



JOINT WORK SESSION MEETING

AGENDA

CITY OF CREVE COEUR

CITY COUNCIL AND PARKS AND HISTORIC PRESERVATION COMMITTEE

300 NORTH NEW BALLAS RD

JUNE 10, 2019

6:00 PM

CALL TO ORDER

ROLL CALL

DISCUSSION ITEMS

1. Approval of May 28, 2019 City Council Work Session Meeting Minutes

2. Historic Building Assessment

Summary: Tim Kilby, the proprietor of the Country Gentleman Historic Restorations and Woodwright Shop, will present his assessment of the Clester Cabin, Hackmann Cabin, and Lake School House. The Parks and Historic Preservation Committee has been invited to participate in the discussion.

Pursuant to Section 610.022 RSMo., the City Council could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. And/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Posted: _____ posted 06/7/2019

Deborah Ryan, MPCC
City Clerk



**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MAY 28, 2019
6:00 PM**

CALL TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Tuesday, May 28, 2019 at 6:00 PM.

Council Member, Ward 2 Ellen Lawrence
Council Member, Ward 3 Robert Hoffman
Council Member, Ward 3 Charlotte D'Alfonso
Council Member, Ward 4 Scott Saunders
Council Member, Ward 1 Alexis Travers
Council Member, Ward 4 Susan Baseley
Council Member, Ward 1 Heather Silverman

Council Member, Ward 2 AJ Wang -- **Absent**

ROLL CALL

Staff Present: City Administrator Mark Perkins, City Attorney Carl Lumley, Chief Eidman, Finance Director Lori Obermoeller, Public Works Director Jim Heines, City Engineer Matt Wohlberg, Assistant City Administrator Sharon Stott

DISCUSSION ITEMS

1. Approval of May 13, 2019 City Council Work Session Meeting Minutes

RESULT:	ACCEPTED [6 TO 0]
MOVER:	Scott Saunders, Council Member, Ward 4
SECONDER:	Ellen Lawrence, Council Member, Ward 2
AYES:	Lawrence, Hoffman, D'Alfonso, Saunders, Travers, Silverman
ABSTAIN:	Baseley
ABSENT:	Wang

2. Review of FY 20 Proposed Budget - Continued from May 13, 2019 Work Session

Mark Perkins stated the Retirement Plan there is an increase in contribution level from three to four percent and change the contribution to zero for employees that have reached the 30 year level of service. This increase will align with the required contribution for those employees in the LAGERS plan. The Legacy Plan is written so that employees that reach 30 years of service or more do not accumulate credit in the plan for anything over that level of service. For years, employees did not pay anything for their retirement plan.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MAY 28, 2019
6:00 PM**

Council Member Lawrence stated she does not want to go back and not in favor of changing the plan.

Council Member Hoffman asked how many employees fall into that category.

Mark Perkins stated currently there are four and at the end of FY20 there will be seven.

Mark Perkins stated the pay justification is a long-standing strategic goal of the city is to maintain competitive pay and benefit package to attract and retain talented staff. Staff is proposing an overall 3% merit adjustment based on performance. All salary ranges for all grades are recommended to increase 2% and market adjustments are being made to 33 positions as a result of raiding the minimum salary ranges based on market analysis.

Adjourned at 6:16 pm

Submitted by:

Deborah Ryan
City Clerk

RESULT:	ITEM DISCUSSED
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City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

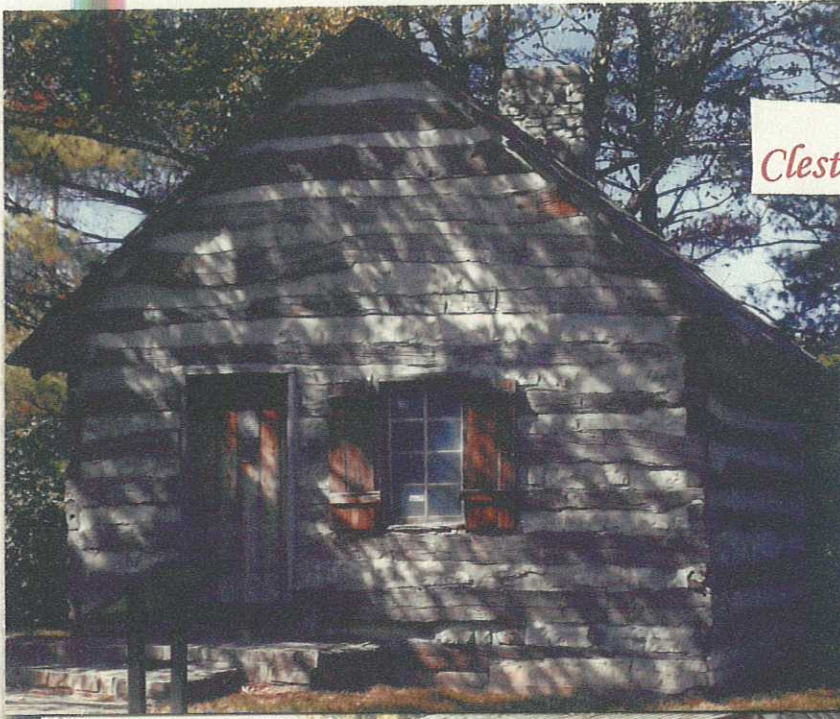
Meeting: 06/10/19 06:00 PM
Department: Public Works Department
Category: Discussion
Prepared By: Matt Wohlberg
Department Head: Jim Heines

SCHEDULED

STAFF REPORT

Historic Building Assessment

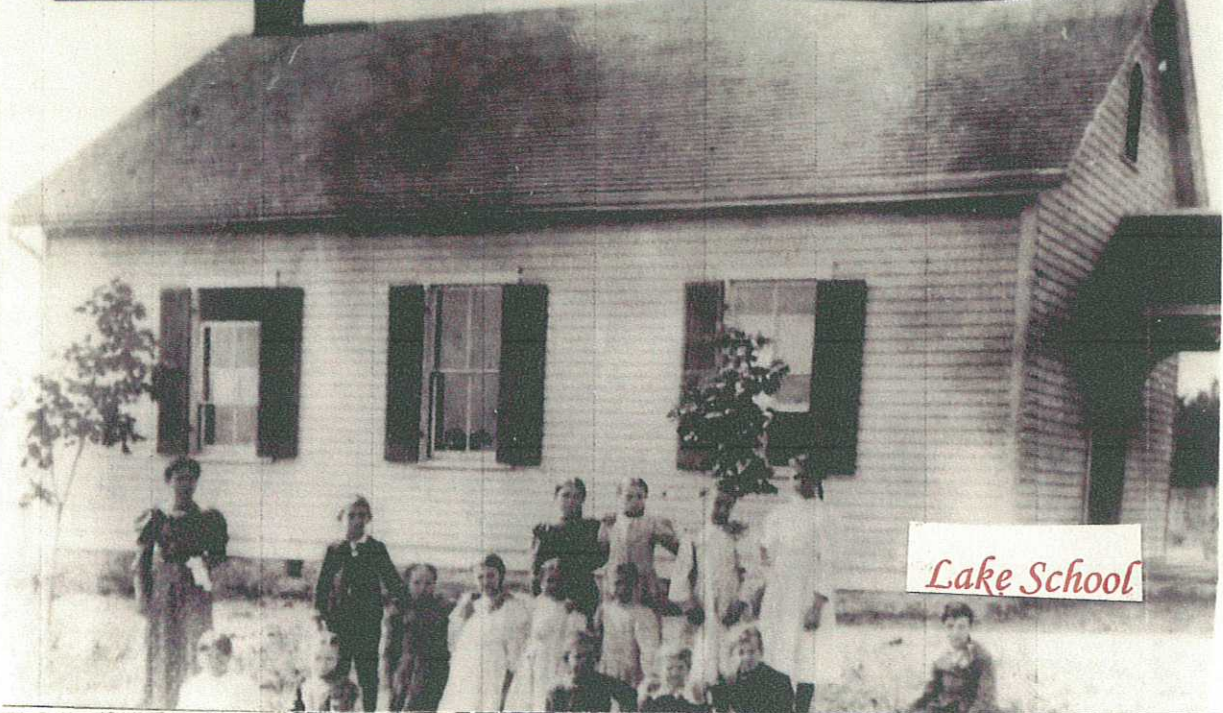
Tim Kilby, the proprietor of the Country Gentleman Historic Restorations and Woodwright Shop, will present his assessment of the Clester Cabin, Hackmann Cabin, and Lake School House. The Parks and Historic Preservation Committee has been invited to participate in the discussion.



Clester cabin



Hackman cabin



Lake School

COST ESTIMENTS FOR BUDGETING

The estimates below are based on a two man crew with a crew hourly rate of \$150 per hour.

The roofing estimate is from my roofer whom I have worked with for 20 years. I would consider his company as the most experienced "historic" shake installer in the area.

Clester Cabin

***must do**

- | | |
|--|---------|
| • Roof replacement per its current configuration | *10,000 |
| • Rear sill, log 2-3, top plate extension | *3,800 |
| • Full front sill replacement, if needed. Not counting step removal | 3,500 |
| • Epoxy repairs | *3,500 |
| • Pulling door into position, | *2,500 |
| • Misc. , thresholds, wood step, window sill etc... | *2,000 |
| • Power wash, borate, clear coat exterior | *4,500 |
| • Flash chimney | *1,200 |
| • Chipping back exterior chinking, re daubing all exterior | 13,000 |
-

Hackman cabin

- | | |
|---|---------------|
| • Residing, new window trims, foundation flashing | *40,000 |
| • Re-decking porch cypress 1x8 vs. fir 3 1/2" t/g | 4,500 / 5,900 |
| • New wood shingle roof | *18,750 |
-

Lake school house

- | | |
|--|-------------------------|
| • Support porch for regrading, reset after grading and adjust as needed, set masonry unit under post and repair post base as needed. Rebuild new deck porch as is. | *3,500 |
| • Repair front right lower corner ??? | minimum *4,000 |
| • Painting, minor repairs etc..... | per budget requirements |

This is not a bid, only based on what we know of the current conditions. All restoration work is opening Pandora's Box. I would consider the above numbers as a minimum amount for planning purposes only

Clester Cabin in Conway Park



City of Creve Coeur
2018

DISMANTLED & DELIVERED VALUE - \$20-25 K Tim Rilly

Construction overview

The Clester cabin is an example of a very early single pen log cabin. Measuring approximately 18' square and a story and a half high, is unique in its use of a log gable vs a framed gable common in the Midwest. The log gable is more common in the North and North East (Ohio, Pennsylvania) portions of the country due to the Dutch populations in those areas. According to Dictionary of American family names (Oxford University press) The Name Clester is an Americanized form of several similar Dutch names, thus reinforcing the Dutch origins of this log gabled log cabin. As a side note, this is the only log gable cabin I have seen in the Midwest in over 30 years of cabin research.

The cabin is constructed of a mix of Oak logs (red, black and white Oak). The logs are hewn on both the inside and outside leaving the barked edges top and bottom and joined using the "v" notch at the corners. The foundation would have been on dried laid stone.

The roof *rafters* are peeled log poles measuring approximately 4-6" dia. And space approximately 3' on center. Atop these pole rafters are *purlins* of close to the same size as the rafters but hewn on the top side, running the opposite direction (front to back) spaced approximately 24" on center. The hand split shake roof was applied directly onto the purlins.

The front gable wall contains one vertical plank door with wooden hinges and one double hung window with 10"x12" glass. The rear gable wall has a stone fireplace centered on the gable. There is a simple loft covering the rear portion of the cabins interior extending a little less than halfway from the fireplace wall accessed via a simple wood ladder.

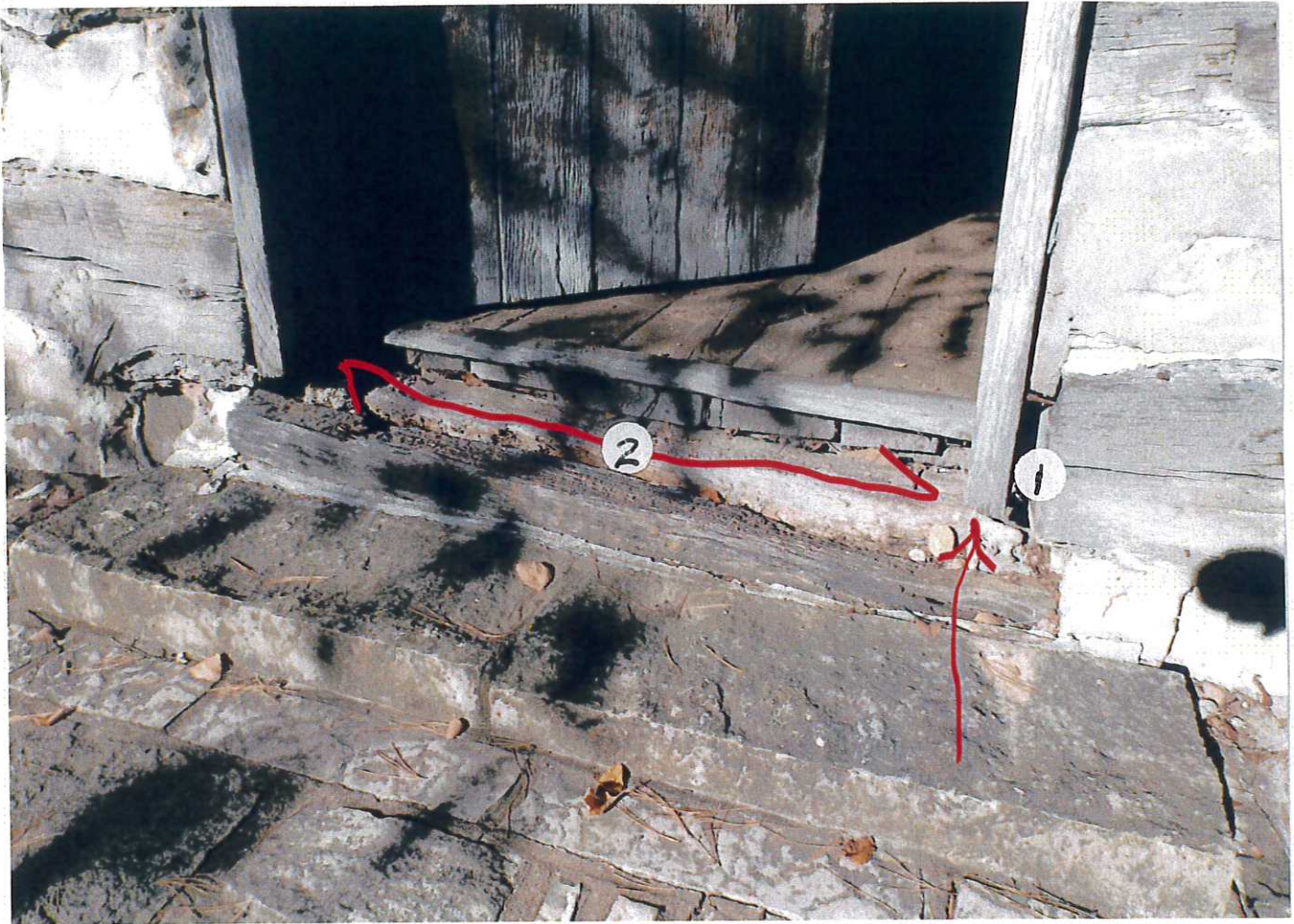
I don't believe the floor is original but a good reproduction of a hewn floor or a puncheon (half spit log) floor.

The current chinking (nogging) is not original and contains Portland cement. The original chinking would have been a sand and lime putty mixture or mud possibly mixed with straw applied over stone or wood slats (chinks) wedged between the logs

Contents of pictures

<u>Page #</u>	<u>Issue #</u>	<u>Description</u>
1.	1,2	Door jamb out of plumb, need for new wood step
2.	3	Replace window sill
3.	4,5	Front sill log (1-1) right and left repairs
4.	6	Cantilever logs 2-7 & 4-7
5.	7	Log 2-3 repair
6.	6,8,9	Cantilever logs, log 3-1, 3-7 repairs
7.	10	Log 4-1 repair
8.	11	Replace concrete plugs with epoxy plugs
9.	12	Roof conditions
10.	13	Chinking
11.	14	Spooky Doll
12.	15	Stone walkway

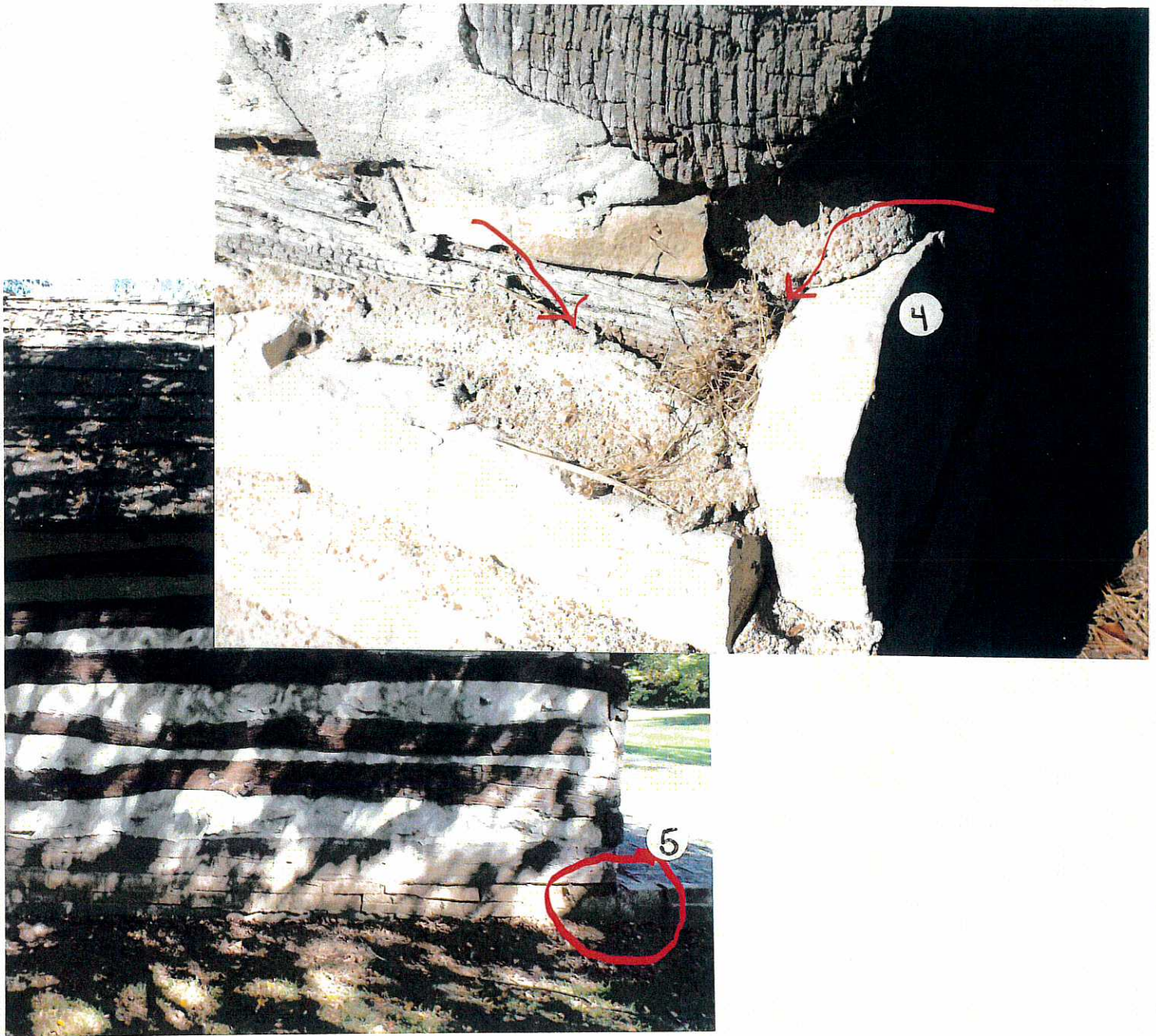
Last page-----Sources



- 1) Latch side of door jamb has kicked out at the bottom about 4 1/2" misaligning the logs that are attached to it. The lower rows of chinking under the window will most likely need to be removed prior to pulling the jamb back to its original position. Once the jamb is repositioned it needs to be fastened to the original framing around it. Remove fasteners / chinking around window as needed to re-align logs and window unit and refasten.
- 2) The wood step between the upper stone step and the bottom of door threshold has rotted. Replace with new white oak timber approximately 9 1/2" wide. Field verify height. Fasten to adjoining logs.



3) Replace window sill using white oak, white pine, walnut or fir.



- 4) Most of the front sill (log 1-1) was not available for viewing due to the stone steps. It is possible it may need replacing in its entirety. At a minimum the right side needs to be exposed. The stone work has been built up around the end grain of this log creating a water trap.
- 5) The left side needs to have the concrete taken out, examined and epoxy repaired.



- 6) The top plate logs, on which the rafters sit (logs 4-7 & 2-7), cantilever past the wall and past the roof line for no structural reason. Being exposed to the weather these ends have started to rot and the rot is working its way back to the bearing point. The cantilever log on the front left will need to be cut off, using epoxy, fill in any void under the bearing point and a new end doweled in using $\frac{3}{4}$ " fiberglass rods epoxied in. The remaining cantilever logs need only epoxy to fill the existing cracks on top. All 4 cantilever logs need to have Borate rods installed to prevent further rot.



- 7) On log 2-3, the last 4 ft. is hollow and needs to be cut off and new section of like log doweled on using $\frac{3}{4}$ " fiber glass rod epoxied in.



- C



- 10) Log 4-1, remove and repair concrete repair on right end of log same as above.



- 11) Throughout the cabin there are random holes approx. 2" in diameter that are filled with concrete. Remove all concrete plugs including end grain repairs and replace with epoxy in a way that it sheds water.



- 12) **Roof: The existing shake roof is in need of replacement** with a new treated CCA heavy shake roof. The current roof consists of two shake roofs. The bottom (interior) roof is actually laid upside down, with the butt of the shingle up vs. down. On top of the inner roof lays a layer of felt paper, then the outside roof which is laid in normal fashion with the butt of the shingle down. The spans of the shingles are at a maximum due to the spacing of the purlins. This makes the install of a new roof very delicate since the roofer will be supported by only the shingle itself. This will add to the labor of installing a new roof. Our best guess is this was done to enjoy the visual of the roof system and the shake roof from the inside and still be water tight. I did not see any sign of the roof leaking though.



- 13) **Chinking:** Overall the chinking is in pretty sound condition. Although, it is not properly tucked in on the underside of the logs to allow the water to run freely down the wall and not get caught by chinking and run inside. To replace the chinking would be one of the most expensive aspects for this cabin. The inside chinking looks OK and is not subject to rain. I feel the outside chinking may be salvaged by chipping off the existing mortar parging and replace with new, tucking the upper edge under the log. Recommend doing a test piece in the rear.



14) Remove spooky doll.



- 15) Stone walkway and steps: The existing stone entry is in good condition, though not ADA qualified. In addition, the stone work covers about one half of the front sill (log 1-1). This causes a very wet environment for the sill as well as no opportunity to inspect and apply treatments. **IF** the front sill needs to be replaced, it will be nearly impossible to do so with the stone work in place. I would recommend removing the stone work and install a ramp that will not trap moisture against the sill. (see Oge cabin at Drace park, Town & Country)

Note:

Log numbers: The first number in a log number is the wall number, 1 thru 4.
The second number is the placement of that log within the wall.

Last page-----Sources

Review:

- All issues addressed in this report should be done for the longevity of this cabin. Most issues are simple repairs. The log replacement will be the most involved.
- You may get a year or two more out of the roof, but it may as well get replaced during this restoration. Considering the cabin sits under the canopy of the trees, any wood roofs life span will be shortened. A new medium shake sill last maybe 15 years. You may want to consider going to a heavy shake instead (thicker shake). The heavy shake would be in keeping with the period of this structure and have more longevity.
- The chinking could remain but it is causing problems that we don't yet see.....recommend trying re-parging the exterior. It would be the most cost effective approach.
- The stone walkway *could* stay but the log sill (1-1) cannot be inspected and I fear it has issues. This is a load bearing log, supporting the floor system. The stone approach is not authentic and should not be touching the building.
- After completion of the restoration, you will be good to go for the first two years. At the two year mark and every two years after , check to see how the finish is holding up by throwing some water on it in different locations. If it does not bead up, respray the clear coat (garden sprayer works fine). Recommend respraying the borate every other round (4 years).

- Log replacement should use like logs from other old cabins. If these are not available, new logs should be sawn using White Oak logs then hewn to match existing logs. Green logs can be used but make sure they are borate treated as soon as sawn. The borate will soak in much deeper this way. The shrinking of the logs overall, will be minimum (1/4" or so).

Resources:

- Wood epoxy, fiberglass rods for wood and Abocast 8007-2 for filling masonry cracks: Abatron (800-445-1754) or www.abatron.com. Liquid wood and woodEpox. Compressive strength 2300-2800 psi.
- Borate: "Tim-Bor" or equivalent borate powder, and Bor 8 rods. Schroeder Log Home Supply-800-359-6614 or www.loghelp.com. Borate stops rot and is highly toxic to wood-destroying insects and fungi. None toxic to humans.
- Clear coat: Sherwin Williams - clear "superdeck". Or equivalent water based clear coat.
- Chinking: 1 part White Portland cement / 1 part lime / 6 parts fine Meramec sand applied over ¼" galv. Hardware cloth. Or parged over existing stone.
- Square nails: All exposed nails to be square.
www.tremontnail.com

Hackman Cabin in Conway Park



City of Creve Coeur
2018

DISMANTLED & DELIVERED VALUE \$40,000 +- Tim Rilly

Construction overview

The Hackman cabin is currently a “*dogtrot*” style log home consisting of two separate log structures under a common roof separated with a breezeway in between. This log home was moved intact using house movers, therefore it has its original fabric intact and well represents both periods of the original build dates of each cabin.

For this report, I will consider this structure as it stands today, though each cabin has a story to tell.

Both cabins are constructed of a mix of oak logs. The logs are hewn on two sides using a mix of “v” notches and half dovetail notching. Most framing members are pine i.e.... rafters, joist, flooring. The porch from the original site was a concrete slab and did not move with the cabin and is now constructed of treated framing and 1x decking. The porch framing is in good condition but a little under framed. The decking could use some work as some of the boards were replaced with plywood and the ends of the boards are showing signs of decay, being exposed to the weather and no gutters.

Most doors and windows are replacements but represent the period OK. In the short hall (dogtrot) there is a very nice single panel door on the west side that better represents the 1800’s (as far back as 1840’s). This door probably came from a salvaged cabin since it is too nice for the primitive original cabin (cabin 2), and too old for the newer addition (cabin 1). In addition, it is clear that cabin 1, although old, was salvaged from other cabins. This is evident by the mix of notching on the corners. Some are “V” notched, some are “half dovetail” notched. Salvaging log cabins was not uncommon for the time.

When the original single pen cabin (cabin 2) became a dogtrot cabin, cabin 2 was lowered in height to match the new roof line. This is probably where the fill logs came from for the rear of the dogtrot and the window opening in the old cabin. The existing roof should date to the time of the house expansion and is common in construction from gable to gable.

The pine T/G flooring is common throughout the house with the exception of the lower floor in cabin 2 (old cabin), which is a bit wider.

Cabin 2 still retains its original mud chinking (daubing) and is in very good condition. This should be considered when deciding on restoration approaches.

Cabin 1 has been plastered and wall papered over the original chinking. This too should be taken into consideration when deciding restoration approaches.

The existing shake roof needs to be replaced but I did not see evidence of the roof leaking.

The attic gable openings are covered by loose fitting shutters with no window behind them. Not animal nor water tight.

Contents of pictures

<u>Page #</u>	<u>Issue #</u>	<u>Description</u>
1.	None	Cabin 1, wall 1
2.	None	Cabin 1, wall -2, interior wall
3.	1-4	Cabin 1, wall 3- Sill, log replacements
4.	1-4	Cabin 1, wall 4- foundation, epox. repairs, siding
5.	None	Cabin 2, walls 1 & 4
6.	1-4	Cabin 2, wall 2-epox repair, cracked FP footing
7.	1-3	cabin 2, wall 3- sill, log replacement, epox. Repair
8.	Chinking	All exterior chinking

Note:

Log numbers: The first number in a log number is the wall number, 1 thru 4.
The second number is the placement of that log within the wall.

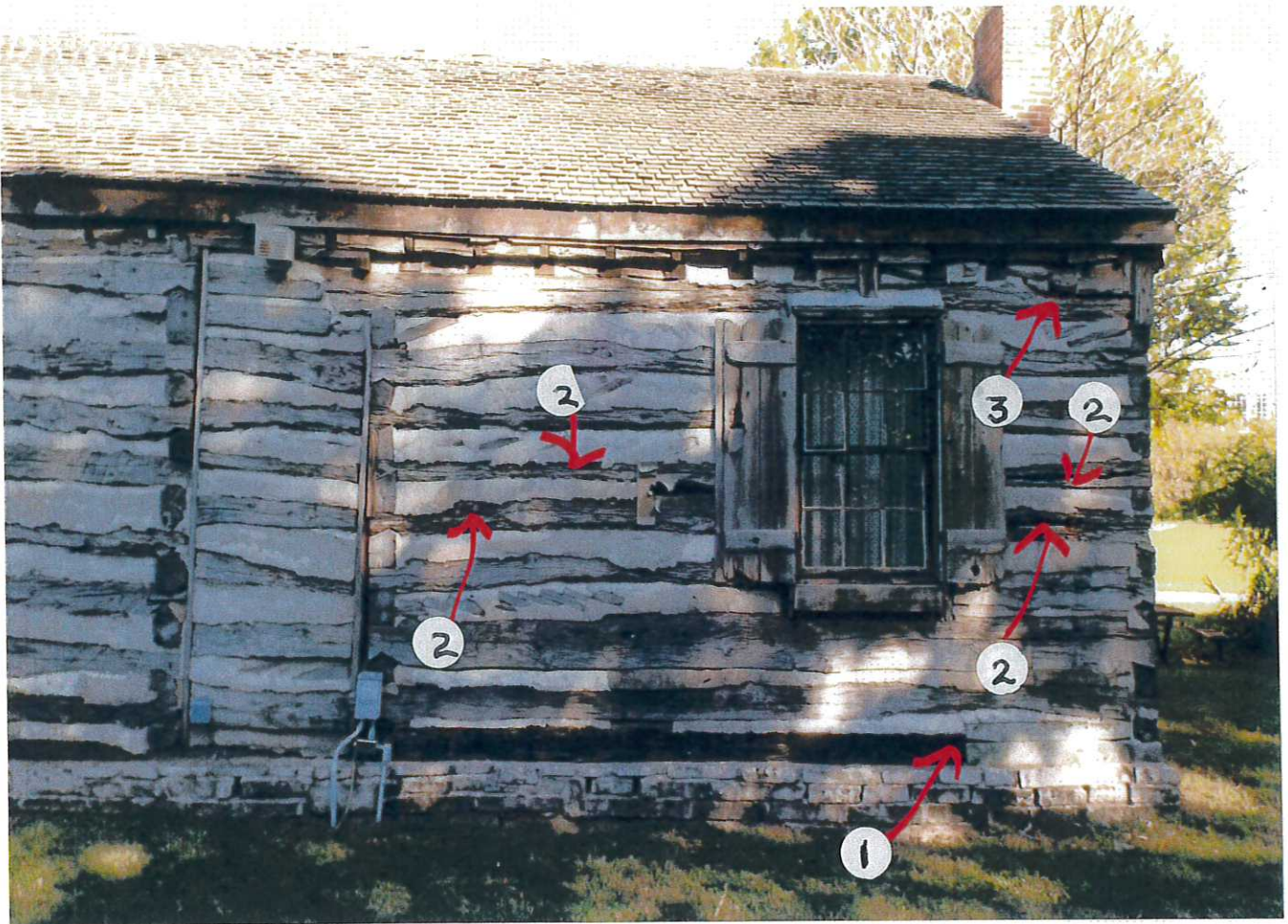


Cabin 1

Wall 1: logs are in very good condition.



Wall 2: Interior wall. No issues visible on this wall.

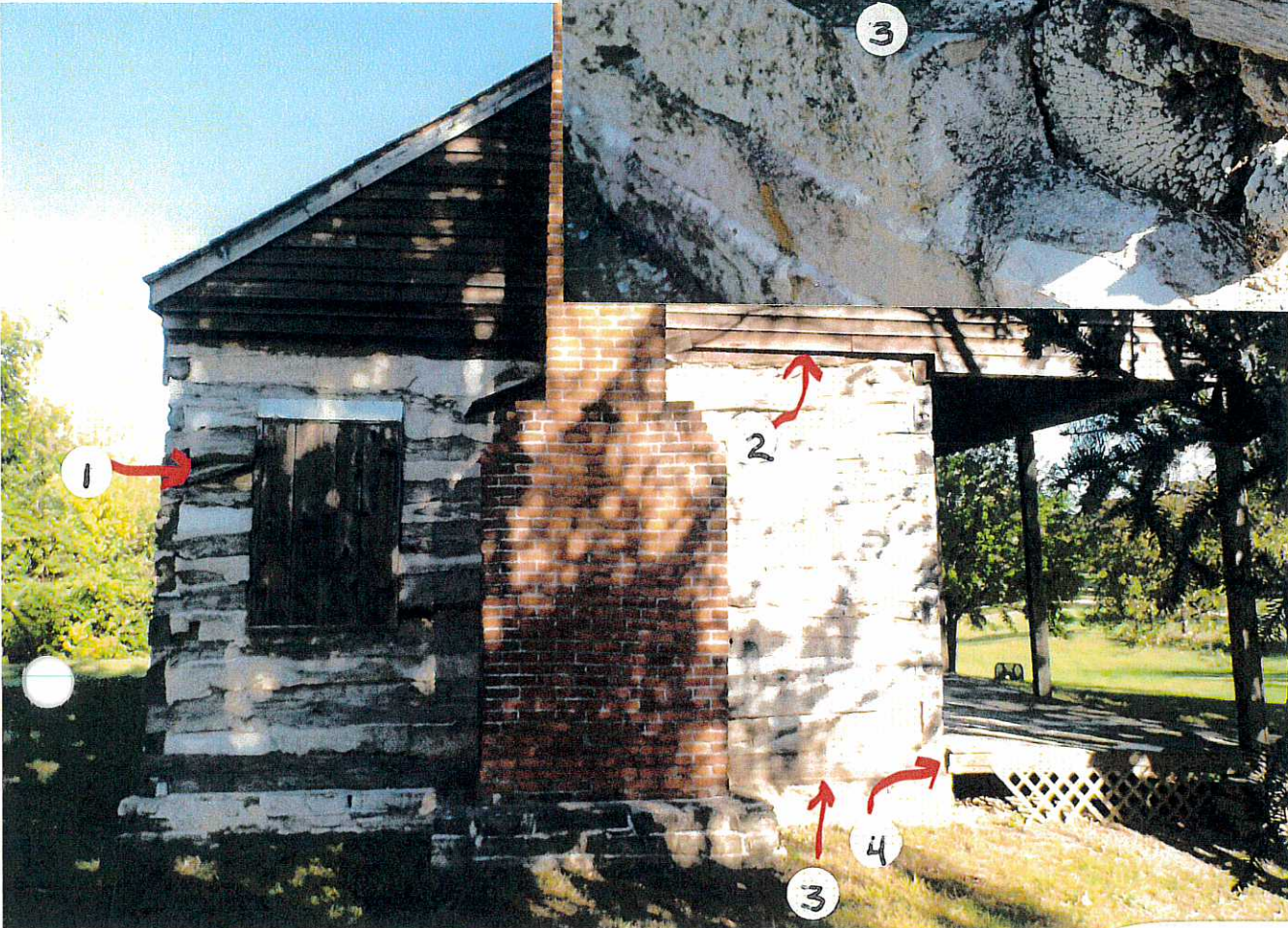


Wall 3:

- 1) The sill log has been replaced prior using segmented timbers of different sizes. They appear to be in sound condition and stable.
- 2) Logs 3-5, 3-6, 3-10 and 3-11 need to be replaced with like logs.
 - A. **Option one**) This must be done very carefully, not harming the plaster interior.
 - B. **Option two**) If the interior half of the log is sound, it is acceptable to replace only the outer half with a new log face using like logs in order to protect the plaster.

Choose which approach is less aggressive. Borate logs prior to install.

- 3) Log 3-14 sounds punky on the right end. Recommending drilling a small test hole(s) to get a feel for its condition and probing the interior. Replace rotted section as needed with a like log.
- 4) The remainder of the logs on this wall are solid but cosmetically unattractive.



Wall 4: All logs are in stable and sound condition.

- 1) Two small rows of chinking are missing around the windows exposing the interior plaster to moisture. Chink spaces between logs 1-6 & 1-7 and between logs 1-3 & 1-19; clean and re chink.
- 2) One piece of lap siding has blown off. Replace. (missing piece is resting behind the chimney.)
- 3) The foundation is larger than the cabins, leaving an exposed portion of foundation top with logs sitting on top. This is a water trap and should be flashed or at a minimum sealed with a quality sealant.
- 4) Log 1-10: remove concrete repair at logs end, clean and borate then replace with epoxy repair, tooled to look like surrounding log.



Cabin 2

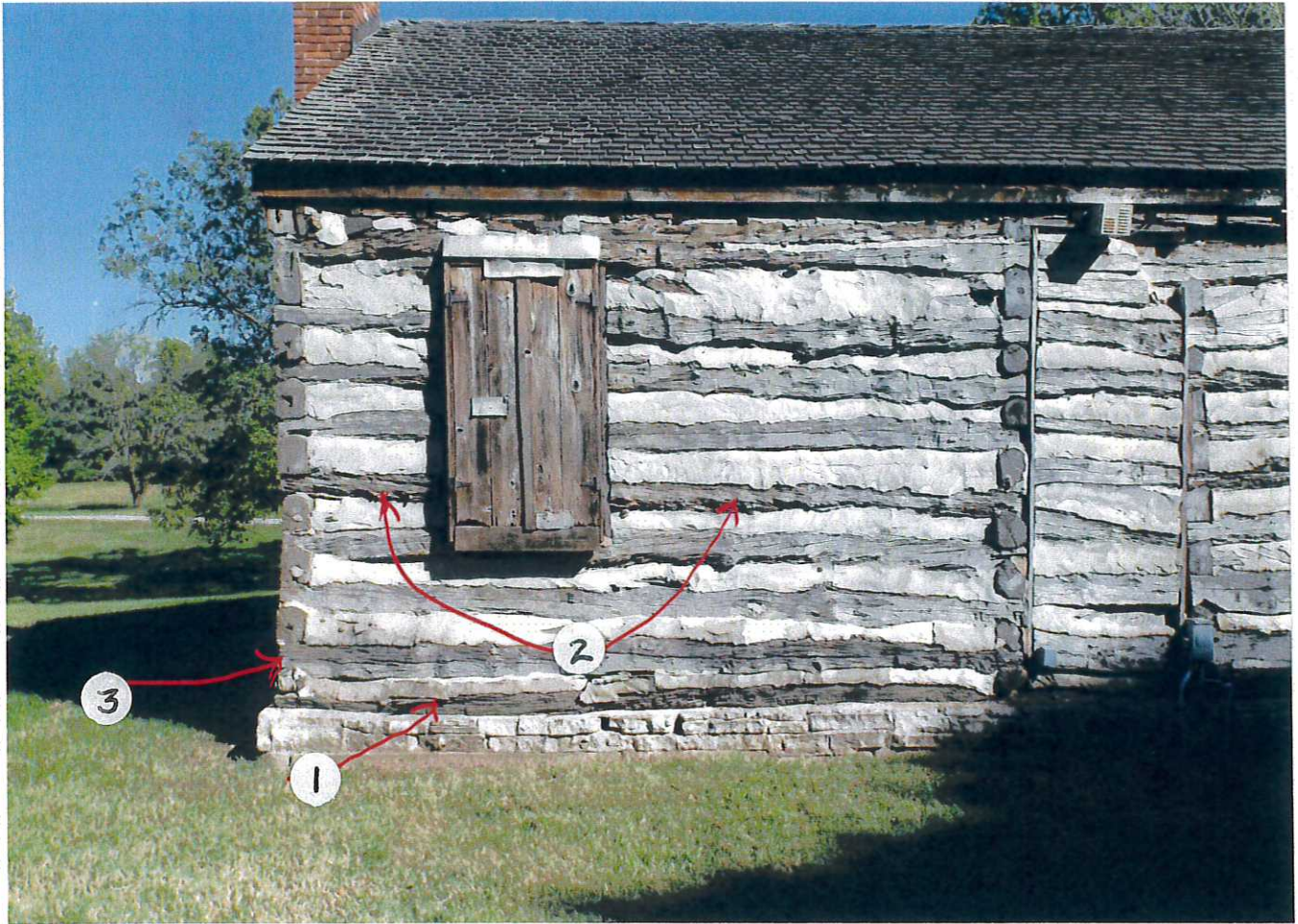
Wall 1: No log issues on this wall

Wall 4: Interior wall. No issues on this wall.



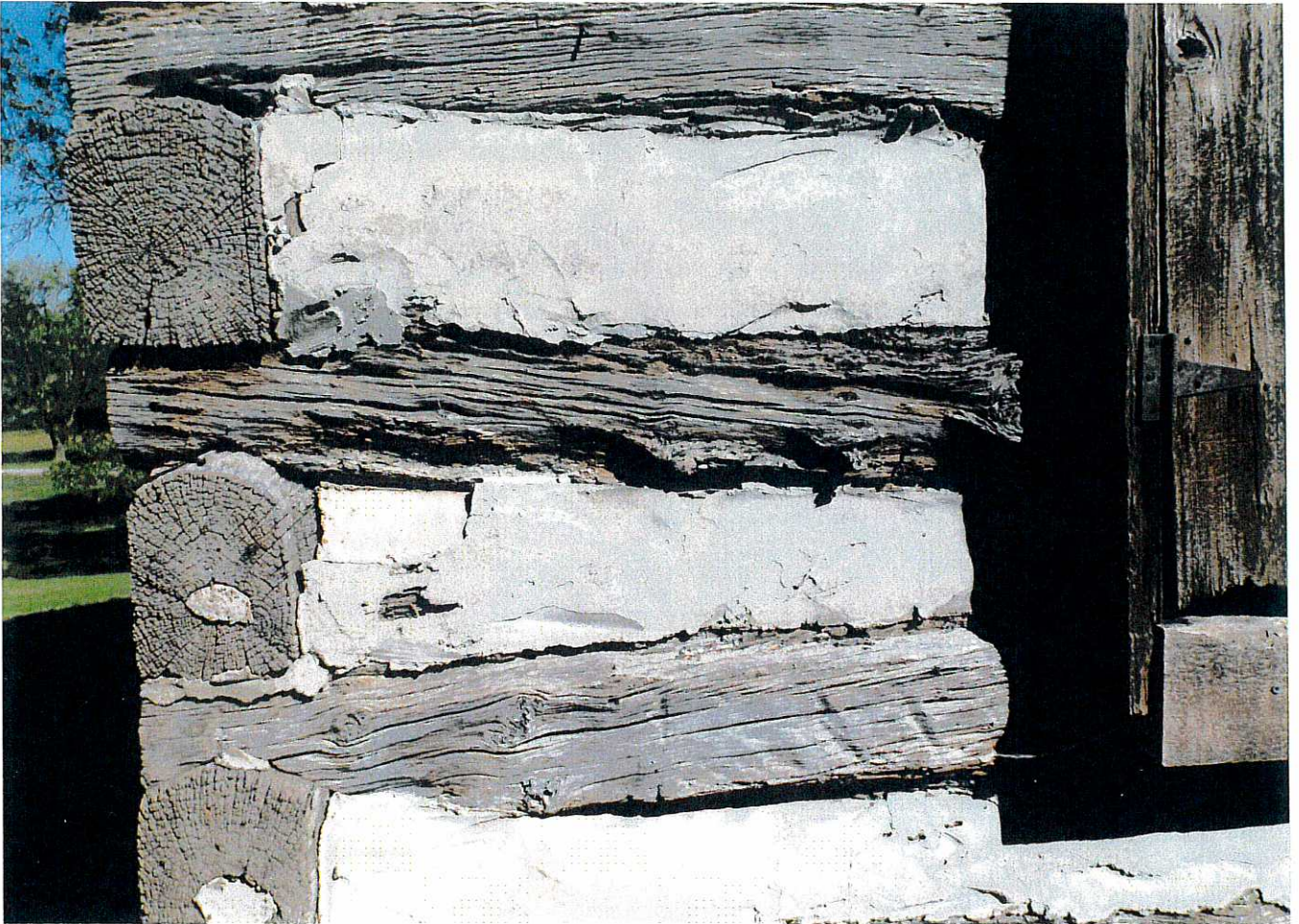
Wall 2: With the exception of issue one (log 2-10) logs are sound.

- 1) Epoxy repair void on end grain of log 2-10. Clean void and borate prior to applying epoxy system.
- 2) Re-chink all voids without chinking. Clean and borate void prior to chinking.
- 3) Fireplace footing has large cracks on the top and edge faces. Properly fill voids with mortar and/or masonry epoxy.
- 4) Replace any missing or overly worn lap siding.



Wall 3:

- 1) The entire sill (3-1) needs to be replaced. New sill should be of sound period timbers, if not available, new timbers measuring approx. 7" x 9" x 16' sawn from new white oak logs. Chinking will have to be removed to replace any logs in this cabin. Original chinking is mud. Replace with same leaving texture same as original daubing. Borate new logs prior to install.
- 2) Logs 3-5 and 3-11 are structurally sound but extremely weathered. Option to replace for cosmetic purposes with like log.
- 3) Log 3-2 has begun to hollow due to split in end grain of log. Clean out old wood, borate and epoxy repair void. Tool new repair to match existing log end.



The exterior chinking on this cabin is a detriment to the longevity of the structure. As the logs have lost girth over the years, the chinking has been added layer by layer and is not water tight at all. In many areas the chinking extends past the face of the logs allowing water to come down the wall and be drawn into the building. This must be addressed.

Review

The Hackman cabin is a wonderful opportunity for the City of Creve Coeur to interpret two different periods of log cabin living under one roof. Being that this cabin was moved in whole and intact it exhibits the original materials and techniques used in these two different periods as well as the transition of style and architecture as the family house needed to grow.

Over all the cabins are in OK condition but need to have the condition issues discussed addressed or the speed in which the cabin is deteriorating will accelerate.

The biggest issue I see, is how to address the log replacements and chinking without destroying the interior fabric, which needs to remain intact. Considering this cabin did go through a major remodel in the late 1800's, it would have been in keeping of the period to have sided the exterior of the cabin, leaving the only the porch's log walls exposed. If this approach is acceptable, then the chinking issue goes away and the log replacements can be approached with a little less visual purity and approached in a structural approach only.....meaning , do what needs to be done without affecting the interior and maintain stability knowing it will be covered with lap siding. This will make the cabin more historically correct in the long run. In addition, although the logs are firm and sound, the rear walls are just about worn out and can't take any more exposure to weather. This will be the best overall route to stabilize the structure and probably the most cost effective.

Whichever approach is chosen, all unpainted exterior woodwork should be borate treated followed with a clear coat. (See sources)

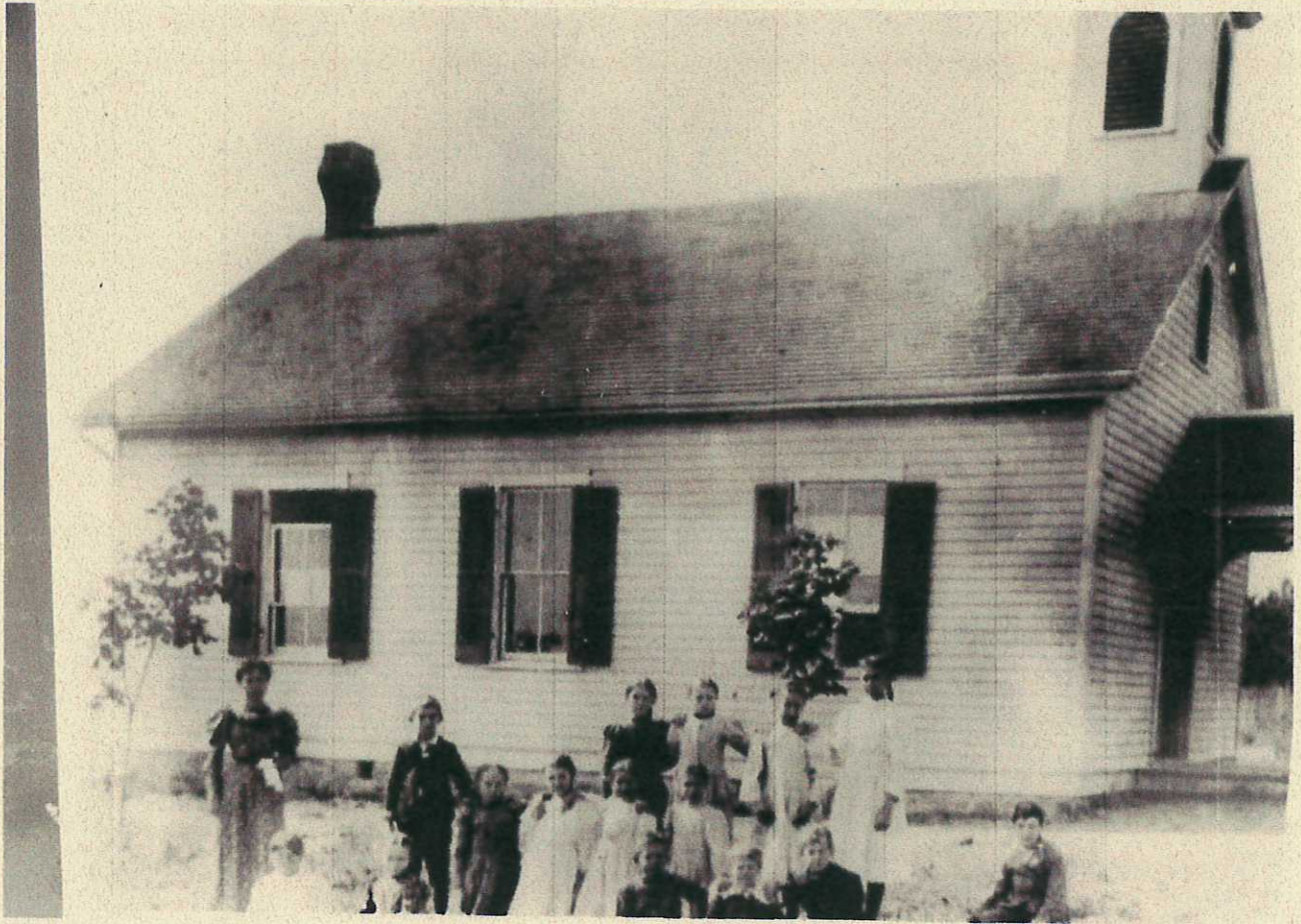
The gables need to be tightened up by replacing siding as needed, re-fitting the shutters and screening the attic opening as well. Replacing or repairing any other exterior wood work as needed.

Note: Log numbering: The left number indicates which wall, 1 thru 4. The right number indicates the position of the log within that wall.

Resources:

- Wood epoxy, fiberglass rods for wood and Abocast 8007-2 for filling masonry cracks: Abatron (800-445-1754) or www.abatron.com. Liquid wood and woodEpoxy. Compressive strength 2300-2800 psi.
- Borate: "Tim-Bor" or equivalent borate powder, and Bor 8 rods. Schroeder Log Home Supply-800-359-6614 or www.loghelp.com. Borate stops rot and is highly toxic to wood-destroying insects and fungi. None toxic to humans.
- Clear coat: Sherwin Williams - clear "superdeck". Or equivalent water based clear coat.
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www.tremontnail.com

The Lake School House



City of Creve Coeur

2018

Construction overview

The Lake School house is a very typical one room school house common in the late 19th century. Measuring at 24' wide by 36' long, it has three 2/2 double hung windows equally spaced on each side. The front entrance is centered on the gable end covered with a small gabled porch. There is a cloakroom to the left and to the right as you enter the building. Centered on the rear wall (opposite the entry) was the woodstove and blackboards. On this particular school house, there is also a rear door that appears to be original to the structure.

This school was built on a stone foundation with frame construction using dressed pine lumber. When moved to its current site, it was put onto 14" round piers infilled with concrete block walls. The exterior walls were covered with pine lap siding (clapboard) with a 4 1/2" exposure. The original bell tower no longer exists, perhaps removed when the school was moved intact to its current location. It has been replaced a little further back on the roof than it was originally with a smaller, shorter one with less decorative details. As was the rule, the exterior was painted white. Originally it had a wood shingle roof but now has a new metal "fake shake" roof. It currently has no gutters as it once did.

The flooring is typical for the period using 3 1/2" T/G pine. Similarly, the ceiling too is of 3 1/2" T/G pine but with the addition of a decorative 3/8" bead on one edge of each board (referred to as bead board). Walls are plaster and lath, painted white with a band of black caulk board painted above the chair rail going around the room at window sill height. All openings are trimmed with decorative trim pieces with rosettes on the corners and painted.

Contents of pictures

<u>Page #</u>	<u>Issue #</u>	<u>Description</u>
1.	1	Grade is too high, rebuild entry deck, reset post
2.	2	Damage due to grade, repair corner
3.	3	Porch has sunk out of level
4.	4	Misc. repairs and paint
5.	5	Door sill on rear repair
6.	6	Concrete infill cracks, repair
7.	7	Basement support post, replace



- 1) The grade on the front elevation is about 1' (foot) too high and dirt is up against the structure as well as the deck and porch post sitting in the dirt. The entire front needs to be re-graded so water flows away from the building. Rebuild the entry approach with either treated wood or masonry, with raised masonry units under the porch post. Borate any raw wood newly exposed and paint.



- 2) On the right side of the front elevation, a landscape timber has been placed against the wood water table of the structure. Remove timber and repair any damage hidden behind rotted water table. Borate all exposed wood prior to painting.



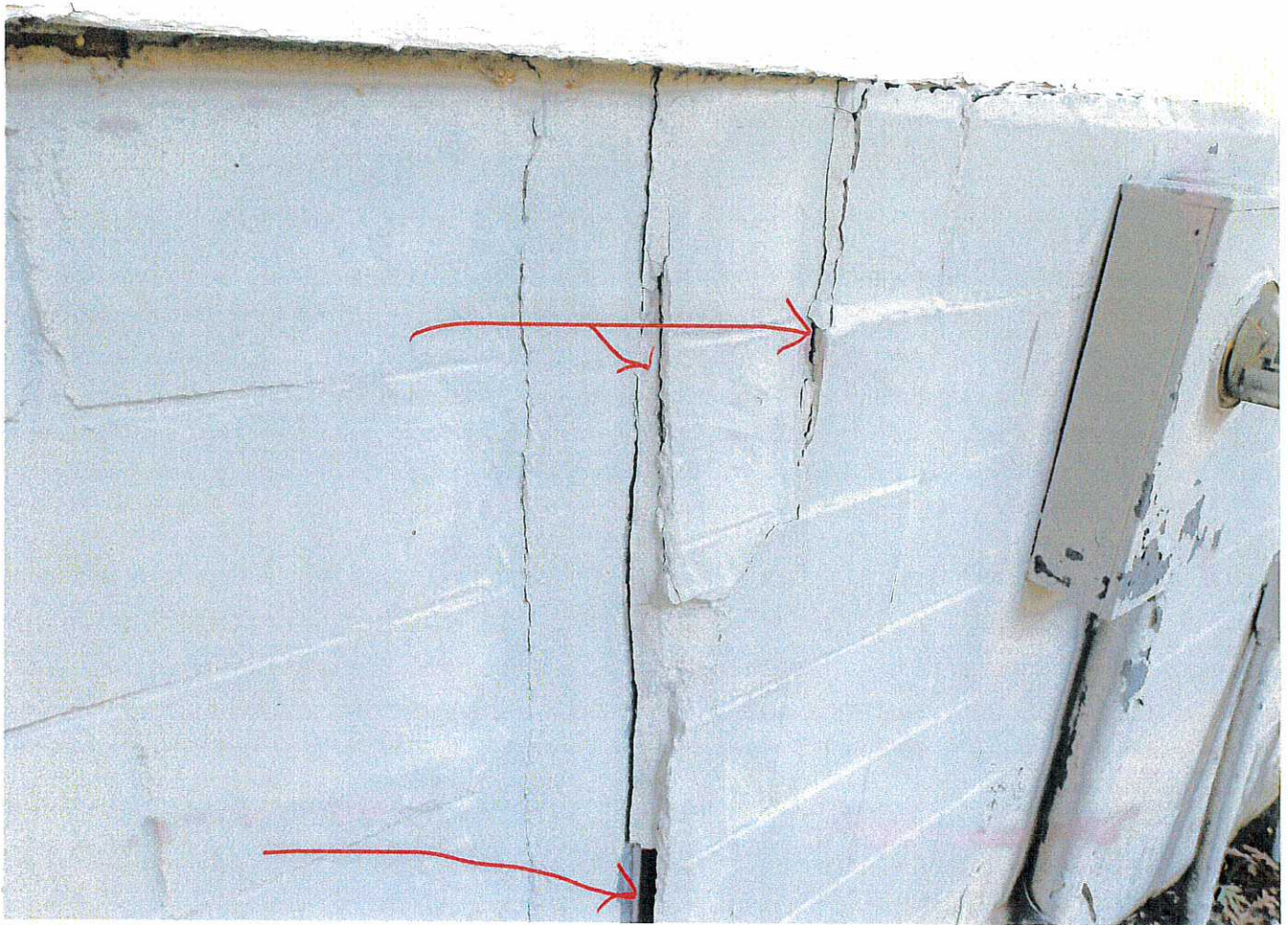
- 3) The porch post have either sunk or rotted at the bottom causing the porch's upper structure to be un-level. After the front has being excavated for its water issues, recommend *trying* to jack the porch to a level position. While doing this, be very aware of how the new roof is reaction to being moved. It may be necessary to stop jacking prior to getting it level. This is cosmetic and not a structural issue.



- 4) Throughout the structure there are several small pieces of trims and siding that have nicks, chipped areas and missing parts. This is cosmetic only. A lot of bad looking areas are merely missing paint. At a minimum scrape and repaint the structure. Replace worn wood parts as desired.



5) In the rear of the building, replace door sill.



- 6) The block fill between the vertical piers has cracks in multiple places. Fill with Abatrons "Abocast 8007-2" or equivalent.



- 7) In the interior of the basement on the rear wall there is hewn post supporting the center carrier beam. This post is sitting in the mud which has accumulated on top of the slab, causing it to start rotting. Recommend removing the old post and replace with a new 8x8" treated post with a short header beam on top to span the width of the carrier beam. This new post to sit on a new masonry unit at least 8" high. Fasten post to concrete pier top and bottom as well as to the carrier beam. The post needs to be there due to inadequate bearing on the concrete pier.

Review

The Lake School house is over all in very good condition. Most repairs are cosmetic in nature with the exception of some repair/replacing of the lower components on the front and corners due to improper grade. (per our initial meeting at the site, it is my understanding that the City will assume responsibility for the poor drainage issues.)

The structure, being original to the late 19th century, has accumulated many, many coats of paint causing a loss of detail in the moldings and other details. A very hearty scraping and quality paint job will be sufficient but adding to the visual loss of detail.

The only structural work will be on the front and little on the front sides where the water table boards have rotted and probably some of the band boards (sills) on the long sides. The post in the basement will be simple to replace, though the carrier beam should be lifted about a ¼" to remove the old and replace the new, then lowered to a tight fit. The rear wall has a bow to it that I believe has been there for a very long time. The rear piers were even poured with the center pier accounting for the bow. I would not consider this a structural issue without further discovery. I would recommend bench marking the bow in a way that it can be kept tract of to see if it indeed is expanding. Further discovery will tell us more, as of now, it is not accessible for viewing.

Most of the molding on the school are still common today and should not be a hard to find. The decorative brackets are out of position due to settling. They should be re-fitted to a more visual appealing position.

The interior is in extremely good condition and needs no work that I could see other than repairing and refitting the rear door.

It would be nice to rebuild the exterior section of stove flu for authenticity and visual appeal. A bracket would have to be installed in the attic to support this as well as the new flu being flashed.

Review:

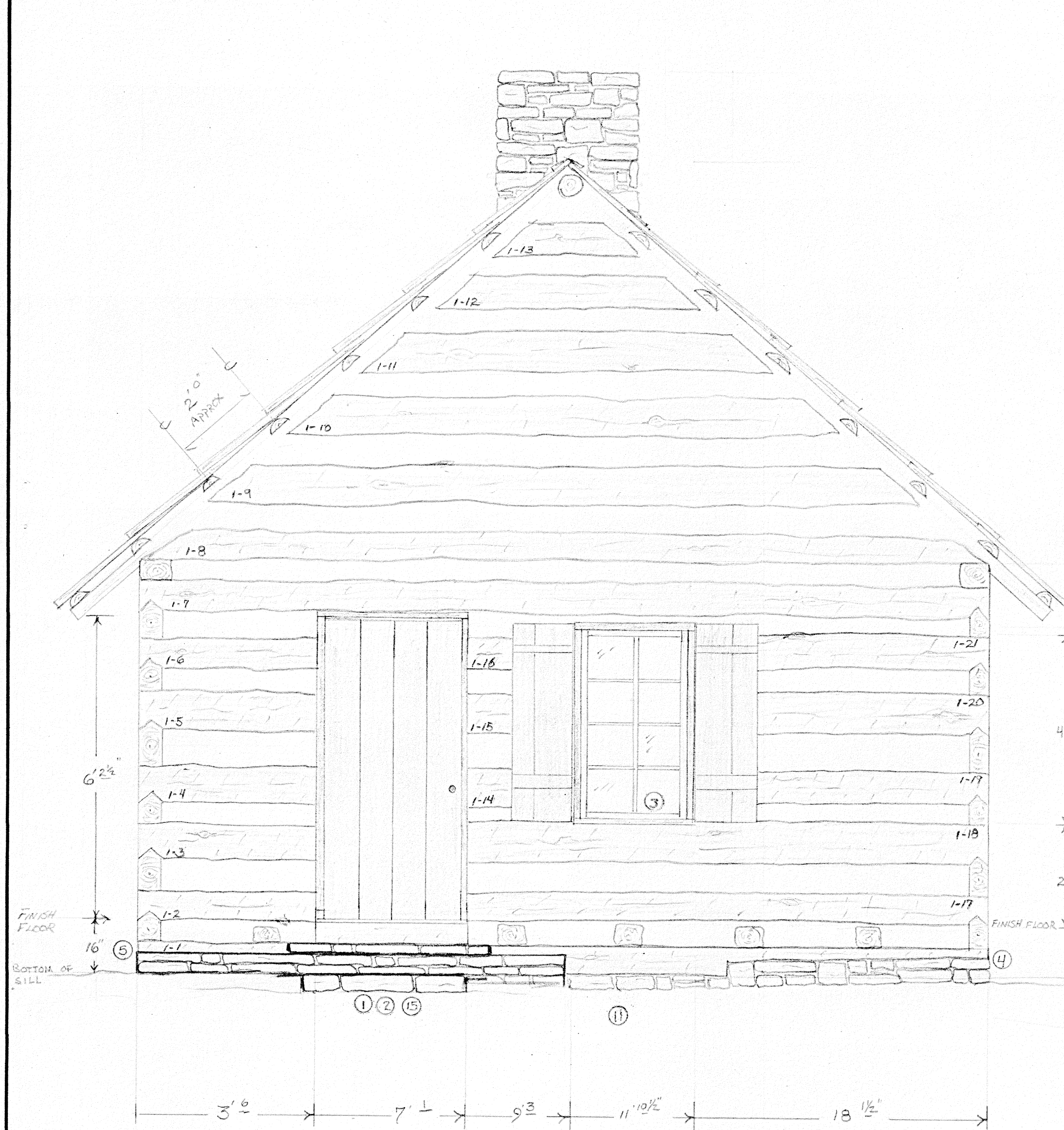
- All issues addressed in this report should be done for the longevity of this cabin. Most issues are simple repairs. The log replacement will be the most involved.
- You may get a year or two more out of the roof, but it may as well get replaced during this restoration. Considering the cabin sits under the canopy of the trees, any wood roofs life span will be shortened. A new medium shake sill last maybe 15 years. You may want to consider going to a heavy shake instead (thicker shake). The heavy shake would be in keeping with the period of this structure and have more longevity.
- The chinking could remain but it is causing problems that we don't yet see.....recommend trying re-parging the exterior. It would be the most cost effective approach.
- The stone walkway *could* stay but the log sill (1-1) cannot be inspected and I fear it has issues. This is a load bearing log, supporting the floor system. The stone approach is not authentic and should not be touching the building.
- After completion of the restoration, you will be good to go for the first two years. At the two year mark and every two years after , check to see how the finish is holding up by throwing some water on it in different locations. If it does not bead up, respray the clear coat (garden sprayer works fine). Recommend respraying the borate every other round (4 years).
- Log replacement should use like logs from other old cabins. If these are not available, new logs should be sawn using White Oak logs then hewn to match existing logs. Green logs can be used but make sure they are borate treated as soon as sawn. The borate will soak in much deeper this way. The shrinking of the logs overall, will be minimum (1/4" or so).

Note:

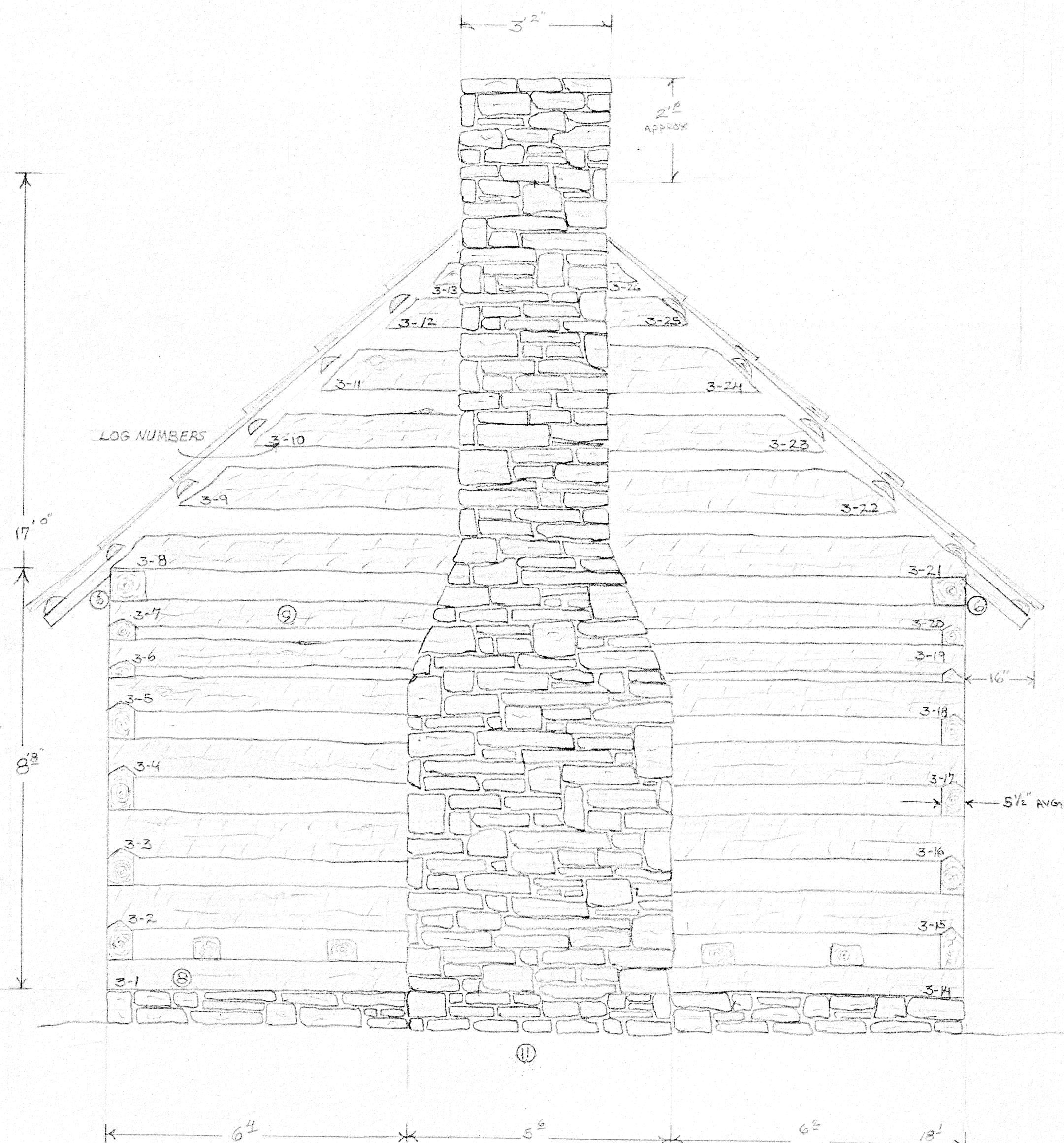
Log numbers: The first number in a log number is the wall The second number is the placement of that log within the wall.

Resources:

- Wood epoxy, fiberglass rods for wood and Abocast 8007-2 for filling masonry cracks: Abatron (800-445-1754) or www.abatron.com. Liquid wood and woodEpoxy. Compressive strength 2300-2800 psi.
- Borate: "Tim-Bor" or equivalent borate powder, and Bor 8 rods. Schroeder Log Home Supply-800-359-6614 or www.loghelp.com. Borate stops rot and is highly toxic to wood-destroying insects and fungi. None toxic to humans.
- Clear coat: Sherwin Williams - clear "superdeck". Or equivalent water based clear coat.
- Chinking: 1 part White Portland cement / 1 part lime / 6 parts fine Meramec sand applied over ¼" galv. Hardware cloth. Or parged over existing stone.
- Square nails: All exposed nails to be square.
www.tremontnail.com

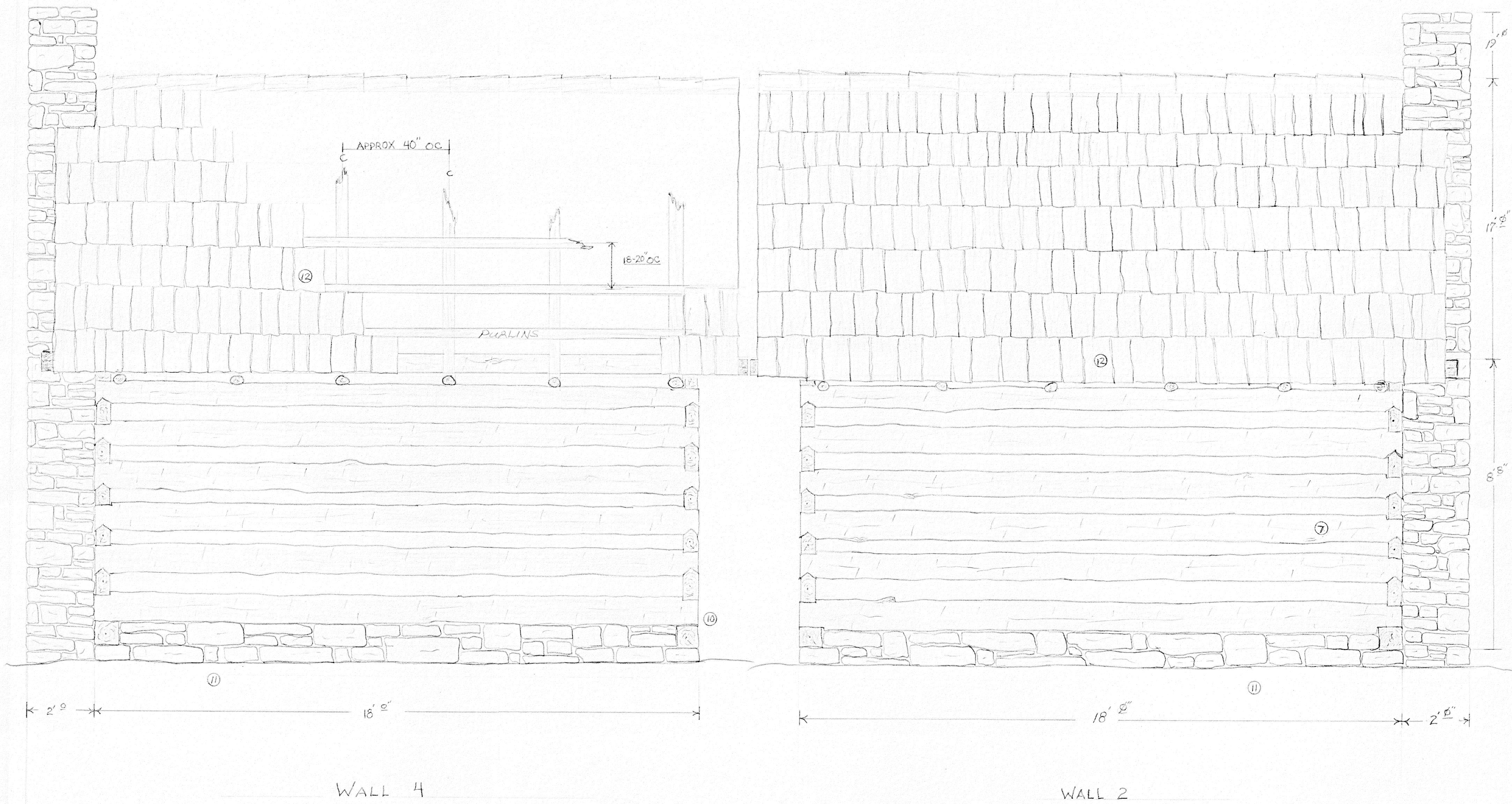


WALL 1 (FRONT)

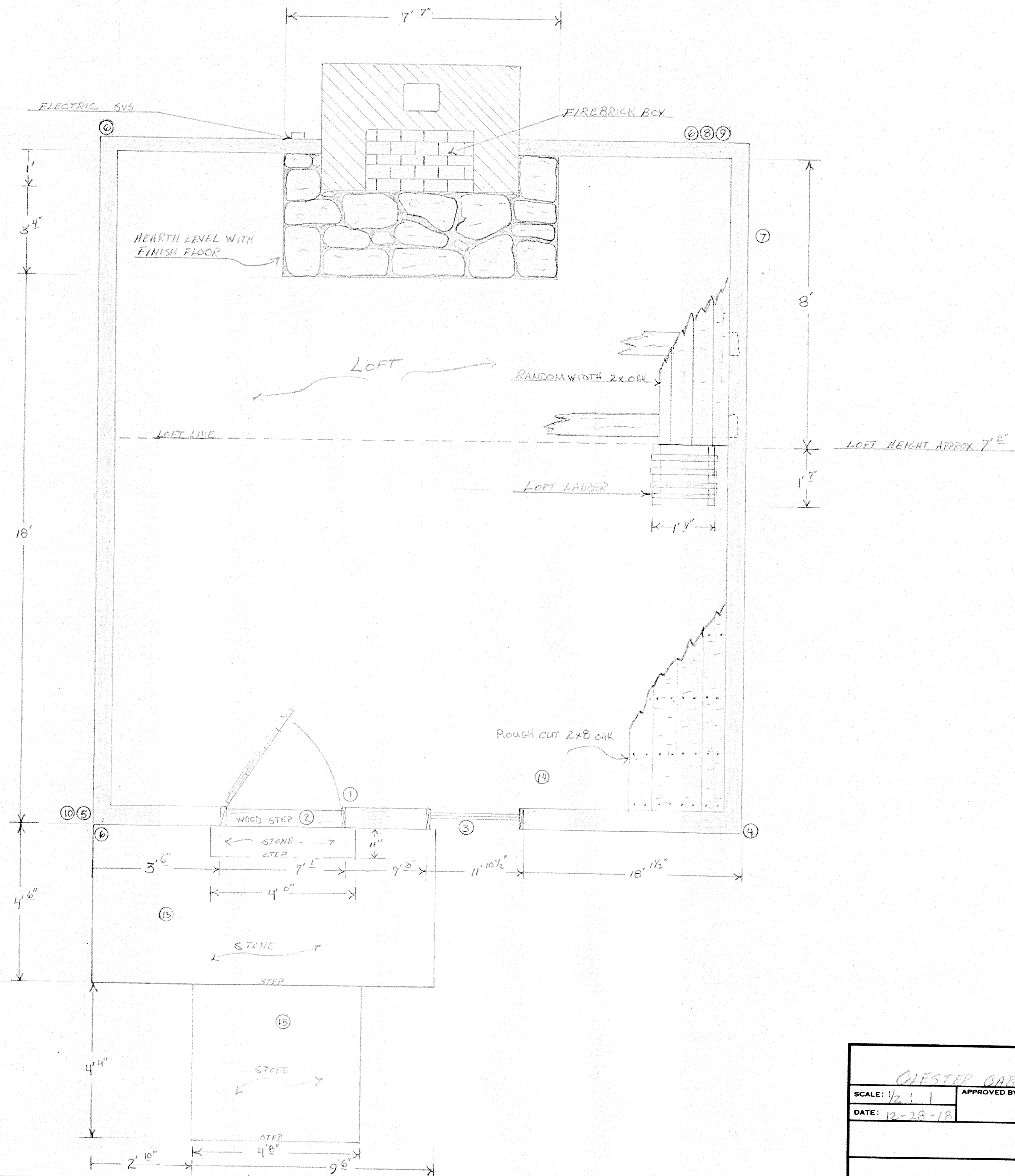


WALL 3 (REAR)

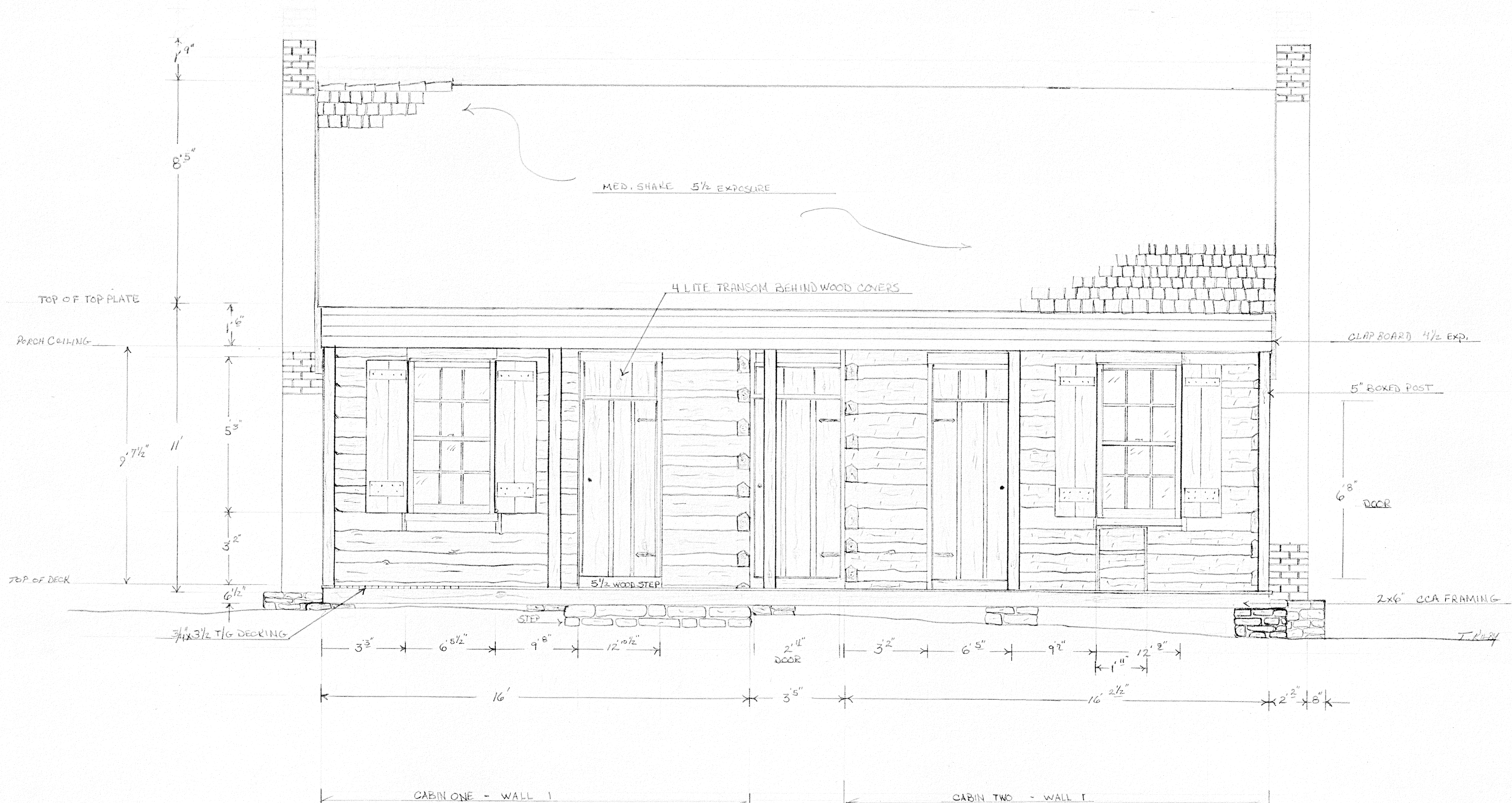
GLESTER CABIN		
SCALE: 1/2" = 1'	APPROVED BY:	DRAWN BY: J. K. KIRBY
DATE: 12-10-19		REVISED
DRAWING NUMBER		



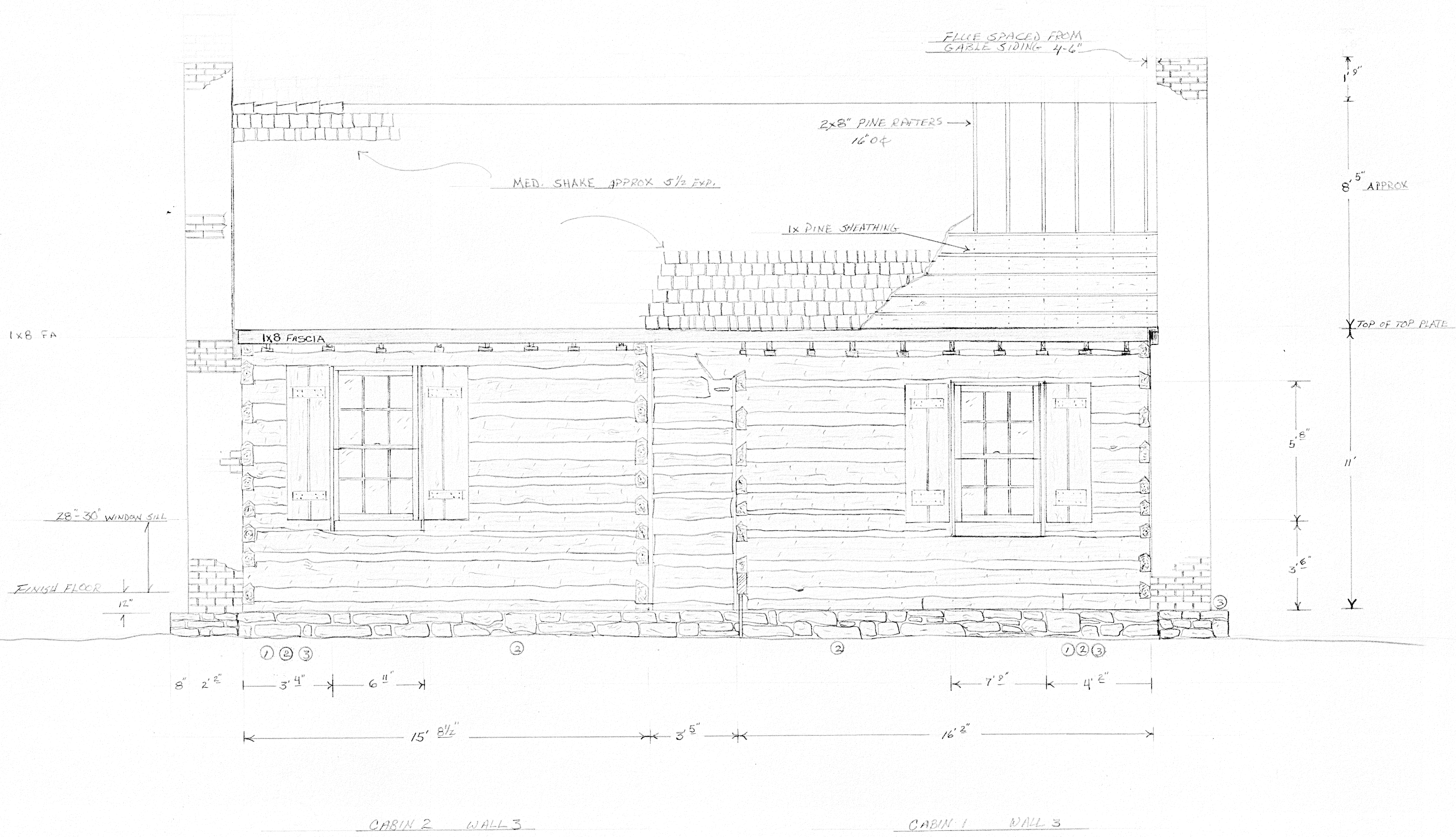
CLESTER CABIN		
SCALE: 1/2" = 1'	APPROVED BY:	DRAWN BY: T. KILBY
DATE: 12-20-18		REVISED
		DRAWING NUMBER



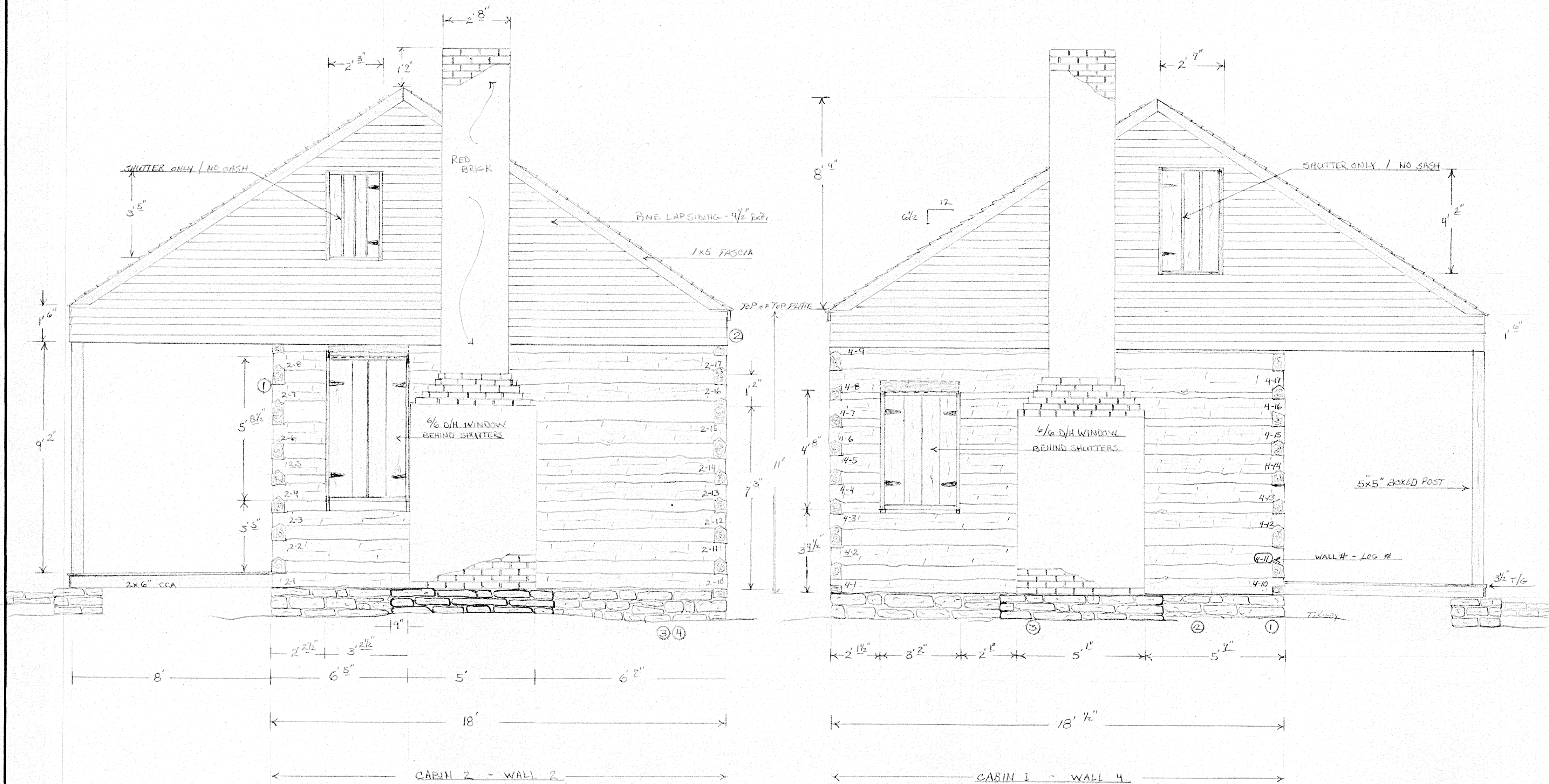
OLESTER CABIN		
SCALE: 1/2" = 1'	APPROVED BY:	DRAWN BY: T. HURRY
DATE: 12-28-18		REVISED
		DRAWING NUMBER



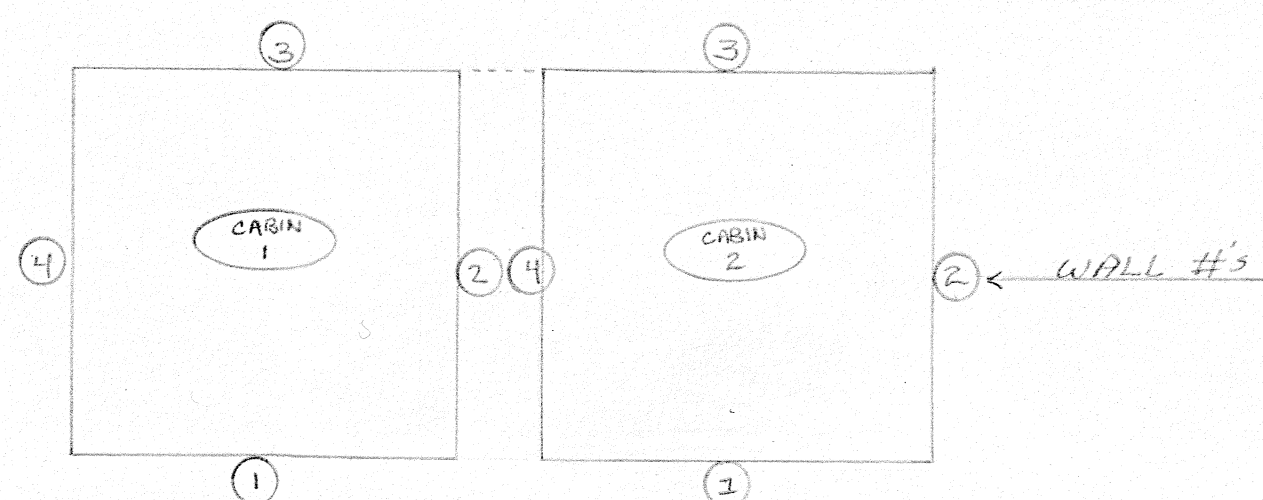
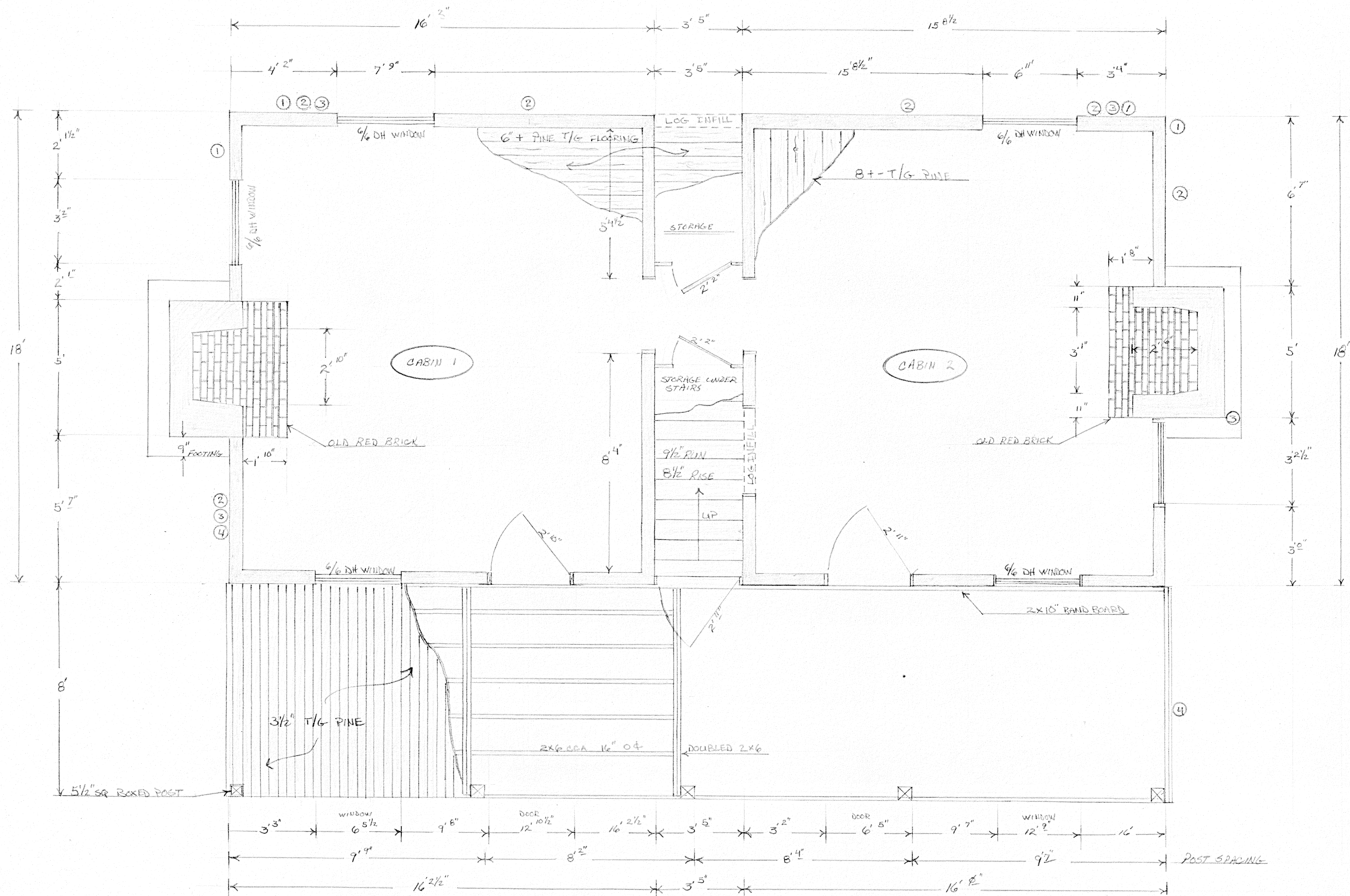
HACKMAN CABIN		APPROVED BY:		DRAWN BY: J. KUBA	
SCALE: 3/8" = 1'		DATE: 1-15-19		REVISED	
DRAWING NUMBER					



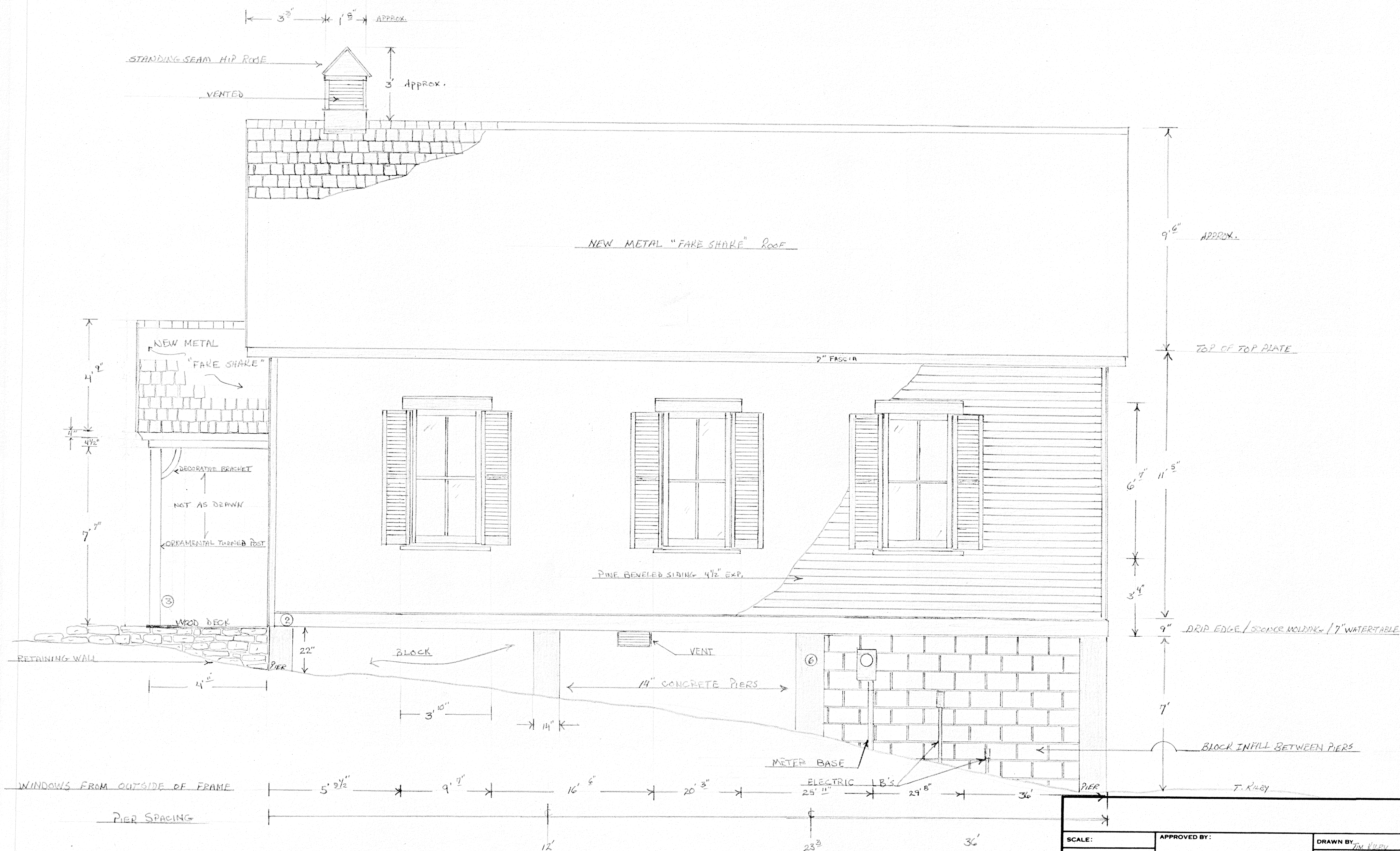
HACKMAN CABIN		
SCALE: 3/16" = 1'	APPROVED BY:	DRAWN BY: T.M. LURY
DATE: 1-3-19		REVISED:
		DRAWING NUMBER



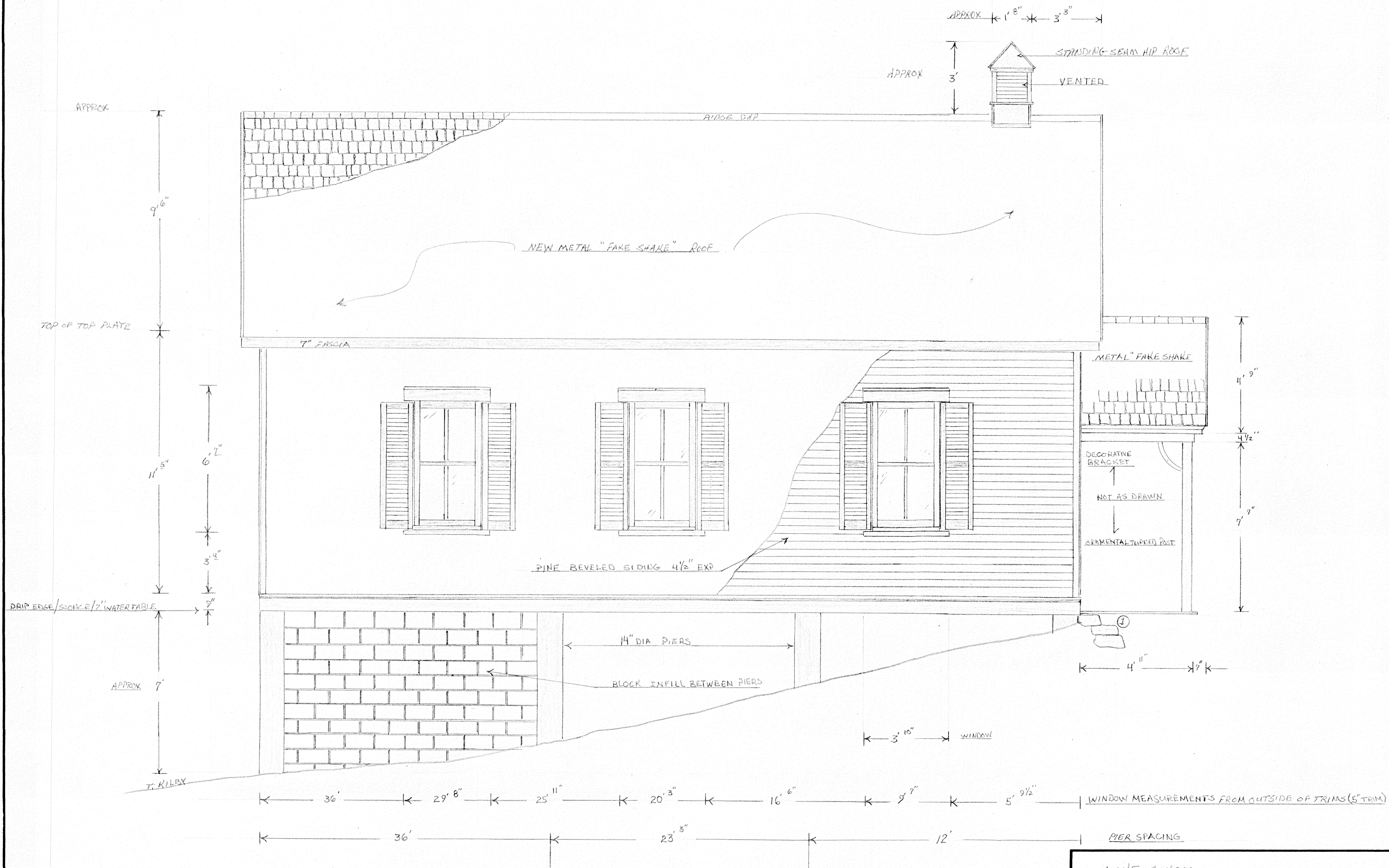
HACKMAN CABIN		
SCALE: 3/8"	APPROVED BY:	DRAWN BY: <i>Tommy</i>
DATE: 1-19-19		REVISED
		DRAWING NUMBER



HACKMAN CABIN		
SCALE: 3/8"	APPROVED BY:	DRAWN BY: T. KILBY
DATE: 1-24-19		REVISED
		DRAWING NUMBER



SCALE:	APPROVED BY:	DRAWN BY: T. RILEY
DATE:		REVISED
		DRAWING NUMBER



LAKE SCHOOL

SCALE: 3/8"

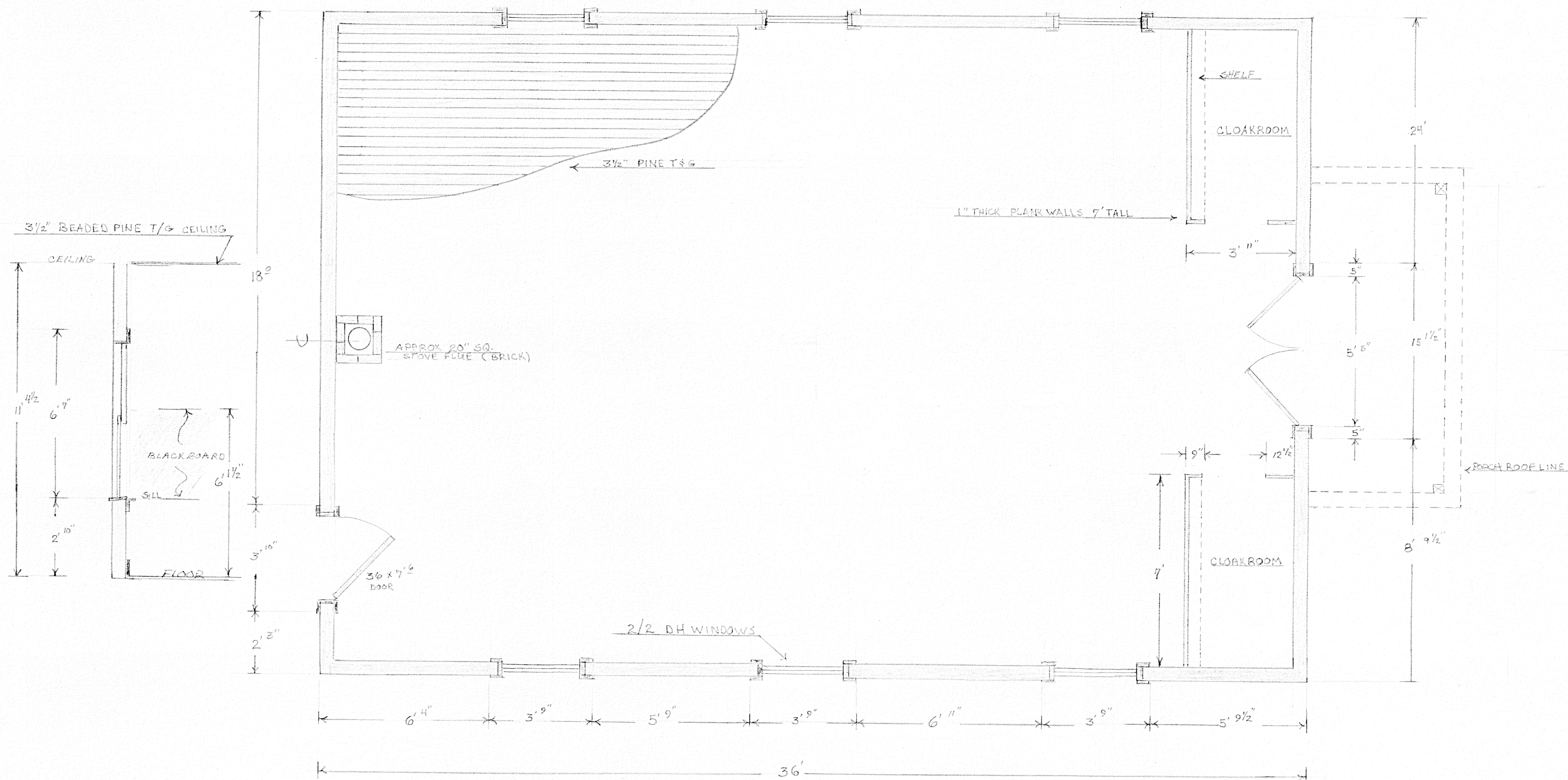
APPROVED BY:

DRAWN BY T. KILBY

DATE: 2-1-19

REVISED

DRAWING NUMBER



LAKE School		
SCALE: 3/8"	APPROVED BY:	DRAWN BY: J. K. M.
DATE:		REVISED:
DRAWING NUMBER		