May 11, 2020

Rebecca Lynn Palmer
State Historic Preservation Officer
901 S. Stewart, Suite #5004
Carson City, Nevada 89701

RE: Haybarn Rehabilitation, Floyd Lamb Park at Tule Springs, 9200 Tule Springs Road, Las Vegas, Clark County, Nevada.

To Rebecca Lynn Palmer,

This is a response to the Nevada State Historic Preservation Office, (SHPO), comment and recommendations letter received by the City of Las Vegas department of Planning for the above-mentioned project, dated April 14, 2020.

**Haybarn Rehabilitation:**

New Exits - We intend to follow SHPO recommendations of installing the two (2) exit doors on the South elevation within the third bays from each end, as the Architectural drawings depict. The cost and timeliness to update the renderings precluded us to update accordingly, the intent of renderings were for visual clarity only. The Structural drawings were produced prior to SHPO site visit and the placement of the new exit openings, are to be located per the Architectural plan and indicated as such on the Structural drawings. See revised presentation documents with updated renderings.

Composite Roofing Material - We have selected a composite shake product manufactured by CeDUR using state of the art polyurethane technology. The shakes are reproductions of natural wood cedar shakes with the benefits of being lightweight, fire, ha il and wind resistant.

We understand that SHPO would prefer an appropriate wood shake material installed, but the City of Las Vegas' concern for fire safety and lifecycle cost, coupled with insurance restrictions, preclude the use of an authentic wood shake material.

After extensive research, this product was selected for not only its aesthetic qualities, but more importantly, the safety characteristics not provided by other roofing products of this nature. CeDur exceeds the roofing industries most difficult testing standards for wind, impact (Class 4 Impact Rating) and fire (Class A Fire Rating). These testing standards are recognized and reinforced by the International Code Council Evaluation Service Report #3838, issued for this product, see attached.

Additionally, after reaching out to multiple roofing suppliers, we are not aware of an asphalt shingle that equals the CeDUR product in aesthetics or performance, let alone provide a 50-year warranty, as offered by CeDUR.

We have confidence in the selected CeDUR product, justified by the performance provided at the Foreman's House project, which is in close proximity to the Haybarn project at Tule Springs and it is our professional opinion this product is performing exceptional, with no signs of deterioration or failure (see attached digital image).

This is a shared opinion by many other state historical societies throughout the nation. Please review the attached testimonials and examples of project installations that have selected this product for their historic sites.

We request that SHPO reconsider their opinion of this product and allow us to be consistent with our design appearance for the historic buildings located at Tule Springs.

Security Nylon Mesh Attachment - We intend to replace the existing nylon mesh in kind using the existing mechanical fastener or clip currently installed on the building, no new fasteners or attachment system will be necessary. See attached photo of existing condition. If this is not satisfactory to SHPO we have provided an optional attachment method as shown in the revised presentation documents.

**Site Improvements:**

Site Fence Design - Per your recommendations, we intend to install fencing for the rear yard that matches the existing split rail fencing that occurs throughout the park. See updated presentation documents with updated renderings.

Fire Riser Room - Per your recommendations, the fire riser room will be located on the West elevation of the Haybarn as recommended by your review letter, see the attached revised plan. The fire riser room will be constructed from masonry block material to match the Haybarn in color. The Height of this room will not exceed the 8'-0" existing bond beam openings of the Haybarn. There are no posts or raised roof for the Fire Riser room, your review letter appears to be describing the separate Pump House design, which is located away from the Haybarn building and will sit adjacent to the proposed water supply tank and can be screened by vegetation as suggested. See revised presentation documents with updated renderings.

Site Lighting - Per your recommendations, we intend to install the industrial –style lighting fixture. See revised presentation documents with updated renderings.

Parking Lot Improvements - Per your recommendations, future structures will be of a compatible yet differentiated design and located away from the Haybarn. Unfortunately, the use of a nearby existing historic ranch building as a restroom is cost prohibitive to bring power, water, and sanitary services and be able to meet current accessibility codes.

In closing, I want to reiterate the City of Las Vegas' previous and continued commitment to preserving its historical past for generations to come and hope that the above responses meet with the State Historical Office of Preservation's approval.

Respectively,

Dr. Diane Siebrandt
Historic Preservation Officer
City of Las Vegas
Department of Planning
333 N. Rancho Drive 3rd Floor
Las Vegas, NV 89106

E: dsiebrandt@lasvegasnevada.gov
P: 702.229.2476

## WALL & ROOF MATERIALS

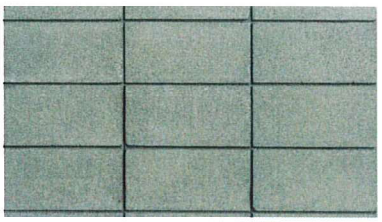
ROOF SHINGLE
PRODUCT: AGED COLOR SAMPLE
COLOR: WALDEN

METAL ROOFING AT RESTROOMS BUILDING, TRASH ENCLOSURE AND PUMP HOUSE

4" CMU AT TRASH ENCLOSURE AND PUMP HOUSE

PAINT 1
SHERWIN WILLIAMS
Black Magic SW 6991

PAINT 2
SHERWIN WILLIAMS
Ivory Lace SW 7013



STACKED 8" CMU AT RESTROOM BUILDING

# ICC-ES Evaluation Report

# ESR-3838 CBC and CRC Supplement

*Issued November 2019*
*This report is subject to renewal November 2020.*

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**
**Section: 07 31 53—Plastic Shakes**
**Section: 07 32 26—Plastic Roof Tiles**

**REPORT HOLDER:**

**COLORADO ROOFING PRODUCTS dba CeDUR**

**EVALUATION SUBJECT:**

**CeDUR® SHAKES**

## 1.0 REPORT PURPOSE AND SCOPE

**Purpose:**

The purpose of this evaluation report supplement is to indicate that CeDUR® Shakes, recognized in ICC-ES evaluation report ESR-3838, have also been evaluated for compliance with the codes noted below.

**Applicable code editions:**

- 2016 *California Building Code* (CBC)
- 2016 *California Residential Code* (CRC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

## 2.0 CONCLUSIONS

### 2.1 CBC:

The CeDUR® Shakes described in the evaluation report ESR-3838 may be used where the CBC requires a Class A roof covering complying with CBC Section 1505.1.1, a Class B roof covering complying with CBC Section 1505.1.2, or a Class C roof covering complying with CBC Section 1505.1.3, provided installation is in accordance with the 2015 *International Building Code®* (IBC) provisions noted in the evaluation report.

The roofing panels may be used in the construction of new buildings located in any Fire Hazard Severity Zone within a State Responsibility Areas or any Wildland-Urban Interface Fire Area, provided installation is in accordance with the 2015 *International Building Code®* (IBC) provisions noted in the evaluation report and the additional requirements of Sections 701A.3 and 705A of the CBC.

### 2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

### 2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

### 2.2 CRC:

The CeDUR® Shakes described in the evaluation report ESR-3838 may be used where the CRC requires a Class A roof cover complying with CRC Section R902.1.1, a Class B roof covering complying with CRC Section R902.1.2, or a Class C roof covering complying with CRC Section R902.1.3, provided installation is in accordance with the 2015 *International Residential Code®* (IRC) provisions noted in the evaluation report.

The roofing panels may be used in the construction of new buildings located in any Fire Hazard Severity Zone within a State Responsibility Areas or Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2015 *International Residential Code®* (IRC) provisions noted in the evaluation report and the additional requirements of Sections R337.1.3.1 and R337.5 of the CRC.

The product recognized in this supplement has not been evaluated for compliance with the *International Wildland–Urban Interface Code®*.

This supplement expires concurrently with the evaluation report, reissued November 2019.

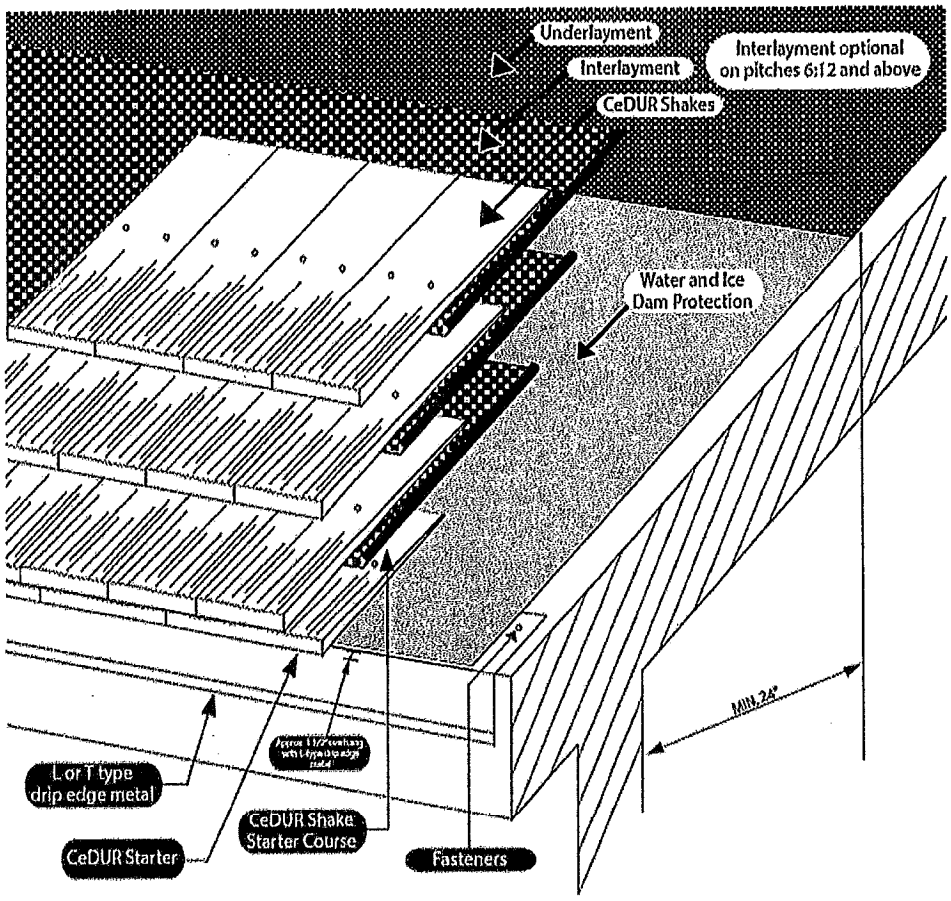



**FIGURE 1—CeDUR® SHAKE CLASS A FIRE RATED ASSEMBLY**

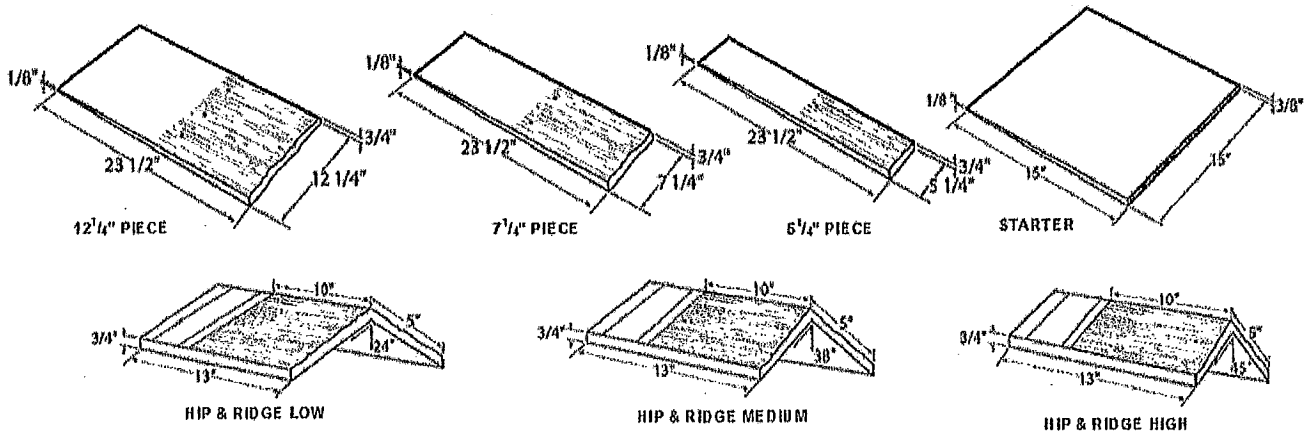



**FIGURE 2—CeDUR® SHAKE PROFILES AND DIMENSIONS**

the wind loads as specified by IBC Section 1609 or IRC R301.2, for components and cladding.

Flashing must be in accordance with IBC Sections 1503.2 and 1507.9.9 or IRC Sections R903.2 and R905.8.8, as applicable.

**4.2 Underlayment and Interlayment:**

Underlayment, as described in Section 3.3, must be installed over the entire surface of the solid sheathing. Interlayment, as described in Section 3.3, must be installed in accordance with the report holder's published installation instructions and Figure 1 when the roof slope is less than 6:12. In areas subject to high winds, the underlayment must be installed in accordance with IBC Section 1507.9.3.1 or IRC Section R905.8.3.2, as applicable.

In areas where the average daily temperature in January is 25°F (-4°C) or less, or where there is a possibility of ice forming along the eaves and causing a backup of water, an ice barrier that consists of at least two layers of ASTM D226 Type I complying underlayment cemented together, or of a self-adhering polymer-modified bitumen sheet, must extend from the eave's edge to a point 24 inches (610 mm) inside the exterior wall line of the building.

**4.3 Roof Shakes:**

The CeDUR® Starter described in Section 3.1.1 must be installed at the eave line and attached with a minimum of four fasteners. Subsequent rows of shakes are installed with a minimum exposure of 8 inches (203 mm) and a maximum exposure of 10 inches (254 mm). Two fasteners must be used for 5¼-inch-wide (133 mm) and 7¼-inch-wide (184 mm) shakes and three fasteners must be used for 12¼-inch-wide (311 mm) shakes. Fasteners must be as described in Section 3.5. (See Figure 1)

**4.4 Hips and Ridges:**

**4.4.1 CeDUR® Preformed Hip and Ridge:** The CeDUR® preformed hip and ridge units described in Section 3.1.2 must be installed with a minimum of two fasteners on each side of hip and ridge units as described in Section 3.5. Underlayment, as described in Section 3.3, must be installed with a minimum 4-inch lap (102 mm) on each side of the hip or ridge.

**4.4.2 CeDUR® Site-Made Hip and Ridge Shakes:** Site-made hip and ridge shakes must be made from 5¼-inch (133 mm), 7¼-inch (184 mm) or 12¼-inch (311 mm) shakes. Pieces must be alternately lapped. Two fasteners on each side of hip and ridge shakes, as described in Section 3.5, must be used per side.

**4.5 Fire Classification:**

The roof assembly is recognized as a Class A roof assembly under IBC Section 1505.1 or IRC Section R902.1, when installed in accordance with Section 4.5.1.

**4.5.1 Class A Roof Covering:** CeDUR® Shakes, underlayment and interlayment, when required, installed as follows:

- Deck: Closely fitted, minimum 15/32-inch (11.9 mm) thick exterior grade plywood, minimum 15/32-inch-thick (11.9 mm) oriented strand board (OSB) or nominally 1-inch-thick (25.4 mm) lumber complying with the applicable code.
- Maximum roof slope: 21:12 (175 percent slope).
- Underlayment: One layer of ASTM D226, Type II (No. 30) asphalt-saturated felt installed over the entire surface of the deck.
- Interlayment: One layer of ASTM D226, Type II (No. 30) asphalt-saturated felt. Interlayment is required when the roof slope is less than 6:12.
- Minimum and Maximum shake exposure: 8 inches (203 mm) and 10 inches (254 mm), respectively.

**4.6 Wind Resistance:**

Under the 2015 and 2012 IBC and 2015 IRC, when installed in accordance with this report, CeDUR® Shakes are limited to areas subject to a maximum ultimate design wind speed ($V_{ult}$) of 130 mph (209 km/h) in accordance with 2015 and 2012 IBC Figure 1609 (2015 IRC Figure R301.2), on structures having a maximum mean roof height of 40 feet (12.2 m) or less in Exposure B areas. Under the 2012 IRC, when installed in accordance with this report, the roof coverings are limited to installation in areas subject to a maximum basic wind speed of 100 mph (161 km/h) in accordance with 2012 IRC Figure R301.2(4)A, on structures with a maximum mean roof height of 40 feet (12.2 m) in Exposure B areas.

**4.7 Reroofing:**

Prior to application of the CeDUR® Shakes, the existing roof covering and underlayment must be completely removed. Any damaged sheathing must be replaced. The installation of the underlayment and shakes must then proceed as described in Sections 4.1 through 4.4.

## 5.0 CONDITIONS OF USE

The CeDUR® Shakes described in this report comply with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

**5.1** Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published instructions and this report, this report governs.

**5.2** CeDUR® Shakes are manufactured in Aurora, Colorado, under a quality-control program with inspections by ICC-ES.

## 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Special Roofing Systems (AC07), dated February 2014 (editorially revised May 2016).

## 7.0 IDENTIFICATION

**7.1** Each CeDUR® Shake is identified with the CeDUR name, production date, and manufacturing location. Each bundle of shakes is labeled with the report holder's name (CeDUR), the evaluation report number (ESR-3838), manufacturing location, contact number, color (Live Oak, Shiloh, or Walden) and quantity.

**7.2** The report holder's contact information is the following:

**COLORADO ROOFING PRODUCTS dba CeDUR**
**3590 HIMALAYA ROAD**
**AURORA, COLORADO 80011**
**(909) 376-2328**
**www.cedur.com**

ICC EVALUATION SERVICE

# ICC-ES Evaluation Report

**ESR-3838**

*Reissued November 2019*

*This report is subject to renewal November 2020.*

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**
**Section: 07 31 53—Plastic Shakes**
**Section: 07 32 26—Plastic Roof Tiles**

**REPORT HOLDER:**

**COLORADO ROOFING PRODUCTS dba CeDUR**

**EVALUATION SUBJECT:**

**CeDUR® SHAKES**

## 1.0 EVALUATION SCOPE

**Compliance with the following codes:**

- 2015 and 2012 *International Building Code®* (IBC)
- 2015 and 2012 *International Residential Code®* (IRC)

**Properties evaluated:**

- Weather protection
- Wind resistance
- Fire classification
- Durability

## 2.0 USES

CeDUR® Shakes are used as roof covering materials and are recognized as Class A roof coverings when installed in accordance with Section 4.5 of this report.

## 3.0 DESCRIPTION

### 3.1 Roof Tiles:

CeDUR® Shakes are manufactured from a proprietary blend of polymeric-based materials to simulate wood shakes. CeDUR® Shakes are available in Live Oak (Caramel Brown), Shiloh (Gray), and Walden (Chocolate Brown). CeDUR® Shakes are produced in a length of 23 1/2 inches (597 mm) and widths of 5 1/4 inches (133 mm), 7 1/4 inches (184 mm) and 12 1/4 inches (311 mm). (See Figure 2) The maximum exposure is 10 inches (254 mm), resulting in an installed weight of 1.7 pounds per square foot (8.30 kg/m$^2$). See Figure 1 for installation assembly.

**3.1.1 CeDUR® Starter:** CeDUR® Starters are made the same way as CeDUR® Shakes. The starter has a 15-inch-wide (380 mm) exposure, are 15 inches (380 mm) in length and taper from 3/8 inch (9.53 mm) to 1/4 inch (6.4 mm). (See Figure 2)

**3.1.2 CeDUR® Preformed Hip and Ridge:** CeDUR® Preformed Hip and Ridge units are made the same way as CeDUR® Shakes. Hip and ridge units are 13 inches long (330 mm) with a 10-inch (254 mm) exposure. CeDUR® Hip and Ridge Shakes can also be fabricated on-site from 5 1/4-inch (133 mm), 7 1/4-inch (184 mm) or 12 1/4-inch (311 mm) wide shakes (See Figure 2).

### 3.2 Sheathing:

CeDUR® Shakes must be installed on solid sheathing consisting of minimum 15/32-inch (11.9 mm) exterior-grade plywood sheathing 7/16-inch-thick (11.1 mm) oriented strand board (OSB) or nominally 1-inch-thick (25.4 mm) lumber complying with the applicable code.

### 3.3 Underlayment and Interlayment:

Underlayment must be a minimum of one layer of Type II (No. 30) asphalt-saturated felt complying with ASTM D226. Interlayment, when required, must be one layer of minimum 18-inch-wide (457 mm) Type II (No. 30) asphalt-saturated felt complying with ASTM D226.

### 3.4 Flashing:

Flashing must be a minimum No. 26 gage [0.019 inch (0.483 mm)] corrosive-resistant sheet metal.

### 3.5 Fasteners:

To secure the shakes to the sheathing, corrosion-resistant nails, staples or screws may be used. Nails must be minimum No. 11 gage [0.120 inch (3 mm)], with 5/16-inch- diameter (8 mm) heads, corrosion-resistant ring shank roofing nails. Staples must be corrosion-resistant, minimum No. 16 gage staples with minimum 15/16-inch-wide (24 mm) crowns and 1 7/8-inch-long (48 mm) legs. Screws must be corrosion-resistant, No. 8 or No. 10 screws with minimum 5/16-inch-head-diameter (8 mm). Fasteners must be of sufficient length to penetrate into the roof sheathing a minimum of 3/4-inch (19 mm), or through the sheathing, whichever is less.

## 4.0 INSTALLATION

### 4.1 General:

CeDUR® shakes must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at the time of installation.

The shakes must be installed on roofs with solid sheathing and a minimum slope of 4:12 (33 percent slope) and a maximum slope of 21:12 (175 percent slope). Solid sheathing must be minimum 15/32-inch (11.9 mm) exterior-grade plywood, 7/16-inch-thick (11.1 mm) oriented strand board (OSB) or nominally 1-inch-thick (24.5 mm) lumber complying with the applicable code. The sheathing must be structurally adequate and fastened to resist

CeDUR™
Timeless • Durable • Beautiful

To Whom It May Concern:

It has come to our attention that there have been questions raised about CeDUR and the historical fit for the Tule Springs Project. With our realistic wood look we are the aesthetic choice for historic preservation professionals across the country. CeDUR has a standalone Class A fire rating, an increased nail zone, a Class 4 impact rating, and a history of roofs being installed for 22 years. CeDUR has become the preferred choice for builders, architects, and preservation societies across the United States when it comes to replacing aging wood shake roofs.

It has been requested that we provide you with a couple contacts:

- National Park Service
  Kevin Shluckebier
  Project Manager/Architect
  NPS Midwest Region
  402-661-172
  Kevin_Shluckebier@nps.gov
- Montana State Historical Preservation Board
  Janice Goodman
  253-332-7495

CeDUR has been the choice on historic projects of all kinds some of which are:

- The Waverly Mansion http://www.wpnet.org/index.php/attractions/waverly_mansion
- Villa De La Vergne https://www.nola.com/news/communities/st_tammany/article_3013706f-a93f-5361-9e57-e8ecd8c255d1.html
- Black Horse Tavern https://www.blackhorsenj.com/our-history
- Homestead National Monument https://www.nps.gov/home/learn/historyculture/park_history.htm
- Pea Ridge National Military Park https://www.nps.gov/peri/learn/historyculture/index.htm
- Peninsula State Park https://dnr.wi.gov/topic/parks/name/peninsula/history.html
- Ice Age National Trail https://www.nps.gov/iatr/index.htm
- Day Log House https://www.plattecountylandmark.com/Article12001.htm

With a long track record of performance, meeting the highest technical standards, and achieving a look that no other synthetic, composition, metal, or asphalt material does, CeDUR is the trusted choice for wood shake replacement.

If there are any questions or if you need further information, please let us know.

Thanks,

Konrad C. Bolowich
Sales and Operations Manager

3590 Himalaya Road • Aurora • Colorado • 80011
Toll Free (844) 974-9196 • Local (720) 974-9200 • Fax (720) 974-3193
info@cedur.com • www.cedur.com

# East Farmington Schoolhouse

April 24, 2020

To whom it may concern …

I highly recommend CeDur roofing materials for any project that requires a hand-split cedar shake look-alike roof. With the help of the Montana Preservation Alliance and the Montana History Foundation I chose CeDur shakes for the East Farmington Schoolhouse Restoration. This pre 1900 building has been a landmark in our area for over a hundred years. We wanted to stay as close to the original materials as possible. CeDur has the look and texture of the original roof plus the added benefits of a 50 year warranty, impact and fire resistance. It has been in place for a little over a year now and has resisted high winds, wildly fluctuating temperatures and anything else the weather on the Rocky Mountain Front could throw at it. It also has the added benefit of being very easy to work with. One of the reasons I decided on the product was that in my situation, restoring a historic building, it fit the "look" required by our local historic agencies - although I would use it again on any age building!

Sincerely yours,

Janice Goodman

Volunteer at the Montana Preservation Alliance and Montana History Foundation and owner of Copper Horse Farm, Llc

## Re: Foreman's House at Floyd Lamb Park

Kristen Brown <knbrown@shpo.nv.gov>

Wed 4/22/2020 4:39 PM

**To:** Diane Siebrandt <dsiebrandt@lasvegasnevada.gov>

Hi Diane,

OK, thanks for the information. I spoke with our Deputy SHPO about this to get her thoughts as well.

As we discussed on the phone, I first recommend researching whether the City is able to return the product for a refund, or is able to use the product somewhere else. If that isn't possible, you will have to submit more information to our office.

Due to the current quarantine, getting an independent/unbiased condition assessment of the Foreman's House roof and its performance after 12 years is probably not going to happen. Instead, we will need to see high-resolution photographs of the Foreman's House roof, including some taken from various distances and several detail shots of the shingles themselves. I noticed some cupping and warping of the shingles and some areas where they did not appear to be laying flat. That should be documented.

I determined that the covenant was recorded in June 2007, so it would have been in place when that roof was installed. I don't have a record that the roof was coordinated through out office. However, as I explained, even if that roof was coordinated with our office, any decisions made in 2007 would not set a precedent for this current review.

The CeDUR shingles are a relatively new product that has only been available for a little over 20 years. Because of this, there isn't enough data on the performance and longevity of the product, or its appearance over time, especially in a harsh climate like Las Vegas, with the intense heat, sun, and wind. In general our office is not able to recommend or approve substitute materials that don't have a proven track record over time.

We ask that you submit the following for our review:

- The high-resolution photographs;
- A sample of a CeDUR shingle (if the City does not have one available to send, one may be obtained from the manufacturer); and
- And and explanation (on City letterhead) of the oversight in ordering the shingles without prior approval.

It is likely that our office will have to forward the information to the Commission for Cultural Centers and Historic Preservation for their review and decision since installing the shingles will not meet the Standards or the intent of the covenant.

Thank you, and let me know if you have questions.

Kristen Brown
Architectural Historian
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
knbrown@shpo.nv.gov
(775) 684-3439

---

**From:** Diane Siebrandt <dsiebrandt@lasvegasnevada.gov>
**Sent:** Tuesday, April 21, 2020 4:10 PM
**To:** Kristen Brown
**Subject:** Foreman's House at Floyd Lamb Park

Hi Kristen,

Thanks for your phone call yesterday. The roof on the Foreman's House at Floyd Lamb Park was installed late 2008/early 2009, I'm still trying to locate the paperwork to get exact dates.

Best
Diane

**Diane C. Siebrandt, PhD**
Historic Preservation Officer
Department of Planning | Long Range Planning Section
**702.229.2476 | dsiebrandt@lasvegasnevada.gov**
333 N. Rancho Dr,3rd Floor | Las Vegas, NV 89106
city seal

lasvegasnevada.gov

NEVADA
**STATE HISTORIC PRESERVATION OFFICE**

**Department of Conservation and Natural Resources**

**Steve Sisolak, Governor**
**Bradley Crowell, Director**
**Rebecca L. Palmer, Administrator, SHPO**

April 14, 2020

Diane C. Siebrandt, PhD
Historic Preservation Officer
City of Las Vegas Dept. of Planning
333 N. Rancho Drive, 3rd Floor
Las Vegas, NV 89106

RE: Hay Barn Rehabilitation, Floyd Lamb Park at Tule Springs, 9200 Tule Springs Road, Las Vegas, Clark County, Nevada.

Dear Ms. Siebrandt:

The Nevada State Historic Preservation Office (SHPO; defined as "State" in the Commission for Cultural Affairs Covenants) has reviewed the scope of work received March 4, 2020 for the Hay Barn rehabilitation project at the National Register listed Tule Springs Ranch (in Floyd Lamb Park) in accordance with the CCA Covenant that remains in effect until December 31, 2034.

The City of Las Vegas (City) proposes to rehabilitate the historic hay barn at Tule Springs Ranch for adaptive reuse as an event center. The SHPO previously provided comments and questions in a letter dated January 18, 2019 and in emails dated September 16, September 30, and December 14, 2019. In that correspondence, our office requested additional information regarding a number of items, including: seismic bracing; interior truss bracing; masonry work; new egress doors; removable security nylon mesh / bird netting attachments; cupola access stairs within the trusses; roofing material; rear "yard" fencing; water tank/pump house; and site lighting.

The SHPO has reviewed the current submission in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties, Standards for Rehabilitation* (Standards), and has the following comments and recommendations:

**Hay Barn Rehabilitation**

- The proposed stabilization includes upgraded foundations, steel C-channel columns, and diagonal threaded-rod bracing at each corner of the building. In addition, new steel gusset plates will be added to the existing trusses and new wood sheathing will be installed on top of the existing diagonal roof sheathing. The infill and/or bracing originally proposed for the wall openings is no longer part of the scope. The proposed scope of work is in keeping with the recommendations developed by structural engineer Mel Green and is an acceptable method of stabilizing this building with minimal intervention.
- The submission specifies that historic masonry will be removed and replaced in-kind only as necessary for the stabilization work to occur. In addition, where mortar repair is required, the new mortar will match the old in color, texture, and tooling.
- Six new exits will be added to the building, four on the rear elevation and two on the front (south) elevation. Our office notes that the proposed location of the south doors was moved

away from the center of the façade based on our previous recommendation. Non-historic gates on the east and west elevations will be replaced. The proposed new doors and replacement doors will be of a compatible design. However, there is a discrepancy in the drawing set: the floor plan drawing 2 indicates that the south doors are to be located within the third bays from the ends of the building. However, the color elevation renderings illustrated on drawings 4, 13, 14, and the structural drawing S001.2 indicate the fourth bay. Per the SHPO's discussion during a site visit, it was the SHPO's understanding that the new south doors would be located within the third bays, closer to the ends of this building. Please revise the drawings to show the doors within the third bays to reflect our discussion.

- The proposed plans specify that a synthetic composite roofing material be used on the building. The material is designed to mimic the appearance of cedar shakes. As our office expressed during a site visit, substitute materials such as this are not recommended. The similar shingles located on the Foreman's House do not appear to have maintained their integrity as the submission suggests, but instead appear to be cupping and showing signs of deterioration. The SHPO recommends that a historically appropriate wood shake roof be applied. If wood is not a feasible option, an asphalt composite shingle that mimics the appearance of wood (i.e., an "architectural shingle") would be a more appropriate material. Please submit information regarding alternative roofing materials.

- The submission does not include information about the proposed method of attachment for the removable security nylon mesh / bird netting. However, our office acknowledges that there is currently netting in place and replacing it will not adversely affect the building. Please forward a drawing which illustrates the attachment points for the security nylon mesh / bird netting as well as specifications for the proposed gauge and color.
- The revised scope of work states that the existing cupola access platform and stairs in the center of the roof truss system to be retained. The historic platform and stairs are part of the building's character. The platform will be strengthened by the addition of two new wood purlins attached with steel joist hangers. This is an acceptable solution.
- The proposed rehabilitation includes the installation of a sprinkler system which is acceptable.
- The proposed rehabilitation includes the installation of new interior pendant lights. The proposed lights are acceptable.

**Site Improvements**

- The submission notes that the preferred fence design for the rear yard will match the existing fencing at the park. Matching the fencing to the historically appropriate park fencing is acceptable. The alternative "modern" fence design depicted on several of the drawings (especially drawing 17) in the submission is not appropriate or compatible for this historic ranch. Please revise the drawings to indicate a compatible fence design.
- In order to install a sprinkler system in the barn, a small riser room and pump house will be constructed. The riser room is proposed to be attached to the barn at its southwest corner, and the pump house will be located nearby. Our office acknowledges that the location of the new structures due to existing water infrastructure. However, as the south elevation is a primary

elevation for this building, our office recommends that the riser room addition be located instead on the west elevation. Photo 3 on page 6 of the .pdf indicates that there are several utilities already located on this corner of the building. Our office needs written justification for why the riser room cannot be located on the west elevation or inside the building itself. If it must be located on the exterior south elevation, the riser room must be designed to be as small as possible in height, width, and depth. The elevation renderings appear to illustrate walls equal in height to the barn's masonry walls. There appear to be openings above the wall with posts leading to a proposed roof just under the barn's existing roof. It is acceptable to our office if pipes are exposed to the elements (painted to match the building) or located inside the building if this will help to minimize the size of this addition, especially its height. Perhaps the roof of the addition can be lowered substantially to match the height of the masonry opening. In order to understand the design intent of this new addition, please submit a detailed equipment plan and elevation drawings which clearly indicate proposed materials. Regarding the pump house, its proposed design is compatible yet differentiated from the historic ranch structures. The SHPO recommends screening proposed new structures on this historic ranch with vegetation as much as possible.

- As noted in our email dated December 14, 2019, some of the proposed site lighting appears modern and "futuristic" in design and is therefore incompatible with this site. The schematic drawing 20 depicts an alternative light fixture on the far right of the page with an industrial-style shade. That design is simpler and more appropriate. The other two renderings show on this drawing are not appropriate for this historic ranch. Please revise this drawing accordingly.
- The proposal specifies that a gazebo be installed in the rear "yard." This feature would be largely out of view from the historic ranch complex and is acceptable.
- The parking lot will be improved, and a small trash enclosure will be constructed. In addition, a future phase includes the construction of a restroom building east of the barn and largely out of view of the historic ranch complex. The new structures will be of a compatible yet differentiated design. The SHPO previously recommended that one of the nearby historic ranch buildings be adaptively reused as new park restrooms. If that option is not possible, the new restrooms and trash enclosure should be placed as far away from the barn as possible and out of view.

The submission specifies that surface cleaning will be done using the gentlest means possible and that chemical and physical treatments will be avoided. In addition, work will stop if archaeological resources are discovered during construction. Finally, the project will be photographed and documented during and after work.

In summary, please submit more information to the SHPO for the following items so our office may complete our review and ensure these items meet the Standards in accordance with the covenant:

1. revised drawings showing the placement of the new south elevation doors to be located within the third bays from the ends of the building; and

2. other options for roofing materials; and

3. a drawing illustrating the attachment points for the security nylon mesh / bird netting as well as specifications including the gauge and color; and

4. revised drawing for the proposed fence ; and

5. detailed plan indicating the equipment layout and elevation drawings which clearly indicate materials for the proposed new riser room addition; and

6. revised drawing for the parking lot lighting.

Thank you for your commitment to this important cultural and architectural resource. If you have questions concerning this correspondence, please feel free to contact SHPO architectural historian Kristen Brown at (775) 684-3439 or by email at knbrown@shpo.nv.gov.

Sincerely,

Rebecca Lynn Palmer
State Historic Preservation Officer