Summary of Investigations in Area XV

Location: Area XV was located generally north and east of the early and later Addison residences located in Areas V and I, respectively. Specifically, Area XV encompassed 150 sq. meters bounded by the grid coordinates S1-75 E510 to 525 and S1-65 E510 to 525. The area was mostly level and featured a slight slope west to east with the west end somewhat more elevated and a more pronounced slope north to south. Overall, the surface was level. To the north and south of the site area are found low ridges. These high spots on either side of Area XV are evidence that the area likely received ground water run off as it was the low spot in the immediate vicinity.

Previous Investigations: Three (3x1 m) units were excavated during the Addison III phase of field investigations. These units exposed clusters of cobbles that were interpreted as a possible road bed, a construction pad or the remains of a razed structure. A number of artifacts described as a “small concentration” were also recovered.

Results of Current Work: Six (3x2 m) units were laid out in such a manner so as to provide E/W and N/S sectional views of the entire site area (see accompanying map for locations of units).
Stratigraphic and artifactual evidence from the units allows for some general interpretive statements to be made.

1) The cobbles thought to be the remains of some sort of construction were determined to be contained within, hence to be part of a layer of fill.

2) The very sparse diagnostic artifacts recovered from the excavations date to the 19th century and may provide a date for the deposition of the fill material.

3) The lack of any sort of midden soil, structural remains, or cultural features indicates that the area very probably was never resided upon.

4) The topographic setting, the slope apparent at the base of the fill and the nature of the subsoil (see below) all point out that prior to being filled, the area was a shallow erosional gully. The gully appears to have received surface runoff (and subsurface seepage) from the elevated ridges to the north and south and likely carried this runoff to the deep ravine located a few meters east of the site area.
Discussion of Stratification: It appears quite likely that a single layer of fill was dumped in the site vicinity and subsequently weathered into the zones that were excavated as "natural" layers. Top to bottom these layers were:

A: a dark (10YR 3/1 very dark gray to 10YR 3/3 dark brown and 10YR 2/2 very dark brown) loamy layer composed of a thin mantle of gelation soils mixed with forest litter and humic matter, grading into these deposits was a transitional zone that consisted of the uppermost portion of the fill deposits. This zone was discolored due to leaching and chemical weathering. It was generally the same color as the top portion of the layer but in unit 5175 E 519 - the most southerly of the units situated in the portion of the site area with the greatest surface slope - it was noted that the transitional layer gradually became lighter in color (10YR 5/3 - yellowish brown to 10YR 4/3 brown). Artifacts were recovered from only one unit. Overall, the layer ranged from 3cm to 4cm with the thickest deposits in the southern-most unit C this may indicate that erosion continues and that sediments are carried south down slope.
toward the low spot of the site area.

B: Generally described as yellowish brown (10 YR 4/6) to brownish yellow (10 YR 5/4) clay containing varying amounts of silt and sand. In Unit 5169 E 519 enough sand was present to be identified as a lens or pocket. This layer varied somewhat in thickness but was generally thicker than Layer A. It averaged circa 20 cm. This layer also varied in the amount of mottling it contained. In units that had a C layer, Layer B was mostly homogeneous in color. In the two units that lacked a C layer and in which Layer B over lay subsoil Layer B was mottled with iron oxide staining (10 YR 7/4-yellow) and light brownish gray clay (10 YR 4/1). Layer B also contained some cobbles. In the units lacking a C layer clusters of cobbles over lay subsoil within Layer B. In the units with deeper fill - and a third excavation layer - the concentrations of cobbles were within layer C. Layer B contained the highest density of any of the excavated layers although artifacts were quite sparse. Most of the artifacts were very small shards of ceramics and in each case whiteware was recovered.
Layer C: Only four of the six units had C layers. These were: S175/E519, S172/E519, S169/E519, and S170/E525. The northernmost unit, S167/E525, and the westernmost unit, S170/E512, lacked C sediments (however, the Blayer in the latter two units was quite similar to layer C elsewhere). Overall, Layer C was quite similar in color compared with layer B: 10YR 4/6 brownish yellow to 10YR 6/4 light yellowish brown and 10YR 5/6 yellowish brown. However, Layer C was quite compact and more clayey than Layer B. Layer C was composed of sandy clay and as in the shallower units, there was evidence of water seepage through the layer, i.e., iron oxide staining and pockets of baked clay. Clusters of cobbles were found throughout the layer but especially at the base of C and more specifically in the low spots. Layer C was thickest in the southernmost unit where it was 40 to 50 cms thick and extended to 80 to 90 cms below ground surface. Removal of Layer C exposed an undulating layer of gray clay that was the subsoil.

Layer C overall sloped north to south and west to east. This slope paralleled the directions that ground water would drain and also illustrated the former topography of the area prior to its filling.
Interpretation of stratification:
The area apparently originally sloped south and east. When the fill was deposited to level out the area more fill was required in the lower spots (i.e. east and south). Where the fill was sufficiently deep or thick, water percolation, leaching, and chemical weathering created three fairly distinct stratigraphic zones. In the west and north the fill was shallower and apparently better drained and only 2 stratigraphic zones were noticeable. The subsoil dipped south and east and undulated. The low spots were filled with cobbles. There was no evidence of a buried soil leading one to think that the former surface, when buried, was badly eroded.

Water apparently does not flow through the subsoil which has a very high clay content. The ground seepage percolates through the layer overlying sub (as well as vertically from above) discoloring and depositing iron oxides leached out from above.

Overall Interpretation: I believe area XX was a former erosional gully that was filled. The fill material contained 19th century artifacts but I am uncertain as to whether these materials can be used to date the filling.