



Certificate of Appropriateness

Milwaukee Historic Preservation Commission/200 E. Wells Street/Milwaukee, WI 53202/phone 414-286-5712/fax 414-286-3004

Property**Description of work**

2813 W. KILBOURN AV. Concordia Historic District

Tear off and re-roof with GAF Timberline Natural Shadow, barkwood color. Repair/replace damaged wood siding, trim, and decorative details with wood epoxies or Western Red Cedar (clear grain, smooth finish, no sapwood). Rebuild eaves including repair/replace any rotten pieces. Remove aluminum siding bargeboards and soffits, repair/replace underlying wood. Repair all wood elements of front porch. Tuckpoint front porch porch and rebuilt where needed including re-setting any fallen cap stones. Rebuild front porch stair wing walls to match existing, also provide new footings. Remove scrub trees and shrubs from foundation area. Replace gutters with new half-round gutters.

Date issued

2/27/2017

PTS ID 114223 COA: Overall rehab

In accordance with the provisions of Section 320-21 (11) and (12) of the Milwaukee Code of Ordinances, the Milwaukee Historic Preservation Commission has issued a certificate of appropriateness for the work listed above. The work was found to be consistent with preservation guidelines. The following conditions apply to this certificate of appropriateness:

Work must be done according to the specifications in the attached scope of work.

All work must be done in a craftsman-like manner, and must be completed within one year of the date this certificate was issued. Staff must approve any changes or additions to this certificate before work begins. Work that is not completed in accordance with this certificate may be subject to correction orders or citations. If you require technical assistance, please contact Tim Askin of the Historic Preservation staff as follows: Phone: (414) 286-5712 E-mail: Tim.Askin@milwaukee.gov.

If permits are required, you are responsible for obtaining them from the Milwaukee Development Center. If you have questions about permit requirements, please consult the Development Center's web site, www.milwaukee.gov/build, or call (414) 286-8210.

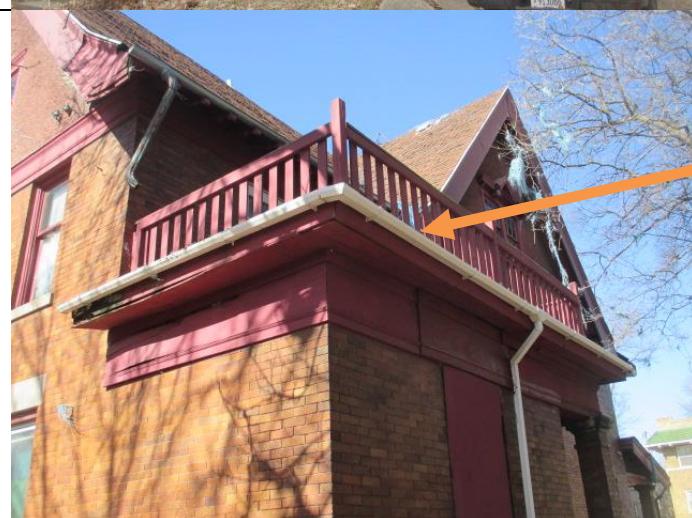
City of Milwaukee Historic Preservation Staff

Copies to: Development Center, Ald. Robert Bauman, Contractor , Inspector Dave Pedersen (286-2540)

2813 West Kilbourn Ave - Repairs



- Restore house to original details and dimensions
- Full Roof tear off and restoration.
- Install appropriate gutters and downspouts
- Remove aluminum on eaves & barge boards.
- Repair roof gable eaves – soffits, barge boards, trim etc.



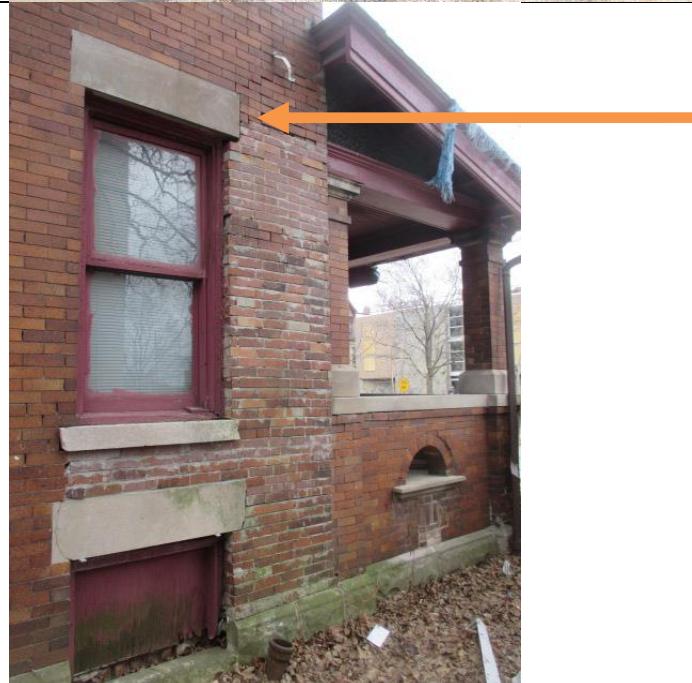
- Tear off and replace rubber membrane on side porch at southeast corner of house.
- Install appropriate K-Style gutters and corresponding downspouts.



- Remove aluminum and restore attic gable eaves.
- Paint all repaired or replaced wood to match exiting red color.



- Tuckpoint and repair all masonry at front porch.
- Replace capstones where required.



- Tuckpoint and repair brick at northeast corner of house.



- Front porch wing walls

2813 West Kilbourn Avenue

Bid Item #1-Roofing, gutters, eaves:

1. Main house roof and front porch roof requires complete tear off, sheathing, flashing and roofing with GAF Timberline, Natural Shadow in **Barkwood** color. Metal valley flashing, drip edge and gutter apron to be color that matches roof or is one shade darker than roof color.
2. Chimney remains and new flashing to be installed as part of roof repair.
3. Side porch at southeast corner of house requires flat roof repair. Remove existing roofing, repair roof structure where needed, sheath roof and install new rubber roof membrane. Retain existing railings. Repair of eaves and trim at this location are not part of this scope.
4. Install new half round gutters with corresponding downspouts at main roof of house and at front porch gutters.

Bid Item #2 Wood Repairs:

5. Exterior wood repairs/replacement of siding, trim and decorative details on house and porch must be with clear, smooth wood with no knots and no sapwood. Wood to be **Western Red Cedar**.
6. Rebuild eaves at roofline and gables as needed; replace any rotted fascia boards, soffit boards, crown molding, trim, brackets, bargeboards, etc....
7. Remove aluminum from barge boards and soffits at each gable and repair existing wood where feasible. All rotted and deteriorated wood to be replaced with Western Red Cedar. All wood at soffits to be painted red color to match existing paint job.
8. Repair all wood elements on front porch (barge boards, brackets, porch ceiling etc.)
9. All repaired or replaced wood to be painted with Benjamin Moore, Moor-Gard latex paint. All existing siding and trim to be scraped thoroughly and carefully. Provide smooth surface for paint application. Paint all exterior wood surfaces with one coat of bonding primer and two coats of exterior paint. Paint colors to be specified by the owner. (Window sashes do not need to be painted. Aluminum storms remain in place. Any wood storms must be painted)

Bid Item #3 - Front Porch Masonry Repairs:

10. Tuckpoint all deteriorated and mismatched brick mortar joints on front porch, front porch wing walls and at northeast corner of house. Mortar joints must match

existing mortar in thickness, color, rake profile and composition of mortar. Mortar must be custom mixed to ensure proper match.

11. Rebuild brick walls where required and reset any missing cap stones.

Bid Item #4 –Front porch stair wingwalls.

12. Rebuild front porch stair wingwalls to be straight and plumb. Repairs will include new footings to insure stability of newly built wingwalls.

Bid Item #5 –Landscaping & Security

13. Remove any scrub trees and shrubs growing along foundation..

14. House to be secured at the end of each work day. All boards to be replaced on doors and windows to prevent vandalism and break-ins.

Please submit bid by breaking out costs by each bid item listed along with a total for all proposed repair work. As part of accepting bid, DCD may choose to remove certain bid items in order to keep overall project on budget.

General Specifications for Roofing and Gutters

Roofing shingles to be used are GAF Timberline, Natural Shadow in Pewter Gray or Barkwood color, unless otherwise specified. Drip edges, gutter apron and roof valleys should match color of roof shingles as closely as possible (e.g. use black drip edge etc... when installing pewter gray shingles.)

- 1) Tear off all roofing material down to the original boards.
- 2) Inspect and replace rotted, damaged or missing boards using like-with-like dimensioned boards.
- 3) Sheath the roof with OSB a minimum of 7/16" thick to create a continuous nailing surface.
- 4) To avoid interior water damage only tear off as much roof area as can be repaired and sheathed in the same day. No roof shall be left with open areas overnight. Any roof that has not had felt applied shall be securely tarped at the end of the work day.
- 5) Install 15 lb. (non-perforated) felt with 3" minimum overlap using T-50 3/8" staples.
- 6) Install 3 ft. wide "Ice and Water Shield" along all eave lines. On eaves extending out more than 3 feet add a second row of "Ice and Water Shield" with a 6" overlap.

- 8) For all roof venting cut a 3" wide channel along the gable peak to within 2 feet of the roof edge for installation of a ridge vent. (NOTE: Pan vents are NOT permitted unless approved by owner's representative.)
- 9) Install manufactured **Black** aluminum 1-1/4" drip edge along entire gable roof edge, and **Black** gutter apron with 1/4" shingle overlap at eave edge. Install using 1-1/4" galvanized roofing nails.
- 10) Install a full shingle starter strip along the base of the roof. The architectural shingles are to be nailed down using roofing nails. The size of the nail is determined by the thickness of the roofing material (typically 1-1/4"). Nail the shingles just below the tar strip using 4 nails per shingle, or in the thickest area of the shingle follow manufacturer's specifications.
 - a) Install the first architectural shingle 1/4 inch over the edge of the roof to force any water away from the fascia. It will also help prevent any fascia deterioration.
 - b) Next mismatch the shingle gaps by cutting different amounts of material from each piece of shingle before it is laid. For example; the first row should be left alone, the second row would be cut 5 inches, the third row 11 inches and on in 6-inch increments. This staggers the architectural shingles as they are installed so the gaps from each shingle do overlap each other. Continue this process until the entire roof surface is covered, leaving the peak of the roof bare.
 - c) Install ridge cap of architectural shingles over the peak of the main roof. These shingles will require a 2" nail on each side to hold them in place.
- 11) All roof valleys shall be installed as open roof valleys using 26 gauge prefinished **Black** aluminum. Start by running a piece of ice and water shield 36" wide up the entire length of the valley and stapled against the wood, then run 15 # felt lapping past the valley 12"-18" on each side of the valley.
 - a) Using a metal valley with a "w" bend in the metal, to slow water from rushing under the shingles, run the metal valley piece up the valley starting at the bottom of the valley and work your way to the top. The metal valley needs to be black in color to compliment the color of the roof shingles.
 - b) Install the shingles past the valley center on one side of the flashing all the way up. Do not drive nails into the flashing. Then install shingles on the other side. Again, do not drive nails through flashing. Overlap shingles as you go, much like weaving.
 - c) Snap a chalk line 3 inches from the center of the valley at the top of the valley and widen the gap by 1/8" per running foot on each side of the valley as it runs downward.

- d) Place a piece of sheet metal under the shingles to make sure you will not damage the flashing. Use a utility knife with a hook blade to cut the shingles along the chalk line.
- e) Snip off the corners of adjacent shingles (dub) to protect against water being channeled under shingles. Lift up shingles and use a hook blade to cut all the pointed unexposed ends. Make each cut about 2 inches from the point.
- f) Caulk twice between shingles and flashing. Using roofing cement in a caulk tube, insert the tube's tip all the way under the shingles and run a continuous bead. Then hold the nozzle 2 inches back and apply a second bead nearer the edge. Then lift up each top shingle and apply roofing cement to adhere the shingles to each other. This is to seal out water and to attach the shingles because there are no nails.

Gutters

Install new half-round gutters and downspouts. Gutter and downspout color to be **granite gray** unless otherwise specified. Gutters to be half-round unless otherwise specified.

- a) Half-round gutters must be installed with brackets or straps installed under the roof shingles and not directly mounted to the fascia board. All gutters shall be a minimum of .032 gauge, maintain a minimum slope of 1/2" per 10 running feet of gutter, and shall be attached approximately every 32" on center, or every other rafter tail, and shall be a minimum of 1/2" from the fascia board.
- b) Gutters longer than 40 feet should be sloped in two directions from the midpoint of the gutter and connected to a minimum of a 4" diameter downspout. All downspouts shall be a minimum of 024 gauge.

Go to this link to find out more about 1/2 round gutters vs. K style including price, <http://www.guttersupply.com/p-halfround.gstml>

Aluminum half round gutters are supplied by the gutter store in various colors. www.merchantcircle.com/business/The.Gutter.Store.414-258-8000

Chimneys and flashing

- If the chimney exits the roof below the ridge, a chimney saddle must be installed where none exist.
- All chimneys shall be flashed with permanent metal base flashing and counter flashing. Step flashing to be installed when specified.
- Install appropriate flashing at any wall and roof intersections.

Decorative tin ornamentation and metal flashing

- To be repaired per specifications provided by owner's representative

GENERAL SPECIFICATIONS for CARPENTRY

These guidelines to be followed where applicable

All wood repair and replacement to be made with **clear wood, no knots, no sapwood**. All new wood must be primed and painted as soon as possible after installation to insure durability of paint job.

All wood repairs/replacement to wood siding, trim and decorative details must be with clear, smooth wood with no knots and no sapwood. Wood to be Eastern White Pine, Spanish Cedar or Western Red Cedar. (Western or Ponderosa Pine is not recommended as it rots prematurely in most exterior applications.

Repair and replacement of wood siding, shingles and trim must match dimensions and patterns of existing siding, shingles and trim.

Porch Repairs/Reconstruction:

1. Secure porch roof while deck, posts and roof are inspected for deterioration. Replace damaged or deteriorated framing members with same dimensioned materials. Install new porch foundation piers directly below each column.
2. Raise and level porch roof leaving a slight slope to allow water runoff. Install new 6"x 6" posts that extend from the ground to the porch roof. Columns are to be placed in same locations as existing columns. Sheathe roof with 7/16" OSB and apply appropriate roofing. OSB must not be visible on finished porch roof. See drawings supplied for boxing columns and capitol design.
3. When rebuilding wood porch decks use primed Fir tongue & groove 5/4" x 4" decking. Deck boards to be primed on all sides before installation. All decking shall extend a minimum of 1" beyond the porch skirt framing
 - a) All porch decks shall have a slope from the house to the outer porch edge of 1/8" per linear running foot.
 - b) All decking will be laid perpendicular to the house and be supported at the house with a ledger board and by joists a minimum of 16" on center (if new), or IAW with the specifications of the UDC.
 - c) All joists will be mounted be means of joist hangers properly installed.
4. Porch railings to be a maximum of 36" tall on residential homes in historic areas unless otherwise indicated.
 - a) Porch hand rails will include a bread loaf upper rail and a bottom rail built up with 2X and 1X material (see plans). Bottom rail to be installed 3" inches above the porch deck.

- b) Railings will be attached to newel posts, columns, or the house with 4" galvanized counter-sunk screws to allow future repair and replacement.
- c) Railings will have 2" x 2" (actual 1-1/2" x 1-1/2") square stock spindles spaced 1-1/4" apart, and all spindles will be installed in a minimum 1/4" x 1-1/2" blank with galvanized 1-1/2" screws.
- d) Stair rails will mirror the design of the hand railings and be attached to newel posts.
- e) Upper porch railings on second floor porches will mirror the design and appearance of the first floor railing, except that newel posts may be designed proportionately narrower.

5. When repairing or rebuilding porch skirts all materials will be of like-with-like wood replacement of the same design and dimensions as originally existed or as specified by the drawings provided by the Owner's Representative.

- a) All porch skirts will be installed with a continuous board frame that is a minimum of 6" in width. Clear cedar boards must be used where wood meets the ground in areas such as porch skirt board frames and stairs.
- b) All framing will cover the rough framing lumber of the support posts, columns and beams.
- c) All skirts will incorporate a slat design that will closely mirror the design of the wood railings above or as specified by the Owner's Representative.

6. When repairing or rebuilding stairs all components will be of like-with-like clear wood materials (no knots, no sapwood).

- a) All stairs will be supported by a minimum of three stringers with steps of equal height, and no step will exceed 8 inches in height.
- b) There will be no more than a 3/16" variation between steps.
- c) Each step will have a minimum tread width of 11" with a tread overhang of no more than 1 inch.
- d) Each step will be constructed with a corresponding riser.
- e) Any stairs with more than three steps will include a hand railing along each side of the stairs that attaches to a lower newel post and an upper newel post or column.

Siding and Trim repair and replacement. Windows and Doors:

Miscellaneous repairs or replacement to existing items such as the water table boards, soffits, fascia boards, crown moldings etc... will use like-with-like materials of the same design and dimensions. (clear wood no knots)

Quarter sawn vertical grain clapboards to be used for replacement of wood clapboards (for example see wardclapboards.com). Sawn wood replacement shingles to be all clear cedar, vertical grain with no knots or sapwood. (Premium Grade Sidewall, 100% Vertical Grain Shingles)

Any new elements such as the addition of or removal of windows or doors will be indicated by the Owner's Representative and specify the design and dimension of each new element.

Generally new windows will be wood, double-hung with proportions and trim work similar to other existing windows. Doors must match existing historically accurate doors and be a minimum of 6'8" in height and 36" in width, and will reflect the panel design of other exterior doors on the house.

GENERAL SPECIFICATIONS for MASONRY

All brick and mortar repairs must blend with existing brick and mortar color, patterns, mortar mix and joint thickness. Repairs must maintain the historic integrity of existing brick and masonry work. These guidelines to be followed where applicable.

- 1) When doing mortar or brick repair, or replacement on historic homes the following process/procedure is to be followed:
 - 2) Inspect all masonry for signs of deterioration. Identify any bricks that are cracked or spalled, and determine the reason for the damage. Replace damaged bricks using like-with-like material.
 - 3) Check for cracks in the mortar joints and determine if excessive settling has occurred which will require additional foundation repairs.
 - 4) When repairing foundations be sure to incorporate the same brick pattern. The contractor shall use like-with-like dimensioned bricks of similar color and density for any repairs.
 - 5) When removing any damaged brick from a chimney, or rebuilding a chimney it is critical that the contractor take photos of the existing chimney, so that they can duplicate the corbelling pattern that exists. Rebuilt chimneys MUST be completed using the same type, pattern and dimensions as the existing chimney. When in doubt the chimney design on page 97 of "As Good As New" may be used if approved by the Owner's Representative.
 - 6) When tuckpointing brick or block the old mortar must be removed to a minimum depth of 3/4" by means of a tuckpointer's rake pulled across the joint or lightly tapping with a hammer. If the mortar does not come loose a hammer and plugging chisel should be used. Either of these methods is preferred. Use of an electric grinder should only be done in areas that are not visible to the general public such as rear walls, and then only after being approved by the Owner's Representative. Great care must be taken not to damage the brick. "No mortar removal is to be done using a reciprocating saw with a masonry blade."
 - 7) When applying the new mortar to Cream City brick the joint should be damp but not dripping wet. The new mortar should use a lime mortar mix with one part lime to two parts sand. Use Type "K" mortar if available and Type "O" mortar as a second option.

- 8) When tuckpointing it is important that the mortar match the existing mortar in color. New mortar must be colored or tinted and installed in an inconspicuous test area, prior to installing it in highly visible areas.
- 9) When applying mortar a grout bag or knife-like tuckpointing tool should be used to push the mortar all the way back into the joint. Tuckpointing should be done in 1/4 inches layers, packing each layer before applying the next. Apply mortar as neatly as possible and avoid smearing mortar on the face of the brick.
- 10) When the final layer begins to set up slightly, it MUST be tooled to match the style of the existing joints. (See pg 85 of "As Good As New), unless another style is approved by the Owner's Representative prior to initiating any project work.
- 11) Clean up any excess mortar immediately using phosphoric acid. If this does not work use muriatic acid. Use muriatic acid in a solution of 1 part muriatic acid to 10 parts water. Apply the acid mixture with a large sponge. Leave the acid in contact with the masonry for 30 seconds then use a scrub brush to remove any excess mortar. When clean, rinse thoroughly with water and neutralize the cleaned area with 1 cup of household ammonia to 1 gallon of water. Muriatic acid is dangerous so do not get in contact with eyes or skin, and always keep a neutralizing agent like baking soda on hand.