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NATIONAL TRUST FOR HISTORIC PRESERVATION

**For the Historic Blackwell School (1889-1965)
Marfa, TX**

A Conditions Assessment and Preservation Recommendations

Presented to:

The Blackwell School Alliance Board

Joe Cabezuela, President and Richard Williams, Archivist



AUGUST 2008

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Conditions Assessment and Preservation Recommendations

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A Conditions Assessment and Preservation Recommendations

For the Historic Blackwell School (1889-1965)
At the Corner of Waco Street and Abbot Street
Marfa, Presidio County, Texas



Circa late 1880s [?]

Earliest Known Photograph of Blackwell School (Marfa, TX)



2008

Contemporary Photograph of Blackwell School (Marfa, TX)



Graduating Class of 1960

Top Row: Joe Cabezuela, Narciso Sanchez, Joe Mendoza, Tino Ontiveros, Richard Williams, Mario Cobos, Johnny Espinoza, Mrs. Evelyn Davis, Mr. Henry Ward.

Next Row: Richard Vasquez, Tomas Molinar, Tony Gaspar, Santos Gonzales III, Oscar Torres, Willie Rubio, Santos Gonzales, Jr.

Next to Bottom row: Mary Helen Balderama, Amalia Acosta, Delfina Rubio, Rosa Grado, Socorro Guevera, Delia Rivera, Maggie Nunez.

Bottom Row: Ida Guerrero, Maria Rosario Villanueva, Josie Leos, Mary Rosa Villanueva, Anna Fuentes.

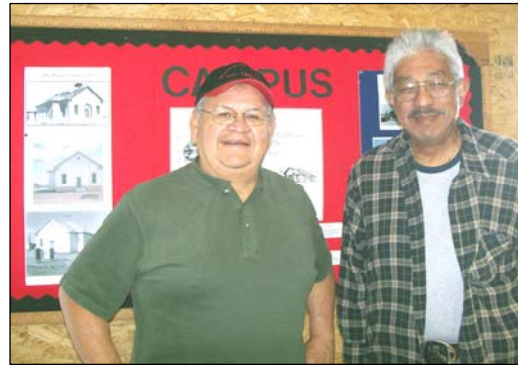
The Blackwell School Alliance

Joe A. Cabezuela-President
Azusena Nuñez – Vice-President
Larry Rivera – Treasurer
Alma Cabezuela – Secretary
Toni Dominguez – Registry Director
Valerie Serrano – Activities Director
Sally Williams – Activities Director
Richard Williams – Archivist
Estela Madrid – Merchandise
Aurora Hernandez – Registrar

Acknowledgments

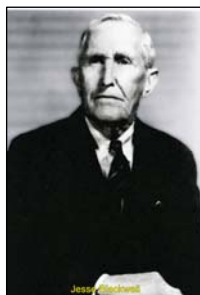
Photo: Blackwell School Alliance President Joe Cabezuela (Left) and Archivist Richard Williams (Right)

Special thanks to Denise Alexander, and the National Trust for Historic Preservation, for securing the funding to provide this Conditions Assessment and Preservation Recommendations for the Harper Building. The Blackwell School Alliance Board (Joe Cabezuela,



President) deserves special recognition for their tireless efforts to preserve the last remaining schoolhouse from the larger complex. Richard Williams, Alliance Archivist, was very helpful during the process of conducting the necessary fieldwork, and furnished most of the photographs used in this report.

Introduction



Principal
Jesse Blackwell

With the contemporary focus on sustainable and environmentally-friendly or “green” building, preservationists are fond of saying that the “greenest” buildings are those already built. Historic restoration reaffirms that preserving the existing built environment is often more cost effective, and aesthetically more suitable, than demolition and replacement with new construction.

This project will inspire other adobe building owners to properly conserve their own dwellings using traditional materials and techniques. Engaging the community will ensure a lasting legacy of involvement and investment. Marfa townspeople need a community core, a learning center, and open space. This historic site is an ideal fit.



Blackwell Junior graduating Class of 1955. Top row left: Lourdes Aguirre, Mike Juarez, Rito Rivera Tony Herrera, Willie Quintina, Pete Frias, Merl Gibbs, George Najar and Ismael Tarango. Second row left: Hortencia Portillo, Lucy Lujan, Carolyn Sue Kelly, Elena Paiz, Susana Pacheco, Elena Ceniceros and Sylvia Ontiveros. Front row left: Elodia Guerrero, Eva Vasquez, Lyra Mae Wilcox, Irene Mediano, Romelia Villanueva, Rosa Pena, Catherine Acosta and Anabel Colomo

Blackwell School Alliance

Dozens and dozens of young faces peer out from black-and-white photographs lovingly tacked to bulletin boards inside the old schoolhouse. Letterman jackets, mementos, trophies, newspaper clippings, articles of clothing, pages torn from schoolbooks, and memories are all lovingly cared for by Blackwell School Alliance members in general, and archivist Richard Williams in particular. A tiny drum majorette's uniform sewed by the little girl's godmother is displayed on the wall, and a basketball uniform is framed behind glass. Dozens of pencil nubs sharpened all the way to their erasers (collected from underneath the floorboards) make Richard Williams smile. They remind him of a time when everyday things seemed a little more precious, and when there was very little to waste. The bucking bronco logo and the school's black and red colors stir memories as returning students now in their sixties and seventies make their way back to the old school house to visit with one another and reminisce.

Once a bustling city block, all of the buildings save for this one have been demolished and

the rubble hauled off to the landfill. When Joe Cabezuela and several of his classmates learned that the Harper Building was slated to meet the same fate, they visited with the Marfa Independent School District (MISD) and told the authorities that enough was enough. They explained that this building belongs to the students, and to the neighborhood, and to the town of Marfa, and they offered to dedicate some of their retirement years to preserving it.



The MISD officials agreed, and the Blackwell School Alliance was formed. The Alliance paid a dollar, and signed a 99-year lease with the school district. A weekend was spent hauling away the trash and debris cluttering the interior. Once the place was cleaned up and aired out, Richard busied himself with setting up the museum. The Alliance has hosted several reunions, open houses, pot lucks, barbecues and concerts already, with future fundraisers planned.

Cornerstones Community Partnerships

Cornerstones is a non-profit organization with technical staff based in Santa Fe, Bernalillo, and Mesilla, New Mexico. Cornerstones works at the invitation of communities to restore historic structures, encourage traditional building practices, and affirm and revitalize cultural values. Decades of hands-on experience, training, and collaborations with native and international craftspeople and preservationists, have endowed the technical staff at Cornerstones with a unique expertise in working with communities to conserve traditional cultural resources. Responding to a call from the Blackwell School Alliance, the National Trust for Historic Preservation in turn contacted Cornerstones Community Partnerships, and invited them to participate in the upcoming preservation project.

The National Trust for Historic Preservation

In 1947, at the urging of the National Council for Historic Sites and Buildings, the first national preservation conference was held in Washington, D.C. Two years later, President Harry Truman signed the legislation creating the National Trust for Historic Preservation. Since then, the National Trust has taken the lead in preserving this country's built heritage.

Mindful of the National Trust's mandate to help people "protect, enhance, and enjoy the places that matter to them," Denise Alexander (National Trust, Dallas/Fort Worth) took a request for assistance from the Blackwell Alliance to heart. She asked the Staff at Cornerstones Community Partnerships to prepare a Conditions Assessment for the Marfa schoolhouse, and saw to it that National Trust funding was provided to accomplish this important first step.

Conditions Assessment

This document is the result of visual inspections, physical probing, records research, interviews, and photo-documentation. It includes several foundation, roof framing, and wall investigations. The building is structurally sound. The wood framing members are in excellent condition. Even so, this assessment identifies serious threats to the building, including inadequate foundation perimeter drainage, prolonged moisture entrapment, wood rot, and deteriorated protective coatings, including peeled exterior paint, spalling plaster, and failed glazing and caulk. Although no problems due to settlement were encountered, heavy rain gullyng at the sections of exposed adobe walls has occurred. The use of incompatible materials (i.e., cement stucco and earthen architecture) has created a series of problems that are also identified and addressed in this report.

Preservation Recommendations

A Conditions Assessment would ordinarily be followed by a comprehensive Preservation Plan. This in turn would be followed by a proposed Construction Sequence and Cost Estimates for implementing the Preservation Plan. Due to limited funding resources during the planning phase, the results of the Conditions Assessment were used to prepare a Table of Preservation Recommendations, rather than the preparation of a comprehensive

Preservation Plan. The Table identifies the characteristic features of the building that must be conserved, summarizes procedures for mitigating or eliminating known threats to the building, and references specific conservation techniques. This section also suggests potential funding and partnering strategies for implementing the recommendations.

All work should conform to the Secretary of the Interior's *Standards for Preservation*. Persons familiar with adobe, lime plastering, and the use of other traditional materials and techniques must be tapped to undertake the work. It is hoped that the preservation recommendations in the form of line-item activities can be provided to qualified contractors and subcontractors for them to prepare bids for the actual work. A final preservation project cost estimate can be tallied once the cost for each of the activities has been calculated.

Engaging the Community and Appealing to Potential Funders

The Blackwell School Alliance members envision resurrecting the historic Harper Building and site for use as a vibrant museum, community hub, learning center, and green space for the entire Marfa community to share. Although the preservation of the building itself represents the core purpose, its adaptive re-use serves a larger purpose.

It is worth noting that potential funders are often as interested in *how* the historic preservation is accomplished, as much or more than they are interested in *what* is being conserved. Most foundations may, for example, care more about revitalizing communities; engaging youths at-risk for truancy, anti-social behavior, substance abuse, or violence; and/or providing educational opportunities or parks or local gathering places than they are passionate about the historic resource itself.

A Blackwell School Alliance and Cornerstones Community Partnerships Collaboration

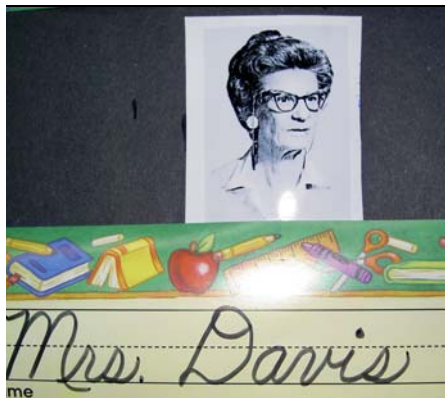
As funding and scheduling permit, the Cornerstones Staff looks forward to working together with the Blackwell School Alliance to raise awareness and educate the public about the philosophies guiding the historic preservation profession; the cultural and architectural importance of this building in our region's history, and the need for a Marfa community core, green space, and learning center.

The Cornerstones Staff collaborates often with the National Park Service (NPS), the New Mexico Historic Preservation Division (HPD), the Engineering Technology Department at New Mexico State University (Las Cruces), and Mexico's *Instituto Nacional de Antropología e Historia*, (INAH).

In addition to involving our long-term constituents, Cornerstones anticipates bringing new partnerships and funding strategies to bear in order to assist with this important endeavor in any capacity we are able to.

Historic Context

Serving first as the Mexican Methodist church, the doors to the Harper Building opened in 1889 to formally educate Marfa's Mexican children. Named for Principal Jesse Blackwell, the Blackwell School shut its doors in 1965 when all of Marfa's schools were racially integrated.



A thriving and separate campus from Marfa Elementary School, Blackwell served hundreds of predominantly Latino children (and children from the nearby neighborhood) from kindergarten until the 8th Grade.

The 1896 United State Supreme Court case, *Plessy v. Ferguson*, sanctioned ethnic segregation, declaring that institutions and amenities could be "equal" though kept "separate" between those of Anglo-

Saxon descent, and those persons of color. The reality of substandard or non-existent restroom facilities, "Whites Only" restaurants, and separate school systems most often meant, though, that minorities were left to cope with unacceptable circumstances. State and municipal funding seemed to find its way to the predominantly white educational institutions, whereas the others were left to fend for themselves.

Without necessarily understanding the underlying social situation, Joe Cabezuela and the other Alliance members vividly remember helping their mothers and other members of the Blackwell Parent Teacher Association sell tamales at fundraisers to help buy textbooks.

In a well-intentioned but ill-conceived attempt to culturally assimilate her students, Mrs. Davis carried out the State's mandate to allow only English on campus. Students still remember her asking them to write words in Spanish on slips of paper. The slips were put into a box, and the box was buried during a mock-funeral ceremony.

Rather than embracing both Latino and Anglo cultures, Mexican children were asked to forego their familiar customs, including their Spanish language. Children who continued to speak in their native tongue were paddled. Because this, and similar efforts, were repeated in schools across the country, remembering becomes an important facet of understanding U. S. history as it relates to the treatment of Latinos, Native Americans, Asians, African Americans and Blacks, and other ethnic minorities.

The preservation of the Harper Building becomes an important lesson in understanding how Marfa used to be. The transition from Blackwell School to Marfa Community Center celebrates a policy of inclusiveness and diversity, and commemorates the beginning of a new and vibrant heyday.

Statement of Significance

The historic Blackwell School is closely associated with the broad patterns of our local, state, and national history. It is a visible reminder of the tenacity of ethnic groups to maintain their cultural identity despite efforts to conform to an Anglo political domination.

It is a physical record of the longevity and beauty of the distinctive design and craftsmanship in using traditional techniques; and in relying upon local, readily available, materials and skilled labor. The design and workmanship represent the transition from purely the vernacular to the period of materials, design, and workmanship made available after the arrival of the railroad.

Brief Chronology

- 1889 Earliest known photo of Blackwell School’s Harper Building, originally a Methodist Church, featuring a wood shingle roof and a cupola. The actual construction date is not known.
- 1896 The U. S. Supreme Court, in *Plessy v. Ferguson*, sanctions the practice of segregation (chiefly in the nation’s South) by upholding as constitutional the principle of “separate but equal” public accommodations and facilities for ethnic minorities.
- 1914 Written description of the Harper Building in 1914:
“...three room adobe, plastered house...belfry... heated using coal... two outside toilets. East (front) long room that ran north-south...Archway and short wooden doorstep that led to double or very large door... On the west, two side-by-side classrooms... Each had an outside door and a heavy staircase... no playground equipment.”

Source: John Fortner, *Big Bend Sentinel* (23 April 1987).
- 1920s-1930s Additional buildings and classrooms added to lot.
- 1954 The U. S. Supreme Court, in *Brown v. Board of Education of Topeka*, rules segregation illegal, launching an earnest twentieth-century struggle for civil rights nationwide.

Blackwell School teacher Evelyn Davis introduces “The Last Rites of Spanish Speaking” in an effort to culturally assimilate the Spanish-speaking students.
- 1957 Blackwell School students paint interior murals at the “Yucca Restaurant,” recently known as “Carmen’s” (currently vacant).

U. S. Federal troops force Central High School (Little Rock, AK) administrators to integrate by admitting twelve black students.

- May 1960 Faculty and Graduating Class of 1960: Joe Cabezuela, Narciso Sanchez, Joe Mendoza, Tino Ontiveros, Richard Williams, Mario Cobos, Johnny Espinoza, Mrs. Evelyn Davis, Mr. Henry Ward, Richard Vasquez, Tomas Molinar, Tony Gaspar, Santos Gonzales III, Oscar Torres, Willie Rubio, Santos Gonzales, Jr., Mary Helen Balderama, Amalia Acosta, Delfina Rubio, Rosa Grado, Socorro Guevera, Delia Rivera, Maggie Nunez, Ida Guerrero, Maria Rosario Villanueva, Josie Leos, Mary Rosa Villanueva, and Anna Fuentes.
- 1988 Blackwell Reunion Committee formed to rekindle old friendships and to offer scholarships.
- May 2007 The Blackwell School Alliance signs a 99-year lease with the Marfa Independent School District for the Harper Building.
- “Exhumation of Mr. Spanish” during first Blackwell School class Reunion. The “Roll Call” list identifies 1,687 former students to date. Volunteers are asked to join the Blackwell Restoration by registering (\$25.00) to receive the Alliance newsletter at: Registration Directors, PO Box 417, Marfa, TX 79843.
- July 2007 The Blackwell School Alliance files for non-profit tax-exempt status under Internal Revenue Service (IRS) code Section 501(c)(3).
- February 2008 Memorandum of Agreement (MOA) Signed Between National Trust for Historic Places, and Cornerstones Community Partnerships, to Provide a Conditions Assessment and Preservation Recommendations.
- March 2008 Blackwell Alliance receives an Abstracter’s Certificate signed by Presidio County.

April 2008

The Conditions Assessment fieldwork is accomplished, and the Cornerstones Board of Directors visits Blackwell School.

Executive Director Jim Hare offers a letter stating that Cornerstones is willing to act as a financial conduit or fiscal agent at no charge until the Blackwell Alliance achieves its own non-profit status.

June 2008

First Annual Meeting of the Blackwell School Alliance Board is held at Hotel Paisano (Marfa, TX).

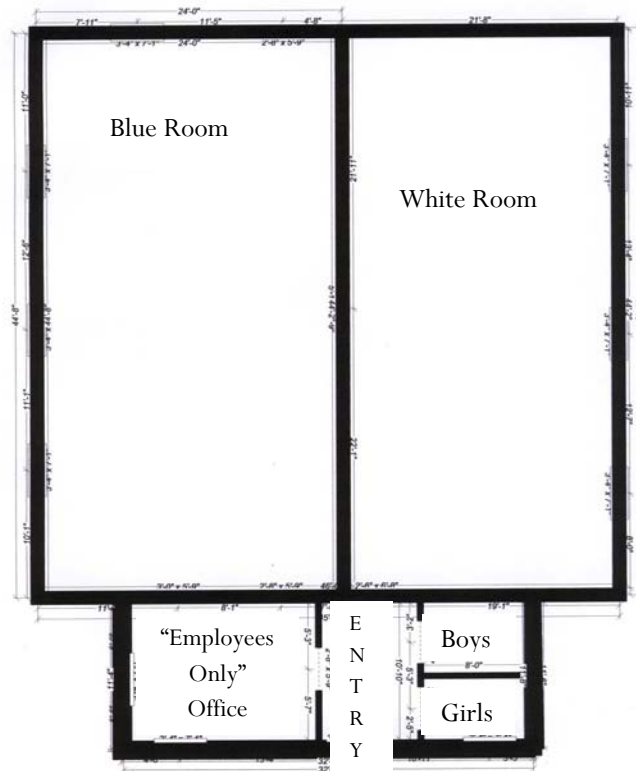
August 2008

Another successful Blackwell School Alliance fundraiser is held in conjunction with the annual Marfa Lights Festival.

The Cornerstones Community Partnerships Staff prepares several Letters of Intent on behalf of the Blackwell Alliance preservation project to submit to potential funders.

The “Final Conditions Assessment and Preservation Recommendations” document is delivered to the Blackwell Alliance, and to the National Trust for Historic Preservation.

Blackwell School (Marfa, TX): Floor Plans and Street Location



FRONT DOOR

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ABBOTT STREET (EAST)

Architectural Description: Defining Features

The historic schoolhouse is a simple, story-and-a-half, gable-roofed building that is symmetrically fenestrated. It features a tall stone foundation set in lime mortar, several original wood-framed sash windows, wood doors, and thick (24") adobe walls. Although most of the original doors and windows have been removed, a wide wood soffit and overhang, rake boards, and wood door and window trim lend an air of 19th-century charm.

The wood shingle roof has been replaced with metal. The addition of the impermeable render has caused noticeable differential movement and subsequent cracking. The ruptured stucco allows water infiltration and pest intrusion. Save for a flagpole and some signage, the rest of the city block is barren.

The original site configuration, including the landscaping, still needs to be researched.

Characteristic features to be considered during the preservation process include:

- Traditional (adobe, lumber, and stone) construction
- The use of lime in the plasters and mortars
- Operational wood sash windows and doors with period hardware
- Exterior trim at roof
- Tongue-and-groove wood flooring
- Interior trim, including wainscoting, crown molding, chair rail, etc.
- Simplicity of room layout
- Removed original furnishings, including stoves for heating, desks, etc.

Historic photographs will be used to replicate the missing original elements.

Conditions Assessment: Photo-Documentation



Deterioration at Front Façade Caused by the Addition of Cement Stucco

Photo-Documentation: Window Openings



Nearly All of the Historic Windows Have Been Removed

Photo-Documentation: Rear Elevation



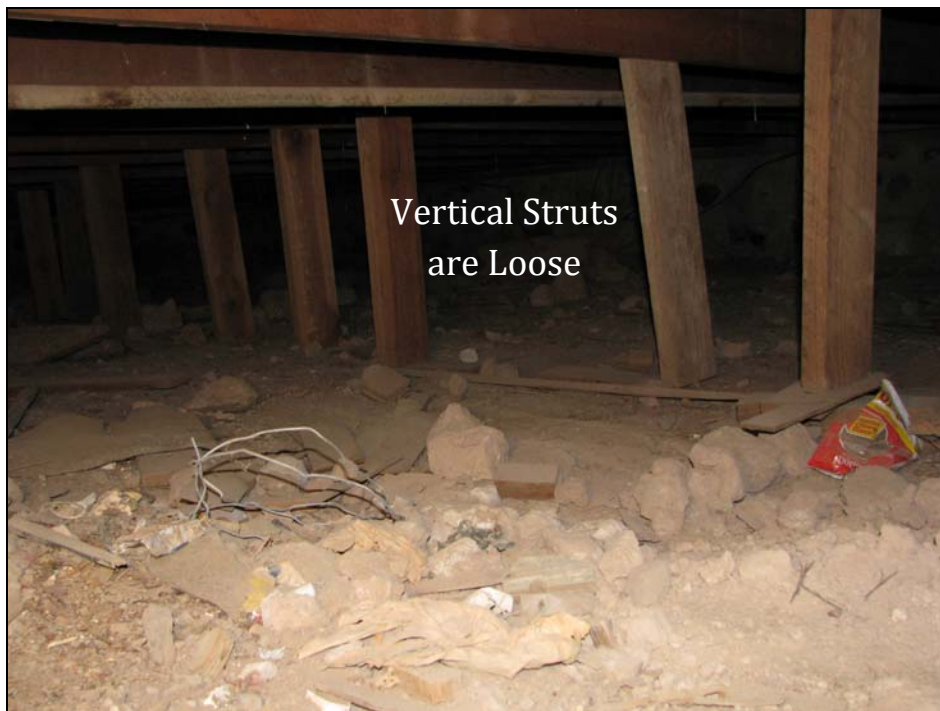
A Rear Adobe Wall Has Been Replaced Using Stud Framing. Please Note the Addition of a Concrete Loading Dock and Wood Ramp, and the Faulty Roof Design at the Concrete Hallway Between the Main Building and the Band Room. Americans with Disabilities Act (ADA) Issues Will Need to be Addressed During the Upcoming Preservation Effort.

Photo-Documentation: Crawl Space Beneath the Floors



The joists sit on top of a rock wall that provides more than adequate clearance and ventilation. None of the joists shows any signs of deterioration.

The vertical struts sit on top of wood blocking. Many are loose and need to be shimmed or reattached.



Clean out adobe rubble, trash, wood scraps and other debris to minimize the threat of moisture retention or pest intrusion.

Photo-Documentation: Interior Details



Interior trim pieces are missing, including sections of crown molding at the ceiling, wainscoting, baseboard, shoe mold, and chair railing. Enough original material remains, however, to replicate the missing trim pieces.

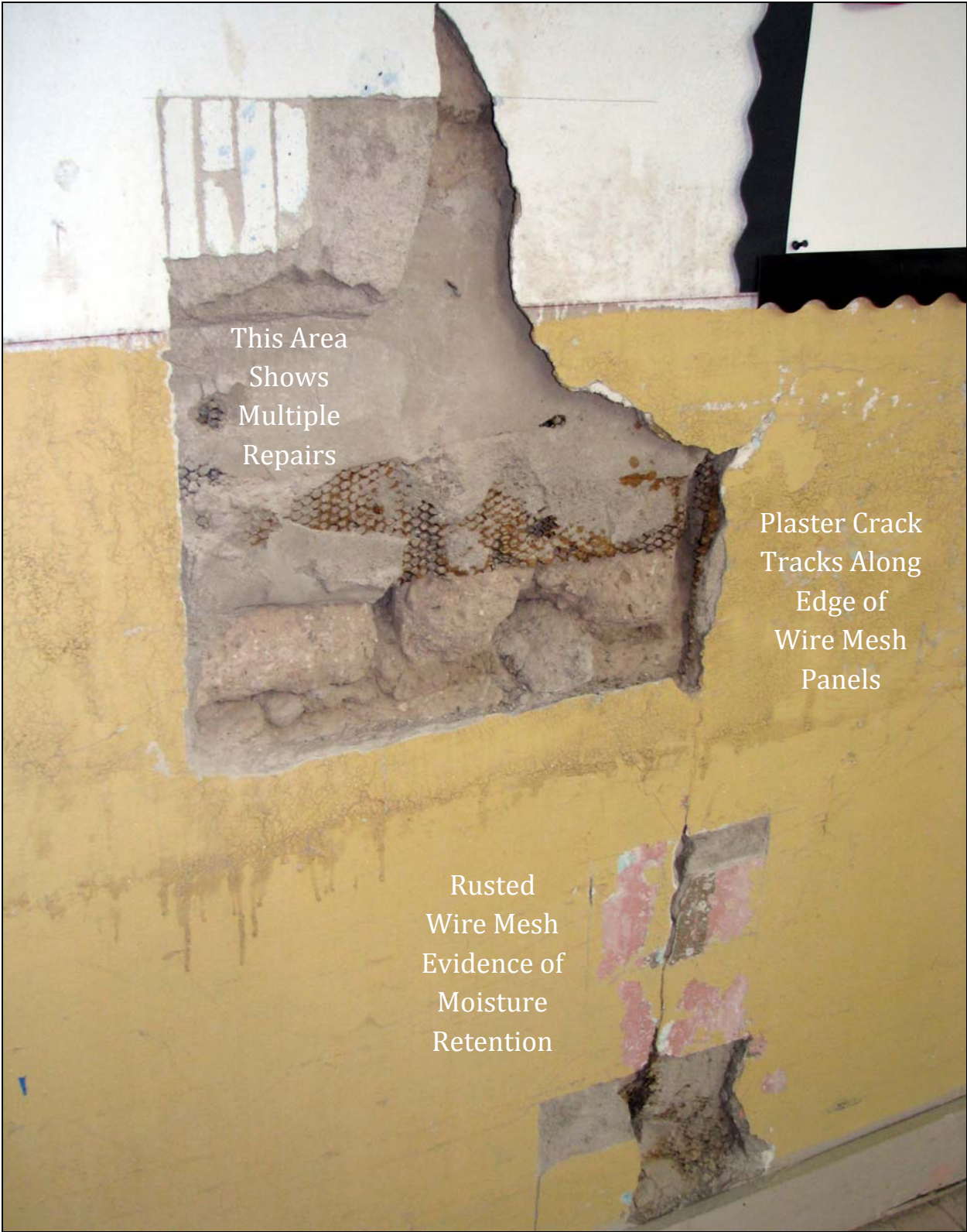
Latex paint and other finishes are spalling.

Recommend replacing original finishes (e.g., mud plaster, lime wash, etc.) and replicating the missing trim in each room.



The Interior is in Need of Routine Maintenance.

Photo-Documentation: Interior Plaster



This Area Shows Multiple Repairs

Plaster Crack Tracks Along Edge of Wire Mesh Panels

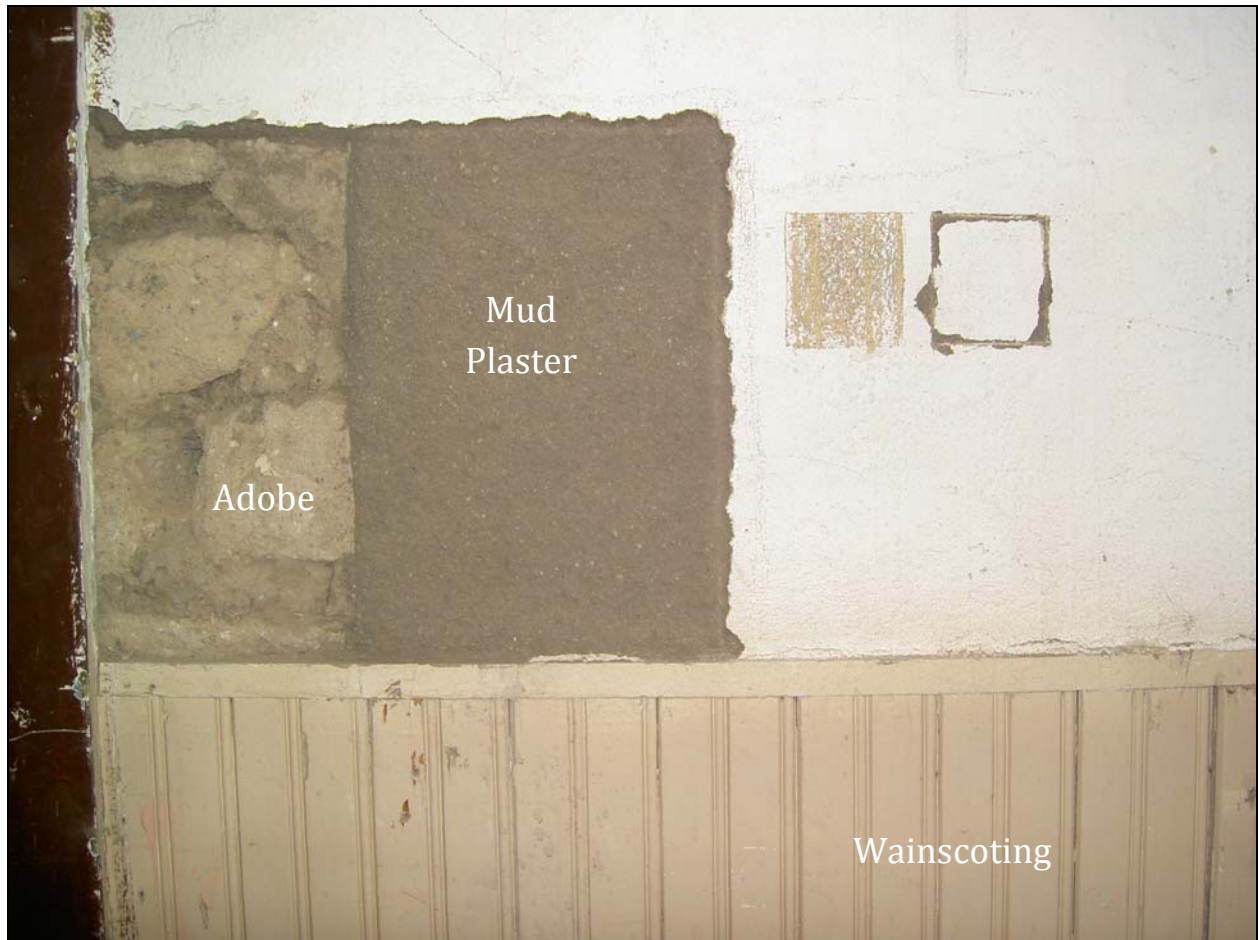
Rusted Wire Mesh Evidence of Moisture Retention

Band Room Roof Framing Investigation.



2" x 4" Rafters and Bottom Chords with 1" x 4" Vertical Supports: No Evidence of Stress, Deterioration, Leaking, or Pest Intrusion Noted During an Inspection of the Framing System Above the Band Room.

Photo-Documentation: Intrusive Interior Investigation



Intrusive Investigations at the White Room (South Wall) Reveal Latex Paint, Lime Wash (Verify) and Mud Plaster Applied to Original Adobe Wall Above the Beaded Wainscoting.



Photo (Left) Shows the Condition of the Wall Prior to the Layer-by-Layer Intrusive Investigation.

Photo-Documentation: Roof Framing Above Main Building



Photo (left) Shows Large Owl's Nest at Roof Eave. A Missing Piece of Rake Trim/Cornice Return at the Exterior Front Façade Has Allowed the Intrusion

Roof Framing (Rafters & Collar Ties) and Decking Supporting New Metal Roof

Field Notes and Historic Photographs

Fieldwork Conducted: 07-12 April 2008

Front Facade (East Elevation)

Five concrete steps lead to the central main door (34" x 84") and concrete landing which faces east. One large (32" x 72") window unit flanks either side of the door. A ~24" square louver to vent the gable attic features wire mesh and wood trim. The basaltic (porous lava) rock foundation is exposed at the SE corner. Naturally quarried, and un-worked or dressed, the stones typically measure 8" x 9" and 8" x 11" and are set in a sandy lime mortar. Some stones are rounded, and others are rectangular.

The original foundation and lime plaster have been unsympathetically patched using wire mesh and a cement-based (relatively impermeable) stuccos and mortars. The cement stucco measures ~ 1" thick.

The front façade features a wood soffit and overhang, rake boards and wood trim. The rake boards are loose. The caulk joints have deteriorated. The northeast corner is missing the rake board return. As a result, a large and active bird's nest is visible at this location.



Blackwell Band c1948. Photograph courtesy of the Blackwell School Alliance.

Although further investigation is necessary, a pipe in the ground at the front elevation may channel surface water to a dry well.

The front steps (not original) and wall base show different paint layers, including red, blue, tan/peach and

white. An earlier flight of wood [verify] steps was wider, and may have concealed access doors to the crawl space.

The window unit to the left of the front door, and the door itself are replacements. The

window opening to the right of the front door has been plastered over. Although well-intentioned, the use of dissimilar (cement versus traditional mud and lime) patching materials has resulted in differential movement between the brittle stucco and the softer wall material. The wire mesh has rusted in areas, causing the plastering anchoring system to fail. Extensive vertical cracking in the stucco and the adobe is evident. Water has been allowed to channel along the length of the crack and collect at the base of the wall. Some coving (surface erosion) at the base of the walls probably due to long-term moisture entrapment is visible. The paint at the wood trim features is failing. Wood architectural features need to be repainted, repaired and reattached as necessary.

Southeast Section

Moving clockwise around the building from the front façade, the southeast section of the building measures 12' wide and shows a 76" inset. A window opening has been in-filled and plastered. A telephone box and a hose bib are located here. Significant cracking is evident. One trim board at the soffit is damaged. The larger trees and weeds have been removed.

Prep, prime, paint, repair or replace damaged soffit wood, depending upon physical probing and assessment. Remove encroaching vegetation.

Main Room (South Elevation)

The far left (replacement) window is constructed using five lights and an aluminum frame. The glass is broken. The central window has been in-filled and plastered. The right window is blocked using plywood and insulation at the interior.



Choir. Photograph courtesy of the Blackwell School Alliance.

Minimal plaster cracking at the wall base is evident. Soffit appears to be in good shape and the boards intact. The preservation crew will need to double-check the condition of the wood elements through physical probing once repairs are undertaken.



“District Champs Football Team 1948.” Photograph courtesy of the Blackwell School Alliance.

Remove encroaching vegetation. Repair original windows and/or replace with historically accurate replicas.

Cinderblock Hallway between Main Room and Band Room (Addition):

The distance between the Main Room and the Band Room measures approximately eight feet. Trees have been removed at the south elevation, although the stumps remain. Prolonged dampness and mold is evident at the roof. Both the Band Room roof and the Main Building roof shed water to the concrete masonry unit (CMU or cinderblock) hallway roof. The north gable shows evidence of prolonged periods of dampness at the concrete landing or porch area, including vegetation and black residue.

Rear (East) Band Room

A rear door has been in-filled and plastered. Damaged plaster shows that the walls are structural clay tile (rather than adobe) at this location. There also appears to be a poured concrete footing at this location, although a full foundation investigation was not undertaken.

Front (West) Band Room

Whereas the Main Building was constructed using adobes on a rock foundation, the Band Room appears to be constructed using hollow clay structural tile set on a concrete footing. Although the Band Room is depicted in historic photos, it may have been constructed later than the Main Building. The sole exterior access (4' x 7' left-handed, outward-swing door) is located at the west elevation. A series of five windows (4' x 7') at the West Elevation have been in-filled and plastered. The roof gables face north and south. The plaster exhibits minimal (cosmetic) cracking some 18" above grade. This cracking may indicate a transition between the use of different materials (i.e., concrete foundation and structural clay tile wall). The 12"-14" wood overhang shows signs of deterioration, including some paint peeling and small areas of possible rot. Exposed rafter tails (2"x 4") extend ~12" beyond the plane of the wall. The rafters are notched to the top plate of the wall. The gable features 2"x 4" rake (trim) boards. Several decking boards have been replaced using plywood. Several remaining boards show some splitting and the beginning stages of paint failure. A vertical crack extends from the ground to the full height of the wall. Although it has been caulked, this crack needs to be monitored. The structural clay tile may be cracked behind the plaster due to settlement or water infiltration at this location.

Side (North) Band Room

A wood ramp (from grade to 28" above grade) is constructed using 4" x 4" posts and 2" x 6" boards, and accesses the rear door to the Main Building. A concrete masonry unit (CMU) and concrete porch or landing is located at this elevation. The date "1974" is etched into the concrete. The sloped landing does appear to shed water, although water does collect next to the concrete hallway.



Main Building (West Elevation)

The rear door (3' x 76") exhibits a right-hand, inward swing. This wall is not original. The historic adobe has been replaced using studs and oriented strand board (OSB) attached using screws. Currently this wall shows one two-over-two window (fixed panes). Vertical cracking is evident at the northwest corner where the new plaster meets the existing plaster. The 14" wood soffit overhang and fascia board show some signs of deterioration, including loose or missing knots and peeling paint. The paint is also failing at the wall face.

Main Building (North Elevation)

Small pebbles have been placed at the foundation perimeter to help shed water. Consult with a specialist to ensure that the grade is at the proper height to

promote positive drainage. This elevation at one time featured three symmetrically-placed windows that were larger in size than the replacement windows. The central window has been in-filled and plastered. The existing windows are constructed using three fixed lights at the top, and the sliders at the bottom, set in aluminum frames. The glazing is deteriorating.

The soffit boards need to be monitored for rot. The rake boards are loose, and the paint at the wood members is peeling.

An electrical meter, fuse panel box, and a gas line are located at this elevation. The glass is broken at the corner street lamp.

Main Building (North East Corner)

Prolonged dampness at the inside corner of the main building is indicated by vegetation intrusion, plaster cracking, and delaminating paint. An investigation of the hose bib at this location confirms that the waterline pipes are leaking underground.

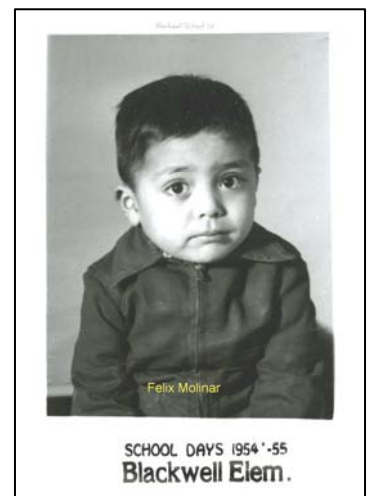
INTERIOR INVESTIGATIONS

A room-by-room inspection of the structural and architectural features, including the crawl space and the roofing systems, revealed that the building is in excellent shape. Alterations to the original building design, including the loss of original doors and windows, are reversible.

Front Entryway

Partition (stud and gypsum wallboard) walls have been added to the front entryway to provide restrooms and an “Employees Only” office space. Linoleum flooring covers plywood and decking on wood joists. Hand-lettered signs “BOYS” and “GIRLS” are located above the restroom doors. A sink and water fountain located between the two restrooms is no longer operational. Rotted floor boards indicate prolonged dampness caused by plumbing leaks.

Each restroom features a 5-panel solid wood door (3' x 6'-4") with period hardware. The door trim shows several layers of paint, including blues and greens. A 32"-square wood bead board attic access door with 1" x 6" trim is located above the restrooms. It features a right-handed, outward swing. The “Girls” bath room features a poured concrete floor, one sink, one toilet, one toilet paper holder, a paper towel holder, a soap dispenser, a bare light bulb at the center of the ceiling, and a dropped acoustical tile ceiling that obscures the full height of the window. The “Boys” bathroom features one



urinal, one toilet, one sink, one paper towel holder, one soap dispenser, one toilet paper holder, and a dropped acoustical tile ceiling.

It appears that bead board wainscoting (~4'-6" tall) at the front entryway has been removed to accommodate the partition walls. Although each has been removed, "ghost" baseboard and shoe molding outlines are evident. Floor-to-ceiling height measures a full thirteen feet tall. The ceiling is constructed using the same bead board as the wainscoting sections. Small crown molding conceals the wall/ceiling juncture.

One of two Main rooms, known colloquially as the "White Room" is accessed directly from the Front Entryway. A large opening (6'-10") features left-hand hinges, and swung into the entryway. Although hinges and latching hardware remain attached, the door has been removed. Wide (1" x 6") door trim is painted red.

The "White" Room

The White Room features 3-1/4" wide tongue-and-groove flooring boards face-nailed using common nails. Shrinkage and gaps are evident between many of the boards. The floor may have been painted peach or tan at one time. Wainscoting (4' tall) and chair rail (2" wide) and scotia molding grace the long (north and south) walls, and lend an air of formality to the room. The wainscoting has been removed from the east and west walls. Sections of chair rail have been removed from the south wall to accommodate cabinets.



Imelda Dominguez in the Uniform her Godmother Sewed. Photograph courtesy of the Blackwell School Alliance

Hand-painted letters at the north wall read, "PAINTING DEPT."

Typical window sills feature very wide (17") boards, with the interior edge rounded into a bullnose. The windows are trimmed using 1" x 6" boards. Sections of crown molding are missing. The "ghost" marks of missing trim pieces remain evident. Brick flues indicate the location of kerosene stoves.

Fairly extensive cracking in the east White Room wall appears to correspond with the end of the Boys bathroom north wall (approximately 11' north of the doorway to the front entryway).

The "Blue Room"

The "Blue Room," located south and adjacent to the White Room, is accessed through a large open doorway. It is also accessed through the Band Room to the west, or through the "Employees Only" office to the east. The east wall door is

constructed using solid wood (3'-7') and features a 25" x 27" glass panel at the top and three raised wood panels below. The transom is boarded over. The west wall door, probably of the same construction, has been removed. Only the blocked transom remains.

This room features the same tongue-and-groove flooring, wainscoting, ceiling, and crown molding as the adjacent large room. The baseboard and shoe mold, and the chair rail have been removed. The interior walls and trim are in need of routine maintenance: scrape, prime, and paint. Care must be taken to ensure maximum permeability, particularly on the adobe walls.

Three windows are blocked at the south wall, and one window is blocked at the west wall. A sink and water fountain are mounted to the north wall. Two flues are located in the Blue Room, opposite those in the White Room.



The Associated "Band Room" Building

A concrete ramp connects the Blue Room with the Band Room through a concrete block hallway at the west elevation of the Blue Room. The Band Room is thus a separate building located at the rear of the Main Building, and has its own exterior door at the west elevation.

Whereas the door at the Blue Room has been removed, there is a hollow-core door at the Band Room east wall. The door is right-handed and opens into the Band Room. It is trimmed using 1" x 4" boards. The walls measure ~10" thick. There is some evidence of burning at the northwest corner interior walls.

The Band Room walls appear to be constructed using a combination of concrete masonry unit (CMU) and structural clay tile. Different paint patterns at the floor suggest that interior partition (non-load bearing) walls have been removed. Dropped ceiling panels (4' x 8') sheets are attached to the bottom of the roof trusses. The joints are concealed using narrow wood trim strips.

The “Employees Only” Office Space

A partitioned space to the left of the Front Entryway features a linoleum floor and original walls concealed by thin faux-wood paneling. The aluminum-framed window is visible at the east wall. Plywood obscures the south wall window. Although an earlier ceiling is visible above the room, from inside the room the ceiling has been dropped using faux-wood panels.

The solid wood door between the Entryway and the Office Space features a fixed glass pane, with four raised wood panels. The wall paneling probably obscures a transom over the door. A fuse box is located at the north wall.

INVESTIGATION #1: Damp Ground at Water Shut-Off Valve (Exterior)

At water shut-off valve at the northeast corner of the building. This site was selected because the ground next to the foundation is damp. Exposing the valve below ground reveals that cellulose (shredded paper) and Styrofoam pieces have been placed between rocks and chunks of concrete presumably to provide temporary insulation. A closer inspection reveals that the nut at the valve knob leaks badly when the water is turned on.

Note: The main shut-off valve is located quite some distance away, near the Blackwell sign at the northwest corner of the property. Prolonged dampness is allowing encroaching vegetation to thrive. The mortar joints at the foundation are threatened by the ground moisture, and the water will cause problems to the adjacent wall during seasonal freeze/thaw cycles. The valve and the pipe must be



“Pledge of Allegiance.”

Photograph courtesy of the Blackwell School Alliance.

monitored and inspected for leaks once the leaky valve is repaired. Depending upon the frost line level, building managers may want to construct an insulated box for the water valve once it is repaired.

INVESTIGATION #2: Foundation Investigation NE Corner Area (Exterior)

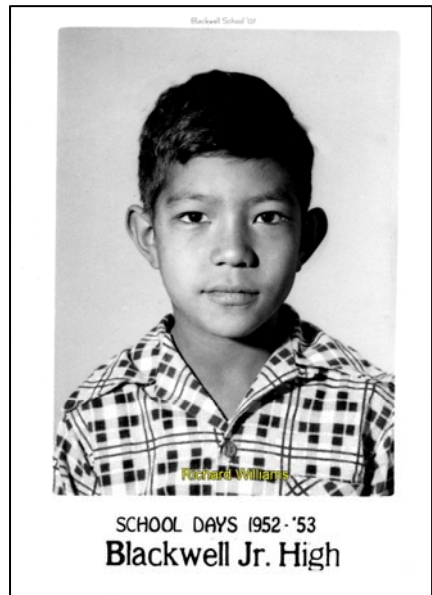
A small (16" x 24" x 8" deep) trench at the foundation near the water shut-off valve at the northeast corner of the building reveals a rock foundation on grade. The centerline of the test pit measures 28" east of the shut-off valve. The bottom of the 1" to 1-³/₈" thick cement stucco is ~6"-7" above existing grade. The gap between the bottom of the cement stucco and the grade has been covered with smooth river rock to help shed water away from the building. Consult with a specialist, though, to ensure that the grade at the foundation perimeter is at the correct height to promote positive drainage.

The rocks used to construct the wall vary in size. They are roughly rectangular, and measure between 10" and 18" in length, and 6" and 9" in height. The rocks are set in lime mortar. The mortar joints vary in width (½" - 1"+). The rock faces are clean. It appears that the bottom ~24" of stucco may have been painted gray at one time. Several layers of paint are evident.

INVESTIGATION #3: Several Areas at Front Façade (Exterior)

An investigation at the northeast corner of the front façade reveals that the plaster is thick at this location (1-½" to 1-¾") and has delaminated (pulled away) from the rock and

adobe. Subsequent freeze/thaw cycles and seasonal weathering (hail, wind, rain, etc.) will eventually cause a large section of plaster to fail. Although the plaster no longer adheres to the adobe at this location, the mortar joints are solid. There are no signs of settlement. A similar dynamic has caused a sizeable section of plaster to fail completely at the southeast corner of the front façade.



An inspection of both deteriorated areas reveals that much of the damage may have been caused by roof and soffit leaks prior to the installation of the new metal roof. Continuous water runoff or tracking down the wall has caused failure and/or de-lamination. Plaster cracking allowed water penetration. Over time, the wire mesh anchoring the plaster to the adobe wall corroded and broke. Some areas of the plaster show a 2"+ air cavity between the back of the plaster and the adobe wall face.

Grass is growing in some of the ruptured plaster areas, demonstrating the extent of the loose plaster infill and long-term moisture retention.

Please note that the existing front steps and landing (concrete) were originally constructed using wood. The area behind the concrete landing may conceal wood framing or nailers for the wood steps.

The area at the SE Elevation (Front Façade Left) corner shows the worst deterioration of any other aspect of the building. The area showing the most damage is located three or four adobe courses above the bottom of the cement-based stucco (five or six courses above grade). The adobes are set using lime mortar. The rock for the most part appears to be un-worked (natural). The joints vary in width, from very narrow ($\frac{1}{4}$ ") to very wide (2" +). The lime mortar is a very soft mix (high sand to lime putty ratio). The walls will need extensive mortar re-pointing work once the cement-based stucco is removed.

Suggested stabilization: Set stones in mud or lime mortar to fill the largest voids. Remove loose plaster, particularly overhead sections that pose a safety hazard. Monitor those sections of plaster that have separated from the adobe wall. Improve drainage at the base of walls.

Although difficult to find at first, there are pockets of original lime plaster that remain attached. Several are visible at the exposed front façade window header. Presumably, nearly all of the earlier lime plaster was removed prior to the application of the wire mesh and cement stucco.

INVESTIGATION #4: Floor at Entryway Boys' Restroom (Interior)

The removal of a temporary plywood panel in the floor near the water fountain reveals an area where concrete chunks, rotted wood, nails, trash and other debris have collected. Once the rubble and debris were removed, an

inspection of the joists at this location revealed that the structural members are rotted, and are no longer suitable for carrying a structural load.



INVESTIGATION #5: East Wall of “White Room” (Interior)

Hairline ($\frac{1}{16}$ " to $\frac{1}{8}$ ") vertical plaster cracking is visible from the floor to the ceiling at one particular area midway along the length of the east wall of the “White Room.” Airflow is noticeable at a gap at the top of the wall, between the top of the plaster, and the beadboard ceiling. Removing the layers used to construct the wall one by one, it appears that the cracking is caused by differential movement between the different plaster ‘recipes.’

One area shows a $\frac{3}{4}$ " soft, rough, lime plaster that has been painted. An adjacent area is harder and smoother. A third area is also constructed using a softer lime plaster. In each case it remains to be verified whether the plasters are lime or gypsum. A combination of framing and adobe is evident at this wall, possibly in conjunction with repairs associated with the leaking water fountain at front entryway. Differential movement between dissimilar construction methods within the same wall, and the different renders may account for the hairline cracking. This area also roughly corresponds to access and egress above the ceiling into the attic area below the gable roof. Physical impact and movement may also have contributed to plaster problems at this particular location.

In an effort to determine the different paint and plaster layers, small (2" x 2") squares were incised into the topmost layers to make sure that no underlying murals or artwork was compromised during the larger investigations. The following layers were revealed during the investigation at the West wall of the “White Room.”

Beginning with the outermost layer on the right side of the vertical crack:

1. Gold paint
2. Blue-green paint
3. Red paint
4. Brown paint
5. Thin ($\frac{3}{16}$ ") gypsum or lime finish coat
6. Thicker ($\frac{3}{4}$ "-1") gypsum or lime first coat
7. Wire mesh
8. Adobe (sun-dried sand and clay brick) wall

Beginning with the outermost layer on the left side of the vertical crack:

1. Gold paint
2. Blue-green paint
3. Red paint
4. Brown paint
5. Thin ($\frac{3}{16}$ ") gypsum or lime finish coat
6. Thicker ($\frac{3}{4}$ "-1") gypsum or lime first coat. Presence of horse (verify) hair noted.
7. Adobe (sun-dried sand and clay brick) wall (no wire mesh)

The investigation reveals that the long vertical crack tracks along the edge of the wire mesh. No evidence of murals beneath the surface paint was uncovered. Blue water color appears to have been splashed on the wall beneath the first white coat of paint. The fact that the cracks in this wall have been painted, suggests that they are not recent. One repair area was also noted, consisting of smooth cement-based plaster attached to wire mesh underneath what appears to be either gypsum or lime plaster.

INVESTIGATION #6: Crawl Space Investigation Beneath Main Building Floors

Access to the crawl space was initially gained through a floor hatch in the White Room. The nominal (milled) 2" x 10" x 20' floor joists run north-south, and show no signs of insect infestation, structural compromise, or rot.

The following framing methods were noted at the **Front Entryway** area near the restrooms:

1. Two 2" x 6" headers set on rock piers carry the south end of the Front Entryway joists.
2. The north ends of the joists are carried by 2" x 4" struts set into the dirt.

"Tony Lujan & Cruz Carrasco" is written in pencil on a joist. The following inscription is also written in pencil on the east face of a joist near where three water lines run north-south:



"Jakob Lujan did the plumbing here in 1972 instauld faucit and faucits outside Who ever reads this Good Luck with the Girls."

Photographs were taken of the concrete slab underneath the restroom wall, and facing east at the front entryway, showing the floor joists on 2" x 4" struts and the wood, rock foundation, and adobe debris that have accumulated beneath the flooring.

Each of the six joists at this location is supported by 3" x 3-3/4" posts. The posts may be set on rocks below the grade (only 1-1/2" below the surface was excavated during the investigation).

Modern trash was encountered at the southeast corner of the 29" tall crawl space (**below the "Employees Only" office**). Presumably the Wrigley's gum wrappers, pencils, pen tops, candy wrappers, cigarette butts, etc. were dropped through a floor grate that has since

been concealed with plywood and linoleum floor covering. The initials "DB" "MM" and "AQ" and the dates "'73-'74" were etched into a concrete patch when it was wet. No signs of rot or insect infestation were noted during an investigation of the wood members. The joists sit on a wood sill plate on top of the rock wall above 4-5 courses of rock lime mortar. Animal dung [possibly rat?] is present. An animal burrow is evident at the base (underneath) the rock foundation.

An inspection of each of the joists supporting **the White Room** floor revealed no problems. The crawl space clearance measures between 20" and 26" throughout, which provides more than adequate distance and ventilation between the bottom of the joists and the dirt. The

Photograph courtesy of the Blackwell School Alliance.



joists are set on two-foot centers, and are supported at each center span by 1-½" x 5-½" boards set on wood blocks on the flat at grade. None of the joists show any signs of stress, bowing, fatigue, rot, mold, or insect infestation. Typically, the joists are set on top of a sill plate (~20" above grade) that is supported by the rock foundation.

Typically, 3-½" x 10" x 12" adobes have been set in lime mortar on top of the rock foundation and between the joists as infill. The infill adobes feature a high vegetation content, and may even be *terrones* (sod blocks). Joist supports have been displaced, and

need to be corrected. An animal burrow underneath the North wall of the White Room will need to be in-filled. At least a dozen small pencil nubs were identified and collected from this area.

Because the east wall of the White Room shows vertical cracking, a special effort was made to examine the foundation at this location. The adobe wall sits on a rock foundation, and a joist closely parallels the foundation. None of the elements (joist, rock foundation, or adobes) show any signs of stress or deterioration.

At least six vertical struts supporting the White Room joists need to be reattached to the joists and shimmed tight. Several are loose, and several more are completely detached and are no longer functioning as joist supports. One large (broken/unused) adobe measures 13" x 19" x 3-½". Blocking (2" x 4") has been installed beneath a damaged floor section near the rear (west) entrance.



“1908-1911 Mary Shannon’s Class.” Photograph courtesy of the Blackwell School Alliance.



“Marfa Tex. 1932 Public School #13.” Photograph courtesy of the Blackwell School Alliance.

The entire crawl space needs to be swept clear of accumulated dirt, broken adobes, trash, and wood debris to minimize the threat of moisture entrapment and pest intrusion. This activity will make future monitoring and routine maintenance easier.

An inspection of the crawl space beneath **the Blue Room** flooring revealed the same construction patterns previously noted, and the same overall excellent condition of the framing members. Although a section of the rock foundation at the east end of the room has been removed to run wiring, the gap does not appear to be adversely affecting the wall above it. The cross-section of the foundation measures 26" thick. The rocks are set in lime mortar. A layer of small round aggregate and lime mortar has been placed between the top rock course and the adobe infill between the joists. Large adobes visible at this location measure 12" x 22" x 3-½".

“Omar + Tanya,” “Raymond + Lupita,” and “Rudy + Terri” is written in white chalk on the vertical struts in line with the access/trap door in the Blue Room. A large animal burrow is visible at the southwest corner. Several vertical support struts are loose or detached.

INVESTIGATION #7: Roof Framing Investigation (Main Building)

A small room (12' east-west x 7'-9" north-south) above the Boys and Girls restrooms provides access to the space beneath the gable roof, and features scrap lumber flooring, 2" x 4" stud framing, and lath and plaster walls. The floor boards vary in width and thickness (¾" to 1"). The studs support a top plate.

A 5" diameter cast-iron pipe inscribed with “CFCO” and “H10-1/2LB” is evident.

The top of the floor is 6" above the bathroom ceilings. The north and east walls are plastered, and the south and west walls are not plastered.

"Raymond Roman was here 1/27/77" and "Cruz Tarango was here 1/27/77" is written on the plaster.

Sections of crown molding and the beaded ceiling at the north and east walls visible from the attic access room indicate that this portion of the front entryway was open from the floor to the ceiling at one time, and that the "Employees Only" room and the restrooms were added. The crown molding and ceiling obscured above the rooms is painted an olive green and a sky blue underneath. These paint colors pre-date the white paint visible in the remaining rooms. The floor-to-ceiling height measures 53".

A hard-fired brick stove chimney remains intact at the northwest corner of the attic access/storage area. A 7" diameter hole in the brick face may have serviced a flue. This seems to indicate that a wood or gas stove was removed with the addition of the

restrooms. "D.HANIS" (presumably the manufacturer) is imprinted on the bricks. The brickwork has partially collapsed. Adobe and brick debris have collected in the northwest corner. The wall finish appears to be lime wash on mud plaster at this location. It is important to note that this may represent an early wall finish that has been "captured" (not altered) above the restroom

addition. Perhaps the gypsum or lime plasters evident elsewhere in the building replace an earlier lime wash on mud plaster.



Photograph courtesy of the Blackwell School Alliance.

A quick inventory of the items stored in the attic access area reveals the following: Five boxes of schoolwork and papers (removed to the downstairs with the assistance of Richard Williams and Ismael Vasquez). Approximately 11 desk/chair frames (missing the seats); two folding chairs; one dozen bus cushions; a set of small cabinet doors; bundles of empty urea fertilizer sacks; two desk chairs (desks missing); a stack of insulation [asbestos?]; one broken toaster; 16 window weights, and miscellaneous debris.

INVESTIGATION #8: Roof Framing Investigation (Band Room)

An investigation above the dropped ceiling in the Band Room reveals that the walls are constructed using hollow clay tiles set in a soft lime [verify] mortar. The roof is framed using a system of trusses and a ridge board. The decking boards appear to be new, and do not show any signs of water penetration or deterioration.

The bottom truss chord (1- $\frac{3}{4}$ " x 5- $\frac{1}{2}$ ") is a long (24') single span. The rafters measure (2" x 4" x 12'). The center verticals measure ($\frac{3}{4}$ " x 3- $\frac{1}{2}$ " x 40"). The smaller support verticals measure ($\frac{3}{4}$ " x 3- $\frac{1}{2}$ " x 2'), and the diagonal supports measure ($\frac{3}{4}$ " x 3- $\frac{1}{2}$ " x 5'). Each of the trusses appears to be structurally sound, with no evidence of rot or compromise.

Heating, ventilation and air conditioning (HVAC) ducts are installed above the Band Room ceiling. Metal 1" diameter gas lines with threaded ends are visible at the north gable end.

INVESTIGATION #9: Interior Finish Investigation (South Wall White Room)

A layer-by-layer investigation of the wall finishes reveals the following sequence:

1. White latex (verify) paint
2. Amber latex (verify) paint
3. Calcimine or lime wash on mud plaster
4. Mud plaster (varies in thickness between $\frac{1}{2}$ " and $\frac{3}{4}$ ")
5. Adobe wall

Please note that a lab analysis may be necessary to determine whether the finish on the mud plaster is lime-based (lime wash) or chalk-based (calcimine) paint. Calcimine paint was used prior to the 1940s as an interior finish, and is no longer manufactured. Benjamin Moore distributes the following product that is formulated to bond with calcimine paint: "Moorcraft Super Spec Alkyd Calcimine Recoater 306."

Possible Presence of Hazardous Materials

Consult with a Hazardous Materials (HAZMAT) Specialist to assess the building for the presence of asbestos, lead paint, radon gas, mold, or other toxic substances. Cornerstones has partnered with **Terracon Engineers and Scientists** under similar circumstances.

The nearest Terracon office is located at: 24 Smith Road, Suite 261, Midland , TX 79705.

Phone: 432.684.9600

Fax: 432.684.9608

Contact:

Liz Pratt

Corporate Services

Representative

Americans with Disabilities Act (ADA) Compliance

Consult with a specialist familiar with historic preservation and Americans with Disabilities Act (ADA) compliance to ensure that egress and mobility issues are addressed during the preservation process. The goal is to achieve the highest level of accessibility with the lowest amount of impact on the historic structure. A brochure entitled, “Adapting for Access: ADA Compliance in Historic Structures” prepared by the Utah State Historic Preservation Office (SHPO) is included as an Appendix.



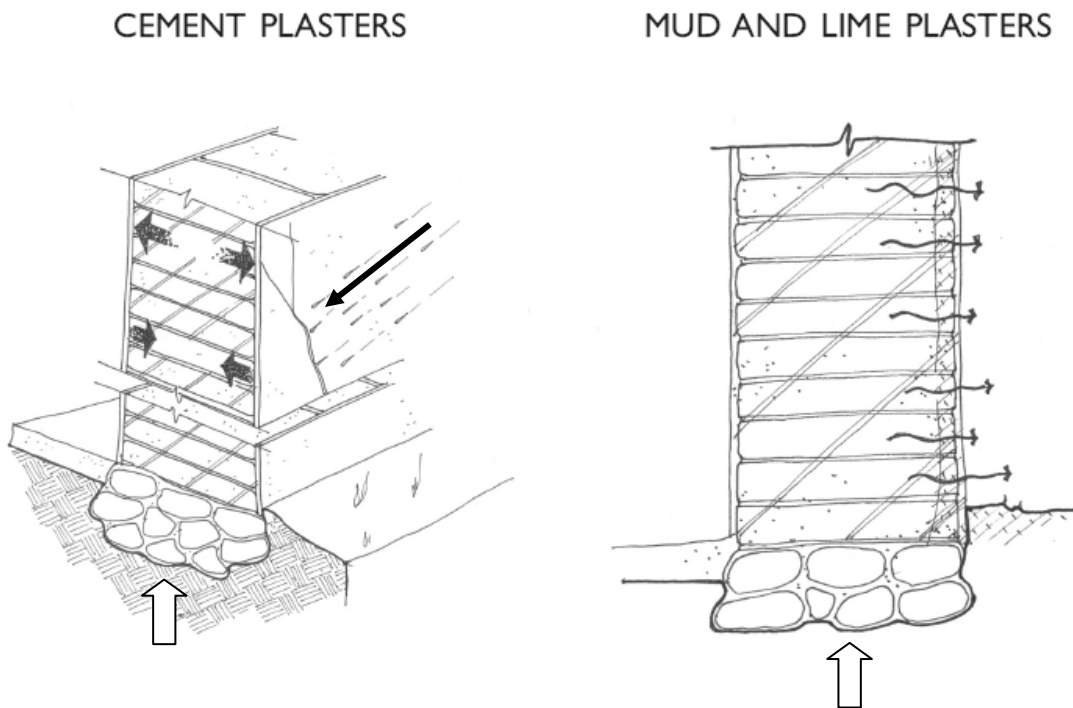
“Musical Chairs.” Photograph courtesy of the Blackwell School Alliance.

Summary

Clearly, this building has been protected and cared for over the 11+ decades since its original construction. Some repairs have been crucial in saving the building from disrepair. Providing window and door inserts to replace missing units; new underlayment and roofing; small rounded pebbles placed at the base of the walls to promote positive drainage away from the base of the walls, pruning and tree removal and other necessary routine maintenance activities have spared this building from ruin.

Although well-intentioned, the introduction of contemporary materials (ex. wire mesh, and cement-based stuccos) has caused the exterior protective render to fail. Cracking, particularly at the front façade, allows water infiltration and pest infestation. Over time, the wire mesh has rusted and the exterior plaster is in the process of sloughing off the walls.

The following diagram illustrates the different dynamics involved with the use of incompatible materials (cement plaster and adobe) and compatible materials (mud and lime plasters and adobe):



MOISTURE WICKS UP FROM THE GROUND AND ENTERS THROUGH PLASTER CRACKS

(Left) Moisture is trapped within the impermeable cement stucco plasters.

Over time, the adobe loses its structural integrity.

(Right) Traditional plasters (mud and lime) are permeable.

Mud and Lime plasters allow the walls to dry out.

When a rigid cement plaster is applied to an adobe wall, there is a high probability that the plaster will crack from the thermal expansion of the wall mass. Water penetration ensues. Subsequently, the wire mesh used to attach the cement plaster rusts, and the plaster fails. Cement plaster moves at a different rate than adobe does during daily and seasonal temperature changes. This differential movement is the major cause of cement plaster cracking.

Traditional mud and lime plasters, by contrast, are more compatible with the thermal qualities of adobe. Mud and lime plasters are permeable materials. They allow the moisture that has wicked into the walls to evaporate.

Known threats to the Blackwell School include differential movement between the plaster and the adobe substrate; moisture entrapment caused by the application of impermeable cement stucco; failing paint; missing window units; and missing trim elements. Although minimal wood rot was noted, the exterior paint is also in the process of deteriorating.

Although the building is sound, it must undergo a series of preservation measures to restore it to its original integrity of workmanship, materials, and design.

Briefly, recommend the following broad sequence of mitigation events:

- A. Deliver Final Conditions Assessment (Cornerstones)
- B. Deliver Final Preservation Recommendations (Cornerstones)
- C. Provide Suggestions for Funding Sources (Cornerstones)
- D. Provide Suggestions for Community Partnering (Cornerstones)
- E. Help Plan and Participate in an Adobe-Making Weekend (Cornerstones)
- F. Design a Landscaping Plan Maximizing Site Drainage (Alliance and Specialists)
- G. Implement Preservation Recommendations (Alliance and Preservation Crew)
 - a. Prepare a Step-by-Step Construction Sequence and Schedule (Alliance or Cornerstones or Specialists)
 - b. Use Specific Techniques and Procedures (Preservation Crew)
 - c. Coordinate with Electrical, Plumbing, HVAC, Computer/Phone/Fire Suppression/Irrigation/ (Alliance and Specialists)
- H. Install New Landscaping and Exterior Additions Once Building is Conserved
- I. Prepare a Long-Term Maintenance Plan for the Building and Grounds (Alliance or Cornerstones or Specialists)

Proposed Methodology

Recommend the preparation of signed **Memorandums of Agreement (MOAs)** between the owners, work supervisors, volunteer entities, and involved partners as needed. An MOA outlines the scope of work and assigns responsibilities. It delivers the rationale behind the undertaking, and can convince other potential funding and partnering agencies to join the cause. It also serves as a written reminder of original goals and obligations.

Keep in mind that any large ground-disturbing activities may require that an **archaeological procedure** be in place before any such work is initiated. A written procedure should detail archaeological techniques including recovery and collection, and will outline preliminary inventory and conservation techniques. This process will be particularly important as ground-penetrating work at the foundation takes place; and during the implementation of a site drainage plan. Decisions will need to be made regarding the final outcome (*e.g.*, whether the artifacts will remain on-site, or whether they will be archived elsewhere).

In addition to creating a safe, efficient, and successful preservation work environment, **the daily work supervisor should also:** (1) Provide accurate and complete **photo-documentation**, (2) **Communicate and meet** regularly with the Blackwell Alliance Board, (3) Provide accurate **Progress Reports** that detail successes and challenges, (4) Facilitate successful relationships with each of the **partners**, including all subcontractors, codes inspectors, and the Texas Historical Commission as necessary, (5) Help with **grant writing and fundraising** as much as scheduling and budgeting allows, (6) Provide regular **press releases** to regional media outlets, and (7) Provide **final reporting**, including a critical assessment of the project outcomes. (8) At the conclusion of the project, a **Long-Term Maintenance Plan** should be prepared to outline the list of regularly scheduled activities that must be undertaken to maintain the building once it is preserved. (9) A **written agreement** should obligate those involved with performing the routine maintenance. Ideally, also, a written agreement will outline the length of time for which the **preservation work is guaranteed**.

Partnering Opportunities

We recommend implementing the ‘Cornerstones Community Partnerships Model’ to accomplish the work. This model is predicated upon working with the building owners and the larger community to perform the work. Working with students, volunteers, and those at risk for underemployment, truancy, substance abuse and/or criminal behavior adds an important element of social activism to historic preservation.

In addition to teaching marketable skills in traditional building techniques and procedures, participants learn about archaeological procedures, photography, computer skills, and other tangible links to self-improvement. Intangible qualities, such as teamwork, reliability, grace under pressure, and pride in one’s work are learned and shared in an atmosphere of mutual respect.

To accomplish this aim, consider cultivating these or similar partnerships:

- Hire electrical, plumbing, and HVAC consultants who are willing to work with student interns interested in learning that trade
- Engage clients enrolled in high school or other non-traditional/alternative/disciplinary high school programs
- Work with adults and young adults who need or want to perform community service hours
- Enlist the assistance of vocational technology students at the local Community College and/or other local Vo-tech and woodshop programs
- Appeal to federal job-training programs (ex., AmeriCorps; Youth Conservation Corps) and state-level agencies (Community Service Learning) for funding and participants
- Solicit in-kind donations from those willing to perform hands-on job training, grant writing, fundraising, woodshop instruction, etc.
- Communicate with the Staff at the nearby Fort Davis to see if the National Park Service can provide assistance in the form of grants, on-site workshops, or traditional skills training
- Work with local resident Louise Greggs. She helps manage the Marfa Thrift Shop. Proceeds from the Thrift Shop sales benefit the Marfa/Presidio County Museum. Louise has offered to advertise this project at the Thrift Store, and to provide an interpretive display at the Museum. Simone Swan (Southwest Adobe Alliance) is an adobe activist living in Presidio, TX and Santa Fe, NM; Darlene Jamar (Marfa, TX) has supported Cornerstones projects in the Texas towns of Socorro and Ruidosa. Simone and Darlene have each expressed an interest in supporting the Blackwell Alliance.

Conclusions

Culturally and architecturally significant, this building is to be cherished and conserved for future generations. Cornerstones Community Partnerships is honored to be involved with this very special project. We look forward to working with the Blackwell Alliance to assist with achieving this worthwhile goal.

Involving local residents in a project of this type will ensure long-term success: Challenging and engaging the next generation; raising public awareness; economic development through skills training; and heritage tourism. As an important corollary, philanthropic foundations not necessarily focused on historic preservation as a core activity, are nevertheless willing to fund a process that promises such long-term positive results including community revitalization.

The largest and most important task confronting the Blackwell Alliance is the removal of the cement stucco in sections, repairs to the underlying adobe, the addition of a natural anchoring system, a two-coat lime plaster system and a series of lime wash coats.

At each elevation, remove the cement stucco, and repair the damaged adobes using the procedures and techniques described in *Adobe Conservation: A Preservation Handbook* prepared by the staff at Cornerstones Community Partnerships. Re-plaster using the original render (lime). Prep, prime, and paint all wood if no rot is encountered during restoration process. Replace rotted wood in-kind, in keeping with the Secretary of the Interior's *Standards for Rehabilitation and Preservation*. Pull the grade away from building by hand to promote positive drainage.

Repair the damaged adobe walls in-kind, using the same materials, design, and workmanship that was used to construct the walls originally. Use traditional adobes, for example, rather than stabilized adobes. Stabilized adobes contain additives that compromise adhesion. Traditional renders (mud or lime plasters, for example) adhere best to similar materials (such as un-stabilized/traditional adobes).

Lime plaster (lime + water + sand + aggregate) was originally applied to the exterior adobe walls. Adhesion is the critical factor when applying any type of render, especially those that are subjected to weathering. Metal anchoring systems (wire lath, for example) tend to rust in the presence of moisture, and will rupture over time. Recommend using a traditional *rajuelar* or "lattice" rock anchoring system to attach the first coat of lime plaster to the adobe substrate.

For specific recipes, techniques, and procedures for repairing adobe walls; and instructions on the use and application of lime-based renders, including the rock anchoring system, please refer to *Adobe Conservation: A Preservation Handbook* prepared by the Cornerstones Community Partnerships Staff and published by Sunstone Press (Santa Fe, NM). A copy has been donated to the Blackwell Alliance and additional copies are available on request.

Consider replacing the original wood shingles once the existing new metal roof needs more than simple routine maintenance, or requires extensive repairs. Purchase wood shingles that meet relatively new strict federal standards for being fire resistant. Please note that the existing underlayment appears to be new, and could be used to attach the wood shingles when the time comes.

As plans at the exterior progress (landscaping, parking, outbuildings, game courts, seating, restrooms, etc.) please keep in mind the critical importance of maintaining positive drainage away from the building. One of the main reasons the existing building has retained its structural integrity is the fact that the adobe walls sit on a tall rock foundation, and the fact that drainage has been away from the base of the walls. Consider using gravel instead of asphalt to minimize surface 'sheeting' or runoff. Tie into existing storm drains to channel water off-site.

If landscaping is added, keep plants and any watering or irrigation systems away from the base of the walls. Consult with historic photos and an historic landscape architect to make sure the designed setting, including the landscaping, is in keeping with historical precedent; or is in keeping with what may have been planted given this specific site type during its period of significance. Take a long view during the planning process. Keep what will become large shade trees, for example, well away from the building to minimize future pruning concerns.

A Chart showing Preservation Recommendations is included as Appendix 1. A pamphlet summarizing Americans with Disabilities Act (ADA) issues is included as Appendix 2. A letter from Jim Hare, Executive Director, offering Cornerstones as a Blackwell School Preservation Project fiscal agent is included as Appendix 3. The following federal standards are provided to serve as guidelines as plans for the preservation work progress.

Federal Standards for Preservation

1. A property will be used as it was historically; or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Source: <http://www.nps.gov/history/hps/tps.standards/Preservation.pdf>