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FINAL REPORT

Phase I and Phase II
Cultural Resources Assessment of Selected Sites
to be Affected by Flood Protection Activities,
Kaskaskia Island Levee Raise Project,
Randolph County, Illinois

Prepared for
U. S. Army Corps of Engineers
St. Louis District
Contracts #DACW43-80-M-0219
and
DACW43-80-M-0664

by
American Resources Group, Ltd.
Carbondale, Illinois

Principal Investigator
Michael J. McNerney

Report Prepared by
Terry J. Powell
and
David C. Austin

Cultural Resources
Management Report #17
August 1980

This document has been approved
for public release and its
distribution is unlimited.
This cultural resources survey and assessment is conducted in a study area consisting of ten archaeological site areas, or portions thereof, which lie within the impact area of the proposed Kaskaskia Island levee project, Kaskaskia Island, Ill. Based upon information gained from the initial and present surface reconnaissances, along with shovel testing results, there is no evidence to indicate the presence of significant prehistoric or historic archaeological remains on sites R-329, R-336, R-339, R-352, R-354, R-359, R-361.
Phase II recommendations state that sites R-357 and R-360 do not meet National Register criteria. Construction may proceed on the levee at Hackaska Island without adversely affecting significant prehistoric and historic cultural resources in all areas.
ABSTRACT

Ten previously located sites, 11-R-329, 11-R-336, 11-R-339, 11-R-344, 11-R-352, 11-R-354, 11-R-357, 11-R-359, 11-R-360, and 11-R-361, will be adversely affected by the Kaskaskia Island Levee Raise Project. Phase I called for shovel testing and surface collecting to determine their significance. Sites 11-R-329, 11-R-336, 11-R-339, 11-R-344, 11-R-352, 11-R-354, 11-R-359, and 11-R-361 were determined not to have significant archaeological resources. No further mitigation is recommended for these sites. Two sites, 11-R-357 and 11-R-360, contained sub-plow zone cultural deposits of an undetermined nature. Therefore, Phase II testing was recommended to adequately assess the significance of the cultural deposits.

Controlled surface collection and test excavations were conducted on both 11-R-357 and 11-R-360. These procedures indicated that there were no significant cultural deposits on either site. One test pit was excavated to a depth of 2 meters below the last evidence of cultural material on each site to test for buried cultural deposits. No buried cultural deposits were revealed.

There is a possibility that a deeply buried archaeological site may be encountered at any location along the levee during construction activities. In this event, the Principal Investigator and the State Historic Preservation Officer of Illinois should be notified immediately.

Construction may proceed at all ten site locations without adversely impacting significant prehistoric and historic cultural resources.
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INTRODUCTION

The following cultural resources survey and assessment is conducted for the St. Louis District, U. S. Army Corps of Engineers. Phase I was conducted under Purchase Order DACW43-80-M-0219, and phase II was conducted under Purchase Order DACW43-80-M-0664. Assessments of this nature are required by the National Environmental Policy Act of 1969, Executive Order 11593, and are now required under the Archaeological and Historic Preservation Act of 1974.

The study area consisted of ten archaeological site areas, or portions thereof, which lie within the impact area of the proposed Kaskaskia Island levee project, Kaskaskia Island, Illinois. Sites 11-R-329, 11-R-352, 11-R-354, and 11-R-357 will be covered by fill of a levee berm. Sites 11-R-336, 11-R-339, 11-R-344, 11-R-359, 11-R-360, and 11-R-361 lie within or near designated borrow pit locations and are scheduled to be partially or completely destroyed by these actions. These ten sites, as well as others, were located during an intensive pedestrian surface reconnaissance conducted in 1975 (Linder 1975).

Fieldwork for phase I of this project was conducted between October 23 and November 16, 1979. Fieldwork for phase II of the project was conducted between November 27 and December 28, 1979. The research was directed by Michael J. McNerney, Principal
Investigator; Terry J. Powell served as Project Director and principal author. Archaeological technicians who participated in the project included David C. Austin, Alan J. Brown, Randall D. Dawdy, Lee H. Hill, Janice B. Luth, Patrick J. McNerney, Joseph M. Nixon, and Bonnie Swift. Analysis and report preparation was performed by Terry J. Powell with assistance from Janice B. Luth. The historical research was performed by David C. Austin; illustrations were prepared by Randall D. Dawdy.

All artifacts collected will be transferred to the Center for Archaeological Investigations, Southern Illinois University at Carbondale, Carbondale, Illinois.
SETTING

Kaskaskia Island is located in Randolph County, Illinois. It is bordered on the east by the Mississippi River; to the south by the flood plain in Perry County, Missouri; to the north by the flood plain in Ste. Genevieve County, Missouri; and on the west by the former channel of the Mississippi River and the Ozark Plateau (Map 1).

The island was formed on April 18, 1881, when the floodwaters of the Mississippi River cut through the narrow strip of land separating the Mississippi and overtook the channel of the Kaskaskia River where it flows today. A portion of the island was washed away, including the town of Kaskaskia.

The drainage system of the island is quite complex, as the entire island is heavily dissected by continuous movement of the Mississippi River. Most of the surface is covered by sloughs, depressions, and old meander scars. Today, flooding is not as frequent due to the levees which surround the island. However, potential annual flooding of the Mississippi River continues to shape the island's landforms.

Today, much of the land is farmland and is partially a result of its long geological history. The bedrock under Kaskaskia Island is of Ordovician age, which is approximately 40 million years old. The elevation of the bedrock ranges between 200 and 400 feet above sea level (Willman and Frye 1970:14, 19).
Natural Divisions

1. Upper Mississippi River and Illinois River Bottomlands Division (Illinois River Section)
2. Western Forest-Prairie Division (Carlinville Section)
3. Middle Mississippi Border Division
   a. Glaciated Section
   b. Driftless Section
4. Southern Till Plain Division
   a. Effingham Plain Section
   b. Mt. Vernon Hill Country Section
5. Wabash Border Division
   a. Bottomlands Section
   b. Southern Uplands Section
6. Stark Division
   a. Northern Section
   b. Central Section
   c. Southern Section
7. Lower Mississippi River Bottomlands Division
   a. Northern Section
   b. Southern Section
8. Shawnee Hills Division
   a. Greater Shawnee Hills Section
   b. Lesser Shawnee Hills Section
9. Coastal Plain Division
   a. Pleistocene Hills Section
   b. Bottomlands Section

MAP 1
Location of Study Area
Kaskaskia Island is one of the driftless regions of Illinois, where glaciation did not occur. However, the island was greatly effected during the Pleistocene by glacial floodwaters which created the bottomlands along the Mississippi River. The floodwaters deposited between 50 to 200 feet of alluvium on Kaskaskia Island and also created some gravel terraces. Interestingly, there is no loess deposited on the island (Willman and Frye 1970: 17, 50).

Kaskaskia Island is geographically part of the Lower Mississippi River Bottomlands Division (Schwegman 1975:39). The soil, fauna, and flora of Kaskaskia Island are typical of the division.

The soil is fine textured with both sandy well drained components and clayey with poor internal drainage (Schwegman 1975: 39-40). Recent scouring of the river has created a ridge and swale topography. The ridges are composed of coarser materials with greater permeability and faster surface runoff, while the swales have soils of lower permeability and lower surface runoff. The individual soils range from the very clayey Darwin silty clay to the Dupo and Medway silt loams which produce prime farmland. Other soils include the frequently flooded Ware loam and the Laudes sandy loam (U. S. Army Corps of Engineers 1977:8).

These soils support prairie, marsh, and forest vegetation. Forests grow predominantly upon the lighter soils with silver maple, ash, American elm, honey locust, sugarberry, and pecan. The pecan trees were once very plentiful on Kaskaskia Island. Wet and mesic prairies, once common, are now at a minimum with
the occurrence of land drainage to enhance agriculture. The marshes, composed of river tailrush, cattails, lotus, and pickerel weed, have also decreased considerably since the construction of drainage ditches (Schwegman 1975:40). Most of the island is presently farmland.

The environment of the island supports a wide range of animal life. A variety of herpeta fauna include western cottonmouth, green water snake, green tree frog, western birdvoiced tree frog, and the male salamander. Fish present in the Mississippi River include distinctive species such as the Alabama shad, plains minnow, sturgeon chub, flat head chub, and the sicklefin chub (Schwegman 1975:41). Common varieties of fish include carp and several varieties of catfish. Fauna present on the island include rodents, rabbits, beaver, muskrat, opposum, coyote, and deer. Species of birds present include wild turkey, hawks, and various songbirds typical of the midwest. Migratory waterfowl exploit the food resources of the many sloughs, depressions, and old meander scars.
ARCHAEOLOGICAL CONTEXT

The brief summary of the cultural sequence and settlement and subsistence patterns presented is intended to serve as a framework in which to place the sites investigated on Kaskaskia Island. The discussion is limited to the immediate area around Kaskaskia Island in southwestern Illinois and southeastern Missouri.

Paleo Indian

The Paleo Indian occupation occurs prior to 8000 B.C. It is inferred mainly from archaeological evidence in the western portion of North America. Subsistence was probably based on hunting large Pleistocene game such as mammoth, as well as small fauna, and gathering wild plants.

Paleo Indian sites are rare in the midwestern United States and consist mainly of isolated finds of projectile points. The most significant Paleo Indian site near Kaskaskia Island is the Kimmswick Bone Beds approximately 40 miles northwest of Kaskaskia Island. Paleo Indian projectile points have been found in association with mastodon bones in one of the bone beds (Carlson 1979:1). No Paleo Indian sites have been found on Kaskaskia Island. The absence of Paleo Indian sites in the Mississippi River valley can probably be attributed to burial or destruction by river or glacial deposition and erosion.
Archaic

The basic subsistence settlement strategy of the Archaic Period, dating from approximately 8000-500 B.C., was more sedentary than that of the Paleo Indian Period. Subsistence settlement was still based on hunting and gathering; however, settlements were occupied for longer periods of time as camps were moved according to the availability of plant and animal resources on a seasonal basis.

Many Archaic sites appear to be small seasonal hunting and collecting stations which exhibit a limited range of artifacts. Sites are often found in rock shelters, such as the Modoc Rock Shelter about 10 miles northwest of Kaskaskia Island in Randolph County, Illinois. Excavations there revealed an Archaic occupation ranging from 8000 to 2000 B.C. (Fowler 1959:57).

Early Archaic occupations in the Kaskaskia Island area are not common. The earliest levels at Modoc Rock Shelter are of Early Archaic occupation (Fowler 1959:46). Most Early Archaic sites are small surface scatters of material producing a few chronologically diagnostic projectile points, such as Dalton, Cache River, Thebes, and Dovetail.

Middle Archaic occupations in the Kaskaskia Island area are predominantly represented by surface finds of temporally diagnostic tools of the period. In situ archaeological sites are limited to the middle levels at Modoc Rock Shelter.

Late Archaic occupations are the more common Archaic sites in the area. There are numerous small camps which produce temporally diagnostic projectile points. The most substantial
Late Archaic occupation is in the uppermost level of Modoc Rock Shelter (Fowler 1959:57).

**Woodland**

The Woodland tradition, from 500 B.C. to A.D. 1500 in the Missouri-Illinois area, is marked by the addition of pottery and agriculture. Early Woodland cultural adaptations within the Kaskaskia Island area are not clearly defined. Sites are usually defined as Early Woodland when thick, heavy cord marked pottery is found in association with Late Archaic tool assemblages. Thus, Early Woodland occupations are a mixture of traits and could be viewed as a transitional period between the Late Archaic and Middle Woodland. No sites that are definitely of an Early Woodland Period have been identified in southwestern Illinois or southeastern Missouri.

With the advent of the Middle Woodland Period, pottery and artifact styles became more elaborate, and lithic technologies showed greater diversity and sophistication. Larger, more intensely occupied sites occur, and burial practices are very elaborate, often with large amounts of exotic grave goods.

Middle Woodland occupations are common throughout southwestern Illinois. Sites of the period are represented by Sugar Camp Hill (Maxwell 1951) near Carbondale and numerous sites in the Cedar Creek Basin (McNerney 1975). Major centers of Middle Woodland occupation within the area are the Twenhafel site in the Mississippi River Valley near Gorham, Illinois (Hofman 1979:34-39; Maxwell 1951:190-191), and the Hiser Mounds and Village site near Sand Ridge, Illinois (Hoffman 1960:25-30).
Sites with Late Woodland occupations near Kaskaskia Island include the Kreilich site, Cole site, Fortnight site, and the Cornucopia site, all along the lower portion of the Saline Creek in Missouri, approximately 3 to 6 miles west of Kaskaskia Island. The Kreilich site is approximately 3 miles west of Kaskaskia Island on a small tributary of the Saline Creek, about four-tenths of a mile south-southwest where the Saline Creek flows into an old channel of the Mississippi River. The Cole site is on the right bank of the Saline Creek, approximately 2 to 3 miles upstream from the Kreilich site. The Fortnight site is northwest of the Cole site on a plateau above the Saline Creek. The Cornucopia site is 1,000 feet west of the Cole site and 500 to 600 feet southwest of the Fortnight site (Keslin 1964:30-113). All of these sites are situated around, or very near, saline springs to exploit the salt resources.

**Mississippian**

The Mississippian Period, ranging from A.D. 800 to 1600, is characterized by a wide range in site size and complexity. The Cahokia site, one of the largest Mississippian sites in North America, is only 50 miles north of Kaskaskia Island. Sites ranging from small campsites to small villages and towns are found within the area. Sedentary villages are common, often exhibiting houses and storage/refuse pits. Maize agriculture was well known and supported large urban centers like Cahokia. Smaller settlements away from the more urban-like centers relied more heavily upon hunting and collecting, supplemented by maize agriculture. Sites
of this period were loosely linked by an elaborate socio-religious system known as the Southeastern Ceremonial Complex.

Sites with Mississippian occupations near Kaskaskia Island include the Kreilich site, Cole site, Fortnight site, Copperhead site, and the Bluff site. As noted earlier in the discussion of Late Woodland occupations, the Kreilich site, Cole site, and Fortnight site are all along the lower portion of the Saline Creek in Missouri, approximately 3 to 6 miles west of Kaskaskia Island (Keslin 1964:30-113). The Copperhead site is a burial site with stone box graves approximately 200 feet east of the Cole site. The Bluff site, another burial site with stone box graves, is just north of the Kreilich site on a bluff above the Saline Creek and probably served as the burial area for the inhabitants of the Kreilich site (Keslin 1964:114-140). One of the largest Mississippian occupations near Kaskaskia Island is the Common Field site near Ste. Genevieve, Missouri. The site consists of a village and several mounds. Small Mississippian camps and possibly farmsteads have been found on Kaskaskia Island.

**Historic Indian Groups**

At least 10 distinct North American Indian groups resided in, or traveled through, southern Illinois during the Historic Period. These were the Illinois and its segments, the Shawnee, the Mascouten, some Kickapoo, the Miami, the Wea, the Piankashaw, the Delaware, the Chickasaw, and the Natchez. The Illinois were the most important group to reside in Illinois, with major villages along the Mississippi River in the area of the French villages of Kaskaskia and Nouvelle Chartres at Fort de Chartres (Orser 1973:33).
Several historic Indian archaeological sites are known in southwestern Illinois. The Kolmer Archaeological Site near Prairie du Rocher, Illinois, is a Michigamea village dating between 1720 and 1752 (Orser 1975a) and is on the National Register of Historic Places. The Guebert site, a Kaskaskia village dating from 1719 to 1833, is located just north of Kaskaskia Island (Good 1972:61).

In southeast Missouri, the Shawnee and Delaware were reported to have settled in large villages on Apple Creek in the 1790s, approximately 20 miles north of Cape Girardeau. They moved to the Springfield, Missouri, area until they were finally removed to Indian territory. No historic Indian sites have been located in the southeast Missouri area (Price and Price 1977:15-16).

Euro-American

The earliest Euro-American occupations in the area were the French settlements at Ste. Genevieve, Missouri, and Kaskaskia, Fort de Chartres, and Fort Kaskaskia, all in Illinois. The French from Fort Kaskaskia exploited the salt springs at the Kreilich site from around 1715 to approximately 1835 (Keslin 1964:31). Kreilich site is approximately six miles west of Fort Kaskaskia near St. Marys, Missouri. Homesteads and farmsteads were also scattered throughout the area.

The old site of Ste. Genevieve has been identified archaeologically on the northwest end of Kaskaskia Island. The former town of Kaskaskia has since been destroyed by the Mississippi River (see section on History of the Kaskaskia Island Area). Archaeological excavations have been carried out at the Kreilich site. Little
of the French occupation was revealed in the excavations (Keslin 1964:31).

Numerous excavations have been conducted at Fort de Chartres (Brown 1976; Orser 1975b), and preliminary excavations have been conducted at Fort Kaskaskia (Orser and Karamanski 1977).

Numerous homesteads dating to the latter half of the 19th and early 20th centuries are present in the area. Few of these sites have been investigated archaeologically as interest in historic sites of this period is relatively recent (Price 1979).

Sites of the historic period which are on the National Register of Historic Places within the area of Kaskaskia Island include Fort de Chartres, Fort Kaskaskia, the Pierre Menard House (ca. 1802), old Cahokia Courthouse (ca. 1737), all in Illinois, and the French Historic District in Ste. Genevieve, Missouri.

A number of cultural resources assessments have been conducted in recent years within the area (McNerney 1977, 1979; McNerney and White 1979; Price and Price 1977). Investigations of these types have reported sites encompassing the entire range of cultural periods and site types.
HISTORY OF THE KASKASKIA ISLAND AREA

Kaskaskia Island, once part of the fertile American Bottom, was in the early historic period bordered by the meandering Kaskaskia River below the Illinois Bluffs to the east and on the west by the Mississippi River. This section of the Mississippi Valley was heavily utilized by prehistoric Indian groups, as evidenced by the nearby Modoc Rock Shelter, occupied as early as 8000 B.C.; the group of mounds south of Ste. Genevieve, Missouri, on le grand champ; village sites along Saline Creek in Missouri and the Kaskaskia River in Illinois; and a salt spring on the Saline, used as early as A.D. 500 (Adams et al., 1941:15-17; Keslin 1964:30).

At the time of the exploration of the Mississippi Valley by Marquette and Joliet in 1673, the Kaskaskia Island area was dominated by the Illini confederacy, particularly the Tamaroa and Cahokia tribes. In 1703, French Jesuits and the Kaskaskia tribe settled on the west bank of the Kaskaskia River about 5 miles above its mouth, forming, after Cahokia, the second permanent white settlement in Illinois. This shifted the center of the French trade from the upper Illinois River to the American Bottom. By 1707, the Indian and white population numbered about 2,200 (Franzwa 1967:148), with regular intermarriage between the two groups (Palm 1933:42-44). Four years later, the village had a large church
with a belfry and three grist mills to grind corn and wheat grown south and west of the town.

In 1718, French troops arrived at Kaskaskia and forced the separation of the French and Indian populations, the latter moving further up the Kaskaskia to form two new villages. In 1720, Fort Chartres was built 16 miles above Kaskaskia, and the villages of Prairie du Rocher and St. Phillippe were established nearby within a few years. The Michigamea tribe, considered by some to have been a part of the Illini confederacy, came up from Arkansas and settled near the fort.

Across the Mississippi River, a lead mining operation in the hills of Missouri began in 1723. A camp was established on le grand champ 3 miles southeast of present-day Ste. Genevieve to transport the lead onto keelboats for shipment (Franzwa 1967:20-25). The French also procured salt from the salt spring on the Saline, probably from before 1715 (Keslin 1964:31). Kaskaskia and the other French settlements became a major source of supply for other parts of the French empire, shipping lead, salt, grain, hides, and pork to New Orleans and its outlying posts.

When the first Fort Chartres, built of wood, was destroyed by flood in 1727, another wooden stockade was built a half mile further back from the river (Palm 1933:67). Its soldiers and the Indian allies were sent out to subdue the Fox tribe in 1730. In 1734, when the Chickasaw threatened Illinois, the erection of Fort Kaskaskia on the bluff above the village was begun for additional defense. The fort was completed two years later, and the Illinois
troops and Indians were sent south against the Chickasaw in 1736

The next decade was a period of prosperity for the Illinois
country. A census taken in 1731 had counted 300 whites, 102 Blacks,
and 68 Indian slaves living in Kaskaskia (Belting 1945:3-4). By
1750, the town of Ste. Genevieve stretched for a mile along the river,
with much of the adjoining flood plain planted with grains, cotton,
grape vines, and fruit trees (Franzwa 1967:28, 31).

In 1753, plans were made to construct a new Fort Chartres one
mile upstream from the old fort. When finished at the outbreak
of the French and Indian War in 1756, it covered an area of 4 acres,
was solidly built of limestone quarried from the nearby bluffs,
and could contain 300 men (Wallace 1903:110-111). It was generally
held to be "the most commodius and best built fort in North America"
(Schuyler 1966:18).

During the French and Indian War, French commanders led the
Illini against the English as far east as Virginia, Pennsylvania,
Georgia, and the Carolinas. Meanwhile, Fort Kaskaskia was rebuilt.
By the Treaty of Paris in 1763, the French empire in North America
east of the Mississippi was ceded to the English, and Spain acquired
the land west of the Mississippi. British forces did not arrive in
Illinois until two years later. In the meantime, Fort Kaskaskia
was abandoned, and the Fort Chartres garrison was reduced to 30 men
who formally surrendered to the English in October, 1765. Many of
the French and Indians at Kaskaskia moved across the river to St. Louis
and Ste. Genevieve to escape British rule.

At the time of the British takeover, Kaskaskia contained about
65 families and a number of slaves. It was "by far the most considerable settlement in the country of the Illinois," with the principal buildings being the Jesuit church and mission house and a number of stone buildings (Angle 1968:42-43). Captain Harry Gordon of the British Army wrote in 1766 that Kaskaskia "consists of 80 Houses, well built, mostly of stone, with Gardens and large Lots to each, whose inhabitants live generally well, and some of them have large stocks of Cattle and Hogs" (Snyder 1913:65-66). Prairie du Rocher contained 12 houses, while St. Phillippe was nearly deserted (Schuyler 1966:18).

Because the banks of the Mississippi had been slowly approaching Fort Chartres, the French inhabitants of Kaskaskia, fearing the British garrison would remove to Fort Kaskaskia on the bluff above the village, destroyed the fort one night in October of 1766 (Snyder 1913:68).

To the French inhabitants on both sides of the river, the new English and Spanish regimes brought few real changes, except for the influx of some American colonists and speculators. In 1772, a flood demolished the western wall of Fort Chartres, and the British garrison removed to Kaskaskia, where they fortified the Jesuit mission house and named it Fort Gage. The old Fort Chartres hereafter remained abandoned; its walls and buildings were torn away over the years to be used in the construction of other buildings in the area, while the banks of the Mississippi slowly receded to the west.

The British at Kaskaskia set up a despotic military government, while in Missouri the Spanish appointed a Frenchman to be military
and civil commandant at Ste. Genevieve. In July, 1778, George Rogers Clark captured Kaskaskia for the Americans and set up a temporary county government under the authority of Virginia. Due to financial pressures and friction between the French and Americans, it soon collapsed. With the expiration of this government in 1781, Illinois had no legal government until the passage of the Northwest Ordinance in 1787.

During this period of anarchy, an American fur trader and adventurer, John Dodge, backed by American newcomers and some of the more prosperous French, placed himself in command at Kaskaskia. For 6 years, Dodge occupied Fort Kaskaskia and ruled tyrannically, causing more citizens to cross into Spanish territory. Kaskaskia dwindled to a small, decaying hamlet.

Meanwhile, in 1784, the Mississippi had encroached upon Ste. Genevieve, carrying away much of its waterfront; and, in 1785, Les Grandes Eaux, the big flood, completely inundated the village. Over the next two years, old homes were moved and new ones built on the hills above the old town site, which was not completely abandoned until 1791. In 1794, the old church was moved to the new village site (Yealy 1935:61).

In 1790, Arthur St. Clair, governor of the new Northwest territory, arrived at Kaskaskia and formed St. Clair County, establishing judicial districts at Kaskaskia, Prairie du Rocher, and Cahokia. A rivalry between Cahokia and Kaskaskia caused St. Clair to form Randolph County in 1795, naming Kaskaskia its county seat.

By this time, the town had decreased in population by over
75 percent since 1783 (Allinson 1907:280-281). Moses Austin, traveling through the country, wrote that it had "no more than 5 or 600 souls," and "was much diminished in wealth as well as population" (Austin 1899:538). Prairie du Rocher had about 60 houses (Austin 1899:536), while Ste. Genevieve had "not over 100 Houses, but has more Inhabitents (sic) than Kaskaskia and the Houses are in Better repare (sic), and the Citizens are more Wealthy. . . . what has made the Town of St. (sic) Genevieve is the Lead and Salt that is made near the place . . . ." (Austin 1899:541). Two miles south, Nouvelle Bourbon, or New Bourbon, had been founded in 1793 and, by 1798, had a population of about 400 (Yealy 1935:68).

In 1800, Indiana Territory was formed, and large numbers of Americans came to settle in what is now Monroe County. In 1802-1803, an American garrison rebuilt Fort Kaskaskia and was stationed there for five years. In 1804, Kaskaskia became a land office town; and, in 1809, after Illinois had been made a separate territory, Kaskaskia became the capital. Across the river, Ste. Genevieve rivaled St. Louis with over 1,300 people. The remnants of the Peoria tribe lived nearby (Yealy 1935:73-75).

Kaskaskia became the capital of the new state of Illinois in 1818. A visitor wrote that the town . . . contains 160 houses, scattered over an extensive plain; some of them are of stone. Almost every house has a spacious picketed garden in its rear. The houses have a clumsy appearance. The inhabitants are more than half French, they raise large stocks of horned cattle, horses, swine, poultry, &c. There is a post office, a land office for the sale of public lands, and a printing office, from which is issued a weekly newspaper entitled the 'Illinois Herald' (Buck 1917:76).
Roads connected Kaskaskia with Illinoistown (East St. Louis), Shawneetown, Vincennes, Fort Massac, and Golconda. The location of the land office and the arrival of American settlers caused a floating population to soar to over 7,000 (Montague 1859:47).

The state capital was removed far up the Kaskaskia River Valley to Vandalia in 1820; and, other than a few more notable events, Kaskaskia began its decline. In 1825, the town celebrated the arrival of the Marquis de LaFayette; and, in 1833, the Convent of the Ladies of Visitation opened there. In 1841, a visitor described the town as "having ceased to be of much importance, and seems to be in a state of decay." The population was estimated at "about one thousand, and is largely mixed with half-breed French . . . ." (Oliver 1843:53-54). A major flood in 1844 destroyed many Kaskaskia homes and ruined what commercial aspects the town still possessed. The county seat was removed to Chester, which had been founded in 1829, and the convent was moved to St. Louis. Other floods in 1851 and 1857 covered the agricultural fields south and west of the town (Montague 1859:47).

While the Mississippi River slowly shifted its channel to the Illinois side, the town of St. Marys, which became a small milling and farming center, was platted on the Missouri side of the river in 1847 (Work Projects Administration 1941:522). In Ste. Genevieve, the production of salt on the Saline ceased in about 1835 (Keslin 1964:30), and the construction of railroads diverted the lead ore from Ste. Genevieve to St. Louis. The town hereafter depended upon agriculture and the quarrying of sandstone. Although it had ceased to be the rival of St. Louis, a large number
of German immigrants in the 1830s and 1840s boosted its population. Copper mining was begun west of the town in about 1875, and later lime and marble industries were established.

The town of Dozaville was founded by William Doza in 1872 on the west edge of Kaskaskia Commons, almost opposite St. Marys. By 1883, it contained a general store and a combination grocery and drug store (McDonough 1883:308). This town has also been referred to by the name of Pujol, after Louis Phillippe Pujol, a Kaskaska merchant (Adam 1968:481).

On April 18, 1881, the Mississippi River overflowed its banks, washing away the thin strip of land separating it from the Kaskaskia River, thus forming a stream with a fall of six feet that poured into the Kaskaskia channel. This channel widened and deepened over the next few days and nights until it was reportedly large enough for a steamboat to pass through. The town of Kaskaskia was severely damaged and was hereafter surrounded by water. Having a population of about 350, the town luckily was not completely demolished in the 1881 flood, but the great change effected in the Mississippi channel now guaranteed its eventual destruction. More of the old town was washed away between 1886 and 1909; and, by 1914, only a corner of it remained, occupied by four or five families. St. Marys and Dozaville (Pujol), once on opposite sides of the Mississippi, became separated only by sand and a narrow slough (Burnham 1914:100-110) (maps 2, 3, and 4).

New Kaskaskia rose about two miles further inland in about 1915. The population in 1960 numbered approximately 100, and Dozaville contained about 175 people (Adam 1968:406-407). The only remnants left of the old town are the cornerstone of the old church, built
into the State Memorial Building in present-day Kaskaskia, and the 650 pound bell it houses, which was cast in France in 1741 and given to Kaskaskia by King Louis XV.

Today, plans are underway by the Division of Historic Sites, Illinois Department of Conservation, to develop an interpretive program which would help locate historic French sites and explain their significance along a 50-mile stretch of the Mississippi Valley from Cahokia to Chester. Throughout this area, to be termed the French Colonial District, physical remains of the French are being restored, and a series of state and private historic sites, as well as sites no longer in existence, will be included and marked by signs along the old French road system (Hamilton 1979:1-3).

Already, several state historic sites have long been established. Aside from the Kaskaskia Memorial Building on Kaskaskia Island, the State of Illinois has established state parks on the sites of Fort de Chartres and Fort Kaskaskia, after their purchase by the state in 1913 and 1930, respectively.

Ste. Genevieve has retained much of its original character, despite the town's continual commercial progress. Many early French colonial homes have survived; and, although some have been altered considerably since their construction, other structures have kept their original appearance or, in some instances, have been completely restored.
Previous work on Kaskaskia Island proper is limited to a surface reconnaissance in 1975 conducted by Loyola University at Chicago, Illinois, under the direction of Dr. James Warren Porter. The area proposed for reconnaissance was a zone 100 feet (30.5 meters) inside and 600 feet (182.9 meters) outside existing and proposed levees, consisting of 2,900 acres (972.0 hectares). Approximately 2,200 acres (891.0 hectares) of the proposed 2,900 were actually covered. The additional 700 acres (283.5 hectares) consisted mainly of slough areas which were not accessible for surface reconnaissance.

Forty-two new sites were located, including the ten proposed for testing in this study. Components represented on the sites were 1 Archaic, 8 Woodland, 9 Mississippian, 26 of unknown cultural affiliation, and 10 historic, including a few early French occupations (Linder 1975:1, 27, 28).

Site size ranged from an isolated artifact to an area of over 13,000 square meters. The single Archaic component was an isolated find of one Late Archaic projectile point. Most of the Woodland sites yielded from 1 to approximately 20 artifacts within a 50 square meter area. The largest size Woodland site (23-STG125) produced 53 artifacts in a 2,000 square meter area under excellent visibility (density of .03 artifacts/square meter). Mississippian sites tended
to produce more artifacts and were of larger site size than Woodland sites. One of the larger sites, 11-R-347, of 5,000 square meters, produced 152 artifacts under poor to fair visibility with an artifact density of .03 artifacts/square meter. On a whole, many of the sites produced a small number of artifacts.

Ten sites are to be impacted by the proposed levee project. The scope of work calls for a shovel testing program to determine the National Register significance of these sites. The location of sites were relocated using maps and description of locations on site forms produced by the 1975 survey.

In the initial reconnaissance, a very minimal amount of surface material was used to define a site. Site R-344 was defined on the basis of two flakes, and site R-348 was defined by a possible core (Linder 1975:14). The present reconnaissance used only one piece of cultural material to redefine sites recorded by the initial reconnaissance. Site size was defined by the area of scatter of surface material.

Once the site was located, all artifacts were marked by flags, thus delineating the site size. All materials commonly associated with prehistoric sites, ceramics, chert, sandstone, so-called fire-cracked rock, bone, baked clay, etc., were flagged. All materials common on historic sites, such as brick, limestone, ceramics, metal, bone, etc., were also flagged. Once the site was located and its limits defined by the distribution of flags, a shovel testing program was implemented in order to determine the presence or absence of sub-plow zone cultural deposits. Any undisturbed midden or cultural features would be indications that
additional testing should be conducted. The strategy was to place
a gridwork of shovel tests spaced 10 meters apart over the entire
area of artifact scatter. Each shovel test was 30 centimeters by
30 centimeters by 50 centimeters deep. However, low artifact
density over large areas demanded departure from this practice.
The ideal strategy was carried out on most sites, and any deviations
are described for individual sites in the section on results of
shovel testing.

The criteria for evaluating archaeological sites and determining National Register significance was a combination of several factors: (1) the nature and amount of sub-plow zone cultural material, (2) the nature of the artifacts collected on the 1975 and the present reconnaissance, and (3) the nature of the soil stratigraphy exposed by the shovel tests. All three factors were evaluated together on a site-by-site basis. Cultural indicators of sub-plow zone prehistoric cultural deposits were defined as charcoal, baked clay, sandstone, and limestone, as well as the more obvious artifacts. Indicators of sub-plow zone historic sites include brick, limestone, sandstone, and cinders, as well as the more obvious artifacts of ceramic, metal, glass, and bone.

All shovel test holes were carefully examined for any indicators of cultural material. Soil from each test hole was examined for material. The walls and bottoms of holes were troweled and inspected for very small flecks of charcoal, baked clay, or other material. The soil stratigraphy was also observed and recorded, as well as the depth of the plow zone. The Oakfield soil coring tool was regularly employed to sample the soil below the depth of the shovel.
tests. Occasionally it was used to sample soil between the 10 meter interval shovel tests.

Three sites, R-344, R-352, and R-360, were cored with a 1 1/4 (3 cm diameter) core. Mr. Clifford Miles from the Soil Conservation Service in Sparta, Illinois, performed the corings. These provided examination of deep stratigraphy for former buried surfaces and cultural deposits.

All material found was labeled according to a test hole number and depth. Charcoal and baked clay were not used as conclusive evidence of prehistoric cultural deposits alone. They were used as additional indicators on sites where other artifacts were located below the plow zone. Given the small sample which shovel testing reveals of a site, tests which produced even one piece of sandstone or a charcoal fleck below the plow zone would be a candidate for additional testing.

After shovel testing was completed, a sketch map of site location, the placement of shovel test holes, and surface material was made. The gridwork of shovel tests provided a means of obtaining a controlled surface collection. After mapping was completed, all surface material was collected and placed in appropriately labeled bags. Only two deviations occurred, on sites R-329 and R-357, which are discussed later in the results of phase I assessment.
RESULTS AND EVALUATION OF PHASE I ASSESSMENT

Introduction

Surface cover was considered a factor in evaluating the sites to be investigated. Tables 1 and 2 present data on artifact counts, type of ground cover, ground visibility, and site size for the initial and present reconnaissances, respectively. An inspection of the tables indicates that there are differences between site size and the amount of material recovered in the two reconnaissances. In general, more cultural material per site was recovered in the initial reconnaissance than in the present. In most instances, the differences appear to be proportional to the amount of ground visibility.

However, the differences in the amount of cultural material on R-352 and R-360 can not be totally attributed to ground visibility. Visibility on R-352 was similar during the two reconnaissances, but a much larger quantity of material was recovered in the initial reconnaissance. An explanation is offered for this discrepancy in the results of phase I assessment for R-352.

Visibility on R-360 was much less in the present reconnaissance than in the initial, but twice as much prehistoric cultural material was recovered. The differences in cultural material collected on R-352 and R-360 suggest that factors other than ground visibility are responsible for the differences.
Table 1
Initial Surface Reconnaissance of Sites on Kaskaskia Island
(Linder 1975)

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Number of Artifacts</th>
<th>Ground Cover</th>
<th>Ground Visibility</th>
<th>Site Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prehistoric</td>
<td>Historic</td>
<td></td>
<td>Prehistoric</td>
</tr>
<tr>
<td>R-329</td>
<td>4</td>
<td>-</td>
<td>Sparse weed cover</td>
<td>-</td>
</tr>
<tr>
<td>R-336</td>
<td>6</td>
<td>-</td>
<td>Low corn</td>
<td>Fair to poor</td>
</tr>
<tr>
<td>R-339</td>
<td>1</td>
<td>-</td>
<td>Low corn</td>
<td>Fair</td>
</tr>
<tr>
<td>R-344</td>
<td>2</td>
<td>-</td>
<td>Beans</td>
<td>Very poor</td>
</tr>
<tr>
<td>R-352</td>
<td>153</td>
<td>-</td>
<td>Plowed wheat stubble</td>
<td>Fair to good</td>
</tr>
<tr>
<td>R-354</td>
<td>3</td>
<td>2</td>
<td>Plowed</td>
<td>Excellent</td>
</tr>
<tr>
<td>R-357</td>
<td>26</td>
<td>1</td>
<td>Plowed</td>
<td>-</td>
</tr>
<tr>
<td>R-359</td>
<td>30</td>
<td>-</td>
<td>Plowed</td>
<td>Excellent</td>
</tr>
<tr>
<td>R-360</td>
<td>5</td>
<td>-</td>
<td>Plowed</td>
<td>Excellent</td>
</tr>
<tr>
<td>R-361</td>
<td>1</td>
<td>-</td>
<td>Plowed</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
Table 2
Present Surface Reconnaissance of Sites on Kaskaskia Island

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Number of Artifacts</th>
<th>Ground Cover</th>
<th>Ground Visibility</th>
<th>Site Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prehistoric</td>
<td>Historic</td>
<td></td>
<td>Prehistoric</td>
</tr>
<tr>
<td>R-329</td>
<td>7</td>
<td>-</td>
<td>Low wheat</td>
<td>40%</td>
</tr>
<tr>
<td>R-336</td>
<td>1</td>
<td>2</td>
<td>Corn stubble</td>
<td>30%</td>
</tr>
<tr>
<td>R-339</td>
<td>0</td>
<td>3</td>
<td>Corn stubble</td>
<td>20-30%</td>
</tr>
<tr>
<td>R-344</td>
<td>3</td>
<td>-</td>
<td>Bean stubble</td>
<td>20-25%</td>
</tr>
<tr>
<td>R-352</td>
<td>5</td>
<td>-</td>
<td>Bean stubble</td>
<td>5-20%</td>
</tr>
<tr>
<td>R-354</td>
<td>0</td>
<td>0</td>
<td>Disced weeds</td>
<td>50%</td>
</tr>
<tr>
<td>R-357</td>
<td>6</td>
<td>30*</td>
<td>Planted</td>
<td>100%</td>
</tr>
<tr>
<td>R-359</td>
<td>18</td>
<td>-</td>
<td>Bean stubble</td>
<td>35%</td>
</tr>
<tr>
<td>R-360</td>
<td>11</td>
<td>31</td>
<td>Bean stubble</td>
<td>20%</td>
</tr>
<tr>
<td>R-361</td>
<td>0</td>
<td>-</td>
<td>Bean stubble</td>
<td>20%</td>
</tr>
</tbody>
</table>

* All material was not collected
More historic cultural material was recovered in the present reconnaissance than in the initial reconnaissance. This is undoubtedly due to only a very recent awareness of the archaeological significance of late historic sites. Late historic sites were probably observed in the field during the initial reconnaissance but were not recorded. The comparison of the two reconnaissances indicates that ground visibility, when combined, provided adequate evaluation of site size and the nature of cultural materials present on each site.

R-329

This site is located on the north end of the island just inside the present levee on a low ridge trending roughly east-west (Map 5). The site was defined in the original survey by four isolated pieces of material (Linder 1975:9), two of which were located outside the area to be impacted which is within 200 feet of the present levee.

The scatter of prehistoric material was of extremely light density, similar to that of the initial survey, covering an area of 200 by 400 meters. It was determined that this sparse density did not warrant 10 meter interval shovel testing over the entire area. Thus, an alternate testing strategy was implemented.

One transect of shovel tests, (A), was placed across the entire length of the site to provide a cross section of the stratigraphy across the site. Another transect, (B), was placed within the scatter of historic material at the western end of transect A, covering 72 by 30 meters. Also, four test holes,
MAP 5
Location of Sites Tested

- ■ to be impacted
- □ not to be impacted

0  0.5  1 km
0  0.5 mile
spaced 10 meters apart, were placed around each of the six prehistoric artifacts found on the surface (Map 6). These four test holes were placed around each artifact based on the assumption that subsurface features may have been the source of the artifacts. The 10 meter spacing anticipates the possible lateral displacement of the artifacts from their source.

All tests in transect A on the prehistoric component were negative. Shovel test A-5 (Map 6) revealed a sandy silt highly mottled with dark angular chunks of silt. All other tests produced uniform soil stratigraphy. The highly disturbed stratigraphy in test A-5 appears to correspond to the location of an old borrow pit from a former levee as described by Mr. John Klein, the owner of the property. The levee was constructed about 1914-1918, and the borrow pit was filled in with the levee fill at a much later date, in the early 1950s. The repeated construction and destruction of the levee could have possibly disturbed much of the area of site R-329 (Map 6).

Only test area A of the six test areas produced any possible signs of cultural material. Two pieces of gravel and one tiny fleck of charcoal were found in the northernmost shovel test of area A. However, this occurrence does not appear to be highly significant, for it falls in the path of the former levee and borrow pit and thus is probably of a disturbed context. No evidence of prehistoric midden accumulation or subsurface features were encountered in transect A or the test areas.

All seven tests in transect B as well as shovel test A-12 produced historic material to a depth of 45 centimeters below
MAP 6
Site R-329

Levee Limit
Walked Area Limit
Historic Site
Shovel Test
Lithic
Pottery
Utility Pole
the surface. Materials from a wide temporal range, from stoneware to a throw-away aluminum pie pan, occurred within the same depth range. Thus, the materials are in a highly disturbed context.

Mrs. Klein, the owner of the property, recalled that an old house once stood at this location but was demolished in order to build their present house. Much of the rubble from the old house was buried in the present backyard, while the remainder was taken to a dump. Apparently, transect B was located in this area.

The old house was reported to have been 200 years old. Three sherds of coarse earthenware recovered from the site indicate that such an age is possible. The sherds are indicative of an early French occupation. No other artifacts indicated such an early occupation. A much later occupation, possibly mid to late 1800s, is indicated by three whiteware sherds, three stoneware sherds, and several curved glass fragments. A very late occupation is indicated by a throw-away aluminum foil pie plate and a carbon rod, possibly from a storage battery.

No further mitigation or assessment is recommended for R-329. The prehistoric component is within the plow zone, and a portion of the site has undoubtedly been disturbed by the construction and destruction of the former levee and borrow pit. All evidence indicates that the historic component of R-329 is highly disturbed. Thus, very little information would be provided for either the early French occupation or the later historic occupation in such a highly disturbed context. Historic sites which have been occupied for a long period of time, such as R-329, often have had much rebuilding which destroys the in situ context of earlier
occupations. The following is an inventory of the cultural material recovered at the site.

Initial Reconnaissance (Linder 1975:9)

1 flake
1 hoe flake (Mill Creek chert?)
2 clay tempered plain sherds

Present Reconnaissance

General Surface

Prehistoric
1 Korando cord-marked body sherd
2 unidentified sherds
5 chert flakes
1 biface mid section

Historic
3 stoneware
3 whiteware
3 redware; 2 coarse with caramel colored slip, 1 coarse with white slip and green tint glaze; 18th century Early French (Good 1972:72) (Plate 2A, B)
1 door knob (?) fragment
8 curved glass
1 decorated glass
1 round nail
2 square nails
1 unidentified metal fragment
2 brick fragments
1 plaster fragment
3 limestone
4 sandstone
2 igneous rocks
2 pebbles

Shovel Tests

Prehistoric
1 chert piece

Historic
2 stoneware
3 curved glass
2 flat glass
1 carbon rod (storage battery?)
1 aluminum foil pie plate
9 brick
26 limestone
14 plaster
7 pebbles
This site is located on the north end of the island outside the levee on a low rise trending in an east northeast-west southwest direction, covering an area 10 meters by 10 meters (Map 5). The site was originally defined as a small, sparse scatter of material of a Woodland affiliation (Linder 1975:11).

The present surface reconnaissance revealed no diagnostic prehistoric or historic material. One piece of worked chert indicated a prehistoric occupation, and two pieces of limestone suggested a possible historic component. However, a similar type of limestone occurs on the sides of the levee not far from the site.

Three transects with a total of 15 shovel tests covered the site (Map 7). The plow zone was approximately 25 centimeters. Below it, the soil was a very uniform dark gray clayey silt. Soil cores in the bottom of several shovel tests extended to an additional 50 centimeters, at which point the soil consistency prevented any deeper penetration. These cores produced soil similar to that found in the shovel holes. No evidence of cultural material was revealed in any of the shovel tests.

The shovel tests indicate that the prehistoric and historic components are confined to the surface. Since no other historic material was encountered, the limestone probably originates from the levee and does not indicate an historic occupation. Based
upon the sparse material from both surface reconnaissances and the negative shovel tests, no further mitigation or assessment is recommended. The following is an inventory of cultural material recovered at the site.

Initial Reconnaissance (Linder 1975:11)

1 plain surface grog tempered sherd
3 sherd fragments, grit tempered
2 chert flakes, 1 modified, 1 possibly heat treated

Present Reconnaissance

General Surface

1 worked chert
2 limestone

R-339

This site is located on the north end of the island outside the levee on a low east northeast-west southwest trending rise (Map 5). The site was defined by a single grog tempered, cord marked sherd during the initial survey. The present survey found no prehistoric material but did identify a possible historic component, covering 20 by 30 meters. The minimal quantity and range of historic material suggest that the scatter represents an isolated discarding activity and not a true site.

Two transects, A and B, were placed in the area of the prehistoric component as defined by the initial survey. The historic scatter was tested by placing shovel tests approximately 10 meters from each piece of brick and limestone in four directions (Map 8). The soil on both components was a very uniform dark brown sandy clay silt, very similar to the soil on R-336. All tests in the area of the prehistoric component were negative. Two tests in
the historic scatter produced a piece of limestone and a cobble in the plow zone but nothing below this depth. The subsurface tests indicate that the historic component is probably only a small surface scatter of discarded items. Given the paucity of surface material for both surveys and the lack of subsurface material, no further mitigation or assessment is recommended. The following is an inventory of the cultural material recovered at the site.

**Initial Reconnaissance (Linder 1975:11)**

1 cord marked, clay tempered sherd

**Present Reconnaissance**

**General Surface**

Historic

1 limestone

1 brick fragment

**Shovel Tests**

1 limestone (plow zone)

R-344

This site is located on the east side of the island outside the confines of the levee (Map 5). It is situated on a low sandy rise trending roughly east-west. The site was identified in the initial reconnaissance on the basis of two flakes of an unknown cultural affiliation (Linder 1975:14). The present reconnaissance located four artifacts within ca. 20 by 30 meter area. The one sherd indicates a Late Woodland occupation. Transect A crossed the site lengthwise, northeast-southwest, with transects B and C perpendicular to it (Map 9).
The soil, as revealed in transect A, grades from a dark gray silt on the slope on the west end to almost pure sand near the top of the rise. Mr. Clifford Miles of the Soil Conservation Service, Sparta, Illinois, extracted a 1.3 meter deep soil core near shovel test A-4 with a 3 centimeter solid soil core. The depth from 0-29 centimeters of this core was a loamy soil with some soil development; 29-180 centimeters was almost pure sand. There was no evidence of any buried soil horizons or other indications of buried prehistoric cultural levels.

Based upon the sparse surface material collected during both reconnaissances and the negative sub-plow zone tests, no further mitigation or assessment is recommended. The following is an inventory of the cultural material recovered at the site.

Initial Reconnaissance (Linder 1975:14)
- 2 chert flakes

Present Reconnaissance

General Surface
- 1 Korando cord marked (?) snord
- 2 chert flakes
- 1 chert chunk

R-352

This site is located on the east side of the island just within the confines of the levee and occupies an area of 70 by 70 meters (Map 5). It occupies a northeast-southwest trending ridge with a similar trending low rise to the south. The site was defined in the initial surface reconnaissance by a surface scatter of 153 artifacts located under fair to good surface conditions.
conditions. The artifacts indicated a Mississippian occupation (Linder 1975:15-16). This site produced one of the highest prehistoric artifact counts of the ten sites which were to be assessed. The type and quantity of artifacts recovered indicated a rather intensely occupied site, suggesting a possible presence of subsurface features. However, the present survey revealed such a sparse scatter of material that the site was difficult to define. Only 8 flakes and 1 piece of sandstone were found. Surface examination was not limited to the 200 foot area within the present levee to be shovel tested; the entire area was thoroughly investigated. The large difference between the amounts of material located on the two surface reconnaissances is difficult to explain.

There are several possible explanations for this discrepancy: (1) surface visibility during the present surface reconnaissance was not as good as for the initial reconnaissance, (2) there is a difference in the amount of person hours spent in surface examination, (3) farming activities are a large factor in determining the distribution of material that appears on the surface at any one time, or (4) most of the material was collected in the initial surface reconnaissance. These factors will be assessed individually to provide an explanation for the discrepancy in the amounts of material collected.

Surface conditions under which the two reconnaissances were conducted are comparable. Conditions under which the present surface survey was conducted is regarded as "fair," while that of the initial reconnaissance was "fair" to "good." Assuming that
survey techniques and the definition of concepts of surface conditions are comparable, this slight difference in surface conditions should not have produced the large difference in amounts of material collected.

Four person hours were spent in surface examination on the present reconnaissance while an indeterminate number of hours was spent on the initial reconnaissance. However, it is felt that any amount of increase in the number of person hours spent in surface examination during the present reconnaissance would not have appreciably increased the amount of material recovered.

Farming activities may be a factor in determining the distribution of artifacts, but little is known about these processes.

Much of the material on the site may have been collected on the initial reconnaissance. The soil covering much of the site is sand, and the slight ridges could have been more prominent, at one time, but have since been eroded by water and wind, leaving the site as just a thin veneer of artifacts on the surface. This phenomenon is known to occur with repeated artifact collecting, and one artifact collection could have severely depleted the number of artifacts.

The best hypothesis is a combination of three factors presented in order of decreasing importance: (1) depletion of artifacts by collection in the initial survey, (2) differential surface conditions, and (3) farming activities at or just before the two surveys effect the distribution of artifacts. Most of the artifacts were probably collected during the initial surface reconnaissance, with better surface visibility. This, along with
possible unknown processes in farming practices, may have obliterated the amount of material for the present reconnaissance.

Shovel test transects were placed only within the 200 foot area of the site within the impact zone (Map 10). This area also corresponded to the highest concentration of cultural material located in the present reconnaissance. All 45 shovel tests were negative, except for one near the level in which one charcoal fleck was discovered. It could be associated with disturbance from levee construction, or even the original deposition of the soil. No other indications of cultural activity were discovered. Test holes were checked very carefully in light of the discrepancy in surface material.

Mr. Clifford Miles of the Soil Conservation Service, Sparta, Illinois, extracted a 1.8 meter deep, 3 centimeter diameter solid core near the center of the area shovel tested. No sub-plow zone cultural deposits were indicated.

Based upon the above evaluation, no further mitigation or assessment of R-352 is recommended within the impact zone. The following is an inventory of cultural material collected from the site.

Initial Reconnaissance (Linder 1975:15-16)

1 piece chert
1 notched hoe
1 drill
2 triangular points
1 piece quartzite pebble
128 flakes, some of Kaolin and Mansker cherts, many modified
1 monks mound red sherd
1 cord marked grit grog tempered sherd
5 shell tempered (some grog) sherds
2 plain, grit grog tempered sherds
MAP 10
Site R-352
- Levee Limit
- Impact Limit
○ Shovel Test
L Lithic
Ss Sandstone

20 meters 10 0
Scale

49
1 fabric marked, grit clay tempered sherd
4 ceramic fragments
1 red slipped, grit tempered sherd

Present Reconnaissance

General Surface

7 flakes
1 piece sandstone

R-354

The site is located on the north end of Kaskaskia Island within the confines of the levee. It is situated on the edge of an old channel remnant (Map 5). The site was defined by the initial survey as having a prehistoric component consisting of 3 flakes and an historic component consisting of 1 musketball and 1 clinker (Linder 1975: 16). The present reconnaissance located no material. The site appears to represent a very limited activity area for each component and was probably completely collected during the initial survey.

Four shovel test transects of four test holes each were placed on the site area as defined by the initial survey (Map 11). All shovel tests were negative.

Based upon the limited amount of surface material, both the prehistoric and historic components appear to be limited activity areas. Most of the site was probably collected during the initial reconnaissance. Therefore, no further mitigation or assessment is recommended for R-354.

R-357

The site is located on the north end of Kaskaskia Island within the confines of the levee (Map 5). Linder's reconnaissance
MAP 11
Site R-354

- Levee Limit
- Fence
- Shovel Test

Transects

Klein Property

Scale
10 meters

Old Meander

--- Levee Limit

Shovel Test
consisted of a general and controlled surface collection and post-hole testing at 40 meter intervals, transecting the east-west dimension of the site (Linder 1975:16-17). Linder's surface collections indicate a Woodland, Mississippian, and possibly an Early French occupation as defined by one musket ball, covering an area of 150 by 50 meters.

A general surface reconnaissance and shovel testing program were conducted for the present assessment. The surface collections indicated a Woodland, Mississippian, and a substantial historic occupation. Six of the 75 shovel tests produced positive indications of the prehistoric component, while 15 shovel tests produced positive indications of the historic component. Most of the positive tests yielded material below the plow zone for both components (Table 3).

Several shovel tests within the northwest corner of the site produced sandy silt soil mixed with angular chunks of dark gray silt similar to the soil in shovel test A-5 on site R-329. These tests were within the old levee-borrow pit area described on site R-329. Thus, part of R-357 is highly disturbed by the construction and destruction of the old levee (Map 12).

The exact nature of the context of the positive shovel tests is indeterminate. However, they do not appear to be related to the disturbance caused by the old levee and borrow pit, for some natural soil development can be seen in the shovel test profiles. Thus, further assessment and mitigation is recommended for site R-357 in order to determine the nature of the below-plow zone deposits. The following is an inventory of the cultural material collected at the site.
<table>
<thead>
<tr>
<th>Transect</th>
<th>Hole Number</th>
<th>Material</th>
<th>Depth B.S.</th>
<th>Zone Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12</td>
<td>Chert core (?)</td>
<td>Surface</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>12</td>
<td>Thinning flake</td>
<td>40 cm</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>Square nail</td>
<td>35 cm</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>Sandstone</td>
<td>35 cm</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>Charcoal flecks Thinning flake</td>
<td>45 cm</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>Flake (utilized?)</td>
<td>45 cm</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>Burned clay</td>
<td>28-38 cm</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>Bone? L.S.?</td>
<td>40-45 cm</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>Metal</td>
<td>30 cm</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>Brick piece Metal</td>
<td>35-40 cm</td>
<td></td>
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<tr>
<td>C</td>
<td>3</td>
<td>Charred seed</td>
<td>45 cm</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>Coal/clinker</td>
<td>25 cm</td>
<td>PZ</td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>Quartzite or sandstone</td>
<td>50 cm</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>Gravel piece</td>
<td>33 cm</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>Coal Gravel piece</td>
<td>25 cm</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>10</td>
<td>ca. 33 limestone</td>
<td>30-40 cm</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>11</td>
<td>Sandstone</td>
<td>25 cm</td>
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</tr>
<tr>
<td>E</td>
<td>1</td>
<td>1 bottle glass 4 charcoal 2 gravel</td>
<td>0-25 cm</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>2 nails 1 iron</td>
<td>30-35 cm</td>
<td></td>
</tr>
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<td>E</td>
<td>2</td>
<td>Limestone</td>
<td>28 cm</td>
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<td>----------</td>
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<td>------------</td>
<td>------------------</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>Stoneware</td>
<td>10 cm</td>
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<tr>
<td>E</td>
<td>4</td>
<td>2 brick frag</td>
<td>ca. 40 cm</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>1 brick frag</td>
<td>21 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 round nail</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sandstone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>Limestone</td>
<td>26 cm</td>
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</tr>
<tr>
<td>F</td>
<td>2</td>
<td>Square nail</td>
<td>Back dirt</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>Limestone</td>
<td>20-25 cm</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>Iron</td>
<td>ca. 20 cm</td>
<td></td>
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<td>G</td>
<td>1</td>
<td>1 limestone</td>
<td>10-15 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 glass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>Brick frag</td>
<td>30 cm</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td>Iron</td>
<td>34 cm</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td>Brick frag</td>
<td>Plow zone</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>Limestone</td>
<td>10 cm</td>
<td></td>
</tr>
</tbody>
</table>
Initial Reconnaissance (Linder 1975:16-17)

General Surface

1 biface tip
1 core
6 flakes
1 plain surface grit/grog tempered sherd

Controlled Surface Collection

S.0-15 E 60-80
1 large chert nodule
1 small piece chert
5 flakes (some burned)
1 plain surface shell tempered sherd

S.0-15 E 80-100
1 fossiliferous chert nodule
3 flakes (1 burned)
1 cord marked grit/grog tempered sherd

S.0-15 E 100-120
1 Mansker chert piece
1 hoe flake

S.0-15 E 140-160
1 flake

S.15-30 E 20-40
1 flake
1 shell tempered ceramic fragment

S.15-30 E 40-60
1 flake

S.15-30 E 80-100
1 core
1 piece sandstone
3 flakes

S.15-30 E 100-120
1 musket ball
2 flakes

S.15-30 E 120-140
1 plain shell tempered sherd

Present Reconnaissance

General Surface

Prehistoric
1 unidentified clay tempered rim sherd
1 weathered clay tempered body sherd
1 weathered clay tempered flat rimmed rim sherd
3 shell tempered body sherds
1 shell tempered rim sherd
1 chert core
3 flakes
1 piece shatter

56
1 bifacial thinning flake
1 bifacial thinning flake from bifacial digging implement
1 bifacial artifact
1 Late Archaic projectile point (Plate 1B)

Historic
3 stoneware
15 whiteware
2 commonware
12 curved glass
4 unidentified metal fragments
3 round nails
2 angular nails
1 end from a horse hame
1 fragment small animal skull
1 brick fragment
1 limestone/chert rock

Shovel Tests

Prehistoric
2 flakes
1 core?

Historic
1 stoneware
1 whiteware
2 curved glass
1 flat glass
1 unidentified metal fragment
5 brick fragments
3 sandstone
36 limestone
Several flecks of charcoal
4 angular nail fragments
1 round nail fragment
1 burned clay fleck
2 cinders and coal

R-359

This site is located on the east side of Kaskaskia Island outside the confines of the levee on a northeast-southwest trending sand ridge (Map 5). The site was defined by the initial reconnaissance by 29 artifacts. Ceramics indicated a Woodland and Mississippian occupation (Linder 1975:17-18).

The present reconnaissance recovered 12 artifacts within a 50 by 40 meter area. Three shovel test transects of five tests each...
were placed within the area of scatter. Four additional tests were placed around an isolated piece of sandstone north of the scatter and two additional tests on the west side (Map 13). All tests were negat. except for one which produced a modern nail within the plow zone. The nail is an isolated discard item and does not indicate an historic component.

All shovel tests on top of the ridge, near the center of the site, produced pure sand, while shovel tests on the edge of the ridge produced a clayey silt. Five soil cores were taken randomly across the site. These extended to approximately 50 centimeters below the surface. All cores were culturally sterile and produced pure unstratified sand.

The total lack of cultural material in the sub-plow zone and the nature of the sub-plow zone soil cores indicate that this site is within the plow zone. No further mitigation or assessment is recommended. The following is an inventory of the cultural material at the site.

Initial Reconnaissance (Linder 1975:17-18)

15 chert flakes, few modified
Sandstone
5 pieces chert (1 Mansker chert)
2 sherd fragments
5 cord marked grit tempered sherds
1 plain grit tempered sherd

Present Reconnaissance

General Surface

Prehistoric
2 Korando cord marked (?) body sherds
1 Baytown phase (?) body sherd
2 flakes
1 core
4 sandstone
MAP 13
Sites R-359, 361

- Levee Limit
- Shovel Test
- L Lithic
- Pc Prehistoric Ceramic
- R Rock
- Ls Limestone
- Ss Sandstone
R-360

This site is located on the east side of Kaskaskia Island outside the confines of the levee (Map 5). It is situated on a sandy ridge trending northeast-southwest. The initial reconnaissance identified a Woodland component on the basis of one cord marked grit tempered sherd and four flakes (Linder 1975:18).

The present reconnaissance identified a Woodland component measuring 60 by 38 meters and an historic component measuring 20 by 75 meters. Three shovel test transects were placed along the northeast-southwest axis. Transects A and B were placed through the center of the surface scatter of both components, as they overlap considerably. Transect C consisted of three shovel tests which covered a smaller portion of the prehistoric scatter (Map 14). Four of the 20 shovel tests produced evidence of the prehistoric component below the plow zone (Table 4). One test produced a metal fragment within the plow zone. Mr. Clifford Miles of the Soil Conservation Service, Sparta, Illinois, extracted a 1.8 meter deep, 3 centimeter diameter solid core near the center of the site. No buried cultural deposits were present.

The exact context of the subsurface prehistoric material cannot be assessed from the available information. The historic component did not exhibit the quantity of material indicative of a homestead and is present only within the plow zone. The material
Table 4
Positive Shovel Tests

<table>
<thead>
<tr>
<th>Transect</th>
<th>Hole Number</th>
<th>Material</th>
<th>Depth Below Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>Metal</td>
<td>15 cm (PZ)</td>
</tr>
<tr>
<td>A</td>
<td>7</td>
<td>Charcoal fleck</td>
<td>33 cm</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>Charcoal fleck</td>
<td>23 cm (PZ)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chert flake</td>
<td>25 cm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sandstone</td>
<td>37 cm</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>Sandstone</td>
<td>30-40 cm</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>Sherd fragment</td>
<td>14 cm (PZ)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chert flake</td>
<td>26 cm</td>
</tr>
</tbody>
</table>

probably represents a small isolated dumping activity. Some of the material is very recent in age, probably dating post-1950.

Since the sub-plow zone prehistoric material can not be evaluated on the available information, additional testing is recommended. Due to the limited research potential and recent age of the historic component, no further mitigation or assessment is recommended. The following is an inventory of cultural material collected at the site.

Initial Reconnaissance (Linder 1975:18)

1 cord marked grit tempered sherd
4 flakes, 1 Kaolin chert

Present Reconnaissance

General Surface

Prehistoric
2 Korando cord marked body sherds
2 probable Korando cord marked body sherds
1 clay tempered (?) weathered rim sherd
2 flakes
2 cores
1 bifacial thinning flake
1 igneous rock
4 sandstone

Historic
10 curved glass
8 flat glass
2 whiteware sherds
1 nail
2 beer can fragments, "Falstaff"
1 glass bottle neck with plastic cap
2 screws
1 door lock catch

Shovel Tests

Prehistoric
1 sherd fragment
1 chert flake
2 sandstone
1 unidentified metal fragment
2 charcoal flecks

R-361

This site is located on the east side of Kaskaskia Island outside the confines of the levee (Map 5). It is situated on a very slight rise, the beginning of the same rise on which site R-359 is located. The site was defined as a possible site by the initial reconnaissance, based upon the presence of one flake.

No material was located during the present reconnaissance. Two transects, with three shovel tests each, were placed within the area identified as the site by the initial reconnaissance (Map 13). No evidence for a prehistoric or historic occupation was recovered.

Based upon the sparse surface material of the two surface reconnaissances and the negative shovel tests, the site appears to be an isolated surface find or possibly a limited activity area. No further mitigation or assessment is recommended for R-361.
Summary of Phase I Recommendations

Based upon information gained from the initial and present surface reconnaissances, along with the shovel testing results, there is no evidence to indicate the presence of significant prehistoric or historic archaeological remains on sites R-329, R-336, R-339, R-344, R-352, R-354, R-359, and R-361. Thus, no further mitigation or assessment is recommended on these sites. However, surface reconnaissance and shovel testing did indicate that significant prehistoric archaeological remains may be present on R-357 and R-360, and significant historic remains may be present on R-357. Thus, additional testing is recommended to evaluate the nature of the remains and their significance.
RESEARCH DESIGN AND METHODOLOGY, PHASE II

With the completion of Phase I, two of the ten sites were recommended for further investigation. Work proceeded immediately with test excavations at sites R-357 and R-360. Procedures for this phase of the project are outlined in the scope of work (Appendix B). Test excavations were to be conducted at each shovel test unit in which features were detected. The standard excavation unit was to be 2 by 2 meters with no more than six units per site. At least one test pit was to be excavated 2 meters below the last evidence of cultural activity at each site. Where no material was found during shovel testing, the base of the plow zone was defined as the last evidence of cultural activity. All artifacts and features encountered were to be plotted, mapped, and photographed in situ. At the base of each excavation level, plan view and profile maps of soil strata, features, and artifact distribution should be completed. The standard vertical level should be 10 centimeters, unless otherwise stated (Appendix B, section 3.1).

These field operations will delineate both the horizontal and vertical extent of the site and, if determinable, the site function. Documentation to substantiate work will be provided by a photographic log in the Supplement, in which 35 mm slides are acceptable (Appendix B, section 3.3).
Artifacts recovered during excavation were washed and permanently labeled, using the numbering system of the Center for Archaeological Investigations, Southern Illinois University at Carbondale.

R-360

Site R-360 is located outside the levee on the east side of Kaskaskia Island within 270 meters of the present location of the Mississippi River (Map 5). The sandy ridge on which the site is located trends northeast-southwest. A controlled surface collection was conducted at the site. Individuals transected the site in a grid pattern, flagging visible artifacts. Each artifact was plotted with a transit location. Based upon the distribution of the surface material, local topographic relief, and information from the phase I shovel testing, the placement of excavation units was chosen.

Unit A was placed in an area of a moderate artifact concentration on the flat level portion of the ridge (Map 15). Unit B was placed near a positive shovel test, B-5, and also within the most dense concentration of surface material. Unit C was placed on the west slope of the ridge within a very low density of surface material. Unit D was placed further down the ridge to the northeast in an area of low artifact density but higher than where unit C was placed. The placement of this unit was to test the stratigraphy and to gain an understanding of differential amounts of erosion from higher portions of the site. Thus, units A and B were placed in the central portions of the site, while units C and D were placed on the periphery.
MAP 15
Site R-360

Bc  Baked Clay
L  Lithic
Pc  Prehistoric Ceramic
R  Rock
Ss  Sandstone
△  Datum

Unit A

Contour Interval
30 centimeters

9  6  3  0 meters
The placement of these units provided adequate information to evaluate both the horizontal and vertical distribution of the site. The soil profiles of these units also provided an understanding of the depositional history of this area.

Rather than 2 by 2 meters, the size of units were 3 by 1 meters. This change in size does not alter the actual area of the unit. The same amount of floor and profile surface is exposed; and, similarly, the same volume of soil is examined. The shape of this unit will provide a much longer east/west profile. These long profiles scattered across the site can be compared and assessed to facilitate a better interpretation of both cultural deposition and soil stratigraphy.

The actual method of excavation for these units was modified somewhat from the scope of work as a function of weather and time. Units were excavated primarily by shovel scraping. The intention was to screen all dirt removed from the units. However, the soil was extremely mucky from recent rains and was drying very slowly in the predominantly cold weather. Since the drying time under these conditions would be very lengthy and field time was at a premium this time of the year, only one-fourth of the soil excavated was screened through quarter-inch mesh wire. Using this procedure, screening would be completed within a reasonable amount of time, and a representative sample of all kinds and sizes of material would be collected. Further along in the work, it was clear that the proper decision had been made. Frigid weather and strong winds quickly froze the soil as it was transferred from shovel to screen.
Plan view and profile maps of soil strata, features, and artifact distributions were to be completed at each successive excavation level. However, due to the nature of the cultural material and stratigraphy, this was not necessary. Also, the bitterly cold and windy weather hampered mapping procedures. Thus, only written descriptions of levels were completed. Plan views were drawn only when features, artifact concentration, or unusual soil stratigraphies were encountered. Soil profiles were drawn at the completion of an excavation unit for only one long profile in each unit unless important variations in stratigraphy were noted in the other profiles.

A plan map was made and a photograph taken of any features when first encountered. Removal of half of a feature was done by soil zones, if determinable. A profile of the feature was drawn, followed by the removal of the second half of the feature by more distinct soil zones. Screening and artifact collection remained separate for each soil zone.

Every artifact was not mapped in situ. Rather, artifacts within a 10 centimeter level were collected together. However, artifacts found in screening were collected separately from those found in situ. Artifacts found within features were also collected separately. These procedures provided adequate vertical control of an artifact distribution. Field work and analysis indicated that little information was sacrificed using this alternate procedure.

Test unit A, the deepest unit, was excavated with a backhoe to a depth of 2 meters beyond the last evidence of cultural material, approximately 3 meters below the surface. This procedure established
the sequence of deep stratigraphy and allowed examination for any possible buried cultural deposits.

R-357

Site R-357 is located on the north end of Kaskaskia Island within the levee (Map 5). Initial work during phase II of the project included a controlled surface collection, in addition to test excavations. A pedestrian survey of the site made it apparent that the prehistoric material could be mapped by using transit location, but the historic material was too abundant to record in this manner. Thus, an alternate collection technique was used. The majority of historic artifacts were concentrated in an area on the west end of the field (Map 16). By utilizing the shovel test holes from phase I assessment as grid intersections, 10 meter square units were created for the west half of the field. All historic artifacts within each unit were collected together. This alternative provided adequate horizontal control on the distribution of historic artifacts (Map 17).

Based upon the results of the phase I assessment, distribution of the artifacts, and the local topography, six units were placed on the site. Units A and B were specifically placed in areas where there had been positive shovel test results during the shovel testing phase. This is an area of low surface artifact density and is within the lower elevations of the site. Unit D was placed specifically near a negative shovel test. This unit was placed within an area of prehistoric surface material of medium density and was situated in an area of higher site
# Site R-357

**Distribution of Historic Material**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<td>Historic Ceramic</td>
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<tr>
<td>G</td>
<td>Glass</td>
</tr>
<tr>
<td>M</td>
<td>Metal</td>
</tr>
<tr>
<td>Br</td>
<td>Brick</td>
</tr>
<tr>
<td>Ss</td>
<td>Sandstone</td>
</tr>
<tr>
<td>Ls</td>
<td>Limestone</td>
</tr>
<tr>
<td>C</td>
<td>Coal or Cinder</td>
</tr>
<tr>
<td>Sg</td>
<td>Shotgun Shell</td>
</tr>
<tr>
<td>Bt</td>
<td>Button</td>
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<td>T</td>
<td>Tooth</td>
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</table>

**Legend**

- 0 - 10 meters

**Map 17**

<table>
<thead>
<tr>
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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<td></td>
<td>1C</td>
<td>1C</td>
<td>1C</td>
<td>1C</td>
<td>1C</td>
<td>1C</td>
<td>1C</td>
</tr>
<tr>
<td>1Bt</td>
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<td></td>
<td>1Bt</td>
<td></td>
<td>1Bt</td>
<td></td>
<td>1Bt</td>
<td></td>
</tr>
<tr>
<td>1Ss</td>
<td>1Ls</td>
<td></td>
<td>1Ls</td>
<td></td>
<td>1Ls</td>
<td></td>
<td>1Ls</td>
<td></td>
</tr>
</tbody>
</table>

**Shovel Test Transects**

*72*
This unit served as a control to determine if subsurface material was present in areas with negative shovel tests. It also provided information on the vertical distribution of artifacts within this area of the site. Unit E was placed among the heaviest surface scatters of both prehistoric and historic artifacts, serving primarily to test the less dense surface scatter of the historic component. Unit G was located in an area of heavy prehistoric surface scatter. The six units were placed on the site in a manner which would sufficiently evaluate both the prehistoric and historic components in relation to the distribution of surface and subsurface cultural material and elevation within the site.

Test unit B was excavated with a backhoe to a depth of 2 meters beyond the last evidence of cultural material. This procedure established the sequence of deep stratigraphy and allowed examination for any possible buried cultural deposits.

The methods of excavation which were employed at site R-357 were very similar to those at R-360. The soil on R-357 was much less permeable and required a very long time to dry thoroughly for excavation. The soil consistency was very clayey on the eastern end and remained wet during the entire excavation. The screening of one-fourth of the excavated soil continued even in these extremely wet, clayey units. Only one-eighth of the plow zone was screened, since this soil was most effected by the wet conditions. Artifacts found in the screen as compared with those found in situ continued to be collected separately. At the base of each level, forms were appropriately completed; and, with the completion of an excavation unit, a soil profile was drawn.
RESULTS OF PHASE II ASSESSMENT

Test excavations on R-360 and R-357 revealed only disturbed cultural materials. Vertically, the site is disturbed, as there are no definable cultural zones or deposits. An explanation for the formation of stratigraphy of sites R-360 and R-357 is important in determining the degree to which the sites are disturbed. The degree to which they are disturbed determines the interpretation to be given to the distribution and association of the artifacts. The quantity and quality of information to be gained from the sites also determines the significance of the sites and if further assessment or mitigation is needed.

There is a high probability that water movement is the prime factor in the random distribution of artifacts throughout R-360 and R-357. As noted in the Introduction to this report, the topography of Kaskaskia Island was formed by deposition and erosion of soil resulting from the changing courses of the Mississippi and Kaskaskia rivers. The Mississippi River continues to deposit silt in various parts of the island today.

Thus, the two major processes which are likely to be major factors in forming or disturbing the cultural deposits and materials at the sites by deposition and/or erosion are (1) fast moving water and (2) slow moving water. Formation by fast moving water would produce stratigraphy composed of coarse sediments. Cultural
material would be highly disturbed from its original context, and there could be some differential sorting of artifact classes by size or weights by the fast moving water within the vertical dimensions of the site.

Formation by slow moving water would produce stratigraphy composed of fine sediments. Cultural material would be little disturbed from its original context and thus would have no effect on artifact class, size, or weight.

Analysis of soil stratigraphy and the vertical and horizontal distribution of cultural material will be analyzed in a manner to determine if the site was formed by fast or slow moving water.

**R-360**

**Soil Stratigraphy**

Examination of soil profiles in test units A, B, and D indicate that the soil was deposited by relatively slow moving water. The soil is composed of very fine sand, much finer than that found on river beaches deposited by relatively fast moving water. The soil in all test units on R-360 gradually became lighter in color with increasing depth. Soil in units A, B, and C are mostly very fine sand. Soil below the base of the test units becomes more clayey and silty. The stratigraphy is a product of natural soil development. The fine silt and clay particles are carried downward through the soil by percolating water, leaving the more coarse particles, very fine sand, near the surface (Mr. Clifford Miles and Mr. Gary Hamilton, Soil Conservation Service, Sparta, Illinois, personal communication). Figure 1 illustrates the soil profile for test unit A, the deepest unit on the site.

75
Figure 1
Site R-360
West Wall Profile
Unit A

Munsell

1. 10 yr 3/3 dark brown sandy silt loam (plow zone)
2. 10 yr 4/3 dark brown sand
3. 10 yr 4/3 dark brown sand (mottled)
4. 10 yr 5/3 brown sand (dry, compact)
5. 10 yr 5/3 brown sand (moist)
6. 10 yr 4/2 dark grayish brown sand
7. 10 yr 4/3 dark brown sand
The uniform particle size of very fine sand observed in the test units indicates that the sand was deposited at one time or that the method of deposition and the speed of the flowing water changed very little through time. A uniform rate of deposition at intervals of time could produce a deposit with no visible stratigraphy of similar colored material if similar colored material was deposited at each interval of deposition. Leaching in sandy soil would contribute to the lack of well defined stratigraphy, producing the gradual color changes observed in the test units.

Distribution of Cultural Material

The surface material appears to have no patterned distribution for any of the eight classes of material (Map 15). However, material collected during only one controlled surface collection may fail to reveal a pattern which is present. Chert appears to cluster, but this is probably more accurately attributed to the high percentage of chert present on the site. Chert is found on all areas of the site. Although the quantity of chert varies across the site, its proportion to other classes of material remains relatively constant.

The general distribution of material is confined to the ridge top and its more gentle slopes. No material is found in the surrounding low areas of the meander scars. Ridges are the most inhabited areas in bottom lands, such as those found on Kaskaskia Island. Thus, R-360 probably has not been displaced from its original location by water action.

An analysis of cultural material by level was performed in order to detect any artifact distributional patterns in the vertical
dimension of the site. The sample size of artifacts from the test units is too small to make a statistical analysis meaningful. However, some general indications can be gained by observing the available data.

An inspection of Table 5 indicates that there is little patterning in the vertical distribution of artifacts. There is no significant increase or decrease in the number, average volume, or average weight of artifacts with increasing depth in test units. This is true for all artifacts combined or for a particular class of artifact.

The density of artifacts in the test units roughly reflects the density of artifacts on the surface (Table 5 and Map 15). Unit B was placed within the area of greatest surface density of artifacts and produced the highest density of artifacts per level of the test units. Feature 1 in unit B appears to be an erosional gulley in which artifacts have collected for some unknown reason. Unit A was placed within an area of less dense surface scatter, while unit D was placed in an area of even lower density. They contained similar amounts of materials. Unit C was placed within an area of very low surface density and produced no artifacts. The density of artifacts below the plow zone is very similar to that found on the surface and is not concentrated in a definite cultural deposit.

The maximum depth of artifacts in test units on R-360 correlates in a general fashion with the degree of slope of the ridge on which the site is located (Table 5 and Map 15). Test unit A, which was placed in an area on the site with the least amount of slope, proved to be the deepest portion of the site. Artifacts were found to a depth
## Table 5
### Distribution of Material by Test Unit and Level, R-360

<table>
<thead>
<tr>
<th>Level and Unit</th>
<th>Artifact Class</th>
<th>No. of Artifacts</th>
<th>Av Vol (cc)</th>
<th>Av Wt (grams)</th>
</tr>
</thead>
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<tr>
<td><strong>Unit A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td><strong>Level 1, Plow Zone</strong></td>
<td>Pc</td>
<td>6</td>
<td>150.70</td>
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<tr>
<td><strong>0-25 cm</strong></td>
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<td>725.95</td>
<td>6.00</td>
</tr>
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<td>6</td>
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</tr>
<tr>
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</tr>
<tr>
<td></td>
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<td></td>
<td>Ss</td>
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<td></td>
<td>.75</td>
</tr>
<tr>
<td><strong>Level 3, 30-40 cm</strong></td>
<td>Pc</td>
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<td>65.40</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>7</td>
<td>32.90</td>
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<td>.68</td>
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<td></td>
<td>L</td>
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<td>4458.60</td>
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<td><strong>Level 5, 50-60 cm</strong></td>
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<td>5.00</td>
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<td><strong>Level 6, 60-70 cm</strong></td>
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<td><strong>Level 7, 70-80 cm</strong></td>
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<td><strong>Unit B</strong></td>
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</tr>
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<td><strong>Level 1, Plow Zone</strong></td>
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<td>513.90</td>
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<td></td>
<td>R</td>
<td>1</td>
<td></td>
<td>&lt;1.00</td>
</tr>
</tbody>
</table>

*Pc = Prehistoric Ceramics
L = Chert
Ss = Sandstone
R = Rock
<table>
<thead>
<tr>
<th>Level and Unit</th>
<th>Artifact Class</th>
<th>No. of Artifacts</th>
<th>Av Vol (cc)</th>
<th>Av Wt (grams)</th>
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</thead>
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<td>Pc</td>
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<td>309.70</td>
<td>1.50</td>
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<td></td>
<td>L</td>
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<td>14.20</td>
<td>.50</td>
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<tr>
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<td>Ss</td>
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<td>-</td>
<td>8.00</td>
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<td>16=220.50</td>
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<tr>
<td>Unit C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1, Plow Zone</td>
<td>No Artifacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-20 cm</td>
<td></td>
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<tr>
<td>Unit D</td>
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</tr>
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<td>2.00</td>
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<td></td>
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<td>Level 4, 40-50 cm</td>
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<td>1</td>
<td>-</td>
<td>&lt;1.00</td>
</tr>
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</table>
of 90 centimeters below the surface. Units B and D were placed in an area of the site with a larger degree of slope. The depth of cultural material at Unit B was 60 centimeters and 50 centimeters deep at unit D. Unit C was placed on the slope of the meander scar. At this location, the site is no deeper than the plow zone. The correlation of the depth of cultural material with the degree of slope on the ridge strongly indicates that the deposition of the cultural material is directly linked with the formation of the ridge.

The evidence, although not conclusive, suggests that the cultural materials were deposited between intervals of deposition of soil by flooding of the Mississippi River. Three lines of evidence discussed above support this idea: (1) there is a uniform density of cultural material throughout the vertical dimension of the site; (2) the horizontal distribution of cultural material corresponds with the most inhabitable portions of the ridge; this does not appear to have been subject to large amounts of erosion or other disturbances; and (3) the soil on R-360 was deposited by relatively slow moving water.

The cultural materials were probably deposited at intervals such as a seasonal occupation of the site for short periods of time, interspersed by regular deposition of small amounts of alluvium from flooding. Cultural material could have been spread very thinly over the site during each occupation. A thin scatter would produce no visible horizontal layer across the site. Very thin deposits of soil by flood waters would not necessarily produce a layer of culturally sterile soil between cultural deposits. Instead,
a very slow accretion of soil and cultural material could produce the apparent uniform and random distribution of cultural material throughout the depth of the site.

A very small amount of cultural material was recovered in the test excavations and controlled surface collections. The small number of artifacts provided little data with which to interpret site function. One chert adze (Plate 1A), a bifacial blade fragment, and a polished flake from a bifacial digging implement are the extent of the tools recovered from test excavations. The controlled surface collection produced a similar number of tools. The limited amount of debitage can only be used to demonstrate the type of chert-working activities conducted at the site. The analysis of the chert debitage will be presented below.

The few ceramic sherds were too small to infer vessel form or function and could be used only as a gross temporal indicator for R-360. They most closely resembled ceramics described by Keslin (1964:38-41) as Korando cord marked, but they were not identical. Tempering varied from mostly clay temper to sherds with considerable amounts of grit. Most sherds were too small and fragmented to reveal decorative characteristics or rim form.

Phase II test excavations confirmed the phase I assessment that there are no sub-plow zone historic deposits. Unit B was placed within the area of surface scatter of historic material, and no subsurface historic features or material was recovered.

The controlled surface collection provided little additional cultural material. The only tools recovered were a bifacial blade
fragment and a polished flake from a bifacial digging implement. The ceramics and lithic debitage was similar in size and quantity to that found in the test units.

The meager amount of cultural material indicates that the site is a Late Woodland occupation. The lack of stone tools suggests that the site may have been used as a limited activity area, perhaps occupied during a seasonal settlement-subsistence strategy.

The following is an inventory of cultural material recovered from site R-360 during the phase II assessment.

Controlled Surface Collection

Prehistoric

1 unidentified Late Woodland rim sherd (Plate 1C)
8 Korando cord marked body sherds
1 Korando cord marked rim sherd
1 limestone tempered sherd
1 Baytown plain body sherd
3 weathered unidentifiable fragments
1 baked clay pieça
2 chert cores
26 chert flakes
7 chert shatter
1 chert bifacial sharpening flake (hoe)
1 chert bifacial blade fragment
30 sandstone
1 rock debris

Historic

1 nail fragment
2 unidentifiable metal fragments

Test Units

63 Korando cord marked sherds
2 Baytown plain sherds
1 unidentifiable bicated sherd
11 unidentifiable sherd fragments
20 baked clay pieces
2 chert cores
27 chert flakes
5 chert shatter
1 chert adze (Plate 1A)
1 chert bifacial blade base
48 sandstone
5 rock debris
3 bone fragments
1 tooth
3 seeds
few charcoal flecks

Test unit A which was excavated to a depth of 2 meters below the last evidence of cultural material with a backhoe revealed no buried archaeological horizons or features. All of the strata were naturally deposited and showed no evidence of dark soil colorations or artifacts which are indicative of human occupation.

R-357

Soil Stratigraphy

The processes which formed R-357 are very similar to those which formed R-360. Soil stratigraphy and the horizontal and vertical distribution of cultural material is similar to that which was observed on R-360.

Examination of soil profiles indicates that the soil was deposited by relatively slow moving water. The soil is composed of very fine sand, typical of relatively slow moving water. Certain areas of the site exhibit more clay and silt than on R-360. The soil in all test units on R-357 gradually became lighter in color with increasing depth. The stratigraphy is a product of natural soil development as was the case for soils on R-360. Figure 2 illustrates the soil profile for test unit D, which is representative of the site.

Distribution of Cultural Material

The prehistoric cultural material appears to have no patterned distribution. Material collected during only one controlled surface
Figure 2

Site R-357
West Wall Profile
Unit D

Munsell

1. 10 yr 3/2 very dark grayish brown sandy loam (plow zone)
2. 10 yr 3/2 very dark grayish brown sandy loam
3. 10 yr 3/3 dark brown sand
4. 10 yr 3/2 very dark grayish brown sand with some dark brown mottles
collection may fail to reveal a pattern which is present. Also, certain areas of the site, specifically the northwestern portion of the site, were probably disturbed by the construction and destruction of a former levee and borrow pit (Map 12).

The historic component of the site apparently has not been disturbed by the levee projects. The material is confined to an oval shaped area typical of historic sites which have been disturbed only by cultivation.

An analysis of cultural material by level was performed in order to detect any artifact distributional patterns in the vertical dimension of the site. The sample size of artifacts from the test units is too small to make a statistical analysis meaningful. However, some general indications can be gained by observing Table 6.

An inspection of Table 6 indicates that there is little patterning in the vertical distribution of artifacts. There is no significant increase or decrease in the number, average volume, or average weight of artifacts with increasing depth in test units.

The vertical density of artifacts in test units corresponds well to the surface distribution of historic artifacts but less so with the prehistoric artifacts. Units E and F were placed within the center and periphery of the site. Unit E produced a much larger number of historic artifacts than unit F. Units D and G were placed in a very marginal area of historic scatter and produced very few historic artifacts. Units A and B were placed outside the historic surface scatter and produced no historic artifacts.

There was only a partial correlation of surface density of prehistoric material and the density in test units. Test units
Table 6

Distribution of Material by Test Unit and Level, R-357

<table>
<thead>
<tr>
<th>Level and Unit</th>
<th>Artifacts</th>
<th>No. of Artifacts</th>
<th>Av Vol (cc)</th>
<th>Av Wt (grams)</th>
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<td>4.00</td>
</tr>
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<td>0-23 cm</td>
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<td>5.50</td>
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<td></td>
<td>R</td>
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<td>-</td>
<td>1.00</td>
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<tr>
<td>Unit C</td>
<td>Not Excavated</td>
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* Bc = Baked Clay
  Br = Brick
  C = Cinder and Coal
  G = Glass
  Hc = Historic Ceramics
  L = Chert
  Ls = Limestone
  M = Metal
  Pc = Prehistoric Ceramics
  R = Rock
  Ss = Sandstone
<table>
<thead>
<tr>
<th>Level and Unit</th>
<th>Artifact Class</th>
<th>No. of Artifacts</th>
<th>Avg Vol (cc)</th>
<th>Avg Wt (grams)</th>
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<tr>
<td><strong>Unit D</strong></td>
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<td></td>
</tr>
<tr>
<td>Level 1, Plow Zone</td>
<td>Ss</td>
<td>1</td>
<td>-</td>
<td>&lt;1.00</td>
</tr>
<tr>
<td>0-25 cm</td>
<td>C</td>
<td>9</td>
<td>-</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>C</td>
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<td>Level 3, 30-40 cm</td>
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<td>2.00</td>
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<td></td>
<td>C</td>
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<td></td>
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<td>-</td>
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<td>7.00</td>
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<td>L</td>
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<td>C</td>
<td>2</td>
<td>-</td>
<td>&lt;1.00</td>
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<tr>
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<td>L</td>
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<td>-</td>
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<td><strong>Unit E</strong></td>
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</tr>
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<td>104.60</td>
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<td>0-20 cm</td>
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<td>9</td>
<td>-</td>
<td>2.00</td>
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<td></td>
<td>R</td>
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<td>-</td>
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<td>G</td>
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<td>213.70</td>
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</tr>
<tr>
<td></td>
<td>M</td>
<td>16</td>
<td>-</td>
<td>11.50</td>
</tr>
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<td>Br</td>
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<td>1.04</td>
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<td></td>
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<td>-</td>
<td>3.00</td>
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<td>Ls</td>
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<td>-</td>
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<td>Av Wt (grams)</td>
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<td>M</td>
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<td></td>
<td>53</td>
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</tr>
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</tr>
<tr>
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</tr>
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<td>R</td>
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<td></td>
</tr>
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<td></td>
<td>Hc</td>
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<td></td>
</tr>
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<td>G</td>
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</tr>
<tr>
<td></td>
<td>Br</td>
<td>1</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>4</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td></td>
<td></td>
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<td>Pc</td>
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</tr>
<tr>
<td></td>
<td>Ss</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Hc</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>1</td>
<td>398.50</td>
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</tr>
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<td></td>
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<td>4</td>
<td>.50</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 3, 40-50 cm</td>
<td>No Artifacts Recovered</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Level 4, 50-60 cm</td>
<td>Ss</td>
<td>3</td>
<td>6.70</td>
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</tr>
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<td>Level 5, 60-70 cm</td>
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</tr>
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<td>Unit G</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Level 1, Plow Zone</td>
<td>L</td>
<td>1</td>
<td>175.80</td>
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<tr>
<td>0-30 cm</td>
<td>Ss</td>
<td>4</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>1</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>1</td>
<td>&lt;1.00</td>
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39
<table>
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<tr>
<th>#</th>
<th>Date</th>
<th>Site Name</th>
<th>Status</th>
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<tr>
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<td>7-82</td>
<td>SITE 1</td>
<td>Awaiting</td>
</tr>
<tr>
<td>2</td>
<td>7-82</td>
<td>SITE 2</td>
<td>Awaiting</td>
</tr>
<tr>
<td>3</td>
<td>7-82</td>
<td>SITE 3</td>
<td>Awaiting</td>
</tr>
<tr>
<td>4</td>
<td>7-82</td>
<td>SITE 4</td>
<td>Awaiting</td>
</tr>
<tr>
<td>5</td>
<td>7-82</td>
<td>SITE 5</td>
<td>Awaiting</td>
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END
Table 6 (con't)

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<tr>
<th>Level and Unit</th>
<th>Artifact Class</th>
<th>No. of Artifacts</th>
<th>Av Vol (cc)</th>
<th>Av Wt (grams)</th>
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<tbody>
<tr>
<td>Level 2, 30-40 cm</td>
<td>L</td>
<td>1</td>
<td>-</td>
<td>52.00</td>
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<td>Ss</td>
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<td>Level 3, 40-50 cm</td>
<td>L</td>
<td>1</td>
<td>115.50</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Ss</td>
<td>6</td>
<td>-</td>
<td>5.30</td>
</tr>
<tr>
<td>Level 4, 50-60 cm</td>
<td>L</td>
<td>2</td>
<td>20.80</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>Ss</td>
<td>3</td>
<td>-</td>
<td>2.70</td>
</tr>
</tbody>
</table>

F and G were placed in areas of relatively high surface density of prehistoric artifacts and produced little cultural material. Test unit A produced a higher density of cultural material than what was indicated by the surface material. Unit B was placed within an area of low surface density and produced few artifacts.

The presence of cinders and other historic material found in test units D, E, and F indicated that the formation of R-357 was relatively recent. Cinders were found in all levels in test unit D, mixed with prehistoric material. Test units E and F produced mixed levels of historic cinders and prehistoric material, but mixing was limited to the upper levels. There is no evidence that there is any disturbance from levee building activities. All test units exhibit evidence of natural soil development, which would have begun before the levees were constructed.

The analysis of soil stratigraphy and the horizontal and vertical distribution of cultural material suggests that R-357 was formed in very much the same manner as was R-360. The presence of
mixed levels of historic and prehistoric material indicates that the site was at least partially formed in relatively recent historic times and may still be in the process of forming.

Test excavations on R-357 revealed very similar results to those of R-360. Vertically, the site is disturbed very much in a similar manner to R-360. Only disturbed cultural material was recovered; no definable cultural zones or in situ deposits were revealed. The stratigraphic location of cultural material offers little information in interpreting the cultural history of the site.

A much smaller amount of prehistoric cultural material was found in test excavations on R-357 than was found on R-360. No chert tools were recovered. Only two very small cord marked body sherds and some chert debitage were recovered. A fragment of a possible sandstone abrading/grinding stone was also recovered.

Test excavations also produced very little historic material. The inventory of cultural material recovered from R-357 indicates that test excavations added very little additional material in terms of quantity and types of material to that which was found in the controlled surface collection.

The controlled surface collection produced most of the prehistoric and historic cultural material recovered from the site. However, the amount of prehistoric material is not sufficient to adequately interpret the prehistoric cultural history. The only tools recovered were one bifacial blade, one unifacial blade, and two hammerstones. An analysis of the chert debitage will be presented later.

The cultural material recovered from R-357 indicates that
the site consists of Late Woodland and Mississippian occupations. The lack of stone tools and other types of artifacts may indicate that the site was used as a limited activity area during the Late Woodland and/or Mississippian times.

The Historic Component

The historic component of R-357 is defined by a surface scatter of earthenware, stoneware, glass, metal, brick, and limestone fragments. The scatter covers an area of 75 by 78 meters within the zone to be impacted by the levee projects (maps 16 and 17). The scatter probably represents a farmstead or homestead.

No basement or other subsurface features were located. Shovel tests at 10 meter intervals within the area of surface scatter revealed no basement or evidence of outbuildings. To improve coverage of the area, soil cores were taken at 5 meter intervals between the shovel probes, and no subsurface features were located.

The determination of form and function of ceramics, glass, and metal artifacts was difficult. Ceramic and glass artifacts were highly fragmented, and metal artifacts were badly corroded. The form of these artifacts was identified when possible (see inventories below).

Earthenware, R-357, Controlled Surface Collection

<table>
<thead>
<tr>
<th>I. Whiteware</th>
<th>Ct</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Rim sherds</td>
<td></td>
</tr>
<tr>
<td>1. Plain</td>
<td>13</td>
</tr>
<tr>
<td>Whiteware ranges from 1830 to ca. 1890 (Price 1979:14); 2 are highly vitrified; 1 cup sherd (Plate 2D).</td>
<td></td>
</tr>
<tr>
<td>2. Decorated</td>
<td></td>
</tr>
<tr>
<td>a. Edge</td>
<td>2</td>
</tr>
<tr>
<td>1 blue shell edge from about 1830-1860 (Price 1979:31; Noel Hume 1970:116); plate sherd.</td>
<td></td>
</tr>
<tr>
<td>1 blue shell edge rim fragment (?).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>92</td>
</tr>
</tbody>
</table>
b. Hand-painted

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark blue interior banded with 1 wide and 1 narrow band, close together,</td>
<td>1</td>
<td>Handpainted; banding is common from 1860-1920 (Pilling n.d.:51) and is often around the rim of</td>
</tr>
<tr>
<td>painted</td>
<td></td>
<td>cups and saucers with floral patterns (Price 1979:21) (Plate 2E).</td>
</tr>
<tr>
<td>b. Raised</td>
<td>7</td>
<td>Raised decoration introduced in the late 1840s to early 1860 (Price 1979:22); 5 plate sherds,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 bowl sherds.</td>
</tr>
</tbody>
</table>

Total: 23

B. Base
1. Plain

9 1 unidentified ironstone maker's mark; 3 are highly vitrified; 1 plate sherd, 1 saucer sherd, 1 plate or saucer sherd, 4 or 5 cup sherds, 1 plate or platter sherd.

C. Body sherds
1. Plain

53 12 are highly vitrified; 2 cup sherds, 1 plate sherd.

2. Decorated
   a. Transfer print

1 Purple; this color came into use about 1820 (Price 1979:19) (Plate 3C).

   b. Hand-painted

4 A narrow light blue line part of a larger decoration (Plate 3E).

   i Fineline with bright green leaves; dates from about 1830-1860 (Price 1979:21) (Plate 3A).

   ii Small cranberry colored flower, possibly sprigware; dates from about 1830-1860 (Price 1979:21) (Plate 3B).

   iii Broadline earthen green leaf with light blue sponge decoration; dates from about late 1820-1860 (Price 1979:19); plate or saucer sherd (Plate 3D).

   c. Raised

5 2 plate sherds, 2 bowl sherds, 1 angular sugar bowl sherd.

   d. Unidentified

1 Small dark blue flowers on a background of blue which has bled. Transfer print (?)

Total: 84

D. Fragments

20

II. Commonware
A. Rim sherds

93
<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plain</td>
<td>1. Plain</td>
<td>Common yellow; common in the late 1840s (Fitting 1970:66); bowl sherd (?)</td>
</tr>
<tr>
<td>B. Body sherds</td>
<td>1. Plain</td>
<td>Common yellow; bowl sherds (?)</td>
</tr>
<tr>
<td>2. Decorated</td>
<td>a. Annual</td>
<td>Yellow interior, brown exterior with beige bands; bowl sherds (?)</td>
</tr>
<tr>
<td>III. Redware A. Body sherds</td>
<td>3</td>
<td>Coarse redware with caramel colored slip; 18th century (Good 1972:72) and Early French (Jelks and Orser 1979:personal communication) (Plate 2F)</td>
</tr>
<tr>
<td>3</td>
<td>Redware with a clear glaze (Travelstead 1979:19) and is not useful for dating (Pilling 1979:64) (Plate 2C)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>IV. Unknown</td>
<td>1</td>
<td>Light earthen green and white</td>
</tr>
<tr>
<td>Total earthenware sherds: 131</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Earthenware, R-357, General Surface Collection

I. Whiteware A. Rim sherds 1. Plain | 3 |
| 2. Decorated | a. Annular | Earthen blue banded, 4 narrow blue bands |
| b. Hand-painted | 1 |
| c. Raised | 1 |
| d. Incised (?) | 1 |
| B. Base sherds | 1. Plain | 1 unidentified ironstone maker's mark |
| 2. Decorated | a. Raised | Base edge is scalloped with decorative raised markings on sherd |
| C. Body sherds | 2 | 1 is highly vitrified |
| D. Fragments | 3 | |
| Total | 15 |

II. Commonware A. Rim sherds 1. Plain | 1 |
| 2. Decorated | a. Raised | Common yellow with exterior nodes below the rim |
| Total | 2 |

94
Earthenware, Test Units

I. Whiteware
   A. Rim sherds
      1. Plain 1
      2. Decorated
         a. Edge 2 Blue shell edge; plate sherds.
   B. Body sherds
      1. Plain 6 1 sherd is a shoulder.
   C. Fragments 4
      Total 13

II. Commonware
   A. Body sherds
      1. Plain 3 Common yellow; 1 is a fragment with no glaze; bowl sherds.
      2. Decorated 1 Yellow interior, brown exterior.
      Total 4

III. Redware
   A. Body sherds 2 Redware with a clear glaze.
      Total 2

IV. Porcelain
   A. Body sherds 1
      Total 1

Shovel-Tests

I. Whiteware
   A. Lid sherd 1 Very large; chamber pot lid sherd (?)..

Earthenware was identified and described according to Price (1979:9-22). A date range is given for each style of decoration when possible.

Most of the earthenware, 75 percent of the earthenware sample, is plain undecorated whiteware. The greater amount of undecorated sherds as compared to decorated sherds may be explained in two ways. After ca. 1860, there was an increase in the manufacture of undecorated whiteware vessels as well as an increase in decorative styles, such as sprig, edge, and fineline floral, which utilized less space on the vessel (Price 1979:27). Thus, a greater occurrence of plain whiteware sherds would be expected.
Redware and commonware were also collected but were present in much smaller quantities. Most redwares are not useful in establishing dates. Redware has been produced for a long period of time and did not change in style as quickly as other ceramics. Thus, little research has been conducted in using the gradual changes as temporal indicators (Pilling n.d.:64).

There are three very small coarse redware sherds, probably representing an early 18th century French occupation. These sherds are similar to ceramics in Miller and Stone's Group III coarse earthenware from Fort Michilimackinac, Michigan (Miller and Stone 1970:50-52). The defeat of the French in the French and Indian War in 1765 ended their occupation on Kaskaskia Island. Thus, these sherds probably predate 1765. The remaining redware sherds have a harder paste than that of the coarse earthenware. They have a clear glaze which enhances the red color of the paste (Travelstead 1979:19) (Plate 2C). Both types of redware were usually utilitarian vessels.

Among the commonwares, only common yellow was found at R-357. Some sherds have a golden yellow glaze which is more typical of common yellow, and some have a mustard yellow glaze. The latter sherds may not be common yellow but rather a different commonware. Very little information is available on distinctions among commonwares.

Based upon datable ceramics, the terminus a quo for the historic component of R-357 is ca. 1730, while the terminus ad quem, although not as well established, is ca. 1920. In an attempt to develop a mean date for the occupation, South's mean ceramic date
formula (1977:217) was used. A sample of 155 sherds was used to compute a mean ceramic date of 1864 (Table 7). This date, however, should be regarded with some caution. Date ranges were not obtainable for all sherds collected, and these were omitted from the sample. There is some question as to whether the mean ceramic date formula is adaptable to 19th century ceramics. The dating sequence for 19th century ceramics in the midwestern United States is less refined than the dating of 18th century ceramics on the East Coast and would not provide the same degree of accuracy.

The vessels from which the few coarse redware came could have been curated pieces and thus do not actually indicate a French occupation. However, redware was a utilitarian ceramic and was easily broken due to its low degree of firing. If the vessels were curated, it is unlikely that they were curated for a long period of time and, therefore, skew the mean ceramic date very little.

Very little information is available in the literature on stoneware. Therefore, certain attributes were selected and recorded to describe the stoneware from R-357 (Table 8).

Some sherds lacked an interior glaze. The interior surface of these sherds was the same color as the paste; and, thus, no interior color was recorded. The lack of a comparative collection and references on stoneware made identification of most glazes impossible. When known, the glaze type was recorded. Sherds whose interior surface had a plain mat finish color were called a slip. Of the 35 stoneware sherds, one is a fragment from an ink bottle of European origin (James and Cynthia Price, personal communication).
Table 7

<table>
<thead>
<tr>
<th>Decoration</th>
<th>Mean Date</th>
<th>Sherd Count</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecorated whiteware</td>
<td>(1830-1910) 1870</td>
<td>117</td>
<td>218,790</td>
</tr>
<tr>
<td>Edge</td>
<td>(1830-1860) 1845</td>
<td>4</td>
<td>7,380</td>
</tr>
<tr>
<td>Annular</td>
<td>(1860-1920) 1890</td>
<td>2</td>
<td>3,780</td>
</tr>
<tr>
<td>Raised</td>
<td>(1840-ca. 1890?) 1865</td>
<td>13</td>
<td>24,245</td>
</tr>
<tr>
<td>Transfer print</td>
<td>(1820-1920?) 1870</td>
<td>1</td>
<td>1,870</td>
</tr>
<tr>
<td>Handpainted fineline or sprig</td>
<td>(1830-1860) 1845</td>
<td>3</td>
<td>5,535</td>
</tr>
<tr>
<td>Common yellow</td>
<td>(1840) 1840</td>
<td>11</td>
<td>20,240</td>
</tr>
<tr>
<td>Redware</td>
<td>(Early 18th C) 1730</td>
<td>3</td>
<td>5,190</td>
</tr>
<tr>
<td>Handpainted broadline</td>
<td>(1820-1860) 1840</td>
<td>1</td>
<td>1,840</td>
</tr>
</tbody>
</table>

155 288,870 = 1863.6, mean ceramic date or 1864
<table>
<thead>
<tr>
<th>Int Color</th>
<th>Ext Color</th>
<th>Int Glaze</th>
<th>Ext Glaze</th>
<th>Paste Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark brown</td>
<td>Gray</td>
<td>P</td>
<td>P</td>
<td>Pink</td>
<td>Controlled Surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Collection</td>
</tr>
<tr>
<td>Dark brown</td>
<td>Gray</td>
<td>P</td>
<td>Salt</td>
<td>Pink</td>
<td>Rim, milk bowl (Schulte</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1974:67)</td>
</tr>
<tr>
<td>Dark brown</td>
<td>Gray</td>
<td>P</td>
<td>P</td>
<td>Pink</td>
<td>Controlled Surface</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>A</td>
<td>Salt?</td>
<td>Pinkish-buff</td>
<td>Collection</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>A</td>
<td>P</td>
<td>Buff</td>
<td>Controlled Surface</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>A</td>
<td>P</td>
<td>Buff</td>
<td>Collection</td>
</tr>
<tr>
<td></td>
<td>Red-brown</td>
<td>A</td>
<td>P</td>
<td>Buff</td>
<td>Controlled Surface</td>
</tr>
<tr>
<td>Brown</td>
<td>Dark brown</td>
<td>P</td>
<td>Salt</td>
<td>Buff</td>
<td>Collection</td>
</tr>
<tr>
<td>Brown</td>
<td>Gray brown w/ yellow mottles</td>
<td>no</td>
<td>P</td>
<td>Gray-light brown-pink buff</td>
<td>Collection</td>
</tr>
<tr>
<td>Brown</td>
<td>Mottled gray brown w/yellow</td>
<td>no</td>
<td>P</td>
<td>Gray-light brown-pink buff</td>
<td>Collection</td>
</tr>
<tr>
<td>Pinkish-orange</td>
<td>Brown</td>
<td>Slip</td>
<td>Albany slip?</td>
<td>Gray</td>
<td>Controlled Surface</td>
</tr>
<tr>
<td>Dark gray</td>
<td>Gray</td>
<td>Slip?</td>
<td>Salt</td>
<td>Gray</td>
<td>Collection</td>
</tr>
</tbody>
</table>

P = Present
A = "ent
Table 8 (cont')

<table>
<thead>
<tr>
<th>Int</th>
<th>Color</th>
<th>Ext</th>
<th>Glaze</th>
<th>Paste Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dark gray</td>
<td>Gray</td>
<td>Slip?</td>
<td>Salt</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Dark gray</td>
<td>Gray</td>
<td>Slip?</td>
<td>Salt</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Pinkish-orange</td>
<td>Red-brown</td>
<td>Slip</td>
<td>P</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Pinkish-brown</td>
<td>Brown mottled</td>
<td>P</td>
<td>Salt</td>
<td>Light gray-brown</td>
</tr>
<tr>
<td></td>
<td>Pinkish-brown</td>
<td>Brown mottled</td>
<td>P</td>
<td>Salt</td>
<td>Light gray-brown</td>
</tr>
<tr>
<td></td>
<td>Pinkish-brown</td>
<td>Brown mottled</td>
<td>P</td>
<td>Salt</td>
<td>Light gray-brown</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Brown mottled</td>
<td>Salt</td>
<td>Salt</td>
<td>Light gray-brown</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Gray brown mottled w/yellow</td>
<td>Slip?</td>
<td>Salt?</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Brown</td>
<td>P</td>
<td>P</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Brown</td>
<td>P</td>
<td>Salt</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Gray-brown</td>
<td>P</td>
<td>Salt</td>
<td>Gray-pinkish</td>
</tr>
</tbody>
</table>

General Surface Collection

A  Dark brown  A  P  Pinkish-buff  Interior ridges
Brown  Gray  Slip  Salt  Gray
Red-brown  Brown  P  P  Light gray  Deep interior ridges; ink bottle of European origin
<table>
<thead>
<tr>
<th>Int Color</th>
<th>Ext Color</th>
<th>Int Glaze</th>
<th>Ext Glaze</th>
<th>Paste Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown</td>
<td>Brown</td>
<td>P</td>
<td>P</td>
<td>Buff</td>
<td></td>
</tr>
<tr>
<td>Red-brown</td>
<td>Red-brown</td>
<td>Albany?</td>
<td>P</td>
<td>Light gray-brown</td>
<td></td>
</tr>
<tr>
<td>Dark brown</td>
<td>Dark brown</td>
<td>Albany</td>
<td>Albany</td>
<td>Light gray-brown</td>
<td></td>
</tr>
</tbody>
</table>

**Shovel Tests**

- Brown Grey Slip Salt Gray Interior ridges
- Brown Grey Slip Salt Gray
- Brown Brown Slip Salt Pink
- Pinkish-brown Mottled light brown and beige Slip Salt Light gray-brown Interior ridges
- Olive green A P Buff Base fragment
- Brown A Salt? Pinkish-buff Interior ridges
The analysis of glass artifacts was limited to a description based on form and color (see inventory below). Sherds were separated by form, curved or flat. Curved glass was further divided into utilitarian containers and non-utilitarian containers and further divided by color. Utilitarian containers include bottles, and non-utilitarian glass consists of items such as pressed glass containers used for decorative and display purposes as well as utilitarian purposes.

Glass, R-357

**Controlled Surface Collection**

<table>
<thead>
<tr>
<th>I. Curved</th>
<th>Ct</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Non-utilitarian containers</td>
<td></td>
</tr>
<tr>
<td>1. Satin blue</td>
<td>3</td>
</tr>
<tr>
<td>B. Utilitarian containers</td>
<td></td>
</tr>
<tr>
<td>1. Amber</td>
<td>4</td>
</tr>
<tr>
<td>2. Olive green</td>
<td>10</td>
</tr>
<tr>
<td>3. Dark olive green</td>
<td>2</td>
</tr>
<tr>
<td>4. Sun purpled</td>
<td>5</td>
</tr>
<tr>
<td>a. Rim sherd, wide-mouth container</td>
<td>1</td>
</tr>
<tr>
<td>b. Bottle base</td>
<td>1</td>
</tr>
<tr>
<td>c. Patent medicine bottle top</td>
<td>1</td>
</tr>
<tr>
<td>5. Aqua pale green</td>
<td>48</td>
</tr>
<tr>
<td>a. Bottle base</td>
<td>3</td>
</tr>
<tr>
<td>b. Patent medicine bottle bases</td>
<td>2</td>
</tr>
<tr>
<td>c. Patent medicine bottle body</td>
<td>2</td>
</tr>
<tr>
<td>d. Patent medicine bottle top fragment</td>
<td>1</td>
</tr>
<tr>
<td>6. Clear</td>
<td>22</td>
</tr>
<tr>
<td>a. Patent medicine bottle body</td>
<td>1</td>
</tr>
<tr>
<td>b. Ribbed body sherds</td>
<td>2</td>
</tr>
</tbody>
</table>

**II. Flat glass**

| A. Aqua pale green | |
| 1. Fragments | 30 |
| B. Clear | |
| 1. Fragments | 1 |

**General Surface Collection**

| I. Curved | |
| A. Non-utilitarian containers | |
| 1. Clear | |
| a. Pressed glass goblet base | 1 |
### B. Utilitarian

1. **Amber**
   - a. Bottle base 2
2. **Sun purpled**
   - a. Base with open pontil mark and side portion with fluted panels 1
3. **Aqua**
   - a. Patent medicine bottle (?) necks 2
4. Clear 2
5. **Cobalt blue**
   - Total 1

<table>
<thead>
<tr>
<th>Test Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 12</td>
</tr>
</tbody>
</table>

### I. Curved

#### A. Non-utilitarian containers

1. Olive green
   - a. Stopper (?) 1
2. Sun purpled
   - a. Pressed glass 1
3. Clear
   - a. Pressed glass 1
4. Cobalt blue
   - a. Pressed glass 1

#### B. Utilitarian containers

1. **Amber**
   - a. Bottle neck 1
2. Olive green 3
3. Dark olive green
   - a. Embossed letters 1
4. Sun purpled 1
5. Aqua pale green
   - a. Patent medicine bottle body 1
6. Clear
   - a. Bottle base 1
   - b. Embossed letters 2
   - c. Ribbed body sherd 1
   - Total 20

<table>
<thead>
<tr>
<th>II. Flat glass</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Aqua pale green 7</td>
</tr>
<tr>
<td>B. Clear 2</td>
</tr>
<tr>
<td>Total 9</td>
</tr>
</tbody>
</table>

### Shovel Tests

#### I. Curved

#### A. Utilitarian containers

1. Aqua 1
2. Sun purpled 1
   - Total 2

#### II. Flat glass

A. Pale green 1
   - Total 1

103
Metal artifacts were very corroded, but form was determinable for most (see inventory below). All objects were iron, with the exception of two copper artifacts, a shotgun shell base, and a stamped picture or calendar hanger. Of the nails collected, 88.5 percent were angular in cross section, while only 11.5 percent were round. Nails with angular cross section were manufactured before nails with a round cross section.

Metal, R-357

General Surface

<table>
<thead>
<tr>
<th>I. Unidentifiable</th>
<th>Ct</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Identifiable</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Hook (?)</td>
</tr>
</tbody>
</table>

Shovel Tests

| I. Unidentifiable       | 2   |
| II. Identifiable        | 6   |
|                         | Door jam |
|                         | Nails: 2 round, 4 angular |

Controlled Surface Collection

| I. Unidentifiable       | 10  |
| II. Identifiable        | 1   |
|                         | Staple |
|                         | Nails: 6 angular, 1 round, 3 fragments |
|                         | Copper stamped picture hanger (?) |
|                         | Copper shotgun shell cap |

| 23                      |

Test Units

| I. Identifiable         | 1   |
|                         | Hook |
|                         | Key  |
|                         | Door jam (?) |
|                         | Bolt |
|                         | Nails: 13 angular, 3 fragments |

| 16                      |
| 20                      |
| 104                     |
Summary of Historic Component

Ceramics indicate that the historic component of R-357 could have been occupied from 1730-1920 with a mean ceramic date of 1864. The small number of coarse earthenware ceramics could have been curated vessels but could also have been an isolated occurrence of discarded refuse and does not actually indicate an occupation of that date. There are also a few sherds which may be creamware and pearlware. These were counted as whiteware in the inventory above as the sherds in question were small, and the color was difficult to distinguish from the various shades of white of the whiteware. If creamware and pearlware sherds are present in the ceramic collection, they may indicate that these vessels may have been curated items. The quantity of ceramics suggests that perhaps a more accurate span of occupation may have been from around 1820 or 1830, when the shift to the manufacture of whiteware probably occurred (Price 1979:14), to perhaps around 1920. The small amount of creamware and pearlware sherds would not have effected the mean ceramic date to any great extent.

The total artifact assemblage suggests that the occupation was a farmstead or homestead, apparently with no basement or outbuildings which left subsurface remains. The brick, limestone, and sandstone fragments suggest the structures were made of these materials. The house was probably made of brick with either a sandstone or limestone foundation. Sandstone was often used for foundations of outbuildings. The small quantities of brick, limestone, and sandstone suggest that these materials were either salvaged to be used in another structure or disposed of in another location when the land was to be cultivated.

Test unit B, which was excavated to a depth of 2 meters below...
the last evidence of cultural material with a backhoe, revealed no buried archaeological sites. All of the strata were naturally deposited and showed no evidence of dark soil colorations or artifacts which are evidence of human occupation.
Plate 1
A. R-360, adze. Mill Creek chert. Test unit B
B. R-357, Late Archaic projectile point. General surface
C. R-360, unidentified Late Woodland rim sherd. Sand clay and grit temper. Controlled surface collection

Plate 2
R-329
A. Coarse earthenware. Redware. White slip with green tin glaze
B. Coarse earthenware. Caramel colored glaze

R-357
C. Redware
D. Refined earthenware. Plain whiteware cup rim sherd
E. Refined earthenware. Whiteware cup or bowl rim sherd. Handpainted interior blue lines
F. Coarse earthenware. Redware. Caramel colored glaze

Plate 3
R-357
A. Handpainted. Fineline floral. Bright green leaf
B. Handpainted. Fineline floral. Cranberry colored flower
C. Transfer print. Purple
D. Handpainted. Broadline floral. Green leaf with blue sponge. Plate or saucer sherd
E. Handpainted. Fineline. Light blue
Plate 1
A, C. R-360
B. R-357

Plate 2
A, B. R-329
C-F. R-357

Plate 3
A-E. R-357
CHERT RESOURCES AND LITHIC TECHNOLOGY

Chert Resources

The types of chert recovered from R-360 and R-357 were identified in order to determine to what extent local chert resources were utilized compared to more distant sources. Cherts recovered from other sites during phase I assessment have also been included in the inventory below. All chert was identified as to the geological formation from which it came by Ernest E. May of the Center for Archaeological Investigations, Southern Illinois University, Carbondale. A discussion of the geological formations and a description of the chert types can be found in Prehistorically Exploited Chert Resources in Southern Illinois (May 1979).

Most types of chert recovered from sites R-360 and R-357, such as the Burlington, Kinkaid, St. Louis, and Bailey cherts, occur in limestone formations in the southern Illinois area as primary raw material in outcrops. These cherts can be found in numerous outcroppings, thus no one outcropping can be labeled as the source. Kinkaid chert is known to outcrop in the many small stream valleys in the Mississippi River bluffs near Kaskaskia Island (Michael J. McNerney, personal communication) and are suspected to be present on the Missouri side of the river as well. The percentage of Kinkaid chert on sites would be expected to be high due to proximity to the island. Cherts which come from the Mill Creek,
Cobden, and Kaolin areas are expected to be of much smaller percentages. Other cherts, such as Mounds gravel and other glacial gravels, are secondary raw materials and have a very weak distribution. Since Burlington cherts occur north of Kaskaskia Island in numerous localities, it can also be found as redeposited glacial gravels. Glacial gravels appear to be relatively uncommon in the immediate area around Kaskaskia Island, but no formal chert source survey has been conducted in the area.

The following inventory presents quantities and percentages of chert types found on sites R-350 and R-357. The quantity of chert types found on the other four sites which produced chert have also been included. Chert from excavations, shovel tests, and surface collections have been combined.

<table>
<thead>
<tr>
<th>Site</th>
<th>Type</th>
<th>Quantity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-329</td>
<td>Area D Burlington</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area E Upper Mississippian</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Area F Burlington or Kaolin</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>R-336</td>
<td>Burlington</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinkaid</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Burlington</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>R-352</td>
<td>Kinkaid</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Burlington</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>R-357</td>
<td>Burlington</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Kinkaid</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>St. Louis, Cobden or Dongola</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Mill Creek</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Glacial gravel</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Mounds gravel</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mounds gravel, redeposited</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Bailey</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Unidentified</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Unidentified Mississippian</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kaolin</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total, R-357</strong></td>
<td><strong>91</strong></td>
<td></td>
</tr>
<tr>
<td>Site</td>
<td>Type</td>
<td>Quantity</td>
<td>Percentage</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>R-359</td>
<td>Bailey or Kinkaid?</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Kinkaid</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>St. Louis, Cobden</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>R-360</td>
<td>Burlington</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Kinkaid</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>St. Louis</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>St. Louis or glacial</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Mill Creek</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>St. Louis, Cobden</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Glacial</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Possible Burlington</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Unidentified, Mississippian</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Mounds gravel</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Devonian</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Unidentified</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total, R-360</td>
<td>83</td>
<td></td>
</tr>
</tbody>
</table>

An inspection of the percentages of chert types occurring on the sites indicates that Kinkaid and Burlington types predominate. Apparently, local sources were utilized more extensively than more distant sources. Much of the Burlington could have come from glacial gravels. Site R-360 had a higher percentage of Kinkaid chert than did R-357. The predominant chert type present on R-357 was of the Burlington type. There are possibly deposits of glacial cobbles near R-357, and this more local source was utilized.

The presence of Cobden, Kaolin, Bailey, and Mill Creek cherts indicates that more distant sources were also utilized. These types are not known to be found around Kaskaskia Island. The Mill Creek and Kaolin chert quarries are approximately 35 miles southeast of Kaskaskia Island.

**Lithic Technology**

The sample of chert debitage is too small to make many
meaningful statements on manufacturing techniques. However, the samples from R-360 and R-357 can be used to suggest the kinds of chert reduction strategy which took place at the two sites. Both sites were probably seasonally occupied with limited types of activities being carried out. Very little primary or secondary material reduction is expected to have taken place on sites of this nature. Thus, small numbers of cores, primary shatter, or primary and secondary decortication flakes would be expected to be produced. Those which are present would be relatively small. The chert-working activity expected to occur most frequently on R-360 and R-357 would be the maintenance, and to some extent production, of small bifacial and flake tools needed to carry out subsistence activities. The predominant types of debitage expected to be found are thinning flakes and bifacial thinning flakes.

The manufacture of stone-tools is a continuous process generally producing debitage of decreasing size as the process progresses. Bifacial tools or flake tools may be the desired end product. In the production of a bifacial blade, a large flake is struck from a larger piece of raw material. Smaller flakes can then be removed to shape the tool. To complete it, very small flakes are removed at the end of the production sequence. If unmodified flakes are desired for tools, they may be acquired either as debitage from bifacial tool production, or much smaller cores of material may be used to obtain the desired flakes. Whether flakes will be utilized depends upon their size and suitability for specific tasks to be performed. In order to determine if flakes were utilized to some degree, they were
examined for only the very obvious edge damage. Only macroscopic examinations were made.

The stone tool manufacturing process was divided into arbitrary stages in order to observe the kinds of knapping activities taking place. Cores, shatter, decortication flakes, and often block flakes are evidence of the earlier stages of tool manufacture. Maintenance and manufacture of small bifacial and flake tools, as hypothesized for sites R-357 and R-360, would exhibit a few small cores and less secondary shatter than in earlier stages of production, with a preponderance of thinning and bifacial thinning flakes. The following is a list of definitions of debitage categories used in the analysis.

Core - any block, nodule (or flake) from which flakes have been removed (White 1963:6).

Cortex - generally refers to the natural surface or "Rind" on chert-like material (Crabtree 1972:56).

Debitage - residual lithic material resulting from all stages of tool manufacture (Crabtree 1972:58). Debitage can be further classified into shatter and flakes.

I. Shatter - cubical and irregularly shaped chunks or pieces having few or no definitive characteristics such as, bulb of force, platform, etc. Shatter is generally the result of both heavy percussion techniques and the cleavage of raw material along old fracture planes such as, frost cracks (Binford and Quimby 1963:278-279).

A. Primary shatter - generally resulting from breaking up of raw material into more manageable sizes. Characteristic of quarrying activities (Binford and Quimby 1963:278-279).

B. Secondary shatter - shatter resulting from the removal of flakes from cores (Binford and Quimby 1963:298) and is relatively much smaller than primary shatter.

II. Flake - "Any piece of stone removed from a larger mass by the application of force ..." Flakes exhibit a platform
and bulb of force of the proximal end. They may be of any size, shape, or dimension, depending on which technique was used for detachment (Crabtree 1972:64) and the size of piece of raw material, or core, and the desired finished product.

A. Decortication flake - "A flake which has the dorsal surface partially or wholly covered by the unmodified cortex of the raw material with the ventral surface showing scarring from heavy percussion" (Binford and Quimby 1963:287).

1. Primary decortication flake - a decortication flake whose entire dorsal side is covered with cortex. Generally these flakes are assumed to have been removed solely for the purpose of removing the cortex, which generally renders the flake unsuitable for most types of tools and were discarded (White 1963:5).

2. Secondary decortication flake - a decortication flake whose dorsal surface, lateral or distal sides, is only partially covered with cortex. These flakes were also removed for the purpose of removing the remaining cortex. However, edges which are free of cortex permit the flake to be used for certain types of tools (White 1963:5).

B. Thinning flake - a flake removed either by pressure or percussion to thin a piece for artifact manufacture (Crabtree 1972:96). The length and width are generally many times greater than the thickness.

C. Bifacial thinning flake - a thinning flake which exhibits a portion of the cutting edge of a bifacial tool (McNerney 1975:4).

D. Block flake - a flake whose thickness more nearly approaches the dimensions of width and/or length. These flakes are much more "blocky" or tabular in shape than thinning flakes.

**Primary raw material** - In situ raw material which can be obtained from the geological formation where it was structurally formed (Binford and Quimby 1963:278).

**Secondary raw material** - generally either spherical or tabular chunks of eroded and redeposited primary raw material such as, cobbles in glacial deposits (Binford and Quimby 1963: 278).

Below is a list of the chert debitage classes by quantity and percent of the total collection of debitage for each site.
from shovel tests, surface collections, and test excavations have been combined for this purpose. The information for all sites except R-357 and R-360 is of minimal use due to the small amount of material collected. The controlled surface collections and test excavations on R-357 and R-360 are considered to be comparable.

<table>
<thead>
<tr>
<th>Site</th>
<th>Debitage Class</th>
<th>Quantity</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-329</td>
<td>Thinning Flake</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Area D</td>
<td>Biface fragment</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Area E</td>
<td>Block flake</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Area F</td>
<td>Thinning flake</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>R-336</td>
<td>Core</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>R-352</td>
<td>Thinning Flakes</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Block flake</td>
<td>1</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site</th>
<th>Debitage Class</th>
<th>Ct</th>
<th>Percent of Total</th>
<th>Av Wt (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-357</td>
<td>Shatter</td>
<td>11</td>
<td>13</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>5</td>
<td>6</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Flakes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Decortication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>1</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>11</td>
<td>13</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>B. Thinning</td>
<td>39</td>
<td>45</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>C. Bifacial thinning</td>
<td>3</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>D. Bifacial thinning from bifacial digging implement</td>
<td>1</td>
<td>1</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td></td>
<td>E. Block flake</td>
<td>6</td>
<td>7</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Cores</td>
<td>10</td>
<td>11</td>
<td>58.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other artifacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bifacial</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unifacial</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Late Archaic projectile point</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hammerstone fragment</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total R-357</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-359</td>
<td>Secondary decortication</td>
<td>2</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>1</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

114
<table>
<thead>
<tr>
<th>Site</th>
<th>Debitage Class</th>
<th>Ct</th>
<th>Percent of Total</th>
<th>Av Wt (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-360</td>
<td>Shatter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>1</td>
<td>1</td>
<td>26.0</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>11</td>
<td>14</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Flakes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Decortication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>2</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>11</td>
<td>14</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>B. Thinning</td>
<td>43</td>
<td>54</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>(40)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Bifacial thinning</td>
<td>1</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>D. Bifacial thinning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>from bifacial digging implement</td>
<td>1</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>E. Block flake</td>
<td>4</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Cores</td>
<td>6</td>
<td>8</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>Total, R-360</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other artifacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bifacial tools</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both R-360 and R-357 exhibit the expected debitage pattern.

Very little primary lithic reduction is suggested by the low percentages and the low mean weight of the shatter, core, and decortication categories. The high percentage and low weight of thinning flakes indicate that a moderate amount of manufacture and maintenance of tools was the predominant chert-working activity on the two sites.

Flakes were apparently not produced specifically for use as flake tools. Only 3 percent of the flakes for each site show macroscopic edge damage. However, utilization could have been so minimal that it did not produce any macroscopic evidence of utilization.
RECOMMENDATIONS

Cultural deposits on R-357 do not appear to be midden built up by cultural deposition but are probably a result of the combination of the deposition of small amounts of cultural material by the inhabitants interspersed by the deposition of soil by the Mississippi River. Thus, the deposits are of limited scientific or cultural value. Test excavations and controlled surface collections indicate that there are no remains of Old Kaskaskia on or in the immediate vicinity of R-357. The site is approximately three-fourths of a mile from the known location of Old Kaskaskia (Map 18).

The following recommendations are primarily based on the evaluation of the site against criteria established for the nomination of properties to the National Register of Historic Places and the professional experience of the investigator. The National Register criteria are:

The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feelings, and association, and

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) That are associated with the lives of persons significant in our past; or

(c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work
MAP 18

Location of Site R-357 in Relation to Old Kaskaskia
(Burham 1914)
of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) That have yielded, or may be likely to yield, information important in prehistory or history (Federal Register 1976: 1595).

It is the opinion that sites R-357 and R-360 do not meet National Register criteria. Further excavation or other mitigation procedures would probably produce very little additional information in addition to what has already been gained through phase II testing.

There is a possibility that a deeply buried archaeological site may be encountered during the levee construction. In this event, the Principal Investigator and the State Historic Preservation Officer of Illinois should be notified immediately.

Construction may proceed on the levee at Kaskaskia Island without adversely effecting significant prehistoric and historic cultural resources in all areas.
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APPENDIX A

Scope of Work, Phase I
APPENDIX A
SCOPE OF WORK

CULTURAL RESOURCE TESTING TO DETERMINE
NATIONAL REGISTER SIGNIFICANCE SITES
TO BE AFFECTED BY FLOOD PROTECTION ACTIVITIES
KASKASKIA ISLAND LEVEE RAISE PROJECT
RANDOLPH COUNTY, ILLINOIS

1. STATEMENT OF WORK.

The work to be accomplished by the Contractor shall consist of furnishing all supplies, materials, plant, equipment, if required, and all personnel necessary to conduct shovel testing on 10 archeological sites situated within the Kaskaskia Island Levee Raise Project area, sites as set forth in the Scope of Work and furnish a written report thereon as set forth in this Appendix A.

2. LOCATION AND DESCRIPTION OF THE STUDY AREA.

2.1 The study area consists of the following 10 site areas, or portions thereof, which lie within the impact area of the Kaskaskia Island levee raise project. Site specific locations are provided on Map A (Exhibit 1). Sites 11-R-329, 11-R-352, 11-R-354, and 11-R-357 will be covered by fill of a levee apron. Sites 11-R-336, 11-R-339, 11-R-344, 11-R-359, 11-R-360, and 11-R-361 fall within or near designated borrow pit locations and are scheduled to be partially or completely destroyed by these actions.

2.2 Intensive pedestrian surface reconnaissance conducted in 1975 yielded the following materials from the 10 sites:

Site No. 11-R-329, Location UTM E243075-125, N4203850. The initial surface collection from the site consists of one hoe flake, two grog-tempered plain sherds, and one unmodified flake. Culture - Woodland.

Site No. 11-R-336, Location UTM E242600-650, N4203710. The surface collection from the site consists of one plain sherd, grog tempered, three sherd fragments (one possibly cordmarked), all grog tempered,
two flakes (one possibly heat-treated). All artifacts were located on a low ridge, trending NE-SW. This ridge is dissected by several E-W shallow depressions. Culture - Woodland.

Site No. 11-R-339, Location UTM E242490, N4203610. The surface collection from this site consists of one sherd (cordmarked, grog-tempered) and was located on a NE-SW ridge. Culture - Woodland.

Site No. 11-R-344, Location UTM E245375, N4201675. The surface collection from this site yielded two unmodified flakes. These artifacts were found in a shallow depression just east of the existing levee. Culture - Unknown.

Site No. 11-R-352, Location UTM E245225-400, N4200950-4201125. Material recovered during the surface collection included one notched hoe, one drill, two triangular points, one piece of quartzite, 128 flakes, including Kaolin and Mansker cherts, one Monks Mound Red Sherd (limestone tempered), one cordmarked (grit-grog tempered), five shell tempered (some grog), two plain (grit-grog tempered), one fabric-marked (grit-grog tempered), one red slipped, grit tempered, and four red slipped shell tempered. These artifacts were found on a NE-SW trending main ridge on the SE side of the main slope. Culture - Mississippian.

Site 11-R-354, Location UTM E243600, N4203925-4204000. Material recovered during the surface collection included three unmodified flakes, one musketball, and one piece of modern clinker. All material was located on the north slope of a NE-SW trending depression. Culture - Unknown Prehistoric, Historic.

Site No. 11-R-357, Location UTM E243300-475, N4203900-950. Material recovered during the surface collection included one biface tip (well worked), one core, one sherd (grit-grog tempered) plain, and
six flakes. All material was located on a NE-SW trending ridge SE of
junction of an E-W levee and N-S road. Culture - Mississippian, Historic.

Site No. 11-R-359, Location UTM E244800, N420300-075.
Material recovered during the surface collection included 15 unmodified
flakes, 5 angular chert fragments, 2 unidentified pottery fragments,
5 cordmarked (grit tempered sherds), 1 plain shell tempered sherd, and
1 plain grit tempered sherd. All material was located east of the levee
on a NE-SW trending ridge on the north side of a shallow depression.
Culture - Mississippian.

Site No. 11-R-360, Location UTM E244810, N4202875.
Material recovered during the surface collection included four unmodified
flakes and one cordmarked (grit tempered) sherd. The site is situated
east of the levee, NE of a tree on a low NE-SW trending ridge. Culture -
Woodland.

Site No. 11-R-361, Location UTM E244750, N4202910.
Materials recovered during surface collections at this site consist of
only one unmodified flake. It was found on the west end of a shallow
depression on a NE-SW trending ridge. Culture - Unknown Prehistoric.

These sites are among the group which is reported in the 1975 St. Louis
District report "Survey of the Archeological Resources Along the Existing
and Proposed Levees on Kaskaskia Island in Randolph County, Illinois, and
Sta. Genevieve County, Missouri," by Jean Rita Linder under the direction
of Dr. James W. Porter, Principal Investigator. Other sites reported by
Ms. Linder are not affected by the project as now being implemented since
only a levee raise, not new levees, is being undertaken. Ms. Linder's
report is found in Exhibit 2 and serves as a reference to the above-listed
sites.
3. **STUDY REQUIREMENTS.**

3.1 **Shovel Testing.** A series of subsurface shovel tests will be conducted at all sites referenced in paragraph 2 above. The purpose of these tests will be to determine what, if any, undisturbed features are situated below the plow zone at each site. The testing frequency will be a 10-meter interval. The dimensions of each unit will be approximately 30 cm by 30 cm wide by 50 cm deep. The bottoms of each test will be trowel-scraped and visually examined. Testing on sites 11-R-329 and 11-R-352 will be restricted to areas within 200 feet of the present levee. Testing on sites 11-R-354 and 11-R-357 will be restricted to areas within 300 feet of the present levee. The total area to be shovel tested in this manner is approximately 1.76 hectares or 4.35 acres.

3.2 **Laboratory Analysis.** Artifacts removed during shovel testing and excavation procedures will be washed and permanently labeled. All artifacts will then be separated into various general categories and then subdivided into smaller functional and stylistic categories. These distributions shall be qualitatively assessed in a professional, concise manner.

3.3 **Documenting Significance.** The Contractor shall perform all work necessary to accomplish the documentation of nonsignificance on each site in the study area where no evidence of significant subsurface activity was detected. Each site's documentation must stand alone as a completely independent document. Only standard half-tone reproductions of photographs or black and white prints will be accepted as per the photographic requirements as set forth in Exhibit 4. Exhibit 4 sets forth the requirements for each site's documentation. If a numbered heading or subheading in Exhibit 4 guidelines does not apply, the Contractor shall so state under the appropriately numbered heading or subheading. When the
site is not significant as per the criteria in Part 800.10, Chapter VIII of Title 36 of the Code of Federal Regulations, the Contractor shall so state and present the evidence upon which such nonsignificance is based.

3.4 Statement of Location of Materials and Records Produced or Collected Under this Contract. The report shall contain a statement indicating the exact location of all materials and records resulting from this contract work. This statement should include at a minimum the name and address of the curatorial building, the storage room number, and the rack, shelf, or cabinet number where this material is stored. Containers in which artifacts are stored shall be clearly marked "Property U.S. Government, St. Louis District, COE."

4. FINAL REPORT.

The final report shall consist of:

a. A general description of the research in light of current anthropological discussions.

b. A discussion of the theoretical foundation underlying and influencing the research goals. This discussion will be site specific and will address the rationale for the type of measures employed at each site in a clear and understandable manner.

c. A discussion of specific hypotheses derived both from previous research and from the above-cited theoretical orientations. This discussion will be accompanied by a description of related, but more specifically framed, test implications.

d. A comprehensive discussion of data collection techniques as these relate to the data requirements necessitated by the specific hypotheses. This section will also present the sampling methods employed during testing with an accompanying discussion of the relative success of each sampling procedure.
e. A specific discussion of data analysis techniques which are proposed for testing hypotheses. This discussion will outline the rationale for particular analytical techniques as these are constrained and influenced by the methods of data collection. Specific attention will be given to discussions which clarify the data analysis techniques in terms of their applicability to the types of data collected and in terms of their appropriateness for testing the hypotheses addressed.

f. Detailed maps or other specific site location data will be attached as an appendix to the final report.

g. An abstract that is not to exceed one typewritten page.

5. PROFESSIONAL QUALIFICATIONS.

The Contractor shall submit a detailed vita and resume outlining the work histories and academic backgrounds of all individuals scheduled to be directly involved in laboratory-field work or report preparation. This information is to be submitted with the Contractor's proposal and cost estimate. The name of each member of the project shall be included in the final report. Minimum qualifications for the Principal Investigator, Lab/Field Crew Chief, and field workers are outlined in Inclosure 3.

6. PROTECTION OF NATURAL AND HISTORIC FEATURES.

The Contractor shall be responsible for all damages to persons and property which occur in connection with the work and services under this contract, without recourse against the Government. The Contractor shall provide maximum protection, take every reasonable means, and exercise care to prevent damage to existing historic structures, roads, utilities, and other public or private facilities. Special attention shall be given the historic structures and natural and landscape features of the area, and
historic structures and natural and landscape features of the area, and
special care shall be taken to protect these elements in their surroundings.
The Contractor shall provide suitable protection for vegetation and facili-
ties adjacent to work areas.

7. PROPERTY DAMAGE.

The Contractor shall restore to the satisfaction of the Contracting
Officer at no additional cost to the Government any damage to any Government
or private property.

8. PUBLICITY.

The Contractor shall not release any material for publicity without the
prior written approval of the Contracting Officer. This provision shall not
be construed so as to restrict in any way the Contractor's right to publish
in scholarly or academic journals. Students and other archeologists are
likewise free to use information developed under this contract in theses
and dissertations or in publications in scholarly or academic journals.

9. PERMITS.

Rights-of-entry upon the worksite for performance of work under this
contract will be obtained by the Contractor. The Contractor shall obtain
necessary approval to enter on any private property. If entry cannot be
secured to investigate selected sites, the contract will be modified to
reflect the reduced project magnitude.

10. INSPECTION AND COORDINATION.

The Contracting Officer, or his authorized representative, may at all
reasonable times inspect or otherwise evaluate the work being performed
hereunder and the premises on which it is being performed. If any inspection
or evaluation is made by the Government on the premises of the Contractor or
any subcontractor, the Contractor shall provide and shall requ...
subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work. Close coordination shall be maintained between the Contractor's principal investigator and the Contracting Officer's representative to insure that the Government's best interest is served.

11. INVESTIGATION OF FIELD CONDITIONS.

Representatives of the Contractor are urged to visit the areas where work is to be performed and by their own investigation satisfy themselves as to the existing conditions affecting the work to be done. Any prospective contractors (including subcontractors) who choose not to visit the area will nevertheless be charged with knowledge of conditions which a reasonable inspection would have disclosed. The Contractor shall assume all responsibility for deductions and conclusions as to the difficulties in performing the work under this contract.

12. RESPONSIBILITY FOR MATERIALS AND RELATED DATA.

Except as otherwise provided in this contract, the Contractor shall be responsible for all materials and related data covered by this contract until they are delivered to the Government at the designated delivery point and after delivery to the Government at the designated point and prior to acceptance by the Government.

13. SCHEDULE OF WORK.

13.1 Preliminary Report. Ten copies of the preliminary report draft shall be submitted by the Contractor to the Contracting Officer within 45 calendar days after receipt of the Notice to Proceed on or about 15 November 1979. The Contracting Officer shall review the report for compliance with the requirements of the contract and shall return the preliminary report, together
with any written comments he may have thereon, which may require changes in the report, to the Contractor within 60 calendar days after its receipt.

13.2 **Final Report.** The Contractor shall submit 10 copies of the final report to the Contracting Officer within 105 calendar days after receipt of the Notice to Proceed. The original and a set of reproducibles of all drawings, plates, or other graphics shall be furnished at the time of the submittal of the final report.

14. **DELAYS.**

In the event these schedules are exceeded due to causes beyond the control and without the fault or negligence of the Contractor, the contract will be modified in writing, and the contract completion date will be extended one calendar day for each calendar day of delay.

6 Incl
1. Exhibit 1, Map, USGS Topographic
2. Exhibit 2, Linder's Report
3. Exhibit 3, Professional Qualifications
4. Exhibit 4, NR Guidelines
5. Exhibit 5, NR Forms
6. Exhibit 6, Kaskaskia Island GDM
APPENDIX B

Scope of Work, Phase II

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APPENDIX B
SCOPE OF WORK

CULTURAL RESOURCE TESTING TO DETERMINE
NATIONAL REGISTER SIGNIFICANCE SITES
TO BE AFFECTED BY FLOOD PROTECTION ACTIVITIES
KASKASKIA ISLAND LEVEE RAISE PROJECT
RANDOLPH COUNTY, ILLINOIS

1. STATEMENT OF WORK.

The work to be accomplished by the Contractor shall consist of fur-
nishing all supplies, materials, plant, equipment, if required, and all
personnel necessary to conduct testing and evaluation of significance on
2 archeological sites situated within the Kaskaskia Island Levee Raise
Project area, sites as set forth in the Scope of Work, and furnish a
written report thereon as set forth in this Appendix A.

2. LOCATION AND DESCRIPTION OF THE STUDY AREA.

2.1 The study area consists of the following 2 site areas, or portions
thereof, which lie within the impact area of the Kaskaskia Island Levee
Raise Project. Site specific locations are provided on Map A (Exhibit 1).
Site 11-R-357 will be covered by fill of a levee apron. Site 11-R-360
falls within or near designated borrow pit locations and is scheduled to
be partially or completely destroyed by these actions. A description
of the scheduled levee raise construction activities can be found in Exhibit 6.

Site No. 11-R-357, Location UTM E243300-475, N4203900-950.
Material recovered during the surface collection included one biface tip
(well worked), one core, one sherd (grit-groge tempered) plain, and six
flakes. All material was located on a NE-SW trending ridge SE of the
junction of an E-W levee and N-S road. Culture - Mississippian, Historic.
Site No. 11-R-360, Location UTM E244810, N4202875.

Material recovered during the surface collection included four unmodified flakes and one cordmarked (grit tempered) shard. The site is situated east of the levee, NE of a tree on a low NE-SW trending ridge. Culture - Woodland.

These sites are among the group which is reported in the 1975 St. Louis District report, "Survey of the Archeological Resources Along the Existing and Proposed Levees on Kaskaskia Island in Randolph County, Illinois, and Sts. Genevieve County, Missouri," by Jean Rita Linder under the direction of Dr. James W. Porter, Principal Investigator. Other sites reported by Ms. Linder are not affected by the project as now being implemented since only a levee raise, not new levees, is being undertaken. Ms. Linder's report is found in Exhibit 2 and serves as a reference to the above-listed sites.

3. STUDY REQUIREMENTS

3.1 Test Excavations. Test excavations will be conducted at each shovel test unit in which features have been detected. The standard excavation unit will be 2x2 meters. No more than six 2x2-meter/1x4-meter units will be excavated per site. At least one test pit per site shall be excavated to a depth of 2 meters below the last evidence of cultural activity at each site. Where no material was found during shovel testing, last evidence is defined as the base of the plow zone. All artifacts and features encountered shall be plotted, mapped, and photographed in situ. Plan view and profile maps of soil strata, features, and artifact distributions shall be completed at the base of each successive excavation level. Unless otherwise dictated by cultural strata, the standard vertical excavation unit will be 10 centimeters. The purpose of these activities will be to determine the horizontal and vertical extent of the site and to determine
whenever possible, site function. The documentation shall include a photographic log of each phase of the field work described in this Appendix A. Thirty-five millimeter slides are acceptable for this documentation and shall be presented as an appendix to the final report.

3.2 Laboratory Analysis. Artifacts removed during excavation procedures will be washed and permanently labeled. All artifacts will then be separated into various general categories and then subdivided into smaller functional and stylistic categories. These distributions shall be qualitatively assessed in a professional, concise manner.

3.3 Documenting Significance. The Contractor shall perform all work necessary to accomplish the documentation of significance or nonsignificance on each site in the study area. Each site's documentation must stand alone as a completely independent document. Only standard half-tone reproductions of photographs or black and white prints will be accepted as per the photographic requirements as set forth in Exhibit 4. Exhibit 4 sets forth the requirements for each site's documentation. If a numbered heading or subheading in Exhibit 4 guidelines does not apply, the Contractor shall so state under the appropriately numbered heading or subheading.

When the site is not significant as per the criteria in Part 800.10, Chapter VIII of Title 36 of the Code of Federal Regulations, the Contractor shall so state and present the evidence upon which such nonsignificance is based. Being nonsignificant does not preclude a resource from being fully documented as per this paragraph. Field Forms (Exhibit 5) shall be filled out and submitted for each of the 10 sites regardless of significance.
3.4 **Statement of Location of Materials and Records Produced or Collected Under This Contract.** The report shall contain a statement indicating the **exact** location of all materials and records resulting from this contract work. This statement should include at a minimum the name and address of the curatorial building, the storage room number, and the rack, shelf, or cabinet number where this material is stored. Containers in which artifacts are stored shall be clearly marked "Property U.S. Government, St. Louis District, COE."

4. **FINAL REPORT.**

The final report shall consist of:

a. A general description of the research in light of current anthropological discussions.

b. A discussion of the theoretical foundation underlying and influencing the research goals. This discussion will be site specific and will address the rationale for the type of measures employed at each site in a clear and understandable manner.

c. A discussion of specific hypotheses derived both from previous research and from the above-cited theoretical orientations. This discussion will be accompanied by a description of related, but more specifically framed, test implications.

d. A comprehensive discussion of data collection techniques as these relate to the data requirements necessitated by the specific hypotheses. This section will also present the sampling methods employed during testing with an accompanying discussion of the relative success of each sampling procedure.
e. A specific discussion of data analysis techniques which are proposed for testing hypotheses. This discussion will outline the rationale for particular analytical techniques as these are constrained and influenced by the methods of data collection. Specific attention will be given to discussions which clarify the data analysis techniques in terms of their applicability to the types of data collected and in terms of their appropriateness for testing the hypotheses addressed.

f. Detailed maps or other specific site location data will be attached as an appendix to the final report.

g. An abstract that is not to exceed one typewritten page.

5. PROFESSIONAL QUALIFICATIONS.

The Contractor shall submit a detailed vita and resume outlining the work histories and academic backgrounds of all individuals scheduled to be directly involved in laboratory-field work or report preparation. This information is to be submitted with the Contractor's proposal and cost estimate. The name of each member of the project shall be included in the final report. Minimum qualifications for the Principal Investigator, Lab/Field Crew Chief, and field workers are outlined in Inclosure 3.

6. PROTECTION OF NATURAL AND HISTORIC FEATURES.

The Contractor shall be responsible for all damages to persons and property which occur in connection with the work and services under this contract, without recourse against the Government. The Contractor shall provide maximum protection, take every reasonable means, and exercise care to prevent damage to existing historic structures, roads, utilities, and other public or private facilities. Special attention shall be given the historic structures and natural and landscape features of the area, and
special care shall be taken to protect these elements in their surroundings. The Contractor shall provide suitable protection for vegetation and facilities adjacent to work areas.

7. PROPERTY DAMAGE.

The Contractor shall restore to the satisfaction of the Contracting Officer at no additional cost to the Government any damage to any Government or private property.

8. PUBLICITY.

The Contractor shall not release any material for publicity without the prior written approval of the Contracting Officer. This provision shall not be construed so as to restrict in any way the Contractor's right to publish in scholarly or academic journals. Students and other archeologists are likewise free to use information developed under this contract in theses and dissertations or in publications in scholarly or academic journals.

9. PERMITS.

Rights-of-entry upon the worksite for performance of work under this contract will be obtained by the Contractor. The Contractor shall obtain necessary approval to enter on any private property. If entry cannot be secured to investigate selected sites, the contract will be modified to reflect the reduced project magnitude.

10. INSPECTION AND COORDINATION.

The Contracting Officer, or his authorized representative, may at all reasonable times inspect or otherwise evaluate the work being performed hereunder and the premises on which it is being performed. If any
inspection or evaluation is made by the Government on the premises of the Contractor or any subcontractor, the Contractor shall provide and shall require his subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work. Close coordination shall be maintained between the Contractor's principal investigator and the Contracting Officer's representative to insure that the Government's best interest is served.

11. INVESTIGATION OF FIELD CONDITIONS.

Representatives of the Contractor are urged to visit the areas where work is to be performed and by their own investigation satisfy themselves as to the existing conditions affecting the work to be done. Any prospective Contractors (including subcontractors) who choose not to visit the area will nevertheless be charged with knowledge of conditions which a reasonable inspection would have disclosed. The Contractor shall assume all responsibility for deductions and conclusions as to the difficulties in performing the work under this contract.

12. RESPONSIBILITY FOR MATERIALS AND RELATED DATA.

Except as otherwise provided in this contract, the Contractor shall be responsible for all materials and related data covered by this contract until they are delivered to the Government at the designated delivery point and after delivery to the Government at the designated point and prior to acceptance by the Government.
13. **SCHEDULE OF WORK.**

13.1 **Preliminary Report.** Ten copies of the preliminary report draft shall be submitted by the Contractor to the Contracting Officer within 90 calendar days after receipt of the Notice to Proceed on or about 15 February 1980. The Contracting Officer shall review the report for compliance with the requirements of the contract and shall return the preliminary report, together with any written comments he may have thereon, which may require changes in the report, to the Contractor within 60 calendar days after its receipt on or about 15 April 1980.

13.2 **Final Report.** The Contractor shall submit 25 copies of the final report to the Contracting Officer within 30 calendar days after receipt of the edited copy on or about 15 May 1980. The original and a set of reproducibles of all drawings, plates, or other graphics shall be furnished at the time of the submittal of the final report.

14. **DELAYS.**

In the event these schedules are exceeded due to causes beyond the control and without the fault or negligence of the Contractor, the contract will be modified in writing and the contract completion date will be extended one calendar day for each calendar day of delay.

6 Incl
1. Exhibit 1, Map, USGS Topographic
2. Exhibit 2, Linder's Report
3. Exhibit 3, Professional Qualifications
4. Exhibit 4, NR Guidelines
5. Exhibit 5, NR Forms
6. Exhibit 6, Kaskaskia Island GDM
Appendix C

Correspondence
Mr. Michael J. McNerney, President
American Resources Group, Limited
P.O. Box 3217
Carbondale, IL 62901

Dear Mr. McNerney:

The St. Louis District has completed its review of the cultural resource report titled, *Phase I and Phase II Cultural Resources Assessment of Selected Sites to be Affected by Flood Protection Activities, Kaskaskia Island Levee Raise Project, Randolph County, Illinois* by American Resources Group, Limited.

Based on the results of our in-house review and the recommendations of the Illinois State Historic Preservation Officer (Incl 1), the St. Louis District is pleased to accept this comprehensive, well-written report. In particular, the discussions of lithic typology and the historic ceramic chronology will be welcome additions to the District's cultural resource data base.

Please submit an invoice requesting full payment of the remaining contract balance upon receipt of this transmittal.

Sincerely,

EMMETT W. HAHN

EMMETT W. HAHN
Acting Chief, Planning Branch
Mr. Jack F. Rasmussen  
Department of the Army  
St. Louis District Corps  
210 Tucker Boulevard, North  
St. Louis, MO 63101  

Dear Mr. Rasmussen:

The Department of Conservation archaeology staff has reviewed the Cultural Resources Management Report #17 (Phase I and Phase 2 Cultural Resources Assessment of Selected Sites to be Affected by Flood Protection Activities, Kaskaskia Island Levee Raise Project, Randolph County, Illinois and found it to be a very well done report. Both the historical research and archaeological field investigations necessary for this project were carried out in a very thorough manner. Particularly impressive was the analysis of the historic archaeological material as this is an area of investigation which is all too often slighted by researchers in terms of both analysis and interpretation. In conclusion, then, I am happy to accept this report.

The Illinois Department of Conservation concurs with the recommendations presented in the report that construction may proceed at all ten archaeological site locations without adversely impacting any significant prehistoric or historic cultural resources. Should, however, any deeply buried archaeological sites be encountered during the levee construction, all work should be halted and the Department of Conservation Staff Archaeologist, Alan S. Downer, should be notified.

Sincerely,

David Kenney  
State Historic Preservation Officer

DK/AD/LSA/MM