Fort Necessity Stockade
A Preliminary Study

By: Frederick Tilberg,
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REFERENCES TO FORT CONSTRUCTION IN
WASHINGTON'S EXPEDITION

Although it is probable that Col. Washington was well acquainted with the method of stockade construction, an instance in which he had occasion to examine closely this type of fort on the frontier occurred on his expedition to the French on the Ohio in 1753-4. On this mission to the French Commandant at Logtown, Washington noted on December 13, 1753, while French officials had retired from his presence to discuss matters connected with their conference, that he had an opportunity to examine the dimensions and construction of the fort. "It is situated on the South or West Fork of French Creek", he related, "near the water; and is almost surrounded by the Creek, and a small Branch of it forms a kind of Island. Four Houses compose the sides. The Bastions are made of Piles driven into the Ground, standing more than 12 Feet above it, and sharp at Top; With Post-Holes cut for Cannon and Loop-Holes for the small Arms to fire through. There are eight 6-lb. Pieces mounted, in each Bastion; and one Piece of four Pound before the Gate. In the Bastions are a Guard-House, Chapel, Doctor's Lodging, and the Commander's private store; Round which are laid Plat-Forms for the Cannon and Men to stand on.... There are several Barracks without the Fort, for the Soldier's Dwelling, covered, some with Bark and some with Boards, made chiefly of Loggs...." (Old South Leaflets, No. 187, Vol. 8, p. 217.)

In the year following the Fort Necessity action, the instructions given by the Duke of Cumberland to General Braddock for his campaign on Fort Duquesne contain a pointed reference, apparently based on observations in the Washington campaign of the preceding year, to the
type of fort which the King felt should be built. The King stated that "you ought not to build considerable forts, cased with stone, till plans and estimates thereof have been sent to England and a proved by the Government there. His Royal Highness thinks that stockaded forts, with pallisadoes and a good ditch, capable of containing 200 men or 400 upon emergency, will be sufficient for the present." (Quoted in A. B. Hulburt, *Braddock's Road, Scenic Highways*, Vol. IV, pp. 43-9.)

The small fort at Wills Creek (Cumberland) which had been Washington's point of departure in his campaign against Fort Duquesne in 1754, culminating in the action at Fort Necessity, is described as "a small, square fort." (Journal of a Naval Officer, 373, quoted in F. Nichols, *Braddock Expedition*) (Also Hulburt, *Braddock Road, Scenic Highways*, Vol. IV, 25). In expectation of the arrival of Braddock's Army, it had been considerably enlarged. On May 10, 1755, when Braddock and the major part of the army entered it, a naval officer wrote:

"Fort Cumberland is situated within 200 yards of Wills Creek, on a hill, and about 400 yards from the Potomack; its length, from east to west, is about 200 yards, and breadth 166 yards, and is built of logs driven into the ground, and about 12 feet above it, with embrasures for 12 guns, and 10 mounted, 4-pounders, besides stocks for swivels, and loop-holes for small arms." (Ibid., 373.)

The original small square fort now formed the west end of a much larger irregular rectangular stockade. Three long barrack sheds at the opposite end faced the old fort across a wide parade ground, the whole enclosed by the new stockade. (Hulburt, IV, 26.)

On May 27, Col. Washington learned in a message from the Half-King that the French were at the "X-ing of the Yaughyaughgan ab't 10
miles. I hereupon, hurried to this place as a convenient spott. We have, with nature's assistance, made a good Intrenchment, and by clearing ye Bushes out of these meadows, prepar'd a charming field for an Encounter." (Official Records of Robert Dinwiddie, Lt. Gov. of Colony of Virginia, 1751-59, Printed from Mss. in the Collection of the Virginia Historical Society, Introduction and notes by R.A. Brock. Published by the Society, Richmond, 1883, Vol. I, p. 175.) (Also Writings of Washington, Fitzpatrick, Bicentennial Edition, Vol. I, 54.)

As Washington's expedition moved westward, Great Meadows was selected as a suitable place for an encampment and an outpost to serve as a defense position in case of need. A member of the expedition, Capt. Robert Stobo of the Virginia regiment, is credited with planning the construction of the stockade at Great Meadows. It is described in Sargent's "Braddock" as a "log breastwork, 100 feet square, surrounded in part by a shallow ditch, and was commenced immediately on Washington's arrival."

(Penna. Archives, commencing 1790, With an Appendix on Early forts. Joseph Severn & CO., Phila., 1856. Vol. 12, p. 120.) Washington noted on May 24 that "we arrived at the Meadows." Learning from a trader that a strong detachment was on the march from Fort Duquesne, he "placed Troops behind two natural Intrenchments, and had our wagons put there also." (Writings of Washington, W.C. Ford, I-119) (Diaries of George Washington, 1743-1799. Edited by John Fitzpatrick, Vol. I, p. 35. Published by Mt.Vernon Ladies Assoc. of the Union, Houghton Mifflin Co., N.Y., 1925.) In relating the Jumonville incident and succeeding events Washington refers in three instances to "our camp" at the Meadows. (Diaries, I-p. 87-88.)
On May 29, Washington wrote from the Camp at Great Meadows, after relating his account of the Jumonville incident, stating that "we have already begun a Palisado'd Fort, and hope we can have it up tomorrow...." (Official Records of Robert Dinwiddie, Vol. I-132.) (Also Writings of G. Washington, Fitzpatrick, Vol. I, 67.)

On May 30, Washington noted in his diary that he "began to erect a fort with small palisades, fearing that when the French should hear the news of that defeat of jumonville incident we might be attacked by considerable forces." (Diaries of G. Washington, ed. by Fitzpatrick, Vol. I, 90.)

Writing from his camp at Great Meadows on May 31 (after the Jumonville incident) Washington said "we expect every hour to be attacked by superior force, but, if they forbear one day longer, we shall be prepared for them. We have already got entrenchments, are about a pallisado which I hope will be finished today." (Washington's Writings, Fitzpatrick, quoted by Lacock in Connellsville Courier, July 22, 1932.)

Washington also wrote to his brother, Augustine Washington, May 31 from Great Meadows that "We expect every hour to be attacked by superior force but, if they forbear one day longer, we shall be prepared for them. We have already got entrenchments, are about a pallisado which I hope will be finished today..." (Writings of G. Washington, Fitzpatrick, Vol. I-70.)

On June 1, he added "we are finishing our Fort." (Ibid.)
On June 3, Washington again wrote Governor Dinwiddie that "We have just finished a small palisado'd Fort, in which, with my small numbers, I shall not fear the attack of 500 men." (Washington's Writings, Fitzpatrick, Vol. I, p. 73.)

Receiving reports from scouts who had discovered a party of French, Washington decided to advance with part of his force and on June 12 gave orders to Colonel Muse to put away all our baggage and ammunition, and to place them in the Fort, and to set a good guard there till my return;.." (Diaries, Vol. I, 92-3.)

In his letter to Gov. Dinwiddie June 12 concerning preparedness for possible attack, Washington states "I guarded against all casualties that might happen to the camp, and ordered Major Muse to repair into the fort, and erect the small swivels for the defense of the place, which he could do in an hour's time. (Washington's Writings, Fitzpatrick, I, 73.)

Governor Dinwiddie wrote a letter to Washington, believed to have been dated June 17 although the letter is undated, that "...I am glad you have finished y'r Pallisadoed Fort, and hope the Independ't Compa. from So. Car. will join You this night..." (Ibid., 229-230)

Governor Dinwiddie wrote the Lords of Trade on June 18, that in order to resist French attack "our Forces have erected a Stockade Fort near the Monongahela for a retreat on Occasion..." (Ibid., 206)

In the days following, Washington sought through Mr. Croghan the aid of Indians. The Indians, however, doubting the ability of the small force of English to defeat the French, refused to join him. "I thought it proper", he wrote on June 25, "to send Captain Montour to Fort Necessity,
in order to try if he could persuade the Indians to come to us." (Diaries, Vol. I, 101) This is the first mention by Washington of the term Fort Necessity.

With the note on June 27 stating that he had detached Captain Lewis, Lieutenant Waggoner, Ensign Mercer and 60 men to endeavor to clear a road to the mouth of Red-stone creek, on the Monongahela, Washington's diary ends. The road construction continued until June 28 when the group decided to call in all working parties and to concentrate at Gist's plantation and prepare to fortify against a strong French force reported by Washington's scouts to be marching from Fort Duquesne. Further information concerning the advancing force led to another council which decided upon retreat to Wills Creek. By the time the party reached Great Meadows, July 1, the troops were too exhausted to continue further, and it was decided to make a stand at Fort Necessity. The works were strengthened and on the morning of July 3, the French opened fire on the fort. (Diaries, Vol. I, 102)

Concerning Washington's attempts to establish good relations with Indians, it is noted that the Half-King spoke of Col. Washington as a good-natured man but had no experience...that he lay at one place from one full moon to the other and made no fortifications at all, but that little thing upon the Meadow, where he thought the French would come up to him in open field..." (Weiser's Journal, 1754, quoted in W.C. Ford, Washington, p.24.)
It is probable that the French and Indians approached the vicinity of the Fort from the west on the Braddock Road, and first received word that the French had received reinforcements of 700 men and that they were then marching with 900 men to attack Washington's west of the stockade. In a later move, they likely shifted to a neck "small camp", which then consisted of a little more than 300 men and neck of woods on the southeast bringing them within 60 yards of the fort. of this information concerning the French plans, Villiers relates that, as the French drew near the fort, "the Indians, Washington's force "immediately...prepared to make the best Defense their as well as ourselves, set up a great cry, and advanced toward them; but they did not give us time to fire upon them, before they sheltered themselves in an Intrenchment, while we aimed to invest the Fort, which was advantageously enough situated in a meadow, within musket shot from the Woods. We drew as near them as possible, that we might not expose his Majesty's subjects to no-purpose. The fire was very brisk on both sides, and I chose that Place which seemed to me the most proper, in case we should be exposed to a sally." (Journal of de Villiers, quoted by Lacock in Connellsville Courier, June 27, 1932.)

On the return of Washington's expedition from Ft.Necessity, he made a verbal report to Governor Dinwiddle on his own force and Captain Mackay's company of South Carolina. This report was in turn sent by Dinwiddle to Lords of Trade and was dated July 24.

Dinwiddle relates that on June 3, Washington's expedition received word that the French had received reinforcements of 700 men and that they were then marching with 900 men to attack Washington's "small camp", which then consisted of a little more than 300 men and officers. On receipt of this information concerning the French plans, Washington's force "immediately...prepared to make the best Defense their
small Numbers w'd admit of, by throwing up a small Intrench'm't, which
they had not Time to compleat, before their out Centry gave the Alarm,
by firing his Gun, of the approach of the enemy." (Official Records of
Robert Dinwiddie, Now First Printed from the Manuscript in the Collections
of the Virginia Historical Society, with Introduction by R.A. Brock,
Published by the Society in Richmond, 1883, Two Vols., Vol. I, 239-41.)
Washington stated that at the beginning of the action, his men were "drawn
up in good order to receive them before their Intrenchm'ts, but did not
return their First Fire, reserving it until they came nigher." (Ibid.)
Failing in their plan to draw the English away from their entrenchments,
the French apparently moved to the right where they "advanced irregularly
within 60 yards of our Forces, and y'n made a second Discharge,
and observing they did not intend to attack them in the open Field, they
retir'd within their Trenches, and reserv'd their Fire, thinking, from
their Numbers, they w'd force their Trenches." (Ibid.) The account pub­
lished in the Virginia Gazette states that the sentinel at the outposts
gave the alarm about 11 o'clock, and that the French began to fire im­
mediately at first about 600 yards distance, later shifting around to a
point of woods 60 yards from the fort. (Virginia Gazette, July 19, 1752.)
Washington, finding that the French would make no attempt against the
British force in the trenches, then ordered his troops to fire. The state­
ment notes that "the officers declare y's Engagement continue from
11 o'clock until 8 o'clock at Night, they being without shelter, rainy
weather, and their Trenches to the knee in Water, whereas the French were
shelter'd all around our Camp by trees; from thence they gall'd our
People all the Time as above." (Ibid.)
The statement relates that about 8 o'clock at night the French called for a truce and this was soon agreed upon. The capitulation arranged, a party of French came on the following morning and took possession of the encampment, the survivors of Washington's men leaving the stockade and, with French and Indians alike killing their horses and cattle and pilfering their baggage, they reached their base at Cumberland 60 miles away. It is noted that the surgeon's chest was destroyed after the action at the stockade. This source estimates 300 of the enemy killed, and of their own number 30 killed and 70 wounded (ibid.). In another version of Washington's account, which varies slightly in phraseology but not in content, it was stated that the enemy losses must have been considerable as they were "busy all Night in burying their Dead, and yet many remained the next Day." (The Virginia Gazette, July 19, 1754.)

Relative to the destruction of the stockade after the action at Fort Necessity, the French commander de Villiers states that the Indians claimed the right to plunder but that he opposed it. The English being frightened, he relates, "left their tents and one of their colors. I demolished their fort; and M. le Mercier ordered their cannon to be broken." (The Olden Time; a monthly publication, etc., 1848, Vol. II, 213.) This is partially corroborated by Col. Innes in his statement that "after the capitulation the French demolished the works", a reference which may have been directed to the stockade or the mounds on the outside, or both. (Pennsylvania Archives, Vol. 12, commencing 1790. With an appendix on early forts. Joseph Severn & Co., Phila., 1856.)
John B. W. Shaw, a member of the South Carolina regiment, stated in a deposition about two months after the Fort Necessity battle, that "in the morning before the Engagem't, they Washington's force Endeavour'd to throw up a little Intrench'mt round them about two foot deep, but could not finish it, as the French appeared betwixt Nine and ten in the Morning. We had Centinals placed out to Give Notice of the Approach of the French; one of which fired his Piece, and immediately after the French Began to Fire, but being still at a considerable Distance, and did us no hurt. Our men were drawn up before, but did not fire. The French still keeping at a Distance; They then turned off to a Point of Wood that lay very near our Men, Upon which Our Men went into their little Intrenchment, Upon which the French made a Second Discharge But our Men having kept up their fire, their Indians were thereby Encouraged to Advance out of the Wood and Show themselves pretty near where our Men lay, upon which Col^ Washington Gave the Word to fire which was accordingly done, and many of the Indians we e killed, Our people having two Swivel Guns which were dis-charged at the same time. After this neither French nor Indians appeared any more but kept behind Trees firing at our Men the best part of the Day, as our People did at them. There was at this Place a Small stockado Fort made in a Circular form round a Small House that Stood in the Middle of it to keep our Provisions and Ammunition in, And was Cover'd with Bark and some Skins, and might be about fourteen Square, and the Walls of the Fort might be eight feet Distance from the said House all Round. The French were at that time so near that Severall of our People were wounded by splinters beat off by the Bullets from the said House." (Deposition of John B. W. Shaw, Journal of Council of South Carolina, from the third day of September 1754 to the first day of January, 1755, pp. 13-18.)
VERSIONS OF THE STOCKADE

For many years after the battle at Fort Necessity, little was done by either individual or organization effort to preserve the outline of the original stockade. Thus before any measures were undertaken for preservation, action of flood waters and gradual erosion over a long period of time resulted in almost complete obliteration of the mounds which were believed to have been thrown up around the base of the stockade to serve as a parapet for riflemen, and the mounds located on the outside of the stockade employed by the same troops in the beginning stage of the action against the French and Indians. ("Fort Necessity was situated near the headsprings of Great or Big Meadows run... at a place called by the explorers 'the Great Meadows' because it was a flat, open field without trees, but with an abundance of nutritious grass. Pasture was a matter of great moment to the explorer and trader having horses or cattle to field. Hence, both the Little and Great Meadows across the Alleghany Mountains early became places of especial note on this account." Footnote in Washington's Journal, 1754. Edited by J.M. Toner, Munsells & Sons, Albany, 1893.)

Perhaps the earliest indication on a chart or map of the site of Fort Necessity is a sketch of the course of Braddock Road made in 1755. The sketch shows clearly the site of Fort Necessity. It is indicated as a small square although it was probably not the intention of the author to indicate the actual shape of the fort by means of the square symbol. It is noted on the same map that Spring Camp, Steep Bank Camp, Stewart's Camp and other encampments associated with Braddock's campaign are indicated by small rectangles, somewhat larger than that of the fort site. (British Museum)
In 1759 Col. Burd visited the site of Fort Necessity and described it as circular in shape. It is probable, if the original fort were an irregular square or parallelogram, that the action of rain and snows over the five years since it was erected as well as the demolition of the fort by the French, may well have left an appearance of circular mounds.

The first recorded survey of Fort Necessity was made by Freeman Lewis and James Veech in 1816. The survey was described in The Monongahela of Old. (*The Monongahela of Old* by James Veech, Pittsburgh, 1910. Pp. 15-16. The main part of the book was begun in 1850 when Freeman Lewis, a surveyor of Uniontown, projected a history of Fayette County. In the preface to the published volume, it is noted that the work "grew to such proportions that Mr. Lewis was unable to handle it and proposed to transfer the undertaking to Mr. Veech." In 1859, the book was printed but was left in sheet form for several years, an incomplete section of the book pertaining to the extension of the Mason-Dixon boundary line not having been furnished to the printer. A few copies of the incomplete volume were bound and distributed to friends as the work was originally intended only for private distribution. In 1892, Mr. Veech's daughter, Mrs. E. V. Elaine, completed the section on the Mason-Dixon Line and published several copies of the volume. The book was reissued in 1910 under a copyright by James Hadden of Uniontown. Veech, an attorney of Uniontown, became paymaster of the army in 1861. He was for many years a director of the Monongahela Navigation Company and also of the Bank of Pittsburgh. Veech was also a candidate for U.S. Senator in 1855, and for State Supreme Court Justice in 1857.)
In 1816, Freeman Lewis made a survey of the stockade at Fort Necessity with compass and chain and made an engraving which showed its form and proportions. As indicated on this drawing (The engraving was first reproduced in Lowdermilk's History of Cumberland, p. 76), the stockade was "in the form of an obtuse triangle of 105 degrees, having its base or hypotenuse upon the run. The line of the base was, about midway, sected or broken, and about two perches of it thrown across the run, connecting with the base by lines of about the same length nearly perpendicular to the opposite lines of the triangle. One line of the angle was six, the other seven perches; the base line eleven perches long, including the section thrown across the run. The lines embraced in all about fifty square perches of land, or nearly one-third of an acre.

The embankments then (1816) were nearly three feet above the level of the Meadow. The outside "trenches", in which Captain Mackay's men were stationed when the fight began (but from which they were flooded out), were filled up. But inside the lines were ditches or excavations, about two feet deep, formed by throwing the earth up against the palisades. There were then no traces of "bastions", at the angles or entrances.

The junctions of the Meadow, or glade, with the wooded upland, were distant from the fort on the south-east about 80 yards,—on the north about 200 yards, and on the south about 250. Northwestward in the direction of the turnpike road, the slope was a very regular and gradual rise to the high ground, which is about 400 yards distant. From this eminence the enemy began the attack, but afterwards took position on the east and southwest,
nearer the fort. One or two field pieces, skillfully aimed and fired
would have made short work of it. (Monongahela of Old, p. 53.)

A group of canal surveyors reported in 1825 from Lafayette
Springs, described as being located "on the national road, 8 miles east
of Union", having seen "the mud walls of Fort Necessity.... It is a
humble work....Its shape and extent are still to be traced by the remains
of the mud embankments, and bullets are occasionally found in the
vicinity... The embankments of the Fort I have said are still visible,
and their situation, it may be added, are yet partially closed by the
native thicket which once entirely surrounded them. The adjoining lands
have been under cultivation for some time, but the site of Fort Necessity,
has not yet been disturbed by the plough...." (Daily National Intelligencer,
Oct. 18, 1825, p.2.)

Jared Sparks, editor and historian, who made it a practice of
visiting and mapping historic sites along with study of manuscripts,
before preparing his own account (Dictionary of American Biography,
Vol. XVII, 432.) examined the remains of the Fort Necessity mounds in
1830. In his report on the condition of the embankments at that time, he
states that "Fort Necessity was situate in a level meadow, about two
hundred and fifty yards broad, and covered with long grass and low bushes.
The foot of the nearest hills came within one hundred yards of the fort,
and at one place within sixty yards. The space between the fort and hills
was open and smooth, the bushes having been cleared away. The fort itself
was an irregular square, each side measuring thirty-five yards, with a
trench partly finished on two sides. The entrances were guarded by three bastions. (Writings of Washington, 12 vols., Vol. I, 5th. Harper & Bros., N.Y., 1847.)

A traveler, Townsend Ward, who with a small party passed through the Fort Necessity area in 1854, wrote a brief note on the remains of the fort. He pointed out that "...The Meadow or glade is entirely level—the rising ground approaching the site of the fort 100 yards on one side, and about 150 on the other. Braddock's road skirts the rising ground to the south. A faint outline of the breastwork, and a trace of the ditch are yet visible, and now will remain so, for the rude hand which held the plough that aided during many years to level them, was stayed at the intersection of a lover of the memories of these old places. The creek was dry; and this is all that remains." (Philadelphia North America, July 3, 1854; Pennsylvania Archives, Vol. 12, l23. Joseph Severn & Co., Phila., 1856.)

Editorial Note: "The site of the fort was in Fayette County, on a creek emptying into the Yohiogany river; some few traces of the fort are visible but most of them have been destroyed by plowing. On July 3, 1854, the corner-stone for a monument was laid with appropriate ceremonies and speeches, by citizens from different places. A handsome view of the surrounding neighborhood, painted by Paul Weber, taken in July, 1854, ornaments the wall of the Historical Society of Pennsylvania, at Philadelphia." (Pennsylvania Archives, Vol. 12, Footnote, pp. l22-3.)
Archer B. Hulbert, author of several volumes of early roads and historic sites in early period of American history, visited the site of Fort Necessity in 1903, taking with him a copy of the Freeman Lewis map of 1816 which had been first reproduced in Lowdermilk's History of Cumberland in _______ and again reproduced in Frontier Forts of Pennsylvania published in 1896 (State Printers, p. 53). Hulbert states that upon comparison of the map with the physical remains, certain discrepancies appeared. Obtaining the services of a Civil Engineer, Robert McCracken, a survey of the mounds was undertaken. Hulbert states that "The mounds now standing on the ground are drawn on the appended chart Diagram of Fort Necessity as lines C A B E. By a careful survey of them by Robert McCracken, C.E., sides C A and A B are found to be the identical mounds surveyed by Mr. Lewis, the variation in direction being exceedingly slight and easily accounted for by erosion. The direction of Mr. Lewis' sides were N 25 W and S 80 W; their direction by Mr. McCracken's survey are N 22 W and S 80.30 W. This proves beyond a shadow of a doubt that the embankments surveyed in 1816 and 1901 are identical.

"But the third mound B E runs utterly at variance with Mr. Lewis' figure. By him its direction was S 59 1/2 E; its present direction is S 76 E. The question then arises: Is this mound the one that Mr. Lewis surveyed? Nothing could be better evidence that it is than the very egregious error Mr. Lewis made concerning the area contained within his triangular embankment."
He affirms that the area of Fort Necessity was fifty square rods. Now take the line of B E for the third side of the triangle and extent it to F where it would meet the continuation of side A C. That triangle contains almost exactly 50 square rods or one-third of an acre! The natural supposition must be that some one had surveyed the triangle A F B and computed its area correctly as about fifty square rods. The mere recording of this area is sufficient evidence that the A F B triangle  had been surveyed in 1816, and this is sufficient proof that mound B E stood just as it stands today and was considered in Mr. Lewis' day as one of the embankments of Fort Necessity.

Hulbert raises the question why Lewis in his survey appeared to ignore the embankment B E and the triangle A F B which contained the fifty square rods which he stated was the area of Fort Necessity. Hulbert attempts to answer the matter by stating that "the triangle crossed the brook and ran far into the marsh beyond. By every account the palisades of Fort Necessity were made to extend on the north to touch the brook, therefore it would be quite ridiculous to suppose the palisades crossed the brook again on the east. Mr. Lewis, prepossessed with the idea that the embankments must have been triangular in shape, drew the line B C as the base of his triangle, bisecting it at M and N, and making the loop M S N touch the brook. This design (triangle A B C) of Fort Necessity is improbable for the following reasons:
1. It is not one-half the area Mr. Lewis gives it.
2. It would not include much more than one-half of the high ground of the plateau, which was none too large for a fort.
3. There is no semblance of a mound B C nor any shred of testimony nor any legend of its existence.
4. The mound B E is entirely ignored . . . .
5. Loop M S N would not come near the course of the brook without extending it far beyond Mr. Lewis' estimate of the length of its sides.
6. Its area was only about 5,200 square feet which would make Fort Necessity unconscionably small in face of the fact that more high ground was available.

The owner of the fort site at the time of Hulbert's visit was Fazenbaker. Discounting the three-sided sketch of the fort as it appeared in Frontier Forts of Pennsylvania, he directed Hulbert's attention to a small mound, indicated on the McCracken map as "0" which he thought was the remains of the fourth embankment of a four-sided fort. This mound, Hulbert states, was on lower ground and nearer the old course of the brook than the other remains of Fort Necessity. A mound here would suffer most when the brook was out of its banks and this, he states, would account for its disappearance.

Hulbert adds that "Excavation in other mounds had been successful; nothing had been discovered of the palisades, though every mound gave certain proof of having been artifically made. But excavations at mound "0" gave a different result. At about four and one-half feet below the
surface of the ground, at the water line, a considerable amount of bark was found, fresh and red as new bark. It was water-soaked and the strings lay parallel with the mound above and were not found at a greater distance than two feet from its center. It was the rough bark of a tree's trunk—not the skin bark such as grows on roots. Large flakes, the size of a man's hand, could be removed from it. At a distance of ten feet away a second trench was sunk, in line with the mound but quite beyond its northwestern extremity. Bark was found here entirely similar in color, position, and condition. There is little doubt that the bark came from the logs of the palisades of Fort Necessity, though nothing is to be gained by exaggerating the possibility. Bark, here in the low ground, would last indefinitely, and water was reached under this mound sooner than at any other point. No wood was found. It is probable that the French threw down the palisades, but bark would naturally have been left in the ground. If wood had been left, it would not withstand decay so long as bark. Competent judges declare the bark to be that of oak...

"If anything is needed to prove that this slight mound "O" was an embankment of Fort Necessity, it is to be found in the result of Mr. McCracken's survey. The mound lies in exact line (this in italics) with the eastern extremity of embankment C A, the point C being located seven rods from the obtuse angle A, in line with the mound C A, which is broken by Mr. Fazenbaker's lane. Also, the distance from C to D (in line with mound "O") measures ninety-four feet and four inches—almost exactly Mr. Sparks's estimate of one hundred feet. Thus

Fort Necessity was in the shape of the figure represented by lines K C, C A, A E, and B E, and the projection of the palisades to the brook is represented by E D K, E H K, or L W K (line B E being prolonged to L).

Mr. Sparks’s drawing of the fort is thus proven approximately correct. (Archer B. Hulbert, Washington’s Road (Nemacolin’s Path), the First Chapter of the Old French War. In Historic Highways of America, Vol. 3, pp. 173-188, Arthur H. Clark Co., Cleveland, 1903.)
The first day the trench was completed from the point C to a point about twenty feet beyond A on the line A-B. The workmen were instructed to carefully examine and break up all excavated material in the hope that relics might be found of this historic battle. The first day's work netted four lead musket balls, of about one-half ounce size, heavily coated with oxide, these being uncovered at depths ranging from six to eighteen inches below the surface. The next day the trench was completed to the point F and seven more lead musket balls were found, all of one-half ounce size except one which weighed a shade over an ounce. At a point on the line B-F about three feet from B, the first
indication of the old stockade was unearthed, it being a section of fairly solid heart wood eighteen inches long, three and one half inches wide and two inches thick, badly pitted from the action of time. The bottom of this piece was almost in the center of the trench, about three feet underground with the top inclined at an angle of about forty-five degrees toward the inside of the fort as though it had been partly pulled over in the demolition of the stockade.

From F, as there was no known description from which a definite location could be fixed on the ground, it was decided to follow the lines F-G-C. This was followed out, without finding further indications until the intersection of the line G-C with D-E was reached. At this point three large pieces of the stockade were uncovered at a depth of three feet. This depth is just water level with the branch of Big Meadow Run near this point and probably accounts for the fact that the timber here found had been preserved all these years. As the line of the stockade was plainly indicated by the three pieces unearthed, excavation was carefully extended along this line toward E, with the result that six more pieces were found, the last being at E. From here a trench toward F was started which resulted in finding three more pieces at a point five feet beyond E on the line E-F and another large piece which had been just missed while excavating along the line F-C. These pieces of the stockade were all in an upright position, many showing ax marks where they had been pointed to aid in penetrating the ground. They
varied in thickness from six inches to, in one case where the log had evidently been split in half, seventeen and one half inches. The tops were typical of wood that has been exposed to the action of time and water. At a point four feet from E on the line E-F on the inside of the trench and two feet below the surface, six iron balls, each one and one-half inches in diameter and weighing about one-half pound, were dug up within the space of one cubic foot. These were, in all probability, ammunition from Washington's swivel guns. Seven lead musket balls, all about one-half ounce size were also found on this line. At the point D seven small pieces indicating an angle in the line of the stockade were found and all along the line D-C bark and pieces of rotten wood, which were in such condition that they could not be preserved were uncovered. These findings substantiate Bulbert's statement in finding bark along this line when the McRaken survey in 1901 was made. Also at various points along this line pieces of charred wood and lumps of charcoal were excavated from a depth of about three feet, this giving evidence to support the statement that the stockade was burned. Ten feet beyond D on the line D-C, a large cannon ball, three inches in diameter and weighing three and one-half pounds was found on the outside edge of the trench about twenty inches below the surface. Numerous lead balls of various sizes came to light on lines E-D and D-C, some of them weighing as much as one and one-half ounces.
While excavating for drain tile inside the lines of the Fort, approximately two hundred lead shot were found, ranging in size from number eight to buckshot, which looked as though they had been hurriedly made by pouring molten lead in a thin stream into cold water. We also found numerous lead musket balls of one ounce size and the flint from a flint lock musket.

Three feet underground and midway between E and D a small piece of straight grained wood, seven inches long and of one-half inch diameter was uncovered. This could easily be a portion of either a wooden ramrod for the muzzle loading muskets or an Indian arrow shaft.

The evidence found by investigating this site may be summed as follows: The embankments on the lines C-A and A-B which were in evidence in 1816 as proved by the Freeman Lewis survey. The embankment on the line B-F which may have been, and probably was visible at the time of Lewis' survey. This embankment is plainly joined to the one on the line A-B on the inside of the fort at the point B and in no possible way could it have been construed as being thrown up in excavating a farm drain as some authorities have insisted. Besides it is proven at B and at F by the finding of parts of the stockade. The lines F-E, E-D, and D-C are indisputable, as sufficient remains of the stockade were excavated to prove their location beyond the shadow of a doubt.
Commonwealth of Pennsylvania)
County of Fayette )

Personally appeared before me, an Alderman, H. R. Blackford of Un-}
iontown, Penn., who does de-}
pose and say that he is the Engineer in charge of reconstructing 
Fort Necessity and the author of the foregoing article and that 
the statements therein set forth are true and correct to the best 
of his knowledge and belief.

(Signed) H. R. Blackford.

Sworn and subscribed before me this sixteenth day of December, 1931.
My commission expires January 2, 1934.
(Signed) Matt Allen
(Signature of Alderman)

Commonwealth of Pennsylvania)
County of Fayette )

Personally appeared before me, an Alderman, the subscribers hereto who do de-}
pose and say that they were employed in the excavating of the } 
foundations of Fort Necessity and that they have read the foregoing 
article and found the statement therein set forth true and correct to 
the best of their knowledge and belief.

Sworn and subscribed before me this sixteenth day of December 1931. My commission expires January 2, 1934.
(Signed) Matt Allen, Alderman

(Signature of Alderman)

J. G. Hager
E. M. Hansen
W. P. Show
E. W. Bishoff
Clarence E. Savage
Charles H. Spaw
SURVEY OF
FORT NECESSITY
WHARTON TWP. FAYETTE CO., PA.

Remains of old palisades on lines e-o-e f-b

Note: This site is covered with dense growth of swamp grass, weeds, and bushes. Enlargements are well defined and about one foot higher than adjacent ground. All ditches shown on inside and outside of fort, from 6 to 10 inches in depth. (H.R.B. 8-4-31)

Revised Dec. 8, 1931, to show changes due to finding remains of old palisades on lines e-o-e f-b.
Plan of Fort Cumberland, date February, 1755.
The old fort, indicated as a square with bastions, was built constructed in the spring of 1754 and was designed to be the base of operations for Washington's expedition to Fort Duquesne. The parade ground and barracks (numbered rectangles) were constructed early in 1755 to make additional space for the arrival of Braddock's army. The old fort was "made of Puncheons of Wood and cut 12 foot and set 3 feet in the ground" as stated in the notes on the plan, and may well have been the pattern followed by Washington's men in building Fort Necessity.

(Original in British Museum, printed in A.B. Hulbert, Highways of America, Vol. 4, p. 26.)
Captain Trent and a small band of Virginians were sent to the forks of the Ohio early in 1754 to construct a fort. They had not completed the structure when a party of French and Indians drove them away and burned the fort. The French immediately set about the building of Fort Duquesne on the same site. This plan, designed primarily to show the position of Braddock's expedition at the time it was attacked in 1755 by the French at Turtle Creek, shows also the shape of Fort Duquesne and its outer defenses. There is some probability that the interior fort may have been built along the same lines as that of Captain Trent's fort and therefore may be very similar to the stockade built later at Fort Necessity.

(The original of this map is in the King's Mss. Division, British Museum. This copy is made from a negative in the Pennsylvania Historical and Museum Commission, Harrisburg.)
Plan of Fort Duquesne by Robert Stobo. Stobo was in the action at Fort Necessity and was one of the two hostages given by Washington to the French at the close of the battle. While under guard in the French fort, Stobo made this drawing. (1754)
Map of Braddock Road and several encampments east and west of Laurel Mountain. Great Meadows and Fort Necessity are shown, the latter as a small square.

(The map is dated 1755 and is from the original in the British Museum.)
Map of the Pennsylvania-Ohio country, 1755, showing location of forts particularly on the Ohio River north of Fort Duquesne. Fort Necessity is shown obviously enlarged and four bastions are clearly indicated. It appears that the author intended to show not only the location but the general shape of the fort outlines. (The negative of this map is in the Pennsylvania Historical and Museum Commission, Harrisburg.)
Cours de L'Ohio by Bellin, Engineer of the Marine. Map of the Pennsylvania-Ohio region in 1755 emphasizing the course of the Ohio River. The map indicated Fort Necessity by means of a square. The indication of the fort by a square may be also a conventional of indicating forts on the map or Fort Duquesne and other forts further north are shown in this manner.

The original of this map is in Paris Service Hydrographique, Biblioteche. Negative is in the Pennsylvania Historical and Museum Commission.
Map of Braddock Road, author not indicated, which appears in Jared Sparks' Writings of Washington, 1832 edition, Vol. II, p. 38. The map indicates the course of Braddock Road and indicated the location of Fort Necessity by means of a small square. This is not understood to mean that the author intended to show the actual shape of the fort.
Reproduction of the Freeman Lewis survey of 1816. The source of this map is not known at this time. The map varies from the version published in Lowdermilk, especially in its location of the stream bed in relation to the stockade. This chart indicates the main stream running through the Fort extension, the Lowdermilk plan, only a small branch of the stream running through the extension.

Believed to be the original Lewis map, which has remained in the Lewis family in Brownstown until recently. Of Abrahams & Schwanke families, it for a brief time. Not being able to locate it, the belief it had been returned to Margaret Lewis, last surviving member of the family, who died 1852 in Brownstown.
Copy of the original survey made by Freeman Lewis in 1816 and first printed in Will H. Lowdermilk's History of Cumberland, Maryland, published in 1878 (p. 76). The subject of considerable controversy later concerning the outline of the stockade, this diagram shows a fort of triangular shape with an extension on the creek side and a small branch of the creek running through this extension, apparently to indicate the location of the stream at the time of the action. The sketch is in error in locating Braddock Road a few feet from the stockade. It passes actually nearly 100 yards south of the fort.
Sketch of the Fort Necessity stockade which was reproduced in Frontier Forts of Pennsylvania published in 1896. The editors accepted the Freeman Lewis survey as authentic but in reproducing it they have omitted actual connection between the stockade and the stream bed. The Lewis survey shows a branch stream running through the stockade extension. The stockade extension in the Lewis survey is shown by straight lines and this sketch shows a rounded line.

(This sketch was reproduced from Frontier Forts of Pennsylvania, 1896 edition, vol. II, p. 32.)
Sketch of the Fort Necessity stockade and vicinity made by Jared Sparks at the time of his visit to the site in 1830. Sparks first outlined the stockade as a four-sided enclosure, and indicates the northeast corner of the fort extending to the stream bed. He also indicates the embankments on the south and southwest sides of the fort, and the directions and distances from which the French and Indians directed their attacks on the fort.

(The sketch is reproduced from Jared Sparks, Writings of Washington, Vol. II, p. 56.)
Map of Braddock's route in 1755 drawn by Middleton in 1847. The map indicates by means of a dotted line the course of Braddock Road and by a solid line the course of the National Road. Great Meadows and Fort Necessity are clearly shown. Although the fort is indicated by a small square, this is not understood as a means on the part of the author to indicate the shape of the fort.
Engraving of Fort Necessity and adjoining hills by David Shiver Stewart about 1850. It is an attempt to show the action at the Fort July 3, 1754. It may represent the extent of woodland on the surrounding hills as they appeared at the time of the action, or at the time the drawing was made.
Photograph of a painting by Paul Weber of Great Meadows and Fort Necessity in 1854. Apparently no attempt was made in marking the outlines of Fort Necessity which should be in the vicinity of the stream at the right.

(The original painting hangs in the hall of the Historical Society of Pennsylvania, Philadelphia.)
Sketch of the Fort Necessity stockade remains about 1903. It is probable that the indications of the fort outlines on the ground at that time were considerably magnified in this sketch. It is reproduced from A. B. Hulbert, *Historic Highways of America*, Vol. III, p. 157.
Sketch of the Fort Necessity stockade based upon surveys by McCracken about 1903. McCracken, a civil engineer, accompanied A. B. Hulbert on a visit to the site. On the basis of indications on the ground, particularly the embankment marked O on the sketch, they doubted the accuracy of the Freeman-Lewis sketch and undertook excavation at various points. The small AEC triangle represents the Freeman-Lewis survey sketch and their own findings are indicated in solid and dotted lines, somewhat near the outline of the Harper sketch and that of Blackford in 1831.

This sketch is taken from A. B. Hulbert, Historic Highways of America, Vol. III, p. 179.
Photograph by J. K. Lacock of Great Meadows Fort Necessity site as they appeared about 1913. The view is westward and the remains of the embankment are just beyond the three trees in the center of the view. The photograph was printed in Robert Bruce, The National Road, p. 60.
Survey of the embankments by H. R. Blackford, Registered Engineer of Uniontown in 1931. This drawing was based upon findings of trench remains and artifacts discovered after extensive excavations. The present stockade was built on lines established by this survey.
Vicinity map of Fort Necessity showing the National Battlefield Site, the State Park, Mt. Washington Tavern, Braddock Park, Jumonville Glen, Braddock Road and the National Road (U.S. 40)