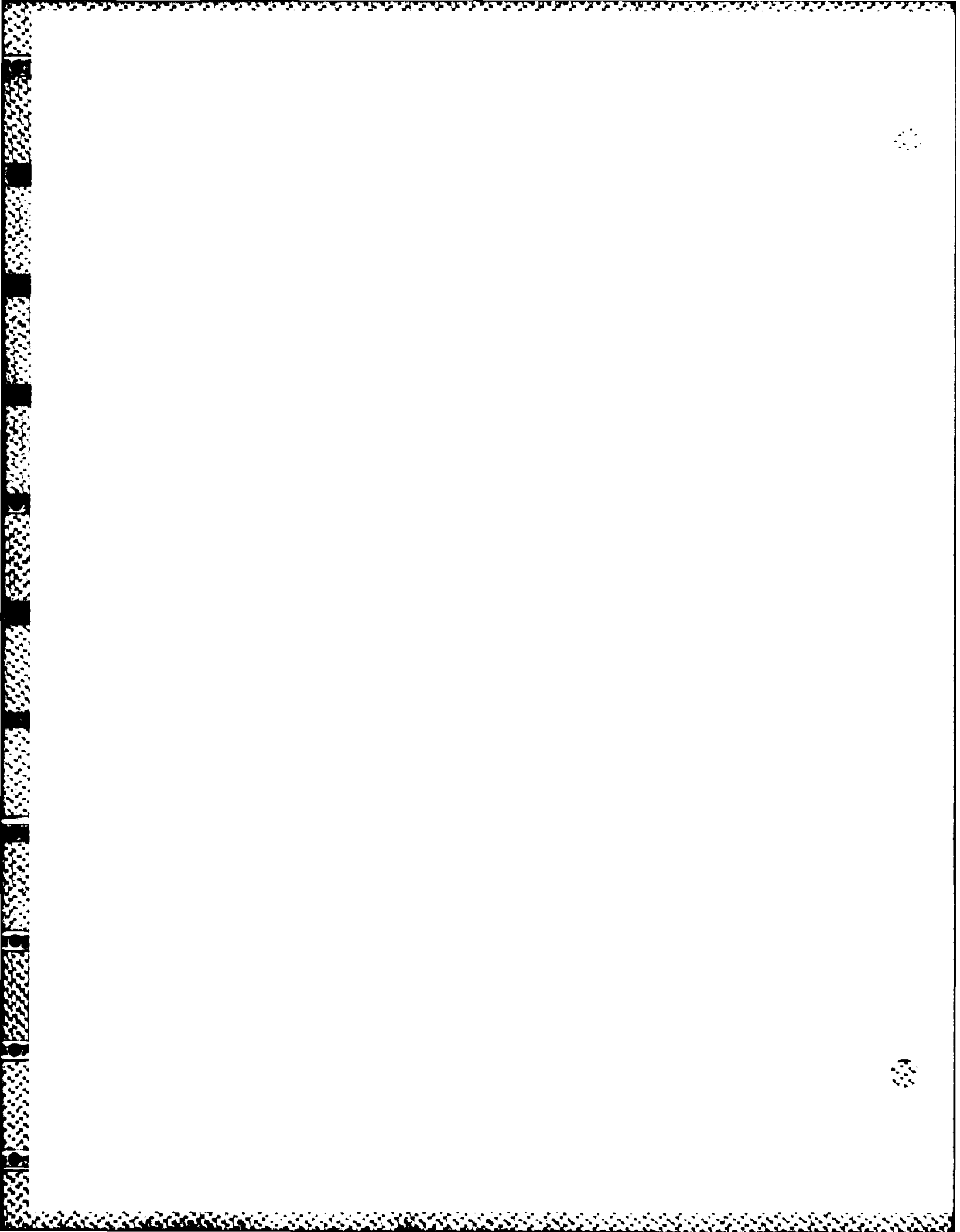
Map Reference # 89-12-8-G

CONTINUATION SHEET

An 1889 newspaper article (in Bonaparte District Nomination File, Iowa City) says Hanback first was partner with Mr. Parker, then in 1871, Mr. Wilson bought out Mr. Parker and the firm became known as Hanback & Wilson. "The clay is taken from beds 2½ miles north and is of a remarkably fine quality."

APPENDIX 1B:

The Archaeological Inventory



AREA XV CULTURAL RESOURCES SURVEYS PROGRAM: ARCHAEOLOGICAL SITE RECORD

COUNTY Van Buren

STATE SITE # 13VB200

RANGE 8W TOWNSHIP 68N SEC. 8

MAPPING INDEX # 89-12-8-G, 89-12-B

UTM _____

FIELD # 89-47

ON THE SE 1/4 SE 1/4 SW 1/4 SE 1/4

ACC. # 989-200

FIELD MAPS USED USGS Bonaparte Quad

SITE NAME Bonaparte Pottery

OWNER OF SITE Bonaparte Lumber Yard

ADDRESS Water Street, Bonaparte

LAND TENANT _____

ADDRESS _____

PREVIOUS OWNER _____

ADDRESS _____

INFORMANT _____

ADDRESS _____

SITE DESCRIPTION IN RELATION TO GEOMORPHIC AND MAN-MADE FEATURES:

The site of the Bonaparte Pottery Works is located at the site of the present lumber yard along Water Street. The site occupies Blk. 463, parcel 009 (new tax map). The site is 244m east of the river bridge, 30m west of a small drainage, 15m north of the Des Moines River. It lies south of Water Street between Texas Street and Madison Street. Site elevation is 540 ft..

TYPE OF SITE Pottery Works CULTURE Euro-American MULTI-COMPONENT 1867-1896

ENVIRONMENTAL DATA

EXTENT OF SCATTER 30 X 30m ORIENTATION East-West HECTARES .09

DRAINAGE Des Moines River ORDER _____ PERENNIAL X INTERMITTENT _____

DISTANCE TO WATER 15m TYPE OF WATER SYSTEM Des Moines River

FLORAL COVER Weeds, Willows by River SURFACE VISIBILITY 0 % CULTIVATED? No

SURFACE CONDITION Gravel-Paving MAN-MADE FEATURES Lumber Yard

TOPOGRAPHY Uniform LANDFORM Floodplain ASPECT South

SOIL TYPE Dickinson Sandy Loam SLOPE 0-2% EROSION No

NATIVE VEGETATION Prairie, Alluvium parent material.

IS THE SITE ENDANGERED? Site is stable. Lumberyard building is original pottery works. Large Waster may be affected by rip-rapping. Much pottery
MODIFICATIONS TO SITE AREA making paraphernalia remains in lumberyard building

CULTURAL MATERIALS RECOVERED OR OBSERVED:

DEBITAGE AND FLAKED LITHICS _____

OTHER LITHICS _____ FAUNA _____

CERAMICS _____

HISTORIC ARTIFACTS Stoneware sherds, kiln furniture, pottery molds recovered.

DENSITY OF MATERIALS ON SURFACE Extremely heavy in waste portion of site.

OTHER REPORTED CULTURAL MATERIALS:

COLLECTIONS FROM SITE Aunty Green Hotel Museum. Bonaparte has several pieces from

OWNER/S Bonaparte Pottery. Also Burette Redhead and William Page own
canning jars made at the pottery.

PREVIOUS INVESTIGATIONS _____

PUBLISHED REFERENCES Van Buren County History, Andreas Iowa Atlas, Bonaparte and Keosauqua
Newspapers.

SURVEY MAP



DATE SURVEYED 10/18/79 DATE RECORDED 10/30/79 SURVEYOR/S Nansel and Till

PHOTOS Of Test Excavations SUBSURFACE TESTING Tested for Corps of Engineers, Oct. 1983.

RESULTS Waster pit extends at least 2m below lower berm surface, and possibly 5m below
upper berm surface.

RECOMMENDATIONS Further historical research, and possible full-scale research project
in basement of pottery building, and waster pit.

APPENDIX 2:

Historical Assessment

HISTORICAL ASSESSMENT
An Intensive Cultural Resource Survey
For the Bank Stabilization Project

NCROD-S-070-0X6-1-103490

Rip-Rap Construction

Bonaparte, Iowa

Prepared by
W C Page, Public Historian
November 1983

BACKGROUND

Van Buren County earned long ago the epithet, "the cradle of Iowa civilization" indicating the county's early settlement. The Black Hawk Purchase of 1832 included Van Buren. The Des Moines River bisects the county and acted as a natural corridor of settlement. Settlers docking on the Mississippi from eastern states, continued their immigration into Iowa along the Des Moines River.

The river also encouraged the early establishment of industry. Both a pre-industrial and a mechanized, factory system developed in Van Buren. The county provides an important case study of the transition from craftsman to Industrial Revolution production in Iowa.

Bonaparte was settled in 1836. William Meek and Dr. Roger Cresap were early owners of the land. They platted the community in 1837 as Meek's Mills, Wisconsin Territory. Meek built a dam to harness river power. Bonaparte became an important factory town producing woolen goods, pottery, furniture, and other wooden goods. During the Civil War, the woolen mills produced many woolen blankets and other goods for the Union army. Bentonsport, a town several miles upstream, also developed early industries including a paper mill.

The Keokuk, Fort Des Moines, and Minnesota Railroad arrived in Bonaparte in 1858. For more than half a century, the industrial towns of Van Buren County competed successfully for markets. By the turn of the Twentieth Century, routes of commerce had changed, and machines, products, and management had grown old. In 1940, the population of Bonaparte numbered about one-half its size during industrial zenith.

Today a plastics factory provides some employment in Bonaparte and there is also a glove factory. Bentonsport experienced a "Rip Van Winkle" sleep. Today

the village attracts tourists to visit its noted historic preservation.

Bonaparte continues to enjoy a picturesque setting. River hills surround the town. The most important locks on the Des Moines River are the focus of a municipal park. (Attempts to navigate the river failed in the 1850's when railroads antiquated water transportation). Meek's woolen mill was altered to serve as a community center in 1938 and a flour mill is now a restaurant.

THE POTTERY

Several potteries and brickworks have operated at Bonaparte. William Welch potted "one mile below Bonaparte" in the 1830's.¹ Hazard Whitmore and Sons operated in northern Bonaparte late in the Nineteenth Century and produced brick.² Sydney Parker and Thomas A. Hanback organized a pottery business in 1866 and purchased land in Bonaparte in 1867 for a shop. The Brothers Meek made brick for their own purposes.

Parker was English by birth and American by choice. He was born in 1837 at Burslem, Staffordshire. That district's great ceramic production began at Burslem in the Eighteenth Century, and the potting trade was probably well known to the Parker family. They emigrated to Wisconsin about 1846.³ By 1850, Sydney Parker was living in Vernon, Iowa. He apprenticed himself to Robert M. Dickson of Vernon to learn the potter's craft.

Thomas A. Hanback was born in 1838, a close contemporary of Parker. In 1853 Hanback came to Vernon from his native Winchester, Illinois. He also apprenticed himself to Dickson, later marrying into the Dickson family, becoming brother-in-law to RMD.⁴

Parker and Hanback planned to establish an independent potting business through partnership in 1866. The following year Hanback purchased land in Bonaparte on

¹Brooks, Norma; "Ghost Pots of Marion County;" Annals of Iowa; Vol. 38, #5; 1966. Miller, Dwight M; "The Historical Potteries of Van Buren County;" ms, Copyright 1982; p 10.

²"A very useful industry conducted at the northern outskirts of town, was the brick kiln owned and operated by Hazard Whitmore and Sons. This industry furnished material with which many of Bonaparte's most substantial buildings were constructed." Burrier, Nora; "Events of Interest in Bonaparte History;" Bonaparte Centennial (1873-1937) Scrapbook; Bonaparte Public Library; p 15.

³Sydney Parker Obituary; The Bonaparte Record; Newspaper clipping; Scrapbook G; Bonaparte Public Library; p 15.

⁴History of Van Buren County, Iowa; Western Historical Company; Chicago; 1878; p 574.

the bank of the Des Moines River from one of the original owners of the village. Parker and Hanback, the partnership, appears as a name directly thereafter in the property records.¹ This property comprises the subject of the report in hand.

The old documents and sources remain silent about Parker and Hanback. The pottery's material culture remains the most tangible evidence of the firm's history (see archaeological survey). The potters usually impressed a vessel's liquid capacity to the left of their "Parker & Hanback" stamp when they marked pieces.²

In 1871 Robert E. Wilson began working with the partners. In 1873 Wilson bought Parker's interest in the company, becoming Hanback's junior partner.³ The firm styled itself "Hanback & Wilson" thereafter.⁴

Wilson, like Parker, was an Englishman by birth and a native of Staffordshire. Wilson was about ten years older than either of the partners. He may have learned the potter's trade in his youth, but military service engaged most of Wilson's early career.⁵ By 1857 Wilson was in Peoria, Illinois, probably engaged at the American Pottery Company. During the Civil War, Wilson served in the Union Army, working as a potter in Farmington (Van Buren County, Iowa) between stints. At the close

¹Transfer Book B; p 480; Van Buren County Auditor's Office; Keosauqua, Iowa. Parker and Hanback owned fractional interest in the property both as partners and as individuals.

²Collections: Bonaparte Historical Society; Bonaparte, Iowa 52620. Dr. Warren Keck; Keosauqua, Iowa 52565.

³Transfer Book B; p 480; Van Buren County Auditor's Office; Keosauqua, Iowa 52565.

⁴History of Van Buren County, Iowa; Western Historical Company; Chicago; 1878; p 486. Some newspaper articles are extant from this period, preserved in local scrapbooks: "The Pottery operated by Messrs. Hanback & Wilson is doing much for our city in giving Bonaparte a reputation abroad and expending considerable money in our midst for material & labor. Its products are in demand everywhere, which is a guarantee that they manufacture crockeryware of a superior quality." Scrapbook "C"; nd; Bonaparte Public Library.

⁵Biographical Sketch (see Appendix); History of Van Buren County, Iowa; op cit; pp 580-81.

of the war, Wilson settled again in Peoria.¹ The remarkable, dodecagonal fruit jars later produced in Bonaparte reflect a shape produced at Peoria and probably Wilson's training at the Illinois pottery. Mass production was also a Peoria keynote.² Wilson left Peoria for Farmington in 1866 and engaged as a potter until 1871 when he relocated to Hanback and Parker.

The Hanback and Wilson operation enjoys some documentation. Their pottery building was a two-story, frame structure, appraised in 1876 at \$1,200. Fire totally destroyed the pottery in 1876; it was rebuilt immediately at a cost of \$1,300.³

In 1876 the firm employed 10 workmen and produced 75,000 gallons of pottery per year. This compares with 240,000 gpy produced at the R.M. Dickson factory several miles upstream at Vernon.⁴ The Bonaparte pottery had also introduced production of drainage tile and could produce 6000' of tile per day capacity. Steam power ran the machinery throughout the pottery and indicates the level of industrialization at the factory.⁵

By the 1880's, the factory began to style itself "Bonaparte Pottery" in its impressed marks on vessels. This advertising carried locative value. The firm

¹Christopher W. Fenton and D.W. Clark had established a pottery at Peoria in 1859. Fenton enjoys today a national reputation for the innovation of his work. He emigrated to Illinois from Vermont where he had worked at the United States Pottery in Bennington. Barber, E.A.; Marks of American Potters; Philadelphia; 1904; p 161.

²"The one place in New England where this type of mass production got underway to any extent was Bennington, Vermont. The famous works there was the brain child of Christopher Webber Fenton..." Watkins, Lura Woodside; Early New England Potters and Their Wares; Harvard University Press; Cambridge, Massachusetts; 1950; p 211.

³History of Van Buren County, Iowa; op cit; p 486.

⁴ibid; p 492.

⁵ibid.

employed 6 to 10 hands, two teams, and produced about 125,000 gallons of pottery in 1887.¹

Production continued to increase. In 1889 the factory produced 150,000 gallons.² The dodecagonal fruit jars enjoyed a sales volume in the company's line of utilitarian products.³

Growing competition faced potters throughout the United States in the 1890's. Glass bottles and canning jars provided cleaner and more efficient vessels for food and drink than pottery. Refrigeration -- both in the home and in railroad cars -- also began playing a larger role in the preservation of food, replacing salt preservation, and eliminating the need for the requisite stoneware vessels.

The extent to which any of these factors affected the Bonaparte pottery will unlikely be known. The firm appears to have weathered out the financial panic of

¹"The Bonaparte Pottery was started in 1866 by Parker & Hanback...They employ 6 to 10 hands and two teams. These works generally turn out about 125,000 gallons of pottery per year. They also make flower pots, drain pipe and fire proof bricks. There is quite a demand for their wares, and they are kept busy filling orders. Thomas Hanback, senior member of the firm, is traveling salesman." "Bonaparte in 1887;" Editor of Bonaparte Journal; Reprinted.

²"THE POTTERY WORKS/ One of the most flourishing industries of Bonaparte is the pottery works of Hanback and Wilson on lower Front Street. This enterprise was begun in 1866 by Parker and Hanback, who conducted the business for five years when Mr. Wilson bought Mr. Parker's interest and the firm became as it is at present... The business is a large and growing one, and they manufacture in the neighborhood of 150,000 gallons of pottery per year. The clay is taken from beds about 2½ miles north and is of a remarkable fine quality. This superior clay together with an extra quality of glazing used, giving a very fine, smooth hard finish make their ware as No. 1 and... for it a ready market." "Business Interests/Brief Biographies of Men that Made Town;" Bonaparte Record; 4 July (?) 1889; Scrapbook C; Bonaparte Public Library.

³"With a growing business they keep constantly prepared to meet the demand, and can fill any orders on short notice. A noticeable feature is the growing demand for stone fruit jars, which the large crop of fruit this year will no doubt make doubly great. Mr. Hanback, the salesman of the firm, is well known in the trade all over the" (balance of article missing). "Business Interest/Brief Biographies of Men that Made Town;" Bonaparte Record; 4 July (?) 1889; Scrapbook C; Bonaparte Public Library.

"Bargains in Earthen fruit Jars--just the thing for blackberries--at Robert Wilson's." "Business Locals;" The Bonaparte Record; n d; Scrapbook C; Bonaparte Public Library.

1893.¹ There is also a hint that the pottery had begun to feel the national decline in the potting industry. (Hanback and Wilson did not sell the factory to an entrepreneur to continue the business. When W.E. Smith bought the factory in 1896, he did so to convert it to a lumber yard. The potting firm also did not sell some potting equipment which remains stored today, 1983, above the lumber yard). Still, by the time Hanback and Wilson ceased operations and sold their business, retirement was undoubtedly a factor. Wilson was already sixty-nine years old; Hanback was fifty-eight. Closing the factory seems to have been a voluntary business decision.²

Thomas Hanback and Robert Wilson lived out their lives in Bonaparte. Wilson died in 1901 and Hanback in 1912. Sydney Parker, the first English partner, lived in Ottumwa, Iowa until his death in 1914. These three men learned the potter's craft in the twilight of the American guild system. Their working lives witnessed the Industrial Revolution's transformation of potting from hand to machine-made wares. The partners' ability to adapt to new technology indicates their business sense. Fits and starts characterized the potting industry. Twenty-nine years of successful operation testifies to a sound business at the Bonaparte Pottery.

¹The panic hit southern Iowa in 1894/95. "all industries, and notably that of mining, were completely paralyzed. During this memorable period of depression the coal industry suffered most of all. The railroads, having little or nothing to haul, did not need coal for steam purposes. The factories throughout the county ran on half or quarter time, and many completely shut their shops." Frank Hickenlooper; History of Monroe County, Iowa; Privately Printed; Albia, Iowa; 1896; p 331.

²Thomas Hanback remained, for example, one of 22 stockholders of a Bonaparte bank. Bonaparte Record; 9 July 1896.

RECOMMENDATIONS

The pottery works at Bonaparte appear to meet the criteria of eligibility for nomination to the National Register of Historic Places for their historic significance. The Bonaparte factory is the only extant building in Van Buren County which calls direct attention to the potting industry, an important early industry in Van Buren County and in Iowa.¹ The Bonaparte pottery is a rare example in Iowa of an extant pottery works and is possibly unique as the building is frame and dating to 1876.²

The proposed bank stabilization project for the Des Moines River at Bonaparte will not have an adverse impact on the pottery building. The archaeological unit of this report discusses impact of the project on the pottery's waster. The National Register of Historic Places already lists Des Moines River Locks #5 and #7, sites located in Bonaparte upstream from the pottery, and also the Aunty Green Hotel at 602 Washington Street, Bonaparte.

¹The R.M. Dickson pottery at Vernon outproduced Bonaparte for every year statistics are available. The Vernon works outlived the Bonaparte factory, surviving into the Twentieth Century. Time has, however, reduced the Dickson factory to an industrial archaeological site.

²The ruins of a pottery built of stone are reported in Des Moines County, Iowa, several miles east of Lowell.

Iowa Site Inventory

Office of Historic Preservation
Iowa State Historical Department
East 12th & Grand Avenue
Des Moines, Iowa 50319

Site Number _____
District Name _____
Map Reference # _____

Identification

- POTTERY WORKS AT BONAPARTE**
1. Site Name _____
 2. Village/Town/City Bonaparte Township Bonaparte County Van Buren
 3. Street Address First Street
 4. Legal Location River Lot 270' FRT South of Block 16 (never formally platted)
Urban Rural subdivision township block range parcel section subparcel 1/4 section of 1/4 section
 5. UTM Location: zone _____ easting _____ northing _____ Acreage _____
 6. Owner(s) Name Edward A & Esther E Thornburg; Elbert) JR & Barbara A Teeter
 7. Owner(s) Address Post Office Box Bonaparte IA 52620
(Street address) (City) (State) (Zip)
 8. Use: Present Lumber Yard Original Pottery Works

Description

9. Date of Construction 1876 Architect/Builder _____
10. Building Type:
☐ single-family dwelling ☐ industrial ☐ other institutional ☐ religious
☐ multiple-family dwelling ☐ educational ☐ public ☐ agricultural
☒ commercial
11. Exterior Walls: ☐ clapboard ☐ stone ☐ brick ☐ board and batten ☐ shingles ☐ stucco
☐ other vertical boards
12. Structural System: ☒ wood frame with interlocking joints ☐ wood frame with light members (balloon frame)
☐ masonry load-bearing walls ☐ iron frame ☐ steel frame with curtain walls ☐ reinforced concrete
☐ other _____
13. Condition: ☐ excellent ☒ good ☐ fair ☐ deteriorated
14. Integrity: ☒ original site ☐ moved—if so, when? _____ additions added on east & west for lumber
Notes on alterations, additions (with dates and architect, if known) and any other notable features of building and site:
storage (after 1896). Boom front facade office building (1 story, built after 1896).
15. Related Outbuildings and Property: ☐ barn ☐ other farm structures ☐ carriage house ☐ garage ☐ privy
☒ other storage sheds between main building and river
16. Is the building endangered? ☒ no ☐ yes—if so, why? _____
17. Surroundings of the building: ☐ open land ☐ woodland ☐ scattered outbuildings ☐ densely built-up ☐ commercial
☐ industrial ☒ residential ☒ other Des Moines River

18. Map

19. Photo



Significance

(Indicate sources of information for all statements)

20. Architectural significance

- ☐ a. Key structure individually may qualify for the National Register
- ☐ b. Contributing structure
- ☐ c. Not eligible/intrusion

The Pottery Works at Bonaparte depend on their historical significance for National Register of Historic Place eligibility, as the site's architectural significance lacks sufficient merit.

21. Historical Significance

Theme(s) INDUSTRY

- ☒ a. Key structure individually may qualify for the National Register
- ☐ b. Contributing structure
- ☐ c. Not eligible/intrusion

The Pottery Works at Bonaparte operated under various business names: Parker & Hanback (1867-1873); Hanback & Wilson (1871-18??); and Robert Wilson & Company (18??-1896). The business was also known as the Bonaparte Pottery. The extant pottery building is one of a very few remaining in Iowa which calls attention to the pottery business, an important early industry. The building is clearly eligible for NRHP nomination on historic grounds. An important waster pit is located between the building and the Des Moines River. Its significance derives from its industrial archaeological merit and must be considered in an archaeological context.

22. Sources (for primary and secondary sources, give complete facts of publication: author, title, place of publication, date, etc.):

SEE ATTACHED HISTORICAL SKETCH

Prepared by W C Page, Public Historian Date Fall 1983
 Address P O B 143 Telephone 319/456-8651
 Organization Richland, IA 52585

For Office of Historic Preservation Use Only

1. Office Information Sources on this Property

- ☐ County Resource File
- ☐ Windshield Survey
- ☐ National Register
- ☐ Grants-In-Aid
- ☐ Determination of Eligibility

☐ Review and Compliance Project:

- ☐ Other
- ☐ Other
- ☐ Other

2. Subject Traces

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

3. Photo Images

- _____
- _____
- _____
- _____
- _____

"SYDNEY PARKER

"Sydney Parker, eldest son of Edward and Sarah Parker, was born, Sept. 1st, 1837, at Burslen (sic), England, coming with his parents to America, at the age of nine years, and going directly to Wisconsin. During his boyhood the family lived in several states, finally settling in Iowa. When 18 years old, he apprenticed himself to R.M. Dickson of Vernon, for the purpose of learning the pottery trade, remaining with him for several years. While there, Nov. 12th, 1858 he was married to Miss Margaret A. Roberts; to this union were born four children, two sons and two daughters.

During the year 1863, he united with the Adventist Church of Vernon and nowhere could there have been found a more consistent member, or a better Bible student. About the same time he joined the Masonic lodge, becoming an enthusiastic member, and filling with honor all the offices pertaining to the order.

Later he came to Bonaparte, where he and Thomas Hanback built and operated the 'Bonaparte Pottery.' He was connected with this for years, finally selling his interest to Robert Wilson. Mr. Parker was a good workman, a master of his trade. March 16th, 1889, the youngest son, Bruce, was called to the great beyond, and March 28th 1893 the wife and mother followed.

Feb. 12th, 1902, he was married to Emily J. Calamane, at Alton, Illinois, she passing away two years later. He has since made his home with his children. He died February 14th, 1914, at the home of his daughter, Mrs. M.O. Schreiner of Ottumwa, having reached the age of 76 years.

He leaves one son and two daughters--Walter S. of Prairie City, Iowa; Mrs. Minnie Ryland, of Bonaparte, and Mrs. Georgia Schreiner, of Ottumwa; two brothers and

three sisters; George of West Grove, Iowa; William of Bloomfield, Iowa; Mrs. Mary McDougall, of Cincinnati, Ohio; Mrs. Harriet Rouch of California; and Mrs. Emma Bridge of Bonaparte.

We as churches and congregations extend our sincerest and heartiest sympathy to these dear friends in their sore affliction; and pray that Jesus, the best friend, may comfort and sustain them, in this their time of need.

xxx"

Source: "Newspaper Accounts and Articles dating from 1901;" (Scrapbook G); Bonaparte Public Library; p 15. The Bonaparte Record clipping; late February 1914.

"THOMAS A. HANBACK

"Thomas Alvin Hanback, who had been in feeble health for twelve months, passed away, very suddenly, on the morning of December 17, 1912, at the age of 74 years, 4 months, and 4 days. He was born at Winchester, Illinois, August 13th, 1838, and at the age of 14 was converted and joined the Baptist Church at the same place, and was a regular attendant at the Sunday School. He was the youngest of six children, his parents being John and Deborah Hanback, and was the last to be taken away.

He moved from Winchester, Illinois, to Vernon, Iowa, where he resided for fifteen years, after which he came to Bonaparte, in the month of March, 1868, and for the long period of twenty-five years, followed the occupation of potter, at his own factory.

On November the 25th, 1858, he married Miss Jenette Harryman of Vernon, Iowa. Of this union four daughters were born, two having died in infancy, and two living: Miss Mary Hanback, of Bonaparte, and Mrs. George B. Johnson, of Fort Worth, Texas. There are two grandsons, George and William Johnson.

Mr. Hanback was Vice President of the Farmers and Traders State Bank of Bonaparte at the time of death. He was a man of excellent habits, having lived clean life, and was good moral and christian man; a kind husband, affectionate father, who loved his home, and spent his spare time at home with his family. He is survived by his wife and two daughters, who mourn their loss, and will be greatly missed not only by them, but also by a large circle of near acquaintances, neighbors and friends. All extend to them sincerest and heartiest sympathy in this time of their sorrow and affliction.

Funeral services were held at the home late Thursday afternoon with Rev. L.T. Hughes of the Presbyterian church officiating, and with interment in the Bonaparte cemetery."

Source: The Bonaparte Record (Bonaparte, Iowa); 24 December 1912; p 1 c 5.

"THOMAS HANBACK

"Tuesday afternoon of this week Thomas Hanback, aged 74 last August, a well known and highly respected citizen of Bonaparte died suddenly. His health had not been the best but he was up and about on Monday. He leaves a wife and two daughters."

Source: The Keosauqua Republican (Keosauqua, Iowa); 19 December 1912; p 3 c 4.

"PROOF OF WILL

"2 day of December 1912 Thomas Hanback's will filed." Probate hearing set for 25 March 1913.

Source: The Bonaparte Record (Bonaparte, Iowa; 31 December 1912; p 2 c 7).

"WILSON, ROBERT, proprietor of Bonaparte Pottery with Thomas Hanback, Bonaparte; born Feb. 17, 1827, in Staffordshire, England. In December, 1845, enlisted in H.M. 24th Foot, and sailed for India the following may; served through the campaign of Punjaub, in 1848-49; received a medal and two clasps of recognition for service; was under Lord Gough, Sir Colin Campbell, and Sir Charles Napier; returned to England in August, 1856; same fall came to Boston, Mass.; following summer, to Peoria, Ill. In April, 1861, enlisted in Co. E, of the 8th Illinois Infantry for three months; was Second Sergeant; afterward elected Captain, Co. I; wounded at the battle of Fort Donelson, and left for dead on the battle-field over night; recovered, and participated at siege of Corinth, after which, resigned. Came to Farmington; engaged in the pottery business. Fall of 1863, was tendered the captaincy of the 5th U.S. Heavy Artillery, accepted, and again went into service; was engaged principally in garrison duty; promoted to Major and Lieut.-Colonel by brevet, for gallantry at Fort Donelson; mustered out fall of 1865. Came to Peoria, Ill., and engaged in the pottery business; December, 1866, came to Farmington; in 1871, to Bonaparte and engaged with Messrs. Hanback & Parker; in 1873 bought Mr. Parker's interest. Married Miss Sarah J. Miles, of Tazewell, Co., Ill., June 9, 1863; she died December, 1868; again married, Anna M. Atkinson, of Illinois, Dec. 9, 1869; she was born in Wicklow Co., Ireland, Nov. 26, 1839; has two children by second wife--Thomas W. and Fanny H.; his wife had two children by former husband--Carrie M. and Cora D. Republican."

Source: The History of Van Buren County, Iowa; Western Historical Company; Chicago; 1878; pp 580-581.

"Mr. Robert Wilson is reported to be quite sick again."

Source: "Bonaparte Billet;" The Keosauqua Republican; 15 August 1901; p 2 c 3.

Robert E. Wilson, Lt Col USA.

August 13, 1901

Ae 74 yrs 5 mos 26 days

Father

Source: Tombstone; Bonaparte Cemetery; Bonaparte Township; Van Buren
County, Iowa. Recorded in Van Buren County Tombstone Transcriptions.
Bonaparte Cemetery; Bonaparte Township; p 58.

ABBREVIATED ABSTRACT OF TITLE

GRANTEE	GRANTOR	DATE/INSTRUMENT
River Lots	From So. line of Water St. opposite line divide Lots 2 & 3 Block 16 East 100' So. to River West River 100' to place of beginning	
Thos. Hanback Parker & Hanback	Roger N. Cresap	June 3, 1867
Hanback & Wilson Wilson, Robt.	S. Parker Parker & Hanback	Aug 8, 1871 Undivided 1/3 Aug 8, 1871 NW cor of land Sold by Cresap to Parker & Hanback then W 50' So. 150' E 50' N 150'
Hanback & Wilson	R.N. Cresap	Oct 10, 1872
Parker, Sydney	Hanback & Wilson	Oct 18, 1873 1/3 land lying between Block 16 and River comm. online bet. Lots 1 & 2 & E 150' & 1/3 of land lying Between Block 16 & River comm. one line bet. Lots 1 & 2 & running 3 150' April 15, 1874
Hanback & Wilson	Sydney Parker & wife	
Smith, Wallace E	Thos. Hanback & wife	March 4, 1896 1/2 River Lots 1, 2, 3, 4 Block 4 St(?) Lot(?) So. Block 16
Smith, Wallace E	Robert Wilson & wife	March 4, 1896 1/2 River Lots 1, 2, 3, 4, St. Lot South Block 16

Source: Transfer Book B; p 480; Van Buren County
Auditor's Office; Keosauqua, Iowa 52585.

PD-E



DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61201

REPLY TO
ATTENTION OF:

February 13, 1984

Planning Division

CONCUR

FEB 28 1984

Mr. Don Klima
Chief, Eastern Division Project Review
Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW.
Washington, D.C. 20004

ADVISORY COUNCIL
ON HISTORIC PRESERVATION

BY *Michael C. Orr*
for Chief, EDPR

Dear Mr. Klima:

This is in regard to a proposed bank stabilization action for the Bonaparte Local Flood Protection project on the north bank of the Des Moines River in Van Buren County Iowa. In May 1983, the city of Bonaparte made application to the U.S. Army Corps of Engineers, Rock Island District, for a Section 10 and Section 404 permit to provide riprap protection along the left bank of the Des Moines River in Section 8, Township 68 North, Range 8 West, within the corporate limits of the city. The project will involve the placement of riprap protection along approximately 31,000 feet (914.4 meters) of riverbank.

In July 1983, the Iowa State Historic Preservation Office informed Rock Island District that a Late Nineteenth Century stoneware pottery manufacturing site, designated 13VB200, would be impacted by the proposed bank stabilization project. Subsequently, onsite investigation of the site area by District staff and the Iowa SHPO's staff archeologist resulted in mutual determination that an intensive survey (including preliminary subsurface testing) would be appropriate to ascertain the site's (riverbank archeological component) potential eligibility for inclusion in the National Register of Historic Places.

The enclosed draft report entitled An Intensive Cultural Resource Survey For the Bank Stabilization Project, Riprap Construction, Bonaparte, Iowa, gives the results of a study conducted by Mr. Anton Till. After reviewing this draft, the Iowa State Historic Preservation Office has determined, in their letter dated 26 January 1984 (enclosed), that there is enough evidence to support the site's eligibility for inclusion in the National Register of Historic Places. We concur

LES 11 11 21 1984

-2-

with this determination and the SHPO's opinion that the riprapping project will affect only a small portion of the site and will serve to prevent further impacts to the remaining portion of the site due to erosion.

We request your concurrence that the bank stabilization project will have No Adverse Effect on site 13VB200. If you require further information, please call Mr. Robert Dunn at 309/788-6361, Ext. 6349, or write to the following address:

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Planning Division
Clock Tower Building
Rock Island, Illinois 61201

Sincerely,


Arthur J. Klingerman
Chief, Planning Division

Enclosures

LEB CI 11 23 4H, C.I
BUESBAUGH
CH 12 1980
VBA 2004 10 10 1980

END

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