DHR | Virginia Department of Historic Resources

PRELIMINARY INFORMATION FORM (PIF) for INDIVIDUAL PROPERTIES

DHR No. (to be completed by DHR staff) 056-5050

Purpose of Evaluation

Please use the following space to explain briefly why you are seeking an evaluation of this property.

I am seeking an evaluation of this property for the purpose of certifying the property as eligible for listing in the Virginia Landmarks Registry and the National Register of Historic Places to apply for tax credits to offset the costs of rehabilitation of the 1942 Gothic Barn located at 934 Champe Plain Rd. in the village of Etlan in Madison County Virginia.

Are you interested in applying for State and/or Federal Rehabilitation Tax Credits? Yes ___X__ No _____

Are you interested in receiving more information about DHR's easement program? Yes _____ No __X___

1. General Property Information

Property name: Cebula Farm

Property address: 934 Champe Plain Rd

City or Town: Etlan, Va

Zip code: 22719

Name of the Independent City or County where the property is located: Madison County, Virginia

Category of Property (choose only one of the following):

Building __X__ Site _____ Structure _____ Object _____

2. Physical Aspects

Acreage: 88.8 Acres

Setting (choose only one of the following):

Urban _____ Suburban _____ Town _____ Village __X___ Hamlet _____ Rural_____

Briefly describe the property's overall setting, including any notable landscape features:

The barn is located in the Village of Etlan, an unincorporated community in Madison County, Virginia. The area surrounding the barn is rural and agricultural. Based on a 1914 survey, the barn sits on what was a 1,539 acre farm known as the Champ Plain Farm owned by M.E. Smith. The Champe Plain farm was divided into 16 parcels for sale, 5 lots in the western most corner were less than 20 acres and the balance of the lots were over 100 acres. Several subdivisions of the larger lots have occurred in the years since 1914 but the barn still stands in an area of agricultural lots from 10 to 330 acres. Adjoining lots are 28 acres or more where farming, haying and livestock can be seen in all directions. Even the smaller lots are cared for by a local farmer who runs cattle and harvest hay off the parcels.

Rossen Hollow Run begins in the Blue Ridge Mountains and runs through the property. There is approx. 1817 feet of creek bank on the property. There is also a spring that starts on the southwest corner of the property and runs north to Rossen Hollow Run.

There are many landscape features of the property and recreational opportunities near and around the property that draw tourist and Northern Virginia neighbors to the area around the barn. The travel distance, by car, from D.C, to Etlan is 78 miles. Once in Etlan the opportunity to experience the beauty and peacefulness of the countryside and understand the simple life of bygone years is abundant in the Village of Etlan and around the farm. There are many features near the property that afford opportunities for tourist to see the barn as they wander through the foot hills of the Blue ridge mountains, seek out hiking trails, view the fall foliage, travel the wine and brewery trails, visit the quaint towns surrounding the area and visit the many stocked streams of Madison County and the surrounding area.

The barn sits just 7/10 of a mile from Shenandoah National Park. The views of the mountains and the ever changing colors and shadows of the clouds on the peaks draws tourist to the park for hiking, fishing, rock climbing and just relaxing and taking in the views. Land where the barn stands has 360 degree views of the mountains and valleys of the Shenandoah National park and the Blue Ridge Mountains.

The farm sits at the base of Old Rag Mountain, a mountain in the Blue Ridge Mountains. Old Rag hiking is one of the most popular hikes in the Mid-Atlantic Region (www.hikingupward,com) and offers challenging trails for the experienced hikers and fire trails for the less experienced hiker. The barn sits less than 50 feet from Champe Plain Rd, a favorite shortcut between Rt 231 and Nethers Rd where the parking lot for Shenandoah National park is located.

The barn is just off Rt 231 (S Ft Valley Rd), a scenic byway to view the fall foliage on Skyline Drive. The Rt 211 (Sperryvile Entrance) to Skyline Drive is 8.4 miles from the farm. Old Rag Mountain is the closest mountain to Rt 231. Champe Plain Rd and Nethers Road are the only public avenues to the park in Madison County. Tourist traveling the byways and attempting to get closer to the mountains will see the barn from Champe Plain Road.

Madison Virginia is on the wine and brewery trails. There are 6 wineries in Madison county alone with several more as tourist travel Rt 231.

Etlan is a farming community surrounded by the quaint and historic towns of Madison, Sperryville, Warrenton, Front Royal and Culpeper who's old architecture houses museums, specialty shops and eateries.

Etlan is on the banks of the Hughes River, a stocked stream popular for fly fishing. The Hughes River is at the end of Champe Plain Rd (6/10 mile).

3. Architectural Description

Architectural Style(s): Arched Rafter Gothic Cattle Barn

If the property was designed by an architect, landscape architect, engineer, or other professional, please list here: _____

If the builder is known, please list here: Coates

Date of construction (can be approximate): 1942

Narrative Description:

In the space below, briefly describe the general characteristics of the entire property, such as its current use (and historic use if different), as well as the primary building or structure on the property (such as a house, store, mill, factory, depot, bridge, etc.). Include the architectural style, materials and method(s) of construction, physical appearance and condition (exterior and interior), and any additions, remodelings, or other alterations.

The property is 88.8 acres and is currently used for cattle grazing and hay production. Approximately 85 acres are cleared and approximately 5 acres wooded. The property has 360 degree views of mountains and valleys including the Blue Ridge Mountains. Based on a 1914 survey, the barn sits on what was a 1,539 acre farm known as the Champe Plain Farm owned by M.E. Smith. Mr. William Ebert (Ebert) Coates purchased approximately 289 acres for a family farm. The family farm supported a vegetable garden, peach orchard, apple orchard, cows, corn, and hay. The barn was added to the family farm by Ebert Coates in 1942 as a "beef barn" to house calves and feed and shelter cattle. It was built by a group of carpenters who built three barns in Madison County using a "new method" to withstand the winds common in Etlan. This coincides with an article in the "American Builder", written by A.W. Holt and published in August 1935 titled "A WIND-Proof Gothic Barn". Two of the Gothic Barns built in Madison County about this time and constructed by the same carpenters still stand and one has recently been demolished. The second surviving barn is located on Champe Plain about a quarter mile from the Coates Barn. It has survived the ravages of the winds but is in a severe state of disrepair. The Coate's barn has been unused since 70's but is in good structural shape. It has been struck by lightning twice and survived the 120 mile per hour wind gust of a storm in recent history. The foundation will require work due to the lightning strike/strikes that traveled through the metal in the silo and into the metal rebar in the barns foundation that knocked the concrete loose exposing the metal and weakened the foundation. In addition, the southeast wall of the barn that receives the greatest wind load has shifted due to the wind and/or the lightning strikes. A licensed engineer has inspected the barn and determined that it is, remarkably, sound structurally but has recommendations to repair the foundation and the damaged wall. In addition, he has given us a report of necessary structural modifications needed to residential building codes and has been retained to review all building modification plans.

The gambrel roof of many barns provided extra space for hay storage but the open design was not recommended for heavy wind areas or regions that that receive significant snowfall. The "balloon frame" barn was first built near Spicer, Minnesota in 1902. The methods of building a wind proof barn described in A.W. Holt's appear to be incorporated in the "Coates" barn. The wind-proof Gothic barn, as described by A.W. Holt employs many of the architectural methods used in the Coates barn and include trussed-rafters, supporting the roof with the walls instead of joist, the height (33 ft.) should never exceed the width (36 ft.), radius, diagonal sheathing tying the roof to the walls and cable bracing to support the roof.

All the wood for the barn was taken from the farm. One grandson of Mr. Coates remembers the timber being sawed on site by a mobile lumber mill and the green wood being soaked in water and placed in a "gig" to curve the wood to create the curved rafters and cable bracing for the roof.

The barn, silo and feed storage, attached to the back of the barn, stands as it was built. The only alteration that I am aware of is the bulk head added in 1949 to the right side of the front of the barn to add strength against wind to the open end of the barn.

The only other structure on the property is a metal pole shed built as a riding rink with attached horse stalls. This structure was damaged by wind blowing snow onto the roof and will be destroyed in the near future. This building (partially) stands as a testimate to the solid construction of the barn, some 50 years older than the riding rink.

All doors, hinges, hay hooks and latches are original with the exception of the feed shaft door attached to the silo.

Briefly describe any outbuildings or secondary resources (such as barns, sheds, dam and mill pond, storage tanks, scales, railroad spurs, etc.), including their condition and their estimated construction dates.

There is a storage building attached to the rear of the barn. It measures approximately 18 feet by 12 feet, less than 6 feet tall in the interior and attaches the dairy barn and the silo. The storage was built at the time the barn was built (1942) and is made of the same concrete blocks. The concrete silo attached to the storage is not in good condition. There is no top on the silo and there is a hole in the side of the silo created by a lightning strike during a storm many years ago.

There is a concrete cattle watering trough with it's original hand pump at the front of the dairy barn and a corral with undated origins.

The larger farm of Mr. Coates' was broken up and sold after his death. We have purchased one of the subdivided parcels. The only other structure on the property we purchased is a metal pole shed built as a riding rink with attached horse stalls. This structure was damaged by wind blowing snow onto the roof causing half the roof to collapse and will be destroyed in the near future. This building (partially) stands as a testimate to the solid construction of the barn, some 60 years older than the riding rink.

Along Champe Plain Rd and within the boundaries of the Coates 289 acre farm there stands two farm houses with additional sheds, barns and corrals. One built in 1920 and the other built in 1942. These were presumably the homesteads for the Coates family.

4. Property's History and Significance

In the space below, briefly describe the history of the property, such as significant events, persons, and/or families associated with the property. Please list all sources of information used to research the history of the property. (It is not necessary to attach lengthy articles or family genealogies to this form.)

If the property is important for its architecture, engineering, landscape architecture, or other aspects of design, please include a brief explanation of this aspect.

The property is significant because it was a family farm to one of five families prominent in Madison (Coates, Utz, Lamb, Graves and Aylor). I spoke with two grand children of William Ebert Coates who have memory of their Grandfather, the barn and the farm. I also talked with towns people who similar memories of their interactions with the owner and the family. Additional research was performed at the courthouse by researching deeds, wills and plats and on the internet researching the history and architecture of barns.

The property is important for its architecture and engineering.

The barn was built by a group of traveling carpenters who built three barns in Madison County using a "new method" to withstand the winds common in Etlan. Two of the barns were built on Champe Plain Rd and the third in Graves Mill. This coincides with an article in the "American Builder", written by A.W. Holt and published in August 1935 titled "A WIND-Proof Gothic Barn". Two of the Gothic Barns built in Madison County about this time and constructed by the same carpenters still stand and one has recently been demolished. The second surviving barn is located on Champe Plain about a quarter mile from the Coates Barn. It has survived the ravages of the winds but is in a severe state of disrepair. The Coate's barn has been unused since 70's but is in good structural shape. It has been struck by lightning twice and survived the 120 mile per hour wind gust of a storm in recent history. The foundation will require work due to the lightning strike/strikes that traveled through the metal in the silo and into the metal rebar in the barns foundation that knocked the concrete loose exposing the metal and weakened the foundation. In addition, the southeast wall of the barn that receives the greatest wind load has shifted due to the wind and/or the lightning strikes. A licensed engineer has inspected the barn and determined that it is, remarkably, sound structurally but has recommendations to repair the foundation and the damaged wall. In addition, he has given us a report of necessary structural modifications needed to residential building codes and has been retained to review all building modification plans.

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5. Property Ownership (Check as many categories as apply):

Private: _____ Public\Local _____ Public\State _____ Public\Federal _____

Current Legal Owner(s) of the Property (If the property has more than one owner, please list each below or on an additional sheet.)

name/title: Bryan Cebula, Owner and Marian Cebula, owner

organization: _____

street & number: 7040 Hoadly Rd.

city or town: Manassas state: VA zip code: 20112

e-mail: BryMarProperties@hotmail.com telephone: (703) 791-7919

Legal Owner's Signature: _____ Date: 9/2/19

• • Signature required for processing all applications. • •

In the event of corporate ownership you must provide the name and title of the appropriate contact person.

Contact person: _____

Daytime Telephone: _____

Applicant Information (Individual completing form if other than legal owner of property)

name/title: _____

organization: _____

street & number: _____

city or town: _____ state: _____ zip code: _____

e-mail: _____ telephone: _____

6. Notification

In some circumstances, it may be necessary for DHR to confer with or notify local officials of proposed listings of properties within their jurisdiction. In the following space, please provide the contact information for the local County Administrator, City Manager, and/or Town Manager

name/title: Legin Webb, County Planner

locality: Madison County, Va

street & number: 414 E. Main St

city or town: Madison state: VA zip code: 22727

telephone: (540) 948-7599

Note: Both the Zoning Administrator and the Assistant Zoning Administrator have retired from Madison County Government. Mr. Legin Webb is the next in line for questions.


1472
9-35A
Hollow Run
Rossen Hollow Run
9-34
Madison
1132
9-35
SPRING
TO Nethers Rd
+ Hughes River
15-8
1195
1305
934
Champe Plain Rd
Ice Riding Rink
EMMETT RD - RT-644
1314
1310
15-8C
15-9A
GOTHIC BARN
15-8B
15-9D
15-10
15-9B
825
15-9C
15-12
TO RT 231

Google Maps

Imagery ©2019 Google, Imagery ©2019 Commonwealth of Virginia, Maxar Technologies, USDA Farm Service Agency, Map data ©2019 200 ft

How To Build
A WIND-PROOF Gothic Barn

By A. W. HOLT

I HAVE just returned from examining the first "balloon frame" barn I ever heard of; and, incidently, it is the first one built near Spicer, Minnesota, where my father was the "lumberman." That was in 1902 and I can almost see dad now as he referred to the old *American Builder,* where he first learned of that construction, while he discussed it with the carpenter who did the building later on. Both agreed that this "trussed-rafter" construction should be much stronger than the old timber-frame that was customary then.

That barn was very similar to the braced-rafter construction illustrated by Fig. 1, which is reproduced from my barn book, "ABC Barn Cost-rates." It is just as plumb and true today as it was 33 years ago. Yet I can recall the farmer-owner telling about another carpenter, who tried to get the job, coming out to see it during its construction and saying, "After the first wind storm you'll be after me to build one of *MY* barns from the wreckage." The next year that dubious carpenter was building this new "open hay mow" barn himself.

After considering my wind-proof gothic barn some readers will likely say the same about this construction. But I venture the assertion that they will be building them in the near future too. Remember, I do not claim it is tornado proof. I cannot conceive of anything that could withstand a real twister. But its stream-lined, hug-the-ground design, plus its scientific bracing makes it as wind-proof as is practically possible. And high winds wreck more barns than do the funnel-shaped clouds.

After engineers at the University Farm of St. Paul and the Iowa State College of Agriculture of Ames had approved my original ideas of construction and suggested a change of the gable bracing that greatly enhanced its strength at no more cost, the Architectural Department of Northwestern Lumbermen's Association of Minneapolis prepared plans for this barn for the four widths of 32, 34, 36 and 38 feet. Construction details for the 36 foot width are reproduced on the opposite page. Refer to these plans as you read on.

Of first importance, the height from grade to ridge of a gothic barn should never exceed the width of the barn; and the rafters should ALWAYS start at the joists. After examining dozens of "sway-backed" gothics and consulting many dealers and carpenters who have been most successful in building gothic barns, I would say most emphatically that the wall framing should not extend above the joists. Bracing the walls to the joist is not effective when there is no hay load to hold the joists down. If the walls spread the roof is sure to sag. If greater hay capacity is desired, the rafters can extend straight for two or three feet by raising the axis above the top of the joists. However, it will cost but very little more to build the barn wider.

Fig. 2 explains why a gothic barn resists wind from the side better than the gambrel roof. To have equal hay capacity, the walls of a gambrel barn must be about 15 percent of its width higher than for a gothic design, as represented by X of Fig. 2. This means almost 6 feet on a 36 foot barn.

Opinion varies as to the proper radius for gothic roofs. At one time I favored the two-thirds-of-width basis but after seeing one built at a radius equal to three-quarters or 75 percent of the width I changed for two reasons: The rafters are straighter so less is sawed off, thereby making them considerable stronger at no extra cost; the ridge is about 10 percent higher for ¾ radius than for ⅔ radius, thereby lowering the walls without losing hay capacity to speak of. Furthermore, the design was more pleasing to me and most others I consulted. Accordingly, these plans show radius equal to 75 percent of the width of the barn with axis on top of the joist.

As to the cornice, many will prefer a wider roof projection with open cornice or exposed rafters. My preference for the cornice as detailed is based on economy and efficiency. Open cornice greatly increases the cost of painting and harbors bird nests, especially swallows. It is much cheaper to use a 12 inch board for a plancher than to have the siding or barn boards extend to the

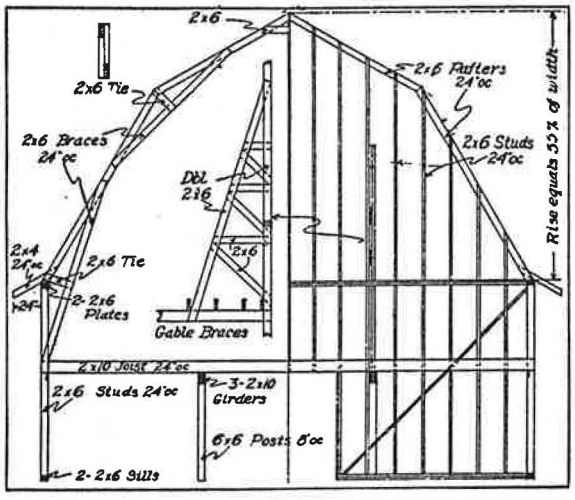


Figure 1

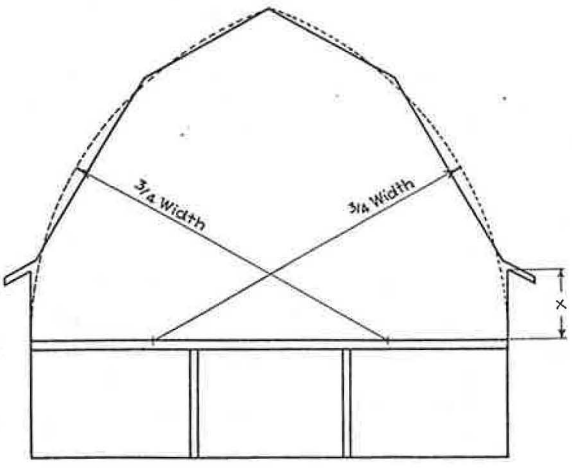
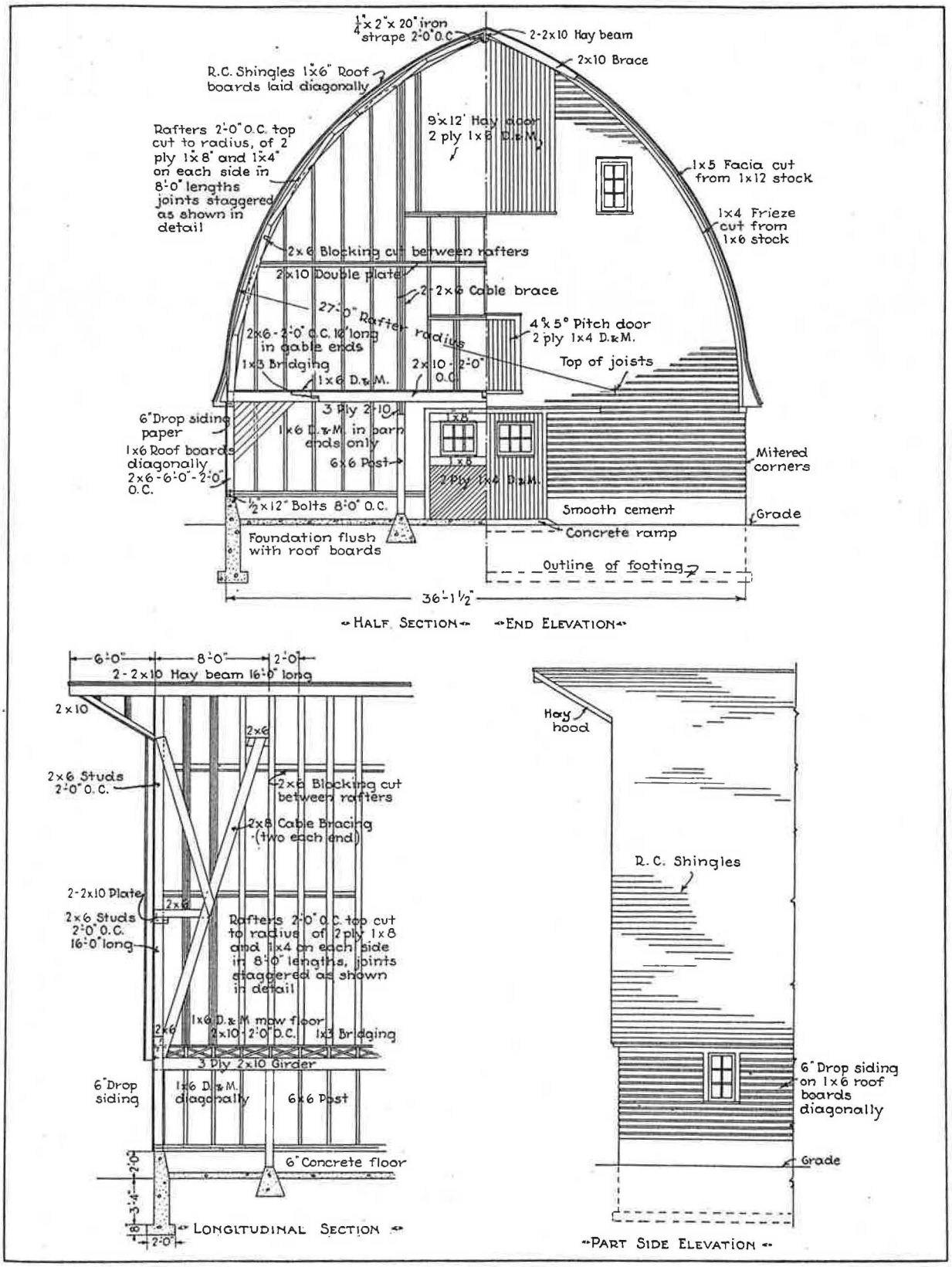
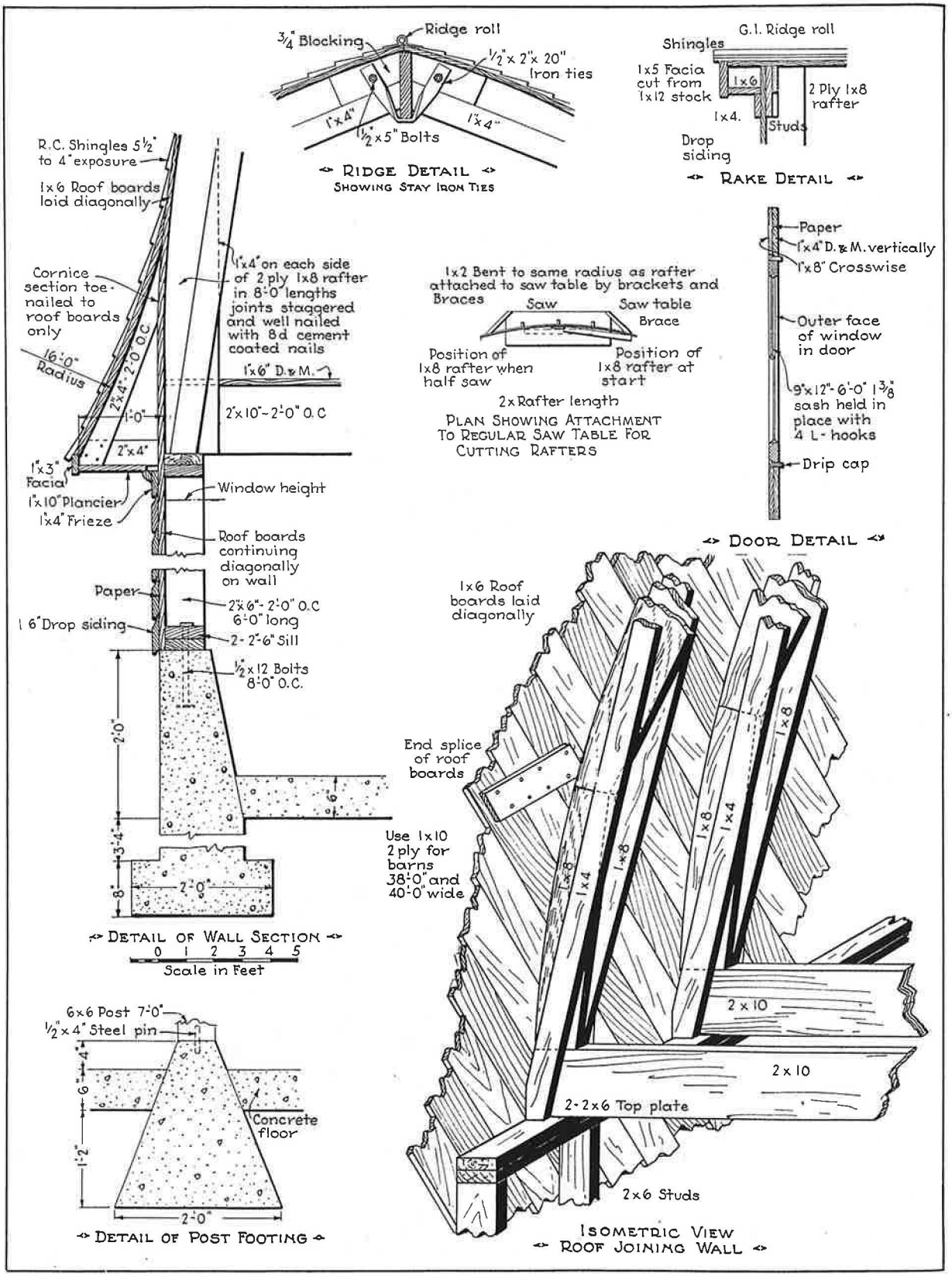


Figure 2



Construction Details of A. W. Holt's Wind-Proof Gothic Roof Barn



Construction Details of A. W. Holt's Wind-Proof Gothic Roof Barn

junction of the roof and wall lines. Wider cornice must be constructed to resist greater wind pressure. The only objection I see to this closed cornice is the fact that it makes a convenient runway for rats and mice. This can be easily cured by scattering poisoned grain in them or turning a couple cats in this "varmin cage" occasionally.

The main feature of this wind-proof gothic barn is the diagonal sheathing, continuous from the sills (which are securely bolted to the foundation) over the roof to the ridge. The cornice framing is nailed on over the sheathing. If desired this can be built in sections on the ground and hoisted up into place. By omitting about half of the roof boards it can be securely nailed through the roof sheathing into the rafters.

This diagonal sheathing ties the roof to the wall and eliminates the weak point of toe-nailing the rafters to the floor or saving the cost of tieing rafters to joists. But the main advantage of this diagonal sheathing is:— *Every piece of roof sheathing is a semi-rafter and CHEAPER to apply than horizontal sheathing.*

That "cheaper" claim is the one that practically everyone questions; so I will explain this, first by reference to Fig. 3 which is self-explanatory from the nailing standpoint. As to splicing, the isometric view shown by the plans shows that any length boards can be easily spliced between the rafters by securing the floating ends to a scrap piece of lumber and nailing it to the adjoining pieces of sheathing. This can be done as quickly as a piece of horizontal sheathing can be sawed to center on a rafter, which is necessary unless end-trimmed material is used.

If desired, end-matched material can be used for the wall below the joist, for greater insulating value, with joints staggered from the floor line to about 8 feet above to securely tie the roof to the walls. Also, roof sheathing above can be spaced if desired by using narrower material. And a piece of roof sheathing can be omitted every three or four feet to provide a place to stand in while applying the sheathing above it and as a ladder for ascending and descending on the roof, as is the usual practice with horizontal sheathing. It's not much harder to work diagonally on a roof than horizontally if three or four men apply the sheathing. The only tool needed to apply this sheathing is a hammer, except at the ridge and ends of the roof. Anyone can apply it CHEAPER than horizontal sheathing.

Every piece of horizontal sheathing imposes more weight on the rafters, whereas, every piece of diagonal sheathing not only sustains its own weight but helps to support the rafters. The Forest Products Laboratory at Madison, Wisconsin, has proved by test that diagonal sheathing will resist four times as much SIDE pressure as horizontal sheathing. Until such time as they can make a comparative test of sections of barn roofs, all I can say is that this diagonal sheathing greatly strengthens the roof framing and braces the whole barn against end pressure. That should be quite obvious to everyone.

Regardless of the roof framing used, diagonal sheathing will enhance its strength. Many barn builders prefer sawed rafters of 3 pieces of 1x8. This requires the same amount of material as the rafters shown by the plan. The weak point of any built-up rafter is the joint. If 3 pieces of 1x8 are used, there will be at least two pieces equal to 16 sq. in. at each joint, which is the same as shown by the plans if no two joints are opposite. Therefore, break all joints when building gothic rafters.

Laminated rafters, such as 6 pieces 1x3, 5 pieces 1x4 or any other size materials bent to the desired radius and nailed or bolted together to retain the bow, ARE NOT RECOMMENDED by the Iowa State College of Agriculture. This confirms my investigation of many

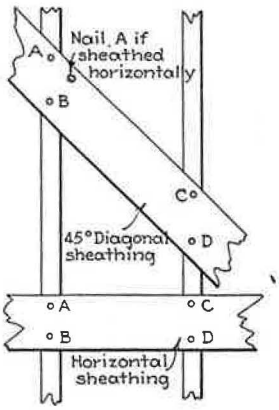


Fig 3. Proof that diagonal sheathing requires 30% less nails than horizontal sheathing. Note that nails AB and CD are spaced farther apart on the rafter, or, that nails AC or BD are farther apart on the board if sheathed diagonally than would be required for horizontal sheathing.

sway-backed gothic barns. Unless these laminated rafters are glued or extra well bolted, the pieces will slip and the roof will fail. Avoid laminated rafters that depend on nails to prevent slippage and straightening out.

The truss-girt-rib gothic framing has proved very efficient. The first gothic I built was from plans shown in the *American Builder* in 1915. It was a barn 44'x80' with rafters starting at the mow floor, constructed as follows: Master rafters of three pieces of 2x10, securely bolted, were spaced 8' 0" oc; girts were 2x6 between these master rafters over which double 1x4 ribs were bent every two feet. That barn is still standing true and plumb after 20 years on the Montana prairies where it IS windy. But, regardless of the framing use diagonal sheathing.

Although the plans show dropsiding over the diagonal sheathing with paper between, at the sides boards and battens or bevel siding can be used equally well. This is largely a matter of personal choice. The extra cost of the double sheathing below the floor of a barn 36'x50' is only a matter of $50.00 using $40.00 material plus about 20 hours of labor. Most of this extra cost should be saved by 30 percent reduction in nails and nailing of roof sheathing so the extra bracing and greater insulating value of double sheathing cannot cost enough more to be of any consequence to a farmer who wants a barn that will stand.

Note that this diagonal sheathing is applied inside of the studs in the ends, so the outside sheathing need not be furred out above the floor line. Of main importance, however, do not place windows in the ends of this diagonally sheathed wall because doing so will reduce its strength about 40 percent according to tests of wall panels conducted by Forest Products Laboratory and given by bulletin, "Stronger Frame Walls" issued by National Lumber Manufacturers Association and available to any lumber dealer. Ask your lumber dealer to get that bulletin if he does not have it on file.

Special attention is called to the gable braces. These are "up-side-down" to what I had been advocating (see Fig. 1) and which most carpenters seemed to prefer, until engineers at several agricultural colleges pointed out the merits of this brace, as follows:

1. Hay pressure cannot break this brace.
2. A sagging girder cannot pull the gables in.
3. Wind pressure on the leeward side cannot pull the girders up when the hay loft is empty.
4. This brace braces the barn longitudinally.

Therefore, if you have been bracing gables from the gable to the girder, as shown in Fig. 1, turn them up-side-down and have a brace that is scientifically correct.

The plans show a double 2x10 plate across the gables.

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How to Build Gothic Barn

(Continued from page 49)

This distributes pressure to the gable braces and ends of roof. THIS IS MUCH STRONGER than a six-foot splice of 2x6 end studs and requires about the same amount of material because a 4x10-2′ contains 6.67 board feet as compared to 6 bd. ft. for the 6 foot splice. Without this double plate, the gable studs should be 2x8. By all means follow this gable framing shown by the plans.

Note that the stiles, rails and braces are omitted on the outside of all doors. Time has proved that these only retain moisture and promote rot. If used instead of the diagonal backing, all braces, stiles and rails should be on the inside of the door and, preferably, the door hung on the inside of the walls.

Farmers are like all other human beings in that they want the most value they can get for their money. And they don't object to investing a few dollars more if they can get a barn that will be standing when the wind storm has subsided. Barn builders cannot go wrong by featuring this wind-proof gothic. To be convinced, ASK YOUR LUMBER DEALER about its cost. Most dealers have been supplied with a detailed list of material for this barn of any size through the courtesy of Merchandising Council of Retail Lumber Dealer Associations. Such a dealer can quickly figure the cost of the diagonal sheathing that makes a double wall below the mow floor. This will be the only extra cost of this wind-proof gothic as compared to a gothic as ordinarily constructed. And gothic barns cost little or no more than gambrel barns that are properly constructed. Don't sell 1902 model barns in 1935. Ask your lumber dealer for further particulars.