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The Mumma Barn
ANTIETAM
National Battlefield • Maryland
EXECUTIVE SUMMARY

PURPOSE OF THE REPORT

As part of the General Management Plan (GMP) (1992 – approved) for Antietam National Battlefield, a series of historic structures are to be restored, rehabilitated, and adaptively reused. One such structure is the Mumma Barn, part of the Mumma Farmstead, a site of national significance (one mile northeast of the town of Sharpsburg, Maryland, in southern Washington County –Figs. 1-6 and Appendix A). According to the GMP, the barn was to be adaptively reused as a park administration building, but as the result of an alternative facility becoming available, it will be rehabilitated for continued agricultural use.

On the morning of the great Battle of Antietam, September 17, 1862, the bloodiest one-day battle of the War Between the States, the original Mumma Barn was burned. This investigation deals with the "new" Mumma Barn, rebuilt soon thereafter in approximately 1863. Both the new and the old Mumma Barns are examples of Pennsylvania Forebay Barns, a barn-type common to this area of Western Maryland, specifically the Hagerstown Valley. This Historic Structures Report (HSR) traces the new barn’s evolution, its social history, its current condition, and its proposed use. It also fulfills compliance requirements if the building and site, which are on the National Register of Historic Structures, are modified. It acts as a guideline so that the barn will be reused in a manner sensitive to its long-term preservation. Any work on the barn must respect the park’s main objective, to "preserve the pastoral scene that prevailed at the time of the battle."

REHABILITATION OF THE MUMMA BARN

The rehabilitation of the Mumma Barn is part of construction Package 315. Also included in this package is work on the Mumma, Sherrick, and Otto Farmhouses.

As part of the historic scene restoration, the exteriors of the Otto and Sherrick Farmhouses...would be restored...and [the] Mumma Farmhouse [including the Mumma Barn] would be rehabilitated...

The important distinction to note from this quote is the difference between "restored" (restoration) and "rehabilitated" (rehabilitation). According to the Secretary of the Interior’s Standards for the Treatment of Historic Properties:

The Restoration Standards allow for the depiction of a building at a particular time in its history by preserving materials from that period of significance and removing materials from other periods.

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2 General Management Plan/Final Environmental Impact Statement X Antietam National Battlefield, Washington County, Maryland; p.12.
The Rehabilitation Standards acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character.\(^3\)

According to these standards, rehabilitating the Mumma Barn involves taking the structure as it is today, complete with additions and modifications, and making any necessary repairs. For example, there is a lean-to addition on the northeast side, which was built after the barn's original construction. If we were restoring the barn to its 1863 appearance, this addition would be removed completely. Since we are rehabilitating the barn, this addition will be repaired and left in place. What is most important is that the architectural integrity of the barn is preserved.

**SIGNIFICANCE OF THE STRUCTURE**

The Mumma Barn has many layers of significance. First and foremost is its location during the Battle of Antietam, but it is also a fine example of the vernacular architecture that is common to this area and so unique to the rural landscape of this country.

No other rural man-made structures are more distinctive or more characteristic than the great farm barns that dot the countryside of America\(^4\).

Unfortunately, with the farming industry on the decline, with general economic change, and with the rise of commercial and residential development, barns are vanishing from our landscape. The Mumma Barn is 136 years old. It is a legacy to the family who built the structure and used it productively for many years. Even though the "new" barn is not original to the site, it is still an excellent example of the forebay barns so prevalent in this area and worthy in its own right of protection and preservation.

**INTENDED USE OF THE BARN**

The development/study package proposal and the project agreement between Antietam National Battlefield and the National Park Service, Denver Service Center (Appendix B), state that the barn is to be adaptively reused to house the park's natural and cultural resources staff. However, when the cost for this adaptive reuse was estimated and an alternative site became available to the park for their administrative needs, a decision was made to rehabilitate the barn leaving its original use unchanged. Therefore, the barn will be structurally stabilized and all necessary repairs will be made for its continued use as a farm structure. Along with the surrounding land, the barn will be leased to local farmers.

Antietam National Battlefield has worked hard to maintain and restore the feeling of the land at the time of the battle. Its gently rolling hills and fields of corn look quite similar to the days when this


quiet farm town was innocently caught in the cross fire of Confederate and Union bullets. It is of vital importance that "The ...barn...will continue to be maintained as part of the historic scene,".

ORGANIZATION OF THE REPORT

This document will follow the guidelines for Historic Structures Reports as provided by the National Park Service's *Cultural Resource Management Guide* NPS 28. NPS 28 calls for a three-part report:

- Part 1. Developmental History
- Part 2. Treatment and Use
- Part 3. Record of Treatment.

Most of this report is included under Part 1. Developmental History, as the Treatment and Use and Record of Treatment are still being developed. The report is then divided into a series of subheadings including:

- A. Historical Background and Context
- B. Chronology of Development and Use
- C. Physical Description

Under these sub-headings, the report briefly discusses the settlement of Western Maryland, the social history of the Mumma Family, and the significance of the farmstead on the morning of the Battle of Antietam. It then moves on to an investigation of Pennsylvania Forebay Barns and how the Mumma Barn fits neatly into this category. Following this, the Mumma Barn will be assessed architecturally. Changes to the barn over the years are identified and current conditions are assessed in terms of any required repairs or maintenance. The report includes sections on the surrounding landscape and current archeological investigations on the site. Graphics are included throughout the text and a bibliography is also provided. Appendices include copies of historical documentation, project documentation, and a detailed architectural assessment of the barn (in three separate volumes; available from the Antietam cultural resources staff or the Denver Service Center).

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5 From the project agreement between Antietam National Battlefield (ANTI) and the Denver Service Center (DSC), Package 315, June 1997.
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CHRONOLOGY OF DEVELOPMENT AND USE

There is often little documentation available about who designed a barn, who built a barn, and who changed a barn over time. This is true of the Mumma Barn, where little information of this nature was found.

"...old barns...rank among the noblest works of man, and for the most part anonymous man. Very rarely will the architect appear in these pages."  

What the visitor sees at the Mumma Barn today is close to what was there when the barn was rebuilt just after the battle. Some changes have been made over time and this report will try to document any modifications. It is, however, difficult to give a precise date a change was made because historical documentation is so difficult to find. While performing research for this project, it became apparent that when visitors documented their trips to Antietam over the years, especially when they took photographs, they often bypassed the Mumma Farmstead buildings because they were nonhistoric to the time of the battle. There are collections of photographs dating from the turn of the century to the mid-twentieth, but none of these include pictures of the Mumma Barn. In fact, one booklet titled, *Views of Antietam Battlefield*, circa 1900, located at the Western Maryland Room of the Hagerstown Free Library, inserted only one sketch among all its photographs, an engraving of the burning of the Mumma Farmhouse and Barn.  

This Historic Structures Report outlines repairs that are necessary for the barn's longevity, with an emphasis on those that require immediate attention. A list of maintenance and repairs that have been performed follows, including a date when each was completed (see Table of Alterations, Repairs, and Maintenance Completed on the Mumma Barn. A detailed field assessment of the barn's existing conditions is contained in three volumes accompanying this report. The information in the maintenance table was found in Antietam National Battlefield park files, through interviews with the park's cultural resources staff, and from general observation.

EXISTING CONDITIONS

What you see today is a two-story, timber-framed, forebay barn, painted white, with a coarse, fieldstone foundation and two flanking lean-to additions. Two outsheds or granaries (these two terms will be used interchangeably through the report) extend from the rear elevation (northwest elevation). The barn is clad in vertical board siding with a matte-black/brown metal standing-seam roof with horizontal wood snow boards at the bottom edge. The two flanking lean-tos have corrugated-metal roofs. The northwest elevation has four large wooden wagon doors that, when fully open, expose nearly the entire interior. Inserted in two of the large doors are small single doors.

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56 W.B. King. *Views of Antietam Battlefield*, W.B. King Photographer, Hagerstown, Maryland, circa 1900. Another photographic collection which omitted the Mumma Barn was by Fred Cross, a Massachusetts Civil War buff who traveled to Antietam on several occasions from approximately 1919 to 1924, and documented his findings in a report (copy in Antietam National Battlefield park library).

57 These three volumes are available at the Antietam National Battlefield park files.

58 The type(s) of wood used in framing the barn has not been formally identified.
for easier entry (Figs. 54-55). The upper level is a vast loft space which is divided into four bays by three wooden, structural frames called bents (see Appendix A, axonometric), which rise up to support the roof. Functionally, the design of the bents, with a large clear area between the top of the bents and the peak of the ceiling, allows for the overhead transfer of hay from the threshing floor to the two mows for storage (Figs. 56-57). There is a regular pattern of wooden roofing lath through which the underside of the unpainted galvanized metal roof is visible (Fig. 58). Small gaps are set between each slat of vertical wood siding, so that natural light streams into the space and the space remains well-ventilated even on the hottest days (Fig. 59). The floor is wood (Fig. 60) and there are two hatches ("hay bays"59) just off each granary that provide access to the lower level and allow grain and hay to be dropped to the animal stalls. There are two double winnowing doors on the front elevation (southeast elevation) which open above the barnyard and also allow animals to be fed below (Fig. 61).

The ground level is divided into seven separate sections, which include horse stalls on the southwest end,60 cattle/dairy stalls at the northeast end, and assorted feeding and holding areas in between (Fig. 62-64). The floor is dirt except for the dairy area that is surfaced with concrete. A galvanized nonhistoric grain pipe runs from the threshing floor above to a feed storage area below (Fig. 65). Access from the upper level to the lower level is through a hay bay at the northeast mow (for hay and feed only)(Fig. 66) and down an open stair from the southwest mow (Fig. 67). Access to the lower level from the west and north corners of the barn is through single doors. There are also six single split doors and one double-door that lead into the barnyard. In between the single doors, above the foundation walls, is 1" x 2" wood lattice for ventilation (Fig. 68). There are also transoms above the single doors with wooden dowels running horizontally in each opening.

The original 60' x 60' barnyard is still delineated, although only a portion of its original stone wall exists on the south side (Fig. 69). Cultivated fields and pastures surround the barn. Cows graze nearby and corn grows high in the summer months. To the southwest of the barn lies the rest of the farm buildings. Directly adjacent is a combination tractor garage/chicken house built in 1936 (Figs. 70-71)61 and a short distance away are the rebuilt farm house (Fig. 72), the original spring house with rebuilt roof (Fig. 73), and a series of small out buildings. A cemetery for the Mumma Family lies to the northwest (Fig. 74).

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60 Draft horses were often located at the end of the barn closest to the house. In case of fire, the horses, which were most valuable to the farmer for work and transportation, could be retrieved first. Also, horses had better feeding troughs than cows. A wooden board is recessed into the foundation wall in this area, which has wooden pegs where a horse's bridle, harness, etc. could be hung. Only a few of these original pegs remain.

61 Richard Brown. _Evaluation of Barn, Dwelling, and Outbuilding Conditions at the Mumma Barn_, p. 9. The tractor garage/chicken house is a wood framed structure that was constructed on or near a former machine shed. Materials used to construct the building may have been salvaged from an original structure. The later building functioned partly for storage of farm equipment (on the northeast side) and as a large chicken house (on the southwest side). This structure, which is in fair to poor condition, is non-contributing to the site and is slated for demolition.
Structural Conditions and Repairs

The overall structural condition of the Mumma Barn is fair; it is not in danger of collapsing, but there are issues that must be addressed. This report will discuss some general observations concerning current deficiencies and a history of repairs. In addition to what is described in this report, a Denver Service Center structural engineer will perform a more technical and in-depth assessment of the barn.

Patrick Macdonald noted that there are many similarities in the structural damage found at the Mumma Barn and structural damage found at the Piper Barn (a Pennsylvania Forebay Barn in the vicinity). The Piper Barn recently went through a major rehabilitation by the National Park Service (Fig. 75-79). Although the Piper Barn is considerably larger, the two barns are built on similar topography, are of a similar design, and are constructed of similar materials. They also have the same physical orientation. It is logical then that they would experience the same types of structural problems. A Historic Structures Report completed for the Piper Barn in 1983 was consulted for this project.62

The rehabilitation of the Piper Barn required repair and reinforcement of its timber structural system. Metal plates and reinforcing bars were used to bolster the wooden bents, beams, and joists that were failing (Figs. 80-81). This additional support was executed in a sensitive manner so that the most character-defining features of the barn's interior remain intact. Similar treatments will need to be applied to the Mumma Barn.

Southeast (Forebay) Elevation at Upper Level: The upper level interior of the barn has several areas of structural damage, primarily along the southeast elevation. The area where most of these problems occur is at the intersection of the roof rafters, the roof purlin, and the angled purlin posts (diagonal bracing) of the bents. Wood in this area has rotted and several structural members have been replaced or currently require replacement. This damage is partially caused by warm air rising to the top of the loft space, hitting the cold metal roof, and condensing. The condensation rolls down the length of the roof and stops at the rafter ends, the purlin, and the wall plate, saturating each wood member. This repeated saturation causes rotting and eventual failure. Also, snow and ice on the southern exposure of the roof is likely to melt faster than on the northern exposure. This brings additional moisture to the down-slope side of the barn where this damage occurs. The rafter ends are reinforced with small lengths of wood (the reinforcement is now rotted as well) (Figs. 82-83). The original wall plate was replaced in three sections. The connections of the angled purlin posts are in need of repair (Fig. 84). The sill at the bottom of the wall is damaged, especially at the door thresholds (Fig. 85). Portions of the winnowing doors were replaced. The galvanized finish of the underside of the roof is flaking off at the end, and each piece of roofing lath throughout the ceiling is stained dark brown from the moisture.

Because the southeast elevation is the down slope side of the barn, settlement and movement has occurred and many of the mortise and tenon connections are beginning to fail. The barn also experiences movement associated with thermal and seasonal fluctuation, which adversely affects structural connections.

It should be noted that the structural system on the upper level operates independently from the structural system on the lower level.

**Bents at Upper Level:** The five bents, which make up the primary structural system of the upper level, are all original. They are of large hand-hewn timbers and each is a double-T in shape. They are the most impressive part of the interior, both from an aesthetic and a technical point of view. The posts of the central bent are chamfered, or beveled at the corners. This was likely done to avoid having the posts, especially at the vulnerable corners, be damaged by heavy equipment (Figs. 86-87).

As mentioned above, several of the mortise and tenon connections on the bents are beginning to fail, especially on the southeast side of the barn. The southeast posts of the bents bear directly onto the ends of the floor joists. These joist ends are quite damaged and can no longer properly support the framing (see next section). At one of the central bents, failure has occurred where the rafters, wall plate, and tie beam intersect (Fig. 88). With proper repairs, these failures can be corrected to preserve the character-defining features and structural integrity of the barn.

**Damaged Joist Ends:** In 1986, Richard Brown, Chief of Cultural Resources for Antietam National Battlefield, wrote an evaluation of the barn. At this time, seventy percent of the ends of the cantilevered floor joists supporting the floor of the forebay were deteriorated. There have been no repairs made to these joists to date, except for a paint job, which only obscures the damage (Figs. 89-91).

With the exception of the rotted joist ends, it should be noted that the remainder of these joints are in fairly good condition, with only isolated areas of deterioration. The joists are all original and are continuous, spanning the whole distance of the northwest/southeast orientation, except under the outsheds (see g) Outsheds/Granaries, this section). As the joists run outside the barn to support the forebay, the timber is more finished and squared off and they taper upward slightly. Robert Ensminger said that it is common to see this condition in German-framed barns. It reflects a desire for clean and orderly timber in more visible areas of the structure.

**Southwest Elevation at Upper Level:** The main vertical member in the southern corner of the barn has severe insect damage, probably from powder-post beetles and/or termites. The damage is so extensive that it is now reinforced by an additional support (Fig. 92). There is also insect damage on some of the adjacent structural members, which is more pronounced on the vertical and diagonal members than on the horizontal members and the siding.

The condition of the roofing lath at this end of the barn is worse than in other areas. Several pieces have been patched or replaced.

**Northwest Foundation Wall:** The northwest foundation wall under the wagon ramp or driveway has an interesting history. A 20-foot section of this wall recently collapsed, leaving a large pile of stone rubble. When this research project began, the wall was bowing out significantly (Figs. 93-95). As a result, in June of 1997, the park placed two temporary posts with adjustable jacks in front of the wall. The jacks were slowly turned (a small amount every other day) and the pressure on the wall was released. When the load was redistributed to the temporary posts, the wall stones began to loosen. Richard Brown, who supervised the project, predicted that not only would the stones come loose, but that the wall would eventually collapse, leaving the temporary posts to carry the weight. It

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63 The park last fumigated the barn in 1992.
did indeed collapse on or about September 8, 1997 (Fig. 96) and was rebuilt in December of 1997 by park staff.

There was a spigot located in the lower half of the wall (Fig. 97). This indicated that a cistern might lie at the exterior, below grade, which was pushing against the wall causing it to bulge.

On October 1, 1997, an archeological excavation at the driveway confirmed that a cistern does indeed exist in this location. Everyone was quite surprised at the size and excellent condition of what was found. It is a large oval-shaped, brick structure, parged in plaster, which measures 8' x 17'-6" and is 6' high, spanning most of the width of the driveway into the barn (Fig. 98). The entrance hatch is framed in metal and a steel panel recessed into the frame closes the opening (Figs. 99-100). When the archaeologists came on site, this hatch was concealed by dirt, but it took little time to determine its location. Several openings at the top of the cistern allowed water to enter the enclosure. These are likely clogged, since the tank is mostly empty. There is still a small amount of water at the bottom after a heavy rain, but this water may be coming through leaks in the hatch (Figs. 101-104).

It is unclear when the cistern was installed, since most of the materials are traditional and it has remained so well preserved underground. The metal entrance hatch, if original, may place its installation around the time of the 1936 barn rehabilitation.

With a cistern in place, gutters and downspouts fed into this area. In addition to the pressure of the tank itself on the adjacent foundation wall, faulty drainage with water leaking over time and water freezing in the winter, may have caused additional damage.

Rotting Posts at Lower Level: Another condition needing immediate attention is the rotting of many wooden posts on the ground level as they go below grade. As a result, there is a visible separation of several posts from the joists above (Fig. 105). The structural evaluation currently underway will determine the extent of this damage and which posts (or portions of posts) require replacement. Several have already been repaired by park maintenance (Figs. 106-107).

Damaged Beam at Lower Level: In 1985, a 11" thick x 12" high x 16' long main girder at the northeast end of the barn was temporarily repaired by park maintenance staff. The girder was severely cracked, causing the floor above to sag (Fig. 108). At that time, it was a very unstable condition because the farmer leasing the barn had the area directly above loaded to capacity. To remedy the situation, a 10" x 12" x 16' long steel I-beam was placed adjacent to the beam to carry the load (Figs. 109-110). This has temporarily stabilized the area and is a reversible repair.

Foundation

As mentioned earlier in the report, there is some debate as to whether the original foundation of the Mumma Barn was reused after the fire on the morning of the battle. Several sources say that it was, but with further examination and consultation with park staff, this does not appear to be true. In 1985, the Sherrick Barn (adjacent to the Sherrick House, which lies within the boundaries of the park), burned down. It was also a Pennsylvania Forebay Barn, with the same typical plan as the

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64 Information provided by Richard Brown, Chief of Cultural Resources, Antietam National Battlefield, Fall, 1997.
Mumma Barn including a fieldstone foundation. In fact, all that remains of the Sherrick Barn is its ruined foundation (Figs. 111-112).

The stone typically used for these foundations is the rubble that dots the local fields. It has a high lime content (as does the mortar used to build with the stone) and when exposed to heat, it cracks and fractures and loses its structural integrity. A perfect example of this can be seen at the ruins of the Sherrick Barn. As the photographs indicate (Figs. 113-114), if the barn was to be rebuilt, the damaged foundation, which was stabilized for safety and for interpretative purposes, would have to be replaced or significantly rehabilitated. Additionally, the stone, when exposed to extreme temperatures, often turns reddish in color (Fig. 115). The stone at the Mumma Barn shows none of this characteristic damage. There is an occasional stone that is pinkish in color as some of the original stones may have been reused, but it is generally in very good condition (Fig. 116). The same argument could be made when examining the basement of the Mumma Farmhouse. The stone there is also in good condition and was therefore, was replaced after the house was rebuilt.

**Repairs to and Condition of Foundation Walls:** Over the years, the stone foundation walls of the Mumma Barn, both interior and exterior, have been stabilized and repointed due to loss of the lime mortar, erosion, and localized over-loading (Figs. 117-119). Several areas still require repair, especially on the northwest side (see the section on Structural Conditions and Repairs above). In 1992, park files indicate that the walls of the driveway were repaired and repointed. More recently (1992-1997), the majority of the interior walls were repointed. Much of the stone along the southeast elevation has recently been repaired, but a few damaged sections still remain (Fig. 120).

At the east and south corners of the foundation, the stone walls curve out and become thicker (Appendix A: HABS Drawings, First Floor Plan). Robert Ensminger said that this is a common feature of many Pennsylvania Barns, built to provide extra support at a weak point in the structure.

**Implement Shed Addition**

A major modification to the exterior of the barn was the addition of an implement shed or lean-to on the northeast side. Evidence, such as a door, which leads from the north granary to the exterior, now obstructed by this construction, verifies that the shed is not original. The earliest photograph that shows this addition definitively in place is a 1936 aerial view (Figs. 121-122). The shed may also be present in the 1906 photograph of the barn from the observation tower, but the image is small and it is difficult to tell what is actually there (Figs. 47-48).

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65 According to the park, there are no plans to rebuild the barn at this time.

66 Presence of the implement shed in 1936 was confirmed by Gregory T. French, a private consultant (Global Positioning Systems (GPS)/Global Imaging Systems (GIS) expert), formally of Geo Research, a group that completed an analysis, through aerial photography, of the Sunken Road and the Mumma Farmstead. The aerial photograph referenced was taken by the U.S. Soil Conservation Service (SCS), May 18, 1936, at a scale of 1:15,840.
According to Richard Brown, the size of the shed was reduced.

An implement shed on the north-east side was originally 10 feet wider than what presently exist[s]. Due to weakness of rafters and sidewalls, the old structure was torn down and rebuilt in the 1940's to the now existing size.\(^\text{67}\)

In 1992, the shed was substantially rebuilt once again by the National Park Service's Williamsport Preservation Training Center (WPTC)(Figs. 123-128). It nearly collapsed because it slipped from the foundation due to a rotting sill, which also caused the exterior wall to belly out. As a result, the structural sill and plates were replaced. The roof was damaged as well and was repaired at this time. In 1994, park staff replaced the exterior siding.

The northwest elevation of the shed once had a door. This door is shown in place in the 1988 HABS drawings (Appendix A), but it was removed due to its deteriorated condition in 1992. A wooden door on a sliding metal track still exists at the southeast elevation (Fig. 129). The door itself was rebuilt when repairs were done to the shed, although the metal track looks older. A significant amount of erosion has occurred below this door due to drainage problems in the immediate area.

At some point, a beam was placed over the head of the door leading from the implement shed to the north granary, for nailing in rafters. A window on this wall was also modified. Bars were removed and it was covered with sheet metal.

Although the implement shed is not original, as part of the rehabilitation of the barn, the shed will remain.

Replacement of Siding and Roof

According to Richard Brown's report, in 1936, major repairs were done throughout the barn.

Further improvements were made in 1936 when the entire barn was covered with new siding and a standing seam roof replaced the wood shingled roof.\(^\text{68}\)

**Siding:** The overall condition of the siding, both on the interior and on the exterior, is good. However, there are isolated areas of damage that must be addressed. For example, many panels of siding suffer from insect attack. Although the park treated the barn in 1992 and it is inspected semi-annually by an exterminator, it must be determined if any siding requires repair or replacement (Figs. 130-132).

The interior face of the siding is unpainted and in many instances, moisture damage is evident. There is also a white bloom on the edges of large sections of the interior face of the siding, which is likely some form of fungal growth (Fig. 133). These white areas are slightly softer than the healthier

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\(^\text{68}\) Richard Brown. *Evaluation of Barn, Dwelling, and Outbuilding Conditions at the Mumma Barn*, p. 5. As a general note, the two quotes above indicate that in the late 1930's to early 1940's, the barn was in need of major rehabilitation. If it was indeed built in 1863, this would have made the structure seventy-five +/- years old when it required major rehabilitation, certainly time enough to be showing its age.
wood at the center of each board. It makes sense that the edges show this condition, as wind and moisture seep through the open ventilation gaps on either side of each board.

In 1992 the siding of the west granary, the snowboards, and the roof of the main structure were repaired once again by the park (Figs. 134-136)

**Roof:** After examination of the underside of the existing roof, it appears that parts of the roof= structural system may have been replaced in 1936 when it was converted from wood shingle to sheet metal. It has not been determined whether the rafters are original or whether they were replaced as a result of this effort (Fig. 137).

At some point, a metal track was installed at the ridge board or roof pole (the peak of the interior). An original piece of hardware and a pulley are still in place. This track is called a "hay fork carrier" which held the "hay fork", a piece of apparatus used to pick up hay and transfer it to the mows for storage.\(^{69}\)

When viewing the exterior roof of the barn from the northwest (rear elevation), the color of the painted metal roof is dark brown (Fig. 138). When viewing the barn from the southeast (front elevation), the color of the painted metal roof is deep black. The roof was last painted in October of 1992, with a grey "Rustoleum" primer and a flat black Rustoleum finish coat. According to Richard Brown, the contractor may have tried to cut corners by thinning the paint. The color differentiation was not noticed until several months after the job was completed.

The condition of the southeast roof is slightly more irregular than the northwest roof, with visible warping and more peeling paint (Figs. 139-140). This makes sense given that there are more structural problems on the down slope side of the barn and that there is more heat generated on the southern exposure.

It can be assumed that the 1936 replacement siding matched the original siding in design and character, but that the current roof, which to the knowledge of park staff is still the 1936 version, is quite different than the original. The roof today must have a heavier, more substantial feel than the wood shingle roof of 1863. It has, however, protected the building well over the years, as it is still in good condition, considering its age, and the interior stays relatively weather-tight (Fig. 141). When the barn is rehabilitated, it will be replaced with a new standing-seam metal roof to match the one currently in place.

**Conversion to a Dairy Barn**

During the ownership of the barn by the Spielmans (1924-1961), a portion of the ground level on the northeast side was converted for use as a dairy barn. From the exterior, this is evident by the addition of a series of windows (Figs. 142-144). Although there is no documentation of exactly when this change occurred, from the materials used, five, metal-framed, fixed windows which are now broken, the work was done post-World War II, probably in the late 1940's or early 1950's. In addition to the windows, the interior was altered to accommodate milking cows.

\(^{69}\) Information provided by Richard Brown, Antietam National Battlefield.
...two stables and one feeding entry have been concreted for dairy use, twenty-one head stalls for cattle were built in.\textsuperscript{70} (Figs. 62-63 and Fig. 145)

Health regulations required that the open-slatted floor of the mow above, be boarded over so that hay did not fall into the milk buckets below.\textsuperscript{71} Today you see a beaded-board floor, which replaced the original.

When the barn is rehabilitated, the windows will require repair.

Floors

Upper Level: The floors of the upper level interior are in fair to poor condition. The majority of the threshing floor at the central bay of the barn is the original wood, except just in front of the wagon doors at the northwest elevation, where an area of boards has been replaced. The original boards are irregularly sized and are as wide as 18" and as thick as 1-1/2". They are also worn and patched in various places from the wear and tear of heavy use (Figs. 147-148). The floor of the southwest mow is also original, but is in poor condition with widely-spaced boards which are not structurally sound (Figs. 149-150). This area may look worse than it actually is, because historically, floorboards in a haymow were intentionally spaced for maximum ventilation. As previously discussed, the floor in the northeast mow was replaced with double-beaded, tongue and groove flooring, now warped, cracked, and seemingly unstable in sections, although the park is currently storing loose straw in this area (Figs. 151-152).

Lower Level: The general condition of the floors on the lower level is very poor, so poor in fact that it requires immediate attention. The topping slab of concrete at the dairy area floor (northeast side) is in total disrepair, primarily due to the infiltration of rodents, specifically ground hogs (Figs. 153-154). The floor in the remainder of this level is dirt (compacted clay and mixed aggregate), also seriously damaged by rodent tunneling (Figs. 155-156). The only other floor material is in a feeding area at the southwest side, which has rotting wood across approximately half its floor area (Fig. 157). When future work is done on the barn, the issue of how to keep the large population of destructive ground hogs from returning to the barn and causing more damage must be addressed.

Outsheds/Granaries

At the rear elevation, located on either side of the large wagon doors of the barn, are the outsheds/granaries. Close examination of how these extensions are tied into the barn structurally indicates that they are original (Fig. 158). Barns with double outsheds were commonly found in this area (Fig. 36). This design feature likely evolved from the increased need for feed grain storage, as area farmers kept larger numbers of livestock.\textsuperscript{72}

\textsuperscript{70} J. Clark Siebert, Appraiser. \textit{Hugh C. Spielman and Hattie G. Spielman Property, Bloody Lane and Hagerstown X Sharpsburg Pike, Sharpsburg, Maryland}, p. 9.

\textsuperscript{71} Information provided by Richard Brown, Antietam National Battlefield.

A curious condition that is visible under each granary is that the original log joists below, which support the floors of the granaries above, have been cut short and replaced by milled lumber (Fig. 159). It is not clear when or why this repair was completed, but one can speculate that the joist ends became moisture damaged and required replacement. Both the north and west corners of the barn traditionally have had drainage problems. The floors of both granaries may also have been replaced at this time. The floorboards are similar in appearance to the replacement floorboards just in front of the wagon doors (at the northwest elevation) (Figs. 160-161).

**North Outshed/Granary:** The condition of the north granary is fair. It is currently used to store National Park Service signs and miscellaneous lumber. The door leading into the granary is original, with a heavy piece of chain acting as a door pull and as a means of pad-locking the space. The granary is divided into three spaces by wood partitions. These were presumably used for storing grain. In two of the spaces, the walls are covered with galvanized sheet metal to act as a moisture barrier (Figs. 162-163). In the back space, there are old metal commercial signs for "Bonnie Bread" tacked randomly to the wall (Fig. 164). These signs look like they date from the 1940's or 1950's and were probably used for the same purpose as the sheet metal. For weatherproofing, the interior perimeter of the granary is clad with a layer of wood siding over the exterior siding. The floors are almost completely obscured by masonite, so their condition could not be assessed. The vertical wood siding on the interior of the granary and on the granary wall that faces the inside of the barn, are quite damaged by insects (Figs. 131-132).

**West Outshed/Granary:** The west granary is now used for storage of the park's masonry supplies. It is divided into two spaces with wooden partitions. There is nonoriginal shelving in the larger of these areas (Figs. 165-166). According to park maintenance records, the siding and bottom sill of the west granary were replaced in 1992. It had become badly damaged due to poor drainage and insect infestation. It was also braced structurally at this time (Figs. 130; 134-136).

**Wagon Shed and Corncrib**

Although the wagon shed and corncrib look like additions to the main body of the barn, the similarity of materials and construction methods indicate that they are original to the 1863 structure. A corncrib was a necessity for a farmer in this area (Figs. 167-169).

A continuous corrugated-metal shed roof covers both features (Figs. 170). This roof was repaired in 1991/1992 by the Williamsport Preservation Training Center as part of an emergency stabilization effort. Also in 1992, deteriorated sliding wooden doors were removed by park staff from the northwest elevation of the wagon shed (Fig. 167) and not replaced, leaving it open on both ends. The siding and foundation of the wagon shed are in good to fair condition (Figs. 171-172).

The corncrib is in very bad condition and needs immediate repair (Figs. 173-179). It is deteriorated throughout (foundation, framing, doors, siding) and as evidenced by the steel rods that were added in approximately 1983 for reinforcement, it has been in poor shape for quite some time.

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74 Information from Richard Brown, Antietam National Battlefield.
Animal Stalls at Lower Level

The condition of the animal stalls is poor, although most of their original layout is still intact (Fig. 62 [plan] and Fig. 180). The few repairs that have been made to the assorted stalls, grain troughs, hayracks, wooden partitions, and wooden gates, have been haphazard.

Doors and Openings

The condition of the doors throughout the structure is fair to poor: all are wood; many are missing altogether, have portions of the door missing, are racked, are out of plumb, or have been substantially rebuilt. Repairs have been made on the large doors at the wagon ramp entrance (the large door on the northeast side was rebuilt) (Figs. 181-185), and portions of the winnowing doors that hover over the barnyard on the southeast elevation are not original (Fig. 186). The six split doors and the double-swinging doors that lead from the ground level to the barnyard are in a state of disrepair (Figs. 187-190). Some original hardware exists, which may be reused (Fig. 191). All doors are framed in wood and most frames are in fair condition, with several areas of insect damage where historic material will have to be replaced (Fig. 192). Locks do not exist on any doors (with the exception of a pad lock on the west granary), so there is no way to secure the building (Fig. 193).

There are several window-like openings in the foundation walls. They have all been covered by sheet metal or plywood, with the exception of an opening at the southwest foundation wall at the interior of the wagon shed, which remains open to the horse stalls within (Figs. 194-195).

Drainage System

According to park maintenance records, in 1993, a sub-grade drainage system was installed on the northeast and northwest sides of the barn, as well as gutters and down spouts (Figs. 196-197). The fascia boards behind the gutters also appear to have been replaced.

There are notable drainage problems on the southeast side of the barn, as gutters and downspouts in this area were not replaced in 1993. At the east corner of the barn, where the stone foundation wall projects out to support the forebay, rain water passing through a faulty gutter and downspout is causing damage to both the stone wall and the siding above (Fig. 198). There is significant erosion at grade in this area. It appears that this condition has been happening for some time and needs to be remedied.

Barnyard

The barnyard is a 60' x 60' area that feeds off of the lower level of the barn. Along with the surrounding fields, it is currently leased to an area farmer. A seven-foot wide concrete path runs continuously along the edge of the building at the southeast elevation (Figs. 199-200). Many years of animal traffic and general weathering have caused a considerable drop (over one foot) from the outer edge of the path to the dirt yard. The drainage in this area is poor and outcroppings of limestone are visible.

The original yard was probably partially enclosed by three fieldstone walls, but only the wall on the southwest side remains. This section, which runs the whole length of the southwest side, is on the
National Park Service, National Capital Region, List of Classified Structures (LCS). It was repaired recently and is in good condition (Appendix K, Fig. 69, and Fig. 186). Defining the barnyard on the southeast side is barbed wire and scattered fieldstone, and on the northeast side there is a deteriorated wood fence. Broken nonhistoric wooden gates allow access to the yard from the southwest and northeast (Fig. 201).

In the 1906 O. T. Reilly photograph, there appears to be a small structure in the eastern corner of the barnyard (Figs. 47-48). Although it is difficult to tell exactly what was there due to the small size of the image, the structure does not appear to be permanent. It may have been some type of feeding trough or housing for hay or grain.

Paint

There are no early pictures to tell us the original color of the barn's exterior, so we can only assume that it was painted white. In the 1906, black and white photograph by O. T. Reilly, the barn is white.

Records indicate that the exterior of the barn was last painted in 1992, with two coats of gloss oil, exterior house and trim paint, in "brilliant white". Today it needs to be repainted once again, as it is peeling in several areas. It has been painted numerous times over the years and after many reapplications, adhesion is fair (Fig. 202).

Electrical Service

Electrical service was added to the barn in 1937 and a service panel still exists at the west corner of the ground level at the door frame (Fig. 203). There is currently no power to the barn. Even if power still existed, it would not meet today's requirements in terms of amperage and electrical codes.

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73 From the National Capital Region List of Classified Structures; Mumma Farm Barnyard Wall, (Appendix I).

76 Oliver T. Reilly, The Battle of Antietam, center photograph.

77 Oliver T. Reilly, The Battle of Antietam.

78 From Antietam National Battlefield maintenance files.
## COMPLETED ALTERATIONS, REPAIRS, OR MAINTENANCE

<table>
<thead>
<tr>
<th>Alterations, Repairs, or Maintenance</th>
<th>Date Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of original Mumma Barn.</td>
<td>Circa 1790</td>
<td>Likely constructed by Christian Orndorff.</td>
</tr>
<tr>
<td>Original Mumma Barn burns.</td>
<td>Sept. 17, 1862</td>
<td>Barn and farmstead burned by Confederate soldiers on the morning of the Battle of Antietam.</td>
</tr>
<tr>
<td>Reconstruction of barn.</td>
<td>1863</td>
<td>This is the presumed date of reconstruction after the Battle of Antietam.</td>
</tr>
<tr>
<td>Addition of implement shed.</td>
<td>Prior to 1906</td>
<td>1906 is the earliest indication of the implement shed in place on the northeast side.</td>
</tr>
<tr>
<td>Replacement of siding.</td>
<td>1936</td>
<td>The barn was extensively repaired at this time.</td>
</tr>
<tr>
<td>Repair to floor joists under granaries.</td>
<td>1936 (?)</td>
<td>The original log floor joists under each granary were sawn short and replaced with milled lumber. The floors of both granaries were likely replaced at this time (as well as a portion of the flooring at the wagon doors).</td>
</tr>
<tr>
<td>Replacement of roof and roof structure.</td>
<td>1936</td>
<td>The barn was extensively repaired at this time. The wood shingle roof was replaced with a metal standing-seam roof. Portions of the structure roof may also have been replaced.</td>
</tr>
<tr>
<td>Installation of cistern under driveway ramp.</td>
<td>1936 (?)</td>
<td>The traditional materials used (parged brick) and its unusually good condition underground, make the cistern difficult to date. The metal hatch, however, indicates that it may have been part of the major work done to the barn in 1936.</td>
</tr>
<tr>
<td>Electrical service added to barn.</td>
<td>1937</td>
<td>Relayed verbally by Paul Spielman, (son of Hugh Spielman, owner of the farm from 1924-1961) to Richard Brown, Chief of Cultural Resources, Antietam National Battlefield.</td>
</tr>
<tr>
<td>Conversion of northeast end of structure into a dairy barn; windows added at northwest elevation.</td>
<td>Late 1940's - early 1950's</td>
<td>No exact date available for this change. Modern building materials suggest this time frame.</td>
</tr>
<tr>
<td>Replacement of floor in northeast mow with tongue and groove flooring.</td>
<td>Late 1940's - early 1950's</td>
<td>This work was completed in conjunction with conversion of barn for dairy use. Health regulations required that there be a solid floor in the mow above (as opposed to the open boards for ventilation), so that hay and straw wouldn't fall into the milk buckets below.</td>
</tr>
<tr>
<td>Rehabilitation of the implement shed.</td>
<td>1940's</td>
<td>Relayed verbally by Paul Spielman to Richard Brown. Original shed was torn down and rebuilt ten feet narrower.</td>
</tr>
<tr>
<td>Acquisition of the barn and farmstead by the National Park Service.</td>
<td>Dec. 18, 1961</td>
<td>Purchased by the United States Government from Hugh and Hattie Spielman for $50,000.</td>
</tr>
<tr>
<td>Spot repair of southeast roof rafters.</td>
<td>Date unknown</td>
<td></td>
</tr>
<tr>
<td>Stabilization of insect infested post at southwest corner.</td>
<td>Date unknown</td>
<td></td>
</tr>
<tr>
<td>Alterations, Repairs, or Maintenance</td>
<td>Date Completed</td>
<td>Notes</td>
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<tr>
<td>--------------------------------------</td>
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</tr>
<tr>
<td>Barn painted.</td>
<td>1975</td>
<td>Park maintenance records indicate that Paul Spielman painted the barn, even though the property was owned by the government at this time and only leased to the Spielmans.</td>
</tr>
<tr>
<td>Foundations repaired.</td>
<td>1980</td>
<td>From park maintenance records (exact location unknown).</td>
</tr>
<tr>
<td>Barn painted.</td>
<td>1981</td>
<td>From park maintenance records X &quot;painted under contract&quot;.</td>
</tr>
<tr>
<td>Insertion of steel beam at damaged northeast beam (lower level).</td>
<td>1985</td>
<td>From park maintenance records; a steel beam was installed at the northeast side of the barn. It was placed adjacent to an existing wood beam, which had split.</td>
</tr>
<tr>
<td>Concrete repair at base of post (ground level; northeast end of barn).</td>
<td>April 1985</td>
<td>Relayed verbally by Richard Brown; repaired at same time steel beam was inserted in dairy area.</td>
</tr>
<tr>
<td>Assessment of barn by Richard Brown.</td>
<td>April 6, 1986</td>
<td>Includes information from Paul Spielman, assessment of existing conditions, and estimated cost of repairs.</td>
</tr>
<tr>
<td>Inventory and Conditions Assessment Program (ICAP); feature inventory of the barn.</td>
<td>1990</td>
<td>Completed by Williamsport Preservation Training Center.</td>
</tr>
<tr>
<td>Barn roof painted.</td>
<td>October 1992</td>
<td>Information provided by Richard Brown; work completed through an S&amp;A Contract; grey Rustoleum primer with a flat black Rustoleum finish coat.</td>
</tr>
<tr>
<td>Barn exterior painted.</td>
<td>1992</td>
<td>From park records; Asiding was given 2 coats of Lasting Architectural II, Exterior House and Trim, gloss oil, brilliant white S6-640.</td>
</tr>
<tr>
<td>Removal of damaged door from northwest elevation of implement shed.</td>
<td>1992</td>
<td>Relayed verbally by Richard Brown; door was never replaced.</td>
</tr>
<tr>
<td>Removal of damaged sliding door from northwest elevation of wagon shed.</td>
<td>1992</td>
<td>Relayed verbally by Richard Brown; door was never replaced.</td>
</tr>
<tr>
<td>Barn treated for insect attack.</td>
<td>1992</td>
<td>From park maintenance records; the barn is inspected semi-annually by an exterminator.</td>
</tr>
<tr>
<td>Repointing of stone foundation walls and rebuilding of driveway walls.</td>
<td>1992-1993</td>
<td>From park maintenance records; repaired by park maintenance staff.</td>
</tr>
<tr>
<td>VENTILATIONS, REPAIRS, OR MAINTENANCE</td>
<td>DATE COMPLETED</td>
<td>NOTES</td>
</tr>
<tr>
<td>--------------------------------------</td>
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</tr>
<tr>
<td>Siding, wagon doors (northwest elevation), snowboards, and roof of main structure repaired.</td>
<td>1993</td>
<td>From park maintenance records; rebuilt by park maintenance staff.</td>
</tr>
<tr>
<td>Repair of drainage system.</td>
<td>1993</td>
<td>From park maintenance records; downspouts and gutters replaced on the northeast and northwest elevations; replaced by park maintenance staff.</td>
</tr>
<tr>
<td>Repair of winnowing doors at upper level, southeast elevation.</td>
<td>1993</td>
<td>Repaired by park maintenance staff.</td>
</tr>
<tr>
<td>Installation of sub-grade drainage system.</td>
<td>1994</td>
<td>Installed by park maintenance staff.</td>
</tr>
<tr>
<td>Repair of west granary.</td>
<td>1993</td>
<td>From park maintenance records; included replacement of bottom sill and siding; repaired by park maintenance staff.</td>
</tr>
<tr>
<td>Repair of wagon doors and frames.</td>
<td>1993</td>
<td>From park maintenance records; repaired by park maintenance staff.</td>
</tr>
<tr>
<td>Replacement of implement shed siding.</td>
<td>1994</td>
<td>From park maintenance records; repaired by park maintenance staff.</td>
</tr>
<tr>
<td>Reinforcement of bowing northwest foundation wall.</td>
<td>June 1997</td>
<td>By park maintenance crew, with two, temporary jacks.</td>
</tr>
<tr>
<td>Collapse of northwest foundation wall.</td>
<td>September 8, 1997</td>
<td>Temporary jacks supported barn.</td>
</tr>
<tr>
<td>Archeological investigations.</td>
<td>Fall 1997</td>
<td>Completed by URS Greiner and Associates, New Jersey. Cistern discovered under driveway into barn.</td>
</tr>
<tr>
<td>Northwest foundation wall rebuilt.</td>
<td>December 1997</td>
<td>By park maintenance staff.</td>
</tr>
</tbody>
</table>

PAST ASSESSMENTS OF THE BARN

A number of reports and studies on the barn were completed over the years. The following is a list, in chronological order, of those that are most important and that were consulted for this effort.

1. J. Clark Siebert, Appraiser. *Hugh C. Spielman and Hattie G. Spielman Property, Bloody Lane and Hagerstown x Sharpsburg Pike, Sharpsburg, Maryland; Validation Report for Farm Property; October 6, 1961*. This was an appraisal completed for the Spielmans before they sold the property to the Federal Government. It defines the property in terms of boundaries and physical attributes and estimates the value of the land and the buildings. A copy of the appraisal, as well as a copy of the property deed, is included in Appendix D.

2. Dwight E. Stinson. *Field Report X Mumma Farmstead: Antietam National Battlefield Site*; National Park Service; Antietam National Battlefield; Sharpsburg, Maryland; January 26, 1962. Dwight Stinson, a historian, wrote a report that included historical information on the Mumma...
family and a brief history of the site and the events that came about the morning of the battle. The report can be found at the Antietam National Battlefield park library.

3. Francis F. Wilshin. *Historic Structures Report, History Data, Antietam National Battlefield Site, Maryland;* Division of History, Office of Architecture and Historic Preservation, Department of the Interior, National Park Service, Washington, D.C.; August 28, 1969. This report describes several of the buildings on the Mumma Farmstead including the barn. It also provides historical background on the Mumma Family and includes a copy of Samuel Mumma Sr.'s war claim after the fire. A copy of the report is included in Appendix E.

4. Maryland Historical Trust. In June of 1978, the Mumma Barn was inventoried by the Maryland Historical Trust as part of their State Historic Site Survey. A copy of the inventory for the barn is included in Appendix F.


6. Park Assessment. In 1986 Richard Brown, Chief of Cultural Resources for Antietam, interviewed Paul Spielman, son of Hugh Spielman, whose family owned and operated the farm from 1924 to 1961. Spielman relayed, to the best of his knowledge, the history of work done on the barn under their tenure. His family sold the property to the government in 1961, but then leased it back from the government until around 1984. For approximately a year after the Spielmans stopped leasing the barn, it was rented to another farmer. This farmer loaded the barn to capacity and it was at this time that the barn's major structural deficiencies were most pronounced. Richard Brown made the decision to not rent out the barn, leaving it solely for park use, until necessary repairs could be made. The Park Service now leases the surrounding land, with occasional use of the barn by government personnel only.

A list of required repairs and a cost estimate were also developed in 1986. The total for work on the barn at that time was $110,700.00. The list of repairs today would be much longer and much more expensive, as many years have lapsed and construction costs have risen dramatically. A complete structural analysis of the barn was proposed in 1988, but was never completed. As part of this current effort, this analysis will finally occur. A copy of Richard Brown's report in its entirety is included in Appendix H.

7. HABS Drawings: In 1988 the Historic American Buildings Survey, a division of the National Park Service that documents historic buildings, completed measured drawings of the Mumma Barn (plans and elevations, eight sheets total). These drawings are the first set of comprehensive, as-built drawings ever done of the structure. These drawings are being used as a base for construction drawings for any rehabilitation of the barn. See Appendix A for a copy of the HABS drawings.

8. Inventory and Conditions Assessment Program (ICAP). In 1990 the Williamsport Preservation Training Center of the National Park Service completed a feature inventory of the Mumma Barn using the ICAP. The ICAP is a facilities management program used to document and inventory the features and existing condition of a structure. This assessment, of which only a hard copy is still available (the electronic version was accidentally lost), offers some baseline information on the barn at that time. However, it is not a particularly easy document to use. As
a result, and as part of this current effort, a new architectural assessment of the barn was completed. It offers similar information (eight years later), in a format, which can be more easily used by park staff. A copy of the ICAP assessment is included in Appendix I. The new architectural assessment of the barn, completed as part of this effort, is in three separate volumes and is available through the cultural resource staff at Antietam National Battlefield and from the Denver Service Center.

9. Dan B. Matteson and Thomas Vitanza. *Samuel Mumma Farm X Emergency Stabilization Historic Structures Project Record;* National Park Service; Williamsport Preservation Training Center; Williamsport, Maryland; June 1992. This document includes all of the correspondences and background information necessary to complete emergency stabilization work on the barn and other structures on the property. Pertinent material from this volume is included in Appendix J.

10. National Park Service, National Capital Region, List of Classified Structures (for the Mumma Farmstead); 1996. The Mumma Barn and the one remaining portion of stone wall at the barnyard contribute to the significance of the historic landscape. Copies of these documents and listings for other features at the farmstead are included in Appendix K.

11. Scope of Work for Archeological Services. The National Park Service and Antietam National Battlefield have a contract for archeological services with URS Greiner, Inc. Some of this work involves the Mumma Farmstead and specifically, the Mumma Barn. A copy of this scope of work is included in Appendix L.


THE SURROUNDING LANDSCAPE

...barns belong on farms where they can be seen in relation to surrounding fields and other farm structures in a farm complex....The preservation of barns should not be divorced from the preservation of the setting.79

The landscape that surrounds the Mumma Farmstead is nearly what it was at the time of the battle in 1862. The land is still cultivated in a similar manner with the same type of crops and cattle graze in the pastures nearby (Figs. 204-209). The only obvious changes are the addition of the observation tower built in 1898, the visitor's center built in 1961-1962, electrical and telephone lines, an occasional wayside interpretive sign, commemorative monuments, some new development visible on adjoining lands (non-NPS), and the presence of motor vehicles touring the park. It is a combination of the National Park Service's determination to maintain the integrity of the battlefield landscape, and the longstanding agricultural character of the Sharpsburg community, that has preserved this historic scene.

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One feature that no longer exists is the Mumma Orchard. It was originally located due east of the barn and covered a trapezoidal area roughly 225' x 350' x 420' (Fig. 210). The park intends to restore this orchard and an archeological investigation of the area is currently underway. Samuel Mumma, Sr.'s war claim indicates that he wished to be reimbursed for the loss of apples. Therefore, it can be assumed that this was the type of fruit they grew (Appendix D). The orchard survived into the early twentieth century, but no trees survive today.⁸⁰

From Oliver Reilly's 1906 photograph taken from the observation tower (Fig. 47), it appears that the vegetation on the south side of the barn and between the barn and the other farm buildings was considerably denser than it is today.

To address these issues and other issues relating to the surrounding landscape, a Cultural Landscape Inventory (CLI) is currently underway. A CLI inventories the features of a site, identifies why it is historically significant, and documents its evolution. A report of this type is essential, as the National Park Service recognizes that the surrounding landscape is equally as important as the historic structures on the land. Richard Quin, for the National Park Service, National Capital Region, is writing it.

⁸⁰ Richard H. Quin; p. 41.