

APPENDIX III
RESEARCH DESIGN AND DATA RECOVERY PLAN

Note: Figures are not included.

**DATA RECOVERY PLAN FOR THE BUCHANAN-SAVIN FARM SITE
(N-6272, 7NC-J-175)**

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DATA RECOVERY PLAN FOR THE BUCHANAN-SAVIN FARM SITE

This data recovery plan describes an alternative for mitigation of the adverse effects of the proposed State Route 1 Relief Route Improvement Project upon the Buchanan-Savin Farm Site (7NC-J-175), New Castle County, Delaware. Execution of the data recovery plan is contingent upon the concurrence of the State Historic Preservation Officer's Staff that a determination of no adverse effect would be appropriate upon recovery of significant archaeological data as per 36CFR 800.4c and the Advisory Council's "Treatment of Archaeological Properties: A Handbook."

BACKGROUND

The Buchanan-Savin Farm Site is located approximately two miles north of Smyrna at the junction of Route 13 and Duck Creek Road (Kent 486) (Figure 1). Archival research has identified the site as an owner- and tenant-occupied farm occupied from the mid-nineteenth century to the present.

The limits of the Buchanan-Savin Farm Site (N-6272; 7NC-J-175) indicated by Phase I Survey (Bachman et al. 1988) were confirmed by Phase II testing. Phase II shovel tests were excavated in all directions around the standing structures at the site until artifact densities fell below two artifacts per shovel test.

The Buchanan-Savin Site presently consists of the extant Savin farmhouse, seven outbuildings, and associated archaeological remains. Six of the seven outbuildings date to the early twentieth century and were constructed after present

Route 13 was built. The Buchanan-Savin farmhouse and one outbuilding date to the nineteenth century. The single nineteenth century outbuilding was moved to its present position near the house after 1867.

Archival research indicates that the Buchanan-Savin Farm Site is a predominantly owner-occupied agricultural complex occupied from the second quarter of the nineteenth century until the present. The Buchanan-Savin Farm Site appears on Rea and Price's 1849 atlas as a structure associated with "G. W. Buchanan." George W. Buchanan died in 1867 and on Beer's 1868 atlas the site appears as "Mrs. Buchanan." Archival research indicates that the site was owner-occupied from the 1840s-1860s and from 1910 until 1969 when the property was purchased by First State Enterprises and then tenanted by the current residents, the Savins. Between 1860 and 1910 the site appears to have been tenanted by a family member of the owner, Samuel Armstrong. A chain of title for the period of occupation from 1831 until the present is given in Table 1.

The Buchanan-Savin Farm Site is located on a 34 acre parcel first set off in 1867 as the dower of Mary Buchanan, George Buchanan's widow. In 1867 the G. W. Buchanan farm consisted of 123 acres. Buchanan had died intestate that year and the freeholders appointed by the New Castle County Orphan's Court found a "two story frame dwelling, kitchen, tenant house, barn, stable, corn cribs, & c." The two story dwelling house described is the extant Buchanan-Savin farmhouse (N-6272). The entire George Buchanan farm that contained the 34 acre widow's dower and the farm house and outbuildings was reunited with the adjacent

TABLE 1

CHAIN OF TITLE OF THE BUCHANAN-SAVIN FARM SITE
(N-6272; 7NC-J-175), 1831-1969

Transaction	Acres	Date	Reference
From T. Arthur and Madeline T. Moffitt to First State Enterprises	121	3/20/1969	D-2-337
From Ella Moffitt to T. Arthur Moffitt via the will of T. R. Moffitt	126	11/11/1967	D-2-337
From Thomas R. Moffitt, decd. to Ella Moffitt, widow via his will	149	7/27/1945	D-2-337
From Francis C. and Lydia M. Armstrong to Thomas R. Moffitt	149	12/1/1921	E-31-314
From Anna A. Armstrong to Francis C. Armstrong (115 + 34)	149	8/27/1910	NCC O. Ct.
From Samuel Armstrong, decd. to Francis C. Armstrong	115	8/27/1910	NCC O. Ct.
(From Mrs. Ann Buchanan to Samuel Armstrong ??)			NCC O. Ct. Z-300
(Samuel Armstrong marries a Buchanan girl?)			
From George W. Buchanan, decd. to Mrs. Ann E. Buchanan, widow	34	2/18/1867	Z-1-284
From Joseph Fleming to George W. Buchanan	269	3/2/1846	R-5-9
From Thomas and Ann [Deakyne] Bratton to Joseph Fleming	160	3/24/1831	N-4-97
Isaac and Ann [Martin] McNeil and Stephen N. and Mary [Martin] Wyatt	109	10/21/1831	N-4-403
George Deakyne, decd. to Ann Dekyne, widow	160		
Sarah [Staats] Deakyne, decd. to George Deakyne	150		

115 acres owned by the Buchanans after both parcels passed to Samuel A. Armstrong.

Armstrong was a wealthy neighboring farmer and by 1910 when the property passed to his brother Francis, Samuel Armstrong owned all of the 269 acres (including the Buchanan-Savin farmhouse) originally purchased by George W. Buchanan in 1846. While Samuel Armstrong owned the property he was probably not living in the Buchanan-Savin farmhouse and archival research indicates that his brother Francis Armstrong, who purchased the property from Samuel's estate in 1910, was living at the site. The Buchanan-Savin property remained in the Armstrong family until 1921 when the property was sold to Thomas R. Moffitt. Moffitt then left the property to his son T. Arthur Moffitt after his death ca. 1945.

The tenant house described in the text of the Orphan's Court account does not appear on the 1867 plat prepared with the account. This tenant structure, however, appears on both Beers' 1868 atlas and Baist's 1893 atlas. This structure appears on both atlases approximately 2,000 feet to the east of the Savin farmhouse along the south side of Thoroughfare Neck Road. Rea and Price's 1849 map of New Castle County, however, does not show the tenant structure which indicates that the structure was built between 1849 and 1868. This tenant structure is not present today and does not appear in a 1906 USGS topographic map which indicates that it was destroyed around the turn of the twentieth century. The tenant structure as it is shown on Beers' and Baist's atlases is well outside of the present proposed right-of-way and will not be impacted by proposed construction of Delaware

1.

Two small outbuildings are shown approximately 200' northeast of the Savin-Buchanan farmhouse. According to the Orphan's court description, it is likely that these two outbuildings are the detached kitchen and the barn. Neither of these structures are the tenant house as historic maps clearly show that structure to be approximately 2000 feet farther to the east. The location of these outbuildings is under present Route 13. Although these structures may have been the present outbuildings which were moved to their current locations, any archaeological evidence of these structures would have been destroyed by the construction of present Route 13. A Phase I pedestrian survey of the plowed fields along both sides of present Route 13 in the area of these two outbuildings did not locate any evidence of historic structures.

An 1857 insurance company description of the Buchanan farm provided information about the farm layout. In April of that year, George W. Buchanan applied for and received an insurance policy on his farm north of Smyrna from the Kent Mutual Insurance Company. The policy issued to him describes in detail the structures that were present at the Buchanan-Savin Farm Site:

"No. 1 A Frame Dwelling house 1 1/2 stories 16 X 20 [feet] with back building 12 X 28 feet situate in Appoquinimink Hundred...estimated value \$600, owned and occupied by the Applicant; warmed by stoves & fire-places--stove pipes well secured; ashes poured on the ground 60 ft. from building; pump under a back shed 6 feet off. Insured value \$400."

"No. 2 A Stable and Carriage house, the main building 18 X 20 feet[,] 16 ft. post, with 2 wings each 12 X 18 ft. 12 feet high;

50 yards from No. 1. Estimated at \$350; insured value \$234." "No. 3 Is a meal, corn, and tool house 12 X 26 feet 1 story high, 40 feet from No. 1, estimated value at \$75. Insured value \$50."

Kent Mutual Insurance Co.
Policy #720. Approved 17 April 1857.

Thus according to insurance records, the Buchanan-Savin Farm Site consisted of three structures: a one and a half story frame farmhouse and two outbuildings, a 18' X 32' stable and carriage house and a 12' X 26' corn, meal and tool shed. The two outbuildings were both located within 50 yards of the house. The location of the two outbuildings shown in the 1867 Orphan's Court plat of the property is consistent with that indicated in the insurance records. Thus the structures described in 1857 appear to be the same ones shown in the 1867 Orphan's Court plat.

According to the 1860 population census, George Buchanan's household consisted of 11 other people besides himself: his wife Mary; his daughters Bathsheba, Angelina, Catharine, and S. [probably Sarah]; and two sons, J. H. and George W. Two farm laborers, W. Fields (aged 28 years) and C. Jones (aged 14 years), and a 21 year old black servant, Moll Smith, shared Buchanan's home. Buchanan himself was 45 years old and his wife Mary was 30 years old. Their daughters ranged in age from 15 year old Bathsheba to 7 year old Sarah. Their only son at home, George, was just two years old.

According to the state agricultural census of 1860 Buchanan owned 22 milch and meat cattle. In that year he produced 700 bushels of oats and 300 pounds of butter which represented a twelve fold increase in the amount of butter. This trend towards

increased dairy production on the farm continued after George Buchanan's death in 1867 and the sale of all of his lands except for the 34 acre house parcel to his wealthy neighbor Samuel Armstrong.

George Buchanan had purchased the Buchanan-Savin property in 1846 from Joseph Fleming. At this time the property was 269 acres in size. Joseph Fleming had assembled the property from two separate parcels that he purchased in 1831 from Thomas and Ann Deakyne and Isaac and Ann McNeil. Ann Deakyne and Ann McNeil had inherited the parcels through marriage from their families, specifically Ann's husband George Deakyne and Ann McNeil's father, Benjamin Martin.

Phase I reconnaissance and pedestrian survey located and identified eight standing structures including the farmhouse at the Buchanan-Savin Farm Site. The results of the Phase I Survey appear in greater detail in Bachman et al. (1988). The area around the Buchanan-Savin farmhouse was observed to be unplowed and the potential for intact subsurface features and artifacts in good stratigraphic contexts was determined to be high. On the basis of these two determinations, a Phase II survey was recommended.

Phase II testing consisted of the excavation of 191 shovel test pits and nine 3' X 3' test units. The shovel test pits were excavated along a 25' grid and the location of all Phase II tests are shown in Figure 2. Phase II shovel tests were conducted around all of the outbuildings and the test units were located in the area of greatest domestic activity and artifact density

around the Buchanan-Savin farmhouse and the southern half of the site identified by shovel-testing.

Feature numbers were assigned to the extant standing structures: the Buchanan-Savin farmhouse (Feature 3), small frame storage shed (Feature 4), recent garage (Feature 5), large agricultural implements shed (Feature 6), small barn (Feature 7), milk shed (Feature 8), concrete trough (Feature 9), frame corn crib (Feature 10), animal pen (Feature 11), concrete retaining wall (Feature 12), and large dairy barn (Feature 13).

As described in the 1867 Orphan's court assessment, the Buchanan-Savin farmhouse is a 2 story frame structure approximately 24' by 52' in dimension. The house is oriented along an east-west axis towards Duck Creek Road (Kent 486) which is consistent with the known nineteenth century occupation of the site. The architecture of the Savin farmhouse is a typical mid-nineteenth century vernacular structure (Herman 1987) and the house itself was determined not to be architecturally significant (Benenson and Bower 1987). All of the outbuildings except for the small frame structure presently used as a storage shed (Feature 4) and the corn crib (Feature 10) are of early to mid-twentieth century concrete block and frame construction. The location of all these features in relation to the Buchanan-Savin Farm House is shown in Figure 2.

Phase II shovel testing identified two distinct areas of high artifact density (greater than 10 artifacts per shovel test). These areas of high artifact density correspond to two major activity areas and are shown in Figure 2. The division line between the two areas is the dirt driveway just south of the

farmhouse that bisects the site from east to west. With the exception of a small area around the Buchanan-Savin farmhouse, all of the site has been plowed.

Area I, roughly the northern half of the site, contains the primary locus of domestic activity and includes the only two identifiable nineteenth century domestic structures at the site, the Buchanan-Savin farmhouse (Feature 3) and the small vertical sided frame storage shed (Feature 4). Feature 4 appears to be the frame kitchen noted in the 1867 Orphan's Court description that was moved to its present location prior to the construction of present Route 13.

The density of total historic artifacts in Area I ranged from less than 5 to 72 artifacts per shovel test. Overall, Area I contained consistently higher densities of historic artifacts than Area II which is consistent with the known occupation of the site. The density of historic artifacts in Area I was consistently higher than Area II, the southern half of the site that is comprised solely of agricultural outbuildings.

In addition to the overall density of artifacts, the distribution of historic ceramics clearly shows the concentration of domestic activity around the Buchanan-Savin Farmhouse, particularly along its eastern end. Similar differences between Area I and II and in the overall concentration of artifacts around the farmhouse can be seen in the distribution of all structurally-related artifacts (i.e. window glass, nails, and nail fragments) and bottle glass fragments. Area I includes both the highest density of historic artifacts and the greatest

concentration of domestic artifacts.

One area of relatively high artifact density was identified in the yard area east of the Buchanan-Savin farmhouse. Shovel tests pits S0E120 and S20E100 contained 46 and 72 total artifacts respectively. Artifacts recovered from these two tests and the tests immediately adjacent (STPs S0E100, S0E140, S20E120, S20E140 and S40E120) included 11 whiteware, 5 American porcelain, 4 American blue and gray stoneware, and one redware fragments. No pearlwares, creamwares, or other diagnostic late eighteenth and early nineteenth century ceramics were recovered which is consistent with the known mid-nineteenth century occupation of the site. Other artifacts recovered included numerous cut and wire nails, clear and olive bottle glass fragments, oyster shell, and coal fragments. These artifacts all came from intact, unplowed contexts and represent concentrations of yard scatter deposits as no historic feature was identified.

Feature 4, the former detached kitchen, is 12'2" by 10'1" in dimension. The structure is of frame construction with vertical board siding and cedar shake shingles and is presently used as a storage shed. The size of Feature 4 is consistent with other mid-nineteenth century detached kitchens identified in central Delaware (Herman 1987). It is unlikely that Feature 4 was utilized as a detached kitchen in its present location as it is not associated with any concentrations of historic ceramics or other domestic artifacts as shown in Figures 9 and 11.

Feature 8, the milk house, is of concrete block and frame construction. This type of construction is typical of the early twentieth century and is the material of construction of all of

other outbuildings, except Feature 10 (the corn crib), at the Savin Farm Site. Near Feature 8 are Feature 9, a poured concrete trough and Feature 7, a small concrete block barn also associated with dairying activities. The location of Features 7-9 and all of the other concrete outbuildings suggests that they were built after the construction of Route 13 in the 1920s.

A total of four 3' X 3' test units were excavated in Area I. Phase II testing identified three features: Feature 14, a recent concrete French drain located 20' east of the Savin Farmhouse and Features 15 and 16, a postmold and post hole located in T.U. S10E110.

Features 15 (postmold) and 16 (posthole) were identified in T.U. S10E110 at 1.3 feet below surface. Both features are located 10 feet from the northeast corner of the Savin farmhouse in line with the eastern gable end in an area of high artifact density determined by shovel testing. The diameter of the postmold, Feature 15, was 0.6 feet in diameter which indicates that the feature is the remains of a fence post and is not structurally-related.

Area II consists of nine historic features including seven extant twentieth century agricultural outbuildings. Area II is not associated with any domestic activities and contained a consistently lower density of historic artifacts than Area I. Artifact density ranged from between 5 and 105 artifacts per shovel test. Area II also contained much fewer historic ceramics and other domestic related artifacts.

Phase II testing identified four areas of high artifact

density (greater than 20 artifacts per shovel test). Two of the areas are associated with an area of medium artifact density (10 to 20 artifacts per shovel test) along the west side of the agricultural machine shed (Feature 6) and the recent two car garage (Feature 5). Artifacts recovered in this area consisted largely of clear and aqua bottle glass fragments and structurally-related window glass and wire nail fragments. Some historic ceramics, all of which were fragments of mid-to-late nineteenth century whitewares and stonewares, were recovered in this area between Duck Creek Road and Features 5, 6, and 10. The density of historic ceramics in this area was very low; no more than three historic ceramics were recovered from any single shovel test.

The other two areas of high artifact density are isolated concentrations of amber and clear bottle glass, window glass, wire nails, and non-diagnostic nail fragments found in single STPs between the machinery shed (Feature 6) and the dairy barn (Feature 13). No historic ceramics were found in these tests. Further Phase II testing in both areas did not identify any evidence of structures and both of these areas appear to be shallow trash deposits.

Test units were excavated in each of these four areas and one subsurface feature was located. All of the areas of high artifact density in Area II appear to be simple sheet refuse deposits. The one feature located, Feature 12, was a fence posthole located in T.U. S300E197. Feature 12 is located 20 feet east of a concrete block animal pen, Feature 11. Feature 12 is the remains of a fence associated with Feature 10 the animal pen.

No postmold remains were identified and Feature 12 was excavated to a depth of 1.5 feet below surface and no historic artifacts were recovered from the feature fill. Upon excavation, Feature 12 was found to be similar in shape and profile to the posthole of Feature 2, the other post related feature identified at the Savin Farm Site.

The only potentially nineteenth century outbuilding in Area II is the corn crib (Feature 10). A corn crib is present on the farm in 1867 according to the Orphan's Court description of the property. However, Phase II testing in the vicinity of the corn crib did not locate any diagnostic artifacts or features and it is not known if this extant corn crib is the same structure described in 1867.

A total of 4,411 historic artifacts were recovered from the Buchanan-Savin Farm Site. The majority (59%) of the artifacts recovered were structurally-related window glass, cut and wire nails, and nail fragments. Historic ceramics accounted for 37% of all artifacts recovered. Mid-to-late nineteenth century whitewares, redwares, and stonewares were the most common ceramics recovered and constituted 54%, 19%, and 10%, respectively of the total ceramics recovered. Pearlwares accounted for only 4% of the total ceramics recovered. The mean ceramic date of all ceramics recovered is 1844.1. Excluding redwares the mean ceramic date is 1854.1 which is consistent with the mid-nineteenth century to present occupation of the site.

Archival research has identified the Buchanan-Savin Farm Site as an owner- and tenant-occupied farm occupied from the

second quarter of the nineteenth century to the present. Phase II testing identified two major activity areas at the site. Area I is partially plowed and Area II is completely plowed. Historic artifacts were recovered from both areas and the potential for further subsurface features in Area I is high.

Area I consists of the core of the site and represents the main domestic area of the site. Further work should be concentrated in this area. The extant standing structures in Area I include the Savin farmhouse itself and a vertical board sided storage shed that was probably a nineteenth century detached kitchen moved to its present location near the house in the early twentieth century. A general yard scatter of mid-to-late nineteenth century artifacts was found over most of Area I and high artifact densities indicative of more intensive trash deposition was found east the farmhouse. One subsurface feature, a fence related posthole and mold was found. Area II is an area of low artifact density associated with the extant agricultural outbuildings and associated activity areas.

The presence of intact subsurface features, undisturbed artifact bearing strata, and intact standing structures led to the determination that the site is eligible for inclusion on the National Register of Historic Places under Criterion D--the site has yielded, and is likely to yield, further information important in history.

Analysis of the site will focus on three key issues of nineteenth century Delaware history: 1) transportation developments, 2) economic and agricultural change with the development of large scale fruit, truck produce, legume, and

dairy industries that took advantage of changes in transportation and the expanding regional urban markets, and 3) changing agricultural labor and tenancy patterns.

The two most important transportation developments in mid-nineteenth century Delaware were the completion of the Delaware railroad trunkline through to Seaford in 1856 and the increasingly widespread use of steamboat transportation in the second and third quarters of the nineteenth century. Related to the use of steamboats was the earlier completion of the Delaware and Chesapeake Canal in 1829. The Buchanan-Savin Site is located within one half of a mile of an established railroad crossing and participated in the economic opportunities brought by improved transportation in the nineteenth and twentieth centuries.

In addition to easy access to railroad transportation, the site is located along a major north-south road. The Buchanan-Savin Farm Site is located near Smyrna and the conjunction of the railroad and water transportation networks that serviced the agricultural, fruit processing, and light manufacturing industries located there.

The construction of the Dupont Highway in the 1920s was another pivotal event in the transportation history of central Delaware. The Buchanan-Savin Farm in particular was affected by the construction of present Route 13 which bisected the farm, forcing the removal of several buildings and the re-orientation of the farm. Further research into the changing site layout and spatial use patterns of this site could yield important data on the synchronic and diachronic effect of a major change in the

physical landscape of a site.

Transportation improvements and the presence of large, nearby urban markets in the nineteenth century stimulated the commercial production of perishable, but potentially very profitable agricultural goods. The demand for Delaware milk, peaches, fodder, and truck produce in nearby Wilmington, Philadelphia, Baltimore, and New York encouraged commercial production. The number of cultivated acres in Kent County alone rose from 283,000 acres in 1850 to 338,000 acres in 1900 (Bausman 1940:10).

The Buchanan-Savin Farm Site was first occupied in the period of agricultural and population expansion that began in the second quarter of the nineteenth century. Not only was more land being farmed, and more owner and tenant occupied farms such as the Buchanan-Savin Site being established, but what was being grown on them was also changing. Corn and wheat, the previous staples, were being replaced with orchard crops, truck produce and dairy products. The changing composition of crops produced in central Delaware continued to change into the twentieth century as peaches and corn were replaced with legumes, alfalfa, and a renewed emphasis on dairy products and truck produce.

Archival and archaeological research indicates that the primary agricultural change affecting two of the eligible sites, the Buchanan-Savin Farm Site and the C. Kimmey Tenant Farm Site, was the trend towards increased milk and dairy production. This trend began in mid-nineteenth century and continued into the early twentieth century and was one of the primary transportation and urban market related changes that occurred in central Delaware. Jensen (1986) in particular explores the commercial

impact of the rise of dairying operations in this period in the mid-Atlantic region.

The Buchanan-Savin Farm Site is an apparently mid socio-economic level owner-occupied and later tenant-occupied farm which was utilized for the production of many different kinds of agricultural products over a period of about 150 years. One question which arose from the archival research is the degree to which this change is reflected in the archaeological record. Thus, a third major question addresses the impact of owner/tenant occupants on the deposition pattern at the site.

Finally, the Buchanan-Savin site can be compared to other nineteenth century agricultural sites, including the Kimmey House Site, the Moore-Taylor House Site, and the Wilson-Lewis House Site to form a picture of nineteenth century farm life in coastal plain Delaware.

RESEARCH DESIGN AND RESEARCH METHODS

The main goals of the proposed data recovery project for the Buchanan-Savin Site is to collect data on spatial organization, food preparation and consumption, and artifact assemblage composition. This data will be used to address the questions of economy, transportation, and agricultural tenancy outlined above.

Studying the spatial organization of discard and other activities on the Buchanan-Savin Site will require excavation of a portion of the site. Although cultural features are present, the overlying plowzone contains the bulk of the archaeological assemblage. This distribution reflects not just the incidence of plowing, but also the fact that most discard occurred as a

constant, small-scale process, while features such as trash pits represent unusual episodes of disposal. The plowzone deposits at the site therefore represent a separate, complementary source of spatial data equally as important as the underlying discrete features.

Phase III field research will consist of excavation of a sample of plowzone deposits in Area I (Figure 2) in order to recover artifacts from plowzone deposits area and reveal additional features. The sampling procedure will use the methods employed at other comparable historic sites (Hoseth et al. n.d.; Catts and Custer n.d.) and will consist of a single five foot quadrant randomly selected for excavation within each ten foot block. After the plowzone is sampled, it will be stripped to expose any undetected features. In Area II, the surface has been heavily disturbed by post-1925 concrete block farm buildings and shovel test pits and units revealed artifacts and features from after that time. Thus no data recovery excavations are planned for Area II.

Field techniques will include standard procedures developed on other DelDOT projects. Plowzone soils will be excavated in five foot units and screened through 1/4" mesh. In the excavation of features, standard volume flotation and water screen samples will be taken.

Laboratory analysis will consist of standard processing and cataloging of artifacts following Island Field Museum Guidelines. South's (1979) functional artifact classes will be employed to generate artifact density maps for pattern detection of plowzone

material. Standard analytical procedures for floral materials will be used and faunal materials will be analyzed with special attention given to butchering and consumption patterns. Field and laboratory data-gathering will generate a data base from the Buchanan-Savin Site which is comparable to other local historic sites.

Once basic data recovery and description of the Buchanan-Savin Site has been accomplished, its patterns of spatial organization and food consumption will be compared to other sites, such as the the Mudstone Branch Site (Heite 1984), the Durham Site (Heite and Heite 1985), and other nineteenth century agricultural sites from the area (Moore-Taylor, Kimmey, Darrach Store, Wilson-Lewis). These comparative data will be used to investigate questions about rural culture change such as:

1) Are changes present in refuse disposal processes and techniques? Can changes be observed in the patterns of artifact distributions and are these changes indicative of varied spatial utilization at the sites? Furthermore, can such changes in patterns be related to historically-documented transportation, residency, economic, and social changes in the surrounding area or to changes in a larger area?

2) Are there changes in the presence/absence, or frequencies, of certain artifact classes among the various historic sites? Can these changes be related to the socio-economic position of the site's occupants or to local and regional economic conditions?

3) Can changes in either of the above categories of data be analyzed for meaningful covariance?

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