
***Exterior Condition Assessment
Of The
Wren Community Hall
34996 Wren Road
Philomath, Oregon***



Submitted To:

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INVESTIGATION SUMMARY

SCOPE: The observations and recommendations of this report are intended to provide an assessment, discussion of alternatives, and direction for the necessary work to rehabilitate and preserve the structure and exterior envelope of the Wren Community Hall located on the north side of town. The building is owned and managed by the non profit Wren Community Club and its volunteers. The study's scope included an examination of the structure, its exterior enclosure's condition, and the development of recommendations for rehabilitation work. The field investigation and study was conducted during a very hot, dry August, 2015.

HISTORY AND BACKGROUND: The Wren Community Hall was constructed in 1939 with donated land and the help of interested community members who volunteered materials and their time to build the hall. A short time after the original construction an addition was built on the north end that provided supplemental space for refreshments. The hall was used for music, dances, school functions, youth basketball, and a variety of community events. By 1974, use and membership of the building had declined substantially leading to its disrepair. The Corvallis Horseshoe Club became involved with the building and installed Oregon's only interior horseshoe facility with four pits. The group maintained the building until 2005, when new community interest decided to return the building to its original uses. With the help of the horseshoe club they removed the pits, its protective elements, and made other repairs. The volunteers then raised funds for a well, septic system and interior restrooms. In the past ten years there have been a series of improvements.

BUILDING USE: The Community Hall consists of the large group space and within the addition a small meeting-refreshment space with an adjoining kitchen work space, and the two single occupancy restrooms. Currently, the building is used for occasional community events, rentals, and Club meetings. It is rented to other groups between six to twelve times a year. More use is anticipated as improvements are provided.



North and West (Front) Elevations



South and Partial West Elevations



North End of East (Rear) Elevation, Woodshed on Right



North Elevation

DESCRIPTION AND OBSERVATIONS

The Wren Community Hall is a wooden, single story, gabled roof rectangular structure. The original single room building portion is approximately sixty feet long (north-south) by forty feet wide. A rectangular addition matching the width and twenty feet long, but lower in height, was constructed shortly afterwards with matching materials. On the west side of this north addition there are two single occupancy restrooms, one being ADA accessible, and a storage area with stair access to the attic. On the east side there is an area developed with residential grade kitchen facilities. The hall is accessed on the north end of the west side with a covered, open entry porch that is enclosed on the sides. There are two covered exit porches on the back [east] side. One is located at the north end of the main hall and the other is near the north end of the addition.

SITE

Although assessment of the site was not part of this project's scope, the following is provided to better explain the building and its context. The hall is sited on a gently southeast sloping site on the east side of Highway 223 approximately one mile north of the town of Wren. There is graveled parking along the front of the building, with an eighty foot long grassed area extending south toward the woods and twenty foot extending east of the building toward brush and the seasonal drainage. The north side yard is wooded. A ten foot by sixteen foot wood shed is located fifteen feet off the northeast corner of the addition. The septic tank is located directly adjacent to the east building wall on its south end. The drain field is located to its south. The well is located off of the north end of the building and is connected to a pressure tank located in an exterior compartment on the northeast corner of the addition. There is no storm or rain drain system. The building and the woodshed have electrical service that is provided by an overhead connection from a power pole approximately 130 feet north of the building.

EXTERIOR

WALLS

The exterior walls are clad on all sides with painted channel siding having a 5" exposure. The siding is applied directly to the stud framing without sheathing or building paper. The framing consists of full size 2" x 4" studs at 24" o.c. Cornerboards are overlaid at the building corners and vertical wall intersections. There is door and window trim but there is no trim at the roof to wall intersection, or water table. The siding at the north addition matches, although the coursing does not align. The siding on the original north wall exists as an interior finish within the addition's interior.

The south gable end receives the brunt of the weather. Earlier photographs from the 1980s indicate a very weathered condition. The siding was repaired recently in 2012 when replacement boards [taken from the north end of the attic] were installed, and the building was repainted. As viewed from within the attic, there

is substantial daylight showing. This translates into moisture penetration when rainy and windy. There are also numerous openings at the joints between the wall and roof at the eaves. This is less of a moisture issue due to the roof overhang. It is more of an insect or potential bat or bird problem.

WINDOWS

The main hall has side wall windows with 7 on the west and 8 on the east and none on the south. The windows are wood hopper type [bottom hinged, inswinging with a chain restraint], 24" x 48" in size, and a 2/3 single glazed configuration. The addition has two windows on the east and west sides and three on the north side using wood casement type sash, 35" x 29" in size, and a 3/2 single glazed configuration. The windows have flat casings and sill extensions. The windows, glazing and assemblies are in good condition. They were repaired with new putty and paint in 2013.

ENTRY

The building's main entry is located at the northwest corner of the main hall and flush with the interior flooring. It consists of a 12' wide by 10' deep vestibule open on the west but enclosed overhead and on the sides for shelter. Walls and roofing match that of the building and it appears to have been built in 1939 as part of the original construction. The ridge of the entry's gable roof intersects the west wall just below the main roof eave. The vestibule has a 7'-6" ceiling that is finished with painted bead board, also used on the inner walls. On the north side there is an inner wall with a ticket window in the middle and posters on either side. On the south side there is a bulletin board for current events, and a lending library wood cabinet. The flooring uses unfinished 2 x 6 spaced deck boards. Access into the hall is through a pair of 3 foot wide stile and rail varnished, unstained fir doors. The doors, part of more recent rehabilitation work, open outward, have lever handles, are weather stripped, and are in good condition. A wood entry ramp and landing area was recently installed for ADA access from the parking area to the entry. The ramp and its side rail and curb are constructed with pressure treated, stained lumber. The ramp extends to the north of the entry and is associated with a designated parking spot.



Entry Vestibule



East Elevation and Porches

REAR DOORS AND PORCHES

There are two exit doors with porches and steps to grade on the east side of the building. One is located near the north end of the addition for direct access to the wood shed. It has a deck of approximately 4 foot square with two stair treads that descend to a wood landing on grade. The deck is 27" above grade and is a few inches below the interior floor of the kitchen. The other deck is located at the north end of the main hall. It has a landing of approximately 8 foot wide by 4 foot deep and has four stair treads [open risers] leading down to natural grade. This deck is 36" above grade, but is flush with the interior floor. Both decks have open railings constructed with pressure treated wood. Both also have low sloped shed roofs that are sheet metal clad over plywood with 2x4 framing. They each over extend the decks and steps and are supported with their own 4x4 pressure treated posts at the low end and attach to the eave framing of the building. This access has a panel configured, fiberglass outswinging exit door, while that at the kitchen is outswinging and of wood stile and rail construction, both replacements.



Main Hall East Porch



Porch and Roof at North

ROOF

The original roofing was cedar shakes that were installed on spaced 1x6 sheathing boards. This installation is intact, however the remaining shakes are extremely deteriorated. The current roof covering is galvanized sheet metal that has been installed over the shakes by using lateral 2x4 [nominal size] nailing cleats. Edges are enclosed with 2x4 material. No roofing paper is used. The metal roofing appears in the Benton County Cultural Resources Survey photograph from 1984, and could have been installed as part of earlier improvements made by the Corvallis Horseshoe Club. The roof metal is intact, but partially rusted. There are minimal roof flashings. The sheet metal extends past the framing to provide some weather resistance, but there is no flashing for wind driven rain. At the connection from the north addition roof to main hall wall the sheet metal is turned up against the siding on the west side, but has a gap on the east side. In the attic on the north end of the eastside and the south end of the west side sheet metal has been installed to capture rain leaks and funnel them to the exterior wall. There are no rain gutters or associated downspouts. The interior ceiling and wall boards have some water staining from roof leaks.

The roof overhangs 16" at both the unsoffited eaves and gables with the rafter tails plumb cut. Solid 1x4 shiplap deck boarding is used at the overhang areas. As mentioned, there are numerous unintentional openings and cracks at the roof overhangs that allow entry of weather and insects. There is no defined roof or gable wall means of ventilation, except for the noted joint drafts. Two wood louvered wall vents are stored in the attic. It is not evident where, or if these were ever installed on the structure. The main hall has four ceiling grilles for ventilation into the attic.

The main hall roof structure consists of full size 2" x 6" rafters and ceiling joists spaced at 24" o.c. constructed with a 8:12 pitch. Every other ceiling joist is doubled, with the alternate ones having considerable overlap. At quarter points and the centerline 1" x 6" vertical supports at 24" o.c. connect the joists to the rafters. These are connected to full size 2" x 6" horizontal cross ties. To reinforce the long span, diagonal 5/4 x 8" members connect at each joist to rafter extending up from the centerline to midspan between the cross ties and ridgeboard providing a truss type of support. The framing at the north addition, that is four feet lower, is the same with exception of not having the diagonal supports. In this area there are 1x floor boards in the center two sections for attic use.

The roof lines and framing are straight and appear in good condition. No areas of deterioration were discovered. There is substantial debris in the attic on the hall's ceiling boards that are installed directly to the joists. Some of the debris is tree litter that may have filtered through the shakes, or fallen down during the metal roof installation. Other litter may have been brought in by creatures including mice. There are remains of numerous old wasp nests, particularly toward the south end of the attic.



Attic Framing at Addition



*Attic Framing Over Hall
Note Metal Drip Catcher*

FLOOR FRAMING AND FOUNDATION

The building's floor framing uses heavy timber perimeter beams to support the exterior walls and roof, and interior beams for mid support of the main floor. These beams vary some in size, perimeter beams of 9" x 7" at the main hall and 6" x 8" on the addition, and interior beams of 6" x 8" were measured. There are five longitudinal interior beam lines forming six bays between 6 and 7 feet in width. The beams support 2" x 7½" full size joists running east-west at both building portions. The hall and north addition's fir flooring is installed directly on the floor joists. The beams are supported by heavy timber piers that rest on 16" square concrete pads approximately at an 8 foot spacing. There are no mechanical connections other than nails between the various members. On the south end deteriorated piers have been replaced with sections from a creosote treated power pole [pole diameter is larger than the original posts; remaining members are stored in the crawl space].

The building is raised sufficiently for good crawl space on the south end where there is about 42" on clearance from the siding to grade. At the north end where the grade is higher there is much less clearance with only 6" to grade at the northwest corner. There is also tight grade clearance at the main entry. There is no enclosure or skirting of the crawl space. Waterlines are confined to the north portion. The space under the main hall is casually used for storage of ladders and materials.

The floor framing and beams generally appear to be in good condition, no deterioration was found. However, deterioration may be encountered in areas where the grade is close to the framing, particularly at the perimeter. Some of the beams and joists appear to have been previously replaced. The wood piers vary in condition. Some have been replaced with heavy timber or the power pole sections, or have been replaced with multiple timber blocks, while others are deteriorated and in need of replacement. The piers are untreated wood that is typically not separated from the concrete and prone to rotting.



Main Floor Framing; Joists Interior Beam and Posts



Flooring, Joist, Beam



Main Floor South and East Posts, Septic in Foreground



Deteriorated Post on Pad

CHIMNEYS

The main hall is heated by a large wood stove. The stove uses a double wall painted metal chimney inside and a stainless steel chimney with cap at the roof. There is a section of brick chimney that remains in the attic on the north side of the north wall of the main hall east of the ridge line. The chimney is not used and has been taken down to be below the roof framing. It may have been used for a stove at either space. The north addition is heated with a smaller wood stove that exhausts through the north wall and into a 16" square concrete block chimney that is exposed on the north wall where the roof overhang is notched to allow it to pass. This chimney does not have a cap.

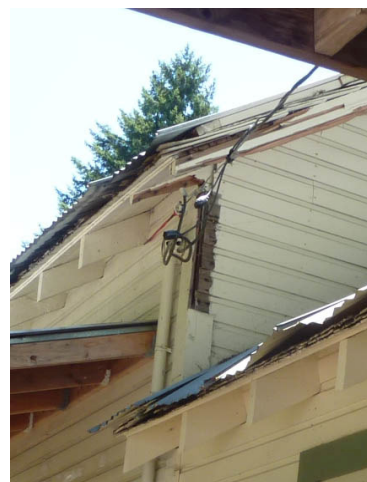
The main hall chimney is relatively new and in good condition. It has a cap and is flashed well to the roof. The roof framing where the prior brick chimney once rose has been cut and is not repaired. The block chimney for the addition's stove is not flashed well to the roof. There are spalls in the block units, particularly above the roofline, but there are also some around the roof level.



Main Hall Chimney



Addition Chimney



Detail of Electrical Connection

THERMAL & MOISTURE

The building has no insulation or vapor barriers in the attic, walls or under the main level flooring. Traditionally, the building is heated only if needed when used. The large wood stoves quickly heat the building and maintain a comfortable temperature level.

ELECTRICAL SERVICE

Wren Community Hall has an overhead electrical service with a 240 volt single phase cable that feeds from a power pole approximately 130 feet north of the building. The weatherhead is located at the northeast corner of the main hall. Conduit descends the exterior of the east wall from the weatherhead to a surface mounted digital meter box. The building's main panel is located directly inside. The panel is a Cutler Hammer 200 amp unit. The distribution for the building has been arranged with numerous circuits that divide the requirements well. There are six spares for future needs. Building wiring is in conduit [older installations] and flexible MC cable [newer installations]. New wiring and service has been installed competently and is in good condition. There are a few exterior power outlets. They use ground fault interrupt devices (GFI). Exterior lighting is minimal with a ceiling light at the entry vestibule, flood lights at rear porches, and RLM metal shade fixtures above the entry and at south roof eave corners [these are missing lamps and reportedly are not used]. One issue is that the service cable's connection to the building has broken the rafter tails and is now on a temporary tie off. This situation is reportedly due to tree limbs falling on the overhead wiring during past storms.

INTERIOR

While the interior was not part of this evaluation, the following is included to better provide a sense of context. The main hall's interior is finished with varnished natural bead board on the walls and 12'-4" high ceiling. The Douglas Fir flooring runs lengthwise and is also varnished and unstained. There is a single large woodstove at the north end of the room as the only source of heat. Hopper style windows along each side wall allow natural ventilation. Lighting is provided by original schoolhouse chain hung fixtures, four of which have been replaced with fan-light units. New LED downlights have been added along each side wall to increase the relative low level of lighting. The north addition is finished with similar materials, except the 8'-0" high ceiling and walls are painted. It has a separate woodstove on the north wall. An electric water heater is located at the southeast corner of the kitchen space.

METHODOLOGY FOR REPAIRS

TREATMENT GUIDELINES AND ALTERNATIVES

The recommendations and principles presented in this report are in accordance with accepted good practice, and follow the Guidelines For Rehabilitating Historic Buildings as developed by the Secretary of the Interior in their 'Standards for Rehabilitation'. The primary guideline is to preserve those historic features and resources that distinguish the building's historic character.

Once historic character defining features conditions are assessed, recommendations can be made for their preservation. The following guidelines define the possible alternatives for treatment, starting from the least invasive:

Protect and Maintain (Preserve): This method seeks to slow deterioration. This could be the recommendation when the feature can continue its intended use as is, or with minimal intervention, or when other repairs might threaten its integrity, or as an interim step until such a time that other treatment can occur. This work can also be considered as good maintenance.

Repair: When the physical condition of the historic character defining materials or features warrant, repairing is recommended. The general principle is to consider the least amount of repair necessary, then move to more extensive or invasive work where necessary. Repair may include limited replacement of heavily deteriorated materials. A project may, for example, include a basic level of repair work that satisfies most of the problem, and a smaller amount of more extensive repair.

Replace: The most invasive method of preservation is replacement. Replacement is employed when the physical condition of the historic character defining materials or features is very deteriorated, or in a dangerous situation so that suitable repairs are not feasible. The best replacement materials are those that are in 'kind' or close to the original material in composition, performance and resultant expression. A good preservation test for evaluating a contemplated replacement is to consider its future reversibility.

PRIORITIZATION

The highest priority is to address those elements that are in the most hazardous condition for personal safety, in danger of being lost, or necessary for the continued preservation of the most significant historic features. These are followed by those features having lesser deterioration, or having less imminent damage. The recommendations are grouped into Immediate, Short Term, ideally to be completed within 5 years, and Long Term, from 5-10 years. Sub-definition is beneficial for budgeting to allow preservation to occur as funding for other operational projects is obtained. Lower priority items may be completed earlier than expected, but in concert with adjacent work, which improves construction and funding efficiency or does not require revision of otherwise completed work. Other work may be best considered as maintenance and thus performed on a regular cycle using annual funding.

Preservation recommendations are primarily concerned with the continued retention, structural integrity, and 'well being' of the historic building and its features. A secondary aspect is the aesthetic quality of the resource and its environment or context. These attributes are those that can be reconciled over time without great concern for loss of historic material. Although secondary, they are important since they provide additional citizen support and pride.

BUILDING CODE

The applicable building code is the current 2012 addition of the International Building Code (IBC) with the latest adopted State of Oregon Structural Specialty Code Amendments, 2014. A detailed analysis was not in the scope of this project and would need to consider the interior environment, however, the building construction and use is relatively basic.

Relevant information is that Wren Community Hall is constructed as a Type VB [combustible non fire rated]. For this type of construction the building's existing size and height is allowable. Its Occupancy is a bit more vague. It could be classified as an assembly type of space, type A3, or possibly a less intensive occupancy use since in reality it does not have regular use or events with large numbers of persons. Assembly occupancies have over fifty people. The main hall has two separated exits directly to the outside which is a requirement. Even though both exit doors are at the north end, they are separated by more than half of the diagonal distance of the room. That satisfies the separation of exits requirement. The exits out of the addition area are either through the main hall's exits or through its own exit off the kitchen area. This latter exit should be maintained free and clear. A preferable remodeled kitchen design would create a short hall space from the meeting portion of the room to the door without going through the kitchen proper. The exits through the main hall are allowed since the travel distance is short, and the whole building is always used by only one group, so those exits would not be blocked. There have been recent upgrades for ADA, and a few more improvements can still be made (grabbars, handrail extensions, etc.). For projects requiring a building permit, accessibility improvements may be required to be included up to a maximum cost of 25% of the project. Compliance with the energy code has some flexibility due to the historic nature of the building and degree of use. If the use increases considerably, it makes good sense to have a more energy efficient structure anyway. Increasing the efficiency for all parts of the exterior envelope can be difficult and expensive considering some of the existing construction details. Never-the-less, many improvements could be made.

RECOMMENDATIONS AND DISCUSSION OF ALTERNATIVES

The following discussions and recommendations address the exterior issues and offer a variety of alternatives. A few improvements may be made directly, while others will require further resolution, specifications, and drawings.

WALLS

The exterior walls and the channel siding were recently repaired and are in good condition. If maintained they will last a long time. The primary issue the walls and siding face is maintenance, and the possibility of rain penetration that can cause interior wood wall staining. Since the wall construction does not have a sheathing layer or any building paper, rain can be driven into the wall. This has caused some staining of the interior wood on the walls and ceiling in the past. This likely occurred during the period when the building received little upkeep. The moisture did not appear to deteriorate the framing since it was open and free to dry. Upgrading the construction with building paper, sheathing and insulation is difficult since it would first require removing all of the siding, trim and roof braces. A considerable amount of the siding would be damaged during removal and handling and would then need to be replaced. Another option to reduce frequent painting is to prime the back side of the siding in the attic area where it is accessible. This would help the exterior paint adhesion in the same way as does pre-priming siding on all sides. If the ceiling boards become wet during rainy weather, it would be advisable to install a vapor barrier deterrent on the framing where accessible.

WINDOWS

The windows do not need significant repairs. They are in good condition and will last very long. None have any weatherstripping, and as a consequence, some of the sashes are drafty. This can be rectified by inexpensive weatherstripping added to exterior wood stops. Alternatively, exterior wood storm windows can be constructed. They can be swapped with wood framed screens for summer.

ENTRY

The entry vestibule is in good condition, provides shelter, and one has no trouble in recognizing the primary entry point. While it has an exterior sign and an events bulletin board inside, highway drivers are unaware of upcoming events. A sign visible from the highway would be beneficial to increase public awareness and use.

The entry ramp allows full access. It could be improved with the addition of 'hand friendly' smooth handrails. For ADA compliance they are to extend past the ramp at each end.

There is a small portion of the siding where the entry vestibule joins to the main hall on the north side that has some deteriorated boards at the bottom of the wall. This area is close to grade and receives rain that is funneled off the main and entry roofs, as well as added surface runoff. The siding there needs partial



replacement, but the long term solution is to address the water issue that is due to a combination of factors. Rain water needs to be directed away from the base of the building. This can be accomplished by sloping the soil away from the foundation, or by collecting with gutters or drains and piping away. Full gutters are not recommended due to their maintenance problem. Gutters for selected roof eaves may be reasonable. A perforated drainage line in this area, and possible along the north side of the building is a preferred solution.

REAR DOORS & PORCHES

The rear porches and their roofs are in good condition and do not need repairs. Although simply constructed, they are serviceable for their needs. The rough framing railing should have grip handrails as a safety provision. A long term improvement would be to construct new porches, roofs and doors that better integrate and fit the design and materials of the historic building. If desired, a rear deck or patio area could be designed and constructed for ancillary use by the Main Hall.

ROOF

The existing sheet metal roof is well worn, loose in places, and not flashed well. The edges where the overlay nailers and closure members are visible are problematic. Due to its installation over the existing shakes, the roofing is very uneven. The sheet metal roofing, nailing members and existing shakes should all be removed. Since this will create substantial attic debris, tarps need to be laid out in the attic to catch falling material. The existing spaced sheathing boards that are in good condition should be retained with new plywood sheathing and roofing felts installed over top. The finish roofing material can then be installed. One acceptable choice is to stay with sheet metal such as a long lasting, prepainted Kynar sheet metal roof and associated flashings. Another acceptable choice is a quality composition shingle roof with prepainted metal flashings. We do not recommend replacing the shakes in kind due to the modern fire hazard and shorter life span. Heavier roofing materials are not an option for the strength of the existing roof framing. The roof project should replace all associated flashings and the chimney pan(s). It is advisable to seal or screen off unintended openings into the attic at this point. Depending upon the air tightness of the attic, vents may be necessary. Various carpentry repairs should be part of this project, including repair of the rafter tails at the electrical service connection, and the rafters and decking at the former brick chimney.

FLOOR FRAMING

Most of the floor framing is in good condition. There are some members that are deteriorated. These primarily are the posts under the beams particularly those along portions of the perimeter, and around the entry vestibule. No deterioration was found in the beams or joists. Although none was found, some deterioration should be expected on the north end and around the entry where the grade is close to framing and there is less ventilation. There are a very few concrete post pads that should be replaced due to their damaged condition. Replacement materials can match the existing, except posts should be preservative treated and separated from the concrete with a membrane, raised base or other means.

The open crawl space of the building is not a particular problem. It allows easy access for repairs, alterations, and provides convenient storage. These spaces can be enclosed if there are problems with creatures, or for better weatherization. The enclosure needs to be designed such that it does not create wood rot or insect damage to the timber framing and also allows ventilation. If enclosed, the ground should have a vapor membrane [visqueen]. The north addition would be a logical portion to enclose since this is where the plumbing is located and where it may be desirable to install insulation for the floor. Since an enclosure of the crawl space alters the exterior appearance, it should be considered as part of a larger project with other potential alterations if it is desired. Those alterations might include seismic bracing, insulation, ventilation, storage and access.

Bark dust and tree debris around the building perimeter should be kept at a minimum and no closer than 6" to wood siding and framing. The site grade should be sloped to carry rain away from the building. Along the north wall water should be directed to the east or west. On the north side of the vestibule to create sufficient slope, some soil further from the building edge will need to be removed. To facilitate removal of the roof's rain water where problematic, perforated drains can be installed and run past the building to daylight. Where passing under the building, these lines should be solid pipe.

The existing post and beam construction is satisfactory for the building. It does not need to be changed to a continuous concrete foundation for structural reasons. Regarding seismic considerations, the building has relatively light loading, a rectangular floor plan, and is built with resilient wood framing. Small earthquakes will not be damaging. A significant quake with a large jolt may cause some displacement of piers and interior equipment. These damages should be able to be fairly easily repaired. If lateral framing reinforcement is desired, there are various options. Pier posts that are in need of replacement can have mechanical connections designed to better secure the post to the beam and to the concrete pad. Cross bracing, or bracing wall enclosures can be installed at portions of the crawl space. Bracing that wraps the south corner bays of the Main Hall where the crawl space is highest would be most effective locations.

CHIMNEYS

The Main Hall has a new replacement metal chimney that is in good condition. The addition's concrete block chimney should have some improvements. The masonry needs to be flashed well to the roof, and a new cap is advised for spark and rain protection. The concrete block is spalled from moisture. It can be sealed with a thin cementitious coating. That can then be painted if desired, or left natural. An alternative is to replace this chimney with a metal flue rising straight up through the roof. If this occurs, the roof notch and wall needs to be infilled and repaired.

ELECTRICAL

The electrical service and distribution are well installed. The most significant issue is the overhead service connection from the power pole to the north. This service should be routed underground to the building. This would reduce power outages and damage to the building. If this is not a near term possibility, an independent power pole located near the building could be installed to reduce potential building damage and to allow more ground clearance for the wire that now dips to within twelve feet above the ground.

The panel, and building wiring appear professionally installed and in good condition. The work is relatively new. There should not be a need for larger service unless there are substantial program or equipment changes needing support. There is some expansion room in the existing panel.

Additional exterior power outlets may be useful for outside events. The existing light fixtures appear adequate. Additional site lighting for the entry, parking and event signage may be beneficial. Regularly used exterior lighting can be efficiently operated with a solar cell to turn on and a timeclock to turn off.

THERMAL & MOISTURE

While there is no insulation, the building is heated only on a few occasions, not regularly. If the use increases, it is wise to provide insulation to save energy and increase comfort. Insulation is an inexpensive improvement. This may be most applicable for the north portion as a first phase. This area can readily be used for meetings and it has the plumbing that needs to be kept from freezing.

The joist spaces of both attics should be cleaned well of debris and waste. A vapor barrier should then be installed over the ceiling boards. This is more to keep the interior space in a relatively clean and sanitary condition than for vapor management. This is recommended prior to any ceiling insulation.

If the Main Hall attic is insulated, the south several feet should not have insulation. With the existing construction there would be a likelihood of insulation near the south wall becoming and staying wet. The north addition attic space could be insulated as a first step.

Wall insulation is not easily added, unless a wall is opened up for some reason. Then the framing could be insulated if the specific wall does not have a rain moisture problem.

The main level floor joists are uninsulated. Floor insulation is not as great a benefit as ceiling or wall. However, since the crawl space is open to the wind and weather, it is slightly more beneficial for the Community Hall building. An open crawl space renders a ground vapor barrier of no use. A first step in improvement would be to install a vapor barrier under the floor boards (winter warm side) of the north addition and possibly the Main Hall. This would reduce drafts. A second step would be to insulate the north addition and piping.

COST ESTIMATE

Wren Community Hall is generally in good condition. However, there are repair and conservation tasks that are needed both for the short term (more urgent) and long term (less urgent) to ensure its best preservation.

The following cost estimates are for budgeting and include direct construction costs, including the contractor's overhead, fees, and a contingency of approximately 15% and are meant to be conservative. In some cases appropriate allowances are utilized. Estimated architectural and engineering design fees are included for the work needing that expertise. The quality level of materials and crafts is assumed to match the existing building.

Short Term:

1. Roofing; strip, sheath; New painted metal type	\$36,500
Alternate: Composition Shingle Roofing	\$32,000
2. Roof and Attic Carpentry Repairs and Enclosure	\$6,000
3. Clean Attic Debris, Vapor Barrier	\$7,000
4. Replace Deteriorated Posts and Siding	\$9,000
5. Complete Exterior Painting	By Volunteers
6. Underground Electrical Service	\$9,500
7. Repair CMU Chimney	\$2,500
8. Handrails at Ramp, Porches	\$1,500
9. Slope Soil Away From Building	By Volunteers
Architect/Engineer Fees	\$5,500
Contingency	<u>\$7,500</u>
Subtotal Construction	\$85,000

Long Term:

1. Install Drain Lines at North End and Eaves to Daylight	\$8,500
2. New Site Mounted Building Event Sign	\$4,000
3. Weatherstrip Windows	\$3,200
4. Storm Windows	\$8,800
5. Revise Rear Porches and Roofs	\$19,000
Architect/Engineer Fees	\$4,000
Contingency	<u>\$4,500</u>
Subtotal Construction	\$52,000