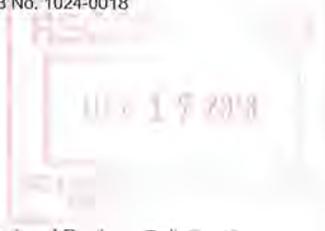


SG 3365

United States Department of the Interior
National Park Service



National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).

1. Name of Property

historic name Muscatine County Home Dairy Barn

other names/site number Muscatine County Farm; Muscatine County Home; The Old Barn

Name of Multiple Property Listing _____

(Enter "N/A" if property is not part of a multiple property listing)

2. Location

street & number 3210 Harmony Lane

not for publication

city or town Muscatine

vicinity

state IA

county Muscatine

zip code 52761

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this X nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance: ___ national ___ statewide X local

Applicable National Register Criteria: X A ___ B X C ___ D

[Signature] _____ 12 DEC 2018
Signature of certifying official/Title: Deputy State Historic Preservation Officer Date

State Historical Society of Iowa
State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

X entered in the National Register ___ determined eligible for the National Register

___ determined not eligible for the National Register ___ removed from the National Register

___ other (explain:)

[Signature] _____ 1-31-19
Signature of the Keeper Date of Action

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply.)

Category of Property
(Check only **one** box.)

Number of Resources within Property
(Do not include previously listed resources in the count.)

- private
- public - Local
- public - State
- public - Federal

- building(s)
- district
- site
- structure
- object

Contributing	Noncontributing	
2		buildings
		site
1		structure
		object
3	0	Total

Number of contributing resources previously listed in the National Register

N/A

6. Function or Use

Historic Functions

(Enter categories from instructions.)

AGRICULTURE/animal facility

Current Functions

(Enter categories from instructions.)

RECREATION AND CULTURE/museum

7. Description

Architectural Classification

(Enter categories from instructions.)

OTHER

Materials

(Enter categories from instructions.)

foundation: CONCRETE

walls: BRICK

WOOD

roof: METAL

other: _____

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Narrative Description

Summary Paragraph (Briefly describe the current, general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

The Muscatine County Home Dairy Barn sits on Muscatine County-owned land surrounded on the north, west, and south by the new Discovery Park near the western corporate limits of the City of Muscatine in eastern Iowa. The Muscatine County Home Dairy Barn is 40 by 60-feet in dimension, with the shorter sides facing east and west. It has a poured concrete foundation that extends approximately 3 feet to just below the brick sills of the main level windows. From this raised concrete foundation to the eaves, the exterior walls are constructed of hollow brick tile clad with a dark red face brick. From the eaves to the peak of the Gothic arch, each gable end exterior is clad in vertical board-and-batten, which has been recently painted white. The barn's distinctive Gothic roof has been clad in corrugated metal. A cattle shed and concrete feed lot are associated structures dating from W.P.A. funded improvements in 1939. This well preserved Gothic-roof dairy barn is the only surviving large-scale building of the nonextant Muscatine County Home.

Narrative Description (Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable.)

(Iowa SHPO Additional Instructions: After the main **Narrative Description**, discuss any physical alterations since the period of significance under the subheading **Alterations**, the seven aspects of integrity as it applies to the property in a **Statement of Integrity**, and any future plans for the property under the subheading **Future Plans**.)

The Muscatine County Home Dairy Barn sits on Muscatine County-owned land surrounded on the north, west, and south by the new Discovery Park near the western corporate limits of the City of Muscatine in eastern Iowa. This Gothic-roof dairy barn is the only surviving large-scale building of the nonextant Muscatine County Poor Farm (a.k.a. Muscatine County Home, Muscatine County Farm). That institution was established by the county's Board of Supervisors in 1883 on what was then a 160-acre farm in the NE quarter of Section 33 in Bloomington Township, a rural location which at the time was well west of the city of Muscatine. Today, this acreage has been annexed by the city, and the dairy barn sits near the eastern edge of Discovery Park, developed on 100 acres of the former Muscatine County Home land. The county-owned park that features the office of the County Conservation Board and Environmental Learning Center, Muscatine Arboretum, two stocked fishing ponds with docks, picnic shelters, 1.5 miles of hard surface trails, two miles of primitive trails, and two parking lots. The barn is one of several county-owned buildings (human services dept., and several maintenance and storage buildings) located mainly to the east and southeast. A nursing home and office/cottage were recently removed. Surrounding the park is a highly developed area bounded by Cedar Street on the north, Houser Street on the east, US 61 on the west, and W. Fulliam Avenue on the southeast. This area contains a residential development in the southeast corner along Fulliam Avenue, and a commercial node in the northeast corner at the junction of Cedar and Houser streets.

The Muscatine County Home Dairy Barn is 40 by 60-feet in dimension, with the shorter sides facing east and west. It has a poured concrete foundation that extends approximately 3 feet to just below the brick sills of the main level windows. From this raised concrete foundation to the eaves, the exterior walls are constructed of hollow brick tile clad with a dark red face brick. From the eaves to the peak of the Gothic arch, each gable end exterior is clad in vertical board-and-batten, which has been recently painted white. The barn's distinctive Gothic roof has been clad in corrugated metal. At each Gothic arch peak is a hay hood. Originally, the barn likely had two venting cupolas on the roof ridge, but these have been replaced with modern covered inlets. The eaves on both long sides of the barn were extended 10 feet outward probably during the W.P.A. funded remodel of 1939, creating an open shed-roof porch on the south side and an enclosed shed-roof addition on the north side. This enclosed north addition is clad in vertical board and batten and extends approximately four feet beyond and slightly wraps around the

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

west end masonry wall of the barn. This extended section of the north addition would have been close to or abutted a nonextant 14-foot-wide concrete stave silo (built in 1926), the footprint of which can still be discerned in aerial views. The extension also features a door on the south side next to the west wall of the barn. These barn additions, along with the open cattle shed located just west of the silo footprint, may have been part of a historic remodel and construction project that was completed in 1939 with W.P.A. labor (See History).

Doors into the barn are mainly on the south side, which faced the concrete feed lot, the remnants of which are extant. The south side has five doors, one of which is a double door. Only a few may be original. One door (with 3-light transom) is located on the north side enclosed addition, and one door is located on the south side of the west extension of enclosed north addition. Neither gable end has stable doors, but each has two haymow doors, one at the eave level and one at the peak. Windows on the barn number 31, with six on the south side, seven on the north side, and six on each gable end. Most of the windows surround the stable level and all are 6-light windows, many of which appear to be original hopper windows that tilt inward from the top. Of the four haymow windows (two on each gable end), one on the west side is likely an original 6/6 double hung sash. The other three are replacement 1/1 double hung sashes that appear to be metal-framed. Six original 6-light hopper windows on the north side of the barn are extant but enclosed within the north addition.

Interior

The main entrance is located on the south side of the barn near the east endwall. The entire stable floor is concrete, with some rough patches showing decades of wear under hoofs. The east third of the stable is supported by six large square wood posts. A recently constructed set of stairs leading to the haymow is directly opposite the entrance in the northeast corner. An enclosed room (possibly new) with a new door and a newly constructed mule pen are located near the new stairs. Another set of recently constructed stairs is located at the southwest corner. The original dairy cow section of the original general purpose barn was probably located in the area defined by the three rows of pipe columns in the west two-thirds of the stable. Originally, these pipe columns probably numbered nine total, but the westernmost three have been encased in or replaced with square wood columns, leaving six original pipe columns extant. These pipe columns are filled with concrete and were a space-saving and sanitary structural support recommended for dairy barns by the Loudon Machinery Company and many other dairy barn experts of the time. A concrete feed trough with semi-circular cut-outs for cows' heads runs north-to-south from just inside the westernmost barn entrance to the addition door. A linear concrete patch matching the length of the feed trough likely was where the manure gutter was located, which would have been a commonly-recommended feature in dairy barns at this time (Louden 1925:23).

The interior of the haymow is a completely open space with an original wood floor and five interior laminated ribs or rafters spaced approximately 10 feet apart along the barn's 60-foot length. These curved laminated rafters, made up of five pieces of 1 by 4-inch boards nailed together and joined end to end, rest on the plate on the masonry wall and are spliced at the ridge with collar beams. The laminated rafters give the barn its Gothic roof shape and provide a maximum of unobstructed storage space. Overall, the barn appears to generally conform to plans and specifications in the 1925 catalog, "Louden Barn Plans," published by the Loudon Machinery Company of Fairfield, Iowa. The barn specifically resembles the plans and specifications for Construction Type "O," which "refers to the round vaulted roof, commonly known as the Gothic roof barn," although the Loudon Machinery Company was not the only source of plans and specifications for the Gothic roof barn (Louden Machinery Co 1925:18). Two hatch doors in the floor lead to the stable below.

Original Loudon Machinery Company equipment is extant, including a remnant row of cow stanchions in the ground-floor stable and a hay carrier installed at the ridge in the haymow. Other historic farm and

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

dairy equipment donated by local residents is displayed with signage, as this barn is now used as a museum by the Friends of The Old Barn, the group that saved the building from demolition in 2006.

Cattle Shed and Concrete Feed Lot

The cattle shed is located west of the barn and was constructed in 1939 during the W.P.A. funded remodel of the dairy barn and improvements to the Muscatine County Home farm. The building has a concrete slab foundation that is raised approximately 18 inches on the east, west, and north sides. Three exterior walls (east, west, and north) are clad in vertical board-and-batten siding, and the side-gabled roof is clad in corrugated metal. The long south side is open to the concrete feed lot. Between the east and west endwalls are three evenly spaced wood posts, each flanked by solid triangular support brackets at the eave and each resting on tall, slightly tapered concrete columns. The shed was likely built to provide quick shelter for the dairy herd when outside in the feed lot.

The concrete feed lot was also built in 1939. This large open lot connected the barn, cattle shed, and the nonextant silo and a nonextant hog house (on the west side of the lot south of the cattle shed) into one farming unit. The lot also provided an easy to clean open space for the dairy herd to assemble, feed, and move to and from the barn. It could also accommodate temporary pens for separating livestock outside the barn.

Alterations

- W.P.A. funded addition and rearrangement of the interior of the stable to house more cattle – 1939
- W.P.A. funded cattle shed and concrete feed lot – 1939
- Corrugated metal roof – c. 2002
- Two sets of stairs built for public access to haymow barn museum – 2010s
- Enclosed room and mule pen – 2010s

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A Owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

(Enter categories from instructions.)

AGRICULTURE

HEALTH/MEDICINE

SOCIAL HISTORY

Period of Significance

1926-1966

Significant Dates

1926

1939

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation (if applicable)

Architect/Builder

Maier, Tom

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Statement of Significance

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations).

The Muscatine County Home Dairy Barn is locally significant and eligible for the National Register of Historic Places under Criteria A in the areas of agriculture, health and medicine, and social history and Criterion C as a well preserved example of a Gothic Roof Dairy Barn, possibly built with plans obtained from the Loudon Machinery Company in Fairfield, Iowa. The Muscatine County Home Dairy Barn derives its historical significance from its association with the Muscatine County Poor Farm (a.k.a. Muscatine County Home), and is the last remaining large-scale building representing that historic institution. The poor farm was established by the county where “unfortunates who could not care for themselves” (i.e., the poor, elderly, and physically or mentally disabled) were cared for at taxpayer expense. Like all of Iowa’s poor farms, the Muscatine County Home was largely self-supporting because of its farm, which provided food for the residents and extra produce for sale that funded the home’s operating expenses. The Muscatine County Home Dairy Barn was built in 1926 after several previous barns were lost in a fire that same year. This dairy barn was essential to the Muscatine County Home, which centered around its purebred Holstein dairy herd that provided cream for sale and milk and butter for County Home consumption. By 1961, the Muscatine County Home’s Holsteins were the top producing dairy herd among cooperators in the local Dairy Herd Improvement Association (DHIA). The Muscatine County Home Dairy Barn reflects the history of the Muscatine County Home, a once important county institution that has all but disappeared. In addition to its historical significance, the Muscatine County Home Dairy Barn is also significant as a well preserved example of a Gothic roof barn. The barn was originally outfitted with equipment such as cow stanchions and a hay carrier purchased from the Loudon Machinery Company in Fairfield, Iowa. Because the company provided affordable architectural plans to all its equipment customers, the barn was most likely built with Loudon plans, as well. The curved Gothic roof barn, with its pleasing appearance and brace-free haymow, was the culmination of decades of effort on the part of farmers and agricultural engineers to achieve maximum loft space in the light-frame, two-story type Midwestern barn, many of which were built to house dairy herds and milking facilities. The use of concrete in barn construction reflects the use of the material in all Loudon barn plans and the widespread adherence by Iowa’s dairy farmers to state sanitary regulations after 1910. Concrete also accommodated modern mechanized systems for livestock care, many of which were manufactured by Loudon and installed in the Muscatine County Home Dairy Barn. Despite its metal clad roof and some interior modifications to make the building more accessible to the public as a museum, the Muscatine County Home Dairy Barn, represents this barn type well. The period of significance for the Muscatine County Home Dairy Barn is 1926 to 1966, from the year the Gothic roof barn was built and put into service to the year that the county voted to build a new residential facility that, when completed three years later, saw the demolition of the original County Home and the decline of the County Farm that supported that institution.

An archaeological investigation was not a part of this nomination.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

(Iowa SHPO Additional Instructions: For properties not nominated under Criterion D, include a statement about whether any archaeological remains within or beyond the footprint of the property were assessed as part of this nomination under the subheading **Archaeological Assessment**.)

Criterion A: History of the Muscatine County Home and Its Dairy Barn

In 1883, the Muscatine County Board of Supervisors purchased from Reuben N. and Sarah A. Baker 160 acres in Bloomington Township, on which they established the Muscatine County Poor Farm. This property, which the board purchased for \$12,000 after voters approved a special tax levy, replaced a previous poor farm of just 96 acres located on what was known as Bluff Road in Seventy-Six Township, six miles west of the city of Muscatine, that had become inadequate to the county’s needs. With the new poor farm property

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

secured, the board hired George C. Magoon to construct a two-story brick building for residents (or “inmates” as they were called then), as well as an ice house, spring house, and tank house. In the summer of 1890, an “insane asylum was added to the institution’s facilities (Western Historical Company 1879:555; *Muscatine Daily Journal*, December 31, 1884; *Muscatine Journal* 1891:25). A number of other buildings followed over the next three decades, and by 1911, the Muscatine County Home – so renamed by state legislation in 1909 – was an institution where:

... buildings of a suitable character were erected and made comfortable and pleasant for the care and protection of the county’s unfortunate ones not able to care for themselves. The institution is practically self-supporting and since its foundation has cared for and sheltered on an average of about thirty-five inmates each year. For many years Milton Rice was superintendent of the farm, but since his death in 1910, Charles Kleindolph has filled this position (Richman 1911:102).

The Muscatine County Home, like all of Iowa’s county poor farms, was a state-authorized institution provided by the county where “unfortunates who could not care for themselves” (i.e., the poor, elderly, and mentally disabled) were cared for at taxpayer expense. In Iowa, care for the poor had been viewed as a basic responsibility of county government since the earliest period of Iowa’s statehood. At first, county judges administered and oversaw the care of the poor and the erection of poorhouses. In 1860, however, this system of poorhouse administration ended when the General Assembly authorized county boards of supervisors to oversee matters of the poor and other dependents, a system that continues today. In Iowa, county poorhouses were most often operated as farms to help provide for the sustenance of the dependents and assist in their rehabilitation but also in the hope that profits could help support the institution. Thus, county poorhouses were most often built in rural areas and included the construction of barns and other outbuildings in addition to the poorhouse itself. In their early operations, many of these poor farms also included asylums for the mentally ill under the general thought of the day that this was the most efficient way to provide care for all types of dependents. In 1873, a change in state law “required the administrator of a poor house (i.e., superintendent or steward) to use proceeds from the poor farm cash profit to help fund expenses of the poor house.” This law, in effect, “changed the direction of the administrator’s energies from concern for the residents to making the farm profitable” (Rogers 2014:27, citing Page 1990:1-6; and Gillin 1914:168-169). This 1873 law likely explains in part why Muscatine County’s board of supervisors purchased a new and much larger poor farm in 1883. The more land the poor farm had under cultivation, the more profitable and self-supporting the poor farm would be.

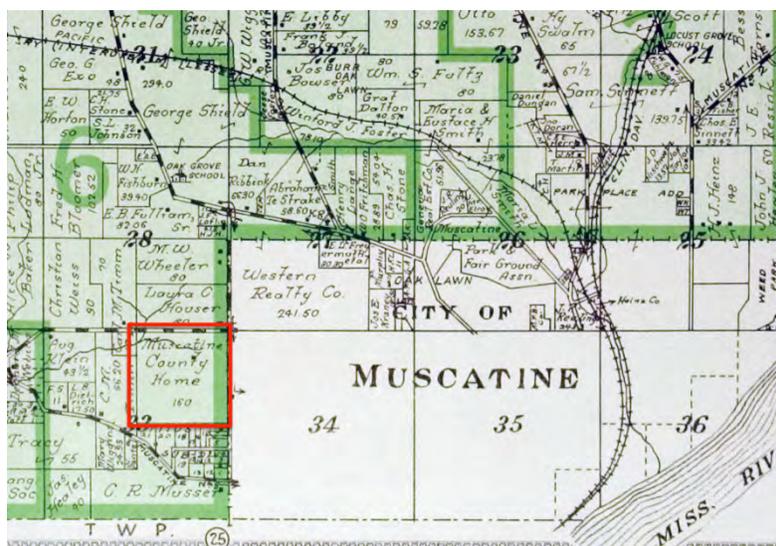


Figure 1. Plat map of Bloomington Township, 1916, showing Muscatine County Home (outline), just west of the city limits of Muscatine. Source: Anderson Publishing Company 1916

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State



Figure 2. View west of the Muscatine County Poor Farm (a.k.a. County Home), 1891

Source: The Muscatine Journal 1891



Figure 3. View northwest of Muscatine County Home and Farm, 1911

Source: Richman 1911

In 1909, Iowa state law allowed for higher tax levies to support county poorhouses and, in that same year, the state officially changed the terminology from poorhouses and poor farms to “county homes,” although the operation of the poor farms remained largely unchanged. This system of poor relief was very widespread in Iowa, where in 1911 all but four of the state’s 99 counties maintained county homes (Gillin 1914:41; Page 1990:1-6; Rogers 2014:27-28).

Like the rest of Iowa’s county homes, the Muscatine County Home was largely self-supporting. Residents, supervised by a small paid staff, grew and canned vegetables, milked cows, fed chickens, and tended hogs, all of which provided food for themselves. The surplus produce was sold, providing funds for the County Home’s operating expenses.

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

Over the following decades, the character and work of the Muscatine County Home remained unchanged, even when the inmate population ballooned during the Great Depression. In 1937, the *Muscatine Journal and News-Tribune* published a feature story on the Muscatine County Home. Under the supervision of matron Eldora Kemp and farm superintendent Rex Kemp, Eldora's son, the institution, according to the *Muscatine Journal*, was a haven of hard work, cooperation, and contentment:

Home life – with its duties its cares and responsibilities and its pleasures – is shared by 72 persons, some residents of Muscatine for a long period of time, others who have been here but a few years, some mentally incapacitated, others with major physical defects, at Muscatine county's home located at 419 Houser street.

Operated along the same lines as any well organized home and farm, the establishment provides a final haven for the scores of less fortunates [sic] who for one reason or another have been forced to seek shelter at the expense of Muscatine county taxpayers. . .

A great deal of the food served to the patients, either at the tables or on the 17 trays which must be carried to individual rooms of insane or ill inmates, is raised on the 160 acre farm, 95 acres of which are under cultivation. Each summer a great deal of canning is done at the home and an apparatus recently was added which makes possible the cold packing of 80 gallons of fruit or vegetables at one time. Much of the food is preserved in tins, rather than glass jars. . . .

Work goes on at the farm much as it does on any other similar Muscatine county farm. Preparations are under way at the present time for the planting of two acres of early potatoes. Later about two acres of late potatoes will be put in to help provide the 400 bushels of the tubers which are consumed each year by the inmates. The farm obtains its milk supply from 12 Holstein cows, which are milked with the assistance of the inmates. Approximately 45 acres of corn, 18 acres of wheat, 14 acres of oats and 12 acres of soy beans will be harvested at the farm this season (*Muscatine Journal and News-Tribune*, April 23, 1937).

The 12 Holstein cows noted in the *Muscatine Journal* article were housed in a dairy barn built in 1926, after the Muscatine County Home lost three barns in a fire. County home residents reportedly "braved the heat and fire to remove all the livestock from the burning barns." Two months later, the board of supervisors decided to replace only one of the three barns lost, and at their July 19, 1926, meeting, they "adopted plans, specifications and form of contract for the erection and equipping of a general purpose barn at the Muscatine County Home, at a cost not to exceed Eight Thousand Dollars (\$8,000)" (McCleary and Erickson 2007:3; Board of Supervisors Minutes, July 19, 1926). On August 2, Tom F. Maher, a Muscatine contractor, "was awarded the contract for the new barn to be built on the county farm." Maher's bid was \$5,432 for the complete barn, with work to be completed in 60 days. The barn was to be "a brick and frame structure with a concrete floor." After losing several barns to fire, the use of hollow brick tile on the stable level was very likely done to make this barn more permanent and fireproof. Maher may have built the barn with architectural plans provided by the Loudon Machinery Company, which also sold the labor-saving farm equipment installed in the new barn, including cow stanchions, hay handlers, and a manure removal system. When the new barn was nearing completion in late September, Harry Hill of West Liberty was hired to erect a new concrete stave silo near the new barn's northwest corner. The new barn housed the County Home's small dairy herd, along with other cattle and horses, and provided storage for hay. In addition to the barn, the farm also featured hog and poultry houses (*Muscatine Journal*, August 30, 1926; McCleary and Erickson 2007:3; Sanborn Fire Insurance Map 1928).

Built of concrete, hollow brick tile, and an expansive Gothic-roof haymow, the county home's new dairy barn was also designed to meet "state and national dairy regulations, particularly regarding sanitary standards," for farm-operated dairies.

The passage of the Meat Inspection Act in 1890 and its 1906 amendment authorized inspectors from the United States Department of Agriculture to enforce sanitation standards within the dairy industry, even on the individual farm level. Farms had to maintain certain standards of cleanliness, which often meant improving their barns to include concrete floors that could be easily washed-down (Peterson, Kernek, and Rogers 2005:18).

Muscatine County Home Dairy Barn

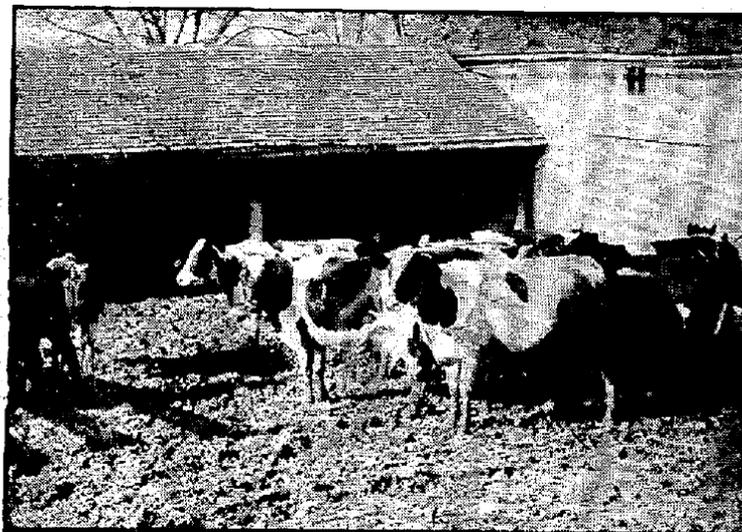
Name of Property

Muscatine County, Iowa

County and State

Concrete, in particular, had been considered since the 1910s to be the best building material for maintaining cleanliness (Universal Portland Cement Co. 1914:126). Louden's 1925 barn plan book begins with several pages on the correct ways to mix and lay cement floors in barns. Model dairy farms of the period featured barns and other outbuildings built entirely of concrete (Louden 1925:6-10).

Thus, by the turn of the twentieth century, "to be successful, the dairyman needed to purchase expensive machinery and maintain it; build silos and improve the sanitation levels of his barn; and expand and improve the quality of his herd. The industry was subject to governmental regulations and focused on efficiency, sanitation standards, breeding for higher milk production, and book farming" (Peterson, Kernek, and Rogers 2005:18). Although the Muscatine County Home's dairy herd was small in 1926, the county-owned institution provided milk products for consumption by residents and staff and sold the surplus to local creameries. The new dairy barn, with its concrete floors, fireproof walls, and labor-saving machinery was undoubtedly adhering to sanitary dairy regulations.



Inmates of the home are given all the milk they want to drink and the Holsteins, pictured above, provide the supply. Inmates help in milking 12 cows.

Figure 4. In 1937, the Muscatine County Home kept 12 dairy cows, here pictured in the barnyard

Source: *Muscatine Journal and News-Tribune*, April 23, 1937

Beginning in 1937, the Muscatine County Board of Supervisors began a series of improvements at the County Home utilizing labor from the Works Progress Administration (WPA), the largest work relief agency of President Franklin D. Roosevelt's New Deal. The first County Home improvement project completed by the WPA was the construction of a "vegetable cave." This storage cellar provided "a place for the storage of a large supply of vegetables" and was considered at the time "the best in the state" (*Muscatine Journal and News-Tribune*, April 23, 1937). Over the next three years, many other farm improvement projects were completed, including the construction of new farm buildings and structures, namely a two-story machine shed, corn crib, granary, cattle shed, concrete feed lot, the enlargement and repair of the concrete stave silo, along with fencing and soil erosion work (*Muscatine Journal and News-Tribune*, July 11, 1940).

One particular project in 1939 – the rearrangement of the interior of the barn to make room for more cows – made the gradual improvement of the County Home's dairy herd possible:

Some changing of the barn has made room for ten more dairy cows and the barn will now house 22 cows. A thoroughbred Holstein sire and six purebred heifers have been added for herd improvement. A herd of 22 Holstein dairy cows, partly grade, with 16 now in production, produce 180 gallons of cream a month, from which about 210 pounds of butter is churned for use in the home, leaving a surplus for sale of 75 gallons a month (*Muscatine Journal and News-Tribune*, December 29, 1939).

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

This remodeling of the barn coincided with superintendent Arnold Miller taking action in the late 1930s to convert the County Home's grade dairy herd "to a registered herd with some of the Holsteins coming from the Maytag herd." The Maytag herd, located in Newton, Iowa, was a nationally known, prize-winning purebred Holstein dairy herd established in 1919 by E.H. Maytag, son of Frederick Maytag, founder of the appliance firm. When E.H. Maytag died in 1940, his sons sought ways to make the herd profitable, which apparently included selling some of the purebred stock. In 1940, the County Home registered its purebred Holstein dairy cattle under the exclusive trademark prefix "Muscoho," which was certified and recorded by the Holstein-Friesian Association of America in Battleboro, Vermont. In 1947, "the herd went on test" with the Muscatine County Dairy Herd Improvement Association (DHIA), "gradually improving until becoming one of the best" (*Muscatine Journal and News-Tribune*, July 1, 1940; June 16, 1961; Maytag Dairy Farms 2016).

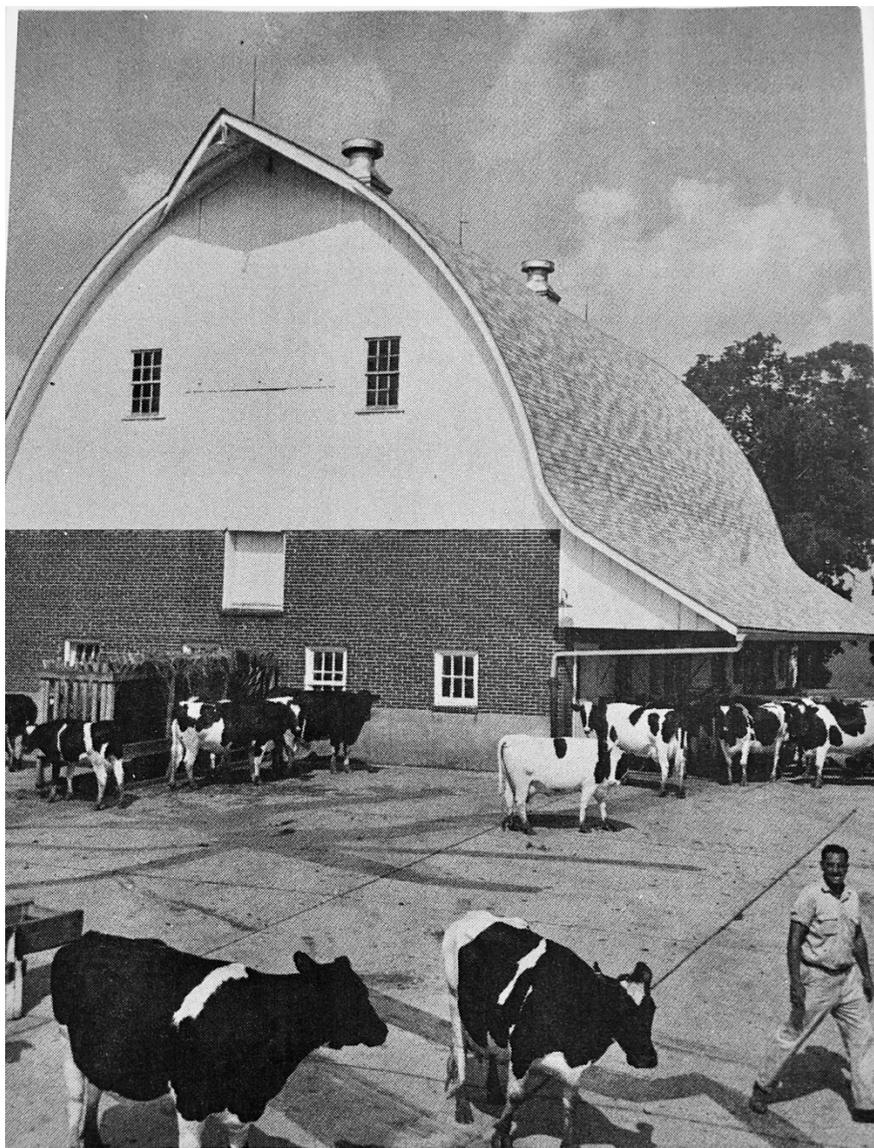


Figure 5. View northeast of Muscatine County Home Dairy Barn, 1961, with superintendent Harry Banta and the 20 "MusCoHo" registered Holstein cows as they come in for evening milking. The Muscatine County Home had the top-producing herd among the local Dairy Herd Improvement Association (DHIA) cooperators for the year.

Source: David & Sheila Hahn, Muscatine, Iowa, courtesy of John Haskins, Friends of the Old Barn

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

The history of the DHIA began in 1905 in Newaygo County, Michigan, with the establishment of the first Cow Testing Association (CTA). The CTA established the systematic recording of dairy cow production with the goal of herd improvement.

A number of agencies helped to foster the DHIA dairy record system in the United States. Before 1914, the Dairy Division of the USDA, under the direction of Helmer Rabild, was the driving force behind the spread of cow testing associations nationally. In most states, the organization and supervision of the program was under the direction or sponsorship of the state departments of agriculture (their predecessors) or the state agricultural colleges. Some colleges had extension faculty and departments even before 1914, when the Smith-Lever Act established the cooperative extension service nationally. By then, CTAs were such a promising source of practical information that they became a key project for state agriculture extension services. . .

Over time, the extension program played a key role in coordinating DHIA efforts across states. In 1924, a national committee was established by state extension specialists under the American Dairy Science Association (ADSA) to develop a uniform set of rules and guidelines for CTAs. This committee recommended that the name "Dairy Herd Improvement Association" be used and that employees be called "DHIA supervisors" (Ferris 2006).

By the late 1950s, the Muscatine County Home's dairy herd began receiving awards:

In 1959, the County Home received a National Honor Roll certificate from the Purebred Dairy Cattle Association for developing a herd of 15.76 cows to a yearly production average of 11,680 pounds of milk and 427.6 pounds of butterfat for the year ending June 1959. The following year (1960) a second certificate was presented by the national association for the record achieved that year (*Muscatine Journal and News-Tribune*, June 16, 1961).

In 1961, under Superintendent Harry Banta, the County Home herd of 20 registered Holstein cows "achieved the distinction of the having the top producing dairy herd" among the local DHIA cooperators. During that year's testing period, "the county home had the highest milk and butterfat producing herd among 15 members" of the DHIA. "Averaging 17.55 cows, the herd produced an average of 11,858 pounds of milk and 464.3 pounds of butterfat per animal." The top cow in the herd was an 18-year-old that "ranked 10th among individuals in the Muscatine County DHIA program." She "produced 16,550 pounds of milk testing 3.4 and 556 pounds of butterfat during the 305-day testing period." Milk produced by the County Home dairy herd was consumed by the residents and cream was sold to the West Liberty Cooperative Creamery (*Muscatine Journal and News-Tribune*, June 16, 1961).

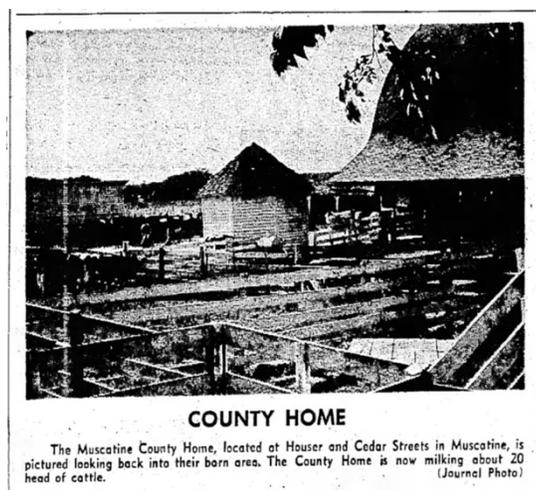


Figure 6. View northwest of Dairy Barn and Feed Lot, 1964
Source: *Muscatine Journal and News-Tribune*, June 26, 1964

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

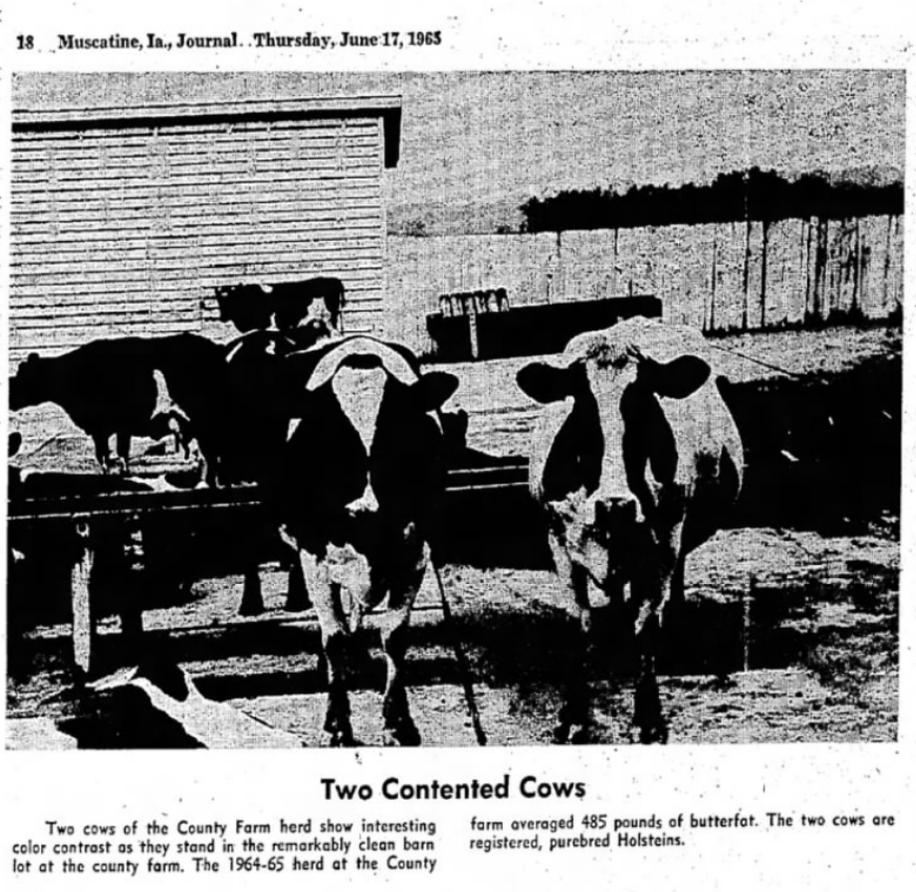


Figure 7. A few members of the Muscatine County Home's dairy herd on the feed lot near the barn, 1965

Source: *Muscatine Journal and News-Tribune*, June 17, 1965

Superintendent Banta, who had been employed at the County Home since 1955, "attributed part of the home's success in improving its herd to cooperation with the DHIA," which required cooperators to keep accurate records on each cow, "showing the amount of feed consumed and volume of milk and butterfat produced" (*Muscatine Journal and News-Tribune*, June 16, 1961).

"We weigh the milk from each cow at every milking and keep an eye on them to see if they need more or less feed," said Banta. Each cow is fed supplement proportionate to the amount of milk produced.

Production records provide a good guide in determining which cows are to be kept in the herd and which ones should be culled out (*Muscatine Journal and News-Tribune*, June 16, 1961).

A farmhand named Alfred Roberts, nine male residents, and a clean, well-equipped dairy barn were crucial to the feeding and record keeping process, which was carried out by DHIA inspectors. "There are 26 stanchions in the huge dairy barn which is kept remarkably clean. A two-unit milking machine is used with chores taking about two hours daily." Record keeping involved weighing all the milk and recording data for each individual cow (*Muscatine Journal and News-Tribune*, June 16, 1961; January 30, 1961).

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

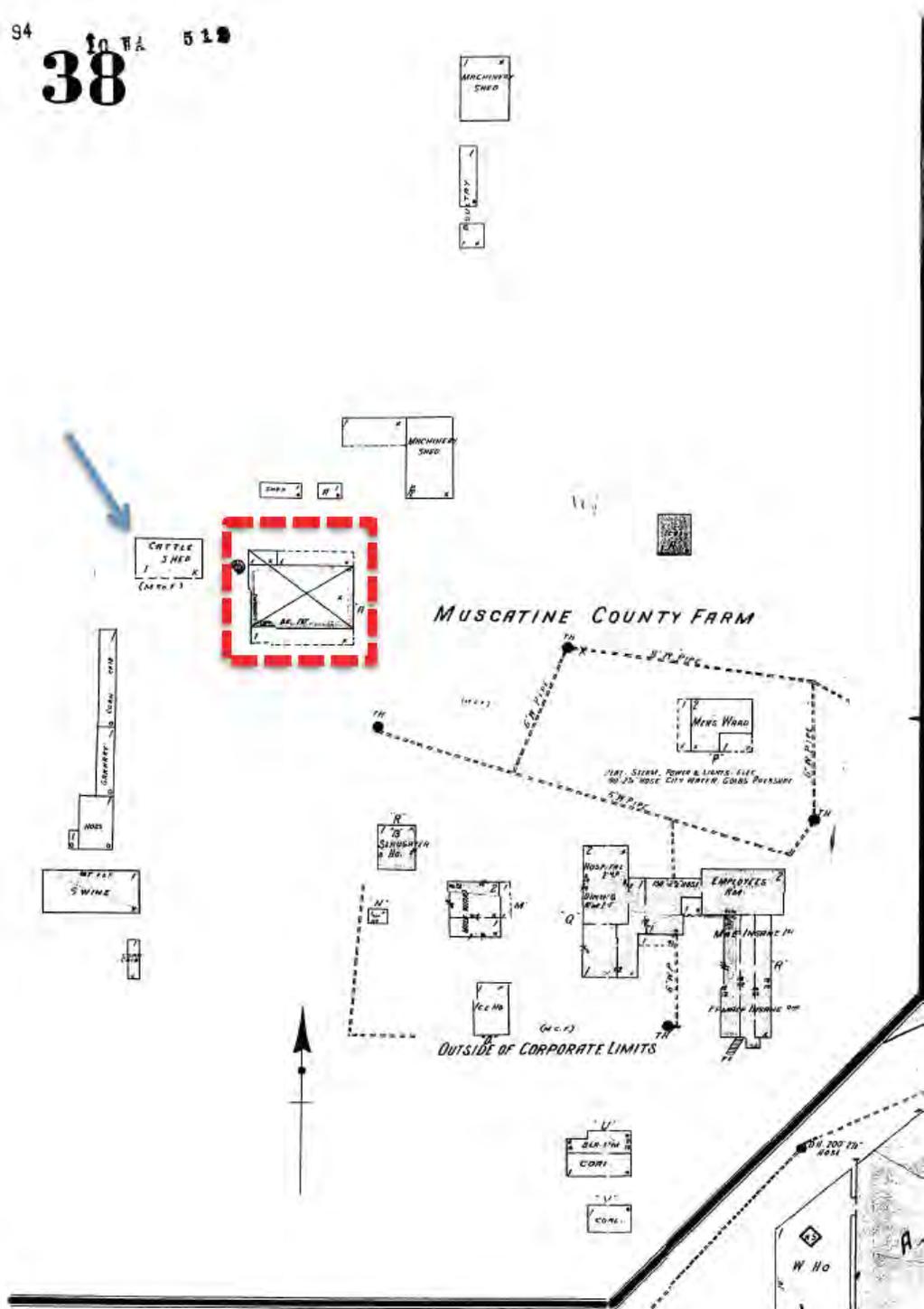


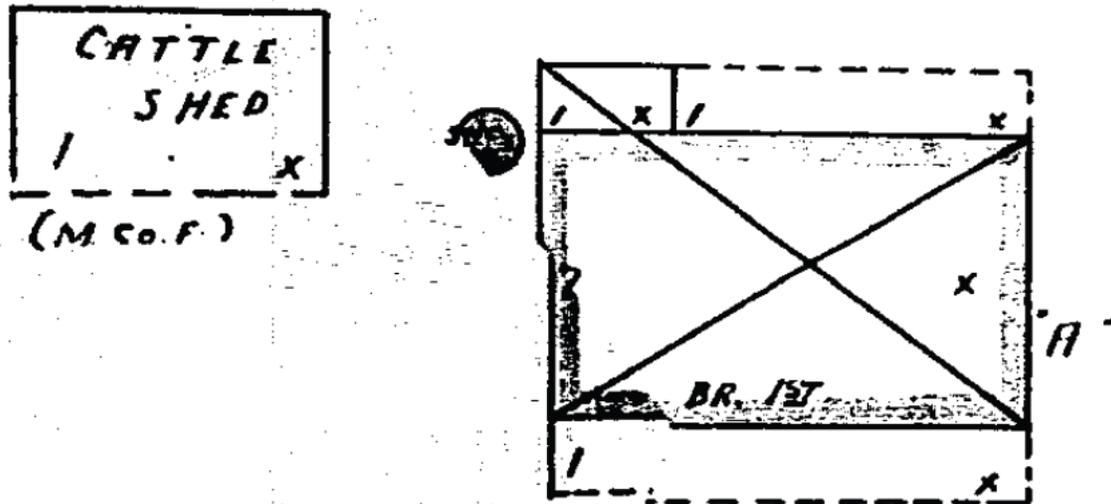
Figure 8. Muscatine County Home and Farm, 1946, showing extant Dairy Barn (dashed outline) and Cattle Shed (arrow). The rest of the buildings shown on this map are nonextant. Source: Sanborn Fire Insurance Map, Muscatine, Iowa, 1928, updated to 1946

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State



N↑

Figure 9. Detail of Dairy Barn and Cattle Shed at Muscatine County Home, 1946

Note the silo at the northwest corner of the barn, of which only the round footprint remains. This was a concrete stave silo built in 1926. The extant cattle shed, along with the concrete feed lot, may have been built in 1939, as part of the WPA improvement projects, 1937-1940. Source: Sanborn Fire Insurance Map, Muscatine, Iowa, 1928, updated to 1946

In addition to the dairy cows, the County Home kept a total of 40 head of cattle, nine of which were beef cattle "being fattened for the home's freezer." Additional livestock on the farm included around 300 hogs, 250 laying hens, and 200 cockerels, "which are butchered and added to the home larder" (*Muscatine Journal and News-Tribune*, January 30, 1961).

In 1965, when the County Home was no longer a member of the DHIA, the herd "produced more pounds of butterfat per animal than in 1961, when the farm had the top DHIA dairy herd. This year's production per animal was 484 pounds, compared with 464 in 1961" (*Muscatine Journal and News-Tribune*, June 17, 1965).

Without the association's assistance, recordkeeping fell to Superintendent Banta, who completed all the paperwork himself. Banta was assisted by six residents in the milking procedure, which started each day at 5:30 a.m. and 4:30 p.m., each milking taking about two hours. According to the *Muscatine Journal and News-Tribune*:

The huge barn on the farm and concrete barn lots are incredibly clean. The helpers at the farm are in charge of this project. The 50 residents at the home consume 20 gallons of milk daily. The rest of the milk and cream is sold to the Wilton Milk Products Company (*Muscatine Journal and News-Tribune*, June 17, 1965).

Despite the County Home's well managed dairy herd and up-to-date and sanitary dairy barn and feed lot, the County Home as an institution was woefully out-of-date. The buildings themselves dated to the 1880s and 1890s, making the facilities, no matter how clean and well-kept, completely inadequate to provide for the safety and proper care of its elderly and mentally and physically disabled residents. As a result, in 1966, the

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Board of Supervisors decided a new modern addition needed to be built, and to that end put a bond issue before Muscatine County voters, the majority of which approved the new building. The modern, three-story facility was completed in 1969 (*Muscatine Journal and News-Tribune*, August 27, 1966; April 25, 1968; June 13, 1969; Muscatine County Assessor record). In 1976, the Board of Supervisors voted to have the "old County Home" –the two-story brick "asylum" built in 1890 – torn down, leaving the modern three-story facility as the sole remaining building that housed residents of the former Muscatine County Home. Just prior to the demolition, the institution had been officially renamed the Muscatine County Care Facility. In the 1990s, the institution was again renamed Muscatine County Residential Services. This facility was demolished in the summer of 2016 (*Muscatine Journal*, August 25, 1976; McCleary and Erickson 2007:3-4; *Muscatine Journal*, December 26, 2017).



Muscatine County Home

The Muscatine County home, which the state code labels a "poor farm," is the only home of an increasing number of county residents destined to live out their time there because they are not capable of joining in normal pursuits. This view of the farm home was taken from the lane leading off Houser street. (Journal Photo)

Figure 10. View of the Muscatine County Home, 1961, which looked much as it did in 1891

Source: *Muscatine Journal and News-Tribune*, January 30, 1961

With these changes, Muscatine County Home farm operations ceased, as well, with the resignation of the Bantas in 1973, and the land and buildings were leased. In 1994 the Board of Supervisors transferred 75 acres from the management of the County Residential Services to the Muscatine County Conservation Board for the purposes of developing a new county park – Muscatine County Environmental Discovery Center (a.k.a. Discovery Park), and the barn ceased to be used at all. In 2006, the dairy barn – the heart of the old County Home farm – was saved from demolition by John Haskins, a local retired farmer, with support from local residents and volunteers, the State Historical Society of Iowa, the Iowa Preservation Alliance, Iowa Barn Foundation, and others, all of whom saw the potential for saving the barn as an educational attraction in the new Discovery Park. Haskins and others soon formed a group called the Friends of The Old Barn, which has been in charge of fundraising and turning the former Muscatine County Home Dairy Barn into an agricultural museum (McCleary and Erickson 2007:3-4; Erickson c.2007).

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Criterion C: Architecture of the Muscatine County Home Dairy Barn

The Muscatine County Home Dairy Barn is a well preserved example of a Gothic roof barn most likely built from architectural plans provided by the Loudon Machinery Company in Fairfield, Iowa. With its pleasing appearance and brace-free haymow, the Gothic roof barn was the culmination of decades of effort on the part of farmers and agricultural engineers to achieve maximum loft space in the light-frame, two-story type Midwestern barn. Fred C. Fenton, agricultural engineering professor at Iowa State College, recounted the history of the development of the Gothic roof barn at the 15th annual meeting of the American Society of Agricultural Engineers in 1920:

Since its first appearance in the Northwest some fifteen years ago [c.1905], the Gothic roof barn has grown in favor steadily. It is popular because of its pleasing exterior appearance and because it gives a haymow entirely free from interior braces. It may also be adapted to almost any width barn.

These barns were first developed near the lumber mills of the Northwest where the lumber could be cut without much trouble to the curvature of the roof. The ribs or rafters commonly were made by nailing together three or more 1x10-inch boards to form a curve. These boards can be prepared best at a sawmill where a power saw is available. The sawmills in the West made the practice of preparing and selling the boards cut to the proper radius. In the Middle West this type lost favor because of the labor of preparing the lumber in the absence of power-driven saws.

In 1916 the first bent rafters made their appearance. An experiment with the bent rafter conducted at Davis, California, in 1916 is the first one brought to my attention. In this construction the boards are bent to the desired curve instead of being sawed out. The ribs are commonly made of four or five one-by four's bent and securely nailed and bolted together with joints spaced so that no two will be closer than three feet. The construction of these ribs is simple and the erection also is very easy. All of these barns built in the Northwest seemed to have been strong enough, and the numerous examples of the bent rafter in the Middle West seem to show that this design is also strong enough. . .

The shape of the roof is growing in popularity and seems well suited to the type of barn required throughout the corn belt (Fenton 1922:28; 29).

The Muscatine County Home Dairy Barn is an example of the early type of Gothic roof barn, in which sawed and bent laminated rafters rest on the building plate at the eaves and are spliced at the ridge with collar beams. A later, stronger design by the Loudon Machinery Company eliminated the weakness at the eaves and ridge with continuous laminated rafters that extended from foundation to foundation (Loudon Machinery Company 1925:18; Fenton 1920:29; Figures 11, 12, and 13).

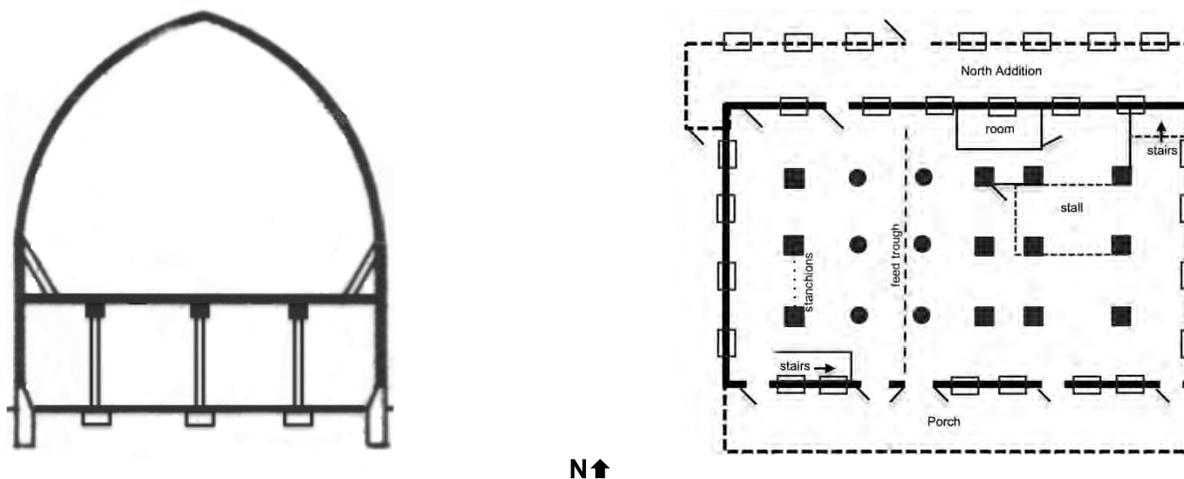


Figure 11. Middle Bent (left) and Main Floor/Stable Plan (right)
Drawings by Price Preservation Research, 2016

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

In addition to the Gothic-roof haymow, the Muscatine County Home Dairy Barn reflects the era of the sanitary dairy barn as discussed in Criterion A. Features of the sanitary dairy barn include concrete floors, hollow brick tile walls, and plenty of windows for sunlight and ventilation. Because the barn was most likely built according to plans obtained from the Loudon Machinery Company, it is instructive to view the county home barn through those features described in Loudon barn plan catalogs of the time. Loudon barn plan and machinery catalogs featured instructions for mixing, leveling, and contouring concrete barn floors, gutters, and troughs to produce safe and sanitary housing for livestock. Loudon's barn machinery and equipment were designed to be set in or work with these specially laid concrete floors and feeding troughs. Their plans also called for numerous windows for light and ventilation to ward off livestock diseases, another feature of the sanitary dairy barn. To that end, Loudon manufactured barn window ventilators, which were nine-light windows that tilted inward at the top (Loudon 1925:18; Figure 14). These features of the early-twentieth-century sanitary dairy barn are extant in the Muscatine County Home Dairy Barn.

In the first decade of the twentieth century, commercial firms such as Aladdin, Sears, Gordon-Van Tine, and Montgomery Ward began selling through their catalogs ready-cut, build-it-yourself, light-frame houses. As the same lumber framing techniques began being applied to barn construction, these companies added a few pre-cut barns to their house catalogs. Two companies in Iowa, however, grew prominent in the new mail-order barn market – Loudon Machinery Company and Gordon-Van Tine – one selling barn equipment and plans, the other selling barns, respectively. Capitalizing on William Loudon's labor-saving inventions for farmers (i.e., the hay carrier in 1867; the litter carrier in 1898; the first automatic water bowl; and first flexible sliding-door hanger), the Loudon Machinery Company "began its self-proclaimed 'first free planning service' in 1907" (Soike 1995:158).

Headquartered in Fairfield, Iowa, its catalogs, filled with sample plans and available barn equipment, invited farmers to simply "tell us about what you have in mind in the way of a barn" and then "we'll draw you a floor plan giving you our recommendations" without charge. The plan service helped gain entry for the firm to advise farmers, especially dairymen, on ways to modernize and equip the barn with Loudon's main stock-in-trade, which included ventilation systems, hay and litter carriers, windows, stalls, and pens. For a nominal charge, Loudon's architectural department would furnish its equipment customers with a barn's complete working plans and contractor's specifications. Thus, any barn furnished with Loudon equipment was likely built using the company's architectural plans. By 1940, the company claimed it possessed "easily the largest' barn-plan department from which 'more than 25,000 barns have been planned the world over" (Soike 1995:158-159; John Haskins to Jennifer Price, May 23, 2018).

The Muscatine County Home Dairy Barn is a curved Gothic roof barn that appears to generally conform to plans and specifications in the 1925 catalog "Loudon Barn Plans," published by the Loudon Machinery Company of Fairfield, Iowa. The barn specifically resembles the plans and specifications for Construction Type "O," which "refers to the round vaulted roof, commonly known as the Gothic roof barn," although the Loudon Machinery Company was not the only source of Gothic roof barn plans (Loudon Machinery Co 1925:18). Although no definitive historical evidence has been found yet that proves this barn was built with architectural plans provided by the Loudon Machinery Company, the barn was originally equipped with Loudon Machinery Company cow stanchions, a hay carrier, and a manure removal system. Along with this equipment, Loudon's architectural plans and contractor specifications would have been easy and inexpensive to obtain, keeping costs low for the Muscatine County Home.

Muscatine County Home Dairy Barn
 Name of Property

Muscatine County, Iowa
 County and State

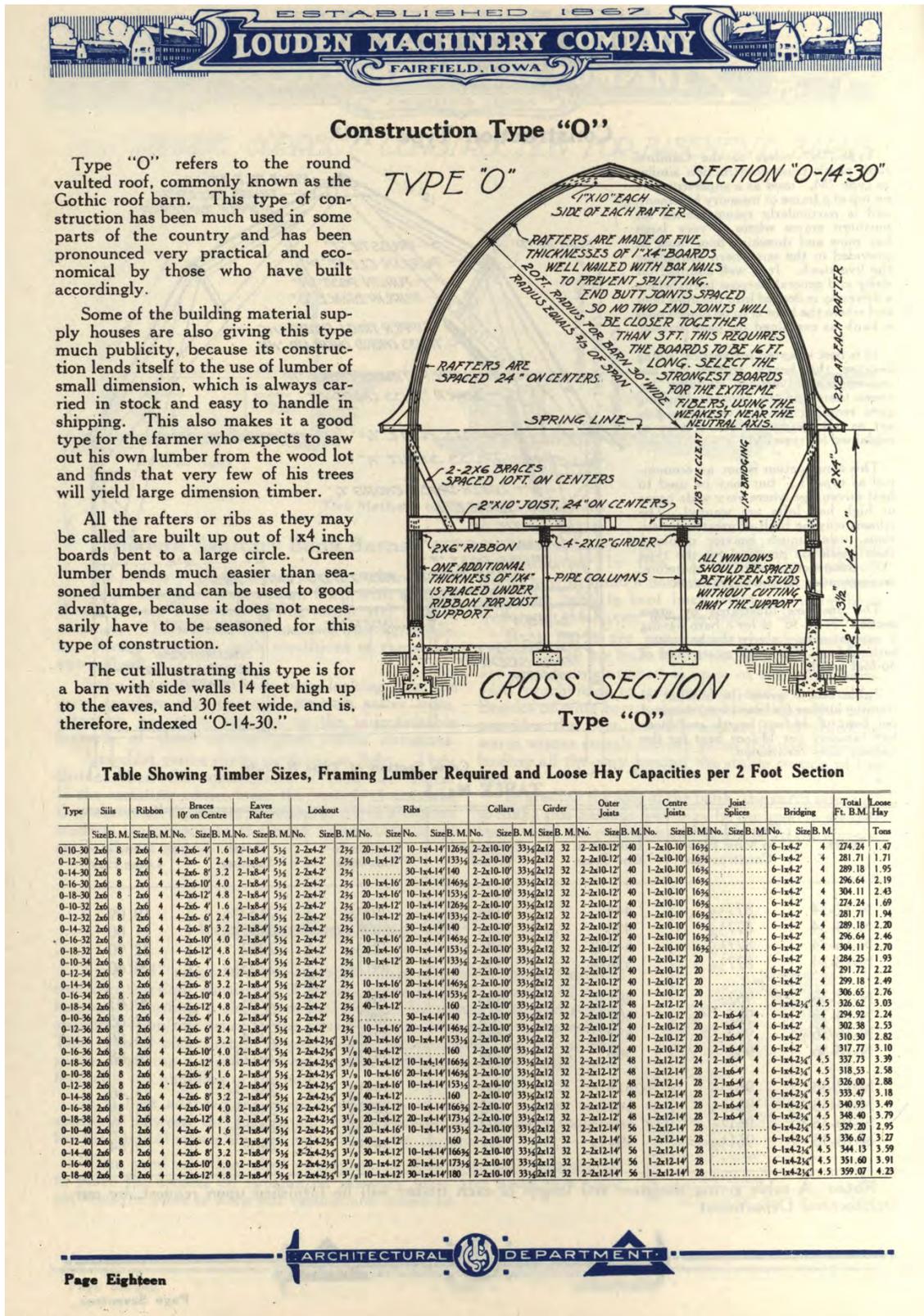


Figure 12. The Gothic Roof Barn, Construction Type "O," as shown in the Loudon Machinery Company 1925 barn and equipment catalog. Source: Loudon Machinery Company 1925

Muscatine County Home Dairy Barn
 Name of Property

Muscatine County, Iowa
 County and State



Method of Constructing Ribs for Type "O" Roofs

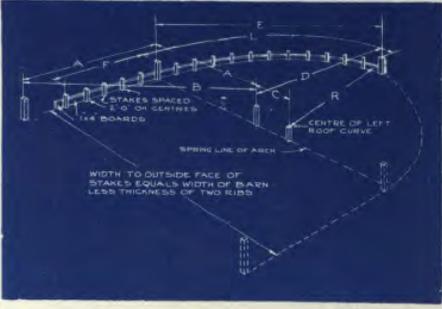
The accompanying illustration shows the method used for staking out the ground in preparing to build the gothic roof rib.

Select a level place on the ground and measure off the distances A, B, C, D and E given on the table below for the width of barn and wall height of the barn to be built. Set stakes firmly in the ground at the points these measurements indicate. Be careful to make the measurements accurately. Stakes should be vertical and firm. Measurements to stakes on which the ribs are to be formed should be made to the face on which the boards are nailed. By lining up along stakes already set, drive other stakes firmly at intervals of two feet along side wall space indicated at F and around the roof curve shown at L. To form the curve, hold the end of a tape line on the stake at the center of the roof curve and measure off the distance R, for the width of barn as given in the table, setting stakes two feet from center to center of stakes.

Start at the stake at the point of the roof and nail the first course of 1 x 4 boards with the smallest nails which will hold them to the stakes, so that the completed rib may be easily removed.

The strength and stiffness of this construction depends very much on the good judgment and honest intentions of the carpenters in not allowing any two of the end joints of the members of a rib to come opposite or very close together and in having all members thoroughly nailed, but not with nails of a diameter that will cause the wood to split. A good specification for constructing the ribs would be: The ribs shall contain not over one end butt joint in any three feet of its length. Each member shall be carefully nailed to the other members with at least three nails to each linear foot, spaced zigzag, and with nails of a thickness that will not cause the wood to split.

When two ribs are completed they may be nailed together with a collar beam and raised into position. They should be carefully braced, and the different ribs held together by ribbons and floor joists until the mow floor and sheathing is applied.



Measurements for Laying Out Ribs for Type "O"

Barn Width	A	B	C	D	E	Radius for Staking Out R	Outside Rib Length L
30' 0"	14' 8"	20' 8 7/8"	5' 0"	18' 11 1/4"	23' 11 3/8"	19' 8"	26' 4 1/4"
30' 0"	15' 8"	22' 1 3/8"	5' 4"	20' 2 1/4"	25' 7"	21' 0"	28' 1 3/8"
34' 0"	16' 8"	23' 6 3/8"	5' 8"	21' 6 3/4"	27' 2 3/8"	22' 4"	29' 10 1/8"
36' 0"	17' 8"	24' 11 1/8"	6' 0"	22' 9 3/4"	28' 10 1/8"	23' 8"	31' 7 3/8"
38' 0"	18' 8"	26' 4 1/4"	6' 4"	24' 1' 2"	30' 5 1/8"	25' 0"	33' 4 3/8"
40' 0"	19' 8"	27' 9 3/4"	6' 8"	25' 4 1/4"	32' 1 3/8"	26' 4"	35' 1 1/8"
Difference for 2' 0" in barn width	1' 0"	1' 5"	0' 4"	1' 3 1/2"	1' 7 3/8"	1' 4"	1' 9 1/8"

Figure 13. Louden Machinery Company's Method of Constructing Ribs for Type "O" (Gothic) Roofs
 Source: Louden Machinery Company 1925

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

ESTABLISHED 1867
LOUDEN MACHINERY COMPANY
FAIRFIELD, IOWA

Comfort and Air

Fresh air in the barn is as necessary for the comfort of the animals as fresh water and pure food. According to experts the average cow consumes more pounds of air during the 24 hours than she does of either food or water. Conservative estimates place the weight of air consumed by a 1,000 pound cow at 224 pounds.

Louden Window Ventilators make possible an abundance of fresh air without draughts. Fig. 986 shows the window closed, and Fig. 987 shows it opened to let in air at the top, while Fig. 988 shows it open for air to enter at both top and bottom. A moment's examination of these illustrations shows the adaptability of the Louden Window Ventilator to meet the different conditions of the weather. On cold nights the ventilator open at the top only will throw the air upward where it will mingle with the warmer air before coming in contact with the cows.

When it is necessary to keep the cows in the barn on warm nights the arrangement of the window in Fig. 988 will give a cooling and comforting active circulation of air throughout the barn.

Fig. 989 is a vertical section showing the sash and the top and bottom of the window frame cut in two and the sash open and slightly raised. Write for special booklet.

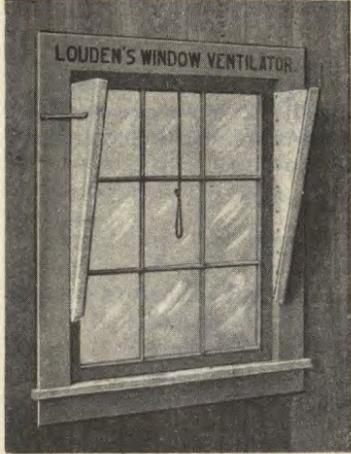


Fig. 986.

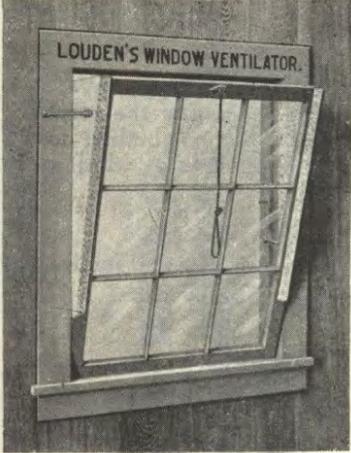


Fig. 987.



Fig. 988.

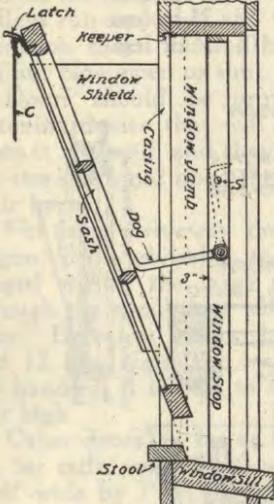


Fig. 989.

Figure 14. Louden Machinery Company Window Ventilators, as shown in the 1925 catalog. These 6-light windows with Louden ventilators are extant throughout stable of Dairy Barn. Source: Louden Machinery Company 1925:26

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

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Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____
- recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- State Historic Preservation Office
 - Other State agency
 - Federal agency
 - Local government
 - University
 - Other
- Name of repository: _____

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property less than one

(Do not include previously listed resource acreage; enter "Less than one" if the acreage is .99 or less)

Latitude/Longitude Coordinates

Datum if other than WGS84: _____

(enter coordinates to 6 decimal places)

1	<u>41.433949</u>	<u>-91.085182</u>	3	_____	_____
	Latitude	Longitude		Latitude	Longitude
2	_____	_____	4	_____	_____
	Latitude	Longitude		Latitude	Longitude

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

Verbal Boundary Description (Describe the boundaries of the property.)

The nominated property encompasses approximately one-third of an acre located in the northeast section of the following 88.74-acre parcel, platted as County Farm & Discovery Center and owned by Muscatine County: the west half of the Northeast Quarter & west part of the east half of the northeast quarter of Section 33 in Bloomington Township (T77N-R2W). The east and west boundaries are approximately 88 feet each, and the north and south boundaries are approximately 160 feet each.

Boundary Justification (Explain why the boundaries were selected.)

The nominated property includes a one-third-acre plot of land that is historically associated with the Muscatine County Home Dairy Barn, cattle shed, and concrete feed lot. Although this was once part of a 180-acre county institution that included a county farm, the land surrounding the barn, shed, and feed lot has been turned into a county park with modern outbuildings, landscaping, roads, and parking lots and no longer retains any historical association with the nominated property.

11. Form Prepared By

name/title Jennifer A. Price, PhD/Consultant date July 2018
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Additional Documentation

Submit the following items with the completed form:

- **GIS Location Map (Google Earth or BING)**
- **Local Location Map**
- **Site Plan**
- **Floor Plans (As Applicable)**
- **Photo Location Map** (Include for historic districts and properties having large acreage or numerous resources. Key all photographs to this map and insert immediately after the photo log and before the list of figures).

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

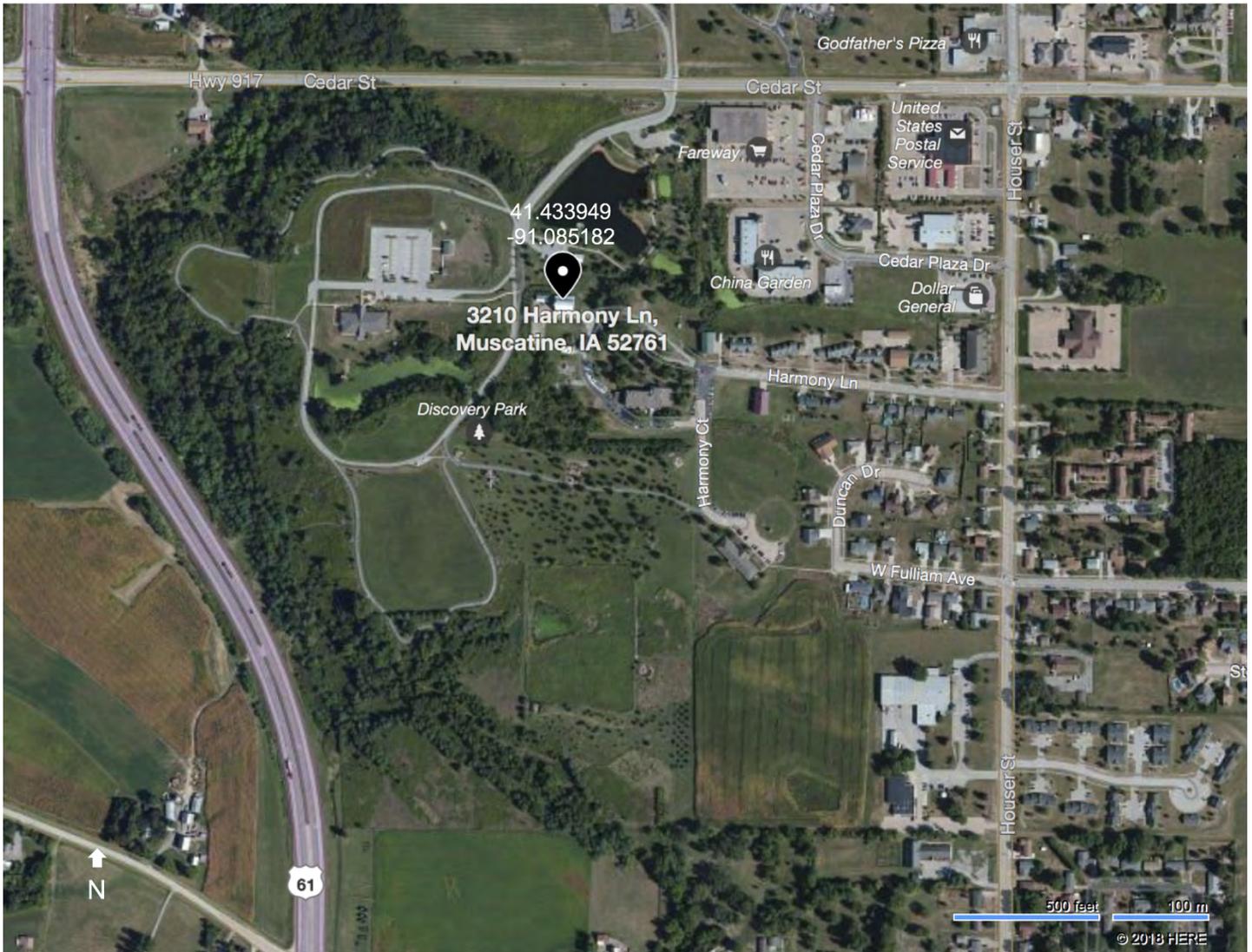


Figure 15. GIS Location Map

Source: Bing Maps 2018

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State



Figure 16. Muscatine County Home Dairy Barn Boundary Map N↑

Source: Beacon/Muscatine Area Geographic Information Consortium 2014 Imagery

Muscatine County Home Dairy Barn
Name of Property

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County and State

Photographs:

Submit clear and descriptive photographs. The size of each image must be 3000x2000 pixels, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Muscatine County Home Dairy Barn
City or Vicinity: Muscatine
County: Muscatine **State:** IA
Photographer: Jennifer A. Price
Date Photographed: July 13, 2016

Description of Photograph(s) and number, include description of view indicating direction of camera:

- Photo 1 of 32: General view northwest of barn
- Photo 2 of 32: Exterior - view north
- Photo 3 of 32: Exterior - view northeast
- Photo 4 of 32: Exterior - view northeast
- Photo 5 of 32: Exterior - view east
- Photo 6 of 32: Exterior - view west
- Photo 7 of 32: Exterior - view west-southwest
- Photo 8 of 32: Exterior – view south-southwest
- Photo 9 of 32: Exterior – view south
- Photo 10 of 32: Exterior – view south-southeast
- Photo 11 of 32: Exterior – view west-northwest of porch
- Photo 12 of 32: Cattle shed, view northwest
- Photo 13 of 32: Interior (main floor/stable) – view north from entry
- Photo 14 of 32: Interior (main floor/stable) – view west
- Photo 15 of 32: Interior (main floor/stable) – view west from center
- Photo 16 of 32: Interior (main floor/stable) – view northwest
- Photo 17 of 32: Interior (main floor/stable) – view east
- Photo 18 of 32: Interior (main floor/stable) – view west

Muscatine County Home Dairy Barn

Name of Property

Muscatine County, Iowa

County and State

- Photo 19 of 32: Interior (main floor/stable) – view northwest from entry
- Photo 20 of 32: Interior (main floor/stable) – view northwest from center
- Photo 21 of 32: Interior (main floor/stable) – view north toward addition entry
- Photo 22 of 32: Interior (main floor/stable) – view east in north addition
- Photo 23 of 32: Interior (main floor/stable) – view west of southwest stairs
- Photo 24 of 32: Interior (main floor/stable) – view south of main entry
- Photo 25 of 32: Interior (upper floor/haymow) – view west
- Photo 26 of 32: Interior (upper floor/haymow) – view east
- Photo 27 of 32: Interior (upper floor/haymow) – view of ridge showing bent rafters and collars
- Photo 28 of 32: Interior (upper floor/haymow) – hay chute, south side
- Photo 29 of 32: Interior (upper floor/haymow) – stairs and north masonry wall
- Photo 30 of 32: Interior (upper floor/haymow) – detail of rafter and braces
- Photo 31 of 32: Interior (upper floor/haymow) – detail of rafter and braces
- Photo 32 of 32: Interior (upper floor/haymow) – display of Loudon hay carrier original to barn

Muscatine County Home Dairy Barn
Name of Property

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County and State

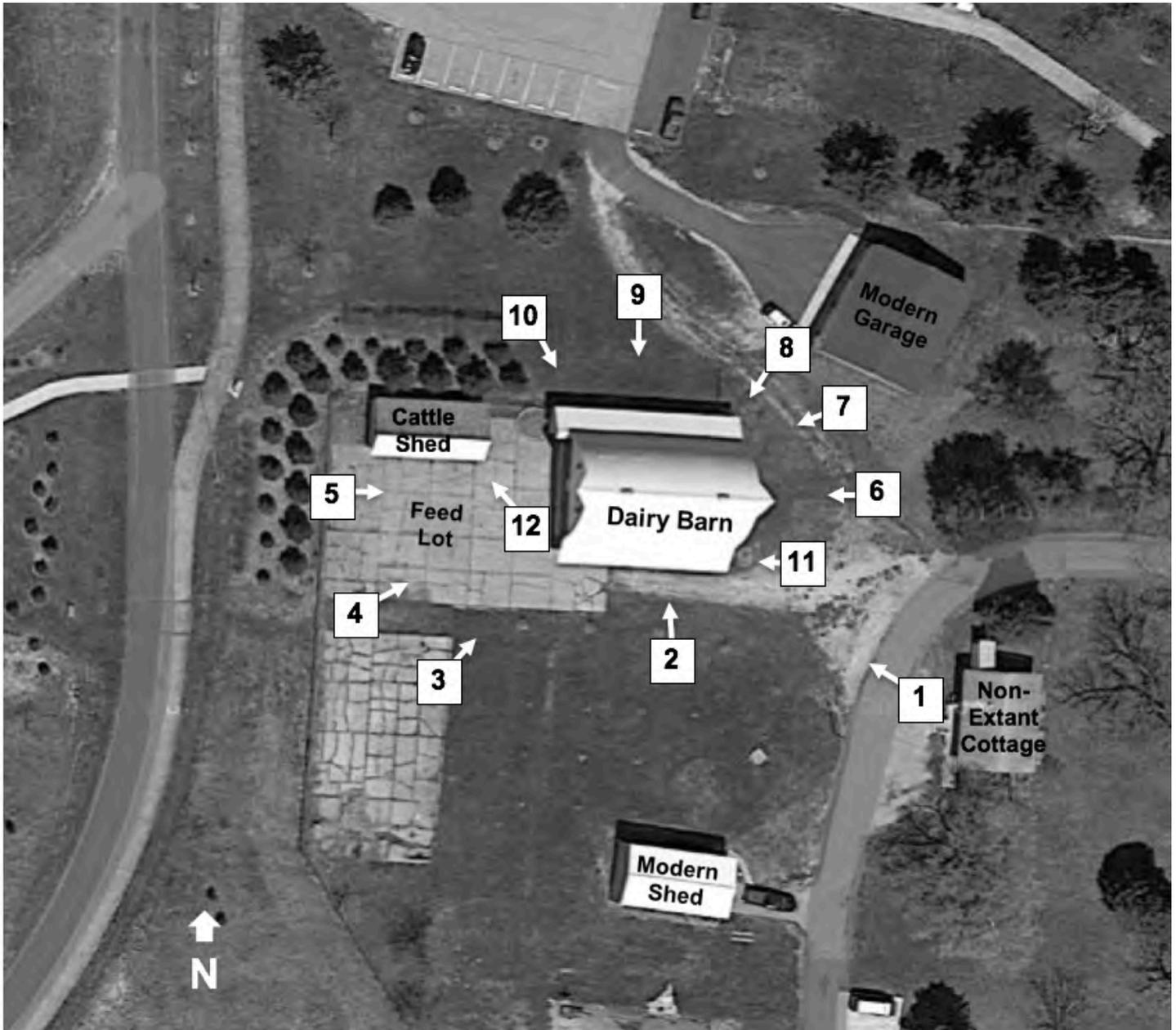


Figure 17. Exterior Photo Key (Photos 1-12)

Base Map: Muscatine County Assessor/GIS 2014 Imagery

Muscatine County Home Dairy Barn
Name of Property

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County and State

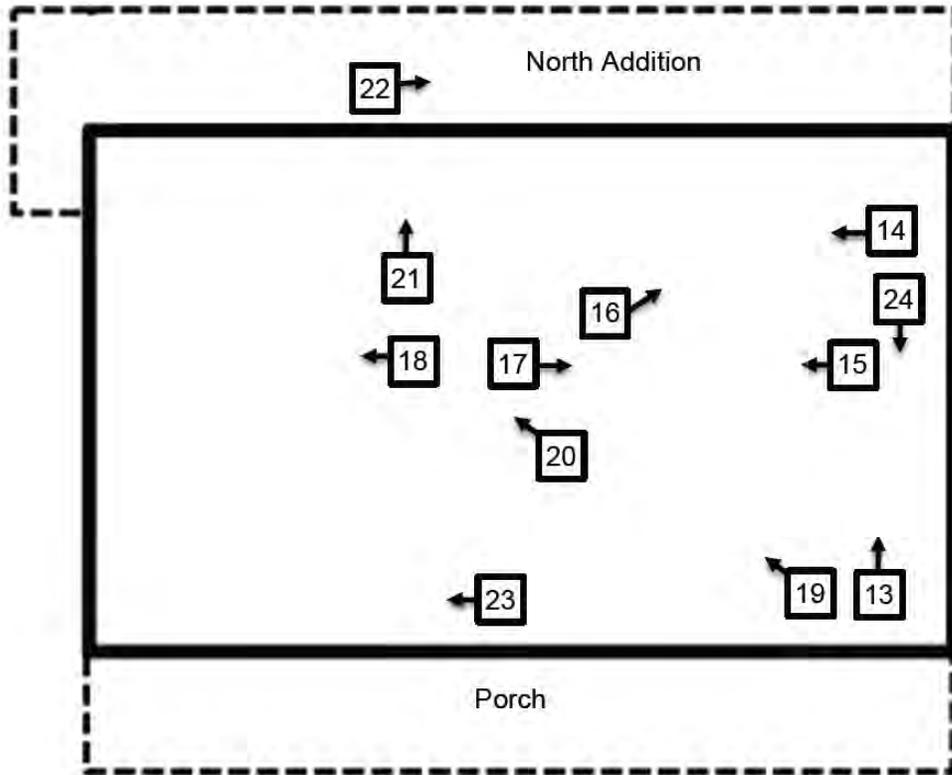


Figure 18. Interior Photo Key – Main Floor/Stable (Photos 13-24)

N↑

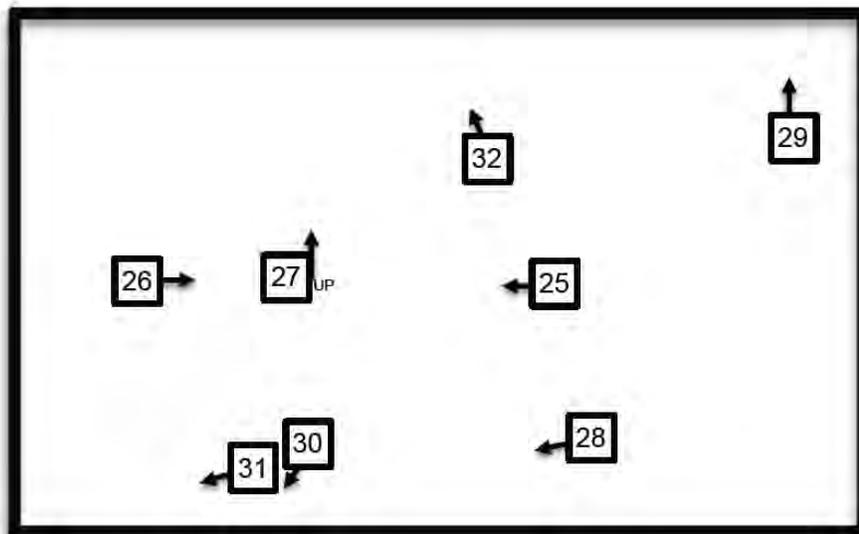


Figure 19. Interior Photo Key – Upper Floor/Haymow (Photos 25-32)

N↑

Muscatine County Home Dairy Barn
Name of Property

Muscatine County, Iowa
County and State

List of Figures

Figure 1. Plat map of Bloomington Township, 1916, showing Muscatine County Home (outline), just west of the city limits of Muscatine. Source: Anderson Publishing Company 1916	8
Figure 2. View west of the Muscatine County Poor Farm (a.k.a. County Home), 1891	9
Figure 3. View northwest of Muscatine County Home and Farm, 1911.....	9
Figure 4. In 1937, the Muscatine County Home kept 12 dairy cows, here pictured in the barnyard	11
Figure 5. View northeast of Muscatine County Home Dairy Barn, 1961, with superintendent Harry Banta and the 20 “MusCoHo” registered Holstein cows as they come in for evening milking.....	12
Figure 6. View northwest of Dairy Barn and Feed Lot, 1964.....	13
Figure 7. A few members of the Muscatine County Home’s dairy herd on the feed lot near the barn, 1965.....	14
Figure 8. Muscatine County Home and Farm, 1946, showing extant Dairy Barn (dashed outline) and Cattle Shed (arrow). The rest of the buildings shown on this map are nonextant.	15
Figure 9. Detail of Dairy Barn and Cattle Shed at Muscatine County Home, 1946.....	16
Figure 10. View of the Muscatine County Home, 1961, which looked much as it did in 1891	17
Figure 11. Middle Bent (<i>left</i>) and Main Floor/Stable Plan (<i>right</i>).....	18
Figure 12. The Gothic Roof Barn, Construction Type “O,” as shown in the Louden Machinery Company 1925 barn and equipment catalog.....	20
Figure 13. Louden Machinery Company’s Method of Constructing Ribs for Type “O” (Gothic) Roofs.....	21
Figure 14. Louden Machinery Company Window Ventilators, as shown in the 1925 catalog. These 6-light windows with Louden ventilators are extant throughout stable of Dairy Barn.	22
Figure 15. GIS Location Map.....	26
Figure 16. Muscatine County Home Dairy Barn Boundary Map	27
Figure 17. Exterior Photo Key (Photos 1-12)	30
Figure 18. Interior Photo Key – Main Floor/Stable (Photos 13-24)	31
Figure 19. Interior Photo Key – Upper Floor/Haymow (Photos 25-32).....	31

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.











D BARN
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William Loden and the American Barn

William Loden (1864-1940) was a prominent American architect and designer of barns. He is known for his innovative designs that combined functionality with aesthetic appeal. His barns were characterized by their large, open spaces and high ceilings, which allowed for easy movement of livestock and equipment. Loden's work was influential in the development of the modern American barn.

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\$5.00

**Historically
at Lowden Barn**



Lowden inventor Charles Lowden's
curved roof barn plans and
equipment to farmers.
Thanks to their engineering and
the use of curved roof joints
allowed the farmer to store more
hay than could be stored in a barn
with a conventional roof.



On the first
floor of the
barn are the
horse and mule
stalls and the
walking area.





Credit for the
[Image]





Washing Machine
1850s
This machine was used for washing clothes. It was made of wood and had a hand crank on the side. The clothes were placed in the tub and water was added. The hand crank was turned to agitate the clothes.

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ELY HAN...

DONATED BY
GLYN HANKS

**Apple Grinder
and Press**

These two machines were used to produce apple cider. The grinder is used to grind the apples into small pieces, and the press is used to extract the juice from the pieces. The grinder is made of cast iron and the press is made of wood. The grinder is used to grind the apples into small pieces, and the press is used to extract the juice from the pieces. The grinder is made of cast iron and the press is made of wood. The grinder is used to grind the apples into small pieces, and the press is used to extract the juice from the pieces. The grinder is made of cast iron and the press is made of wood.





A History of
Em



equipment to farmers. Lowdens clever engineering and the use of curved roof joists allowed the farmer to store more hay than could be stored in a barn with a conventional loft.



On the first floor of the barn are the horse and mule stalls and the milking area.







Silage & Silos

Small informational sign with text and images, likely describing silage and silos.





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