

Feature 171, a prehistoric thermal feature (Type OX), was identified in the northwest portion of the site during plowzone stripping of Trench 5 (see Figure 3, see Figure 18b). It was the northernmost of the five thermal features exposed in Trench 5 and was located at N592.16 E445.67, approximately 22 meters (72 feet) north of Feature 161. Feature 171 was identified on the stripped surface of the B horizon approximately 25 cm below ground surface; the upper portion of the feature had been truncated by plowing. As defined in plan view, Feature 171 was a generally ovoid oxidized stain with dimensions of 52x90cm (20.5x35.4 in) (Figure 29, Photograph 40). The feature had a basin shaped profile with a maximum depth of 26 cm (10.2 in) below the stripped B horizon surface (Figure 30, Photographs 41 and 42). The feature fill was a yellowish-red (5YR 5/8) sandy silt loam mottled with grayish-brown (10YR



5/2) and brownish-yellow (10YR 6/6) and with slight charcoal flecking.

Photograph 40. Site 36LU301: Feature 171, Plan View on B Horizon Surface (Trench 5), Facing West



Photograph 41. Site 36LU301: Feature 171, Profile, Facing West

Feature 171 was bisected along its north/south axis and the east half was removed in three 10-cm arbitrary levels and all fill from this half was screened through 0.6-cm (0.25-in) mesh. The feature profile was recorded and the west half was also excavated in 10-cm levels. Flotation samples were collected from each level in the west half and the remaining feature fill was screened. One piece of debitage (a biface reduction flake made from dark gray chert) and one fire-cracked rock were recovered from the feature fill.

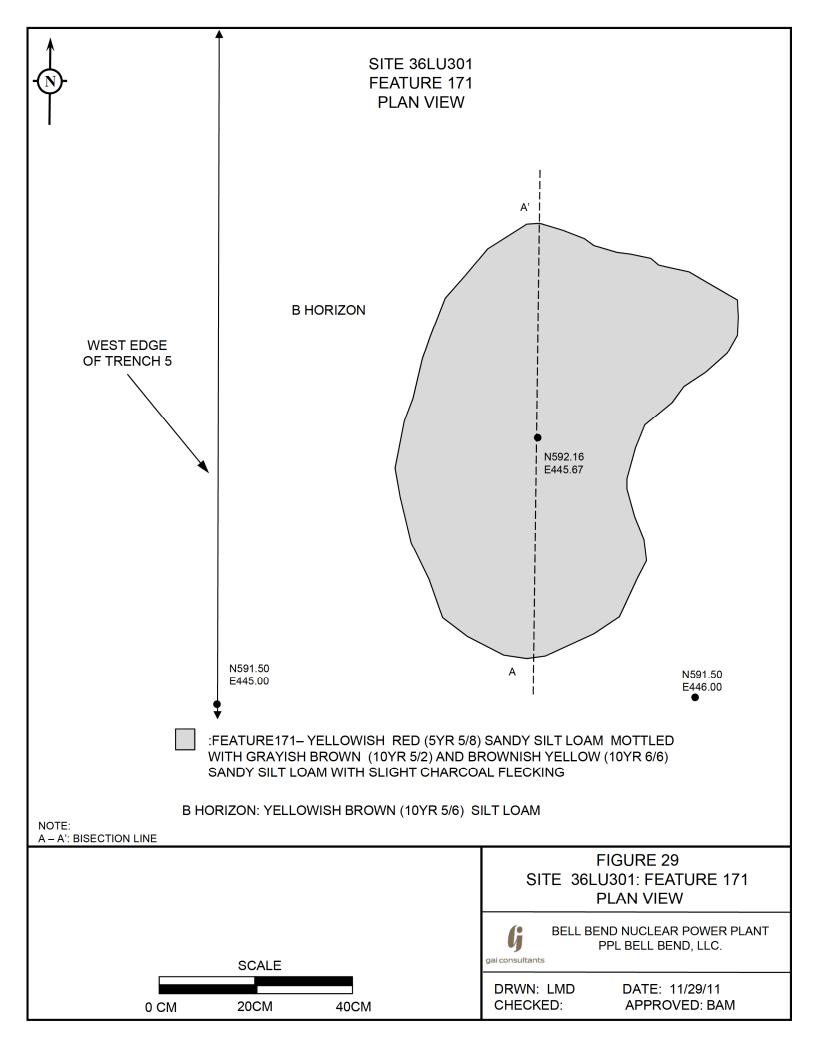


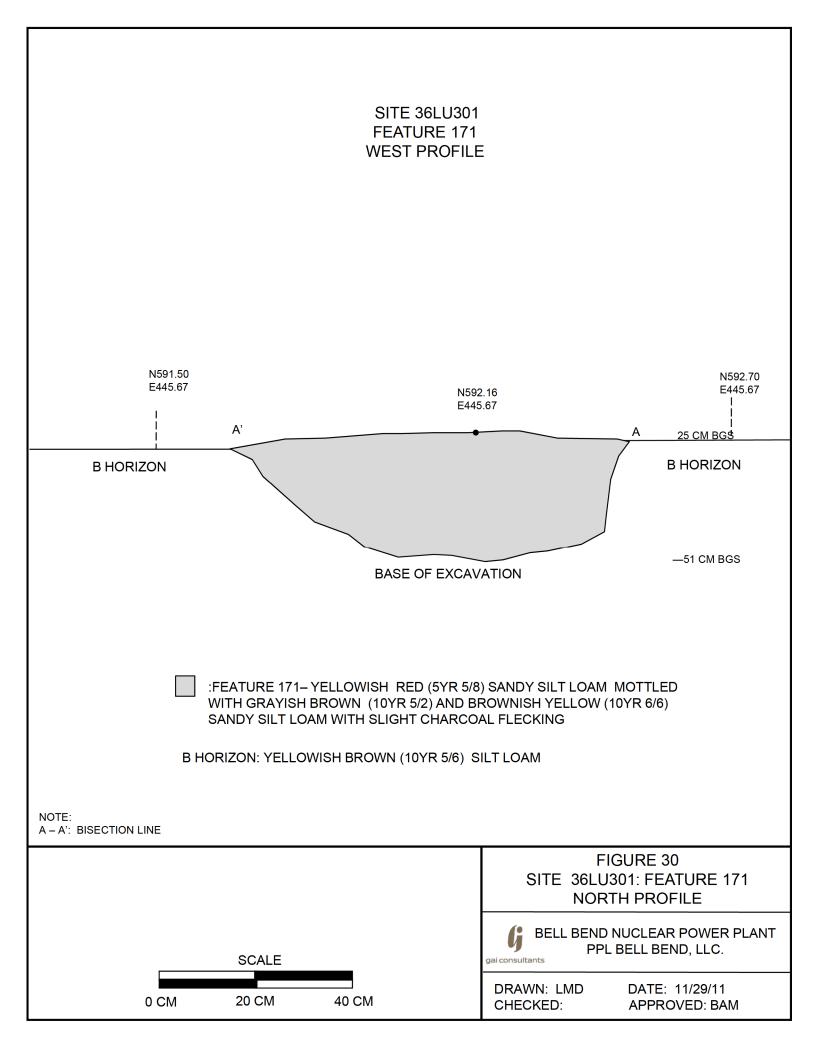
Photograph 42. Site 36LU301: Feature 171, Plan View of Excavated Feature, Facing West

Flotation samples were processed at GAI's Archaeology Laboratory and recovered carbonized specimens (heavy and light fractions) were submitted to Justine McKnight for archaeobotanical analysis (see Appendix J). Archaeobotanical analysis identified a low quantity of wood charcoal representing pine and chestnut, as well as non-carbonized (modern) seeds including copperleaves, carpetweed, purselane, sheep sorrel, knotweed/dock and grass. As with analysis of the samples from the other thermal features, no carbonized plant food remains were identified.

Following completion of archaeobotanical analysis, charcoal samples were submitted to Beta Analytic for a radiocarbon assay (see Appendix K). AMS counting analysis provided a radiocarbon age for Feature 171 of 7150+/-30 B.P. (Beta-309438), with a calibration intercept date of BC 6020, and with a 2 sigma range of BC 6060 to 5990. Radiocarbon analysis indicates that Feature 171 dates to the Middle Archaic period.

Based on the results of Phase II investigations Feature 171 is interpreted as the truncated remains of a basin-shaped hearth that was utilized by the site's Middle Archaic inhabitants for heat. Although the feature may have also been used for cooking, the absence of subsistence remains in the feature fill suggests that this was not a major function.





Summary of Prehistoric Thermal Features

The five thermal features identified within the site during Phase II feature sampling represent the remains of burning events which resulted in reddened (oxidized) soils and/or concentrations of charcoal flecking in these localities. These features are very similar in size, morphology, and in the near-absence of artifacts or cultural remains. In addition, all five features were identified in a single 2-meter (6.5-foot) wide trench, extending in a north/south orientation across the site's upland landform in the western portion of the site (perpendicular to the location of Walker Run, situated south of the site). Their size and morphology suggest that they represent the remains of prehistoric hearth features, whose upper portion has been truncated by previous plowing. Three of the feature remnants (Features 150, 153 and 154) were just 5 to 9 cm (1.9 to 3.5 in) thick, while the other two (Features 161 and 171) had maximum depths of 26 to 29.5 cm (10.2 to 11.6 in). Excavation of these features revealed clear boundaries and a smooth, basin shaped profile. No evidence of an irregular base, as would be expected of a natural tree/root burn, was observed.

Based on radiocarbon analysis, two of the features (Features 150 and 171) date to the Middle Archaic period and two features (Features 153 and 154) date to the Early Woodland period; the remaining feature (Feature 161) yielded insufficient material for radiocarbon analysis and its date is unknown. Due to their close spatial proximity and their overlapping radiocarbon dates, it is possible that Features 153 and 154 represent a single prehistoric occupation.

Archaeobotanical analysis identified no evidence of charred subsistence remains in samples from any of the features; plant remains consisted of low quantities of wood charcoal (primarily pine) and numerous non-carbonized modern weed seeds. Two features (Features 153 and 171) yielded only one to two prehistoric artifacts each while the other three features produced no artifacts. No diagnostic lithic artifacts were recovered from the feature fill or surrounding vicinity. Additionally, no ceramics were found in association with the Early Woodland features (or from the site as a whole).

These features represent multiple prehistoric occupations of the site during the Middle Archaic and Early Woodland periods. However, due to the near dearth of artifacts or subsistence remains from the feature fill, as well as the overall the lack of associated artifacts in the surrounding portions of the site, these features provide little information on the nature of the site's prehistoric occupations.

Prehistoric/Historic Postmolds

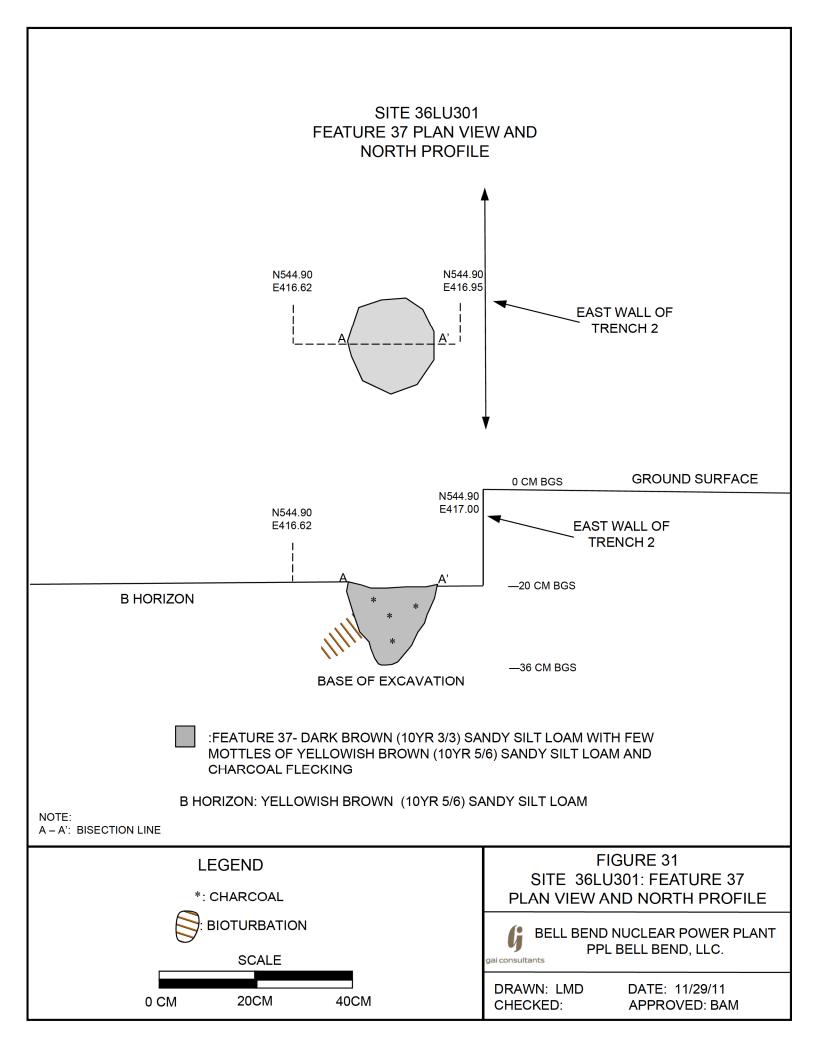
Two possible postmolds (Features 37 and 38) were identified during mechanical stripping of the plowzone in Trench 2, in the southwest portion of the site (see Figure 3, see Figure 15a, see Table 11). Both of these features were categorized as small circular/oval stains (Type A). The size and morphology of Features 37 and 38 suggest that they may represent the truncated remains of prehistoric postmolds. However, as these features produced no artifacts, do not appear to be part of a larger postmold pattern, and are not associated with other prehistoric features their prehistoric origin cannot be conclusively determined. It is also possible that these features may represent small historic period postmolds.

Feature 37

Feature 37 (Type A) was located in the southern section of Trench 2 at N544.90 E416.80 (see Figure 15a). It was exposed on the stripped surface of the B horizon at approximately 20 cm (7.9-in) below ground surface; its upper portion had been truncated by plowing. The feature was defined in plan view as a dark circular stain measuring 18x20 cm (7.1x7.9 in) (Figure 31). It was bisected along its east/west axis, exposing a straight, tapered profile with a rounded base and a maximum depth of 16 cm below the B horizon surface (see Figure 31, Photograph 43). The feature fill consisted of dark brown (10YR 3/3) sandy silt loam with mottles of yellowish-brown (10YR 5/6) and charcoal flecking. Excavation of the feature fill produced no artifacts. Feature 37 represents a possible prehistoric postmold or a small historic period postmold.



Photograph 43. Site 36LU301: Feature 37, Profile on B Horizon Surface (Trench 2), Facing North

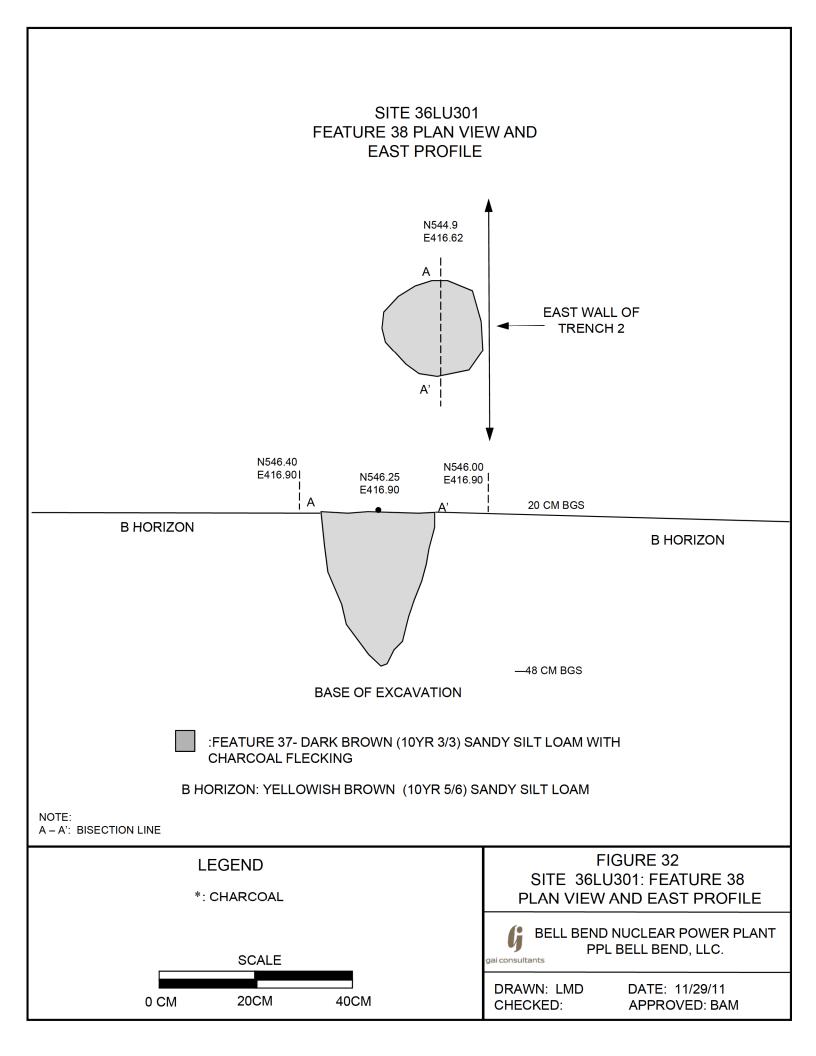


Feature 38 (Type A) was also located on the stripped B horizon surface in Trench 2, approximately 1.3 meters (4.3 feet) north of Feature 37 (see Figure 15a). It had a center point of N546.25 E416.90 and was observed at approximately 20 cm (7.9 in) below ground surface. This feature consisted of a dark circular stain with dimensions of 20x21 cm (7.9x8.3 in) (Figure 32). It had a straight, tapered profile with a slightly pointed base that extended to a depth of 28 cm below the stripped B horizon surface (see Figure 32, Photograph 44). The feature fill consisted of a brown (10YR 4/3) sandy loam. No artifacts were recovered from Feature 38. This feature is interpreted as the truncated remains of a prehistoric postmold or,



as noted above, a small historic period postmold.

Photograph 44. Site 36LU301: Feature 38, Profile on B Horizon Surface (Trench 2), Facing East



Historic Features

Plowzone stripping exposed six large soil anomalies (Type H) that were considered likely to represent historic features (Features 32, 76, 77, 78, 82 and 184) (see Table 10). These features consisted of large dark stains with sharp boundaries and either a rectangular/oval shape or straight edges. Historic artifacts (i.e., pocket knife, ceramics, bone, charred wood) or rock fragments were observed on the exposed surface of these features. These historic features were concentrated in the southwest corner of the site, with five of the six features located south of the N532 gridline in Trench 3 (n=4) and Trench 2 (n=1) (see Figure 15a and Figure 16a); one Type H feature (Feature 184) was mapped approximately 50 meters (164 feet) further northeast in Trench 6 (N571 gridline) (see Figure 19b). One of the six historic (Type H) features (Feature 77) was sampled during Phase II investigations and was concluded to represent an historic trash pit (see Table 11). In addition, based on the results of feature sampling, two additional large oval stains (Feature 83 and 85) categorized as Type D features, and situated immediately north of the historic features in Trench 3, were concluded to represent possible historic features (see Table 11, see Figure 16a). The three sampled features concluded to be historic in origin (Features 77, 83 and 85) are described below.

Feature 77

Feature 77 was identified on the surface of the B horizon near the southern end of Trench 3 at N517.05 E426.50 in the vicinity of three other likely historic features (Features 76, 78 and 82) (see Figure 16a). Feature 76 and 78, consisting of dark oval to rectangular stains, abutted Feature 77 to the south and west, respectively (Photograph 45). Feature 82, a 3.5-meter (11.5-foot)-wide dark, rock-filled stain with charred wood that bisected Trench 3, was

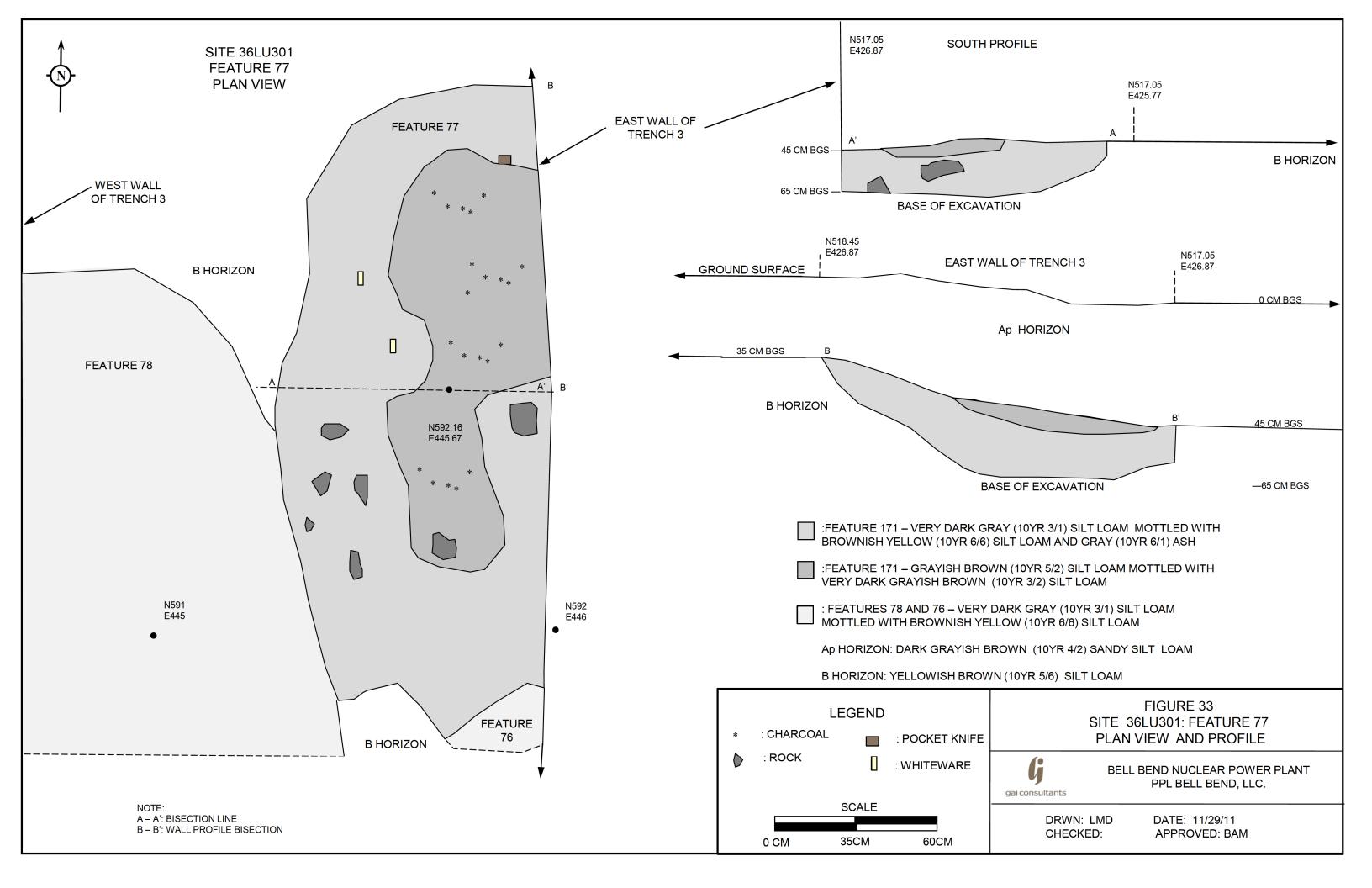


located 10 meters (33 feet) to the north (see Photograph 45). Note that Features 76, 78 and 82 were not sampled during Phase II fieldwork.

Photograph 45. Site 36LU301: Overview of Trench 3 showing Features 76, 77, and 78 in Foreground and Feature 82 (rockfilled stain) in Distance; Facing North.

In plan view, Feature 77 appeared as a large, dark-gray to dark-grayish-brown,

sub rectangular stain with exposed dimensions of 95x214 cm (3.2x7.0 feet); the feature extended beyond the east wall of the trench and was not fully uncovered during Phase II excavations (Figure 33, Photograph 46). The upper portion of this feature was truncated by plowing. A pocket knife and historic ceramics were observed on the surface of the feature. Feature 77 was bisected along its east/west axis and excavation of the north half of the feature revealed a basin-shaped profile with a maximum depth of 26 cm (10 in) (see Figure 33, Photograph 47).





Photograph 46. Site 36LU301: Feature 77, Plan View on B Horizon Surface (Trench 3), showing Feature 77 at East Edge (to right), Feature 76 to the South (near right) and Feature 78 to the West (left), Facing North



Photograph 47. Site 36LU301: Feature 77, Profile in East Wall of Trench 3, Facing East

Ninety-two historic artifacts were recovered during excavation of Feature 77 (Table 12). Over half of these specimens (58 percent, n=54) were animal bone and teeth. The animal bone represented the remains of a yearling, white-tailed deer. Evidence of butchering was observed on the distal end of one radius. Additionally, several bones appeared to be blackened from burning and one calcined bone was noted. The sample of faunal remains also included a single rib from a medium sized mammal (i.e., raccoon). The remaining artifacts consisted largely of kitchen-related redware sherds (n=26), along with one stoneware sherd, one bone-handled pocket knife, one wrought nail, two fragments of thin, tinted window glass and seven indeterminate metal fragments.

Table 12. Site 36LU301: Feature 77 Pattern Analysis, Historic Artifacts

Class	SubClass	Ware Type/Object	Count	%
Architecture	Nails, Spikes, Etc.	nail, wrought	1	1.09%
	Window Glass	window glass	2	2.17%
		Architecture Total	3	3.26%
Faunal	Bone	bone	49	53.26%
		teeth	5	5.43%
		Faunal Total	54	58.70%
Kitchen	Ceramics	redware, brown glaze	18	19.57%
		redware, clear lead glaze	8	8.70%
		whiteware, plain	1	1.09%
		Kitchen Total	27	29.35%
Personal	Personal-Other	pocket knife	1	1.09%
Unidentifiable	Indeterminate	indeterminate metal	7	7.61%
		TOTAL	92	100.00%

Based on Phase II analysis, Feature 77 represents the remains of a shallow refuse pit. The presence of redware sherds, a wrought nail, and thin window glass suggest an early to mid nineteenth century age for this feature. As the adjacent Michael's residence dates to circa 1880, this feature may be associated with an earlier activity or use of the field that predates construction of this residence. The 1873 map of the area (see Figure 8) depicts no structures in this locality and no structural remains were identified within the site during Phase II investigations. This data suggests that Feature 77 and the earlier historic activities may have been limited in time and scale and/or that any associated structures, if present, were abandoned prior to 1873.

Feature 83 (Type D) was a large, mottled, oval stain located on the surface of the stripped B horizon near the southern end of Trench 3 at N534.20 E425.65, approximately 50 cm (20 in) north of historic Feature 82, the rock filled stain noted above (see Figure 16a, Photograph 48). Feature 83 had dimensions of 220x90 cm (87x35 in) and sharp boundaries (Figure 34, Photograph 49). It was bisected along its north/south axis and the east half was excavated and screened through 0.6-cm (0.25-in) mesh. Following recordation of the feature profile, the west half was excavated. In profile the feature was very shallow, with a maximum depth of 10 cm and a slightly undulating base (see Figure 34, Photograph 50). The feature fill consisted of a compact yellowish-brown (10YR 5/4) sandy loam mottled with subsoil (10YR 5/8)



yellowish-brown sandy loam). An area of bioturbation (root or rodent disturbance) was observed in the northern portion of the feature. One piece of window glass was recovered from this area of disturbed soils. Two prehistoric flakes (both identified as flake fragments made from Shriver Helderberg Chert) were recovered during screening of the feature fill.

This feature was truncated by plowing activities and disturbed by rodent activity. Due to the shallow depth of the feature remnant and paucity of artifacts, feature function could not be determined.

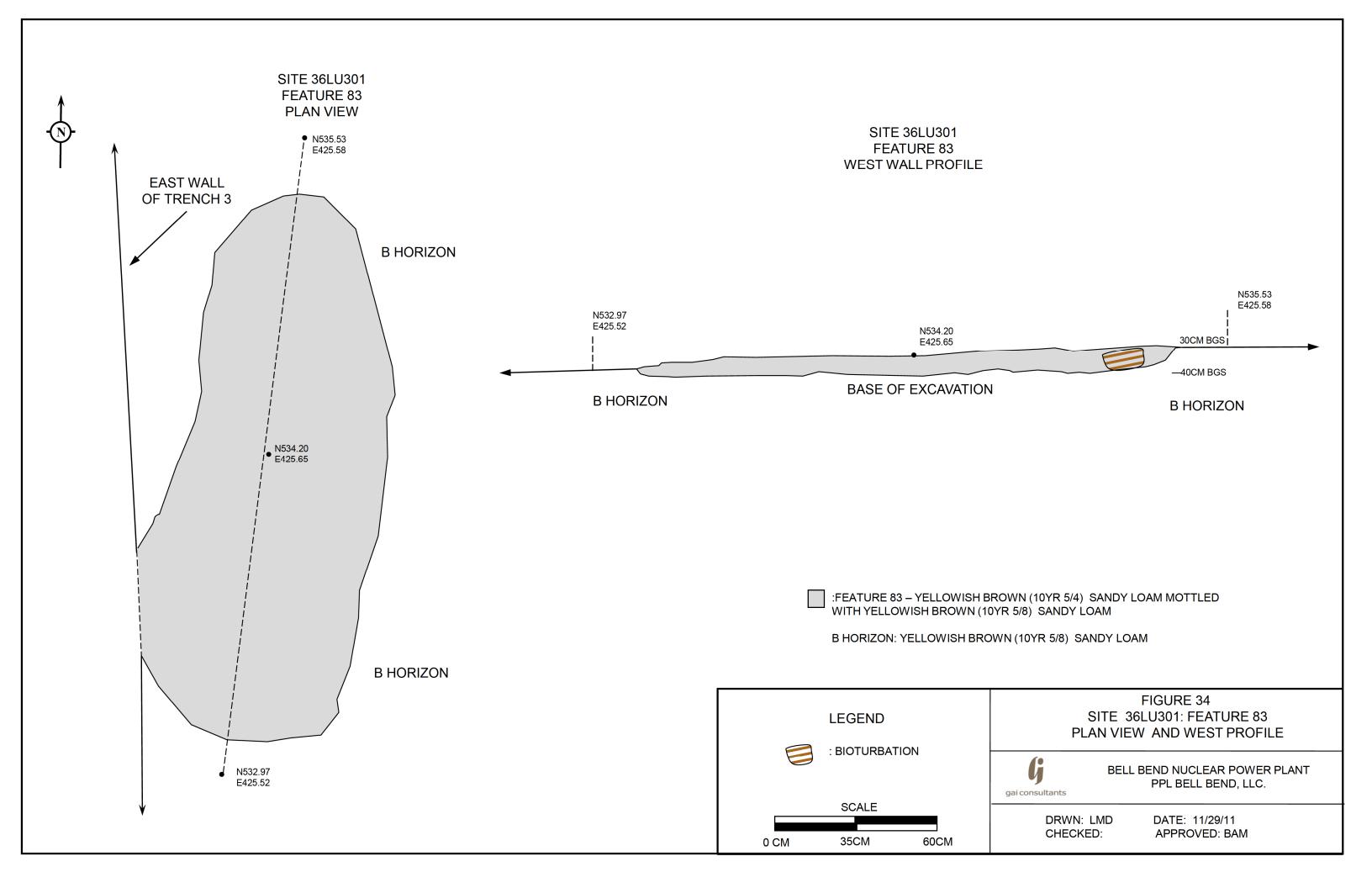
Photograph 48. Site 36LU301: Overview of Trench 3 showing Feature 82 (rock-filled stain) with Features 83 and 85 in Distance (Feature 81 in left foreground), Facing North



Photograph 49. Site 36LU301: Feature 83, Plan View on B Horizon Surface (Trench 3), Facing North



Photograph 50. Site 36LU301: Feature 83, Profile, Facing West



Feature 85 (Type D) was a large stain identified on the stripped B horizon surface near the southern end of Trench 3 at N538.00 E425.65 (see Figure 16a). It was situated approximately 3 meters (9.8 feet) north of Feature 83 (described above). In plan view Feature 85 had a sub rectangular shape with clear boundaries and dimensions of 100x62 cm (39x24 in) (Figure 35, Photograph 51). The feature was bisected along its north/south axis and the east half was excavated and screened. The profile was then recorded and the west half of the feature was excavated. Feature excavation revealed a shallow basin shaped profile, extending a maximum of 13 cm (5 in) (Figure 36, Photograph 52). The feature fill consisted of a brown (10YR 5/3 silt loam). No artifacts were recovered from this feature.

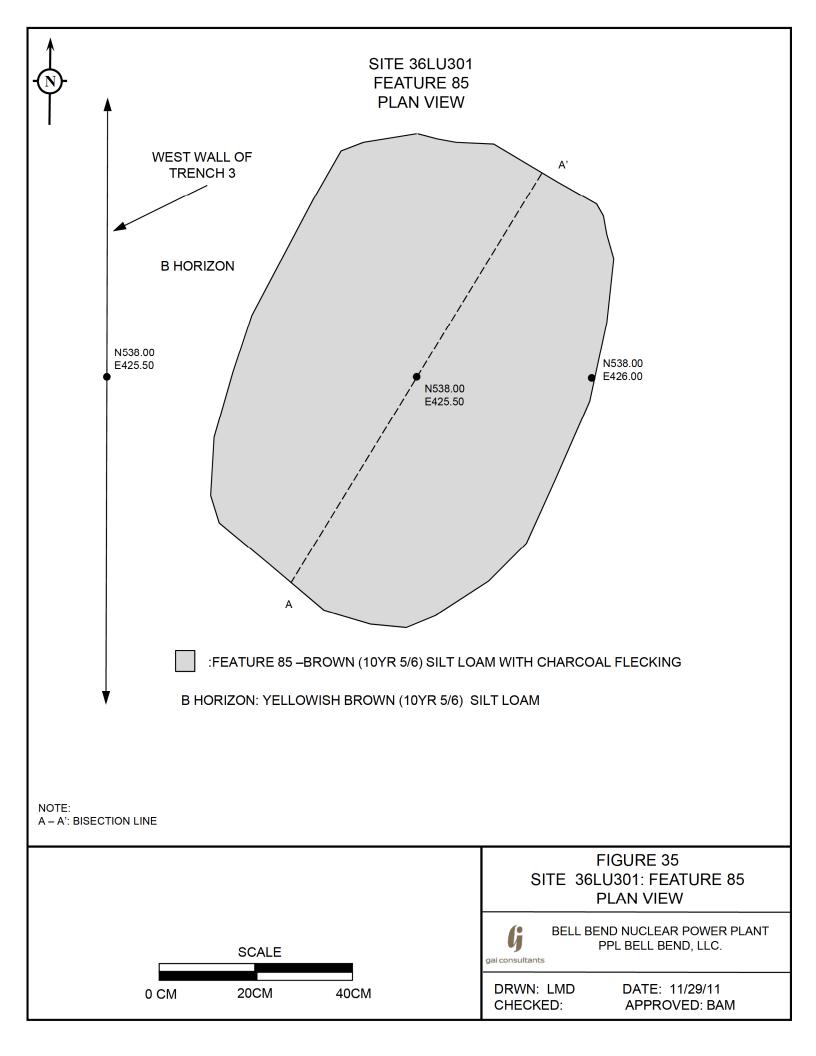


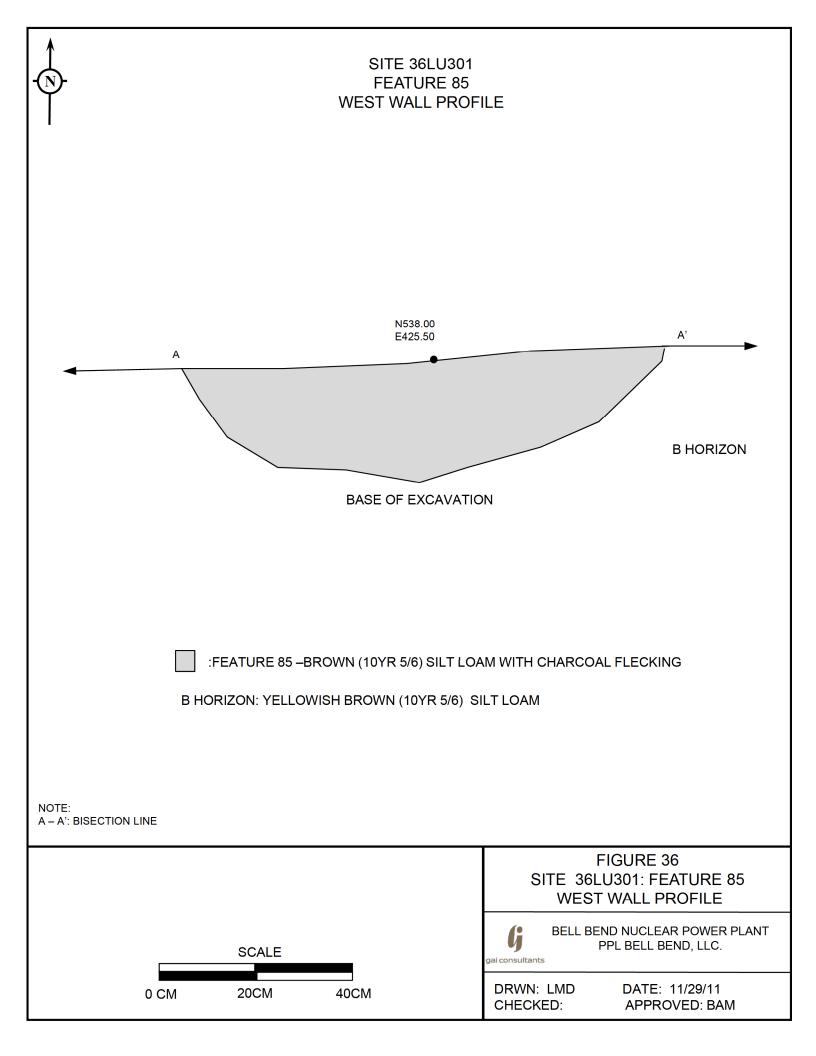
The upper portion of Feature 85 was truncated by plowing activities. Only the shallow base of the feature remained and no artifacts were recovered from the feature fill. As a result, the function of this historic feature could not be determined.

Photograph 51. Site 36LU301: Feature 85, Plan View on B Horizon Surface (Trench 3), Facing North



Photograph 52. Site 36LU301: Feature 85, Profile, Facing West





Non Cultural Features/Anomalies

Based on the results of feature excavations, 45 (82 percent) of the 55 possible cultural features sampled during Phase II fieldwork were concluded to represent non-cultural anomalies. As described in Table 11, the majority (n=27) of these anomalies were categorized as small circular/oval stains (Type A), with a lower frequency of medium circular/oval stains (Type B), irregular stains (Type I), large circular stains (Type C), and large oval/elongate stains (Type D). Phase II investigations indicated that these stains primarily represented bioturbation (i.e. root and/or rodent disturbances) and areas of tree or root burns within the cultivated field.

Each of these features was mapped and photographed in plan view and was documented on a standard GAI feature form. The feature was bisected and the fill from one half was removed and screened through 0.6-cm (0.25-in) mesh. The feature profile was then recorded and photographed. If the results of feature bisection clearly established that the feature was non-cultural, feature investigation was halted at this stage and the second half of the feature was not removed. If the feature's cultural status could not be determined (or if it was considered to be cultural), the feature was fully excavated and the second half of the feature fill was removed and screened.

Artifacts were recovered from only two of the 47 non-cultural features (see Table 11). Feature 2 (a root disturbance located in Trench 1) produced two lithic debitage, No artifacts were recovered from the remaining non-cultural features.

Table 11 includes a summary of the features that were investigated during Phase II fieldwork and determined to represent non-cultural soil anomalies. A representative sample of select non-cultural features is presented in the following photographs (Photographs 53 through 63).



Photograph 53. Site 36LU301:
Representative Non Cultural Feature—
Type A, Profile of Feature 2 (Root
Disturbance) in Trench 1, showing Root
Casts and Mixed Soils, Facing North