

170945

**Resolution relating to a Certificate of
Appropriateness for constructing a
new two-story house with attached garage**

**at 100 W. Brown Street in the
Brewers Hill Historic District for Gregory
Baer & Robert Ater.**

1980s



Prior Building, 100 W. Brown

Condemned and Demolished, c. 2010

2009



Appeal of HPC Conditional Approval

- Design approved as submitted

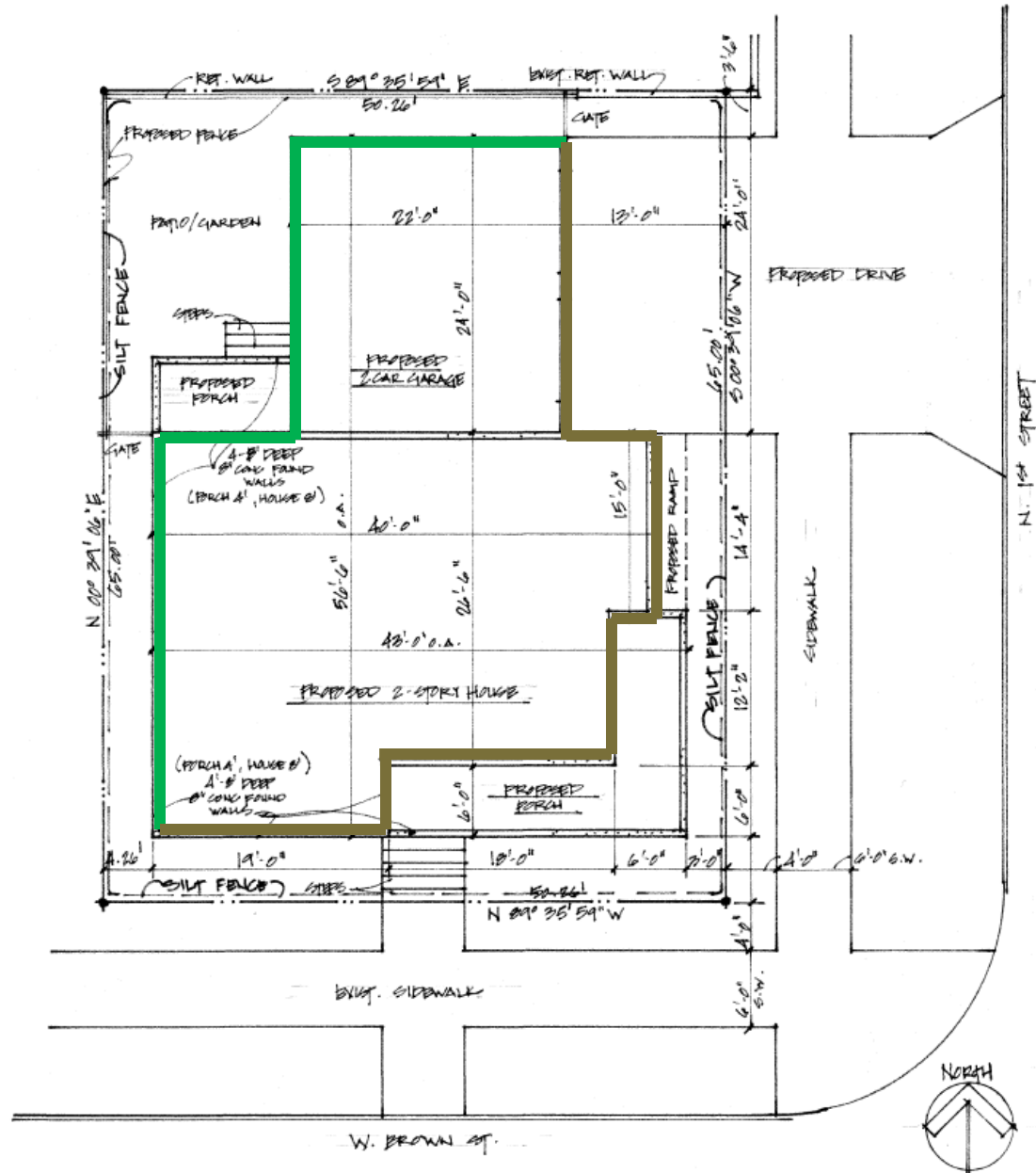
- Attached garage a major concession on this site already

- **Materials conditions:**

- Thick Hardie Artisan siding allowed on secondary elevations
- Wood for street elevations and all trim
- Wood windows rather than aluminum clad
- Composite decking for rear porch, wood for front

Wood Required

HardiePlank Allowed



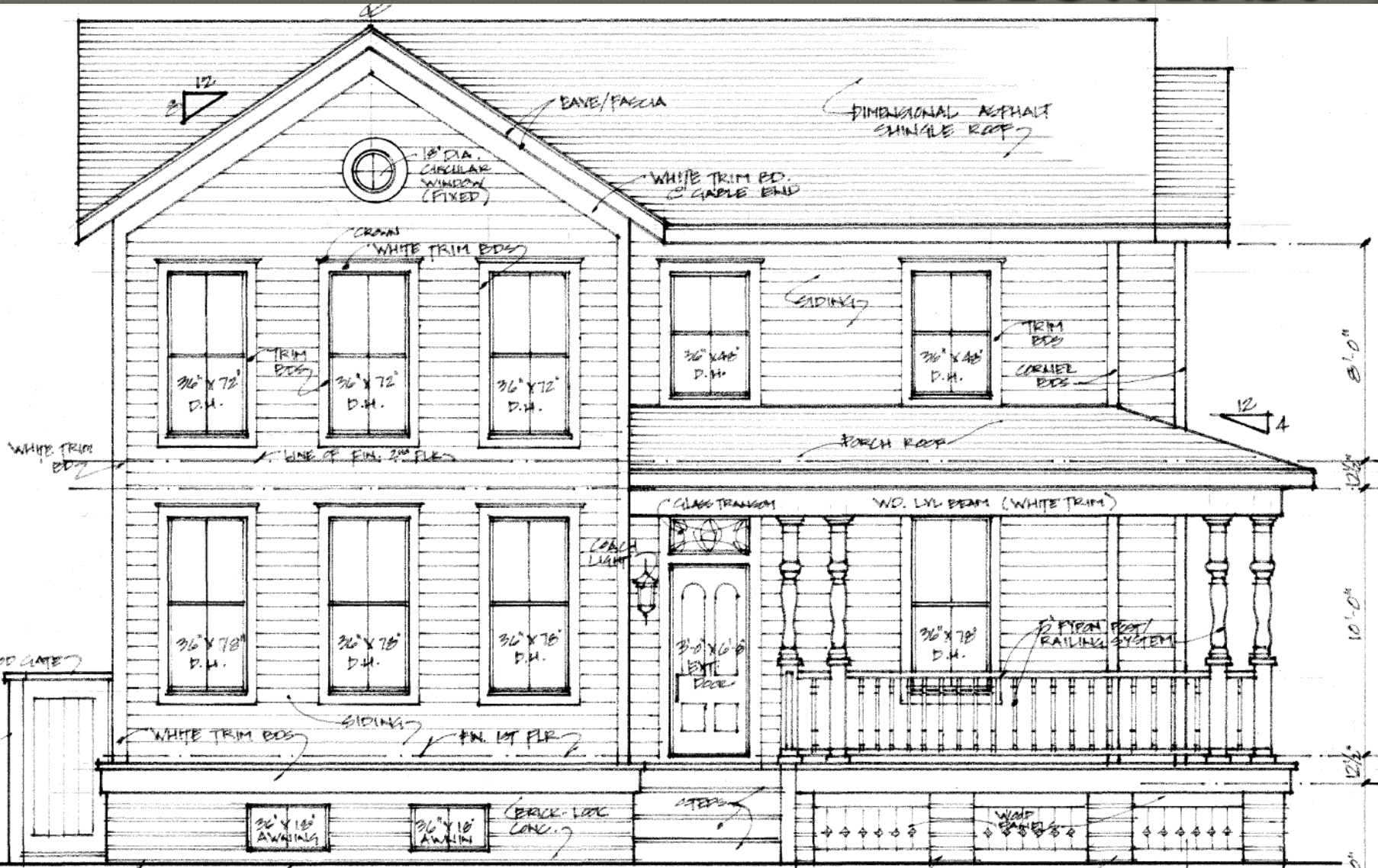
PRELIMINARY SITE/FOUNDATION PLAN

1/8"=1'-0"

SEE STAMPED PRELIM. SURVEY THIS SHEET FOR ADDITIONAL LEGAL INFORMATION

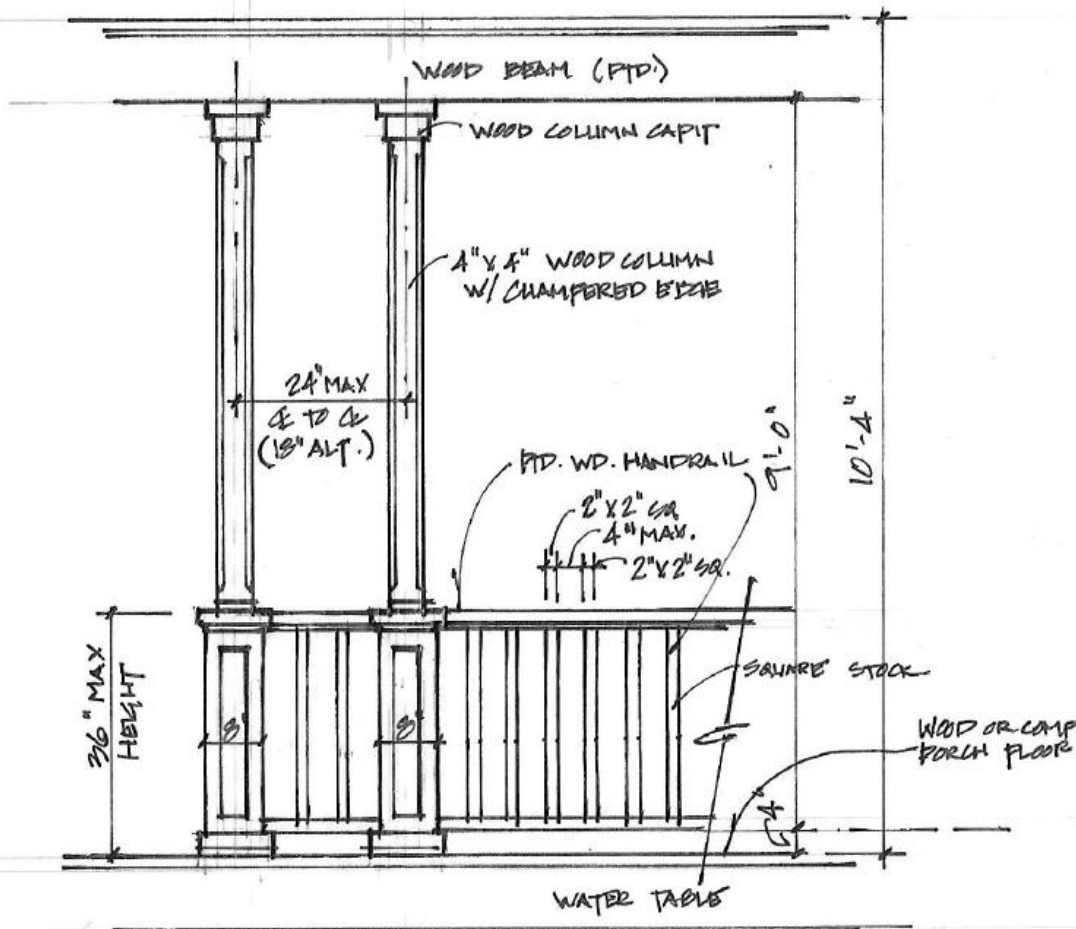
Street-facing, wood required

Brown St



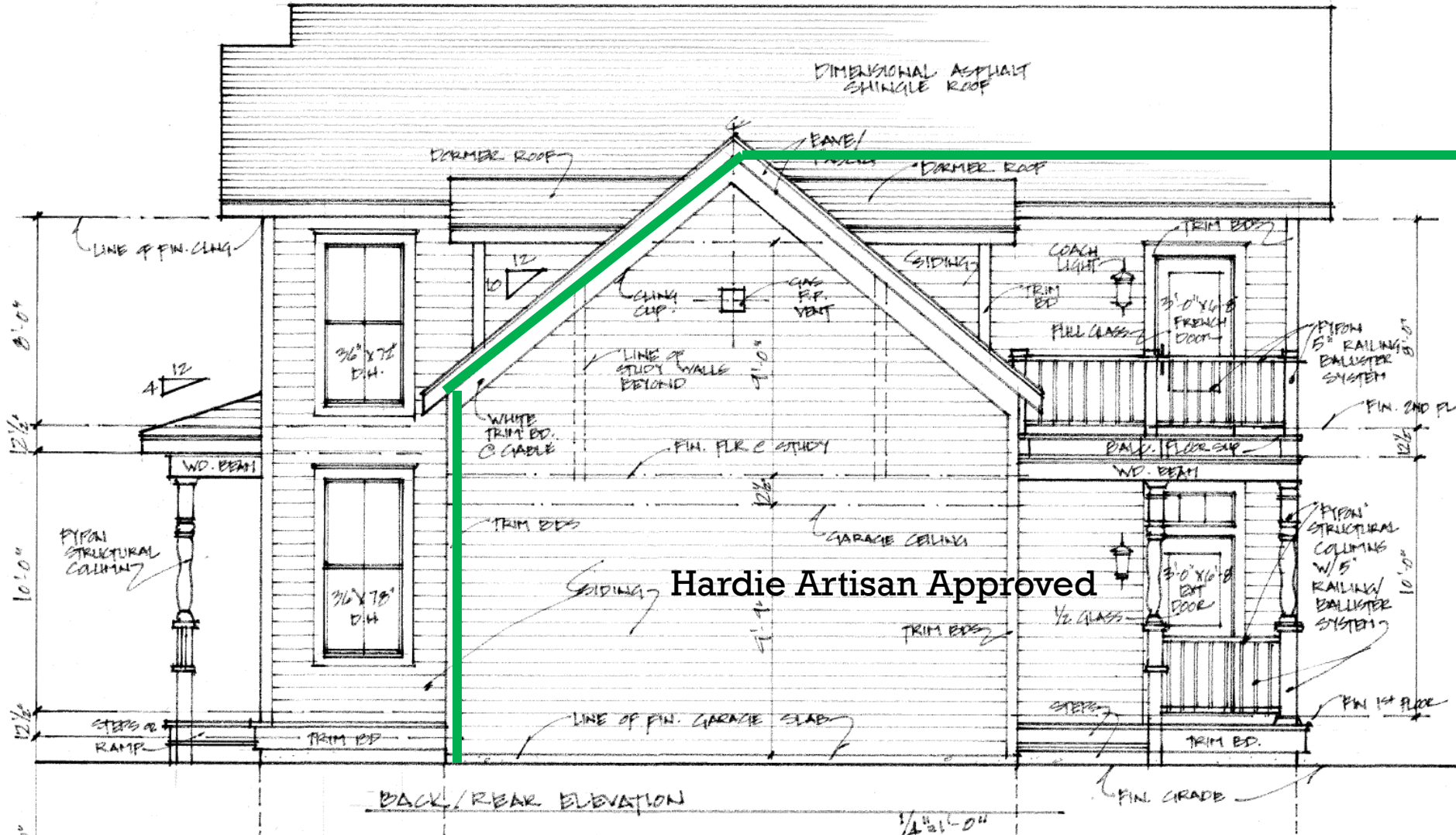
Annotations and labels in the drawing include:
- 12/4 (Roof slope)
- 12/4 (Porch roof slope)
- EAVE/FASCIA
- DIMENSIONAL ASPHALT SHINGLE ROOF
- 18" DIA. CIRCULAR WINDOW (FIXED)
- WHITE TRIM ED. GABLE END
- SIDING
- TRIM ED. CORNER ED.
- 36" X 72" D.H. (Windows)
- 36" X 48" D.H. (Windows)
- 36" X 78" D.H. (Windows)
- 36" X 70" D.H. (Windows)
- 36" X 60" EXT. DOOR
- WOOD CLATED
- WHITE TRIM ED.
- LINE OF FIN. 3RD FLOOR
- PORCH ROOF
- CLASS TRANOM
- WOOD LVL BEAM (WHITE TRIM)
- LOBE LIGHT
- 2" PIPER FOOT RAILING SYSTEM
- FIN. 1ST FLOOR
- 36" X 18" AWNING
- BRICK LVL CONC.
- STEPS
- WOOD PANELS
- BRICK PIERS
- FIN. GRADE
- FRONT ELEVATION (BROWN STREET ELEV.)
- BRICK PIERS
- Vertical dimensions: 8'-0", 12'-6", 10'-0", 12'-6", 8'-0"

Revised porch



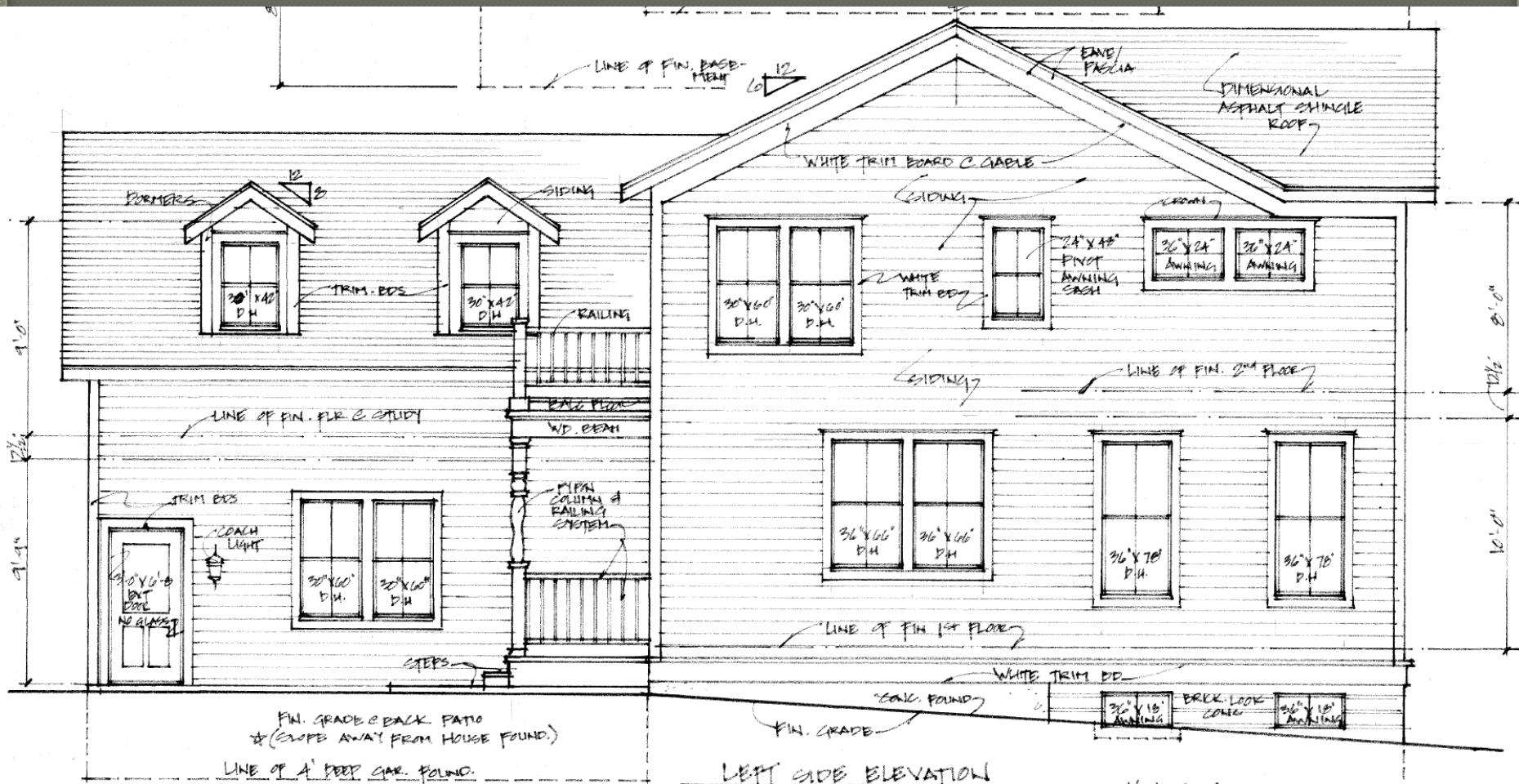
ATER-BAER WOOD PORCH POST/RAILING DET.
1/2" x 1'-0"

Rear/North



West

Hardie Artisan approved for this entire side of building.

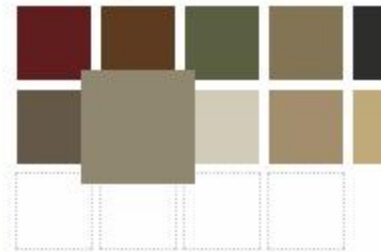


Applicant's Proposed Siding



HardiePlank® Lap Siding
SMOOTH

Monterey Taupe



! More ColorPlus® Technology



Sample color.

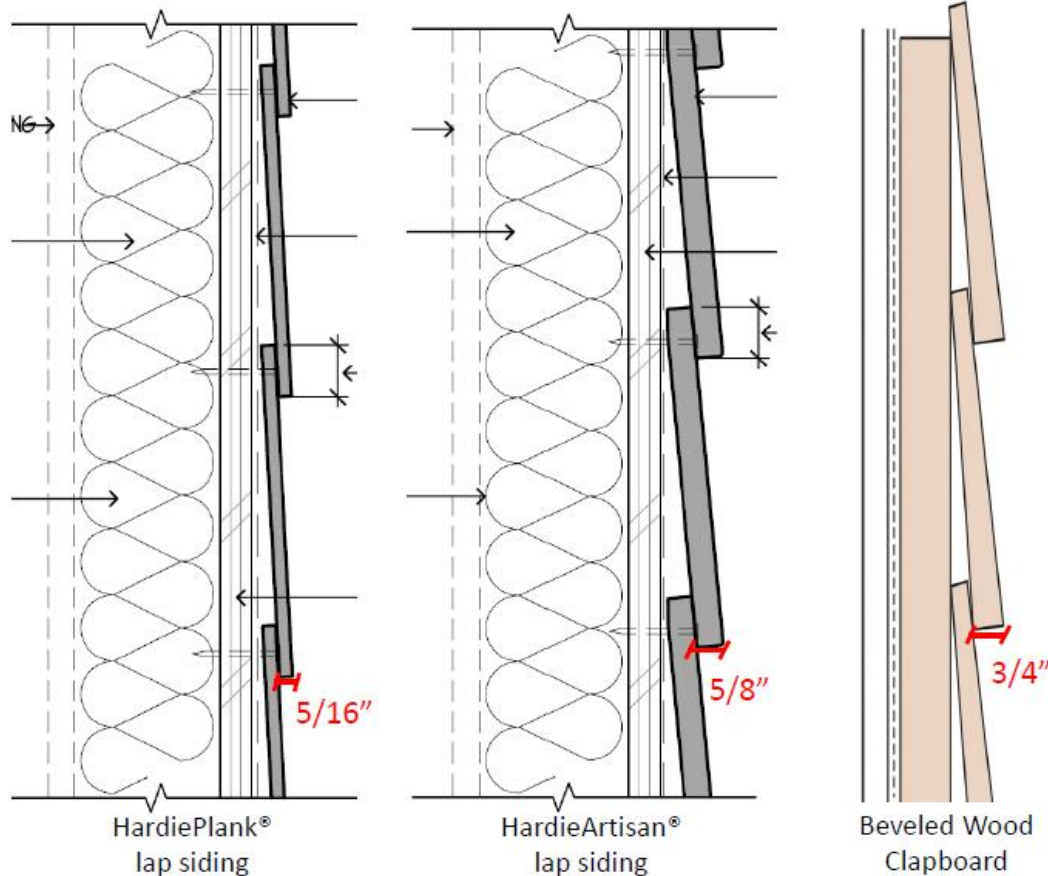
Product Profile Details

One of the key elements in reviewing replacement fiber cement siding is the profile dimension, which includes the thickness of the product.

As evidenced in the manufacturer section drawings below, the profiles can be compared to traditional beveled wood siding.

(right) Mock-up samples of James Hardie products and beveled cedar siding.

(below) Section details of James Hardie products.



Siding Profiles

Regular (left) is proposed for this project.

One of the conditions of approval for the rear elevation was that the Artisan product be used.

Standard HardiePlank does not convincingly create the appearance of beveled wood siding.





Considerable cost factor now that the manufacturer requires every joint to be flashed rather than caulked.

This is a requirement of warranty and leaves a visible gap between boards that is not indicated in the diagram.

James Hardie recommends 6 inch (152.4 mm) wide joint flashing that overlaps the course below by 1 inch (25.4 mm). See Figure 1. Some local building codes may require different size flashing. Joint-flashing material must be durable, waterproof material that does not react with cement based products. Examples of suitable material include painted or coated coil stock and code compliant water-resistive barriers, such as HardieWrap® weather barrier. Other products may also be suitable.

James Hardie DOES NOT recommend using caulk or "H"-joints for the butt joints of HardiePlank® siding with ColorPlus® technology.

James Hardie also DOES NOT recommend applying caulk to the horizontal overlap between siding planks (see Figure 2).

Joint Flashing
6 in. (152.4 mm) wide,
1 in. (25.4 mm) on overlap

FIGURE 1

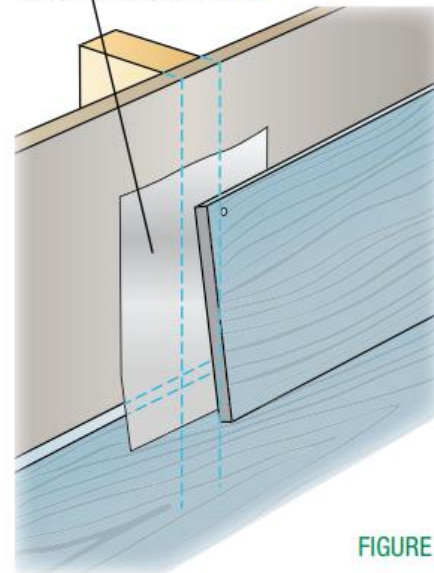


FIGURE 2





Montse of Cohasset, MA ✓ Verified Reviewer

Original review: Jan. 12, 2016

We installed Hardie Plank Evening Blue on the house. They put on the matching caulking and it look great but ONLY for a few months. Each and every one of the seams is **discoloring**. Now I have a house with brand new siding looking like bird poo all over. Our contractor has contacted both Hardie Plank and the caulking rep and neither of them is standing behind the product. They told us that this sometimes happens but it is **NOT COVERED under the warranty**. They are not even willing to paint the seams with a matching color to solve it. So I have a new house that needs to be repainted just a few months (not even a year) after the product has been installed. This is a completely defective product and the manufacturer is not standing behind it when it should. Not recommending it to anybody.

Note discoloration of cement-board siding with factory color →



Cost Comparisons

Ward Clapboard January 2018 Spruce Pricing

Size	Clear & Extra Clear		2nd Clear		Cottage	
	\$/1000 Sq Ft	\$/linear Ft	\$/1000 Sq Ft	\$/linear Ft	\$/1000 Sq Ft	\$/linear Ft
6-1/2"	\$2,225.00	\$1.24	\$1,860.00	\$1.03	\$920.00	\$0.51
6"	\$2,185.00	\$1.09	\$1,825.00	\$0.91	\$920.00	\$0.46
5-1/2"	\$1,965.00	\$0.89	\$1,735.00	\$0.79	\$920.00	\$0.42
5"	\$1,965.00	\$0.82	\$1,735.00	\$0.72	\$920.00	\$0.38
4-1/2"	\$2,100.00	\$0.81	\$1,800.00	\$0.70	\$920.00	\$0.35

Ward Clapboard January 2018 Eastern White Pine

Size	Clear & Extra Clear		2nd Clear		Cottage	
	\$/1000 Sq Ft	\$/linear Ft	\$/1000 Sq Ft	\$/linear Ft	\$/1000 Sq Ft	\$/linear Ft
6-1/2"	\$2,730.00	\$1.52	\$2,500.00	\$1.38	\$920.00	\$0.51
6"	\$2,680.00	\$1.34	\$2,300.00	\$1.15	\$920.00	\$0.46
5-1/2"	\$2,420.00	\$1.10	\$2,110.00	\$0.96	\$920.00	\$0.42
5"	\$2,230.00	\$0.93	\$2,110.00	\$0.88	\$920.00	\$0.38
4-1/2"	\$2,420.00	\$0.93	\$2,210.00	\$0.88	\$920.00	\$0.35

Pre-Staining

1 Coat (both sides)	\$550/thousand sq ft (Approx \$0.29/linear foot)
2 Coats (both sides)	1000/thousand sq ft (Approx \$0.53/linear foot)

Staff would prefer clear grade, but 2nd clear is adequate for HPC standards. "Cottage" grade would not meet HPC standards.

Staff calculates approximately 3800 sq ft of coverage and rounded up 4000 sq ft. This gives 9600 linear ft with a 5" reveal per formulas in this document.

With 6.5" boards, that gives a price of \$9888 for 2nd clear spruce for bare wood.

One coat of primer brings it to \$12672
Two coats of primer \$14976

Example of "2nd Clear"



Example of 2nd Clears with a minor blemish

Applicant Price Comparison

Exterior Element	A: Current Contract	B. Proposed to HPC	C: Add'l Option 1	D: Add'l Option 2
Siding	vinyl siding and trim boards	HardiePlank siding and trim boards	painted cedar with painted cedar trim boards	painted cedar with Azek trim boards
	\$26,025.36 (*A: \$0) (*B: \$0)	\$37,674.00 (*A: \$1,250) (*B: \$1,250)	\$48,084.91 (*A: \$2,500) (*B: \$6,500)	\$47,572.29 (*A: \$2,500) (*B: \$5,000)
Windows	Marvin Windows ("Ultimate" double hung units, clad in aluminum at the exterior with simulated muntins)	Marvin Windows ("Ultimate" double hung units, clad in aluminum at the exterior with simulated muntins)	Parrett wood, aluminum clad window package	Parrett wood window package
	\$30,280.19	\$30,280.19	\$64,831.80	TBD (*B: TBD)

Information based on actual quotes from contractors.

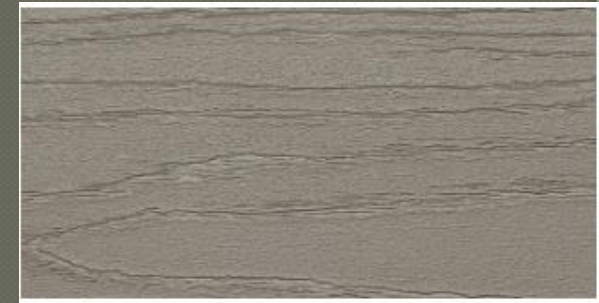
*A = Cost of painting and touch-up upon installation

*B = Cost of regular repainting (\approx every five years)

HPC has never approved vinyl siding under any circumstance.

	Staff: Spruce	Applicant: HardiePlank 100%	Applicant: Cedar w/ Azek	Applicant: Cedar 100%
Amount of Siding	9600 linear ft	Not supplied	Not supplied	Not supplied
Price	\$14,976	\$37,674	\$47,552	\$48,084
	Trim not included	Trim Included		

Applicant's Proposed Porch Deck



PORCH
SLATE GRAY

- Difficult to use for stairs, requires extra stringers, which add extra cost
- Stair use requires different edge than decking planks. Not interchangeable.



Decking



Douglas Fir



Proposed Azek

Trex and other similar products fade and have a cheesy, fake wood grain. What original painted porch floor shows wood grain? None. The fake wood grain holds mold and mildew making them slippery and dangerous.

When applicants in local districts complain they don't want to maintain, they shouldn't live in a historic structure. HPC's, as you know, are quasi judicial bodies and must make rulings based on objective evidence. The evidence is clear, if authentic materials are available, the HPC must rule against the replacement product. ---Bob Yapp

WOOD V. AZEK



Cannot leave the cut end of Azek visible, as it shows its sawdust interior.

SIMILAR PRODUCT: TREX



HISTORIC PRESERVATION

Cost Comparison Tool - Residential Structures

Developed by Preservation Resources, Inc. for the City of Hutchinson, Kansas,
2017

Decking

Acceptable grade of wood Cost		Proposed Composite Material	
New Wood. Douglas Fir, T&G, traditional dimension, 3/4" thick X 3-1/4" wide, vertical grain, older growth. B-grade product. Oil priming back and T&G's 60, 80 & 100 grit sanding. Three coats of oil deck enamel. All labor & materials.	Lifespan cost per year	Recycled composite or vinyl, 1 X 6, embossed wood grain, wood color finish, non-paintable, tongue & Grooved. All labor & materials.	Lifespan cost per year
Costs are quoted per rounded square foot.	<u>(20 year Lifespan)*</u>	Costs are quoted per rounded square foot.	<u>(15 year Lifespan)**</u>
\$3,328.46	\$166.42	\$4,205.40	\$280.36
\$3,328.46		\$5,607.20	
		Square Feet	326

Includes front & rear porches and optional accessible ramp

* Periodic paint maintenance. This product and/or method has a life cycle of over 100 years with repairs, paint removal once every 20 years.

** Permanent staining & warpage at 15 years. Cannot be painted.

Are You Painting Your Windows Wrong?



2 Colors allow your windows to pop like eyeliner on a woman's eyes.

BUT, with 2 colors you need to understand the window and know what to watch out for.

A window is composed of two basic parts.

The window CASING – The pretty frame that holds in the window sash. The casing is stationary.

The window SASH – The window part that moves up and down and fits inside the casing.



Casing

Sash

Paint the window Casing one color and the window Sash the other color.

A common mistake is painting the face of the casing one color, and the inside of the casing the sash color. THIS IS WRONG!



RIGHT

Can You See The Difference?



WRONG

What's worse is replacement windows are designed with these color placement errors. Buyer Beware.

Window Painting



Typical Single Color Clad Window
Every clad window is made this way



Wood windows can achieve this historic appearance. Clad windows come pre-painted and cannot be altered to this appearance.

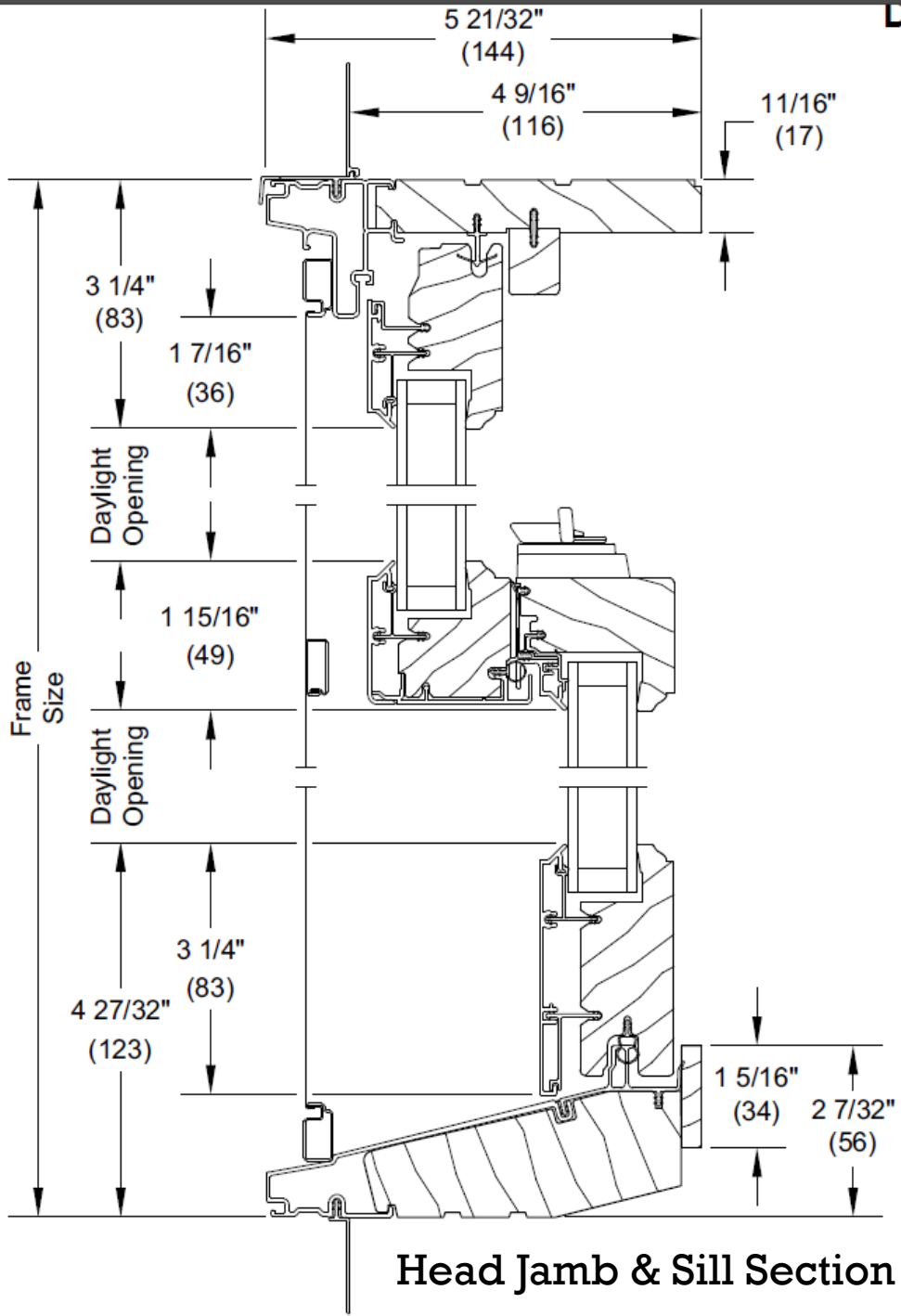
Double

Applicant's Proposed Aluminum-Clad Windows

Marvin Ultimate Double Hung Next Generation

EXTERIOR CLADDING: extruded aluminum and backed by a 20-year warranty against chalking and fading.

Not warranted against wood rot or gas-seal failure for this period



Azek trim, proposed by applicant

- One color only: white
- Can be painted
- PVC product
- Any flaking paint will make its composition obvious.



“AZEK’s Traditional Trim has a smooth, semi-matte white surface on both sides”

Infill Housing/Major Additions in Brewers Hill

Houses

ADDRESS	DATE	WOOD SIDING	WOOD TRIM	WOOD WINDOWS
1840 N 1 ST	1993	YES	YES	YES
112 E Brown Major Addition	1993	Yes	Yes	Yes
1933 N 1ST	1994	YES	YES	YES
1941 N 1st	1995	Yes	Yes	Yes
1850 N 1 st	2000	Yes	Yes	Yes
1906 N 2 nd Three condo structures	2002	Yes	Yes	Yes
2017 N 1 st Major Addition	2003	Yes	Yes	Yes
116 W Lloyd Rebuild on old foundation NOT BUILT	2004	Yes	Yes	Yes
116 W Lloyd Modify design NOT BUILT	--	Yes	Yes	Yes
2018 N 2 nd	2008	Yes	Yes	Yes

Selected Garages

ADDRESS	DATE	WOOD SIDING	WOOD TRIM	WOOD WINDOWS
1934 N 2 ND	1994	Yes	Yes	Yes
1938 N 2 nd	1997	Yes	Yes	(No windows)
1840 N 1 st	2005	Yes	Yes	Yes
2104 N 1 st	2007	Yes	Yes	Yes
2034 N 1 st	2016	No (alley- facing)	No	Yes
2019 N Palmer	2018?	Yes	Yes	Yes

Major Additions: Wood



New Construction: Wood



135 W Reservoir Ave

Milwaukee, Wisconsin

Google, Inc.

Street View - May 2009