



CPED STAFF REPORT

Prepared for the Board of Adjustment

BOA Agenda Item #8
October 9, 2014
BZZ-6814

LAND USE APPLICATION SUMMARY

Property Location: 4831 Thomas Ave S
Project Name: New Garage
Prepared By: Joseph.Giant@minneapolismn.gov, City Planner, (612) 673-3489
Applicant: Dave and Megan Gerlach
Project Contact: Rick Severson
Request: Construct a detached garage
Required Applications:

Variance	<ul style="list-style-type: none"> Variance to increase the height of an accessory structure from 12 feet to approximately 13.5 feet, measured to the midpoint of the peak and eave.
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SITE DATA

Existing Zoning	RI Single-Family District SH Shoreland Overlay District
Lot Area	6,864 square feet / 0.16 acre
Ward(s)	13
Neighborhood(s)	Fulton
Designated Future Land Use	Urban Neighborhood
Land Use Features	NA
Small Area Plan(s)	NA

Date Application Deemed Complete	September 23, 2014	Date Extension Letter Sent	NA
End of 60-Day Decision Period	November 24, 2014	End of 120-Day Decision Period	NA

BACKGROUND

SITE DESCRIPTION AND PRESENT USE. The subject site is a 6,864 square foot rectangular lot containing a two-story Dutch Colonial single-family home built in 1927, and a detached garage that is currently under construction. The home has a gambrel roof, which is a distinctive feature of the Dutch Colonial style of architecture. The garage has a gable roof.

Understanding the difference between a gable and a gambrel roof, and the method by which height is calculated for each, is essential to this variance. Please refer to pages 2 and 3 of the Additional Materials to see an illustration and height calculation for each roof type.

SURROUNDING PROPERTIES AND NEIGHBORHOOD. The subject property is in the R1 Single-Family zoning district and the SH Shoreland Overlay District, approximately 750 feet southwest of Lake Harriet, in the Fulton Neighborhood of Minneapolis. The predominant land use in the vicinity is single-family homes. Nearby homes vary in age and architectural style.

PROJECT DESCRIPTION. This variance concerns the partially constructed garage in the northeast corner of the lot. The maximum height for a garage accessory to a single-family home is 12 feet, or 16 feet if both the roof pitch and the exterior materials of the garage match the roof pitch and the exterior materials of the principal structure.

The proposed cladding of the garage is stucco, to match the house. However, the proposed garage has a gable roof with a 9/12 pitch, while the principal structure has a gambrel roof with primary pitches of 40/12 and 4/12. Because the roof pitches do not match the principal structure, the garage is subject to a maximum height of 12 feet. Upon inspection, it was found that the as-built height of the garage was approximately 13.5 feet.

The applicant has requested a variance to increase the maximum height of an accessory structure from 12 feet to 13.5 feet, measured to the midpoint of the eave edge and the peak.

PUBLIC COMMENTS. This variance application arose from a zoning complaint and subsequent inspection. Any additional correspondence received prior to the public meeting will be forwarded to the Board of Adjustment for consideration.

ANALYSIS

VARIANCE

In accordance with Chapter 525, Article IX Variances, Section 525.520(4) "... to vary the height requirements for any structure, except signs, provided that the total floor area ratio on the site shall not be exceeded, and provided further that the maximum height of any accessory structure shall not exceed sixteen (16) feet or sixty (60) percent of the height of the structure to which it is accessory, whichever is greater.," the Department of Community Planning and Economic Development has analyzed the application for variance based on the following findings:

1. Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.

The maximum height of an accessory structure can be increased without a variance from 12 to 16 feet if the roof pitch and the exterior materials of the accessory structure match the primary roof pitch and exterior materials of the principal structure (537.50). The intent of this administrative height increase is to minimize the visual impact created by larger garages by requiring that they resemble the principle structure.

This provision of the zoning code is relatively easy to implement for homes with gable roofs, but much more difficult to implement for homes with gambrel roofs. Gambrel roofs have two different roof pitches - typically a steep pitch on the lower portion of the roof and a gentle pitch on the upper portion of the roof. A garage taller than 12 feet would have to match both roof pitches in such a manner that the lengths of roof devoted to each pitch was approximately proportional to the principal structure.

The principal structure on the subject property has a steep 40/12 pitch on the lower portion of the roof and a shallow 4/12 pitch on the upper portion of the roof. The lengths of the two sections are approximately equal. Building a garage taller than 12 feet at the subject property would therefore require that it be constructed to meet these specifications. However, adhering to these requirements would compel the applicant to construct a structure that would be far bulkier, taller, and more expensive than a garage with a gable roof.

The administrative height increase typically does not produce this type of result because the majority of low-density residential structures have gable roofs. Matching the roof pitches of a gambrel roof on a residential garage is an impractical and complicated application of the administrative height increase. The gambrel roof on the principal structure is therefore a practical difficulty that is unique to the property which was not created by the applicant.

2. The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.

A garage accessory to a single-family home in the R1 zoning district is a reasonable use of land that is in keeping with the spirit and intent of the ordinance. Besides height, the structure complies with all provisions of the zoning code. The garage is subordinate to the principal structure, and the garage

complies with all placement and setback regulations.

Standards governing accessory uses and structures are established to provide for the orderly development and use of land and to minimize conflicts among land uses by governing the type, size, location, and operational characteristics of accessory uses and structures (537.10). These regulations are intended to prevent the development of accessory uses or structures that may be obtrusive to neighboring properties (537.20[5]). Although it may comply with the letter of the text, a garage with a gambrel roof could potentially create greater conflicts between land uses than the as-built structure.

Height for a structure with a gambrel roof is measured in the same manner as a structure with a gable roof – from natural grade to the average distance between the peak and the eave. “Average distance” is measured as a straight line, but gambrel roofs are typically concave, so structures with gambrel roofs can be significantly bulkier than structures with gable roofs, even though they may have the same midpoint height. The illustration on page 4 of the Additional Materials demonstrates the size differential between the as-built structure and a garage with a gambrel roof.

The current garage has a midpoint height of 13.5 feet, a peak height of 17.4 feet, and a second floor volume of approximately 3,528 cubic feet. If the garage were constructed with a gambrel roof at the same footprint (24 feet wide by 28 feet long), its midpoint height would be approximately the same, but its peak height would be 20.5 feet and its second floor volume would be approximately 6,379 cubic feet (approximately 81% larger than the as-built).

The following chart demonstrates the differences in size and bulk between a garage built without the administrative height increase, the as-built structure, and a garage built with the administrative height increase.

24' x 28' garage, 8' wall height	Max height without admin. height increase	As-built garage	With height increase (gambrel roof)
Midpoint height	12'	13.5'	14.2'
Peak height	16'	19'	20.5'
Total volume	8,064 feet ³	8,914 feet ³	11,755.8 feet ³
Volume of 2 nd floor	2,688 feet³	3,528 feet³	6,379.8 feet³

The preceding examples used the existing footprint of the garage. However, without obtaining a variance, a garage can have a footprint up to 676 square feet and be as tall as 16 feet. At the subject property, a gambrel-style garage with a midpoint height of 16 feet would produce a garage with a peak height of 24 feet and a second floor volume of approximately 8,213 cubic feet (approximately 130% larger than the as-built garage). An illustration this garage is available on page 5 of the Additional Materials.

The variance request complies with the spirit and intent of the ordinance because it would allow a design with a much smaller impact on surrounding properties than a garage that complied with the text of the ordinance.

- 3. The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.**

Although the subject garage is noticeably taller than other garages in the vicinity, it is substantially smaller than a garage that could be constructed without a variance at most residential properties, including the subject property.

The eaves of the subject garage nearly touch the eaves of garages on adjacent properties. In order to mitigate potential off site impacts resulting from the proximity between the structures, Staff recommends that the eaves be reduced to extend no more than 4-inches from the wall of the subject garage.¹ Further, staff recommends that gutters and downspouts be installed on the subject garage in order to direct runoff away from adjacent properties.

Detached garages are incentivized by the City's planning department and are part of traditional Minneapolis architecture. The visibility of detached garages from nearby back yards is something that is to be expected in an urban neighborhood. The as-built garage has no greater adverse off-site impact than a garage that could be built entirely within the parameters of the zoning code. Therefore, Staff finds that the garage does not alter the essential character of the area and is not injurious to the use and enjoyment of other properties in the vicinity.

SHORELAND FINDINGS

All variance requests in the SH Shoreland Overlay District must address the following required findings:

- I. The prevention of soil erosion or other possible pollution of public waters, both during and after construction.**

The terrain around the subject property is relatively flat and the project required very little below-grade excavation. Further, a garage was previously located in the same location as the new garage, so the net increase in impervious surfaces was minimal.

Although the project itself will not likely affect protected waters, it is possible that the close proximity of the garage to structures on adjacent properties could degrade the soil in the areas between the garages. If the garage remains as-built, and the eaves are not reduced to the length prescribed in the conditions of approval, storm water runoff and snow melt could cascade from the subject garage and adjacent garages into the same narrow channel between the structures. Over time, this could lead to significant erosion and soil degradation, and potentially create drainage problems for other properties.

¹ This condition corresponds with building code regulations regarding eave length for structures near shared property lines

In order to mitigate soil erosion in the Shoreland Overlay District, Staff reiterates its recommendation to require gutters and downspouts along shared property lines.

2. Limiting the visibility of structures and other development from protected waters.

Several properties separate the subject property from Lake Harriet. Thus, the proposed garage will not be visible from protected waters.

3. The suitability of the protected water to safely accommodate types, uses and numbers of watercraft that the development may generate.

The subject site does not have direct access to Lake Harriet. The proposed project will not require the accommodation of any watercraft.

RECOMMENDATIONS

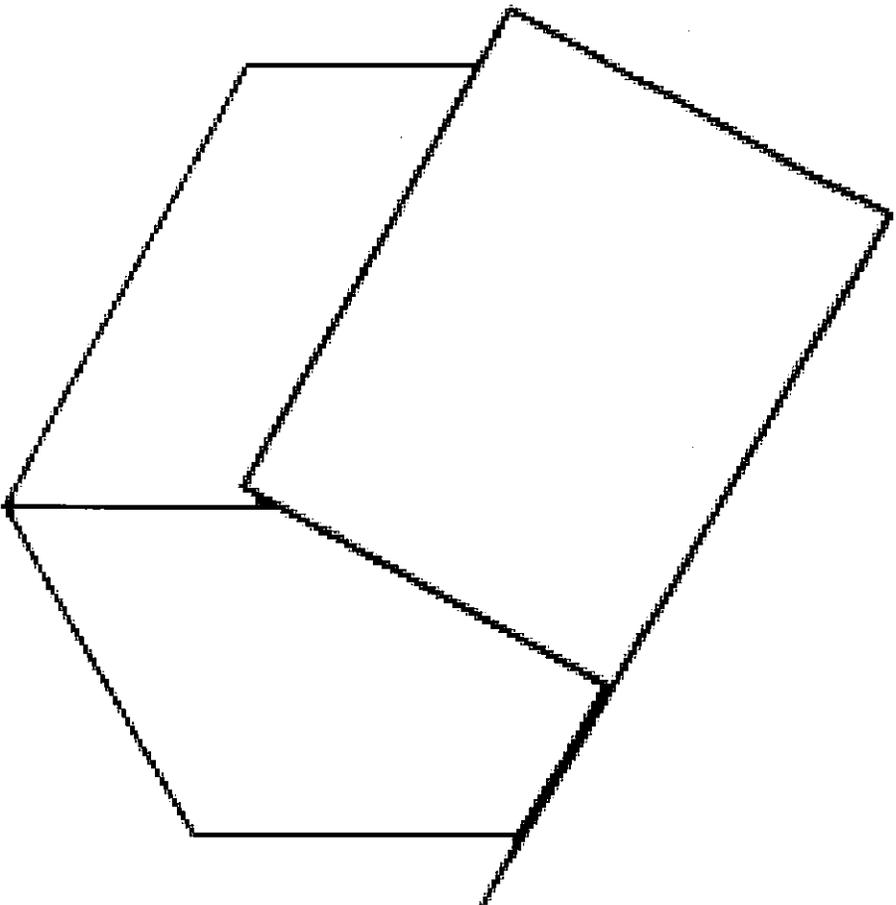
Recommendation of the Department of Community Planning and Economic Development for the Variance:

The Department of Community Planning and Economic Development recommends that the Board of Adjustment adopt staff findings and **approve** the application for variance to increase the height of an accessory structure from 12 feet to approximately 13.5 feet, measured to the midpoint of the peak and eave, subject to the following conditions:

1. Approval of the final site, elevation, and floor plans by the Department of Community Planning and Economic Development;
2. The eaves on walls within 2 feet of shared property lines will project no further than 4 inches from the walls of the garage;
3. Gutters and downspouts will be added to the rear of the garage. The downspouts will direct runoff away from adjacent properties;
4. All site improvements shall be completed by October 9, 2015, unless extended by the Zoning Administrator, or the permit may be revoked for non-compliance.

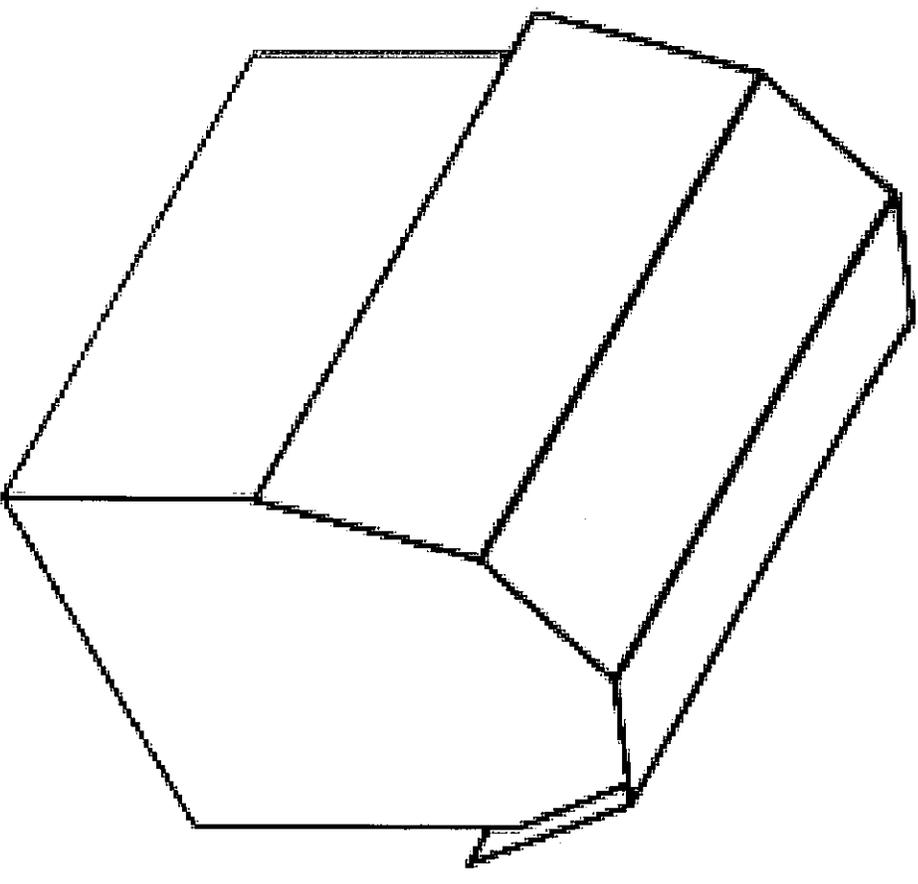
ATTACHMENTS

1. Zoning map
2. Illustration of gambrel and gable roof types
3. Height measurement for gambrel and gable roof types
4. Illustration of garages with different roof styles
5. Maximum garage size without variance
6. Written description and findings submitted by applicant
7. Authorization letter from owner
8. Elevation drawings and house plans
9. Photos of site



Gable Roof

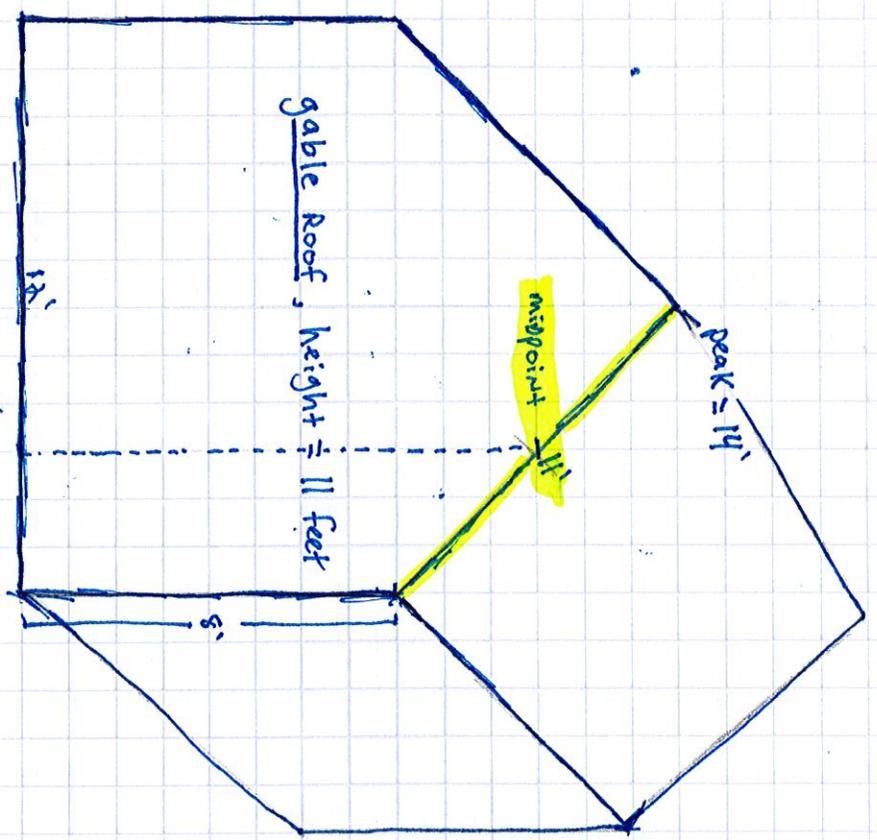
The gable roof is made up of two right triangles and slopes on two sides.



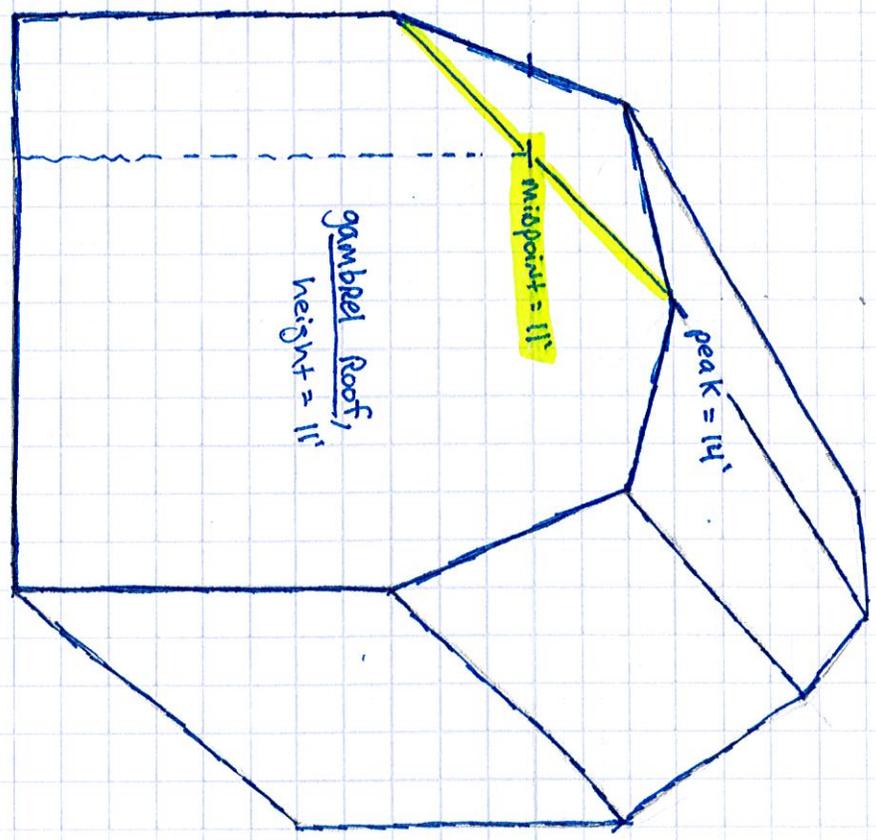
Gambrel Roof

Gambrel roofs have a double slope on each side and are often what most people picture as barn roofs.

Height: The vertical distance from natural grade... to the average distance between the eave edge and the ridge level for gable, hip, or gambrel roofs. (SAD.160)



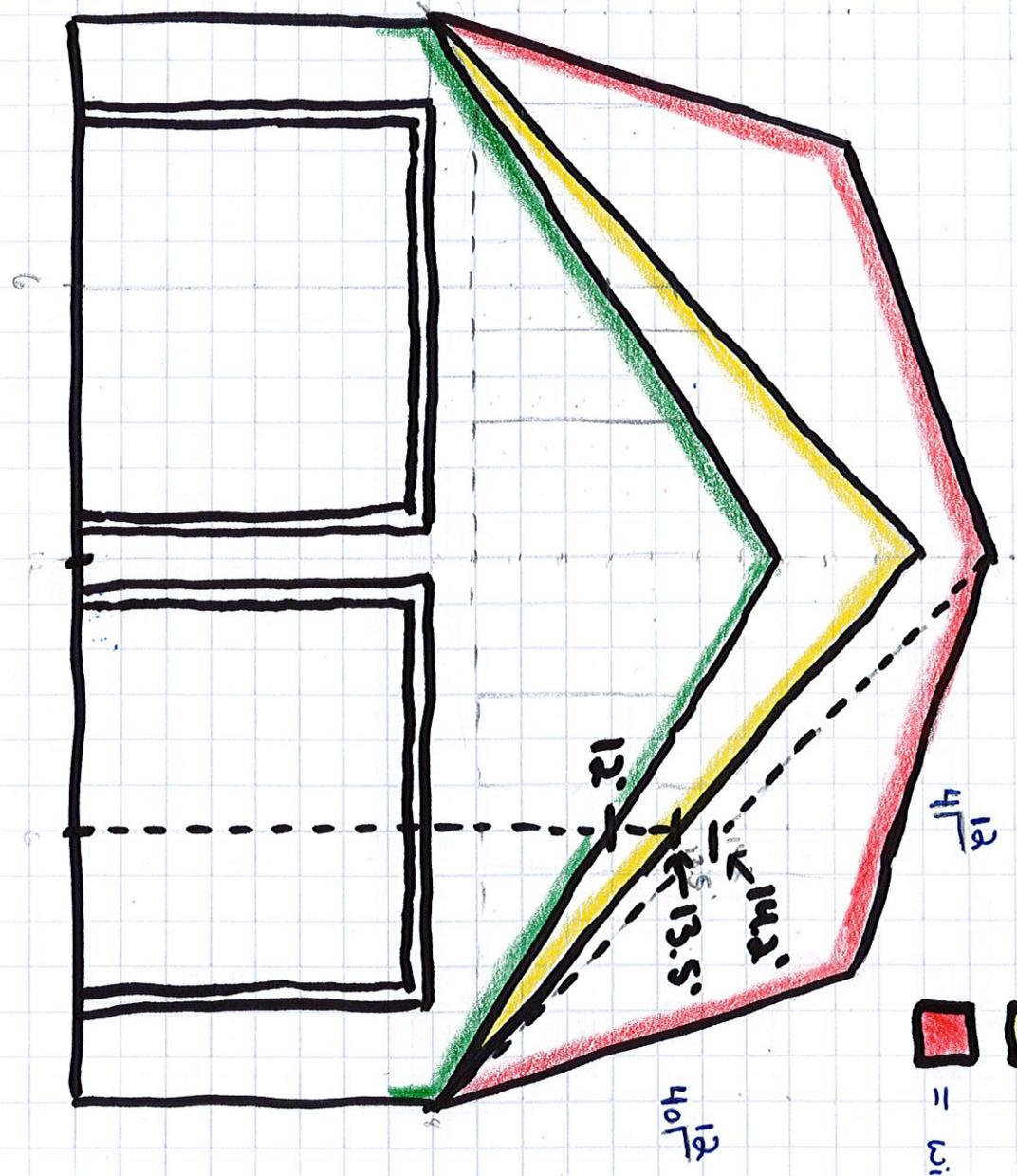
Gable Roof



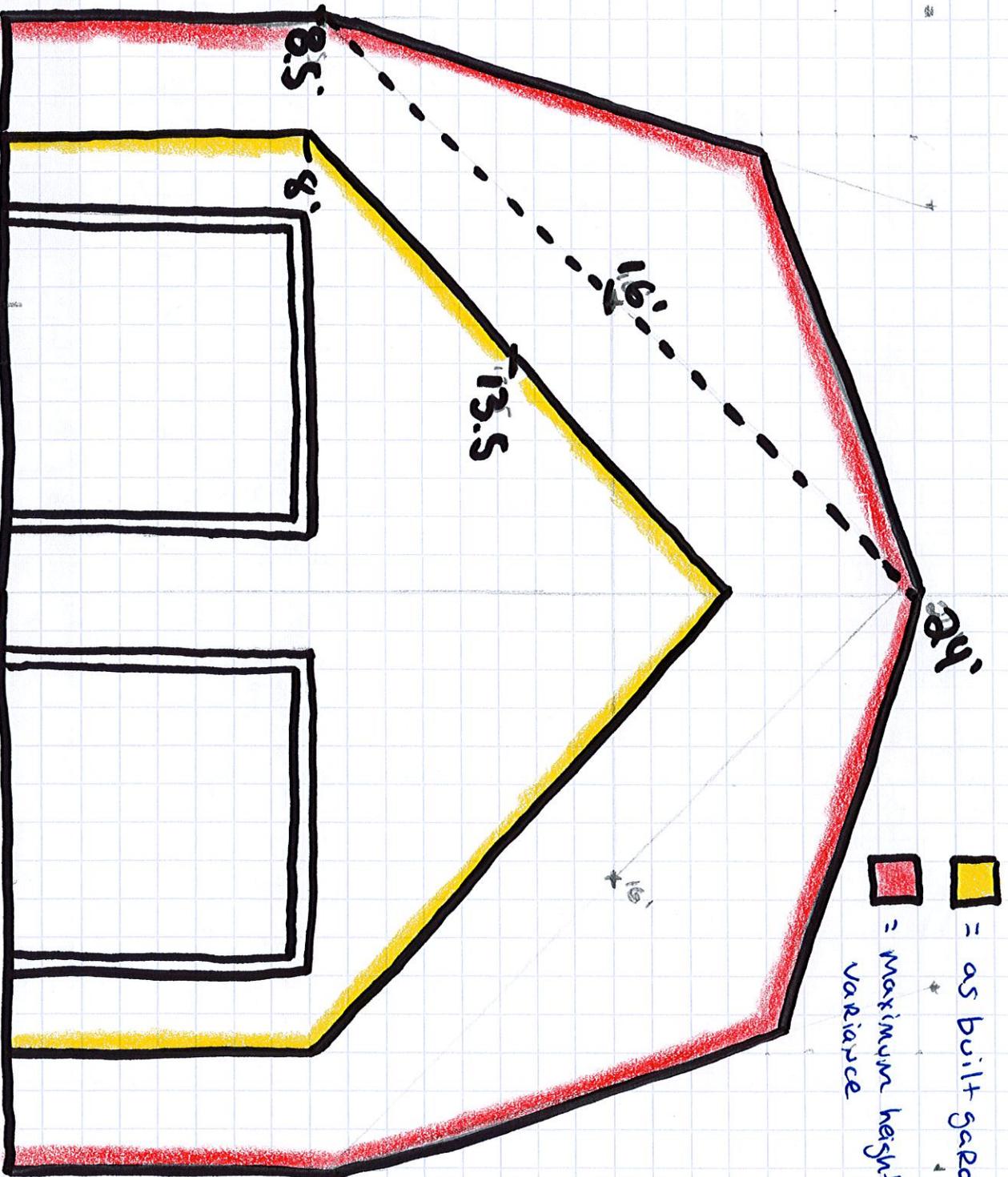
Gambrel Roof

24-foot-wide garage, 8-foot walls

- = max height w/o admin. height increase
- = as-built garage
- = with admin. height increase



Maximum size without variance



█ = as built garage

█ = maximum height without variance

Variance Application

Clairmont Design Build on behalf of the property at:
4831 Thomas Avenue South, Minneapolis, MN

1. The existing property has a gambrel roof on the main house and twin gables and a shed roof on the back of the house. From the back of the house you cannot distinguish the gambrel roof – see attached drawing. Because the gables are the dominant roofline viewed from the garage and back yard, the gable roofline was chosen for the garage. In addition, traditionally gambrel roofs are best suited for a strong rectangular floor plan; at 24 x 28 this garage is nearly square – a shape that does not lend itself to the gambrel design. Furthermore, a gambrel roof would add additional height and heavy mass to the top half of the building.
2. The garage is intended to be used for storage of vehicles along with typical household yardware and recreational equipment storage. It is important to the homeowner to have attic storage space, thus the trusses were manufactured to provide storage up to the allowable garage height. The gable roof is more in line with the spirit of the ordinance because it matches the prominent back roof line. The gable roof also allows for normal attic storage at a lower height than the equivalent gambrel roof. In the interest of keeping the roofline as low as possible, the gable roof is the best option. The gambrel roof (while the requirement within the ordinance) would be HIGHER than the gable.
3. There are many gable roofs in the neighborhood – the proposed gable roof on the new garage is in keeping with the neighborhood as well as the rear roofline of the existing home. We feel that the gable roof is the best architectural choice for the roof in terms of minimizing the impact to the nearby properties due to the reduced height that the gable roof provides. The garage is being completed with the careful selection of materials that tie into the existing home and neighborhood: stucco to match, windows with matching divided lite, carriage house garage doors and beadboard overhang with exposed rafter detail. These materials lend themselves to a charming, carriage house style garage.

In addition, the following findings must be addressed for a variance required by the SHORELAND OVERLAY DISTRICT:

- (1) The prevention of soil erosion or other possible pollution of public waters, both during and after construction. *Does not apply to this variance application.*
- (2) Limiting the visibility of structures and other development from protected waters. *Does not apply to this variance application.*
- (3) The suitability of the protected water to safely accommodate the types, uses and numbers of watercraft that the development may generate. *Does not apply to this variance application.*

Letter from property owner authorizing application.

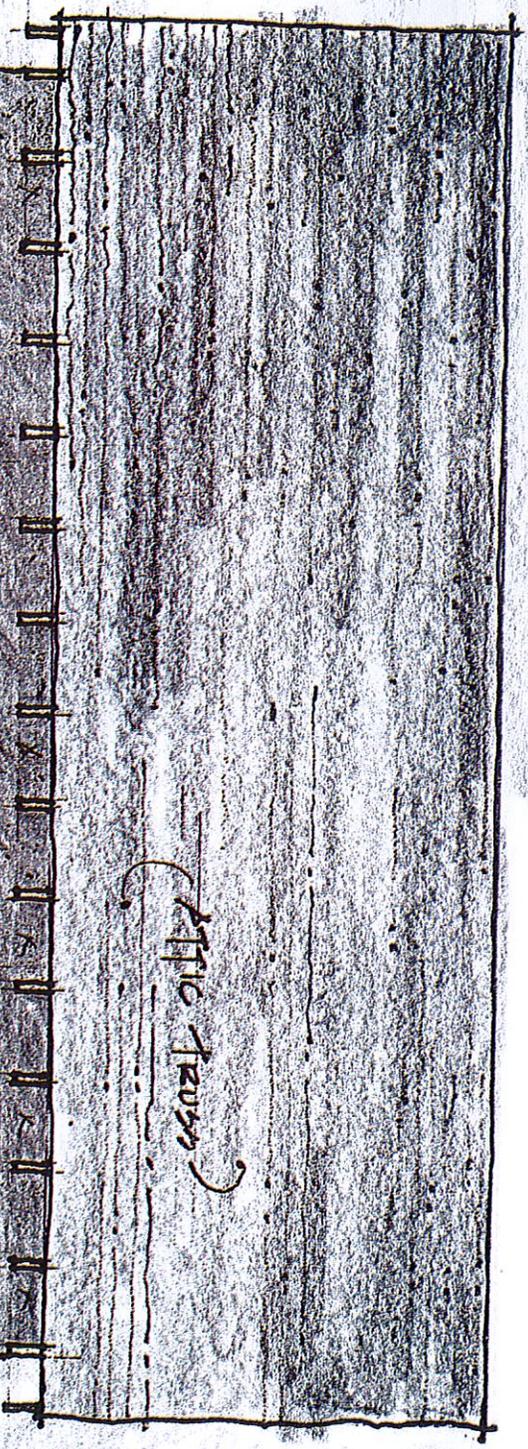
9-16-2014

To whom it may concern,

This letter is to inform all necessary parties that I am giving permission /authorization to Rick Severson of Clairmont Design Build to apply for the detached garage variance as needed.

Sincerely,

Megan Gerlach
Dave Gerlach



Apple Trees

SIDE ELEVATION

4'-10"

GERLACH RESIDENCE
4831 THOMAS AV. SD
MINNEAPOLIS MN

GRACE ELEVATION

CLAREMONT DESIGN BUILD
11058 50TH ST NORTH
LAKE ELMO MN 55042

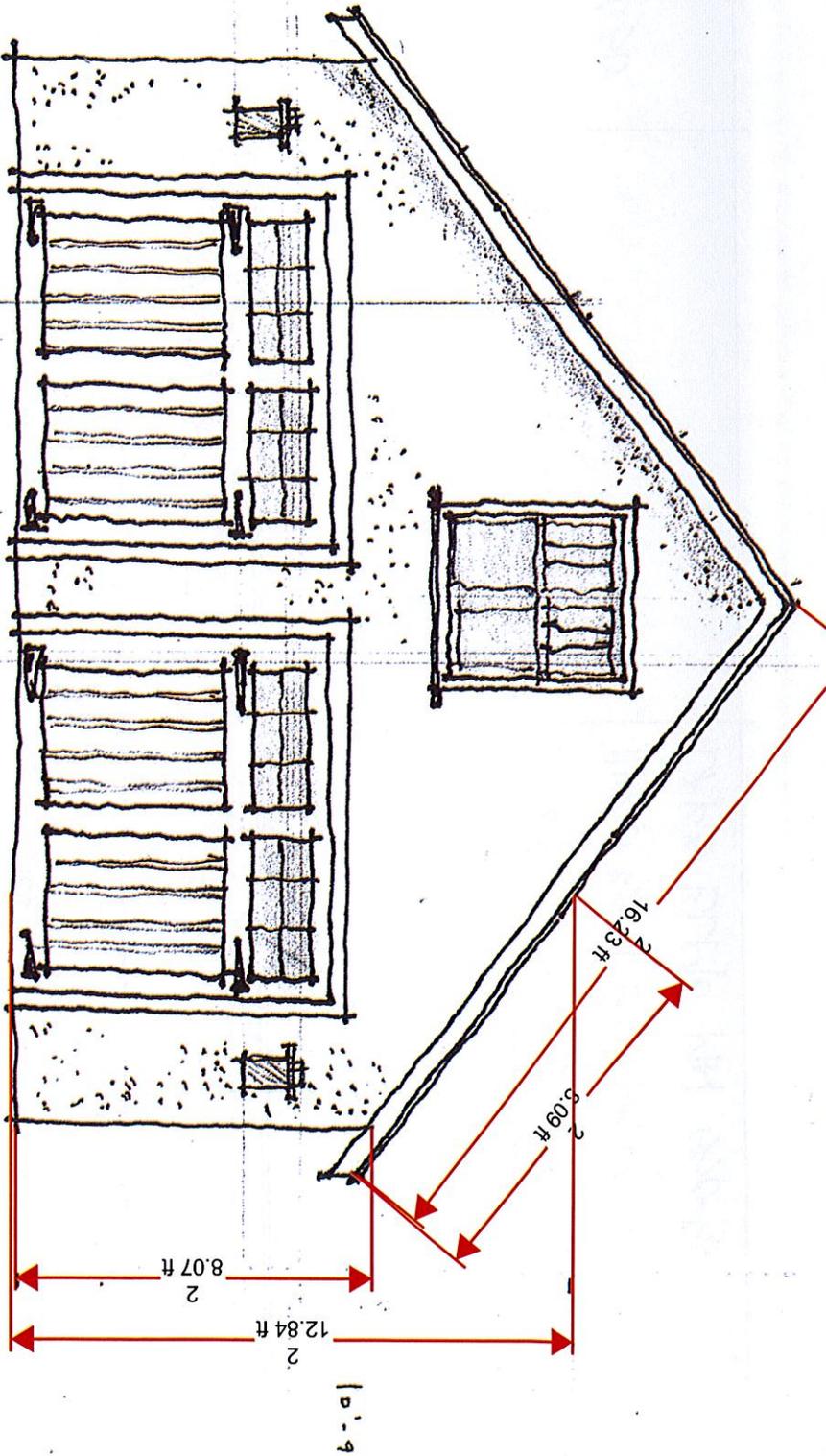
GERLACH RESIDENCE
4831 THOMAS AV. SO.
MINNEAPOLIS MN

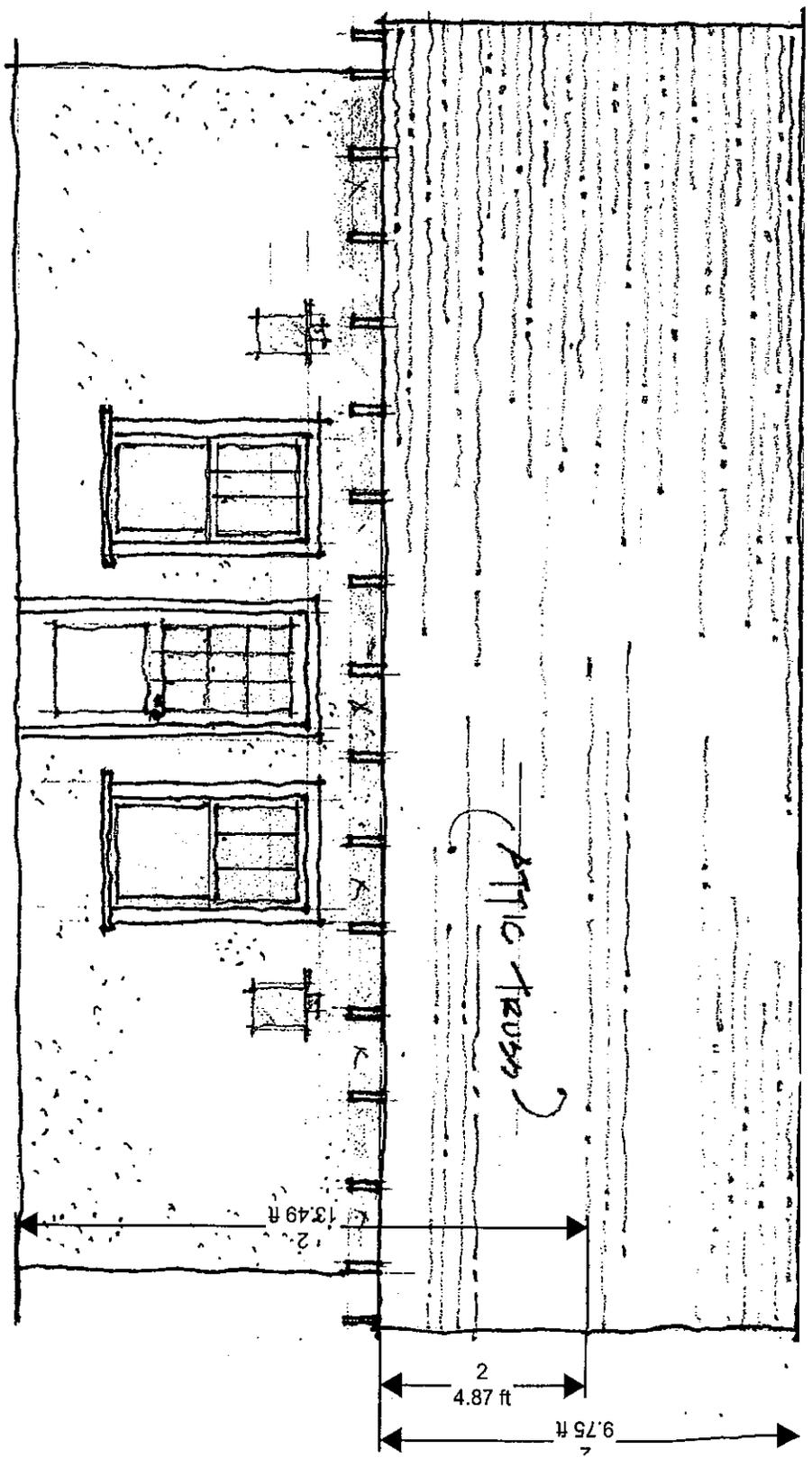
GARAGE ELEVATION

CLAIRMONT DESIGN BUILD
11558 600 ST. NORTH
LAKE ELMO, MN 55042

1/2" = 1'-0"

FRONT ELEVATION



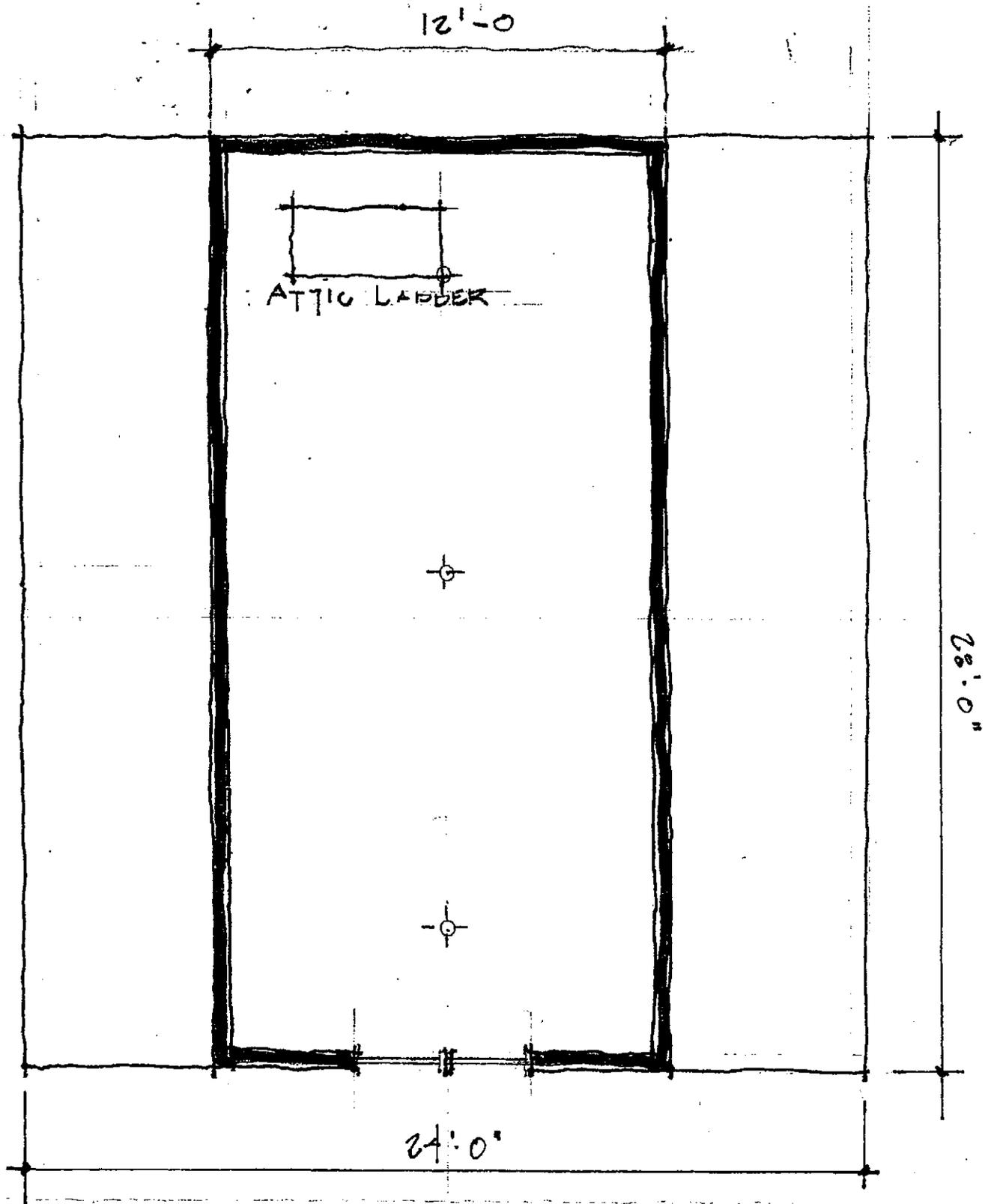


SIDE ELEVATION

1/4" = 1'-0"

<p>GERLACH RESIDENCE 4831 THOMAS AV. SD MINNEAPOLIS MN</p>	<p>GRABER ELEVATION</p>	<p>CLAIRMONT DESIGN BUILD 11058 50TH ST NORTH LAKE ELMO MN 55042</p>
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GARAGE ATTIC PLAN
4" = 1'-0"

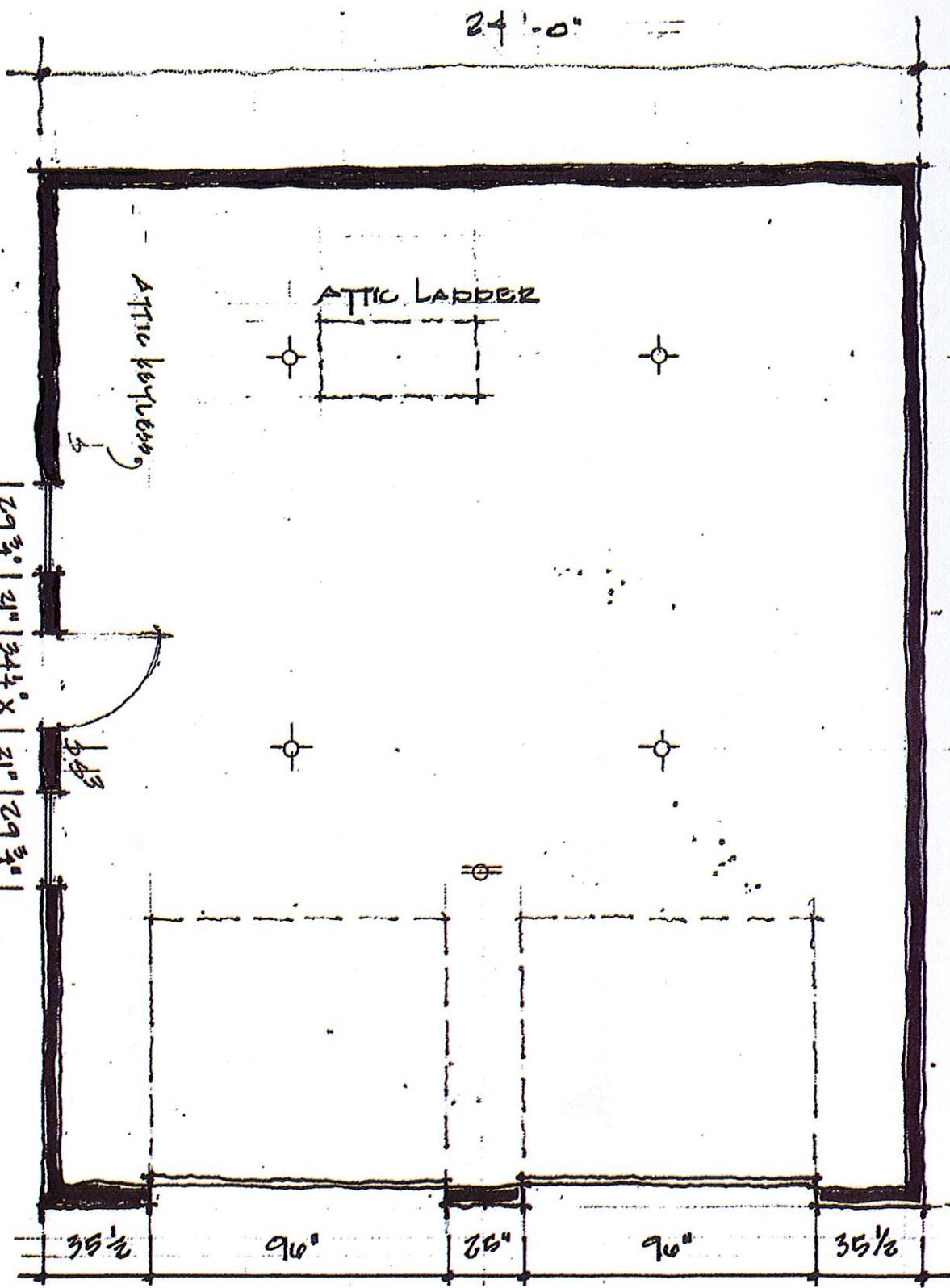


GERLACH RESIDENCE
4831 THOMAS AV. SO
MINNEAPOLIS MN

2ND FLOOR PLAN

CLAIRMONT DESIGN BUILD
11588 50^{ST.} NO.
LAKE ELMO MN

4" = 1'-0"
GARAGE FLOOR PLAN



28'-0"

<p>GERLACH RESIDENCE 4831 THOMAS AV SO MINNEAPOLIS, MN</p>	<p>MAIN FLOOR PLAN</p>	<p>CLAIRMONT DESIGN BUILD 11678 50 ST. NO. LAKE ELMO MN</p>
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List of Materials

Roof – Timberline Architectural grade shingles.

Siding – Stucco (match house)

Windows – Pella, Architectural Series. Divided light to match original windows on house.

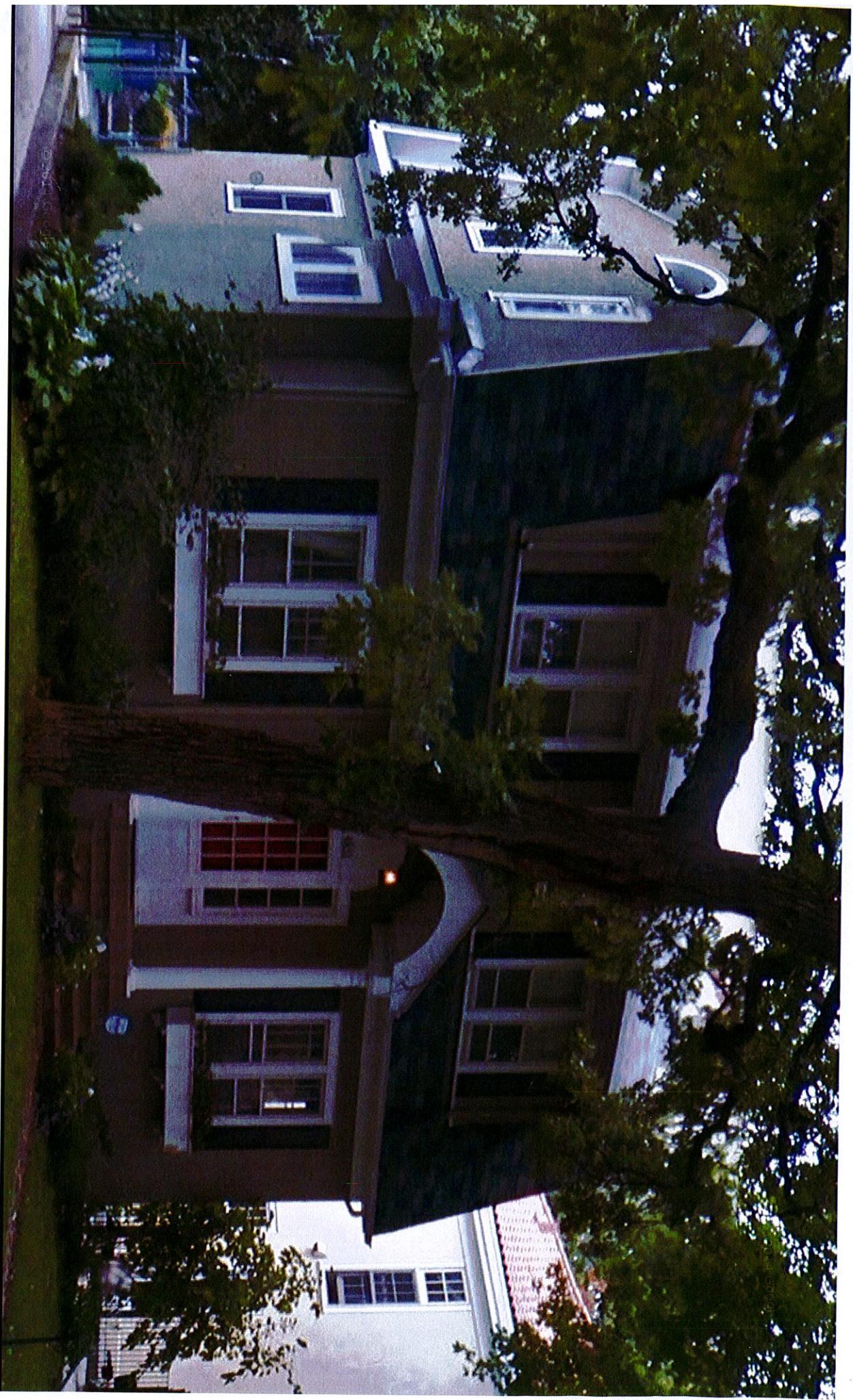
Service Door – Pella Architectural Series. Half light with panel below.

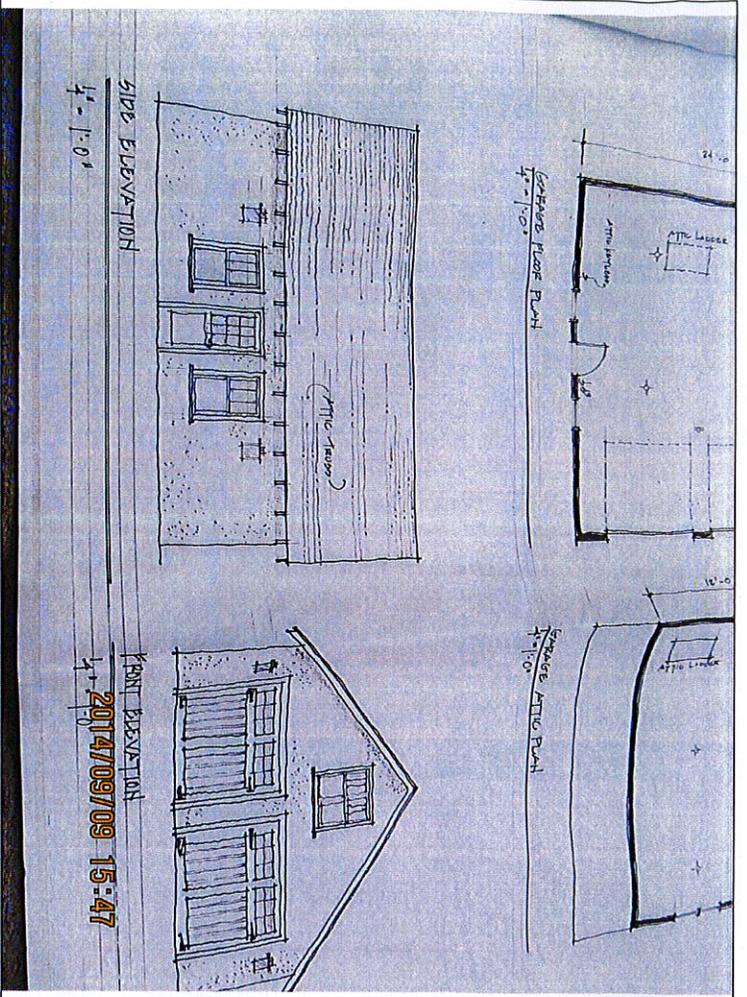
Garage Door – Custom “Carriage House” doors. Divided light windows, steel hinges/brackets.

Overhang – Exposed rafter detail with bead board soffit material

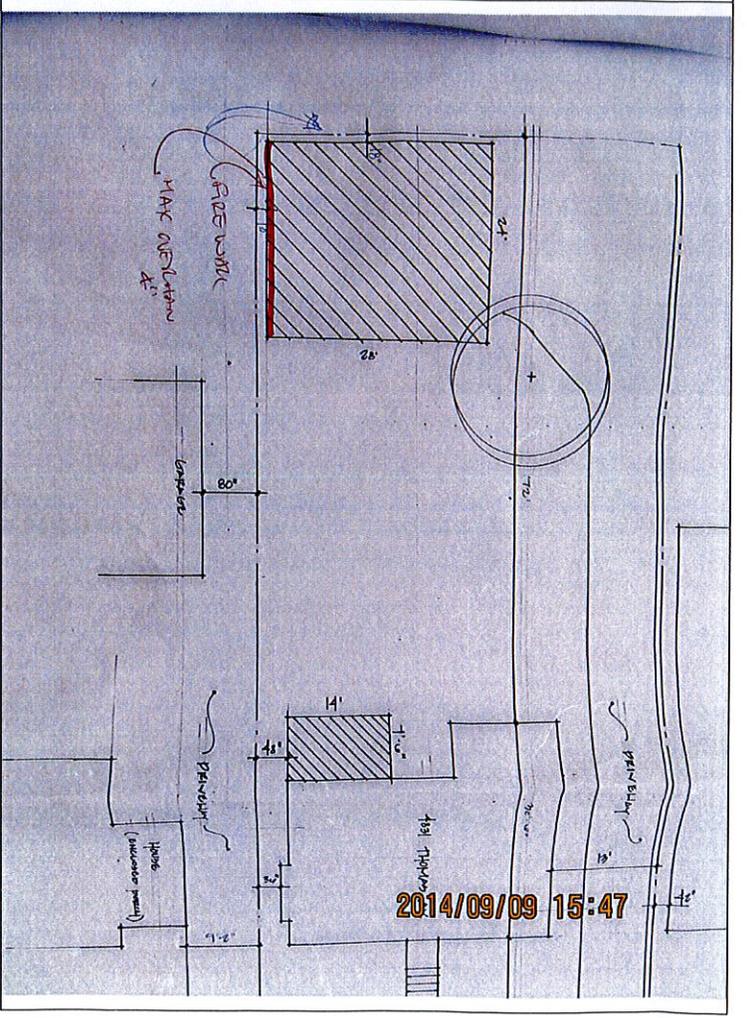
Lighting – Carriage House lights (4)

Interior Finish – Insulated walls and ceiling. Sheetrock, painted white.





4831 Thomas Ave. S.

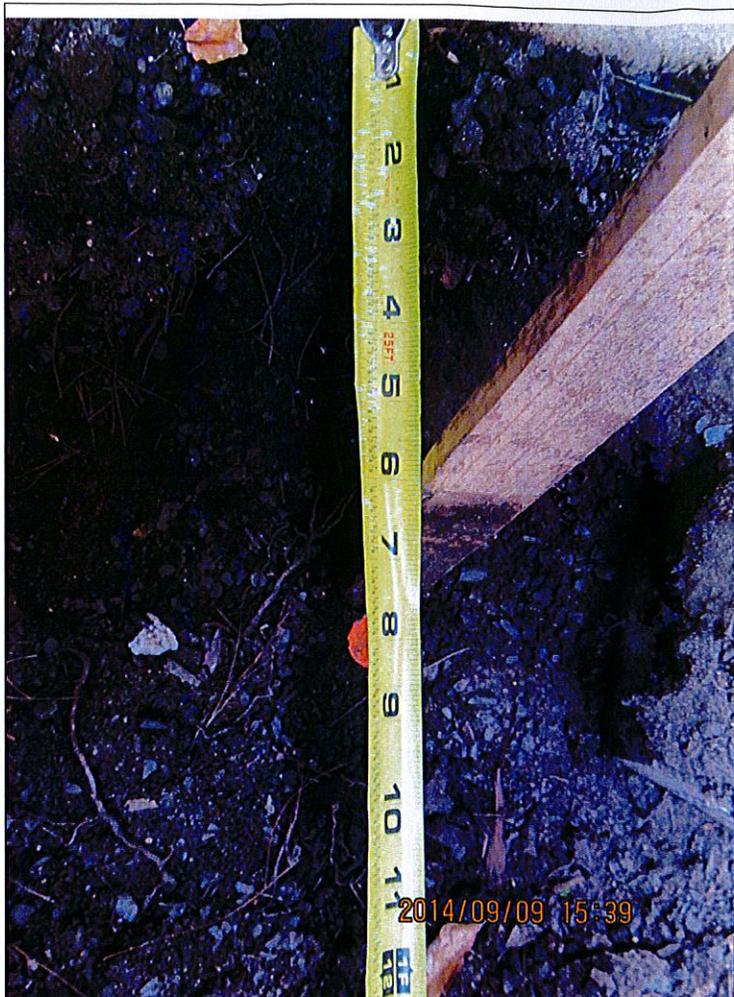


SW

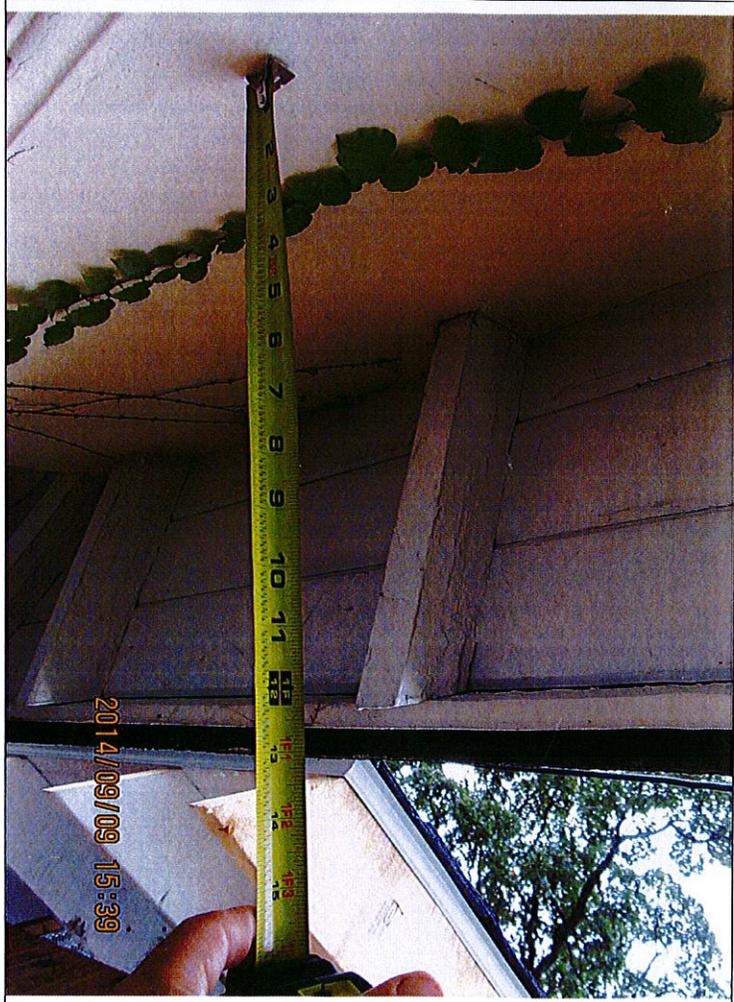




4831 Thomas Ave. S.



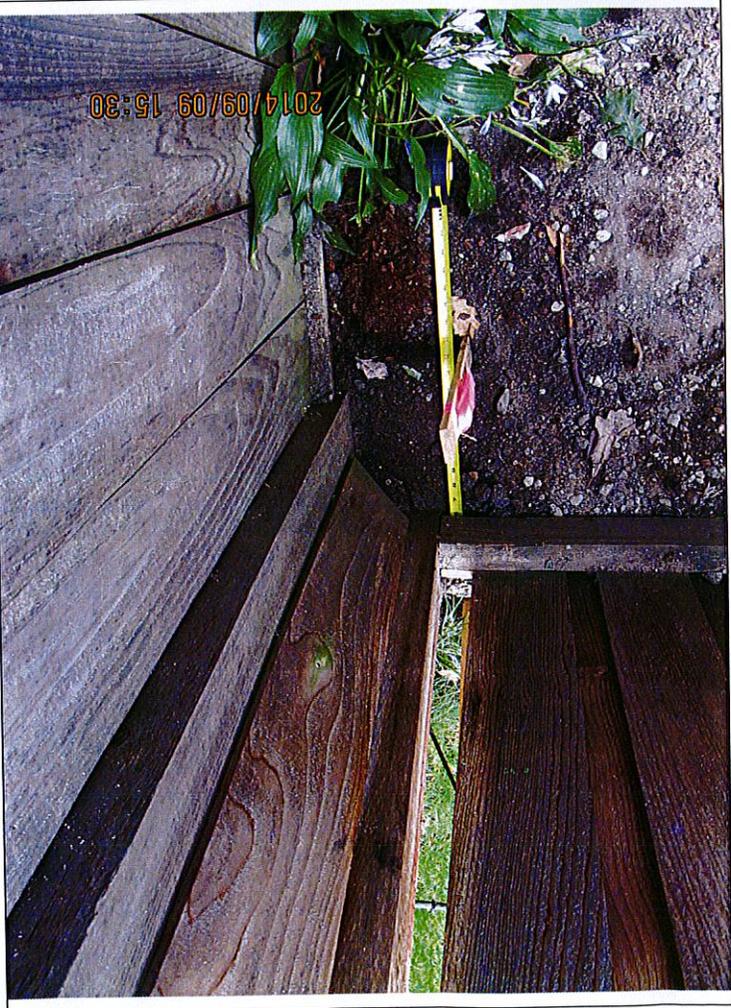
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4831 Thomas Ave. S.



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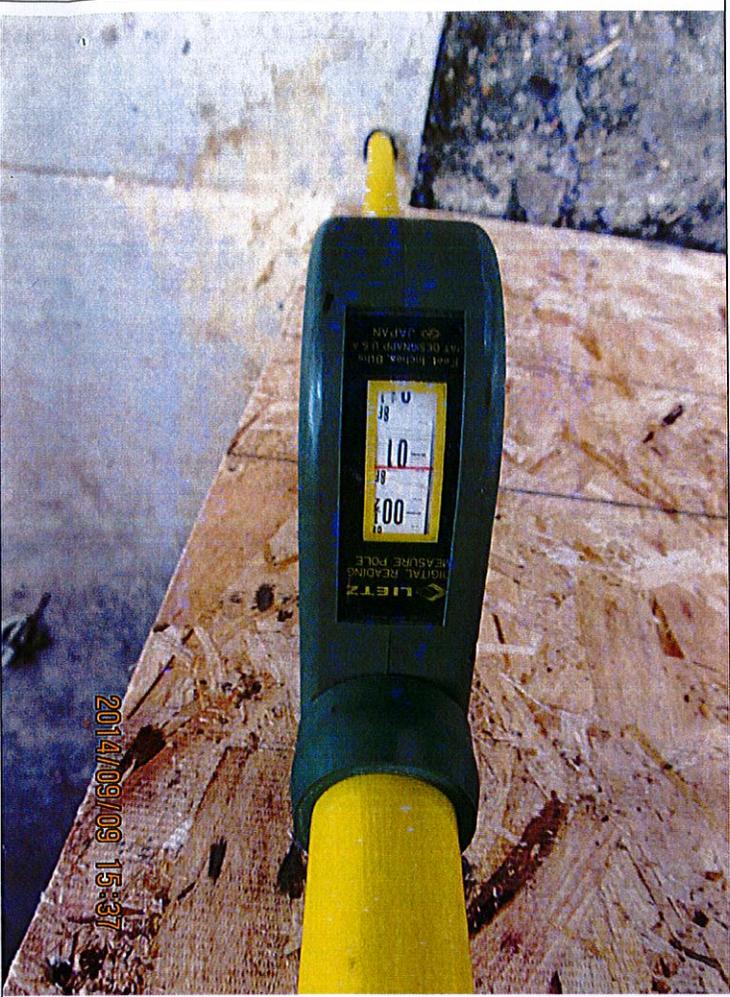
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4831 Thomas Ave. S.

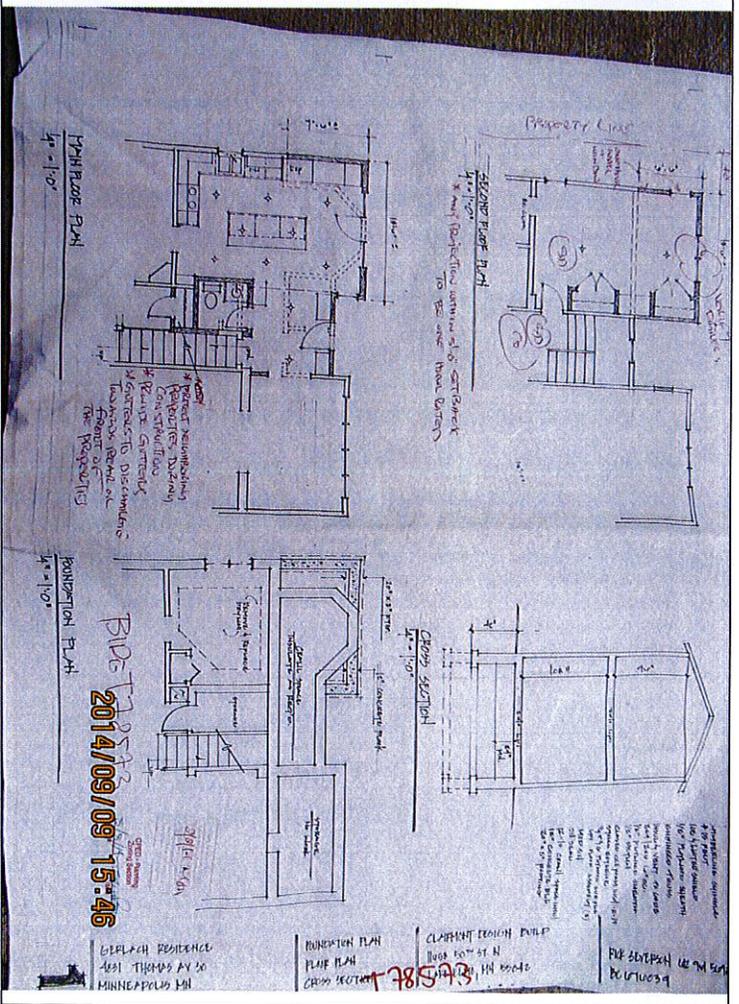


SW

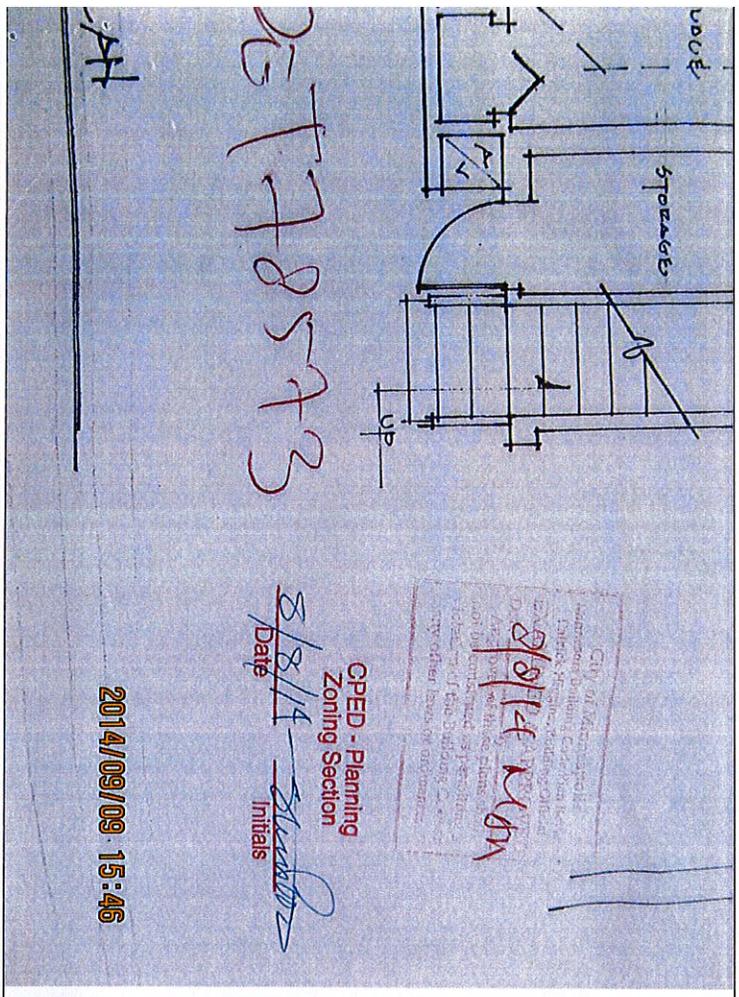




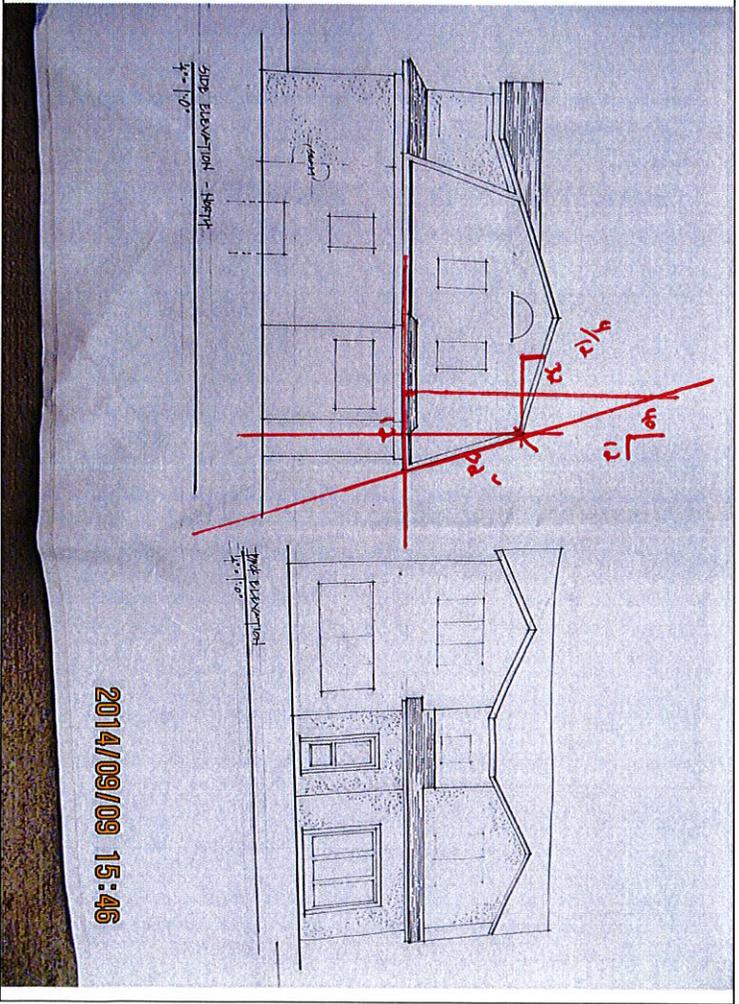
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