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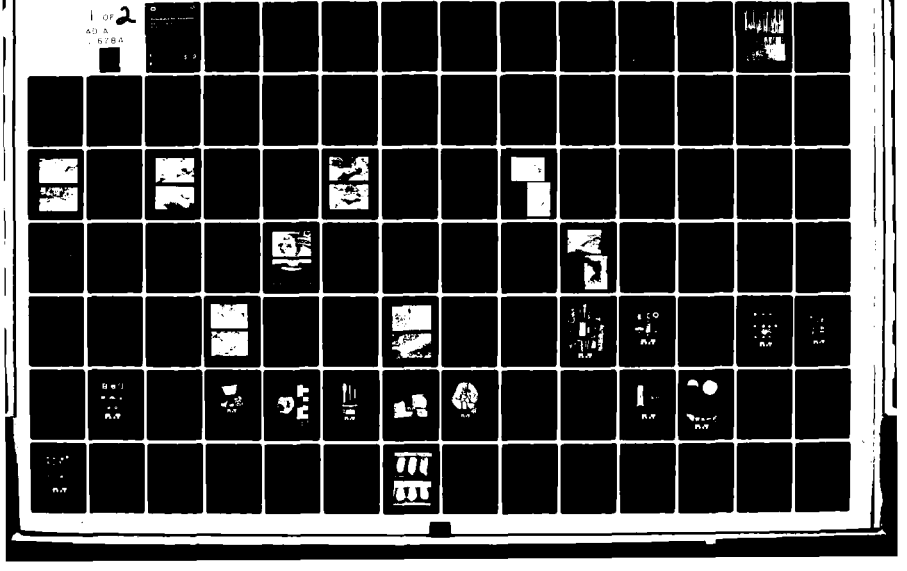

US Army Corps
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Archeological Test Excavations

Bulltown Civil War Site

Braxton County, WV

June 1982

ARCHEOLOGICAL TEST EXCAVATIONS AT THE BULLTOWN CIVIL WAR SITE, BRAXTON COUNTY, WEST VIRGINIA

by

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A Report Prepared for the U.S. Army Corps of Engineers, Huntington District, West Virginia in Fulfillment of Contract No. DACW69-81-C-0024

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ACKNOWLEDGEMENTS

Excavations at the Bulltown Civil War site were conducted from late May to early July, 1981 by The University of Akron under the terms of a contract with the United States Army Corps of Engineers, Huntington District, West Virginia. The excavations were directed by Dr. John P. Marwitt. The field crew consisted of Ronna Cullen, Douglas Cullen, Victoria Schweder, James Mather, Renee Maciag, Christine Fuchs, Christine Baudas, Martin Adlesic, and Stephen Hendershot (University of Akron); Sherri Henline, Barbara Cassell, and Thomas Yocum (West Virginia University); Brenda Davis (Kent State University); and Robin King (Marshall University). The field crew acknowledges with real gratitude the hospitality and friendship of local residents of the Bulltown locality, especially Mr. and Mrs. Fay Skinner, who virtually adopted us and provided aid and comfort in the best tradition of good neighbors. Mr. and Mrs. Gilbert McHenry took an active interest in the excavations, provided valuable information on the site and became good friends. Mr. and Mrs. Forest Taylor allowed us to tap their drinking water supply almost daily and provided a refuge for several crew members from the rain and mud which blighted the first half of the field season. Also acknowledged, with thanks, is the assistance of Dr. Robert Maslowski, Huntington District Archeologist, who was a frequent visitor to the site.

Artifacts were processed and analyzed by Andrea Chase and Steven Batug who authored sections of this report. Douglas Cullen and John Gasser are responsible for the drafted illustrations. Photographic plates were prepared by Joe Benes and Andrea Chase. Drafts were typed by Andrea Chase, Patricia Conley, and Beverly Riggin, and the final manuscript was typed by Irene Fort.

ABSTRACT

This report details the results of archeological test excavations at the Bulltown Civil War Site (46Bx11) Braxton County, West Virginia. The excavations were conducted by The University of Akron under the terms of a contract with the U.S. Army Corps of Engineers, as part of the Burnsville Lake Project. Areas of the site which were tested include the rifle pits and interior of the main Union fortifications, the lower defensive works to the north, and the Confederate positions occupied during the Battle of Bulltown on October 13, 1863. The defensive works were sectioned and two possible structures were located along with several minor features associated with the battlefield site. Artifacts recovered include many cut iron nails, spent rifle and pistol bullets, military hardware and personal items.

INTRODUCTION

Location and Setting

The main part of the Bulltown Civil War Site (46Bx11) is located on a hilltop just north of the confluence of the Little Kanawha River and Millstone Run, the northeastern portion of Braxton County, central West Virginia, about 1 mile NW of the hamlet of Falls Mill (Fig. 1). The hilltop has a maximum elevation of 967 ft. ASL, and rises steeply above the floodplain of the Little Kanawha to a height of about 150 ft. The hillside flanking the flood plain is very steep, and forms an almost vertical escarpment in places. Elsewhere the terrain is more gentle, especially on the north and northeast sides. In the spring of 1981, the entire area was heavily forested with secondary growth hardwoods and heavy brush which has grown up since farming was abandoned in the site area in the early 1940's (Gilbert McHenry, personal communication, 1981). At the time of excavation, the main site area was marked by a slumped and eroded trench (Fig. 5), 5 to 18 ft. wide and 2 to 4 ft. deep, which was continuous along most of the north and east sides of the hill. This trench, which represents the location of the Union rifle pits, lies between the 953 ft. and the 960 ft. contours. There was no evidence of a trench along most of the southwest flank of the hilltop, probably because the steep slope made prepared defensive positions unnecessary here. The rifle pit trench and the southwest hillcrest bound a roughly triangular area of about two acres (Fig. 2).

About 800 ft. north of the main site area, between the 900 ft. and 920 ft. contours, is a short double line of depressions which represent the location of the lower defensive works which covered the northern approaches to the main fortifications. These are on the northwest slope of a small hill which connects to the main site area by a low saddle (Fig. 3).

The third area of the Bulltown Civil War site consists of the positions occupied by the southern wing of the Confederate force during the Battle of Bulltown on October 13, 1863. These positions are located across the Little Kanawha, about 600 ft. southwest of the main Union works (Fig. 1). They comprise 7 shallow depressions (Fig. 33), the remains of rifle pits scattered rather randomly on a hillside, from 100 to 125 ft. above the Little Kanawha floodplain.

Historical Sketch

To adequately appreciate the significance of the action fought at Bulltown on October 13, 1863, one must view the engagement in the context of the war as it was pursued in relation to northwestern Virginia. The combination of opposing political sympathies and extremely rugged terrain created conditions unique to that area. From a purely military standpoint, the battle of Bulltown pales in significance when compared to the campaigns of the Shenandoah Valley,

LOCATION MAPS

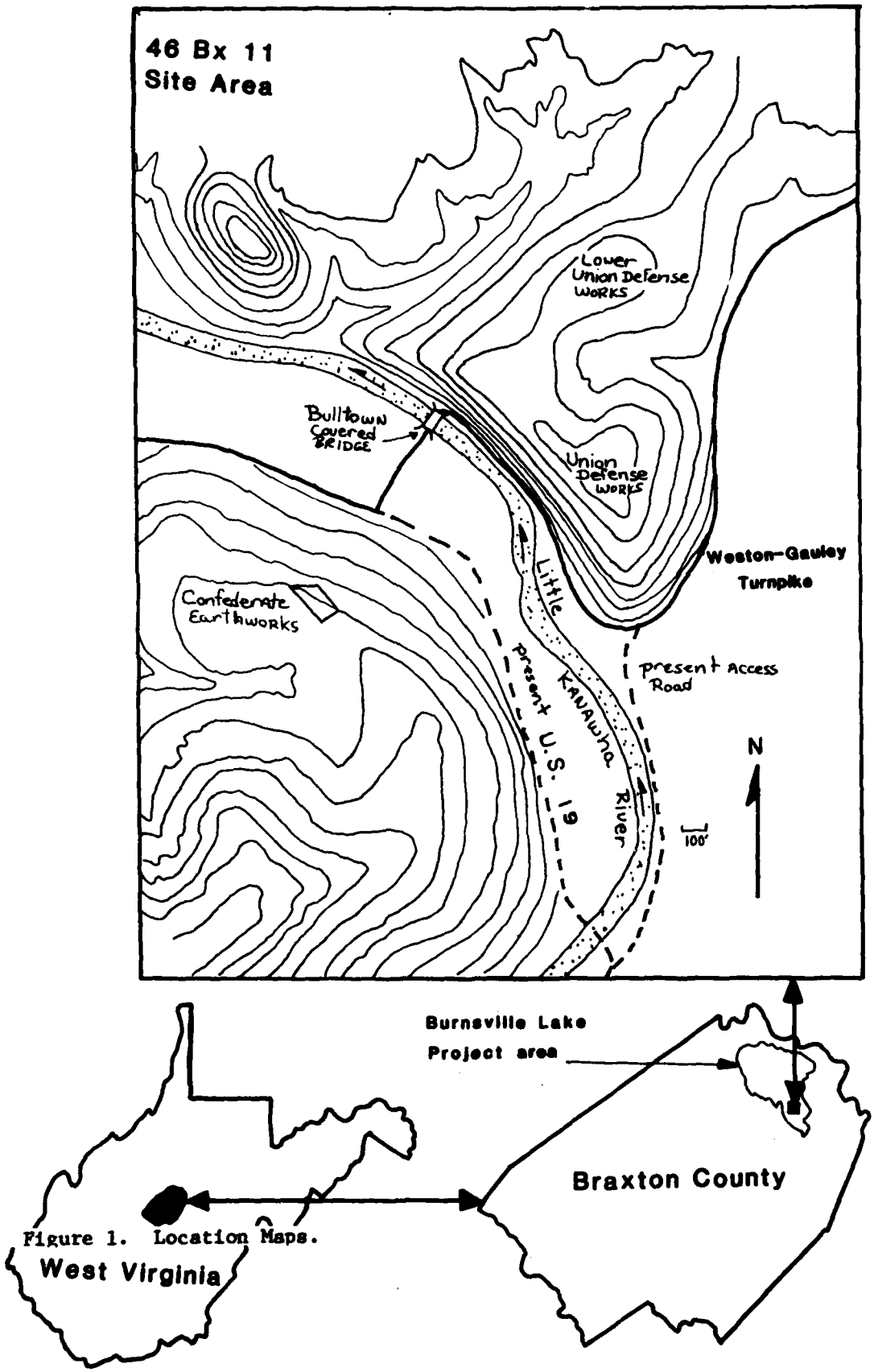


Figure 1. Location Maps.

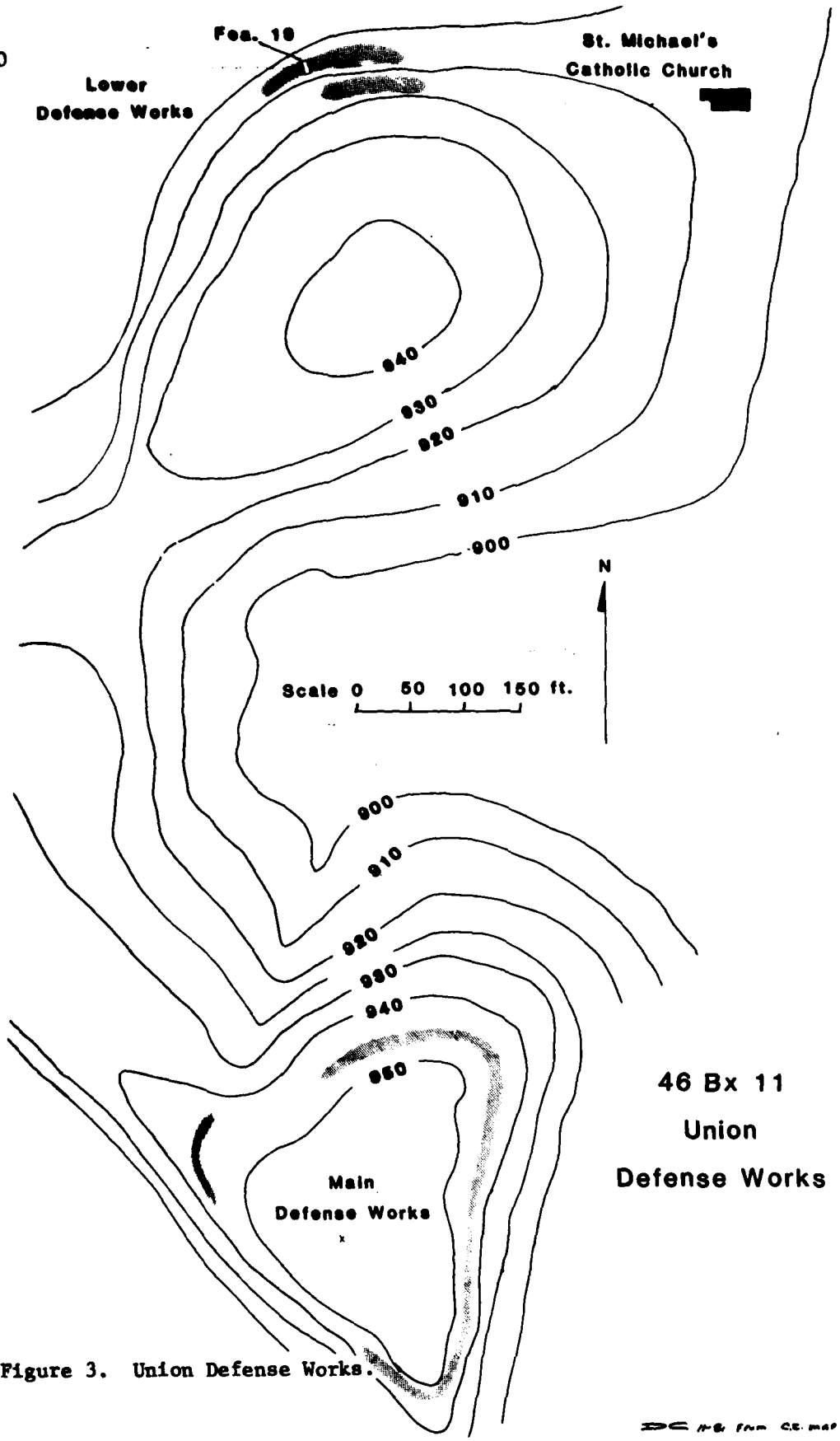


Figure 3. Union Defense Works.

Figure 4. View southeast from main Union fortifications.

Figure 5. View of Union riflepits along southeast face of main Union fortifications before excavation.

Gettysburg, and others. To be sure, the area which became West Virginia has, in general, been overlooked or dismissed as having been relatively unimportant. At first glance, this view is reasonable. There were no large-scale actions fought in the area; as is often the case, the relative significance attached to a theater of operations is solely determined by the number of men employed in that theater. Upon closer scrutiny, though, several reasons why control of western Virginia was strategically important become clear.

The State of Virginia cast its lot with the secessionist movement on "April 17, 1861, after the convention in Richmond passed the Ordinance of Secession by a vote of 88 to 51" (Stutler 1963:8). Unfortunately for the secessionist leaders, the northwestern portion of the State had exhibited a strong desire to remain loyal to the federal government. In a public referendum held on May 23, 1861, the ballots cast by the citizens of 34 counties in western Virginia were not counted. "It has been estimated that the counties now comprising West Virginia polled 44,000 votes and that at least 40,000 were against secession" (Ibid.:1). The Restored Government of Virginia was formed on June 20, 1861, in Wheeling; this body of men created the State of West Virginia just over two years later.

For the southern leaders, the political loyalties which divided the State of Virginia were destined to have significant effect during the course of the war. Had the South been able to take and maintain control of the region, the war might well have lasted longer than it actually had. Control of what became West Virginia would have meant an additional 24,000 square miles of territory for the Confederacy which was bordered by the Ohio River for some 250 miles. More importantly, possession of the Baltimore & Ohio Railway Line running from East to West would have given the armies of the Confederacy considerable tactical and strategic advantages in operations against the Federal government. Lastly, had the regions been more sympathetic to the Southern cause, the estimated 8,000 to 10,000 men from West Virginia who served in the armed forces of the Confederacy might well have been joined by many, many more. Some 32,000 men from this region served with the Federal armies (Ibid.:2).

During the first years of the war, 'Southern' attempts to gain control of the region had little success. By the month of July, 1861, Confederate forces operating in the Kanawha Valley under General Wise, a former governor, were in an untenable position. Federal forces commanded by General Rosecrans were threatening to cut him off "...under orders to march with a strong force from the upper Tygarts Valley region, by way of Weston, Sutton and Bulltown, to cut the Confederate lines at Gauley Bridge"(Ibid.:74). As a result, Wise was forced to retreat on July 19, 1861. He wrote, in his report to the Capitol, "The Kanawha Valley is wholly disaffected and traitorous. It was all gone from Charleston down to Point Pleasant before I got here. Boone and Cabell are nearly as bad, and the state of things in Braxton, Nicholas and part of Greenbrier is awful..." (Ibid 1973:74).

To what extent Wise's failure can be attributed to the disloyalties of the local inhabitants remains a matter of speculation; however, this quote does serve to illustrate the frustration which plagued Southern leadership.

General Robert E. Lee assumed command of all the Confederate troops operating in western Virginia early the following August. However, his attempts to stabilize the situation and push the Federals north were no more successful. On this occasion, unfavorable weather did much to upset his timetable. "...heavy rains fell almost incessantly for more than 20 days. The poor roads and mountain trails were churned to a bottomless sea of mud so that troop movement on foot was difficult and almost impossible for wagon traffic" (Ibid.:95).

The combined effects of weather, extremely rugged terrain, and the absence of extensive road networks did much to dictate the nature and tactics employed by both sides during the rest of the war in western Virginia. The military leaders of the Confederacy were convinced that, falling short of recapturing the territory lost in northwestern Virginia, the next alternative was to deny the enemy its use. "By the defection of West Virginia, the South...was deprived of 2/5 original Virginia territory. The Union also gained the use of the Baltimore & Ohio Railroad, a vital factor in the transportation of troops and supplies, because this was the only through line between St. Louis, Cincinnati and Washington" (Ibid.:32). The network of railroad lines running through western Virginia became primary targets. "In 1861, the Baltimore & Ohio Railroad included three lines, the longest of which extended from Baltimore on the Atlantic seaboard to Wheeling on the Ohio River. Following a course westward, the road crossed the Potomac River at Harper's Ferry and transversed Virginia territory in a northwesterly direction to a point six miles below Cumberland where it re-crossed the river to the Maryland side. After some twenty miles, it again re-entered Virginia and continued along the southern bank of the Potomac for nine miles. Entering into Maryland, it remained in that State until it passed the western boundary of Allegheny County from whence it pursued a winding course to Wheeling."

From Grafton to Parkersburg ran the Northwestern Virginia Railroad which had been leased by the Baltimore & Ohio in 1857. At Parkersburg, connections were made with the Marietta & Cincinnati Railroad and with steamboat lines on the Ohio directed a profitable trade eastward.

The Washington Branch Railroad joined Baltimore with Washington. By a system of tramways through the streets of the former town, connections were made with the Northern Central and the Philadelphia-Wilmington & Baltimore Railroads (Brown 1948:319).

To attain this goal of disrupting Union trade and communications in light of the terrain and lack of roads, the use of partisan guerrilla units played a major role in gathering information and

harassing Federal outposts and patrols. While irregular troops operated in western Virginia serving both sides in the conflict, the majority were Southern sympathizers. These groups of men were, for the most part, led by self-appointed commanders who, of necessity, conducted operations with a great deal of flexibility. "Marauding groups such as the Moccasin Hangers, with an interchangeable membership, had a certain nuisance value to the Confederacy in that they terrorized the Union element and kept the fighting men at home to protect their families and property, but generally were not a credit to the Confederate cause. It was a great time to pay off old scores, quarrels about line fences and neighborhood disagreements, and many acts of the Rangers (in Calhoun County) were more personal than political. They left a wake of looted and burned homes, and rode horses appropriated from their loyal Union neighbors"(Stutler 1963: 141). As the war continued, guerrilla raids and acts of retalitation intensified. On December 19, 1861, the town of Ripley was occupied and systematically looted by a contingent of Moccasin Rangers. The courthouses at Boone and Logan, September 1, 1861, and January 15, 1862, were burned by Union troops (Ibid.:162).

In this attempt to terrorize citizens sympathetic to the Union cause, and tie up Federal forces, these bands of irregulars, more commonly known as "bushwackers", caused such problems that Federal authorities had special units organized to deal with them. Colonel J. C. Rathbone recruited the 11th Virginia Infantry and had "specific orders to kill, capture, or drive out the ranger bands..." (Ibid.:174).

By the spring of 1862, several partisan bands had been concentrated under the command of Captain George Downs. A truce was signed on May 18, 1862, between Captain Downs and Colonel Rathbone. "The result was a signed pact declaring a truce for eight days and a cessation of hostilities, the men of Captain Downs' company to be permitted to visit their families without molestation" (Ibid.:175). As a result of this event and the surrender of the town of Spencer, Colonel Rathbone resigned his commission the following September. Captain Downs was captured early in July, but after being exchanged, went on to organize what became Company A of the 19th Virginia Cavalry commanded by Colonel William L. Jackson. Downs was present at the Battle of Bulltown and was promoted to the rank of Major before the end of the war.

The most significant military actions undertaken by the Confederacy in western Virginia after 1862 were the raids conducted by Generals Samuel E. Jones and John D. Imboden. The actions and popularity of Colonel William L. Jackson, who was to lead the Confederate forces at the Battle of Bulltown, also figure prominently. By one account, Colonel Jackson was the single most important figure in the conception and design of the Jones-Imboden Raid.

"The man who planned and did more to execute the Imboden Raid, more than any one person, was William L. Jackson, who became a Brigadier of the Confederate Army before the close of the war. After the Phillipi

Retreat, William L. Jackson was made Colonel of the 31st Virginia Regiment, an office he held up to the reorganization of the army in the spring of 1862, at which time he became a member of Stonewall Jackson's staff, a position he retained up to the spring of 1863. William L. Jackson was born and reared in Lewis County, Virginia (now West Virginia), and was a first cousin of Thomas Jonathan Jackson, better known as Stonewall. He was a lawyer by profession, and in the year 1859 was elected circuit judge of the 21st Judicial District of Virginia that was composed of the counties of Taylor, Preston, Upshur, Harrison, Barbour, Tucker, Randolf, and Marion, and was known at the beginning of the war as Judge Jackson, and at this time was the most widely known, as well as the most popular man in all that part of Virginia" (McNeil 1906:34:295).

The Jones-Imboden raids were launched beginning on April 20, 1863, with two primary objectives; first, to gather supplies, namely beef and other stocks for General Lee's army in the coming campaigning season, and secondly, to disrupt lines of communication and destroy as much of the Baltimore & Ohio Railroad as possible, concentrating on trestles and bridges. Secondary objectives of importance were the procurement of fresh mounts in exchange for the worn-out jaded animals the cavalry and artillery were forced to use. Also, a recruitment campaign was to be mounted as the raid progressed. "Colonel Jackson told Colonel Fontaine in the presence of Major Thompson, my father and myself, that he (Jackson) was just from Richmond, where he had seen Mr. Davis and had come by General Lee's headquarters on the Rappahannock River and that General Lee's army was hard up for 'meat rations' and the plan had been made up to raid northwestern Virginia and capture and drive south every kind of cattle in that part of the country that would make beef then and the next summer. This, Colonel Jackson said, had been determined on by the authorities as the only way to provide meat rations for the Confederate soldiers. Colonel Jackson informed Colonel Fontaine that night that he had been authorized by the authorities at Richmond to take part of the regiment Colonel Fontaine had already recruited, and in conjunction with some other detached companies to form what was afterwards known as the 19th Virginia Cavalry Regiment... As a boy my sympathies were at once aroused in the behalf of Colonel Fontaine, but it was explained to me that the Confederate government had taken this step because of Colonel Jackson's known popularity in the northwest part of Virginia and if the contemplated raid succeeded, that Colonel Jackson would recruit sufficiently to organize a brigade, which he did in the summer of 1863, and commanded throughout the war" (Ibid.:34:301-02).

The accuracy of the statement above by John McNeil is borne out in the official report of General Imboden dated June 1, 1863. In the report's concluding remarks, he lists the numbers and relative worth of the cattle and horses brought back into the Confederacy. He was, however, less than satisfied with the raid in terms of the assistance rendered by the local populace and recruitment. "I...captured and brought away $100,000 worth of horses, mules, wagons and arms; enabled the government agents to buy and bring out to places of safety over

3,100 head of fine cattle at a cost--stated to me by Major [W. M.] Tate, who procured a large part of them--of $300,000 less than they would sell for anywhere within our lines...I secured between 75 and 100 recruits for my own command, including the 25th and 31st Regiments and Colonel William L. Jackson got between 300 and 400. In this respect, we were all disappointed. The people now remaining in the northwest are, to all intents and purposes, a conquered people. Their spirit is broken by tyranny where they are true to our cause, and those who are against us are the blackest-hearted, most despicable villains upon the continent" (War of the Rebellion 25:104).

General Imboden began the raid on the morning of April 20, 1863, starting from his encampment at Shenandoah Mountains, accompanied by the 25th, 31st and 62nd Regiments, Virginia Infantry, the 18th Virginia Cavalry, and a battery of six-guns; the strength of his command at this time was numbered at 1,825 effectives. "On the evening of the 21st, I was joined by Hightown by the 22nd Virginia Infantry, Lt. Colonel A. C. Dunn's battalion [37th Virginia] dismounted cavalry; and the 19th Virginia Cavalry mostly dismounted, from Major General Samuel Jones' command, numbering in the aggregate about 1,540 men, giving me an entire force of about 3,365 men, of which about 700 were mounted. I was supplied with thirteen days' rations of flour and thirty days of salt, relying upon the county to furnish meat" (Ibid.:25:99).

Almost from the start, Imboden's column ran into difficulty. Unfavorable weather had plagued his advance from the outset. "On the evening of April 23, I reached Tygart's Valley, at Huttonsville, having marched 70 miles in four days, most of the time under a drenching rain that raised the water courses and made the roads very difficult. On Cheat Mountain we found snow in many places 18 to 20 inches deep and had to face a pelting storm of sleet" (Ibid.:99).

To make matters worse, the element of surprise was lost on the morning of the 24th of April while General Imboden was advancing on Beverly. "About 5 miles above Beverly, the cavalry advance met a man, who, as soon as he saw them, fled. They fired upon him but he escaped. It turned out to be the bogus State Sheriff of Randolph (County), named [J. F.] Phares, who, though shot through the lungs, succeeded in reaching Beverly and gave the alarm" (Ibid.:99).

The Federal garrison at Beverly, numbering some 900 men under the command of Colonel Latham, immediately took up strong defensive positions about one mile from the town. Latham communicated the presence of strong enemy forces about to attack him and requested instructions from his superior, Brigadier General Benjamin S. Roberts. By the time General Roberts' reply reached Colonel Latham, General Imboden was attempting to flank Latham's position by cutting the road to Buckhannon. "I replied: If overpowered, destroy your stores and fall back on Phillipi. The superior forces of the enemy soon compelled Colonel Latham to fall back on the Phillipi road. He destroyed such stores as he could not bring off on the regimental train at the post...on learning Imboden's and Jackson's real strength, I ordered the forces at Birch, Sutton, and Bulltown to send all wagons and supplies that could be removed, by direction of

Weston to Clarksburg and the troops, by forced marches, with three days cooked rations to join me" (Ibid.:91).

General Imboden attempted to cut off Latham's command and capture it en masse. Latham, however, made good his escape. Upon entering the town, Imboden wrote: "The attack was so sudden that the enemy could not remove his stores or destroy his camp. The stores were large and valuable, having been recently laid in. His loss was not less than $100,000, and about one-third of the town was destroyed in burning his stores" (Ibid.:100).

The raid was not intended to be a two-pronged assault..."General Samuel E. Jones, with his brigade of cavalry, were to operate in conjunction with us and so was to strike the Baltimore & Ohio Railroad near Martinsburg, and to go west doing all the damage he could to the railroad, and we were to meet him somewhere near Clarksburg" (McNeil 1906:34:306). Bad weather continued to influence the development of the raid..."On the morning of the 25th, my cavalry reported the road toward Phillipi impractible for artillery or wagons, on account of the depth of the mud, in some places coming up to the saddle skirts of their horses" (War of the Rebellion 25:100).

At this point, General Imboden was in somewhat of a quandary. He knew that Federal forces were gathering at Buckhannon and Phillipi, and he had had no word of General Jones' progress. The tactical advantages enjoyed by Federal forces in controlling the railroad network were foremost in the General's mind..."I saw the printed order of General [R. C.] Schenk assigning a division of six brigades for the defense of the Baltimore & Ohio Railroad. This order Colonel Patton (an ancestor of George S. Patton) found in Beverly and produced at our conference..not hearing from General Jones, it was the opinion of all present that he had failed to reach or interrupt communication on the Baltimore & Ohio Railroad, and that our position was exceedingly critical if the enemy had control of that road, as he could throw the whole division upon us in a few hours..." (Ibid.:101).

General Imboden began a retrograde movement on the 27th of April, weather again hampered this movement, in nine hours of march his command covered barely two miles. In this instance, however, the weather was a blessing in disguise. The next day it was learned that Federal troops occupying Buckhannon had evacuated the town. General Jones was threatening Grafton and the Federal forces had been forced to fall back to protect their lines of supply.

General Roberts was well aware of the danger Jones' cavalry presented to his position..."I received from Colonel Wilkinson, commanding at Clarksburg, a telegram that Grafton and Webster were captured and that he was preparing to evacuate Clarksburg in two hours; that he expected to be attacked by Jones' forces at any time. I replied to the Colonel that I would reach him the next day at noon; to hold on if possible, but, if compelled to retreat, to run the railroad

stock and supplies to Parkersburg, destroy such as could not be secured, and to fall back to Parkersburg or Weston" (Ibid.:91-92).

At approximately this point in the raid, General Imboden's command was reduced by some 200 effectives, primarily from Dunn's Battalion, through desertion. In his official report, he attributed this incident to an order he had published. "My own command had lost over 200 by desertion, after passing Beverly, from Dunn's battalion dismounted cavalry, in consequence of an order published by me prohibiting the seizure of horses or other property from citizens for private uses. These men had expected to mount themselves off the country" (Ibid.:102).

As it turned out, General Roberts arrived at Clarksburg by forced marches in time to prevent its capture. It had originally been Imboden's intention to unite his command with General Jones' and defeat the enemy at Janelew or Clarksburg. However, upon arrival in those areas, the troops under Roberts' command immediately began to dig in and entrench themselves in preparation for expected attacks. By the 5th of May, Imboden's and Jones' commands had combined, but by that time the position of the Federal forces had been substantially strengthened. "During the day, I had received from a confidential and perfectly reliable source, an accurate statement of the enemy's forces at Clarksburg, giving the regiments, their size, and their batteries. The whole force was between 4,600 and 5,000 infantry and twelve field guns, and they had been busy several days entrenching. Generals Kinly and Roberts were present in person, and reinforcements were hourly expected. These arrived the next day, increasing the force from 6,000 to 8,000 men" (Ibid.:102).

In the face of mounting resistance, it was decided that the Confederate forces should split up, Jones heading west to attack the Northwestern Virginia Railroad and Imboden heading south. As before, adverse weather conditions did much to delay the movement. "The next day (May 7, 1863) with extraordinary labor, we made 2-1/2 miles, on the 8th day six miles more, making 14 miles in three days, and to do this with my battery I had to destroy the spare wheels of my battery and throw away fifty solid shot from each caisson. Up to the 9th, it rained hard fourteen days and was clear only six, and the roads everywhere were almost impassable, and my animals rarely got any food except the young grass we found along the road...At Bulltown, Suttonville, and Big Birch the enemy had blockhouses and entrenchments, and had destroyed at each place large amounts of stores laid in for the summer's campaign. I destroyed their quarters and blockhouses at these several places" (Ibid.:103).

The results of Imboden's action, while not achieving full expectations, are extremely impressive in light of the difficulties encountered. In addition to the animals and equipment mentioned above, he reported three covered turnpike bridges destroyed, six or eight railroad bridges burnt while..."marched over 400 miles, subsisted my command on half rations a great part of the time. I lost 1 lieutenant

(Vincent), Nineteenth Cavalry, and 1 man in the Eighteenth Cavalry killed, and left to fall into the hands of the enemy 3 men, wounded at Beverly, and 8 sick and 3 prisoners captured; a total loss of 16" (Ibid.:104).

General Imboden neglected to count those 200 men lost by desertion, possibly because Colonel Jackson's success at recruitment more than made up for this loss.

General Jones' command, being mounted, was capable of ranging much farther than General Imboden's. The results of his action are no less impressive. He was responsible for the destruction of the Baltimore & Ohio bridge spanning the Monongahela River. "Soon after dark I had the satisfaction of seeing this magnificent structure tumble into the river. The bridge was of iron; three spans, each 300 feet. More than two years were required for its construction. It cost $486,333" (Stutler 1963:206).

In General Jones' report to his superiors, he states: "In thirty days we marched nearly 700 miles through a rough and sterile country gathering subsistence for man and horse by the way. At Greenland, Fairmont, we encountered enemy forces. We killed from 25 to 30 of the enemy, wounded probably three times as many, captured nearly 700 prisoners, with their small arms, and one piece of artillery, two trains of cars, burned 16 railroad bridges and one tunnel, 150,000 barrels of oil, many engines, and a large number of boats, tanks and barrels, bringing home with us about 1,000 cattle, and about 1,200 horses. Our entire loss was 10 killed and 42 wounded, the missing not exceeding 15" (Ibid.:208-09).

The closing statement in General Imboden's official report indicates that he and the troops under his command exercised great restraint in conducting the operation. "I heard scarcely a complaint of any wrong done to private rights of persons or property by the men under my command. They were nearly all Northwestern Virginians, and had much to provoke them to vengence upon a dastardly foe, who had outraged their unprotected families, but with the willing obedience of the true, Confederate soldier, every man obeyed orders to respect private rights, even of their traitor neighbors" (War of the Rebellion 25:104-05).

Unfortunately, the South suffered two defeats later in that year which were to determine the ultimate course of the war. Lee's defeat at Gettysburg, and the loss of Vicksburg were setbacks from which the Confederacy did not recover.

In the light of these events, the Battle of Bulltown, while being little more than a skirmish, had some significance. Had Colonel Jackson been successful in capturing the fortifications, he undoubtedly would have proceeded north in hopes of duplicating the successes enjoyed by Imboden and Jones earlier than year. Needless to say, this

action would have resulted in even greater loss of life and destruction of public and private property, while it is highly doubtful that the course of the war would have been altered in any significant way.

Strategically located on high ground above the town, the Bulltown fortifications overlooked the Weston and Gauley Bridge Turnpike, the only major road extending in a north-south direction in the area. The location of the fort also protected a covered bridge spanning the Little Kanawha River which had been constructed in 1854 (Cook 1933:254).

While the amount of information concerning the site and the battle is limited, much of what there is is rather confusing. Early in the war, a ring of trenches was dug and a blockhouse was built by Federal troops. Though the fort never had a permanent garrison, troops were kept busy strengthening and extending the works while stationed there. "In times of occupation the defenses were strengthened by a belt of rifle pits dug lower down on the hillside, making it a defensive work almost impregnable to direct assault" (Stutler 1963:247-48).

During the Jones-Imboden raid, rebel forces occupied the site long enough to destroy the blockhouse. Later the following summer, the fort was reoccupied by parts of Companies G and I, 6th West Virginia Infantry, and Companies C and H, 11th West Virginia Infantry, under the command of Captain William H. Mattingly. No official correspondence indicating the exact number of men under this command was found. Roy B. Cook and Boyd B. Stutler both cite this force as comprising seven officers and 117 enlisted men equipped with standard issue small arms, but no artillery. In Genevieve Brown's (1948) regimental history of the 6th West Virginia Infantry, she cites a much higher figure of 400 effectives.

At this point in time there is some evidence to suggest that the fort was going to be occupied on a permanent basis. "The men were kept busy during the late summer months digging additional rifle pits and trenches and in building semi-permanent quarters with lumber brought in from Falls Mill in order to make the place habitable in winter" (Ibid.: 248).

Early in the month of October, the telegraph lines running from Weston to Sutton were cut in a number of places (Cook 1933:255). Colonel Jackson set out for Bulltown with his taskforce from the Greenbrier Valley at approximately the same time. Here again, there is some difference of opinion concerning the size of the force at his command. In Stutler's book, the composition and strength of Jackson's force is as follows..."he organized a taskforce of about 700 men, composed of his own 19th Virginia Cavalry commanded by Lieutenant Colonel W. P. Thompson...part of the 20th Virginia Cavalry under Colonel W. W. Arnett...a detachment of six infantry companies, and the Virginia Battery, two guns under Captain Warren A. Lurty of Clarksburg" (Stutler 1963:248). Brown's (1948:337) estimation is again substantially higher..."About 4:30 A.M....with approximately 1,000 men and two pieces of artillery, one of which was a howitzer that shot a three pound ball."

Cook refers to this battery as being composed of two twelve-pound howitzers which he later calls a "Jackass" battery. This would indicate that the weapons were mountain howitzers. These weapons were specifically designed to provide artillery fire support in areas where the terrain was too rugged for conventional field weapons to be employed. "The tube (220 pounds) and carriage shafts (30 pounds) were packed on one horse, the carriage and implements (287 pounds) on another, and ammunition in two chests on a third" (U.S. Army 1861:336). Standard battery size for the U.S. Army in 1861 was six pieces, including seven carriages, 36 ammunition chests (48 rounds per piece), two chests of forge and smith's tools, two of carriage maker's tools, and 33 horses or mules"(Ibid.:363).

Colonel Jackson moved his command toward Bulltown using the Cold Knob Trail. "...to the upper waters of the Elk and then crossed by way of the Holly River to the Little Kanawha" (Cook 1933:255). Jackson reached Falls Mill on the evening of the 12th of October and converged on the fortification after splitting his force into two columns. At the same time, a small force of Confederates dressed in Federal uniforms succeeded in capturing the Union pickets on duty that night.

With the attack set to commence at 4:30 A.M., Major J. M. Kessler commanding one wing was to make his assault on the northeastern side while Lieutenant Colonel Thompson, commanding the other, was to take up his position on the southeast side across the river from the fort. At a signal from Lurty's battery, a simultaneous assault from these two directions was to take place. Thompson did not reach his assigned position on time and when 4:30 A.M. came, Major Kessler began to advance his wing up the hill. The element of surprise was reportedly lost when half-way up the hill an officer "...fired his pistol and yelled 'Charge!'". As a result the garrison turned out and, although the Confederates succeeded in occupying a portion of the fort, they were ultimately driven back. Thompson, accompanied by Colonel Jackson, reached his position at approximately the same time that Kessler's wing was being driven down the hill. At this point Jackson, under a flag of truce, demanded the immediate surrender of the garrison. "We were attacked this morning at 4:30 o'clock by Col. William L. Jackson... They charged our fortifications on the northeast side. We fell back to our main fortification. They pursued us until within a few yards of our fortification when we poured it into them strong and repulsed them handsomely, with a loss of not less than 50 killed and wounded. They sent us a flag of truce, ordering us to surrender. I told them to come and take us...We gave them 9 of their killed who were in our line" (War of the Rebellion 29:481).

At this point it is said that Colonel Jackson attempted to reduce the fort by shellfire. In Stutler's (1963) work he states that Lurty's battery was equipped only with solid shot. If this was indeed the case, one must wonder why he (Jackson) would employ them to reduce the fort. He must have been aware of the ineffectiveness of such projectiles against earthworks. To employ the guns in this manner would result only in a waste of valuable powder and shot.

This attempt was also unsuccessful, but a second demand for surrender was issued (Ibid.).

Captain Mattingly's report does not confirm these developments, but he states that fighting continued until 4:30 P.M. at which time "...rebels withdrew in the direction of Sutton" (Ibid.:250).

Colonel Jackson, in fact, withdrew to a location known as Salt Lick Bridge, where, early the next morning, the 4th West Virginia Cavalry made contact and a brief skirmish ensued (Ibid.).

In spite of the length of the engagement, the casualties on both sides were light. Captain Mattingly reported: "Our casualties are myself wounded (it was thought mortally) in the thigh, the bone being badly broken, early in the action" (War of the Rebellion 29:481).

There are no official records concerning the Confederate casualties but Captain Mattingly records at least nine dead (see above), and the capture of a lieutenant and private who were wounded in the action, and two other privates who were not (Ibid.).

Here is another area of contention. Mr. Stutler (1963:251) wrote: "On the Confederate side seven men were killed, and six so badly wounded that they were left to the care of Federal surgeons and the kindly townspeople. One died later." He also states that there was an additional Federal casualty of one Lieutenant, John Holt, also wounded, but Captain Mattingly made no mention of this. Brigadier General Kelly reported that Jackson was in retreat, moving up Bryant's Fork of the Little Kanawha toward Adison, and listed his (Jackson's) losses as 13 killed, 60 wounded (War of the Rebellion 29:331).

There was a single civilian casualty, Moses Cunningham, the owner of a farm upon which a portion of the battle was fought. Stutler writes, "He ran out onto the lines of fire to hurrah for Jeff Davis and was clipped by a bullet..." (Stutler 1963:251). Dr. Thomas B. Camden, who treated all the wounded, is said to have advised Cunningham to exercise greater discretion in his cheering. Fortunately, the wound was not serious and he recovered. Captain Mattingly also recovered although he was lamed for life. One man was listed as missing in action while four others were taken prisoner (Cook 1933:256).

Fortified strong points like the site at Bulltown served to provide an "early warning system," as it were, while buying time for the Federal leaders to react. On the day of the battle, Brigadier General William W. Averell had been informed of the engagement and had set in motion forces, including a battery of artillery, to resist the penetration (War of the Rebellion 29:309).

It was Colonel Jackson's ultimate aim to press on in a northerly direction toward Glenville, raiding along the turnpike through Spencer to the Ohio River at Ravenswood (Stutler 1963:250).

Jackson's failure at Bulltown robbed the Confederate forces engaged in this operation of their initiative and momentum. In a greater sense, the Federal victory served to maintain the tide of successes which had begun earlier in that year. On at least one other occasion, however, Confederate forces occupied and destroyed the buildings of the fort. In the report of Colonel Nathan Wilkinson, 5th West Virginia Infantry dated May 5, 1864, he informed General F. Segel that a Confederate force commanded by Captains Spriggs and Chivings burned the fortifications, and had left in an unknown direction (War of the Rebellion 37:68). Two days later, Captain John H. McNeill, a leader of the Virginia Partisan Rangers, attacked the Baltimore & Ohio Railroad at Bloomington and succeeded in destroying a large amount of rolling stock and associated machinery (Ibid:69).

Until the end of the war, the Confederate forces consistently proved themselves capable of penetrating deeply into Federal territory and creating havoc. The raids of Jenkins, Imboden and Jones, Morgan and others, undoubtedly lengthened the duration and suffering of the war. In light of what the South achieved militarily with the limited means at its disposal, one can only speculate on what might have transpired had the Confederacy enjoyed the economic and industrial might of its adversary.

After the War, the Union Army simply walked away and left the Bulltown battlefield site as it was, with some buildings still standing. During a visit to the battlefield, 50 years after the war, Louden (1914) described the site as follows:

> There in the trenches I found the place where the cannons had stood guarding the pike; the well that had quenched the thirst of many powder blackened lips, but now falling in; the indentation left by the magazine; and close by, the bone-strewn ground where the commissary had stood. In the far corner of the works stood the old cavalry sheds, with their falling, moss-covered roofs--some tottering with the wind, so frail were they, while others had tumbled to the ground. The sheds are all that remain of the old camp, and soon they will disappear like the rest.

The Cunningham family, on whose farm the Battle of Bulltown was fought, farmed the fort area until the early 1940's. Since that time the battlefield has become densely overgrown.

Mapping and Excavation Procedures

Prior to the initiation of excavations, a benchmark (TBM1, Fig. 2) was placed at the approximate highest point within the main fortifications and arbitrarily labeled 1000N1000(E). A site grid, oriented 11 degrees west of magnetic north was then extended over the site to provide horizontal control for mapping. The elevation of 96 ft. for TBM1 was taken from a contour map of the Burnsville Lake Recreational

Facilities prepared by the Army Corps of Engineers (Drawing No. 026-UB-16-104/62). A second benchmark (TBM2, Fig. 2), at a grid point 1110N960, was used to tie in the Lower Defensive Works to the main site. It is located 1015 ft. from the northwest corner of St. Michael's Church, at a compass bearing of 229°35'03" magnetic. Both benchmarks were made permanent by driving 4 ft. lengths of 3 in. orange painted iron pipe to a depth of 3 ft.

Portions of the main site selected for intensive testing were staked at 5 ft. intervals according to the site grid, and excavation units square with the grid are designated by the southwest stake of the square. Test trenches designed to section the Union rifle pits were placed perpendicular to the front of fortifications rather than square with the grid, and are identified by Feature numbers rather than grid coordinates.

In excavation, the plow zone was stripped with a shovel to expose subsurface remains. All of the dirt, including the plowzone, was processed through 1/4 in. screens, and artifacts were segregated according to grid square or other excavation unit and the particular feature (such as a pit) where appropriate. All artifacts were confined to the plowzone and to the fill of pits.

The site exhibits no cultural stratigraphy related to construction phases or sequent occupations. Beneath the plowzone, which varies from 5 in. to 12 in. in thickness, there is a zone of sterile yellowish to reddish sandy clay averaging 2 ft. in thickness. Bedrock, consisting of soft rotten sandstone, yellow in color, lies at an average depth of 3 ft. below the modern site surface. This was intruded by the Union rifle pits and by F5 pit.

THE RIFLE PITS

In the spring of 1981, the location of the Union rifle pits was marked by a trenchlike depression 5 to 18 ft. wide (crest to crest) and 2 to 4 ft. deep (Fig. 5). This depression was continuous from west of the center of the north face, east around the northeast salient, southwest to the southern salient, and then northwest for about 80 ft. along the southwest face. A second depression, ca. 40 ft. long, could be seen in the area of the northwest salient. Thus the entire hilltop was enclosed by the rifle pits, except for approximately 200 ft. of the southwest face and about 100 ft. of the north face. The gap along the southwest face can probably be explained by the steeply sloping hillside here, which drops very rapidly toward the Little Kanawha River, and forms an almost vertical escarpment toward the base of the hill. In the view of the Union engineers, the steep slope would have been an unlikely route for an assault, and it was apparently considered unnecessary to fortify the crest of the hill here. In any case, it would have been very difficult to dig rifle pits along most of the southwest face, again owing to the steep slope.

The gap in the north face rifle pits was initially thought to be related to the possible location of the entry to the works just east of the northwest salient. However, excavations in Area D showed that the rifle pits continue around the northwest salient at least 30 ft. to the east, and it is quite possible that they were continuous along the north face, although no testing was conducted to verify this.

The rifle pits were sectioned by 4 test trenches placed perpendicular to the visible line of the entrenchments and extending from crest to crest. Two (F2 and F8) were located in the area of the northeast salient, and one each the south and northwest salients (F18 and F15, respectively). These sections show that the rifle pits were rather variable, both in dimensions and in method of construction.

In general, the rifle pits are larger and deeper along the north and southeast faces, than they are at the south and northeast salients. This is to be expected, since the hillside below the north and east faces is relatively gentle compared to the precipitous southwest face, and more exposed to an attack. Hence the defensive works would necessarily be more elaborate here.

The two sectioning trenches (F2 and F8) excavated in Area A revealed similar dimensions for the rifle pits:

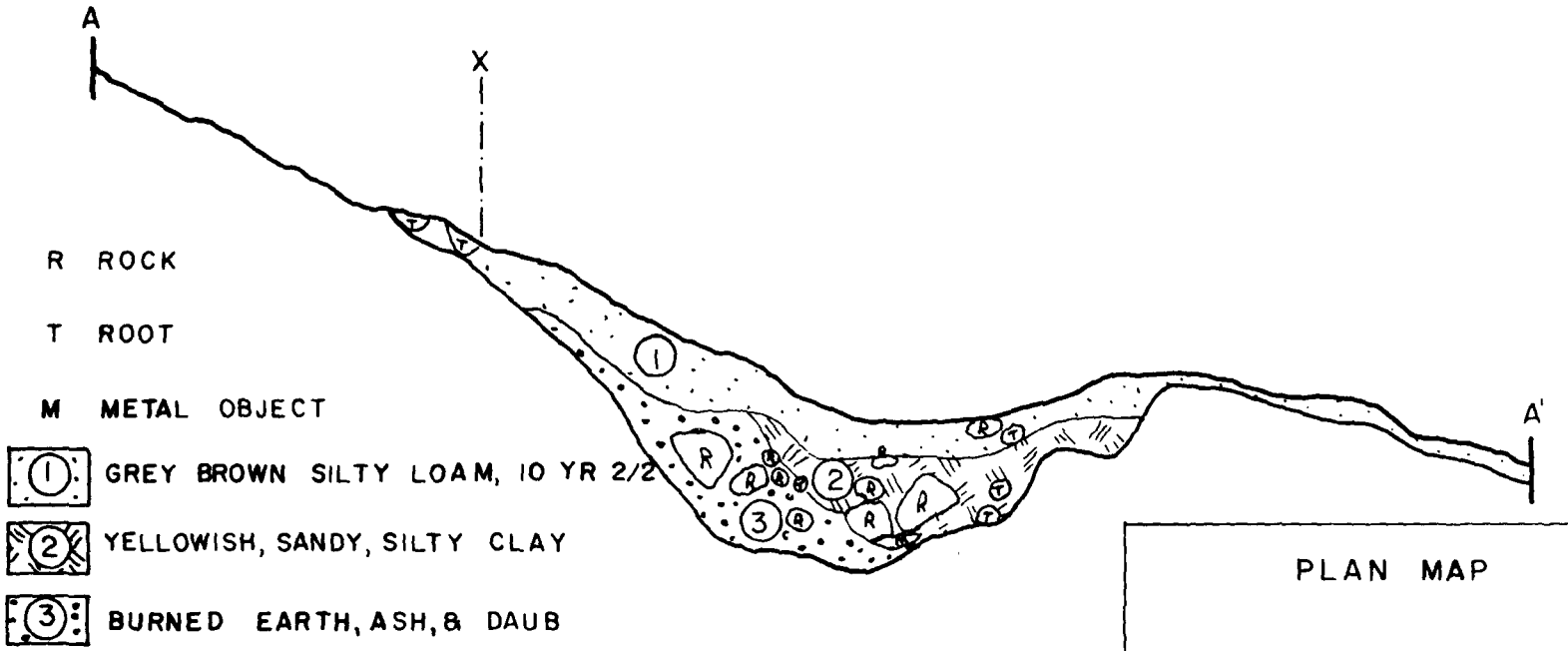
	F2	F8
width (interior crest to lip of parapet)	10 ft. 6 in.	12 ft.
width (floor of rifle pit)	4 ft.	6 ft.
height of parapet (above floor)	2 ft. 6 in.	3 ft. 9 in.

The interior and exterior walls of the rifle pits are sloping, and the height of the parapet is insufficient for defenders to have stood upright. Rather, they would have had to kneel on the floor of the rifle pit or lie prone against the exterior wall for the parapet to have given any real cover. The F2 section (Fig. 7) revealed a shelf or "berm" on the exterior wall above the floor of the rifle pit. This berm is 18 in. wide, and the parapet rises 12 in. above it. Presumably it served as an armrest for the defenders. The extent of this berm is unknown; it was not encountered in any of the other rifle pit sections.

Both of the Area A sections show that the rifle pits were excavated ca. 6 in. into soft sandstone. Probably because this sandstone was impermeable, the water would have stood in the open defenses, a shallow drain (Fig. 6) was constructed in the floor of the rifle pit to allow runoff at the northeast salient. In the F8 section this drain was only an irregular shallow groove in the middle of the floor but in the F2 section it was a well-defined small ditch average 6 in. wide and 2-3 in. deep.

In the area of the F2 section, and probably elsewhere along the southeast face, spoil dirt from construction of the rifle pits appears

Feature 2



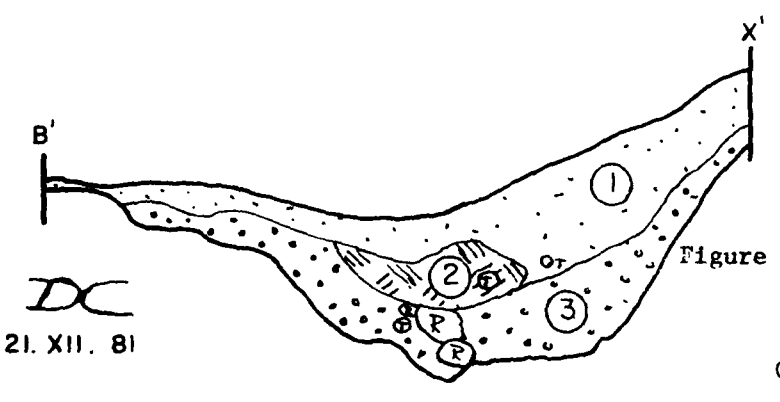
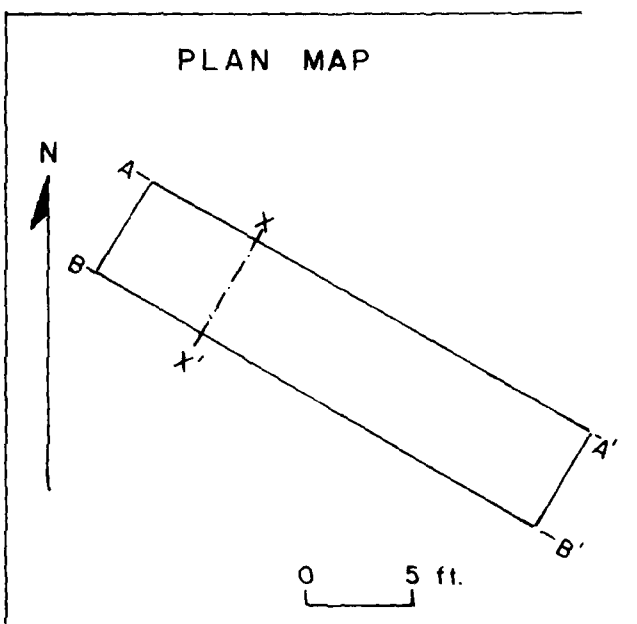


Figure 6. Feature 2.



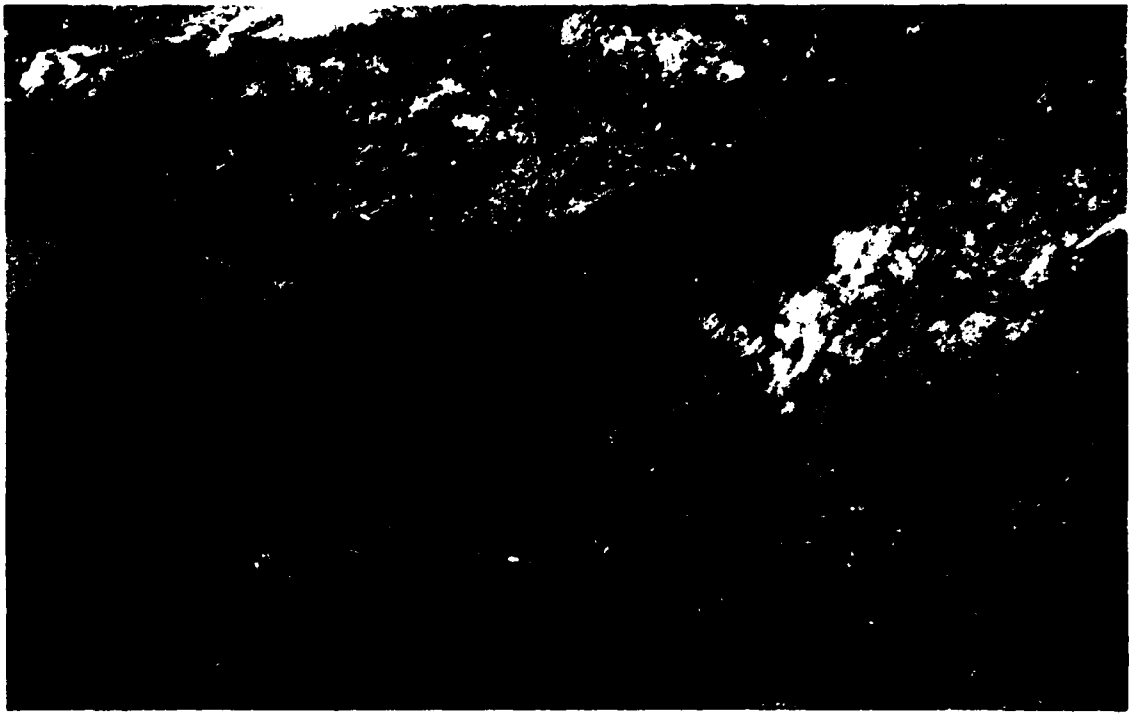


Figure 7. Feature 2 riflepit section in Area A. Parapet is to left. Note "berm" and drain.

Figure 8. View upslope toward interior of works in Area A, showing utilization of riflepit section Feature 2.

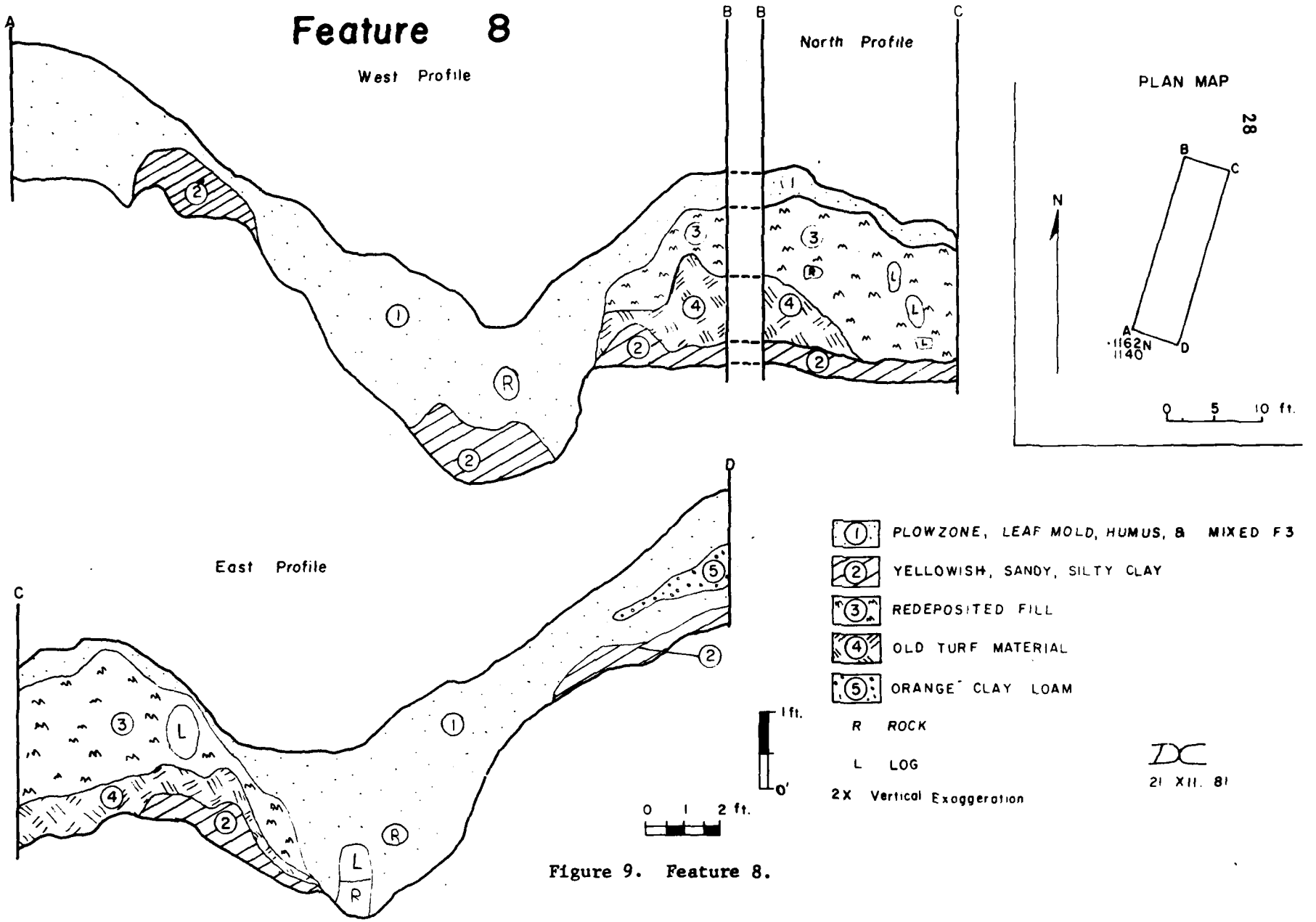


Figure 9. Feature 8.

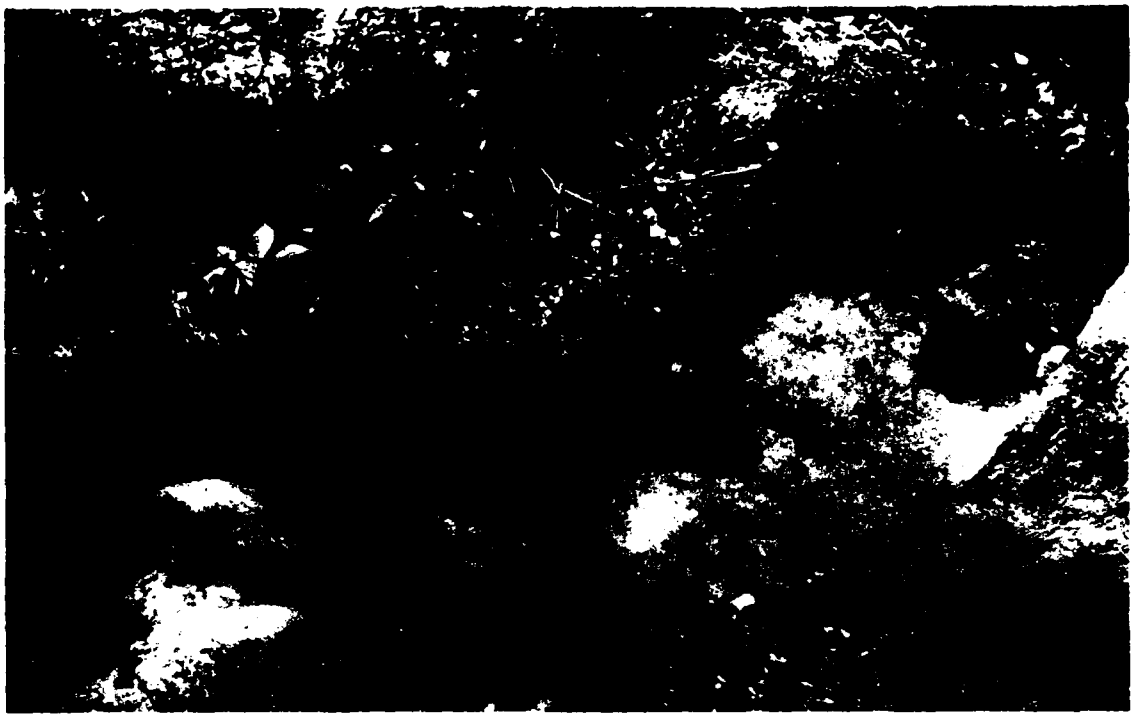
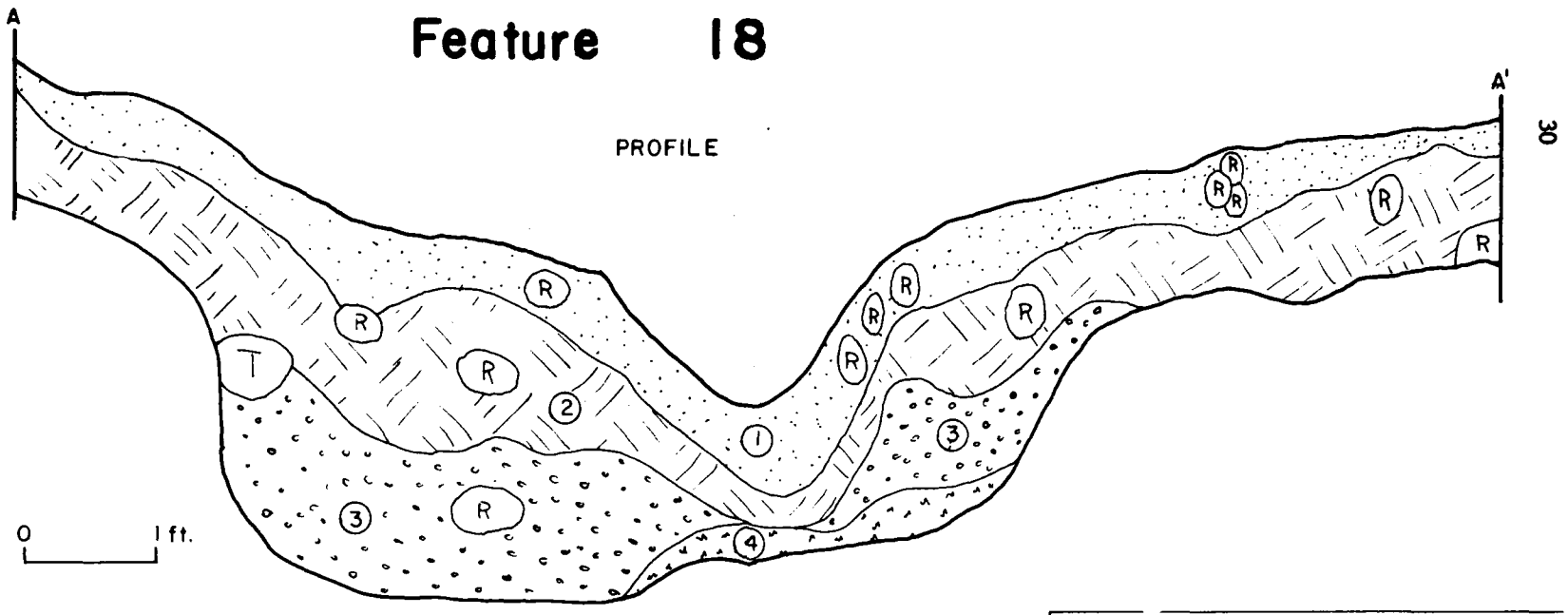
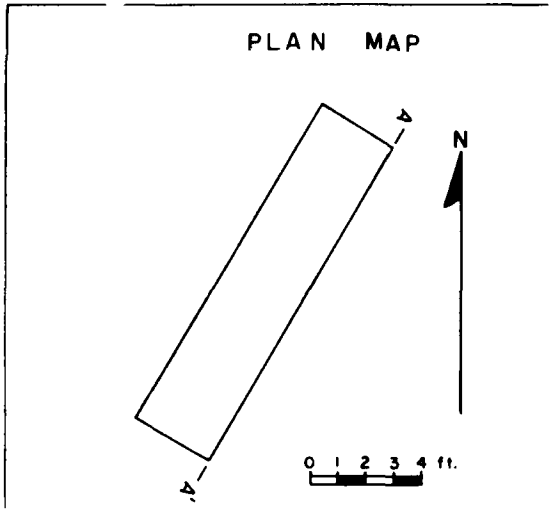


Figure 10. Feature 8 riflepit section (east face) in Area A, showing construction of the parapet (right).

Figure 11. North end of Feature 8 riflepit section, showing buried turf line (preconstruction surface) at base of trench, and charred timbers in the parapet fill.

Feature 18





1 GREY BROWN SILTY LOAM

2 FILL SIMILAR TO 1

3 REDEPOSITED PRIOR FILL

4 SOFT, ROTTEN SANDSTONE

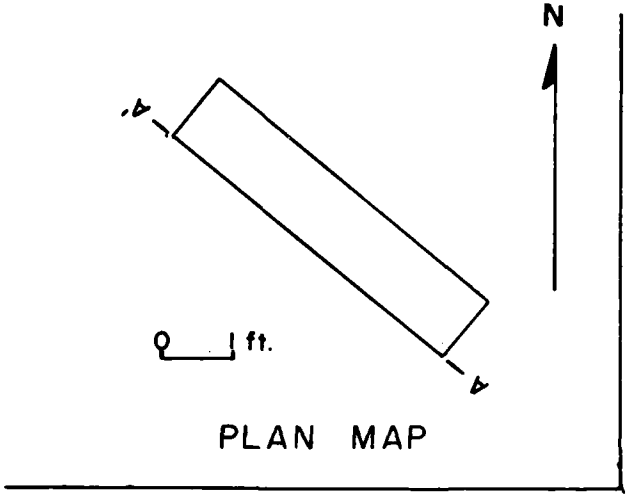
T ROOT

R ROCK

22.XII.81

Figure 12. Feature 18 profile.

Feature 15



1 GRAY BROWN SILTY LOAM, 10 YR 2/2

2 YELLOWISH, SANDY, SILTY CLAY

3 BURNED EARTH, ASH, & DAUB

RC ROCK CLUSTER

R ROCK

T ROOT

West Profile

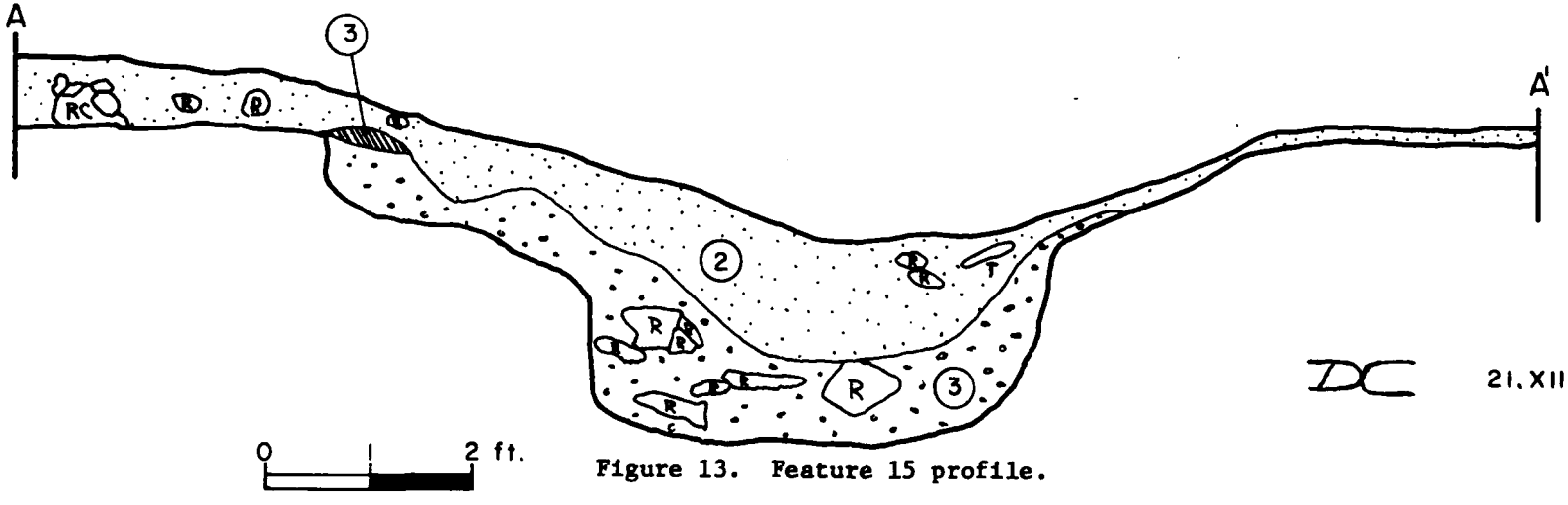


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Figure 13. Feature 15 profile.

Figure 14. Feature 18 section of Union riflepits at south salient. Parapet is to lower left.

Figure 15. Feature 15 riflepit section in Area D. Parapet is to upper left.

to have been discarded by throwing it down the hillside. The F8 section shows that along at least a portion of the north face, about 2 ft. of spoil was heaped on the preconstruction surface in front of the rifle pits to increase the height of the parapet. This is shown by the presence of a buried turf line in the F8 profile (Fig. 11) which is intruded by the rifle pit, and covered by spoil. The spoil used for the parapet included several charred timbers which probably came from trees cut down and burned during clearing of the hilltop before the fort was constructed.

At the south salient, the rifle pits have a crest-to-crest width of about 10 ft. and an interior floor width of 6 ft., including a small step or banquette 9 in. high and 14 in. wide, which was probably a kneeling platform. The rear (interior) wall of the rifle pit is nearly vertical, the exterior wall slightly sloping, and the total depth (floor to lip of the parapet) is 3 ft. 6 in. No drain was present in the floor, which was dug ca. 10 in. into basal sandstone. Spoil appears to have been placed on the forward slope, judging from the fact that there was ca. 15 in. of redeposited earth above the sterile subsoil. No preconstruction humus layer or turf line was present.

In Area D, at the northwest salient, the rifle pits vary from 2 ft. 6 in. to 3 ft. 6 in. deep, and 8 ft. 6 in. to 10 ft. wide (crest to crest). The pit floor is level at the salient, but "U"-shaped adjacent to F16 possible structure (Fig. 26).

Both the interior and exterior walls are strongly sloping, and there is no evidence of a lateral drain, a banquette or berm. It was not possible to determine what disposition was made of the spoil from the original excavation, since the trench was filled level with the modern surface after the war, and plowing has destroyed any trace of a possible parapet. The rifle pit fill in this area was similar in all respects to that elsewhere, consisting of mixed, redeposited soil with large rocks and miscellaneous artifacts.

AREA A

Area A (Fig. 2) comprises the northeast salient of the main fortification, flanking Millstone Run and a portion of the Weston-Gauley Bridge Turnpike to the east. This area was selected for extensive testing based on several logical suppositions: 1) that a salient is the weakest point in a front of fortifications and would have a blockhouse or at least more elaborate defensive works than elsewhere; 2) that this area would have been particularly strategic owing to its proximity to the Turnpike, its relative ease of access from a tributary draw of Millstone Run and consequent exposed position; and 3) that the Confederate assault from the north would have heavily engaged the Union works here. In addition, a survey with a metal-detector suggested that there were several concentrations which could represent razed structures.

In order to locate structural remains, five 5x5 ft. test units were placed along line 1140E, from 1080N to 1145N, and two similar units were

situated perpendicular to line 1140E, at 1125N1150 and 1125N1160 (see Fig. 2). These were excavated to basal, sterile subsoil. In addition, two trenches (F2 and F8) designed to section the Union rifle pits were excavated on the north and east flanks of the salient. These are discussed separately (see The Rifle Pits, above).

No in situ evidence of structures was encountered in the Area A test units, apart from F5 (see below). That there was at least one structure in this area is attested to by the presence of numerous nails and fragments of window glass, as well as a few pieces of iron structural hardware (see Table 1). Notably, 81 percent of the window glass shards recovered (158 specimens) are from Area A. The type of structure(s) present could not be determined, owing to post Civil War disturbance. It is possible that the numerous large stones which comprised much of the fill of the rifle pit sections and F5 pit may have served as wall footers, as building foundations, or in stone fireplaces. If so, they were removed in the post war period after dismantling the building superstructure so that they would not interfere with plowing. Farming would then have obliterated any trace of footer trenches and interior floor features, and scattered the nails. Further, none of the rocks had any attached mortar, and no mortar detritus was encountered, so the presence of stone fireplaces, footers and/or foundations is entirely conjectural.

Judging from the relative abundance of artifacts of all kinds, Area A was rather heavily utilized by the Union garrison, but the nature of the utilization could not be determined.

Feature 5 Pit

This is a roughly oval pit (Figs. 16-18) ca. 6 ft. 3 in. in diameter (max.), and 3 ft. 7 in. deep, located about 10 ft. south of F8 trench section (see Fig. 2). It was sectioned along lines 1150N and 1150.5E, and not completely excavated. It originated at the base of the plow zone about 12 in. below the modern site surface. The pit sides slope evenly from the rim to a flat floor. The bottom of the pit is rectangular, 3 ft. 6 in. long (NE-SW) and 2 ft. 7 in. wide (NW-SE). The bottom 3 in. of the pit were dug into the decayed reddish sandstone which lies at the base of the natural soil profile. The pit fill was stratified, comprising two distinct layers. The bottom 7 in. of fill consisted of reddish silty clay and clay loam which represents erosion of the pit walls. The rest of the pit was filled with subrectangular undressed sandstone slabs up to 30 in. diameter and 8 in. thick, in a matrix of loose gray/brown loam which contained flecks and small chunks of charcoal, burned and unburned bone, and many artifacts (see Table 1). It is presumed that F5 pit was left open when the Union garrison abandoned the fortification at the end of the War and then filled to level the area for farming. At any rate F5 was filled after the Battle of Bulltown, as evidenced by the presence of several spent/deformed Minie balls in the fill.

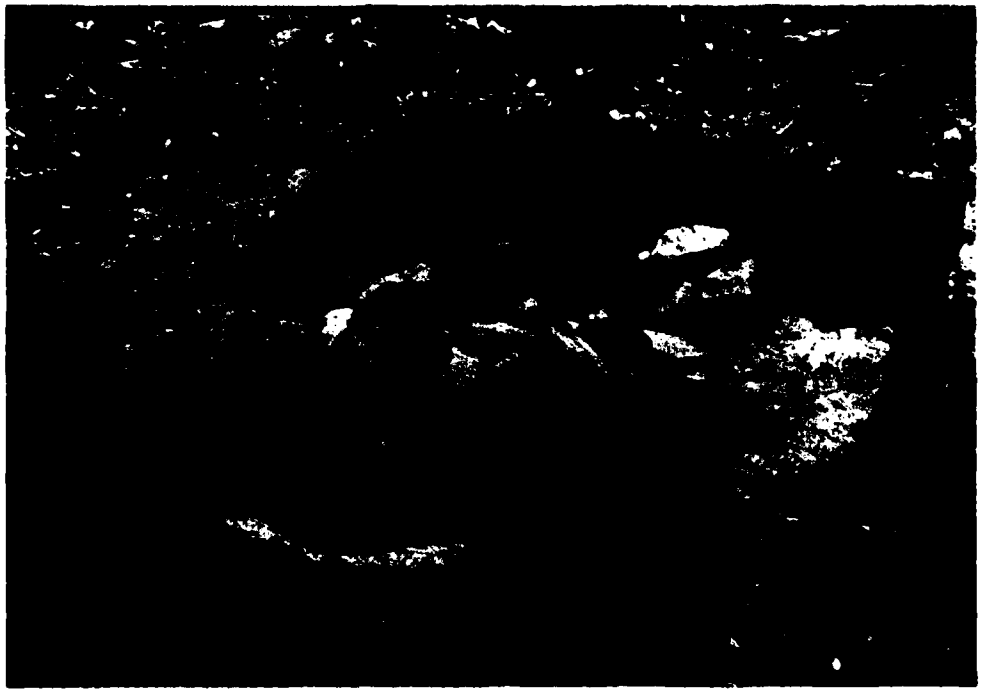


Figure 16. Feature 5 pit in early stage of excavation showing rock fill.

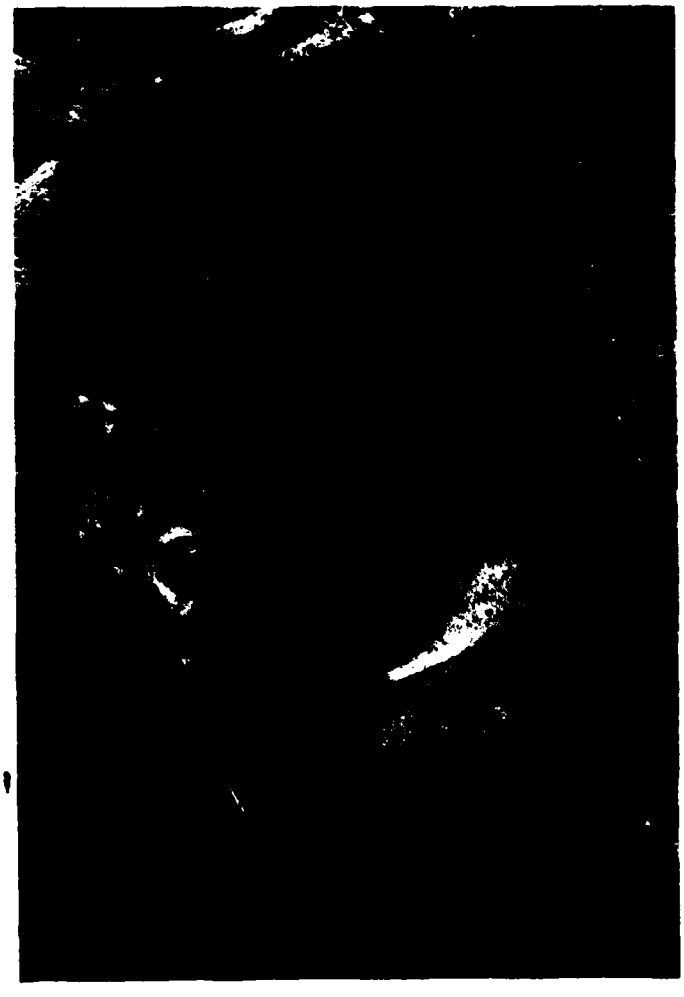


Figure 17. Feature 5 pit with fill removed. Note that the pit is circular at level of origin and square at base.

Feature 5

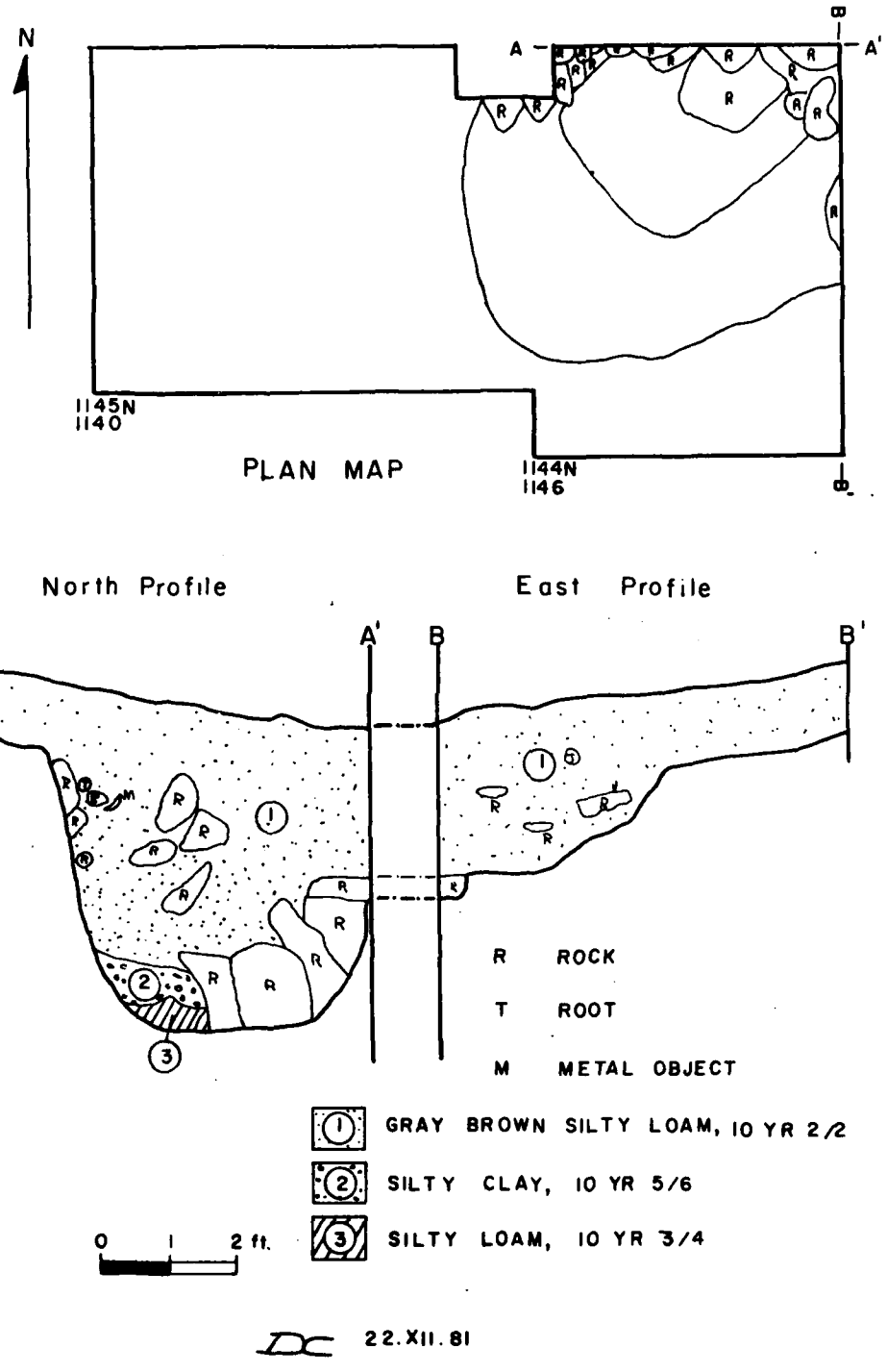


Figure 18. Feature 5 plan and profile.

TABLE 1

Artifact Distribution AREA A

Type	Gen. Occ.	F2 Trench	Feat. 8 Trench	F5 Pit	Total
Nails					
Complete	26	35	86	82	229
Fragments	335	175	281	390	1181
Wire					
Fencing	1	19	11	6	37
Barbed		1	6		7
Staples (Fencing)		7			7
Strap Fragments			10		10
Buttons					
Loop	2	1			3
Flat	3	1	3	7	14
Rivets			3	3	6
Epaulet Tips				1	1
Brass Loop			1		1
"Plummets"	1				1
Brass Crimp			1		1
Buckles			1	1	2
Watchpart			1		1
Screws	1				1
Hinges				1	1
Cannister				1	1
Spoons				1	1
Unident. Metal	6	8	21	58	93
Unident. Frags.	5	109	5	7	126

Table 1 (continued)

Type	Gen. Occ.	F2 Trench.	Feat. 8 Trench	F5 Pit	Total
Eyelet	1				1
Misc. Artifacts					
Glass Bottles					
Medicine	1		1		2
Bottle Fragments	84	21	99		204
Ceramics					
Stoneware	1	2	3		6
Transferware	1		1		2
Window Glass	69	18	45		132
Button Loops		1			1
Unworked Bone	25	6	42	150	223

Identification of F5 as a magazine is extremely tentative, based only on its regular outline, considerable depth, and proximity to the defensive works, together with absence of a reasonable alternative function. It is unlikely that it was originally dug as a trash pit, since most of the fill probably postdates the Union occupation, and a postwar farmer is unlikely to have dug a pit to dispose of trash when he could more easily have made use of the open rifle pits only a few feet away. Arguing against use as a magazine is the fact that a large part of the fortified hilltop drains northeast along the impermeable sandstone through Area A, and a magazine located here could be expected to have had 2-3 in. of water in it after any significant rain, even if the opening was sheltered.

AREA B

Test trenching in this area of the site, approximately 80 ft. east of Area A, was designed to investigate a part of the interior north face of the fortifications which were in the path of the most likely route of assault by the Confederates, and which might logically have been strengthened by means of a block house or other strong points.

A total of approximately 225 sq. ft. of Area B was excavated to basal sterile subsoil, revealing three phenomena: These are F20, a pit of undetermined function; F17, a probable hearth; and F25, a possible footer trench relating to a structure of some kind. The Area B associations are discussed separately below.

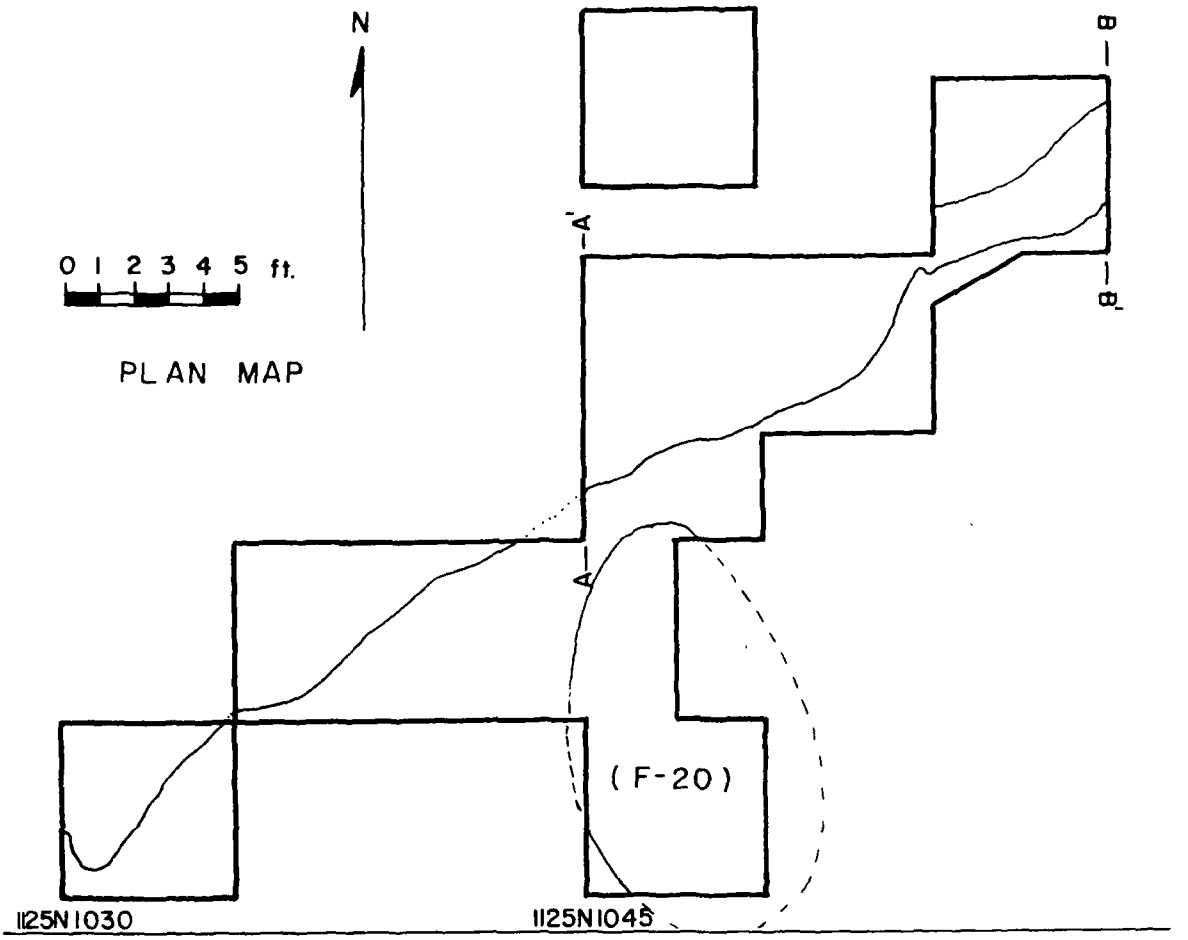
Feature 20 Pit

This pit is roughly oval in plan, about 12 ft. long (N-S) and ca. 8 to 10 ft. wide (E-W). F20 was not completely exposed in plan, and the east-west dimension is approximate, based on a projection of the exposed east rim. A section in the southwest quadrant revealed a sloping sidewall and a basin-shaped floor about 2 ft. 9 in. below the modern site surface (see Fig. 20). The pit fill is unstratified reddish silty clay containing considerable flecks and small chunks of charcoal and lumps of fired clay. No artifacts were present in the fill, although a few were found in the plow zone above the pit. The function of F20 pit could not be determined, but it was evidently filled during an early phase of the site occupation, and was not used for trash disposal. It is not clear how F20 is related to F25 which is located only ca. 1 ft. to the north.

Feature 17 Possible Hearth

This is an irregularly oval basin-shaped depression, ca. 3 ft. long (max., N-S) and 2.5 ft. wide (max., E-W), located about 15 ft. north of F20. It has a maximum depth of 4 in. and originates at the base of the plow zone, about 1 ft. below the modern site surface. The fill of F17 contained ash and charcoal flecks, but no artifacts.

Feature 25



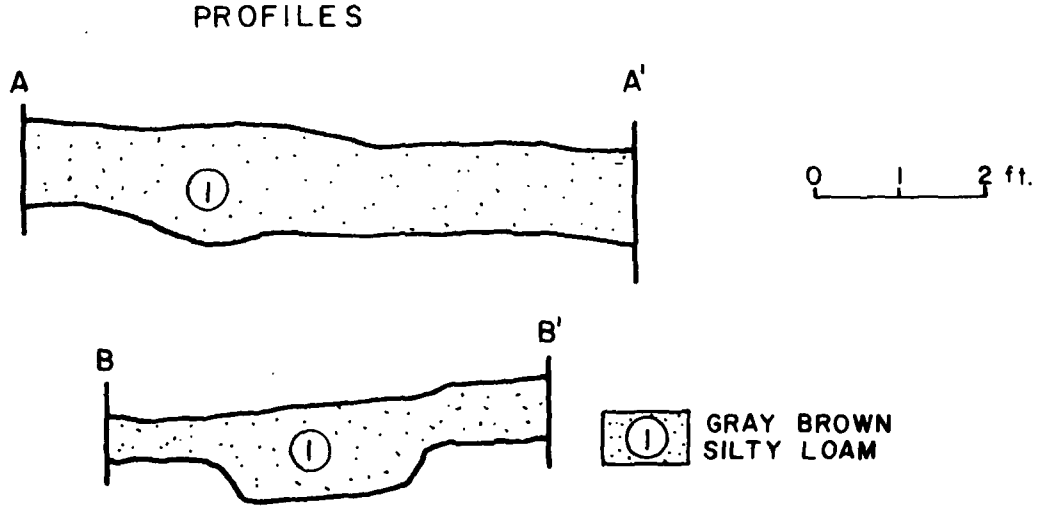


Figure 19. Feature 25.

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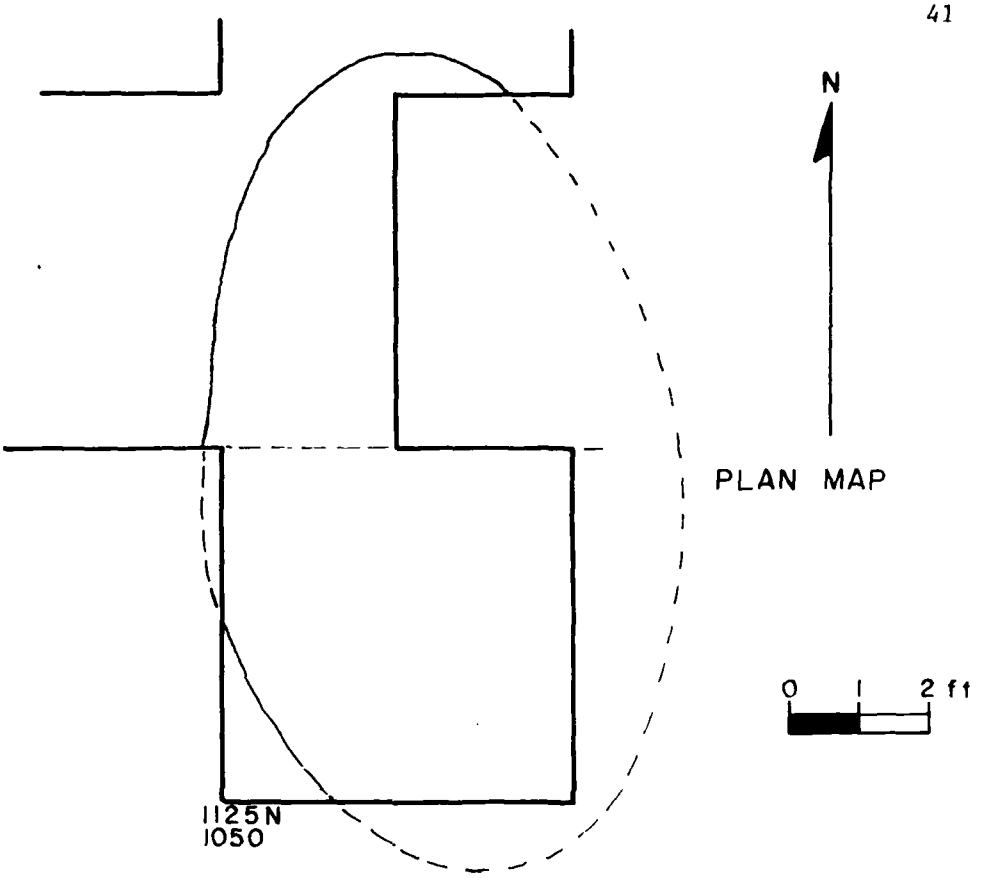
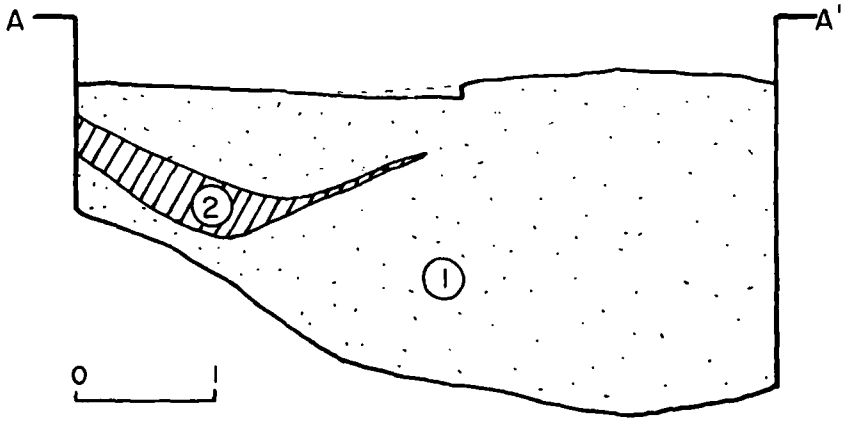
Feature 20



PROFILE



1 SILTY CLAY, MOTTLED 10 YR 5/6, 10 YR 5/8

2 FIRE REDDENED, SILTY CLAY, 5 YR 4/6

Figure 20. Feature 20 plan and profile.

DC 23. XII. 81

TABLE 2

Artifact Distribution AREA B

Type	Gen. Occ.	F20 Pit	Total
Nails			
Complete	114		114
Fragments	580	1	581
Strap Fragments	1		1
Buttons			
Flat	1		1
Hinges	2		2
Unident. Metal	7		7
Unident. Frags.	18		18
Misc. Artifacts			
Glass Bottles			
Medicine	2		2
Bottle Fragments	113		113
Window Glass	17		17
Bridle(?)	1		1
Unworked Bone	27	1	28

Feature 10

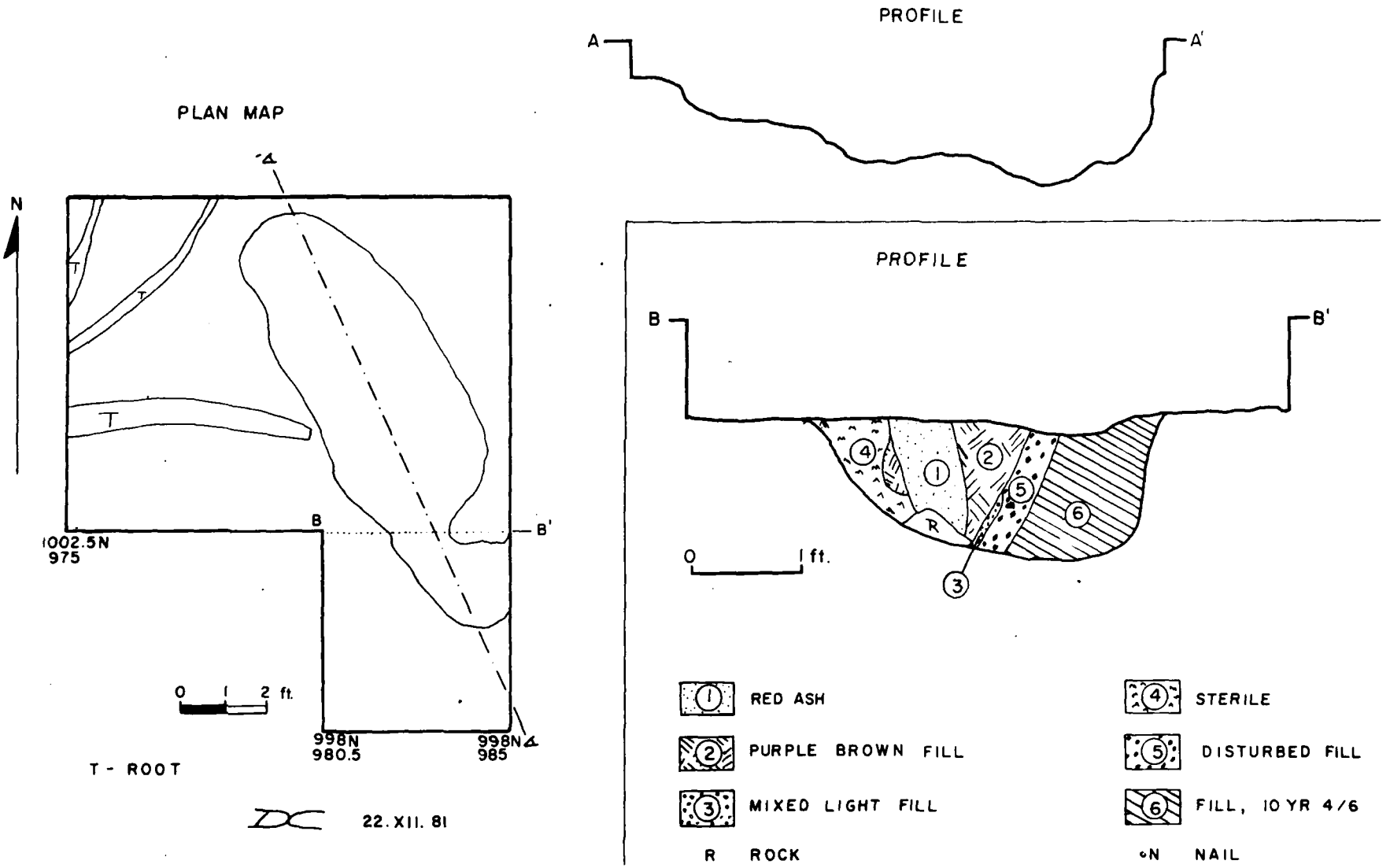


Figure 21. Feature 10 plan and profile.

Feature 6

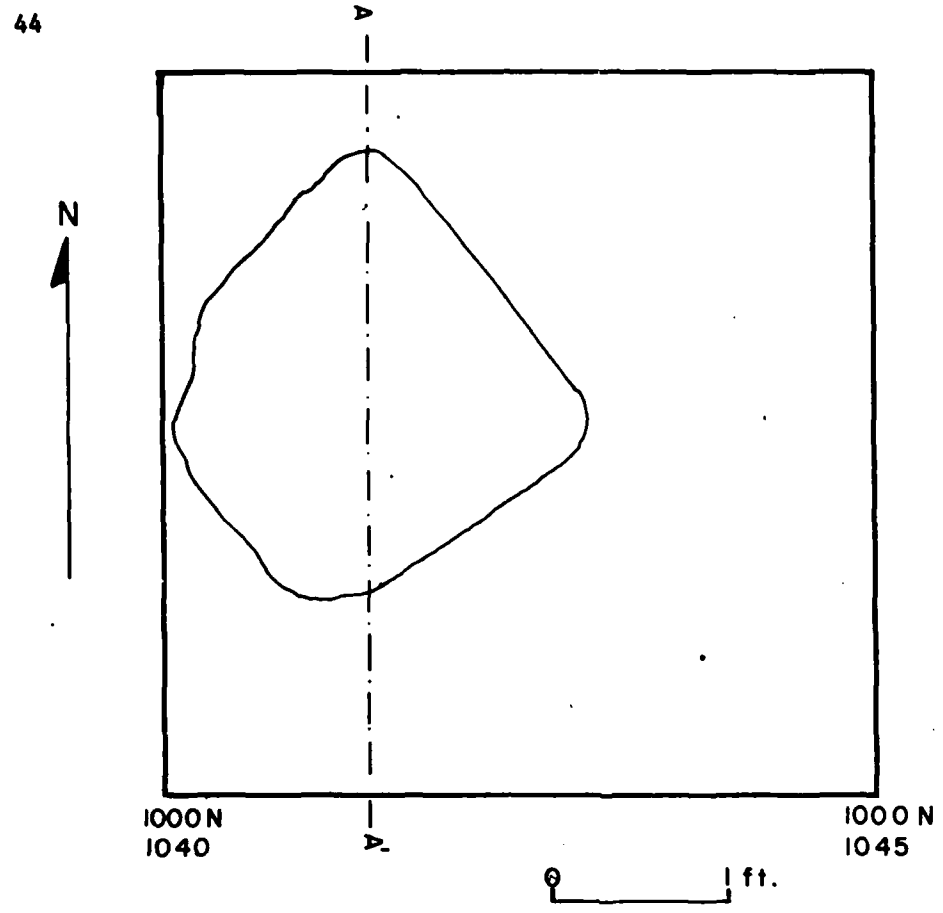


Figure 22. Feature 6 plan and profile.

DC 21.XII.81

2 X Vertical Exaggeration

Figure 23. Possible roasting pit (Feature 10) in Area C.

Figure 24. Feature 13 cooking pit or hearth in Area D.

TABLE 3

Artifact Distribution AREA C

Type	Gen. Occ.	F10 Pit	F6 Fill	Total
Nails				
Complete	17	14		31
Fragments	143	51	5	199
Wire				
Barbed	1			1
Strap Fragments	1			1
Buckles	1			1
Screws	1			1
Unident. Metal	43	1	1	45
Misc. Artifacts				
Bottle Fragments	45	6	1	52
Window Fragments	15	2		17
Ceramics				
Stoneware	2			2
Unworked Bone	3	109		112

Feature 25 Possible Structure

Located about 30 ft. south of and parallel to the north face rifle pits, F25 consists of a northeast-southwest oriented ditch and continuing ledge originating at the base of the plow zone, about 1 ft. below the modern site surface (Fig. 19). From the southwest end or "corner," F25 was traced ca. 35 ft. to the northeast. The northeast end was not located. The southwest 29 ft. of F25 consists of a ledge cut ca. 8 in. into sterile subsoil. This ledge becomes a trench, ca. 2 ft. wide and 4-6 in. deep from in the remainder of the exposed portion. The fill of the trench/ledge consisted of loose clay loam similar to the plow zone, but with a heavy concentration of artifacts, especially cut iron nails. In fact, nearly all of the Area B artifacts were found within or in close proximity to F25.

Between F25 ledge/trench and F17 were several irregular, patchy areas of fire-reddened soil with a little ash, none of them more than a foot or so in diameter. No artifacts were found in association.

F25 and the nearby patches of fire-reddened subsoil are tentatively interpreted as the remains of a structure which may have burned in situ. The ledge and trench appear to have been constructed to seat a wooden beam or log which served as a wall footer. If there was indeed a structure here, it would have been in excess of 36 ft. long. The width could not be determined, but is estimated to have been between 10 and 15 ft., based on the maximum northward extent of the patches of fire-reddened subsoil. Support for the interpretation of F25 as a structure comes from Area D. In this area, about 140 ft. to the east, F16 is more firmly identified as the remains of a wooden structure more than 25 ft. long and 10 ft. wide, with the long axis oriented almost identically to F25 (both are oriented ca. 41° east of magnetic north). In addition, both are similarly situated just within the north face rifle pits. This is perhaps the most logical location for "blockhouses". If F16 and F25 were blockhouses, there is no way to tell whether they were burned during the Jones-Imboden Raid in May 1863 when the Bulltown fortifications are reported to have been burned or destroyed (U.S. War Department 25:103), or in May of the following year when Captains Spriggs and Chewings (C.S.A.) briefly occupied Bulltown and burned the fortifications (U.S. War Department 37:68).

AREA C

Area C comprises a series of test units laid out from the highest point on the fortified hilltop, along line 1000N toward the east face rifle pits, and F24, a 10 ft. (E-W) by 3 ft. (N-S) test trench (see Fig. 2). Since this area would have had a good view of the surrounding terrain it was presumed to have been a likely place to situate a blockhouse/observation post. Its more or less central location within the encircling rifle pits and its good drainage also make it a logical location for a magazine. No structural remains were identified, however, and the only archeological phenomena encountered were a small pit (F6) and a possible roasting pit (F10). These are discussed separately below.

F24 excavation unit was designed to section a shallow depression which, according to local tradition as reported by Mr. Gilbert McHenry, was the site of the magazine. Nothing whatever was revealed by F24.

Feature 6 Trash Pit

This is a roughly square pit (Fig. 22), ca. 3 ft. on a side, with sloping walls, a basin-shaped bottom, and a total depth (max.) of 7 in. from the base of the plow zone. F6 fill was similar in color and texture to the overlying plow zone. The pit walls and floor showed no evidence of discoloration, and no ash or charcoal was present in the fill, although a few small chunks of charcoal were found just outside the edge of the pit. Contents of the pit included a green bottle neck, 2 Minie balls and a few nails. The most probable interpretation of F6 is a small trash pit.

Feature 10 Possible Roasting Pit

This is an irregular "L" shaped pit (Fig. 23) about 10 ft. 4 in. long (NW-SE) and 3 ft. 10 in. wide (NE-SW), with vertical to sloping walls and an irregular floor. A (presumably) small part of the northwest end was not excavated. It originates at the base of the plow zone. Maximum depth is 2 ft. 6 in. The lower half of the pit fill consisted of mixed and redeposited sterile soil. The upper half of the fill contained chunks of fire-reddened earth, considerable ash and charcoal, small stones and many small fragments of burned bone. Only the upper portions of the pit walls were fire-reddened. Artifacts were confined to the upper fill, and included nails, and shards of bottle glass. F10 appears to have been a roasting pit which was later used as a trash repository.

AREA D

This area comprises the northwest salient of the main defensive works. There were no surface indications of the rifle pits here and it was hypothesized that the main entrance to the works may have been via the long relatively flat bench northwest of the fortification, through a gap in the rifle pits. Accordingly, it was suspected that the Union engineers would probably have placed a blockhouse or other strong point here in order to protect the entrance and enfilade the bench which would have been a logical route for any assault on the fort.

As was usually the case, the working hypothesis was not supported by excavation. Although a probable structure (F16) was identified, the rifle pits proved to be more continuous than originally thought and were shown to extend around the northwest salient onto the north face of the fort (see The Rifle Pits, above).

In addition to the main Area D test which uncovered F16 possible structure and a probable cooking pit (F13) which are discussed separately below, several other test units were excavated in this general area.

These included a series of three 5 x 5 ft. squares at 50 ft. intervals along the axis of the bench northwest of the fort proper, a 10 x 5 ft. exploratory trench 50 ft. east of the main area, and a set of three 5 x 5 ft. squares 50 ft. to the southeast of the main area (Fig. 2). All of these proved totally unproductive and will not be discussed further.

Feature 16 Probable Structure

This is the most convincing evidence of structural remains encountered during the course of the excavations. It consists of a low mound of clay rubble and small stones at least 25 ft. long and 10 ft. wide, located parallel to and immediately adjacent to the interior wall of the north face rifle pits (Fig. 25). Like F25 in Area B, the long axis is oriented about 41° east of magnetic north.

The southwest 10 ft. or so of F16 were particularly well defined by bright orange fired clay chunks, abundant ash and chunks of charcoal together with a few sections of carbonized timbers, less than 2 ft. long. The rest of the "structure" to the northeast was less definite, since the clay rubble here was not burned, and was badly intruded by tree roots. The northeast end was not excavated. The maximum height of the rubble mound was ca. 8 in., in the southwest portions. A section of the rubble did not reveal any trace of a floor.

F16 is interpreted as a wooden structure, probably built of small logs chinked with stones and clay, which was partially destroyed by conflagration. As with F25, it is not possible to determine when the fire occurred. May 1863 (The Jones-Imboden Raid, U.S. War Department 25:103) and May 1864 (The Spriggs and Chewings Raid, U.S. War Department 37:68) are both possibilities.

The proximity of F16 to the north face rifle pits argues that it was part of the fortifications, rather than an auxiliary structure like a commissary or stable. A plausible speculation is that this structure was a blockhouse with its north wall pierced with loopholes for musket fire.

Feature 13 Cooking Pit

This is a roughly circular basin-shaped pit located only ca. 1 ft. south of F16 (Fig. 25). It is about 3 ft. in diameter and 8 in. deep, with sloping walls. The bottom of the pit was fire-reddened, and the fill included ash, charcoal and a few small (2 to 3 in. diameter) rocks. F25 was dug into sterile subsoil, and is probably a cooking pit associated with the use of F16 structure.

Figure 25. Feature 16 possible structure in Area D. View is southeast. Excavated riflepit section in foreground. Trench in center sections short axis of F16.

Figure 26. Excavated riflepits adjacent (northwest) of F16 possible structure.

Feature 13

PLAN MAP

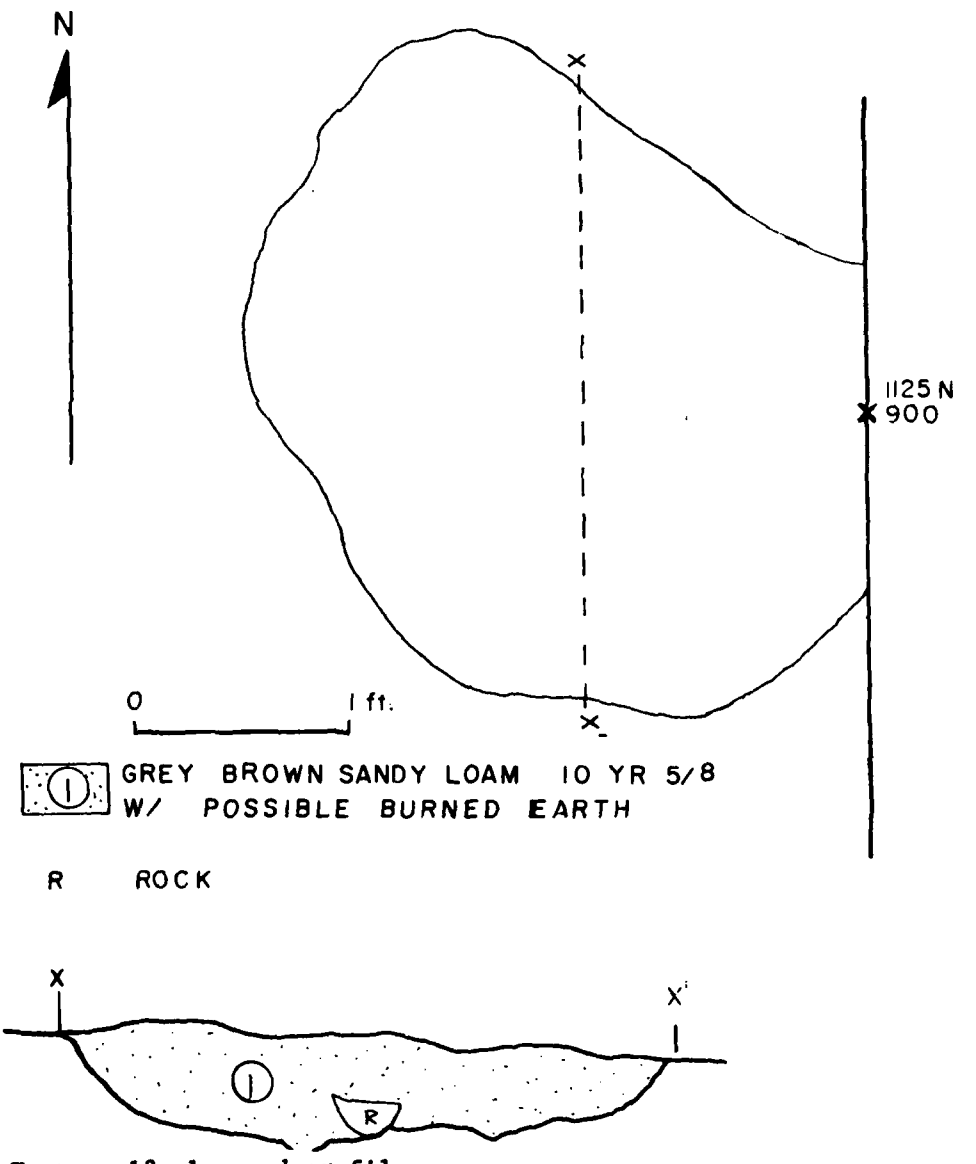


Figure 27. Feature 13 plan and profile.

DC 22. XII. 81

Feature Location Map

For Features 13, 16, & 21

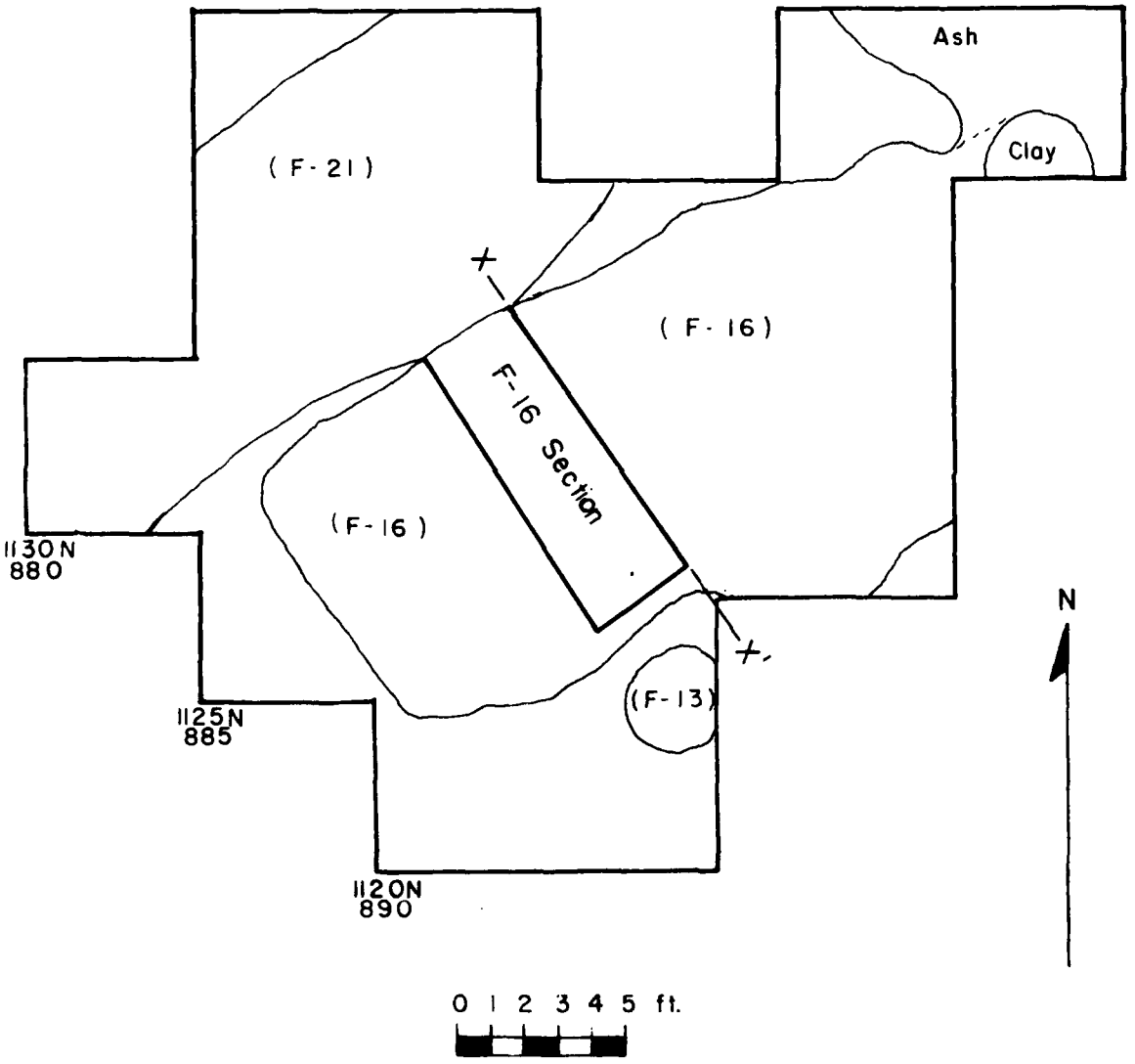


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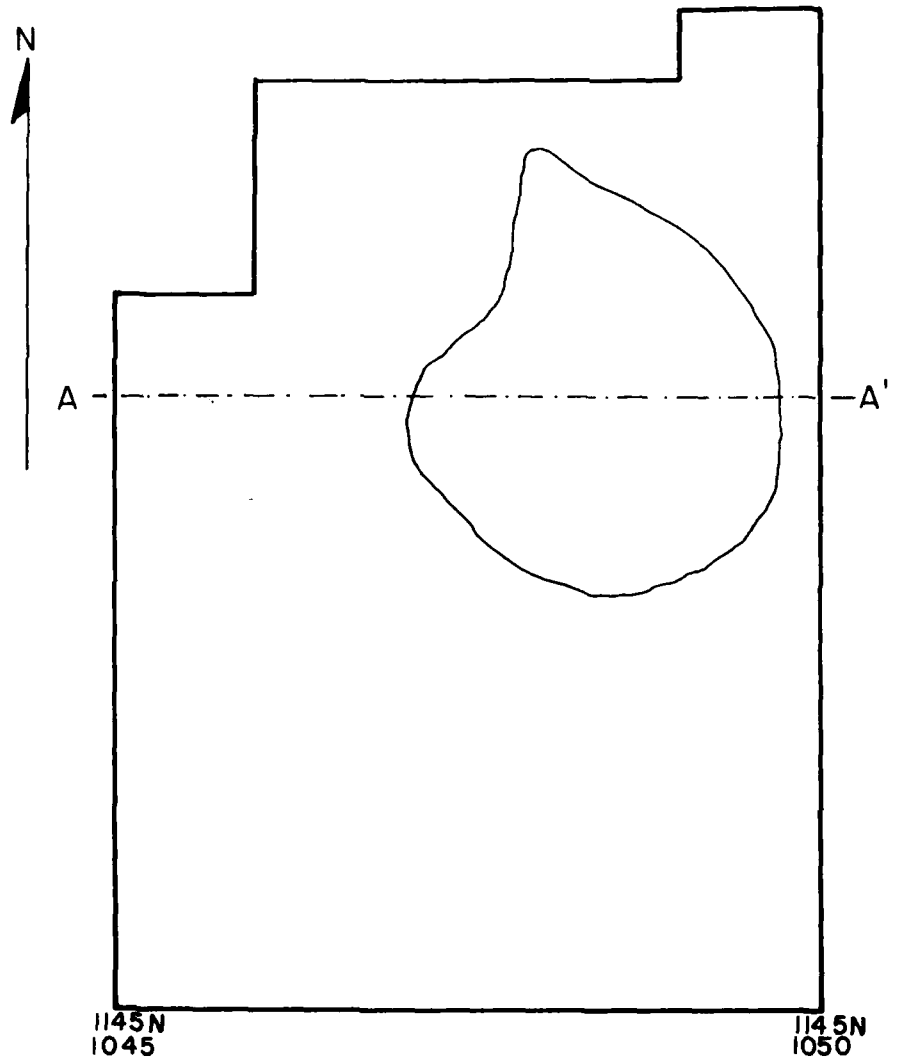
Figure 28. Feature 16 plan map.

Feature 17

PLAN MAP



PROFILE

Figure 29. Feature 17 plan and profile.

0 1 ft.

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TABLE 4

Artifact Distribution F18 Rifle Pit Section

Type	Gen. Occ.	Total
Nails		
Complete	9	9
Fragments	4	4
Wire		
Fencing	2	2
Barbed	7	7
Staples (Fencing)	4	4
Hooks	1	1
Bottle Fragments	7	7
Window Glass	2	2

TABLE 5

Artifact Distribution AREA D

Type	Gen. Occ.	F16 Fill	F13 Fill	F14 Fill	F21 Fill	Total
Nails						
Complete	181	98		3	26	308
Fragments	558	347	6	12	191	1114
Wire						
Fencing	6	11			1	18
Barbed	6	3			3	12
Staples	17	17			2	36
Strap Fragments					1	1
Buttons						
Loop		1				1
Flat	5	1				6
Brass Loop	1					1
"Plummets"	1					1
Metal Labels(?)	3					3
Handles	2					2
Rings	1					1
Buckles	1					1
Metal Tag		1				1
Hooks	1					1
Cannister	1					1
Pendant	1					1
Spoons	1					1
Unident. Metal	22	7	2		1	32
Unident. Fragments	6	7			1	14

Table 5 (continued)

Type	Gen. Occ.	F16 Fill	F13 Fill	F14 Fill	F21 Fill	Total
Misc. Artifacts						
Glass						
Spirit Bottles	1					1
Medicine	2	1				3
Bottle Fragments	206	99			6	311
Window Fragments	6					6
Ceramics						
Stoneware	3					3
Chert Biface		1				1
Unworked Bone	38	12				50

THE LOWER DEFENSE WORKS

About 800 ft. north of the main Union entrenchments and ca. 240 ft. east of the present location of St. Michael's Church (Fig. 3) are two shallow depressions (Fig. 30) which are the remains of the outlying rifle pits which were occupied by pickets and overrun in the first phase of the Confederate assault in the predawn hours of October 13, 1863. These auxiliary works were presumably intended to give early warning of an attack from the north or northeast, and to guard against the possibility of a Confederate force crossing the Little Kanawha downstream from the Union position then moving up the steep draw northwest of the main fortifications to attack from the northwest.

The lower works form a double line facing north-northwest, between the 900 ft. and 920 ft. contour lines. The lower unit is about 125 ft. long and 20 ft. wide (max.). The upper unit is about 90 ft. long, 20 ft. wide (max.), and located about 5 ft. above the lower unit.

A section of the lower unit (F19, Figs. 31, 32) revealed that the depth of the rifle pit was only about 2 ft. (max.) excluding a "sump" toward the rear, which was about 6 in. deep. This sump was probably to keep rain water draining down the hillside out of the firing positions. The floor of the firing positions is slightly depressed toward the sump, presumably also to aid in drainage. The exterior face of the rifle pit, rather than being nearly vertical, is strongly sloped suggesting that the defenders would have lain in a nearly prone position to fire over the crest. There was no evidence remaining of a parapet or breastwork. The rifle pit fill consisted mainly of laminated silty clay and clay loam, probably the result of slump and erosion from the hillside above. No artifacts were found in association with the lower works.

THE CONFEDERATE WORKS

The positions occupied by the southern wing of the Confederate force during the Battle of Bulltown during the day of October 13, 1863 are located about 1000 ft. southwest of the main Union fortifications across the Little Kanawha River (Fig. 1). They are scattered rather randomly on the side of a hill along the 900 ft. contour line or about 100 ft. above the Little Kanawha floodplain. The hillside is now densely overgrown with blackberry bushes and 4-8 in. diameter tulip trees (Fig. 34). The slope has very little soil over sandstone chunks and sandstone bedrock.

The Confederate positions consist of 9 shallow depressions, each 4 to 5 ft. wide and 10 to 20 ft. long, with the long axis perpendicular to the slope of the hill (Fig. 33). A section of one depression (Fig. 35) showed it to be a simple rifle pit, constructed by excavating the loose rock and subsoil to a depth of about 18 in. and piling the spoil in front to serve as a parapet.

Figure 30. Lower defensive works north of main fortifications.

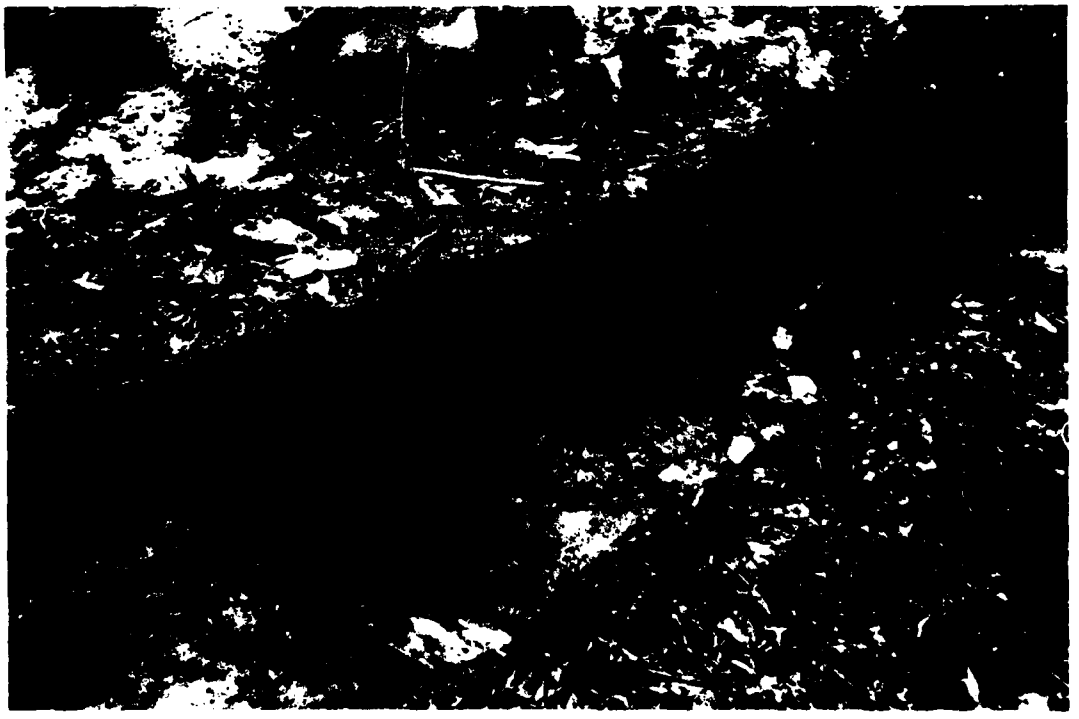
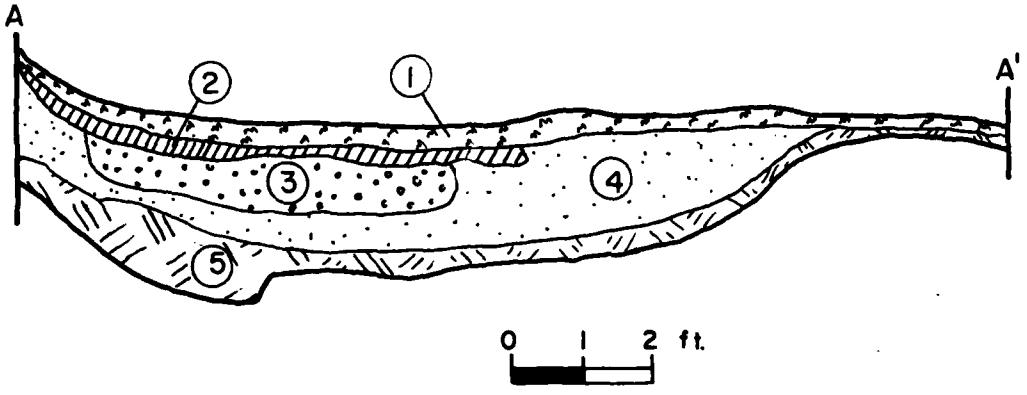


Figure 31. Feature 19 trench sectioning a portion of the lower defensive works.

Feature 19

PROFILE



1 HUMUS

2 CLAY LOAM

3 SAND & CHARCOAL

4 SILTY CLAY

5 CLAY LOAM

PLAN MAP

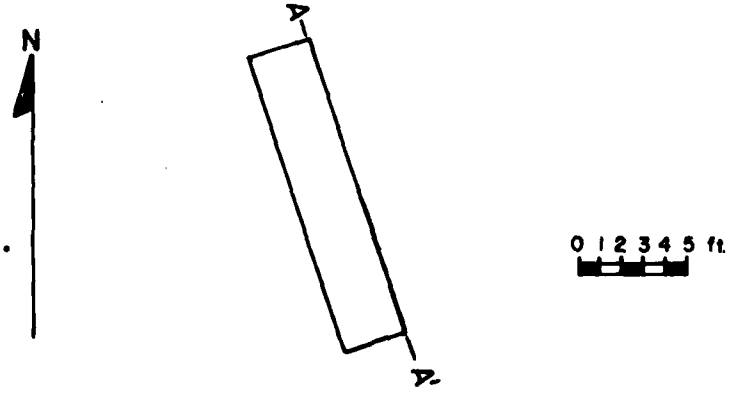
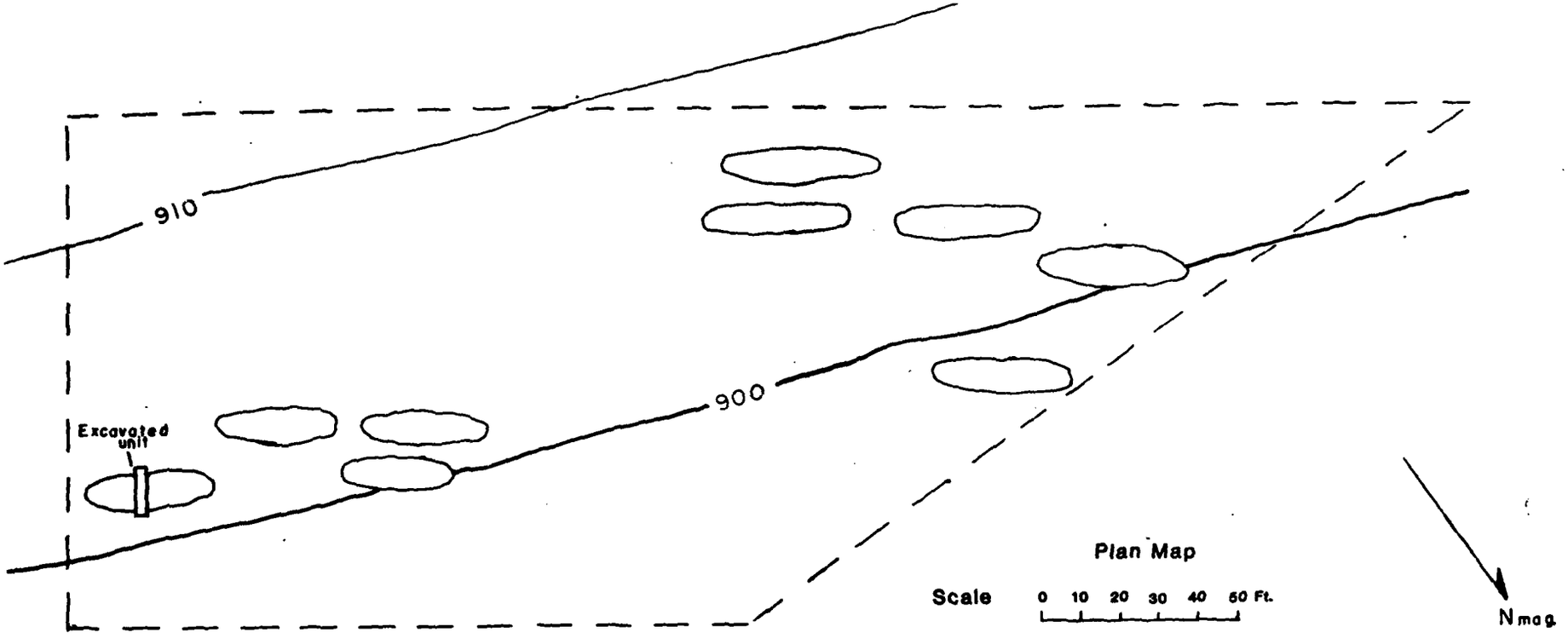


Figure 32. Feature 19 profile.



CONFEDERATE EARTHWORKS
(West Bank of the Little Kanawha River)

Figure 33. Confederate earthworks, plan map.

Figure 34. Brush cleared from one of the Confederate riflepits across Little Kanawha River from Union fortifications.

Figure 35. Section of one of the Confederate riflepits.

The Confederate rifle pits would have offered rather poor cover, since they were shallow and were located about 50 ft. below the Union entrenchments.

No artifacts were found in association with the Confederate rifle pits.

ARTIFACTS

Metal

Of the 5245 artifacts recovered from the excavations, well over 70 percent are complete and fragmentary cut iron nails in lengths of 1 in. to 4 in. The rest of the cultural material consists of a rather unremarkable collection of spent ammunition, fragments of military hardware, personal items, and domestic artifacts such as bottle glass. One fragmentary biface made of local gray chert is the only item of non-Euro-American manufacture recovered. There is no striking correspondence of particular artifact categories with particular areas of the site, apart from the fact that the bulk of the clear window glass was found in Area A, in the northeast corner of the site. It is evident from the density of artifacts of all types that the area of north face of the main Union fortifications was more heavily utilized than the other areas within the encircling rifle pits. Artifacts are tabulated by area in Tables 1-6.

In addition to artifacts, 413 specimens of burned and unburned unworked bone were recovered. With few exceptions these were too fragmentary for identification. The paucity of food remains and domestic artifacts, apart from spirit bottle fragments, is rather difficult to explain. It may be that cooking and most other domestic activities took place outside the fortifications proper, in a separate barracks or garrison area which was not discovered. Alternatively, the fort area was rather carefully policed by the troops and trash and garbage were disposed of outside the fortifications.

The relatively small number of spent rifle and pistol balls (49 specimens) can probably be explained as a function of intensive collecting by generations of local farmers and more recently by relic-hunters. At any rate, many more examples of ammunition are present in private collections than were found during the excavations.

Nails

A total of 691 whole cut nails in sizes from 1 in. to 4 in. and 3079 fragments were recorded, with most of the nails being found in Areas A and D. Some examples are displayed in Fig. 36B, C, D. Fig. 36B resembles a hook because it has been bent. If flattened it would measure approximately 2 in. long. It has a flat head and resembles a shoeing nail. Figs. 36C and D are unusual because of slanting heads instead of the usual flat head. They measure 3 in. and 2-1/2 in. long.

Wire

Fragments of both fencing and barbed wire were found in all areas but Area B. A total of 57 fencing and 27 barbed wire fragments were found. All are probably modern.

Staples

Forty-seven fencing staples were recovered (Figs. 36L, M), most in Area D. They were used for attaching barbed wire to wooden posts and seem to have been made in many different sizes. The smaller ones, measuring 1-1/2 in. long, were more common. The largest example (Fig. 36L) was 2 in. long and 1 in. across the top. All are modern.

Strap Fragments

Twelve strap fragments were found. One specimen (Fig. 37D) is curved with a hole at the end, possibly for a screw. It appears to be made of brass. It is 1-3/4 in. long. Another example (Fig. 43C) is 2-3/4 in. long with the top slightly wider than the stem. It is also slightly curved. A curved metal strip (Fig. 360) was found which measures 4-1/4 in. long.

Buttons

A total of 26 buttons was found, most made of pewter or brass.

Loop Buttons

There were four complete loop buttons found. These are composite buttons made in three pieces: a rounded front crimped onto a backing plate, and a loop attachment. One (Fig. 38A) has a spread eagle with a shield in the center. This is the traditional symbol of the U.S. and was probably worn on a military uniform. This button is 3/4 in. in diameter. The words "Waterbury Button Co." appear on the back along with the loop attachment. There is a Waterbury Button Co. in Connecticut which was established in 1790 and specialized in pewter buttons until it switched to brass in 1820 (Epstein 1968:40). A smaller version with the same design (Fig. 38B) is 9/16 in. in diameter and the loop at the back is broken off leaving only two small stems. There is no writing visible on this button. Another example of a loop button (Fig. 38C) has no design and a smooth rounded surface. It is 1/2 in. in diameter. Designs were not confined to the eagle. One button (Fig. 38D) displays a sort of whirling pattern, although it is badly corroded and cannot be completely made out. It is 1/2 in. in diameter and also has a rounded top.

Flat Buttons

Of the 21 flat buttons found, most were made of some kind of metal and were so corroded that the method of attachment could not be determined. They range from 1/2 in. (Fig. 38) to 5/8 in. (Figs. 38E, F, H)

Figure 36. A-B iron hooks; C-D unusual cut iron nails; E fragment of unworked (food) bone; F-G screws; H iron strap hinge; I brass hinge; J pintle; K eyelet; L large iron staple; M iron fencing staples (modern); N-O iron strapping.

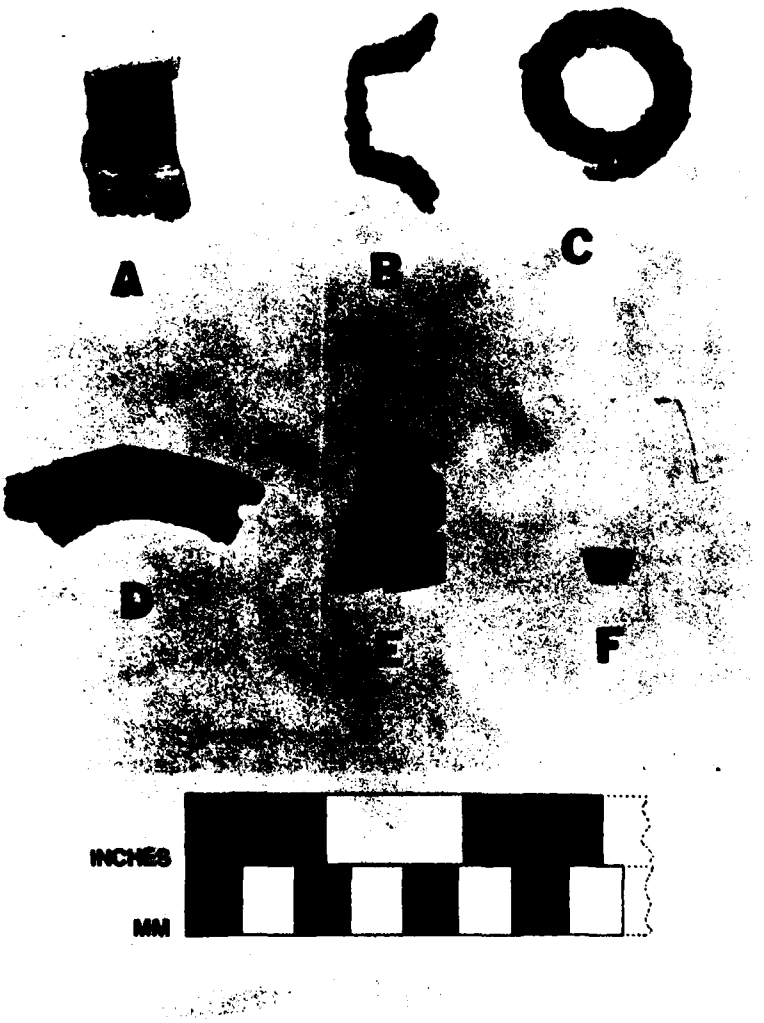


Figure 37. Miscellaneous artifacts. A-B tin handles from dish or bowl; C iron ring; D perforated brass strap; E chert biface fragment; F brass "crimp", possibly from a percussion cap.

in diameter. Two (Figs. 38E, F) are slightly dished at the center. Of the remaining metal buttons, only one (Fig. 38I) displays four holes for attachment and a rounded rim. The remaining metal example (Fig. 38J) is 7/16 in. in diameter and has two flat heads with a stem in the center. This type of button was probably attached with a hook (Fig. 38G).

The remaining buttons were made of either bone, shell, ivory, or a black glass called "jet" (Epstein 1968:48). They are all 3/4 in. in diameter (Figs. 38K, L) and there is a slight indentation where the four button holes appear in the center. They were probably the standard button used on all clothing. Langelier (1978:21) shows a picture of a soldier using the black buttons for suspenders and the white for the shirt.

Rivets

Six examples (Fig. 38D) were recovered. They are metal pins, flat at one end, with a stem at the other end, used for attachment. All are 1/2" diameter and 1/2 in. thick.

Epaulet Tips

One example of an epaulet tip was found (Fig. 39C). This is a piece of brass, closed at one end, with a nob at the top. The other end is open for attachment of some kind of tassel. The example shown is 1-1/4 in. long.

Brass Loop

One brass loop (Fig. 39E) was recovered. It measures 1-1/2 in. diameter and could have been part of a belt fastener or perhaps a rifle sling

Finials

Two brass "finials" (Fig. 39F) appear to have been tips for sword or bayonet scabbards. They are tapered with a flat base and measure 1 in. long.

Metal Labels

Fragments of possible metal labels (Fig. 39H, I) were recovered. They are made of brass and are so fragile that they break at the slightest touch. Although no writing is visible, Fig. 39H has a slight indentation on the back side which may have contained writing of some kind.

Handles

Two brass pieces (Fig. 37A, B) appear to be handles of some kind. They were made of one piece of metal, overlapped and pounded into shape. The tops are 3/4 in. and 1/2 in. on the side.

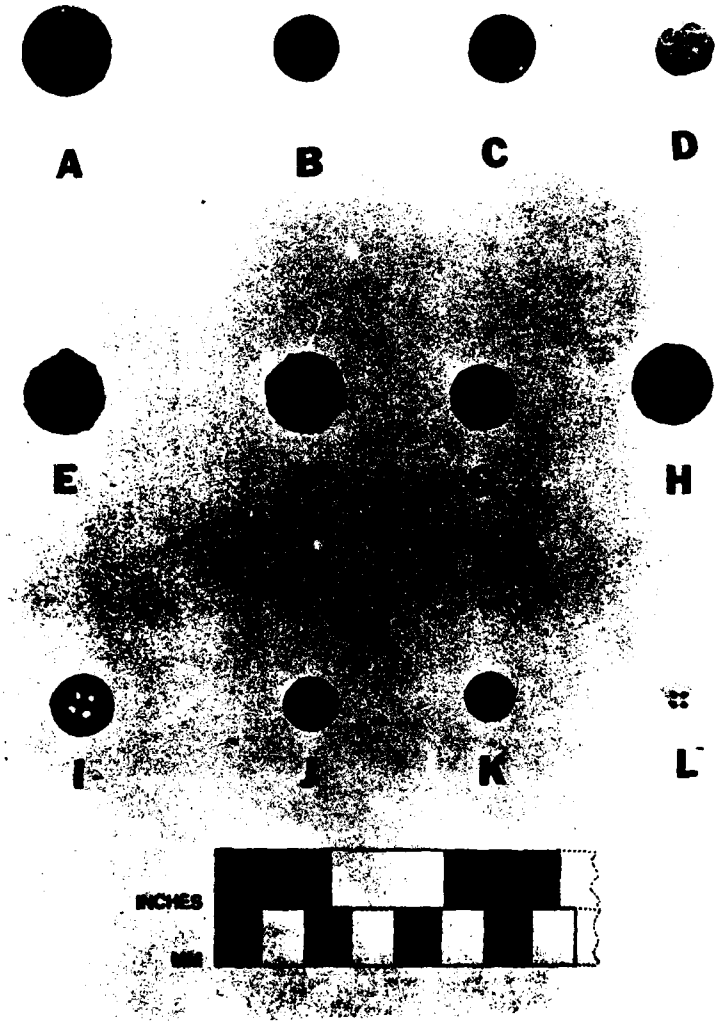


Figure 38. Buttons. A-D loop buttons; E-L flat buttons.

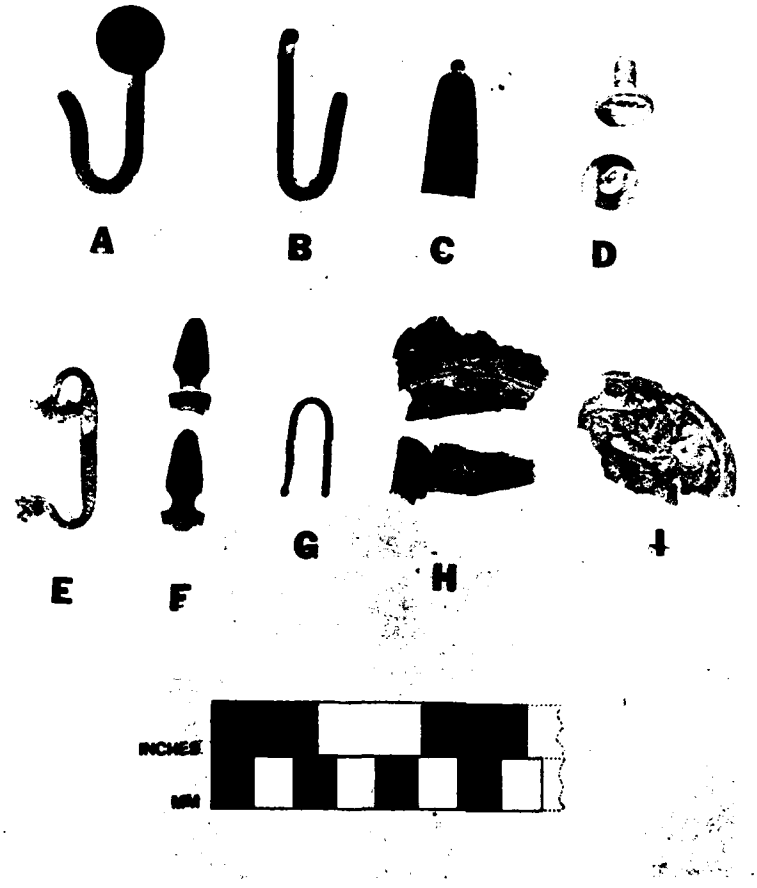


Figure 39. Miscellaneous metal artifacts. A-B regulation knapsack hooks; C epaulet tip; D pewter rivets; E webbing guide or suspender hook; F finials (scabbard tips?); G unknown; H-I lead seals.

Metal Rings

A badly corroded iron ring (Fig. 37C) 1/4 in. thick was recovered. A smaller example (Fig. 40H) may have been a tent or ground cloth garment. It is made of brass and is 1/2 in. diameter. It is flat with an overlap in the back.

Brass Crimp

One brass crimp was found (Fig. 37F). It is flattened and is 1/4 in. wide and long. It may be an example of a rifle percussion cap.

Buckles

Five small buckles (Figs. 40A, B, C) were recovered. The largest measures 1 in. by 3/4 in. The best preserved example (Fig. 40A) is intact, although heavily corroded. The smallest example (Fig. 40B) is 3/4 in. high and 1/2 in. across. These buckles were used not only for belts but also on the uniform cap and straps for the various military harnesses. Since these buckles are so small it is most likely they were used for harnesses rather than as belt buckles.

Watchpart(?)

An unusual item is a metal piece (Fig. 40E) shaped like a watchpart. It is quite thin and measures 1-1/4 in. across. It also has holes which could possibly be for screws.

Metal Tag

One brass tag was recovered (Fig. 40G) which displays faint undecipherable lettering and an eagle design. There are holes at the top and bottom and the top hole has one link of brass chain (or loop) attached. It measures 1/2 in. in diameter.

Hooks

Three metal hooks were recovered (Figs. 36A, 39A, B). The largest is made of iron (Fig. 36A) and measures 3 in. long with a hole at the top measuring 1/2 in. in diameter. The function was not determined. The other two (Fig. 39A, B) are regulation knapsack hooks. They are made of brass and one has a rounded end resembling a button.

Pintle

One iron pintle (Fig. 36J), which measures 2 in. high with a 1-1/2 in. hook, was recovered. It was used with a strap hinge.

Screws

Only two pointed iron wood screws (Fig. 36F, G) were found. They measure 2-1/4 in. long and 1-1/4 in. long.

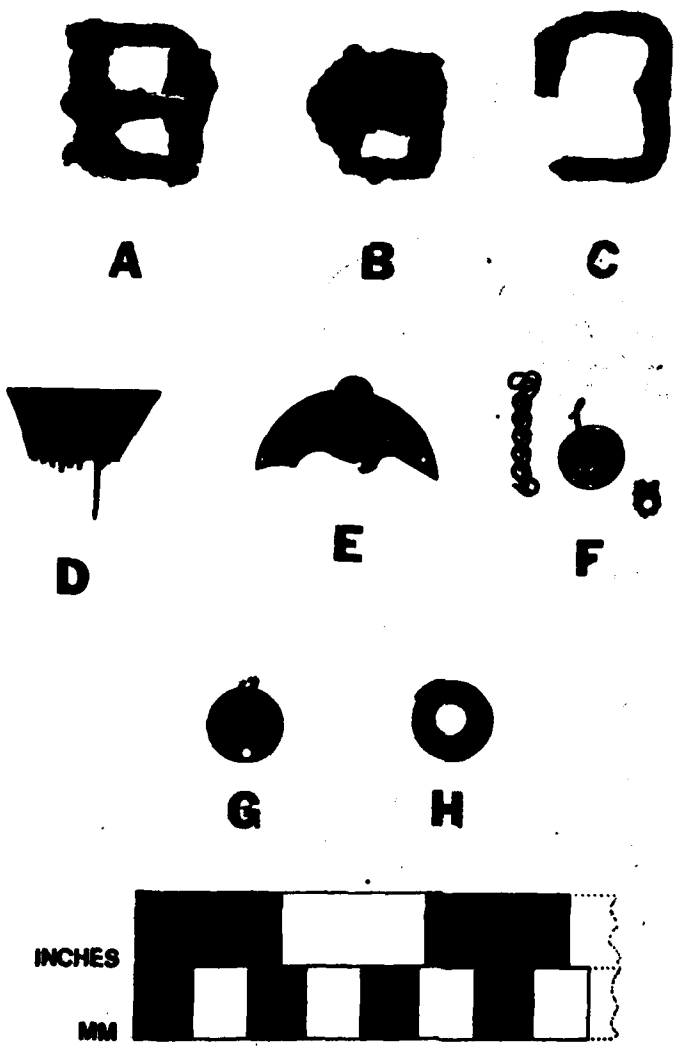


Figure 40. A-C iron buckles; D comb fragment; E brass watch part; F ruby glass pendant with fragments of pewter chain; G perforated brass disc with chain loop; H ground cloth or tent grommet.

Hinges

Three hinges (Fig. 36H, I, N) were recovered. One example (Fig. 36H) is a large piece of metal measuring 3 in. long and has a curved opening at the top measuring 1 in. A second well preserved example (Fig. 36I) still has the nails in place. It measures 1-1/2 in. high. The third specimen (Fig. 36N) is very corroded and bent. It also has nail or screw heads in it, and measures 1-3/4 in. in length.

Metal Cans

Fragments of two metal cans were recovered (Fig. 41B, C, D). The best preserved example (Fig. 41B) has the base intact and parts of the sides remain. The base measures 1-3/4 in. as does the base illustrated in Fig. 41C. The cans appear to have been made in two pieces with the base crimped onto the sides and soldered.

Metal Cannister

Among the larger artifacts recovered is the remains of a metal cannister (Fig. 41A). The base measures 3-1/2 in. across. It has been flattened and the top is missing.

Eyelet

A small iron eyelet was recovered (Fig. 36K). It measures 1 in. long and about 3/4 in. diameter.

Pail

One of the most easily identified artifacts (Fig. 45) is the base of an iron pail or bucket. It is in several pieces and highly corroded. When pieces are fitted closely together the base measures approximately 9 in. in diameter. Along with the base fragments, several smaller pieces of metal were found. The base displays several rows of rings.

Medallion

One extremely delicate fragment (Fig. 42) resembles a medal. It measures 1-1/2 in. in diameter and has raised lettering around the outer edge. There are decorative symbols in the center and along the edge. It may be a medallion from a wine or brandy bottle.

Pendant

Fig. 40F is a pendant made of ruby glass. Parts of the chain were also recovered.

Spoons

Two spoons were recovered. The largest is 5 in. long, made of iron with a wood handle. As can be seen in Fig. 43A, it is heavily corroded. The other (Fig. 43B) is metal and measures 4 in. in length. It has an extremely small cup.

Figure 41. Cannister and tin cans.

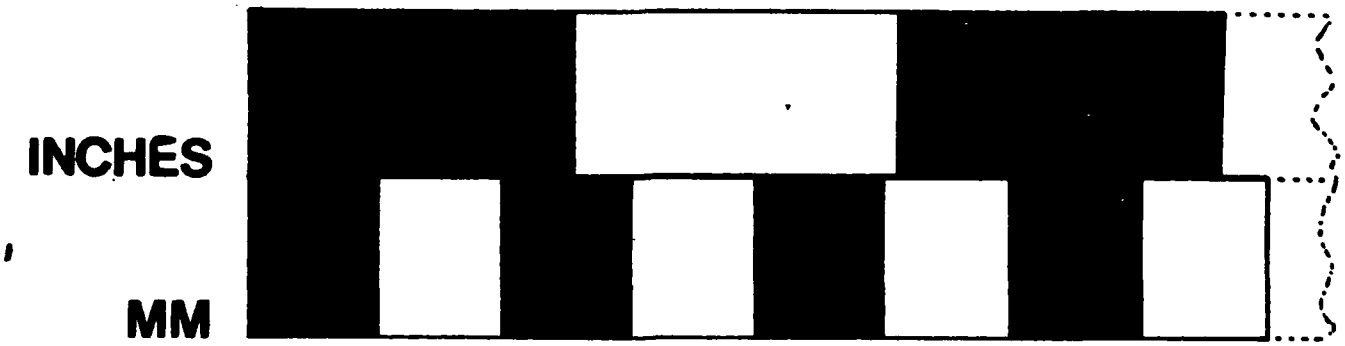


Figure 42. Lead or pewter medallion, possibly from a wine or brandy bottle. Lettering reads "BAZIN PHILADA".

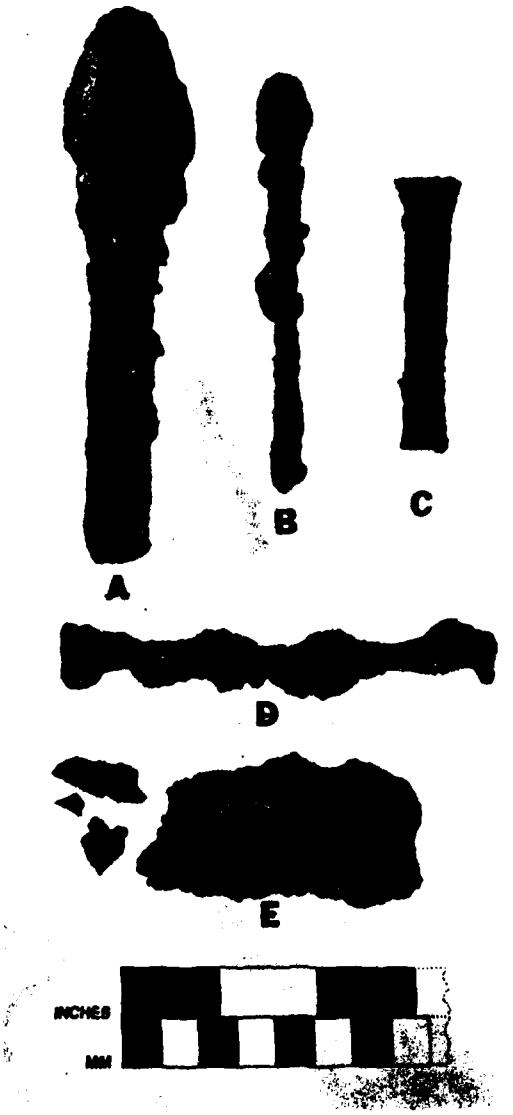


Figure 43. Miscellaneous iron artifacts.
A teaspoon with wooden handle; B spoon;
C unidentified; D bridle bit (?); E unidentified.

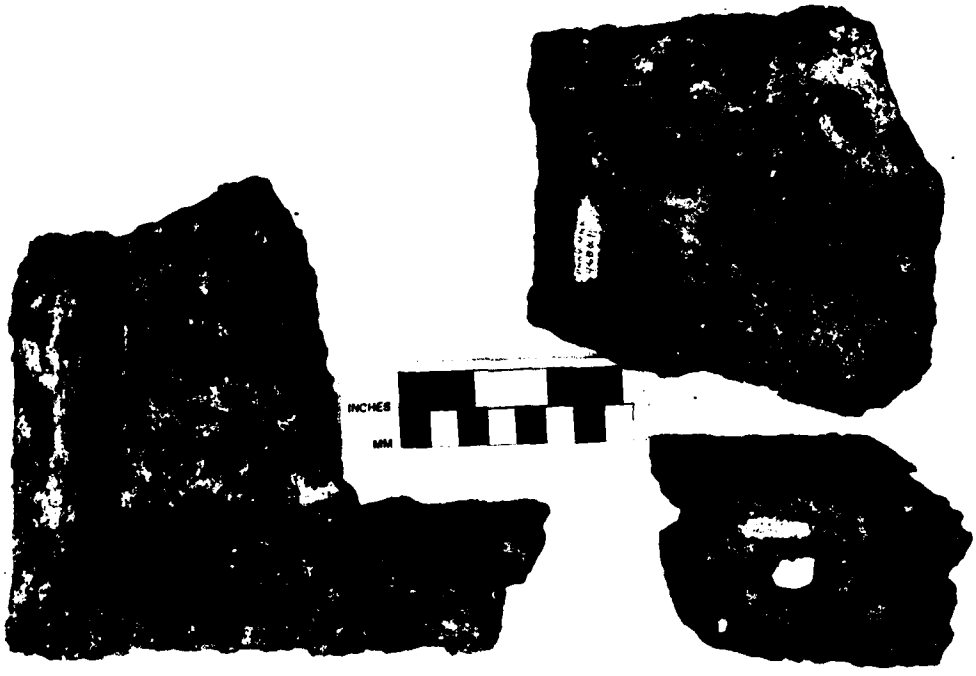


Figure 44. Miscellaneous iron artifacts. Left and upper right are fragments of an iron box recovered by amateurs from the unexcavated well. Lower right is an unidentified fragment of iron found on the surface.

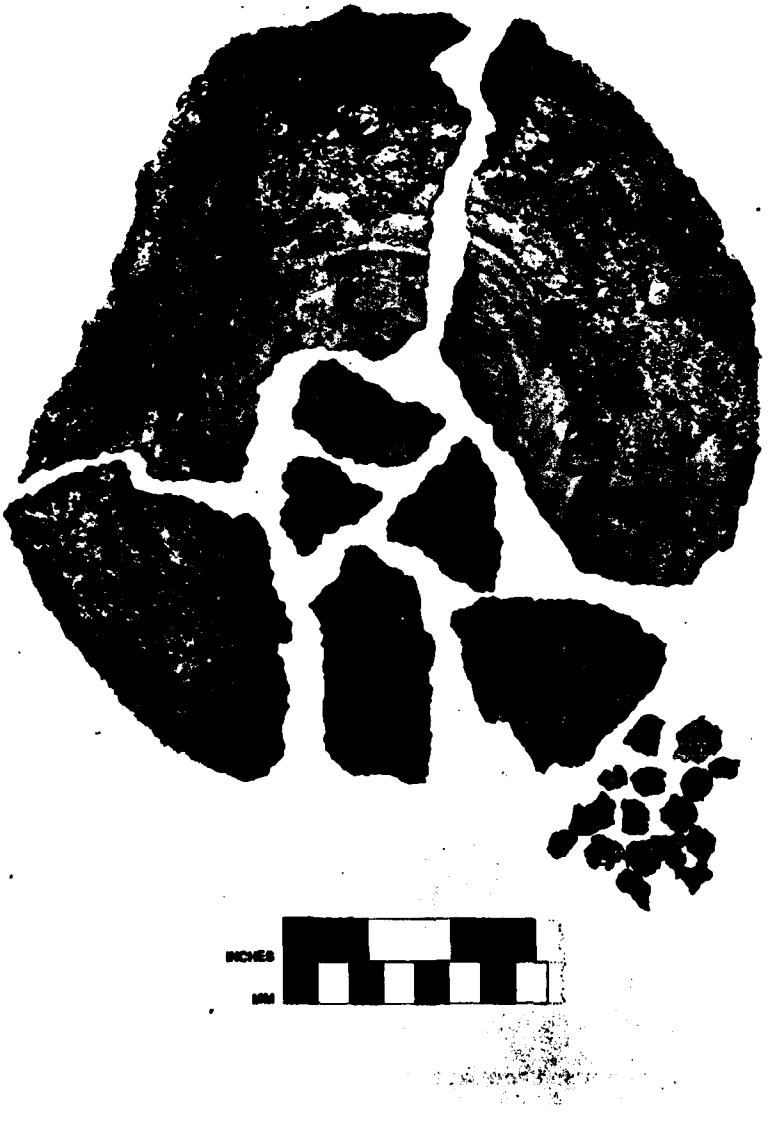


Figure 45. Fragments of galvanized iron pail or bucket.

Bridle(?)

A long metal piece (Fig. 43D) with two flat ends was recovered, that could possibly be part of a bridle. It measures 4-1/4 in. long.

Unidentified Metal

Two pieces from an extremely heavy iron "box" (Fig. 44) were recovered by amateurs from the well. The sides are 1/2 in. thick. One piece has a partial base and two sides. The sides measure 4 in. and 6-1/4 in. long and the partial base measures 4 in. from the inside. The other piece is probably part of the base. The side of the box measures 2-1/2 in. high and the sides are slightly everted. The other piece (Fig. 44 bottom r) is made of lighter gauge iron. It is curved and is 4 in. wide. A large hole is in the center at the point of the curve. A tubular piece of lead or pewter (Fig. 43E) was also recovered. It has one flattened and one hollow end and measures 2-3/4 in. across with a 1 in. wide opening. Several smaller fragments of the same specimen were also found.

Glass and Ceramics

Before describing the glass it is appropriate to give a brief description of how both window and bottle glass were made in the nineteenth century. The most common method of producing bottles and window glass was blowing. The shapes of hand blown bottles were determined by tools and the skills of the blower. Bottles of this type are sometimes lopsided and asymmetrical. They have smooth and shiny surfaces devoid of designs or lettering. They also have pontil scars or rough spots at the center of their bases which result from detaching the bottles from a holding or pontil rod after blowing. By 1857 a tool called the snap case was invented which replaced the pontil rod and eliminated the pontil scar.

Another method of producing bottles was to form them in molds. Two kinds of molds were used: full size contact molds and dip molds of various sizes. Some of these molds contained patterns. Bottles blown from contact molds sometimes exhibit mold marks or lines resulting from glass seeping into hinge seams where the mold sections are joined. Dip mold glass was blown after being dipped into a mold to create a shape or pattern. The patterns on this type bottle are smooth and there are no mold marks present. It is suspected that the first lettered bottles made their appearance by the middle of the nineteenth century.

Window glass is "blown" using a device called the blowers pipe, an iron tool about 5 ft. long with a mouth piece at one end and a bell-shaped aperture at the other. The rod is dipped into a kiln where a mass of melted glass adheres to the bell-shaped end. It is blown to a desired size and the lower end is opened. The cylinder is lowered into a swing hole where its weight causes it to form a true cylinder.

To form a sheet the worker separates the cylinder from the blowers pipe by applying a bit of molten glass along the neck of the cylinder. The result is a cylinder with two open ends. The cylinder is then divided into sections by a brightly heated iron along the inside-front end to end. The outside is tapped with a cold rod along the inner line which causes the cylinder to split. It is then conveyed to a flattening oven and with gradual heating the cylinder flattens out into a sheet which may be cut to the desired size.

Miscellaneous Artifacts

Glass Bottles

In all a total of 695 bottle fragments were found. There were no whole specimens so we can only speculate as to the use and contents of the bottles.

Spirit Bottles

Spirit bottles closely resemble beer, wine and liquor bottles of today. They are amber in color to protect the contents from the light. Stoneware bottles were also used for ale. It is doubtful that these bottles contained beer because the pasteurizing process was not used in making beer until 1873 (Switzer 1974:9). It is more likely that they contained ale, whiskey or wine. The single neck found (Fig. 46A) has a slanting collar with two rings. The neck is 3 in. long. The two bases found represent two types. The first type (Fig. 47A) is slightly dished with raised lettering along the edge. It has two rings and a small circle at the center. The second type is larger, ca. 3 in. in diameter. The outer edge is plain and the center is slightly dished with a small nub in the middle (Fig. 47D). One small fragment of salt-glazed stoneware was found which could possibly have come from an ale or ginger beer bottle (Fig. 47K).

Medicine Bottles

By the nineteenth century there were many medicines on the market claiming to cure just about every known ailment. The present collection includes several examples of small transparent bottle necks which could have been used for medicine. Each neck displays slightly different characteristics. One neck (Fig. 46C) has no lip and a rough edge. The shoulder portion suggests a rectangular base. Two (Fig. 46D, H) had flat jutting lips and small necks. One neck (Fig. 46E) still shows a portion of the body which is rectangular, and a very small lip. The last two have slender necks, one with a double ring at the lip (Fig. 46F) and one with a flat lip (Fig. 46G). The bottle necks range from 1/2 in. to 3/4 in. in diameter. One base portion (Fig. 47H) was recovered of a rectangular bottle. It is 1-1/4 in. long and is flat with fluted edges.

Glass Fragments

Six specimens were found which could not be assigned to a definite category. One neck fragment (Fig. 46B) is transparent in color. It has

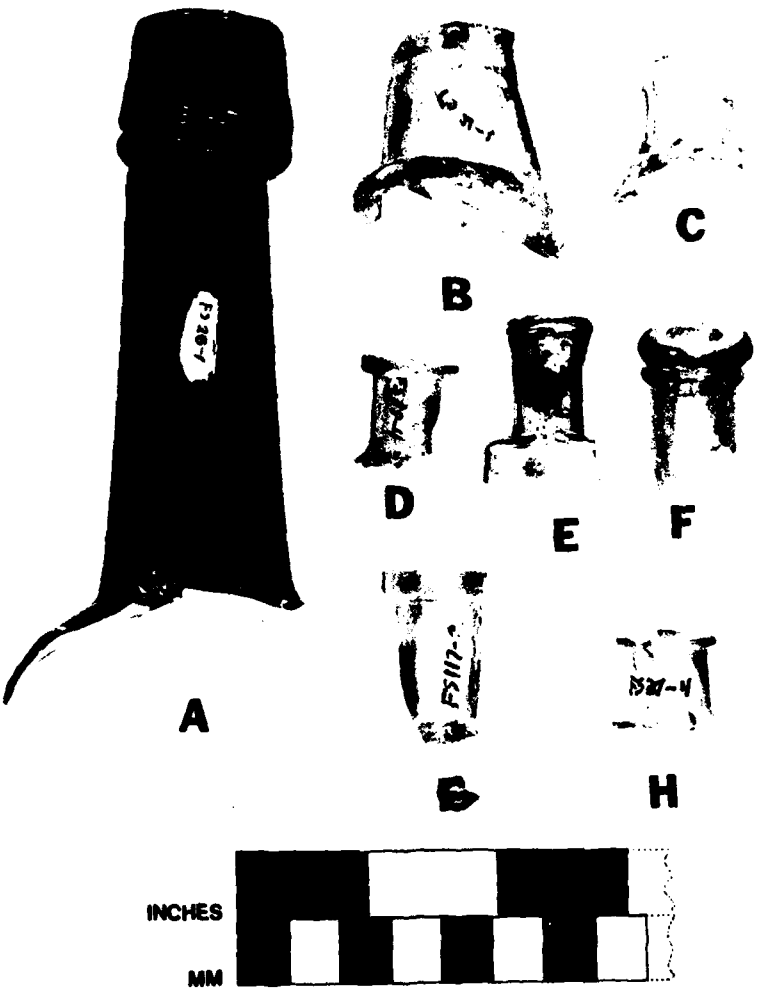


Figure 46. Glass bottle necks. A spirit bottle; B-H medicine bottles.

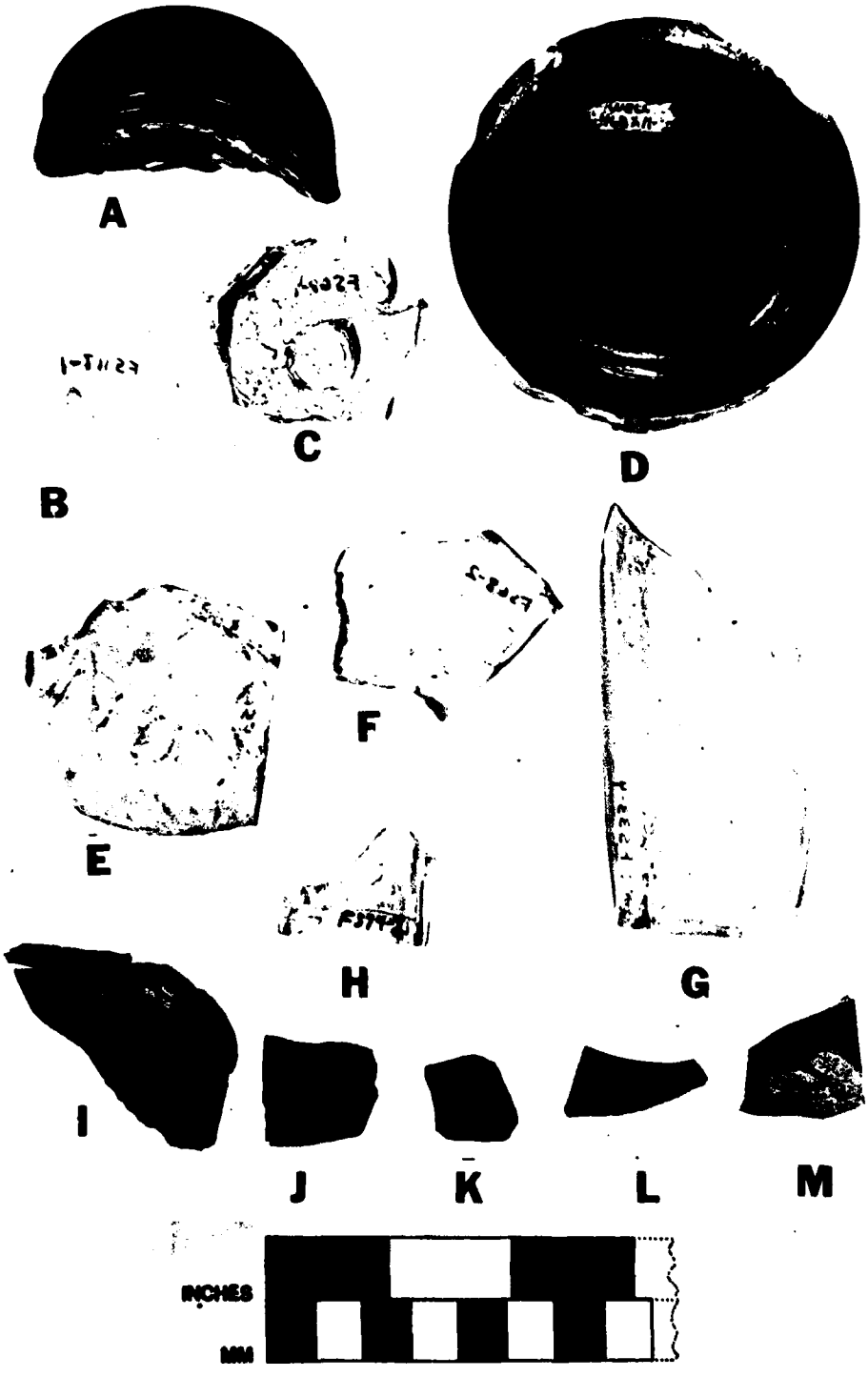


Figure 47. Glass bottle bases and ceramics. A-H bottle bases, I-violet-on-white transferware, J-blue-on-white transferware, K-salt glazed stoneware, L-M white glazed earthenware.

no lip at the top but there is a rounded shape at the base of the neck. The shoulder suggests something other than a round shape and it is similar to the necks of pickle bottles pictured in Switzer (1974:54). Two base portions (Fig. 47B, C) displaying pontil scars were recovered. They are both transparent. One appears to be round and the other has flat edges.

There are two good examples of mold blown lettering. Both pieces are transparent. One has a flat surface with raised lettering (Fig. 47L). The other (Fig. 47F) is flat with a small raised rim, lettering and three raised dots. The pieces measure 2 in. (Fig. 47E) and 1-5/8 in. (Fig. 47F).

A body fragment (Fig. 47G) was recovered which is transparent, cylindrical and displays several flat facets. It strongly resembles ketchup bottles pictured in Switzer (1974:47). It is approximately 3-1/2 in. long.

Ceramics

Only 15 examples of ceramics were recovered and they were very small fragments.

Stoneware

There were 11 pieces of gray salt glazed stoneware (Fig. 47L, ?) recovered.

Transferware

There were two examples of transferware recovered. Those pictured (Fig. 47I, J) have designs in violet and blue, both with a white background.

Comb

Fig. 40D is a fragment of a tortoise shell comb. Only one tooth is intact. It is 1 in. across the top and 1/2 in. on the side of the base. It is tan in color.

Chert Biface

One broken chert biface (Fig. 37) was recovered. It has a 3/4 in. base and is 1-1/8 in. long.

Ammunition

Minie Balls

Type A

These examples (Fig. 48A) are of the American modification of the "Minie" bullet based on a French design patented in 1851. Projectiles of this type characteristically exhibit a cylindrical form with three rings cut into the cylindrical portion of the bullet and a cavity in the base. Cartridges designed for use with the .58 caliber rifled musket consisted of a .577 caliber bullet weighing 500 grains with a 60 grain powder charge. A lighter .577 caliber bullet of 450 grains with a charge of 40 grains was also used with the .58 caliber cadet musket. Twenty three specimens were recovered. Five were .58 caliber with weights from 489.7 grains to 517.4 grains. Twelve specimens measured .57 caliber and weighed from 480.4 grains to 517.4 grains. Two specimens measured .53 caliber. The rifled musket model 1841 was originally bored out to .54 caliber and fired a round patched ball. These specimens weigh 446.6 grains and 452.7 grains respectively. Four other specimens were too deformed to accurately measure.

Type B

A variant of the Williams cleaner bullet is Fig. 48B. In its original form this type of projectile employed a zinc washer held to its base by a lead disk and plug. The four specimens of this type differ from the original version only in that they lack the washer. Three specimens measured .58 caliber with a variation in weight from 432.7 grains to 452.7 grains. One specimen was .57 caliber with a weight of 446.1 grains.

Type C

The specimen pictured in Fig. 48C is identical to the standard Minie bullet described above, but there is a fluted incision in the base cavity. The two specimens recovered were also the heaviest of all. They measured .58 caliber and weighed 551.3 grains and 555.9 grains. This attribute of fluting may have been incorporated to insure uniform expansion of the bullet.

Type D

This (Fig. 48D) is a hollow point variation of the standard Minie bullet, essentially identical to both Types A and C, except that a cavity exists in the nose of the projectile as well as in the base. Three specimens measured .58 caliber and ranged in weight from 489.7 grains to 511.2 grains. The nose cavity, or hollow point, results from using a bullet worm to extract the projectile from the gun. This device was a threaded attachment which, when needed, could quickly be mounted on the end of the ramrod and used to extract misfired or unspent charges. Such implements were commonly issued to troops in conjunction with other tools, cleaning rods, bore brushes, nipple wrenches, and the like for cleaning and maintenance in the field.

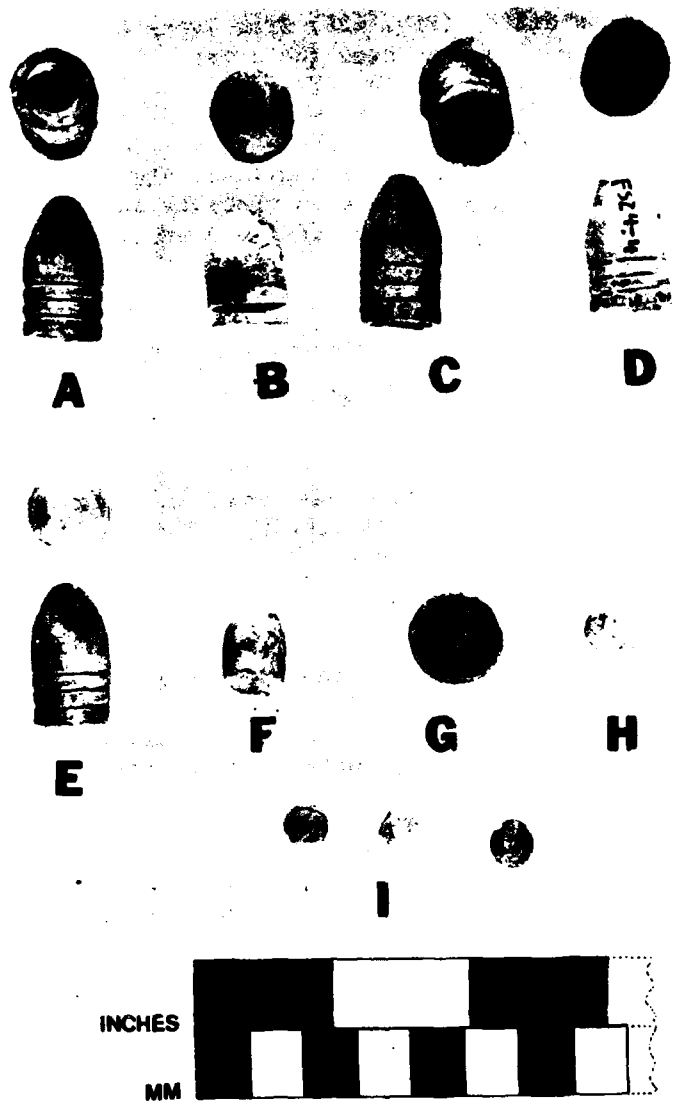


Figure 48. Ammunition. A--Type A Minie ball (standard); B--Type B Minie ball (Williams cleaner bullet); C--Type C Minie ball (incised base); D--Type D Minie ball (hollow point); E--Type E Minie ball (nose ring); F--Conical pistol bullet (.45 cal.); G--.58 cal. ball ammunition; H--.45 cal. ball ammunition; I--Buckshot.

Type E

These specimens differ (Fig. 48E) from Types A and C only in that there is a ring around the nose near the point. Two specimens exhibiting this attribute measured .58 in. They weighed 485.1 grains and 503.5 grains respectively. Five specimens measured .57 in. varying in weight from 471.2 grains to 512.8 grains. Three other specimens were deformed. No mention of this attribute as an intentional element of the design could be found, and the deformation was probably caused during the loading operation by excessive force of the ramrod.

Conical Pistol Bullet

Pictured in Fig. 48F is the only recovered specimen of a .45 in. pistol bullet weighing 206.3 grains.

Ball Ammunition

Recovered were a .58 in. round ball weighing 244.8 grains (Fig. 48G) and two .45 in. round balls (Fig. 48H). The .45 caliber specimens weigh 83.1 grains and 149.3 grains.

Buckshot

Three buckshot specimens were recovered (Fig. 48I): one .32 caliber weighing 46.2 grains, one .33 caliber weighing 44.6 grains, and one .34 caliber weighing 52.5 grains. All were found in F5 pit, suggesting that they relate to the occupation of the fort rather than to modern hunters.

Discussion

The artifacts outlined above display diversity in type and caliber. In general there were four different types of cartridges commonly in use. Cartridge specifications in 1856 were as follows: the altered .69 caliber musket fired either a round ball or conical bullet weighing 730 grains with a charge of 70 grains. Buck and ball cartridges were also issued containing a ball of the appropriate caliber and three buckshot. The manufacture of these two types was essentially similar. Paper treated with combustible chemicals of the appropriate dimensions was rolled around a wood cylindrical form and then pasted or tied shut at the end. After the form had been removed the ball was then inserted and cinched with a piece of string to divide it from the charge which followed. The end was then folded shut. In the case of buck and ball cartridges three 100 buckshot were inserted first and tied off before the ball and charge were inserted. Buckshot cartridges consisted of four or five rows of three buckshot, each row being tied off in the manner stated above. The manufacture of Minie bullets differed in some aspects. The third edition of the Ordnance Manual printed in 1861 contains a description of the process.

> Head balls are made by compression by means of machines for that purpose. The lead is first cast into round cylindrical bars .58

> and .63 inches in diameter for the calibers .58 and .69 inches respectively, and 21 inches long, and thin rolled to .46 and .56 in.in diameter for the same calibers respectively; length 25 inches. These bars are fed to the machine which cuts off a part sufficient for one ball and transfers it to a die in which the ball is formed with cavity and rings, the surplus metal being forced out in a thin belt around the ball in the direction of its axis. The balls are trimmed by hand with a knife and are then passed through a cylinder gauge of the proper size. Bullet moulds are provided to cast balls where pressed balls cannot be had. The mould is so constructed so as to trim the balls by a single operation before they are taken from the mould. Buckshot are pressed by machine in a similar manner to balls. To grease the balls place them on their bases on a tin frame capable of holding about fifty balls and immerse it in a melted mixture of one part tallow and eight parts beeswax kept warm, until the cylindrical part of the ball is covered (Lewis 1956:84-85).

Wrapping paper of the type mentioned earlier was rolled onto a wooden cylindrical form and the end tied shut. The form, paper and all, was then inserted into the base cavity of the bullet and another piece of paper was used to wrap the entire assemblage. The form was then removed and the charge was poured into the envelope at the base which was folded shut. The specifications for cartridges designed for use in .58 caliber and .69 caliber rifled muskets are as follows. The .58 caliber cartridge consisted of a .577 inch bullet of 500 grains with a charge of 60 grains. There was also a slightly lighter .577 caliber bullet of 450 grains with a 40 grain charge used in the .58 caliber cadet musket. The .69 caliber cartridge employed a .685 caliber ball weighing 730 grains propelled by a 70 grain charge. Some of the Minie bullets recovered (Fig. 48E) exhibit a ring near the point. No mention of this attribute could be found to indicate that this feature was an intentional element of the design. This deformation may have been a result of loading these bullets in excessively fouled bores. The force necessary to ram these bullets home during the loading operation may have been great enough to cause disfigurement. Another possible explanation is that these specimens were not trimmed during manufacture and were passed for issue to troops when they should have been rejected.

Two unusual types of projectiles were also recovered. The first (Fig. 48B) is a variant of the Williams projectile which was designed as a supplement to regular ammunition issues. Its function was to provide a method of cleaning out the bore at periodic intervals..."The bullet had a coned zinc washer held to its base by a lead disk and plug. On firing pressure drove the disk into the bullet flattening the zinc washer and forcing its edges out against the surface of the bore...In December, 1861, three million were ordered by the Ordnance Department" (Lewis 1956: 125). Apparently they worked very well and a few were included in each issue of ammunition, wrapped in blue or red paper to distinguish them from regular cartridges. Despite this, they did not find favor with the troops..."they said use of these bullets damaged the bore although

extensive tests did not so indicate...manuscript notes on their performance by Master Armour Allin of the Springfield Armory shows that the bullets were highly effective in accomplishing their purpose and were also at least as accurate as the standard type" (Lewis 1956:125).

The second type of unusual projectile recovered (Fig. 48D) may be of an explosive variety, but more likely reflects use of a "bullet" worm to extract an unfired projectile from the gun. Exact identification has not been possible, but there exists a considerable wealth of information concerning similar types. Explosive ammunition was manufactured and used by both sides during the war. An 1862 text used to instruct West Point Cadets stated the following:

> Percussion bullets may be made by placing a small quantity of percussion powder, enclosed in a copper envelope in the point of an ordinary rifle musket bullet or by casting the bullet around a small iron tube, which is afterward filled with powder and surmounted with a common musket cap. The impact of the bullet against a substance no harder than wood (or bone) is found to ignite the percussion charge or cap and produce an effective explosion. These projectiles can be used to blow up caissons and boxes containing ammunition at very long ranges (Lewis quoting Benton 1956:127).

The Federal government experimented with at least three different types of explosive ammunition, the most common being the Gardiner Shell which housed its explosive charge in a cavity just forward of the base. A slow burning powder ignited by the muzzle flash of the weapon, in turn ignited the bursting charge some 1.25 second after discharge. Thirty-three thousand, three hundred fifty Gardiner Shells were issued to Federal troops, some 10,000 of which were captured and used by the Confederacy. In general their use was looked upon as being inhumane. General U. S. Grant wrote of their use during the siege of Vicksburg... "The enemy used in their defense explosive musket balls no doubt thinking that, bursting over our men in the trenches, they would do some execution; but I did not remember a single case where a man was injured by a piece of one of these shells. When they were hit and the ball exploded the wound was terrible. In these cases a solid ball would have hit as well. Their use is barbarous because they produce increased suffering without any increased advantage to those using them" (Lewis 1956:128). The following quote concerns southern manufacture and illustrates the potential hazards of employing such projectiles. "Lieutenant Kennon ordered the manufacture of 100,000 rounds of musket shell...of which 39,000 rounds are now at the Naval Laboratory at Atlanta, Georgia. They were of no use in the Navy and a dangerous projectile, and many exploded in the operations of ramming. Their sole value lay in the components of lead and fulminate of mercury. As Ordnance officer I would not authorize their use at any time" (Lewis 1956:128). The Gardiner bullets were also hazardous, having a tendency to explode before they exited the barrel. The previous passage, noting that the accidental discharge upon loading was not infrequent, would suggest

TABLE 6

Ammunition, Summary of Data

	Number of Specimens	Variation in Weight	Average Weight
Type A - Standard minie bullet			
Cal. 58	5	489.7 gr to 517.4 gr	502.6 gr
Cal. 57	12	480.4 gr to 517.4 gr	497.7 gr
Cal. 53	2	446.6 gr to 452.7 gr	449.6 gr
*four specimens too deformed to measure			
Type B - Williams cleaner bullet			
Cal. 58	3	432.7 gr to 452.7 gr	444.5 gr
Cal. 57	1	446.6 gr	
Type C - minie with fluted cavity			
Cal. 58	2	551.3 gr to 555.9 gr	553.6 gr
Type D - explosive or hollow point			
Cal. 58	3	489.7 gr to 511.2 gr	501.4 gr
Type E - with ring			
Cal. 58	2	485.1 gr to 503.5 gr	494.3 gr
Cal. 57	5	471.2 gr to 512.8 gr	495.8 gr
*three specimens too deformed to accurately measure			
Type F - conical pistol bullet			
Cal. 45	1	206.3 gr	
Type G - round ball			
Cal. 58	1	244.8 gr	
Type H - round ball pistol			
Cal. 45	2	83.1 gr to 149.3 gr	116.2 gr
Type I - buckshot			
Cal. 32	1	46.2 gr	
Cal. 33	1	44.6 gr	
Cal. 34	1	52.5 gr	

that the incorporation of a safety device may have been an attempt to render these projectiles less harmful to those employing them.

Pistol ammunition differed from other types only in size and weight of slug and propellant. The most common sidearms used during the war were Colt's Navy model 1851 which fired a .36 caliber round ball weighing 81 grains or a 140 grain conical bullet, and an Army model 1860 which fired a .44 caliber 146 grain ball or a 212 grain conical bullet. The .36 caliber weapon used a 20 grain charge while the .44 caliber version employed a 25 grain charge. Cartridge manufacture was not unlike that described earlier, the major difference being the method of packaging. Pistol cartridges were not usually completely covered by wrapping paper. The paper cylinder was either pasted or inserted into an incision at the base of the bullet.

Artillery Shells from the Skinner Collection

The Skinner collection of artifacts from the Bulltown Civil War site includes three unexploded artillery shells (Figs. 49, 50), which are identical examples of Confederate Reed System class 2 projectiles used in rifled guns. Each consists of a (presumably) hollow iron shell 4.13 in. long and 2.18 in. diameter (at base), to which was attached a circular brass fuse holder, 1.13 in. in diameter and 0.32 in. long, with a central hole 0.5 in. in diameter for insertion of a fuse. Attached to the base of each shell by means of three projections and a central bolt with a square nut is a wrought iron plate about 0.25 in. thick. This plate was designed to engage the rifling of the gunbore and impart spin to the projectile.

Michael and Carlyle (1979) describe one of these specimens and note that it is unusual because the three projections which attach the wrought iron plate to the shell base are part of the base and extend through the plate. More commonly in Reed-type shells, these projections are part of the plate and fit into the base of the shell (Lewis 1959:20). All three Bulltown specimens exhibit this feature.

Since there is no evidence that the fort was equipped with artillery of any kind during the Battle of Bulltown, it is probable that these shells were fired from the guns of the "jackass battery" which accompanied the Confederate force for the October 13, 1863 attack. This battery was emplaced across the Little Kanawha opposite the southwest face of the Union entrenchments. However, the Confederate provenience is not absolutely certain since all three specimens are examples of explosive shells, and one historical source (Stutler 1963) reports that the Confederate battery was equipped only with solid shot. Stutler is most probably incorrect but it is conceivable that the three shells were part of the ammunition supply for a Union battery stationed at the fort after the Battle of Bulltown, and were lost or discarded when the battery was withdrawn. In this regard Cook (1933) mentions that a six-pound field piece was sent to the fort from Weston a few days after the battle, and Louden (1914), during a visit to the fort long after the war,

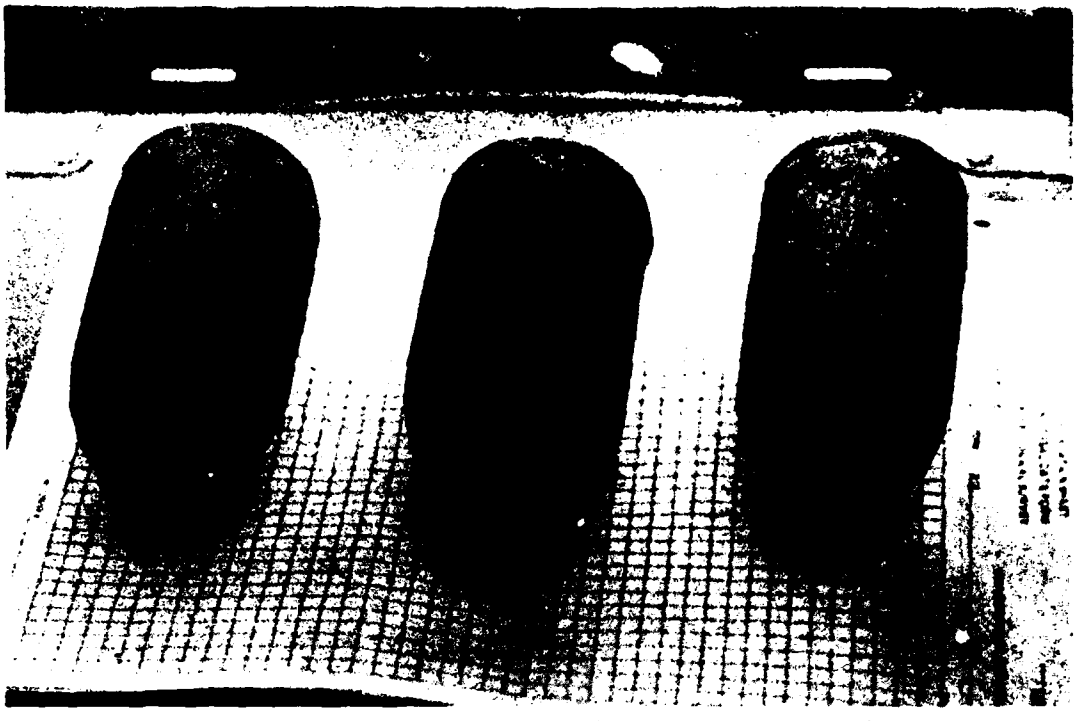


Figure 49. Unexploded artillery shells (Skinner collection). Front view.

Figure 50. Unexploded artillery shells (Skinner collection). Rear view.

TABLE 7

Distribution of Ammunition

Ammunition Type	AREA A				AREA B		AREA C		AREA D					Totals
	Gen Occ	F2	F8	F5	Gen Occ	F20	Gen Occ	F10	Gen Occ	F16	F13	F14	F21	
Minie Balls														
Type A	1		5	4	4		1	1	3	1			3	23
Type B				4										4
Type C			1		1									2
Type D		1					2							3
Type E							1						9	10
Conical									1					1
Ball Ammun.				1					2					3
Buckshot				3										3

says, "There in the trenches I found the place where the cannons had stood guarding the pike."

If, as seems most likely, the shells were fired from the Confederate battery during the Battle of Bulltown, they were defective. As Michaels and Carlyle (1979) observe, "Not only did it not explode, but the plate did not separate from the body of the shell after leaving the muzzle of the gun. This feature of the shell type made it hazardous to fire over the heads of friendly troops."

The reason why the shells did not explode is probably that the fuses were defective. If metal percussion fuses were used, it is probable that they would have been preserved in the nose cavities of the shells, so they were probably of the Parrot or Dyer time fuse type, which came in several varieties (two to four seconds) and failed to detonate the main charge about 25 percent of the time (Coggins 1962:82). Other possibilities are that the Confederates had no fuses for the shells or that the fuses were wet. In any case, if any large number of properly fused explosive shells had been fired at the fort at least some of them should have exploded, but the excavations produced nothing that could be interpreted as shell fragments or shrapnel.

INTERNAL CORRELATIONS

Artifact distributions within the site are in this case a relatively unreliable guide to exact structure locations and activity loci due to the extensive modifications of the fort area after abandonment. This included razing of some standing structures and use of the resulting trash and debris to fill open depressions (such as F5 pit) and the riflepits. Further, more than 70 years of postwar plowing has scattered the remaining artifacts, and many have been removed by modern relic hunters. However, the concentration of nails in two areas of the site (Areas B and D) complement limited archeological remains which suggest the presence of structures.

In Area B, 695 complete nails and fragments were found within or in very close proximity to F25, which is tentatively identified as a structure based on the presence of a leveled area and a possible footer trench associated with patches of ash and fire-reddened subsoil. Additionally, 113 specimens of bottle glass and 28 examples of food bone scraps were also in general association. If F25 was a structure, it evidently had unglazed windows, judging from the fact that only 28 small specimens of window glass were recovered.

In Area D, there is also a concentration of cut nails (1422 complete and fragmentary specimens), bottle glass (52 specimens) and food bone (50 specimens), with archeological evidence which strongly suggests a structure (F16), about 25 ft. long and 10 ft. wide. Only 6 specimens of window glass were recovered, which indicates that, if this structure had windows, they were unglazed.

The most probable interpretation of F16 and F25 is that they were part of the defensive works, perhaps low (one story) blockhouses with the exterior walls pierced with loopholes for musketry.

Area A had no archeological evidence for structures, apart from F5, interpreted as a possible magazine, but nails (1410 specimens), window glass (132 specimens), bottle glass (204 specimens) and food bone scrap (223 specimens) were abundant, arguing that structure or structures were present at some time. It is impossible to conjecture what the structure(s) was like or what function it/they had, but the relative abundance of window glass in Area A could conceivably point to something other than a blockhouse.

Fencing wire, barbed wire and fencing staples were confined almost entirely to Areas A and D, and within those areas, most specimens were recovered from riflepit sections. In F18 riflepit section, wire fragments and fencing staples comprised 13 of the 36 artifacts recovered (see Table 4). In Area A, many of the wire fragments were found in surface context in the slumped and filled riflepits. This is consistent with reports by Mr. McHenry (personal communication 1981) that the hilltop had formerly been enclosed by a barbed wire fence, except for the precipitous west face.

Apart from Areas A, B, and D, there were no significant concentrations of cultural materials except for the 109 specimens of unworked bone associated with F10, which is interpreted as a possible roasting pit.

In sum, the archeological data, consisting of subsurface remains and artifact distributions, clearly show that the north face and northeast salient (Areas A, B, D) were heavily utilized in comparison to other areas within the main Union fortifications. All of the structures appear to have been built along the north face, and most, if not all, were likely to have been integrated with the other defensive works consisting of the riflepits. The presence of bone scrap and domestic debris, such as pottery and bottle glass, suggests that the buildings were not exclusively devoted to defensive objectives, and may have served as barracks or had other auxiliary uses.

EXTERNAL CORRELATIONS

The Bulltown fort has to be seen as a unique phenomenon rather than as representative of a specific formal type or class of fortification works. It was designed and constructed not by professional military engineers but rather by amateur citizen soldiers whose acquaintance with formal fortification theory and practice was, at best, rudimentary. Complicating the problem of comparing the Bulltown works with other frontier forts of the Civil War is the fact that very little is known, archeologically, of such forts. In West Virginia, the single roughly equivalent fort investigated to date is one at Cheat Summit (Lesser 1981) in Randolph County, built by Federal forces in the summer of 1861 and largely abandoned in April of 1862.

According to historical sources cited by Lesser (1981:30) Cheat Summit Fort consisted of a ring of breastworks protected by an abatis and mounted with pivot guns. A blockhouse with pierced walls, and also armed with cannon, was located at the center of the works. Log buildings, 20 x 40 ft. with a stone fireplace at one end, were later built within the breastworks to house the garrison. Since the excavations at this site were minimal, intended primarily to document the existence of intact subsurface remains, and since the defensive works were not mapped, little can be said about how the site compares to the Bulltown fort in size or design and construction. Judging from the fact that several cannon were emplaced, the Cheat Summit Fort may have been a stronger and perhaps more "regular" (in the formal military sense) fortification than the Bulltown example, and is likely to have been constructed with a different purpose in mind.

Since comparison to larger formally planned works is not appropriate, the question of how the Bulltown fort would relate to a typology of Civil War fortifications must remain open until more comparative data are available.

SUMMARY AND CONCLUSIONS

Test excavations conducted at the Bulltown Civil War Site had modest objectives in that they were intended primarily to determine the extent and configuration of the Union riflepits, to determine whether any structural remains were present inside the fortifications, and to recover artifacts which would aid in extending our knowledge of period military equipment and the garrison life of soldiers who were stationed in a small fort in a backwater of the war.

The Union riflepits were sectioned at five locations, revealing that they were variable in dimensions and method of construction as a result of differences in the local terrain and tactical necessities which required stronger and more carefully prepared defensive positions in areas which covered likely routes of attack. Hence, the riflepits formed an almost continuous line around two sides of the roughly triangular hilltop and were particularly deep and well prepared along the north and southeast faces where the hill slope is relatively gentle. The southwest face was left unprotected, except for short sections adjacent to the south and northwest salients. This was presumably because the very steep escarpment along the southwest face made an assault from this direction unlikely. In all areas, the riflepits were simple unrevetted trenches, without interior features, except for a shallow drain in the area of the northeast salient, an interior berm or armrest (present only in the F2 section), and a small banquette or kneeling platform at the south salient. On the north face and at the south salient, spoil from excavation of the riflepits was piled above the exterior side of the trench to increase the height of the parapet. Elsewhere, the spoil was discarded down the hillside.

Because of postwar demolition and farming activities, very little evidence remains of the buildings that were constructed inside the fortifications. Only two structures were identified, and those tentatively. Both appear to have been about 25 ft. long and 10 ft. wide, and were constructed on the same axis, parallel to the north face riflepits. Their function and method of construction could not be determined with certainty from the scanty data available, but it is a reasonable conjecture that they were built of small logs with mud chinking and served as blockhouses to strengthen the north face defenses. In the northeast salient, an oval pit (F5) is tentatively identified as a magazine based on its regular outline, considerable size and location adjacent to the riflepits. Other structures were probably present in the area of the northeast salient, judging from the abundance of nails and glass shards, but no subsurface remains were encountered.

Minor features associated with the main defensive works include several small trash pits, a roasting pit, and two possible hearths. A well, which provided culinary water for the fort, was located outside the north face riflepits but was not investigated.

To cover the northern approaches to the main fortifications and to give early warning of an assault, a picket post was established about 800 ft. north of the hilltop entrenchments. These lower defensive works consist of a double line of riflepits, facing northeast and about 125 ft. in total length. A sectioning trench showed that they were similar in construction to the main defensive works but shallower.

As an adjunct to excavation of the Union fortifications, the positions occupied by the southern wing of the Confederate force during the Battle of Bulltown were located and tested. They consist of a scattering of shallow riflepits on the opposing hillside, across the Little Kanawha River, southwest of the Union fort.

The artifact yield from the excavation is disappointing in regard to quantity and especially as to the lack of diagnostic materials which could serve as a basis for comparison and to shed light on the life of the garrison. Over 70 percent of the collection consists of (mostly fragmentary) cut iron nails which have almost no comparative or interpretive value. Only 49 ammunition specimens were recovered, most of them examples of standard issue "Minie" bullets designed for use with a .58 caliber rifle musket. The rest of the artifact collection is comprised of odd specimens of military hardware, personal and domestic items, few of which have any significant diagnostic value.

Comparison of the Bulltown fortifications with other Civil War defensive works is almost impossible at present because there has been no excavation of sites that are comparable in either scale or function. Further, the defensive works were designed and constructed by amateurs, not by professional military engineers, and both their extent and nature were largely conditioned by the local terrain. Thus they cannot be expected to typify a formal military model or a "regular" fortress in any real sense, and comparison with larger, more elaborate and more permanent forts of the period is not appropriate.

As a unique specimen of a small frontier fortification, which is valuable and interesting in its own right, the Bulltown Civil War Site has been nominated for listing on the National Register of Historic Places. Limited development and interpretation is planned by the U.S. Army Corps of Engineers, Huntington District, as part of the Burnsville Lake Project, and the site is protected by law under the terms of the Archeological Resources Protection Act of 1979 (P.L. 96-95) which forbids surface collection and excavation without permission from competent authority.

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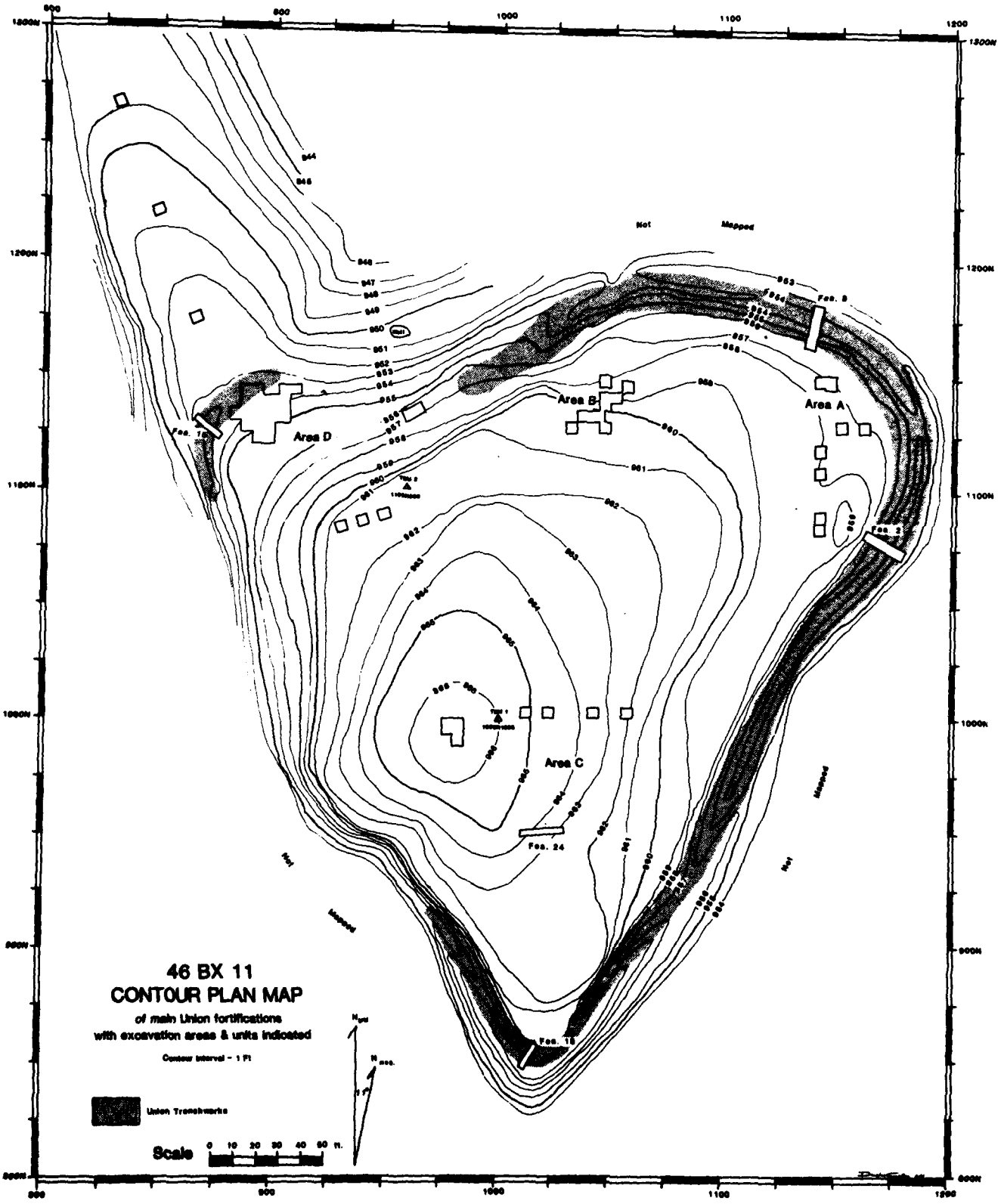
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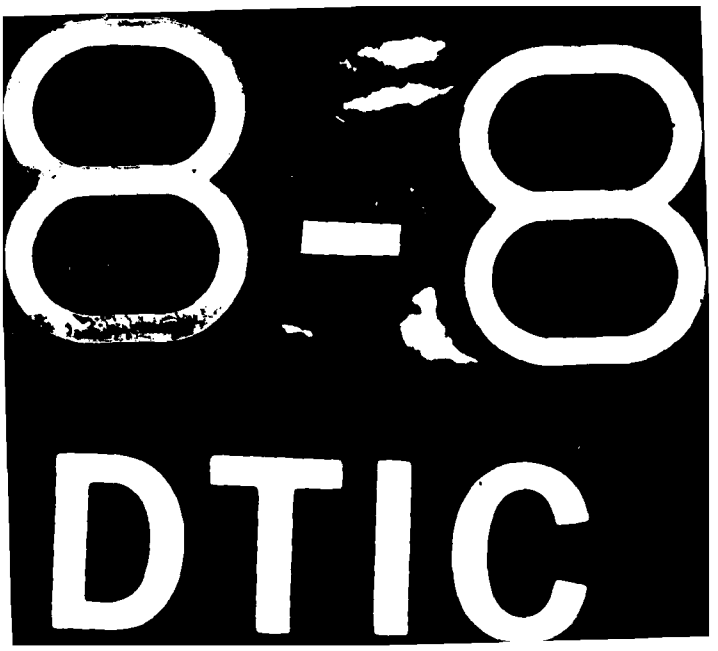
CONTOUR PLAN MAP
of main Union fortifications
with excavation areas & units indicated
Contour Interval = 1 Ft
Union Trenchworks
Scale
0 10 20 30 40 50 ft.
Area A
Area B
Area C
Area D
Not Mapped
Fea. 8
Fea. 24
Fea. 18

FIGURE 2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