**Field Notes**

This was the first visit to the site this season, undertaken to assess the condition of the area, to prepare the site for excavation (to begin Monday, April 20), and to begin construction of a new site map.

Vegetation on the site showed only moderate growth and, although requiring some clearing, presented no significant problems. Some slumping of trench walls has occurred, but units are recognizable. The fiberglass filter cloth which was laid over the site in 1979 has worked amazingly well. Although weathered and brittle where it was exposed, the portions beneath the sand covering retained original strength. Removal of the cloth (over feature corners) revealed features as they were left in 1979. Standing water will be a problem on the site, as it was in 1979, and will require the use of a pump.

Site datum on the south side of Route 806 was located with a shovel (having sunk about three inches below grade) and a triangulation was made with the bench mark painted on the drainage ditch culvert. This triangulation permitted the establishment of a station on the west side of Rt. 806 on the E71 transect. From this point it was then possible to move north and west with the transit in order to establish the N20 and N30 transects (the latter to mark the course of a backhoe trench), as well as three north-south transects through the area to be intensively investigated.

Preliminary mapping of the site included not only the reestablishment of the grid but the mapping of the stone pillars, the dam, Rt. 806, and the drainage ditch along the west side of the site. The corners of feature 1 and the northeast corner of feature 4 were also mapped. A new site map was thus begun. As a note of caution, the new map varies about six inches from the old map (on paper), but is much more accurate due to proper functioning of the transit.

Following the reestablishment of the grid and the preliminary mapping of the site, a north-south trench line (for
BACKHOE EXCAVATION was established in the area south of the site, beyond the east-west drainage ditch. Coordinates of the line are E10S155' / E10S145'. This will place the trench at the south edge of the remnants of earlier fish ponds. A point was also established at the intersection of the E20 transect with the SW wall of the dam. This to serve as a guide for the establishment of a backhoe trench through the dam (in a perpendicular alignment).

Beginning with a call to Mr. Edward Feeser, Resident Maintenance Engineer, arrangements were made to have a backhoe on site on April 20 and to remove five dead trees by April 24. Also to be removed (possibly with the backhoe) are the two stone pillars. Tree removal subsequently occurred on Wednesday, April 15.

Activity on April 20 will begin with direction of the backhoe. First priority will be given to removal of a large backdirt pile in the vicinity of Feature 4 and removal of the pillars. An attempt will also be made to remove the large stump at the north end of Feature 4. Second priority will be given to excavation of the trenches. Excavation units will normally be ten foot squares, and backhoe trenches five feet wide.
Field Notes

April 20, 1981

First day of excavation with crew (Linny Schenck, Ken Joire, Karen Zatz, and Georgia Vichos).

SHA crew had removed all five trees prior to our arrival, as well as the two stone pillars — all removed with no disturbance to site.

Backhoe arrived on site in morning as scheduled. First priority was removal of last season's backdirt pile from area of Feature 4.

Trench lines along N30 and N15 transects were laid out with string. Backhoe excavation proceeding along North side of strings. Both trenches are four feet wide. The trench along the N15 transect began at approximately E0N15 and extended east to E-N15. The N30 trench began at N30E20, extending to N-E30. Both trenches were excavated to a depth beneath stone rubble. No cleaning of trenches had yet taken place. Remaining trenches will be excavated tomorrow.

A 10' square, with its SW corner at N110W10, was laid out following clearing of backdirt by backhoe. This square encompasses the small unit at N110W5, where stone and brick rubble was observed in 1979. This square also encompasses the section of trench GB where the raceway is thought to appear. Humic overburden was removed to a depth of about 10" to surface of a gravelly deposit. Cleaning of stone rubble suggests it may represent the NW corner of Feature 4.
Backhoe excavation - 1) Excavation of the N30 trench was completed with no apparent discovery of additional features.
2) A trench of approximately 25' was excavated from S140°
   to S160° E, with a width of about 3 feet. No features
   were noted, and stratigraphy is comprised of a shallow humic
   topsoil overlying a very yellow homogeneous clay. Large irregular
   stones were observed at a depth of about three feet, but
   these appear to occur naturally.
3) Excavation of a deep trench through and perpendicular to
   the southwest wall of the dam was partially excavated. This
   trench is being excavated to the maximum depth possible.
   A thick layer of charcoal, slag and brick fragments extends
   into the interior of the dam, passing immediately beneath
   the wall of the dam. Contrary to expectations, this layer
   rises in elevation within the interior of the dam. No features
   or artifacts have yet been observed.

Unit N110W10 - Excavation of Unit continued, revealing
an elongated and narrow depression running across the
square from northwest to southeast. Until layers can be
 correlated with those seen elsewhere on the site, each
strata will be given a sequential letter designation as
follows:
A - Topsoil.
B - Dark yellowish brown clayey loam over
   entire pit.
C - Yellowish brown gravelly loam covering the
   area west of the linear depression.
D - Dark yellowish brown clayey loam, with
   inclusions, found east of the linear depression.
A circular pit was discovered at the center of the unit,
seemingly intrusive to red subsoil.
The elongated depression measures approximately ½ feet
in width and 1½ - 2 feet deep, filled with gray-brown
loam with slag and waste-metal inclusions.
Square drawn in plan and photographed.

A CHARCOAL AND SLAG LAYER EXTENDS DIRECTLY BENEATH THE EMBANKMENT OF THE DAM, RISING TOWARD THE INTERIOR OF THE IMPOUNDMENT AND GRADUALLY DISAPPEARS. THE EXPECTATION HAD BEEN THAT THIS LAYER WOULD HAVE DROPPED AFTER PASSING UNDER THE DAM.

THE EMBANKMENT ITSELF IS COMPRISED OF A STONE FACE AND RUBBLE BACKING, REINFORCED BY A RED CLAYEY SHALE EMBANKMENT FRONT AND REAR (REAR EMBANKMENT ALSO INCLUDES A MIXED DEPOSIT OF SLAG).

THE INTERIOR AREA OF THE IMPOUNDMENT IS MARKED BY A THICK DEPOSIT OF GRAY CLAY INCLUSIONS WITH LENSES OF SAND (POSSIBLY REPRESENTING ALTERNATE FLOODING AND SEDIMENT CYCLES). NO INDICATION OF STRUCTURAL FEATURES WAS OBSERVED IN THE TRENCH PROFILE.

SQUARE N110 W10 - EXCAVATION OF THIS UNIT CONTINUED WITH THE REMOVAL OF A GRAYISH-BROWN SOIL, WITH SMALL SLAG INCLUSIONS, WEST OF THE ELONGATED TRENCH-LIKE FEATURE. THIS DEPOSIT WAS SIMILAR IN TEXTURE TO THE FILL OF THE TRENCH FEATURE, BUT NOT AS GRAY IN COLOR.

SQUARE N30 E15 - THE FILTER CLOTH WAS REMOVED FROM THIS FIVE-FOOT SQUARE AND THE NARROW WALL (FEATURE 6) WAS CLEANED. THIS UNIT WILL BE EXPANDED TO A TEN-FOOT SQUARE TOMORROW.

N30 TRENCH - LIGHT BROWN CLAYEY SAND (POSSIBLY CONTAINING HAMMER SCALE) WAS REMOVED TO EXPOSE THE SURFACE OF THE CHARCOAL-SLAG DEPOSIT. THIS LAYER WAS REMOVED FROM THE WEST END OF THE TRENCH, EASTWARD FOR A DISTANCE OF ABOUT 15 FEET.
FIELD NOTES

Work delayed by occasional rain.

Square N30E15 - Unit was expanded to a full ten-foot square,
and topsoil and yellow sand fill (1979) were removed by shovel.
Brown clayey sand, possibly containing hammer scale, was then
removed separately, also by shovel, to expose the
slag/charcoal surface.

The slag/charcoal deposit was removed on the north side of
Feature C, a narrow stone wall discovered in 1979, revealing
a deposit of light brown sandy clay containing scattered bits
of charcoal. A rectangular wood post was discovered in the
northeast corner of the unit. A thick deposit of stone
rubble protrudes from the sandy clay on the north side of
Feature C and may be somewhat patterned (more excavation required)

Removal of the slag/charcoal deposit south of Feature C
revealed a smooth and compact clay surface, somewhat
pinkish in color, overlying a thick (about 10") deposit of
charcoal. A small rectangular feature was noted at the
southwest corner of the unit, this in the form of a depression
cut through the clay and packed with stone — further
definition will have to await expansion of unit. Overall,
the clay layer south of Feature C appears to be a floor
surface.

Artifacts recovered from the slag/charcoal layer include
a tripod foot and a metal spike, as well as a variety of
unidentified metal artifacts.

In the southeast corner of the unit, the slag/charcoal
layer appears to contain a noticeable quantity of
red shale, increasing with depth.

This unit will have to be expanded both north and west.
Work again delayed by occasional rain - departed site at 3:00 p.m.

Square N30E15 - several hours were spent drawing a plan of the square at surface of light brown sandy clay. The large number of exposed stones prolonged the drawing and it is now planned that a 5-foot string grid-frame will be constructed. This should facilitate plan drawing.

N30 Trench - three members of crew were assigned to continue cleaning the floor of this trench, specifically to remove the slag and charcoal layer. This deposit proved to be quite thick in places. As in the southeast corner of unit N30E15, the slag/charcoal layer appears to overlie a similar deposit containing red shale, slag and charcoal. Artifacts appear to come from the upper layer of slag. Water seepage is beginning to be a problem.
Field Notes  April 27, 1981

N 30 Trench - water level was 8" to 10" upon arrival at site - unable to continue Friday's work.

Square N 30 E 15 - also too wet to work without a good deal of pumping. A decision was thus made to expand this unit to the north.

Square N 40 E 15 - after setting in the north corners with the transit, the overburden was removed by shovels to the surface of the charcoal and slag. This latter deposit was then removed to the surface of the light brown sandy clay which was clearly defined only in the southernmost portion of the unit. The surface in the north part of the unit is reddish and hard-packed.

Gene Anderson stopped by in afternoon, concerned about removal of soil from embankment at east end of cemetery area. Examined face of embankment but saw no evidence of burial disturbance.

Talked with Tyler Bastian by telephone after work - asked about volunteers - may be possible to get some.
Field Notes

April 28, 1981

NH0E15 - continued excavation of unit with removal of a reddish sand and gravel across center of unit (east to west) which was lying on the light brown sandy clay. Several large pieces of wood were found lying directly upon the sandy clay beneath the red sand. These pieces oriented east-west. The red sand and gravel abuts a thick layer of slag on the north. (Some of the wood pieces lie along the edge of the slag.) Thin alternating lenses of sand and clay suggest that water once ran along the surface of the sandy clay.

Excavation in the north portion of the unit revealed an extremely hard-packed slag and charcoal surface, this beneath the surface. Which in 1979 yielded large amounts of window glass. Feature 1, a portion of which was uncovered, appears to have been built upon this hard-packed layer.

Idealized stratigraphy is as follows:

[Diagram showing stratigraphy layers including dark brown topsoil, light brown clayey sand, slag and charcoal, reddish sand and gravel, and hard-packed surface]

N100 W10: This unit was opened by Linny and Steve to expand upon unit N110 W10. Topsoil removed to probable surface of Auburn driveway. Circular feature, similar to that in N110 W10 found at west edge of unit.
N40E15 - cleaned surface of sandy clay (5 1/2) and hard-packed clay (N 3/4) for photos and plan drawing.

N100W10 - excavation continued by Linny + Steve, removing strata associated with driveway.

N50E45 - opened unit in afternoon (part of unit opened in 1979), removing overburden to surface of silty + charcoal. This surface, as elsewhere, in F-1 vicinity contained small pieces of window glass.

Kenneth Ohr test trench, discovered along south side of unit, possible stone wall at east end of this trench.

Tyler Bastian visited site in afternoon - has marked out large number of notices for volunteer help at site. Possible that a weekend session can be arranged about May 17.
Field Notes

April 30, 1981

Alex and Ken photographed slag surface to W of W wall of F1 in N50E5 then left for Westchester.

Linn and Gea drew west profile of both N30E15 and N40E15.

Steve and Karyn removing slag surface in N50E5. Karyn noted that it was quite thin in north part of trench, with numerous brick balls, which seemed to be lying on the red clay surface beneath, left there in situ. As moved south slag layer thicker and developing same compact very hard surface as detected to S of S wall of F1 in N40E15.

Laid out trench to W of N30E15, namely, N30E5. Steve and Linn removed mixed topsoil, brown loam and "hammer scale" layers. Seems to be loss of a defined break between latter and slag layer below - the slag layer here is small nodules of the foamy ferrous slag in a clayey matrix - easy to shovel and trowel - in contrast to the hard black slag layer in N50E5. Also in the SE part of the square the layer beneath the "hammer scale" is a fine gravelly reddish slag (?) layer. Have to wait till this is all cleared off to be sure of this distinction. Much old root disturbance in W part of square doesn't help. A number of rocks in no order in slag at E end of trench.

Karyn and Gea continuing to remove slag in N50E5. Had them strip the compact slag off rocks which were encountered at E end Orr's backhoe trench in effort to define them. These seem to be on the red clay. Still doing this at end of day.

Ken back at 3:30 pm.
Karya and Geo continued cleaning the very hard compact slag off the rocks that had been encountered at the NE end of Ken Orr's backhoe trench. Found that they extended to the N more or less to the place where they had originally found the slag to be thinner, less compact and with numerous brick/bat at the base. They also started cleaning the portion of K Orr's trench that extended into square 10S but were interrupted by rain.

The whole crew in the morning participated in the opening of trench N40E5. The topsoil/brown loam layer was shovelled off rapidly along with half of the "hammer scale" clay. Then liny skew-shovelled most of the rest of the clay off. Just before lunch Steve started trowelling the surface to remove the rest of the clay and to delineate the line between the compact slag layer and the layer beneath the "hammer scale" clay in N40E5. Interrupted by rain.

Ken clearing slag in clay off compact slag layer in E half of N30E5. See Field Journal sheet for that square for detailed notes. Also interrupted by rain.

To do: locate profile in deep portion of N30 trench (K) Munsell's on soil layers in N100W10.

May 1, 1981
FIELDNOTES

May 4, 1981

UNIT N30E5 - Removal of slag revealed a concentration of stone seemingly a continuation of that seen in N30E15. Feature 6 appears to have been cut through at a later date. On the east side of the stone, the slag lies directly upon light brown sandy clay (again as in N30E15), while on the west side of the stone, the slag lies upon a very compact surface of pinkish clay (discontinuous), shale and some slag. This, in turn, overlies a thick deposit of black charcoal and large chunks of slag. This may itself lie upon sandy clay, but more excavation is required to determine stratigraphic sequence. A single blue-transfer sherd was found pressed into the surface of the sandy clay above the stone. Removed compact surface above charcoal, which drops sharply to south. A line of small stones appeared along the south edge of the square, but too early to determine if this is a feature. Charcoal and slag will be removed tomorrow after levels are taken.

UNIT N50E5 - Cleaned extension of Feature 6, which branches with one arm going in a northerly direction to intersect Feature 1. Feature 6 was cut through the charcoal and slag layer in its construction. Removal of the charcoal and slag clearly revealed that the sandy clay in this unit continues to the north and dips beneath the red sand and gravel. A possible wood plank or trough feature was partially cleaned, and a handful of metal spikes was found in association. The north one-third of this unit contains hard-packed slag.

UNIT N50E5 - Hard-packed slag was removed to the surface of reddish soil with shale. Pattern of stone at southeast corner still unclear, but excavation of the slag in N40E5 may clarify the situation.

NOTE - It is becoming increasingly possible that the silty clay in the above units may be evidence of a raceway. This possibility is heightened by the presence of strong indications of water action - alternating lenses of clay and water-washed gravel.
UNIT N50E15 - EXCAVATION THROUGH THE FLOOR OF F-1 was begun. The first layer removed was the yellow sandy floor containing bits of lime. This passed through a 1/4" mesh screen. The next deposit was a thin layer of shale, charcoal, and small pieces of slag, also passed through the screen. These two layers were found to lie above an extremely hard-packed deposit of slag and stone. The removal of the slag necessitating the use of a heavy pick.

UNIT N40E5 - A deposit of light brown sandy clay was removed from what is thought to be an early raceway, exposing a surface of yellowish-brown clay and quartz. The silty clay containing thin lenses of water-washed gravel and charcoal yielded two wedge gates and an unidentified fragment of cast iron. It is possible that the fragments of wood found in the clay may be remains of a flume structure.

UNIT N70W10 - Excavation continued with exposure of a heavy deposit of slag in a mixed layer of red shale and charcoal, thicker in the south half of the unit.
Rained all day, heavily on and off. This hampered work to a great extent. Finally quit at 4:30.

Steve shoveled back back dirt at west side of site to enable two more 10' squares to be laid out — at N 30 W 5 and N 90 W 5. After lunch, Gia and Karen, ultimately joined by Ken and Steve, opened up N 90 W 5. Object is to see if race uncovered in two trenches to E continues to W or if it is tied into N/S alignment. Today just took off covering of sand and the gray-green clay with flecks of iron beneath — in fact, the latter layer was not completely removed when had to stop working for the day. Slag/charcoal beneath chips in SE corner.

In the morning, Ken removed slag and charcoal layer over rocks and clay in the SE triangle of N 50 E 15. This is the area w/in that trench to the S of the wall of E 1 and may ultimately be removed in pursuing the course of the race; so mapped the stones revealed after removal of slag/charcoal layer. Noted that it was not as hard as that w/in E 1.

Linni worked all day in N 40 E 15 pursuing the race. Unable to define all of N wall since this would entail under-cutting S wall of E 1. S wall of race seems more indistinct. Had a lot of problems tracing S wall due to rapid water filling. Finally sank a small sump into the bottom of the race in the W side of the square, which helped the situation markedly. Noted a soft hole or slot in the edge of the S wall of the race at the E side of the square — forming N/S line w/ post to S (in N 30 E 15). No signs of post or post mould, however. Noted alternating lenses of gravel and clay w/in race. Much more wood encountered. One huge log (?) in center of race at E edge of trench with associated (?) pieces of wood. Not there by design probably, but mapped and photo’ed anyway. Some problems w/ camera — need to check on correct operating procedure.

The site basically incredibly wet today — really grim.

May 11, 1981
May 12, 1981

N40E15 Linny finished taking out race fill 1/2' of upward curve of N' wall; defined all along the course of the trench. S' wall probably defined all along as well, but may have gone too far to S' in one stretch.

and Ken

N40W5 Gia and Karen worked in this square. After finishing taking down rest of gray-green clay, 2 flocks of iron stacked taking down the slag in clay. This was over a small spread of slag proper in NE corner, otherwise was over red shale in N.E. half. There were number of gullies filled with charcoal in the red shale, but they do not seem to have any plan. In the S' of the trench, the slag in clay overlay a yellow clay. Fle continued into this trench — it was cut thru the clay and the shale, the slag in clay went over it.

N30W5 Opened this square today. Rock/continues into it at end of day, starting to clean off rock pile. In that sandy clay, slag in clay over uneven surface of that yellow clay to N' of the rock. To S' in thick charcoal under slag in clay, but also brown clay. Grand masses of tree roots. Seems like the tree stump must've been in the center of the S' third of this trench.

N50E15 Mapped rocks inside and under E1.
Units N30W5 and N40W5 - These units opened on May 11 and 12 with exposure of silty clay surface. Excavation of units was continued with removal of a portion of the raceway fill. Feature G continues across the entire unit. The stone embankment continues along the south edge of the race - stones have been cleaned - and a shallow depression through the stone embankment appeared in unit N30W5.
EIGHT VOLUNTEERS FROM MONTGOMERY COLLEGE WORKED WITH US TODAY - MORE VOLUNTEERS WILL PARTICIPATE ON SUNDAY AND MONDAY. ALSO HAD ONE VOLUNTEER FROM THE ARCHAEOLOGICAL SOCIETY OF MARYLAND.


UNIT N50W5 - A LAYER OF CHARCOAL AND SLAG WAS REMOVED FROM A SURFACE OF COMPACT REDDISH CLAY AND SHALE. A FEW ARTIFACTS WERE RECOVERED, INCLUDING A WEDGE-GATE.

UNIT N40E25 - THIS SQUARE WAS OPENED IN ORDER TO FOLLOW THE RACEWAY FURTHER TO THE EAST. A LARGE AMOUNT OF OVERBURDEN WAS REMOVED, WITH EXCAVATION CONTINUING TO THE EXPOSURE OF A CHARCOAL SURFACE ASSOCIATED WITH FEATURE 1. THE NORTH HALF OF N30E25 WAS ALSO OPENED.

UNITS N60W5 AND N20W5 - SQUARES WERE LAID OUT IN LATE AFTERNOON AND CLEARING OF OVERBURDEN WAS BEGUN.

CHANNEL 13 TV VISITED IN AFTERNOON FOR INTERVIEW.
Monday rained on & off but worked a full day.

Tuesday rained in the morning, poured in the afternoon. Finally left site 3 pm.

N 20 W 5. Over the weekend the red shale had been removed from a broad slope down to the W. On Monday down on gray-brown silty clay beneath. This and additional layers (thick charcoal layer, more gray clay, hard brown gravelly sand) being removed from a shallow trough running N/S that centered square in line w/ gap in rocks to square to N. Beneath the brown gravel (almost removed at clay's end) is a hard bright pink-yellow clay - looks similar to race clay (at base) but harder. This slopes up on E side. E side is otherwise defined by hummock of red gravelly clay, running entire length of trench. On W however, appears that the red shale must have been in area which cut thru and removed the W side of the trough at the S. Also a lens of charcoal has been noted at base of the red gravelly clay on W side at N. Also in this trench is a slot or narrow trench running N/S to E of hummock of red gravelly clay, paralleling the trough. This is filled w/ gray-brown silty clay which seems to be identical to that over charcoal. A number of stones in clay to E of the slot, also a number on bottom of trough (i.e., lying on bright pink-yellow clay) at the N end.

N 50 W 5. Over the weekend had started taking hard packed red shale and slag down to red clay beneath. Continuing this in these two days layer coming down on is that to which had come and stopped in trench to E - i.e., the layer on which the Or rocks are sitting. Only thing of note is the variation in this layer: SE quadrant is a pink layer clay, NE quadrant a red sand - both mixed w/ seams of hard dk. shale (?). To W in both areas the layer above dips and are coming down to a paler clay w/ pebble sized inclusions.

Finished drawing N profile before digging trench to N.
N60W5  Have removed overburden, brown loam w/yellow clay at base and "hammer scale" from this trench. At "hammer scale" level noted difference in W & E halves of trench. E is the standard, fairly thick (2-3") layer of grey-green clay w/flecks of iron. W is the same clay, but w/ very few of the iron flecks, and is also a good bit thinner. In E below the "hammer scale" is a layer of dark gravelly fill w/ charcoal, and some slag — this is layer described as "slag" layer. In W come down on the layer of reddish gravelly fill below "hammer scale." Tree stump in middle of S profile obscured juncture. Noted a possible post-hole at fairly high level (at brown loam layer) with a piece of wood in it. Looks quite like an animal burrow really, but at lower level (when removing "hammer scale" clay) noted two rocks surrounding the hole packed w/ red clay. So it may be a post hole after all — maybe turned into an animal burrow. Goes very deep.

N40E2S  After weekend discovered they had gone thru brown loam, charcoal, red shale (in N/E quadrant) to top of hard packed slag layer. Continued to do this. Gia thought she had finished — now thinks hard packed layer dips to S and she's not quite down w/ it so must check tomorrow.

N30E2S  Some "hammer scale" left after weekend. Removed that — hacking thru thick heavy slag layer down to mottled clay.

Problems with back dirt disposed last two squares.
Beautiful sunny day. Two volunteers - Linda & Gay - from Montgomery College.

Accomplished a lot of mapping including rest of Occ rocks to W of Fl. Fle S. 5' from Fl, N. edge of rock pile and break in it.

Still to map: N20W5 tough and slot, Official junction of Fle E/W and N/S branches and intersection w/J rock pile, N edge of rock pile, once in its entirety. Need Munsell's on last two profiles to date.

N20W5 Finished with N/S tough which bottomed out on a bright pinkish clay. Removed fill from tough, which ended abruptly 2' to S of N edge but continued right. The way to the S. Looked for analogous beam slot on other side - thinking a possible control device for race w/timber gate supported both sides - instead after removing a brown-green silty clay w/some slag discovered bottom of pinkish-clay.

N30E25 & N40E25 Continuing to back thru slag in both these areas. Nothing remarkable to report.

N50W5 Finished in W - may have (prob. have) gone down beyond red shale and slag into next layer of yellow-red clay w/quartz pebbles. Bagged separately. Removing former from N40W5 as well.

N60W5 Another posthole encountered, it too packed round w/ stones. Tops of stones in both cases at 1" BD. Note that the slag (on E) and red gravel/charcoal/slag (on W) both must dip sharply to S. In NW corner trenching wall trench must have cut thru charcoal layer above red shale (not equiv. to charcoal layer above slag). A red shale clay over wall - all under hammer scale. Hmm.
Munsell's:
N40WS "hammerscale" 10YR 3/4 dark yellowish brown clay w/ flecks of iron
"red gravel" 5YR 9/4 reddish brown clayey sand
"hard packed" 5YR 2.5/2 dark reddish brown gravel with red shale & slag
"red clay" beneath 2.5YR 3/4 dark reddish brown clay w/ shale and slag
above (also "red gravel") flecks of charcoal
"yellower red 7.5YR 4/4 dark brown clay w/ clay" w/ quartz pebbles beneath
pavement
"brown loam" 10YR 3/3 dark brown loam

no readings on: slag, charcoal, yellowish clay at base of dark brown loam, overburden

the "slag" layer on the E side of the square actually consists of a very dark brown, sandy clay, with slag in it. This is not slag yet. The equivalent on the west side of the square seems to have much more slag and charcoal in it. Upon examination of profile it seems clear that the "hard packed red shale & slag" was dug thru w/ the slag layer along the W side of N50WS. Consequently when this was being removed two days ago and yesterday, at this point actually dipped into "red clay" beneath and therefore are now down on the "yellower clay" w/ quartz pebbles. In N40WS are now removing only the "hard packed red shale & slag" down to "red clay."
Bright hot day! Both days. Left 5/22 at 3:45 pm.

N 30° E 25° and N 40° E 25°. Continuing removing respective slag layer in these two pits. High ridge of stone, running across N. trench with well-defined S edge — this is same as edge of compact slag matted. The rock/same as the spread of the rocks under Ft. Initially looked like wall, but now hitting rocks everywhere to N. The Orr rocks are sitting in and on the matted reddish clay w/ lenses of red clay. To N cleaning/ripping rocks — down to reddish gravel where that shows up, but there is a space about 2'² from the N running across the trench E/W where no rocks show up and here are taking the gritty gray clay off a hard layer, much darker than around the rocks, a gritty brown clay with chunks and pieces of wood. Slag was much thicker here. The gritty gray clay is the bottom component of the slag layer. To S in this trench and a little bit of N 30° E 25° are cleaning that motled reddish clay down to a gravelly sandy reddish clay. The former is coming off the rock of the rock pile. The latter is probably the layer above the yellow clay w/ quartz pebbles & clay of the race. Good N edge of rock pile continuing across. This pit — due to intersect with Orr rocks at E bank. To S — i.e., in N 40° W 25° — of rock pile situation different than have seen yet. The slag was very heavy and came right down on a grayish plastic clay. * Have to sink a sump here, pump it out, to see what's happening.*

N 40° W 5° Removed: "hard-packed red shale & slag" (see notes previous pg.). A lens of charcoal at bottom, overlaying both the red clay and the yellow clay w/ quartz pebbles of the sides of the race. See field journal sheet for sketch of pit/holes.

N 40° W 5° Wall trench over F & S in NW corner. Cleaned out down to stones. Discreet spread of charcoal w/ lumps of slag to S of F. It was lying on the red shale. Removed it. Also have removed red gravel, charcoal and slag layers in S of trench, so down to red shale everywhere here. Except that damned sump is still in the middle of the S edge.
N80 W10. Opened this trench 5/21. Removed overburden which consists of brown loam, silt, lenses of clay and brown sand. Fairly thick layer of yellowish clay at base of overburden. On this in NE corner encountered narrow wall of loosely packed small stones, quite shallow, running N.W./S.E. Mapped this but think it may have to do w/ Atena driveway — possibly an edging coming out from pillars — since it is so high and so slight. Below clay of overburden a thick layer of dark gravel. At its base, a lens (2" at thickest) of brown sand overlaying thin spread of charcoal which shows up everywhere in the square. In S half of square backhoe had cleared in 1974. Under protective sand was the charcoal. Shovelled most of charcoal layer off and at end of day travelling it down to red shale.

Note: never worked in N70W10 this week because have no idea what's happening there. Big pits and gullies into red shale — huh?

Have mapped all of E1. That's exposed now; E1, at junction with E1c only: N. edge of rock pile and gap; S. edge of race in entirely as exposed; N. edge of bottom of race only in N40E15 and N40E15 to E1c; all "Orre" rocks now exposed.

Have not mapped N20E15, rock pile and "Orre" rocks in N30E10 E25.

* Need to reestablish depth of pole in N30E25 which has been moved and knocked in further. Still need Musells on E. profile N40E15.
N40E25 - The concentration of stones lying above the silty clay in the raceway was mapped by Linny in the morning. Prior to its removal with pick and shovel, packed between the stones were a large number of small pieces of wood with seemingly clean-cut ends, the average size of which was 3-4" x 1 ½ - 2" x ½". Also exposed was a portion of a larger piece of wood, the thickness of which cannot yet be determined. Much of the soil matrix surrounding the stones was of a gray color and was extremely hard-packed (nearly cemented).

N90W10 - Unit was opened and excavation was begun by shoveling overburden to the surface of Auburn Driveway. Artifacts found in the overburden were not saved. The Driveway was at one time edged with a stone wall, that on the SW side, having now been uncovered.

N80W10 - Surface of hard red shale, beneath the charcoal, was cleaned and elevations were taken.

Mr. Feaser stopped at the site to confirm that the backhoe will be on site tomorrow.
Backhoe arrived at site at 8:30 and worked until 2:15 removing overburden to the east and north of Unit N40E25. An area of concentrated charcoal and slag appeared at the north end of the cleared area.

Unit N40E25 - began removal of silty clay and gravel in the raceway, but quickly began to encounter a large quantity of very thin flat pieces of wood (together with a few thicker pieces). Most of the wood is lying in a gray silty clay in the center of the race, although water-washed gravel is also present. Artifacts were comprised of a few nails and two tiny pieces of window glass. Wood will be recorded tomorrow morning and then removed.

Unit N90W10 - excavation continued through yellowish driveway surface, and the edging wall along the south side of the drive was removed as well. Typically, a large number of artifacts were found lying upon and within the driveway surface.

Unit N90W0 - excavation begun with removal of overburden to the surface of the driveway.
UNIT N40E25 - Wood drawn in plan in morning, followed by photographs. Excavation of silty clay continued, and samples of the wood were taken for identification. The thin pieces of wood were found at one point to be attached to a 1" thick narrow cross-brace with nails. Suspicion remains that the wood may be from a collapsed flume. The remainder of the silty clay in this unit will be removed tomorrow.

UNIT N50E45 - Unit opened in the area cleared by the backhoe to the east of the excavated raceway. The backhoe had cut to a depth close to the base of the possible hammer scale layer, beneath which lay a brown gravelly deposit containing occasional artifacts. The remaining patches of the possible hammer scale layer, together with the brown gravelly deposit, was quickly removed to the surface of a red shale layer. The red shale, in turn, overlies a deposit of yellow sandy mortar similar to the floor of Feature 1. An assortment of artifacts was found in the red shale, including a spire and pieces of hollow ware. Removal of red shale to continue tomorrow.

UNIT N90W10 - Charcoal surface exposed, with this layer seeming to rise in elevation to the north. The general impression of this surface, which occurs throughout this portion of the site, is one of an open area lying outside, but immediately adjacent to, the iron-working complex.
UNIT N50E35 - Continued excavation in N50E35, removing a deposit of shale, slag, and charcoal from a narrow and shallow trench adjacent to the northeast corner of F-1. A large number of nails were recovered from this deposit, as well as one spear. The bottom of the narrow trench is defined by hard-packed slag, probably an extension of the deposit found beneath Feature 1 and above the race. A small amount of red shale was also removed at the east edge of the square, exposing more of the mortar floor surface. What appears to have been a hammer head was recovered from the shale along with a wedge gate.

Stratigraphically, it is clear that the mortar floor in N50E35 was abandoned prior to the abandonment of Feature 1 and may have been abandoned prior to construction of the latter. This interpretation is based upon the presence of the red shale layer which overlies the mortar surface, but underlies the charcoal surface associated with Feature 1.

UNIT N40E35 - Cleaning of the red shale surface was completed with the recovery of a small number of artifacts. Levels were taken and a start was made in the removal of the shale from the west edge of the square.

UNIT N90W10 - The remainder of the hard-packed red shale and slag was removed and a shovel test in the northwest corner confirmed that the next layer is undisturbed red clay subsoil. A start was then made in clearing the north end of Feature 4 in Unit N90W10.
UNIT N100E0 - Unit measured and opened today with initial removal of 1979/1981 backdirt, leaving small balk between this unit and the trench to south. This to preserve a section for later profile drawing if necessary. The 1979 backdirt yielded two wedge gates, two sprues, one spike and other assorted pieces of iron (the gates and sprues were massive). These artifacts appeared to have been in the red shale dug out by the backhoe in 1979. In the F-4 trench excavation had proceeded to the driveway level by the end of the day, having shoveled off a layer of humus and an underlying clayey deposit. The end of F-31 is also appearing in unit.

UNIT N50E35 - Completed the removal of red shale from this square. In the NW corner of unit 85 (NW of F-41), the shale overlies a patch of mottled gray plastic clay, while in the NE and SE corners the shale lies directly upon the yellowish mortar surface. In the SW corner, the shale seems to lie upon a mixed deposit of clay, charcoal, and mortar, but may simply require additional cleaning. The same scattering of large stones was observed on the surface of the mortar as in N50E45. Fire-brick observed within shale and on top of mortar.

UNIT N40E35 - Completed removal of red shale from this square, this shale not extending into the SE corner of the unit. Instead, shale was replaced by charcoal and slag. The charcoal appears as a thin spread, with slag continuing below. Wooden plank appeared at south end of mortar surface.

UNIT N40E45 - Unit opened today, little excavation.

UNIT N40E45 - FOLLOWING YESTERDAY’S REMOVAL OF ‘HAMMERSCALE’ LAYER, MIXED GRAVELLY SOILS WERE REMOVED TO SURFACE OF SLAG IN THE NE CORNER, AND TO A LOOSE WATERWASHED ORANGE-BROWN GRAVEL THROUGH THE CENTER.

UNIT N100 EO - THIS UNIT HAD BEEN SHOVELLED YESTERDAY TO THE TOP OF A RED SHALY CLAY LAYER WHICH SEEMS TO BE THE EQUIVALENT OF THE DRIVEWAY ALONG THE EAST SIDE OF THE 1979 BACKHOE TRENCH. PATCHES OF MOTTLED YELLOW CLAY ALSO APPEAR AT THIS LEVEL, LYING UPON THE RED SHALE IN SOME AREAS. WEST EDGE OF F-31 ALSO APPEARS AT THIS LEVEL, BUT EAST EDGE IS BENEATH RED SHALE AND YELLOW CLAY. AT THE NORTH END OF F-31 THE EAST EDGE IS DEFINED BY A SPREAD OF CHARCOAL - THE RED SHALE DOES NOT OVERLIE IT AT THIS END. A DARK GRAVELLY LAYER IS PRESENT BENEATH BOTH THE RED SHALE AND BRIGHT YELLOW CLAY (BOTH OF WHICH ARE THIN LAYERS), AND F-31 IS CUT INTO THIS LAYER. THE DRIVEWAY IS COMPRISED OF THE USUAL LAYERS OF BRIGHT YELLOW CRUMBLY SOIL ATOP A MOTTLED ORANGE-BROWN CLAY OVERLYING, IN TURN, A DARK GRAVEL. SLAG SAMPLE TAKEN FROM F-31.

UNIT N110 EO - UNIT OPENED TODAY, WITH INITIAL REMOVAL OF BACKDIRT AND OBERBURDEN. BENEATH THE OBERBURDEN IS A RUBBLE LAYER OVERLYING THE UNIT (ACTUALLY A TRIANGULAR AREA LYING BETWEEN THE N110 LINE AND 1979 TRENCH (63). REMOVAL OF THE RUBBLE LAYER REVEALED A PURPLE TO REDDISH
Fieldnotes

June 3, 1981

Shale layer with brick dust in the east part of the unit with the rubble filling the F-4 wall trench. To the west of the wall trench removal of the rubble revealed a charcoal surface similar to that in the unit to the south.
UNIT N90E10 - Removed fill from wall trench above NW extension of Feature 4. Also excavated a shallow linear depression which is an extension of F-31. This feature is filled in this unit with a sandy brown gravel and is much wider here than in N110W10. F-31 was cut into the charcoal and brown gravel layers, as well as into the red shaly clay which forms its bottom. The red shale, with yellow clay underneath runs above F-31 in this unit.

UNIT N110E0 - Removed fill from wall trench above NW extension of F-4, as in N90E10. Wall trench is filled with a mixed red shaly clay with charcoal flecks.

UNIT N100E0 - Removed wall trench containing mixed red shaly clay fill to south of tree stump. Wall appears at a higher level north of the stump and the fill here is a brown stony soil (wall trench still cut into red clay). The charcoal layer lies beneath a mottled clay to NE of wall trench.

UNIT N50E35 and N50E45 - cleaned the yellowish mortar surface, collecting artifacts therefrom.

UNIT N40E45 - Removed slag and shale with some brown gravel (orange waterwashed gravel) and "hammerscale," all overlying mortar surface in NW of unit. Beneath waterwashed gravel and to south of it is charcoal and slag.
UNIT N90E10 - Removed remaining portions of charcoal layer, comprised of charcoal with interlensed patches of water-washed brown gravel.

UNITS N100E0 and N110E0 - Removed back after drawing north profile of N90E0. An 1877 Indian head penny was found in the course of taking the bank down to the surface of the brown gravelly deposit underneath the yellow crumbly soil and orange clay lens. Remainder of E-4 wall trench taken out. Began taking a brown clayey loam with rocks off the charcoal layer, which seems to disappear shortly to the NW of the wall, at which point it is replaced by red shale. Both red shale and charcoal overlie red clay. A rectangular area defined by nodules of slag lying upon the charcoal/red-shale layer was noted and mapped.

UNITS N40E35+E45, N50E35/E45 (4 squares) - The yellowish mortar surface was mapped and photographed, after which removal began. The wood showing at the SW end of the mortar did extend below the mortar and was a long flat plank. This wood actually extended beneath the gray plastic clay at NW end. Removal of mortar is exposing charcoal and slag.
UNIT N50E45 — BEGAN REMOVAL OF SLAG AND CHARCOAL LAYER, WHICH WAS UNDERNEATH THE MORTAR SURFACE. IN THE NORTH HALF OF THE SQUARE, THIS LAYER IS ALMOST SOLID CHARCOAL, WITH LITTLE SLAG AND FEW ARTIFACTS, MIXED WITH SILTY BROWN LOAM. BENEATH THIS CHARCOAL IS RED CLAY AND GRAVEL. THE SW CORNER OF THE UNIT IS DOWN TO A GRAY CLAY WITH WOOD CHIPS, A CONTINUATION OF THE LAYER IN THE NORTHWEST CORNER OF N40E45. LARGE NUMBER OF STONES IN CENTER AND SOUTH PART OF SQUARE, MIXED WITH WHICH WERE OCCASIONAL FRAGMENTS OF “PREMIUM FIRE BRICK.”

UNIT N40E45 — REMOVED REMAINDER OF MORTAR SURFACE AND BEGAN EXCAVATION OF SLAG AND CHARCOAL. THE SURFACE OF GRAY CLAY WITH WOOD CHIPS APPEARS IN THE NW CORNER OF THE SQUARE — THIS IS THE SAME LAYER ENCOUNTERED IN N40E35 ABOVE THE RACE, BUT IS THINNER AND MORE ATTENUATED HERE. OTHERWISE, REMOVAL OF SLAG AND CHARCOAL IS REVEALING A LENS OF GRAY LOAMY BED, WHICH IT APPEARS MORE SLAG IS PRESENT. SLAG OCCURS THROUGHOUT THIS LAYER WITHOUT THE CONCENTRATIONS OF CHARCOAL AS SEEN IN N40E35.

UNITS N80E10 AND N70E10 — THE FIRST OF THESE UNITS IS THE SMALL AREA ISOLATED IN 1979, UPON WHICH THE NE PILLAR HAD STOOD. REMOVED HUMUS LAYER WITH VENCES OF RED CLAY AT ITS BASE, LYING ABOVE REMNANTS OF A BLACK-TOP OR MACADAM ROAD BED (OLD U.S. 15?). THE BLACK-TOP AND UNDERLYING STONES WERE REMOVED TO A SURFACE OF YELLOW LOAMY CLAY WITH SHALESTONE AND, ALONG THE NE EDGE, RED CLAY. WHAT MAY BE A LOW QUALITY FRAGMENT OF FIG. IRON WAS FOUND AT A POINT LEVEL WITH OR SLIGHTLY ABOVE THE MACADAM SURFACE.
UNIT N80E10 - Removing gravelly brown clayey loam which overlies the "road surface" of quartz pebbles. The red clay noted yesterday along the NE of the unit was merely a thin lens above the yellow clay w/shalestone. Immediately to the west of the NE pillar is a large stone-lined post hole. Feature 8, the stone drain-like feature noted in 1979, appears to be the NW of the pillar but ends here, possibly removed by the backhoe in 1979.

UNIT N50E35 - Removed mottled brown layer with loose slag, very thin, lensing out to north side of unit, exposing the gray loamy clay with wood chips. The latter is patchy, with small areas of red shale and charcoal. Few wood chips seen at north side of unit, while the quantity of charcoal increases here. Excavation proceeded to a layer of stone and slag - very hard. Very few artifacts were found among the wood chips.

UNIT N40E35 - Removed a mixed layer containing loose slag, coming down upon the gray loamy clay with wood chips in the north portion of the unit. Mapped wood plank which marked the SW end of mortar surface.

UNIT N50E25 - Began removal of F-41 fill.

UNIT N40E45 - Removed "loose slag" layer to expose layer of wood chips in gray clay.
Mapped:
N50E45 and N40E45: cluster of rocks sitting on wood chip layer (?) -- below mortar surface anyway.

N50E25: F41 continuing

N80E10: Pothole beside NE pillar foundation, and NE end of F8

N60W5 then N80E0: F4 up to point stopped planning it in 1979
N90E0: also planned pothole, partly excavated and planned in 1979, and rocks above it, possibly part of another drain.

Backhoe in on Friday 11/12: Pulled back all backdirt from N. part of site -- also excavated out trench G8 back beyond intersection w/F7. Did not remove any overburden in this area. Pulled back backdirt along wall N. of N50E25. N50E35 and also removed about 1'12" of overburden there. Back 5' or so from edge. Re-excavated F-8 there.

N40E35 and NS0E35: Ken and Steve working here both days. Removed wood chip layer in both squares, working thru the very hard slag which covers rocks in race area. Again, gray clay around rocks at base; slag is over and down around rocks -- very tough to pick out. Slag is stratified -- red-orange at top, silvery blue at base. Slag extends beyond race rocks, covering part of red clay that forms sides of race (probably) on both sides. At N. in NS0E35 the slag petered out with charcoal occurring at that level above red clay.

NS0E25: Karyn and Gia working here both days. F41 continuing to W. end of trench. Either runs directly beside F1 or F1 cut into it at E. end; at W. end narrowing and pulling away (to 3.5') wall. Removing all layers outside of F1 -- boony charcoal, mortar, red shale, loose mixed slag over compact hard slag surface. F41 cut thru red shale and loose mixed slag, bottoms on hard slag. F1 seems to be sitting on red shale. Note that while we had not noted presence of this feature in N40E15 it might have come thru. If it had been cut thru the slag layer in that trench it might not have been detected as it
Sill contains much silt. It was easy to detect in N50E25 only where it cut then the red shale. Noted a skim of very plastic clean clay at base — we had previously encountered this in N50E15 as a linear feature, so pass. F41 had gone into that trench.

N70E0: Mike and Linny (when not mapping) working here. 11/12. Stratigraphy quick confusing and difficult to interpret due to myriad trenches and intangibles, incl. 1979 N70E0, N75E0, N75E5, and S.W. pillar. Basically, following two features in this trench — one being F4, the other the NE course of the E1 continuation, which corners in this trench. E1 wall consists of small rubble stones which are mortared with yellow clay mortar. It was covered by a layer of dark ashy gravel which covered the whole area of the square (i.e., SE quadrant) not excavated in 1979. Beneath this layer was a gray-brown loam with patches of red shale which seem to come up to E1 wall, i.e., wall not cut through. However, must confirm this in N70E10 where it looks like we have the same kind of layer below the Auburn road surface, but here it would be outside the wall (if the stone in the section of the trench to the S. [in T9 S.W. profile] is continuation of E1 wall). Need to dig N60E10 to check on these stratigraphic relationships. Elsewhere in this trench, 1979 excavations had left trench down on surface of red shale and charcoal. E8 had been Peterelled — in course of dismantling it noted floor constructed of rectangular stones set vertically. Trench for E8 seems to have cut thru trench for F4. Dig out wall trench for F4 for mapping.
UNIT N50E25 - REMOVED PORTION OF SLAG AND CHARCOAL ABOVE HARD-PACKED STONE, IMMEDIATELY OUTSIDE FEATURE 1. NO ARTIFACTS RECOVERED.

UNIT N70E10 - REMOVED A GRAY LOAM OVERLYING A QUARTZ PEbble SURFACE. THE LOAM CONTAINING BITS OF SLAG AND FURNACE GLASS. ARTIFACTS WERE MODERN (ESP. BOTTLE GLASS) AND WERE DISCARDED...
UNIT N70E10 - Removed a yellowish-brown gravelly soil lying beneath the quartz layer, probably associated with an early driveway surface and possibly the same as that seen in units further north and west. This layer overlies a slightly reddish-brown gravelly soil and yielded no artifacts.

The reddish-brown gravelly soil appears to post-date any iron-foundry activities at the site and contained patches of what looks like hammer scale, one nail and one iron strap fragment. This deposit overlies the northernmost wall of the F-1 complex.

Following removal of the gravelly soil, excavation of a deposit of purplish shale was begun. Small amounts of which were found lying directly on top of the north wall of F-1, together with bits of mortar. This is a thin layer with varying concentrations of shale and charcoal and contained nails, spikes, one sprue and a flat fragment of cast iron.

UNIT N50E25 - Removed hard-packed slag and charcoal over and between stones which extend beneath Feature 1 - had to remove slag with pick - some wood fragments present.
UNIT N70E10 - CONTINUED REMOVAL OF PURPLE SHALE ABOVE A LAYER OF CHARCOAL. - SEE PREVIOUS DAY'S NOTES FOR DETAILS. BEGAN REMOVAL OF CHARCOAL AND SLAG BELOW PURPLE SHALE AND ABOVE REDDISH-BROWN CLAYISH SAND. LAYER IS ABOUT 4" DEEP IN NE CORNER AND CONTAINED NAILS AND ONE SPIRE.

UNIT N50E25 - FINISHED CLEANING CHARCOAL AND SLAG FROM BETWEEN AND JUST ABOVE STONE OVER RACEWAY.
UNIT N40E25 - A layer of reddish-brown gravelly soil with slag was removed from above packed rubble surface and rubble-capped race embankment. This gravel and slag layer is comparatively deep near the center of the east side of the unit, possibly indicating a drop in elevation. Artifacts included a wedge gate and fragments of flat cast iron, most of which were concentrated in the deep portion of the deposit.

UNIT N50E25 - A layer of closely packed stone overlying the silty clay was removed from unit. Removal of this stone revealed several rotted wood boards, two of these having wooden pegs, and a half section of a tree trunk measuring about two and one-half feet in length. Fragments of thin wood sheets were also found. All wood was found embedded in the surface of the silty clay.

UNIT N50E35 - Completed removal of a layer of charcoal and slag above reddish-brown silty clay and (along south edge of square) tightly packed stone. No artifacts were recovered from the remaining portion of this layer. Measurements taken on closing depth.

UNIT N50E45 - Removed almost all of a layer of charcoal and slag above a reddish-brown silty clay. The interface between these two layers was marked by a thin crust of hard-packed reddish-brown gravel. Removed with the charcoal and slag to which it adhered. Artifacts included wedge gates, an iron bar and nails.

UNIT N70E10 - Continued removal of a layer of charcoal and slag lying upon red sandy clay. Depth of the layer, which directly underlies the northernmost wall of F-1, is irregular. Artifacts included a few miscellaneous pieces of iron, but nothing notable.

UNIT N50E35 - BEGAN REMOVAL OF SILTY CLAY AND GRAVEL LENSES IN RACEWAY. A COPPER POWDER OR SHOT FLASK WAS FOUND ABOVE THE NORTH BANK OF THE RACE, CRUSHED FLAT, BUT COMPLETE WITH CAP. SCRAPS OF LEATHER WERE ALSO FOUND.

UNIT N70E10 - REMOVED MOST OF A DEPOSIT OF CHARCOAL AND SLAG WHICH OVERLIES A SURFACE OF REDDISH-BROWN COMPACT CLAY. THE NORTHERNMOST WALL OF THE FEATURE / COMPLEX RESTS DIRECTLY UPON THE CHARCOAL AND SLAG LAYER. ARTIFACTS COMPRised LARGELY OF NAILS.
Tyler Bastian visited site in morning to check progress of excavations and to discuss strategy for remaining time at site.

Unit N80E35 - Unit measured and opened in an effort to test the northeast portion of the site close to the southeast corner of the dam. Excavation began in a layer of dark brown and gray overburden.

Unit N70E10 - Completed removal of slag & charcoal layer in southwest corner of unit, to clean surface of reddish-brown clay.
UNIT N50E35 - Removed silty clay in raceway, the clay containing lenses of fine gravel. The bottom of the race was overlaid by a thin lens of hard-packed fine gravel containing tiny bits of furnace glass. Artifacts in the clay include leather fragments and bits of what appeared to be rotted cloth.

UNIT N80E35 - Continuation of excavation of miscellaneous recent fills.
UNIT N80E35 - Excavation of Unit Continued with Removal of a Thick Yellow Sandy Clay Which Contained A Fair Number of Stones. This Deposit Was Found To Overlie a Dark Gray Loam Containing Coke Slag and Modern Trash. The Yellow Clay Is Therefore Obviously Fill Soil. One Bag of Artifacts Was Taken From the Interface Between the Layers, Another From the Humic Deposit Exclusively.

UNIT N80E35 - Began excavation of charcoal and slag layer, following removal of a medium-brown loamy soil in which a shallow depression was found running through the center of the unit from east to west. The depression was mapped in plan prior to removal of loamy soil.

UNIT N70E10 - Deposit of reddish-brown clayey soil, lying beneath charcoal and slag, was excavated to a depth of about two inches, through a thin lens of charcoal. This excavation served to define a possible surface upon which were lying a scatter of stones and one wedge gate - surface actually defined by stones and wedge gate, not by texture or color.

Narrow, two-foot wide test trench excavated along north side of unit to determine presence of additional strata. The reddish-brown clay, with flecks of charcoal and brick, extends for at least 10 inches, although charcoal and brick appear to be concentrated in upper part of layer. One large piece of cast iron, probably a fragment of hollow ware, was recovered from a depth of about six inches within this layer.
UNIT N80E35 - COMPLETED THE REMOVAL OF A LAYER OF
CHARCOAL AND SLAG BELOW THE MEDIUM BROWN LOAMY SOIL AND
ABOVE THE REDDISH-BROWN CLAY. A SMALL STONE WALL
VERY SIMILAR IN SIZE AND APPEARANCE TO FEATURE (6) WAS FOUND
ASSOCIATED WITH THIS LAYER AND EXTENDING INTO THE UNDERLYING
REDDISH-BROWN CLAY. THIS WALL HAS BEEN DESIGNATED FEATURE
43. OCCASIONAL SMALL FRAGMENTS OF FIRE-BRICK WERE SEEN
IN THIS LAYER, BUT NOT SAVED. ARTIFACTS INCLUDED FRAGMENTS
OF IRON WASTE AND FLAT CAST IRON.

UNIT N70E10 - CONTINUED EXCAVATION OF SMALL TEST TRENCH
ACROSS NORTH END OF UNIT, CUTTING DEEPER INTO REDDISH-BROWN
CLAY. FLECKS OF CHARCOAL SEEM TO DISAPPEAR WITH INCREASING
DEPTH, AND SOIL BECOMES MORE UNIFORM. EXCAVATION DISCONTIN
AT A DEPTH OF ABOUT 12 INCHES INTO THIS LAYER.
UNIT N70E0 - A narrow, two-foot wide trench was excavated along the north side of the unit in order to check the relationship between Feature 1 and Feature 4. Excavation of the trench began at the surface of the reddish-brown clayey deposit which lay below the charcoal and slag upon which Feature 1 had been constructed. It was quickly perceived that Feature 4 had been cut through this clayey surface in its construction and was thus of a later date than the clay. The stratigraphic relationship between Feature 4 and the charcoal and slag layer could not be determined in this location.

UNIT N80E.35 - Excavation of this unit continued with the removal of a deposit of reddish-brown clayey soil containing charcoal and slag, together with a few iron artifacts. This deposit is present on both sides of Feature 43 (the small stone wall), but is very thin on the south side of the wall where it overlies a thin mortar lens. The layer is much thicker on the north side of F-43 where it extends to a lighter clay with quartz pebbles. Artifacts north and south of F-43 were bagged separately.
FIELDNOTES

UNIT N80E35 - EXCAVATION OF UNIT COMPLETED WITH REMOVAL OF RED CLAY IN SOUTH HALF OF UNIT AND WITH CLEANING OF EAST FACE OF SQUARE FOR PROFILING.

UNITS N90E10 AND N100E0 - CLEANED SURFACE OF NORTHWEST EXTENSION OF FEATURE 4 IN PREPARATION FOR PLAN DRAWING.

UNITS N70E0 AND N70E10 - PLAN DRAWING OF NORTHERNMOST PORTION OF F-1 AND SW PILLAR.
FIELDNOTES

July 3, 1981

Final day of 1981 excavations - emphasis upon ensuring that all units and features have been recorded.

Unit N80E35 - profile drawing made of the east wall of the square in order show depth of fill and the stratigraphic position of the stone wall. A plan drawing of the outline of this latter feature (F-43) was also made.

Units N100E0 and N90E10 - plan drawings made of northwest extension of feature 4.

Units N40E35 / N50E35 - plan of raceway with elevations.