

Historic Structures Report

of the

Devereux House



Prepared for the
Historic Sites Group
Church History Department
15 East North Temple
Salt Lake City, Utah

by Elwin C. Robison
7358 Sylvan Dr.
Kent, Ohio
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I. Introduction

This Historic Structures Report (HSR) is intended as an aid to The Church of Jesus Christ of Latter-day Saints (Church) in conserving and managing the Devereux House at 340 West South Temple Street, Salt Lake City, Utah.

The Devereux House property was acquired by the Church primarily for its proximity to other investments, and not specifically because of its historical importance. However, it is a prominent building in the history of the State of Utah, and its history does interface with the early history of the Church.

Historic properties in the United States are evaluated through the Secretary of the Interior Standards. Those standards which have direct bearing on the Devereux House are those for Restoration, Rehabilitation, and Reconstruction. Portions of the home either have been restored, rehabilitated, or reconstructed. Identification of which treatment was applied in the past will guide decisions for maintenance and conservation in the future.

Scope and Methodology

The Devereux House HSR concerns a property which already had an HSR written in the 1980s in support of the restoration, rehabilitation, and reconstruction of the property. For brevity this report will refer to these actions collectively as the 1980s restoration. The scope of the current HSR is to review the findings of the previous HSR, update the history as required, inventory the existing building fabric and determine if elements are original to the home or reconstructions, and assess the current condition of the home. No structural analysis of the home was conducted as part of this HSR.

Emily Utt provided research materials from the Church History Library collection, and she and Randall Dixon of the Historic Sites Group of the Church History Department have provided additional insight into local history and sources.

Research sources included the following:

- The Historic American Building Survey (HABS) measured drawings made in 1967.
- Historic photographs from the following collections
 - Church History Library
 - University of Utah Archives
 - Craig Paulson's photographs taken during construction.
- Sanborn Fire Insurance Company maps from 1889 and 1898.
- Architectural drawings, notes, and correspondence from the Burtch Beall Collection in the University of Utah Archives.

Research methodologies included the following:

- Examination of the extant building fabric. This examination was primarily a visual analysis. No inspection openings were made during the course of the investigation. All accessible areas of the building were examined, including the basement and crawl spaces, interior rooms, wood shingle roofs and the low slope roof on the west wing. Exterior wall surfaces were examined from the ground and from the porch roof. Key elements observed during the examination were:
 - Surfaces of woodwork which indicate hand or machine production.
 - Construction techniques typical of hand production, such as mortise and tenon connections.
 - Surfaces and edges of woodwork which indicate decades of use in regions likely subjected to contact.
 - Deterioration of distress in finishes and substrates.
 - Evidence of past repairs.
 - Evidence of moisture through stains, corrosion, fungus, or dimension change.
- Comparison of historic photographs with current conditions
- Evaluation of stylistic congruence between architectural elements and the time period of construction.
- Interviews with Craig Paulson, contractor for the restoration, and Jim McElwain, project architect for the restoration.

The Devereux House was the site of important social and political events in the early history of Salt Lake City. The State of Utah made a substantial investment into the preservation of the Devereux House. This HSR will aid the Church in making the best use of this unique resource.

II. Devereux House History

Summary

The Devereux House began as a Carpenter's Gothic cottage built by William Staines. Noted for the extensive gardens and fruit trees, the property was purchased by the successful retailer and investor William Jennings in 1867. Jennings tore down the Staines cottage and built a substantial Italianate residence in two phases. With the establishment of the railroad station just a block to the west, the property became less desirable as a residence, and it went into a gradual decline until it languished as an abandoned property. It was purchased by the State of Utah in 1977, but in 1979 vandals burned a significant section of the building. The centerpiece of a large urban development project, it was restored and adaptively reused as a restaurant and reception center, a function it continues to serve since it was purchased by the Church in 2005.

William Carter Staines

Staines was a prominent figure in early Utah history. Joining the Church in England and emigrating to the United States in 1843, he distinguished himself by handling difficult assignments for the Church. Notably, he was assigned to be a liaison with the Ponca Native American tribe in 1846 and spent four months over the winter with the tribe.¹ He traveled to Salt Lake City in the second pioneer company, arriving on 15 September 1847.² Staines was a partner in a mercantile establishment in 1860,³ but he left this business when he was called on a mission to England in 1863. Upon his return he worked as a Church agent making arrangements for emigrants coming to the Great Basin.⁴ Staines was part of a site selection committee for the new territorial capitol building, and he was named the Territorial Librarian. Under his direction the library acquired works on horticulture, landscape architecture, and architecture.⁵ Staines was present at the organizational meeting of the Horticultural Society, was a member of the Deseret Agricultural and Manufacturing Society⁶ and worked as Brigham Young's gardener.⁷

Staines turned his own home three blocks west of Temple Square in Salt Lake City into a showcase property with extensive landscaping. Staines attended the meeting of the State Fruit Committee, bringing specimens of grapes he had raised in Brigham Young's vineyard and stated, "Some argue that it is too expensive to fence and raise fruit, but it is my business to decorate and beautify Zion, it is part of my religion as much as going to meeting, praying or singing."⁸ Staines' interest in gardening was much more than a hobby. There was significant doubt about how crops would fare in the high altitude valleys of the Great Basin,⁹ and Staines was active in trying out different varieties of fruit trees and garden crops. Staines proudly recorded in his journal, "Took Dinner...with my Family 6 kinds of Peaches upon the Table some measured 9 3/4 Inches round..."¹⁰



Figure II-1. William C. Staines.

It appears that Staines was significantly influenced by Andrew Jackson Downing, the so-called “arbiter of American taste.” Downing wrote *A Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America* in 1841, and then the following year teamed up with architect Alexander Jackson Davis to produce *Cottage Residences*, a pattern book which illustrated designs which incorporated many of the features found on English rural homes. This influential book popularized the Carpenter’s Gothic style in the United States. One of the themes in Downing and Davis’ book was the idea that the style of one’s home should reflect the station and achievements of its owner, and that the style of one’s home could contribute to the moral character of its inhabitants. This echoes Staines’ comment about his “business to decorate and beautify Zion.” A similar book, Lewis F. Allen, *Rural Architecture*, published in 1853 and in the Utah Territorial Library, gives similar advice to homeowners and also advocated both the Italianate and Carpenter’s Gothic styles.

Finished in 1857, Staines’ cottage was intended to be a landscape gardening showpiece, as he sited his residence well back from the street in the center of the property. Likely influenced by Downing’s and Allen’s recommendations on the siting of homes, the design of driveways, and the arrangement of plantings, it differed markedly from the usual urban setbacks common in Salt Lake City at the time.

Staines’ Carpenter’s Gothic styled home featured a prominent steep gabled dormer on the principle elevation with decorative barge boards on the dormer gable (Figure II-2). A photograph of the Staines home taken after Jennings had added the west mansard roof addition shows a south porch (typically referred to as a “piazza” in the 19th century), and a central door flanked by two windows on each side. The windows each have a six lite lower sash, and either a six or nine lite upper sash. Small frieze windows are placed under the eave of the roof, and the photograph suggests a stucco surface tooled and painted to look like cut stone.

By comparing the width of the adjacent Jennings addition it is determined that the Staines home was approximately 36 feet long, but depth is more difficult to determine. A panoramic photograph of Salt Lake taken after the completion of the Tabernacle in 1867 shows the original Staines home from the rear with the Jennings addition on the west. Resolution in the distant photograph is sufficient to show that there was no dormer to the rear, but the depth of the building can only be approximated. However, the roof pitch is relatively shallow, meaning that the depth of the



Figure II-2. A photograph of the Staines cottage between 1867 and 1874. Detail taken from MS 23304 b0000 f0001 d0014 0000 01.

home was substantial. Logically the rear hall of the Jennings addition would have been positioned to permit an exterior door in the east elevation, suggesting that the original Staines cottage had an approximate depth of 30 feet.

Staines' home was large enough to accommodate 26 diners as he records in his journal: "On Tuesday I had President Young, Kimball, Wells, John Taylor one of the Twelve and Bishops Kesler, Livermore, Little and their families 26 in All. Dined at 3 pm all sat down at my Table I think I never felt better in my Life all enjoyed there were much pleased with my new House and Gardens the Presidency Blessed Me and my Family my House and all that pertained to me."¹¹ He also hosted a meeting of 26 "Chiefs of the Navoo Legion."¹² These events suggest that the cottage had at least one room big enough to handle large gatherings.

Although a 36 by 30 building does not constitute a large home, it apparently distinguished itself through architectural details and moldings. When Salt Lake City was evacuated due to the arrival of the United States Army,¹³ Brigham Young apparently asked Staines to offer his home for the temporary use of the newly appointed Territorial Governor, Alfred Cummings. The Staines home was filled with furniture and carpets from other prominent citizens of the city, and it appears that a house-keeping staff was assigned to the house.¹⁴ Providing a welcoming set of accommodations was no doubt a prudent step to avoid confrontation with the new governor and the army sent to make sure he was seated, but also seems to have been motivated by a desire to impress the Governor with the relative sophistication of their desert outpost after a decade of occupation. Mrs. Cummings wrote the following description of the house:

It stands about 130 feet back from the street. -flowers & c. in front – peach and other small trees on each side of the house and extending to the street – a large garden behind and one each side. The house built like an English cottage – a piazza in front, with flat, open work pillars, for vines and a piazza above the first, with heavy carved work all around it, ornamented windows & c. & c. I went into a large parlour. There was a really magnificent and monstrous piano – London make - & new – eight octaves – sent for my use by Heber C. Kimball – some handsome chairs, sent for my use by Brigham Young - & other furniture, carpets & c. sent by other church dignitaries. Then in a china closet, near a large dining room, were cups and saucers and other table furniture...¹⁵

Mrs. Cummings' description of the exterior of the home matches the photograph closely. The piazza, or porch, has the open pillars she described, as well as the balustrade surrounding the upper porch which she describes as "heavy carved work"—most likely referring to the turned balusters. The ornamented windows probably refers to the frieze windows placed just below the eaves. In a story and a half home like the original Staines cottage, such frieze windows are located near the floor, and often would have a privacy screen installed over them. Usually made of cast iron in the resource-rich eastern United States, in iron-poor Salt Lake City they appear to have been carved of wood.

The symmetrical facade of the Staines Home suggests a symmetrical interior layout, with a central hallway with a stair in the center, and rooms to each side. Given Mrs. Cummings' description of a "large parlour" and "large dining room," this suggests that the two front rooms in the cottage were largest, with a kitchen and perhaps a bedroom or study behind. It is probable that there were two

bedrooms in the half story above. The panoramic view of Salt Lake showing the Staines Home from the rear does not show evidence of a rear kitchen wing (Figure II-4). It is assumed that the Staines Home was built of adobe bricks covered with stucco, like other homes built by prominent citizens of Salt Lake during the 1850s.¹⁶ Figure II-3 shows a conjectural plan of the Staines Cottage based on typical plans of the time and the above discussion. If it was built of adobe, walls would likely have been 18 inches thick on the exterior walls and approximately 12 inches thick for load bearing interior walls.¹⁷ Most likely there would have been two load bearing walls running north south in the plan as shown, but the east/west partitions are arbitrary—they could have been placed virtually anywhere to divide the rooms.

The stucco finish of the Staines Cottage protected the soft adobe from the weather. Staines tooled the stucco at the corners to look like projecting stone quoins and adding different colors to the surface. It is likely that this decorative stucco surface was copied by the later Jennings addition.

The 1860 census lists William Staines and his three wives: Elizabeth Turner, Lillias Lyon (spelled Lillian by the census taker), and Margaret McLane. It also lists Mathew Lyon (perhaps a brother in law) and two gardeners at the residence.¹⁸ Since the cottage was not large, the gardeners may have lived in an outbuilding on the property. No children were born to Staines. He sold his property to Joseph Angell Young in May 1866 for \$20,000.¹⁹ It is unclear why Staines would sell such a showpiece, but he had purchased a 300 acre farm in Davis County, and perhaps his financial interests took him north to his farm. There is no record of changes that Joseph Angell Young might have made during the eight months he owned the home before selling it to William Jennings.

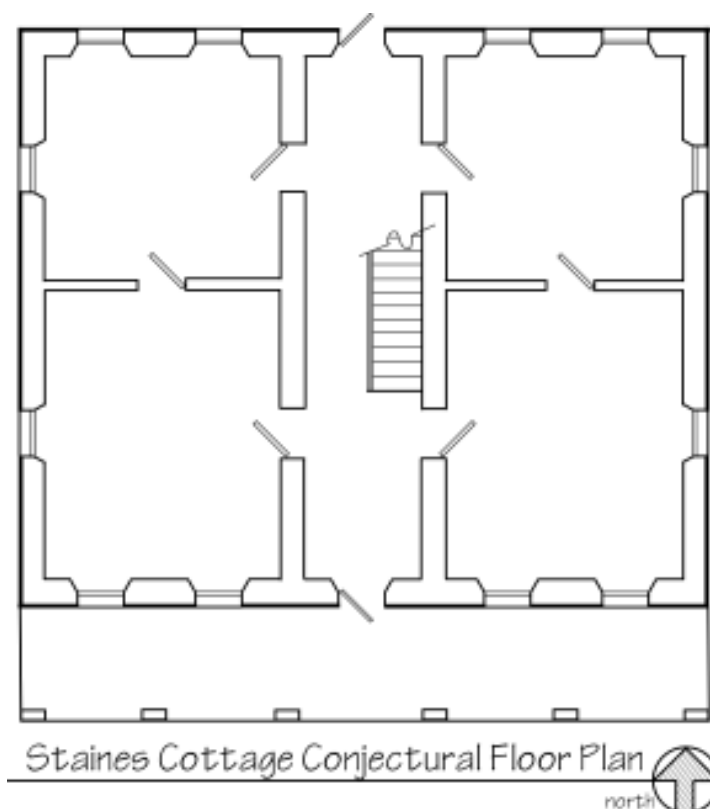


Figure II-3. A conjectural plan of the Staines cottage.



Figure II-4. A view of the north elevation of the Staines cottage and west wing of the Jennings residence before 1874. A detail taken from CHL PH 3821b1fd98t001.

William Jennings

William Jennings was an English immigrant who came to the United States in 1847 seeking better economic opportunity.²⁰ He was a butcher, and while he was working in Missouri in 1851 he married June Walker, a member of the Church. The following year he and his wife moved to the Salt Lake City area, and in 1855 he joined Church. He married his second wife, Priscilla Paul, in that year, and was called to settle in Carson Valley, Nevada. Priscilla was the daughter of an architect and builder, William Paul, who would later design and build Jennings' retail store and home. Jennings became wealthy while living in Nevada by driving cattle to the area, slaughtering them, and selling the meat to the mining camps.

With the advent of the "Utah War" of 1857-58, members of the Church were called back to Utah and then asked to move to the southern counties. Jennings dutifully left Nevada and moved back to Utah, but now with a significant amount of capital. He moved to Salt Lake City after the temporary move to the south. Jennings made profitable investments,²¹ the most visible of which was the Eagle Emporium. The building housing the retail store was built in 1864 by his father-in-law, William Paul, and was a precursor to Paul's design and construction of the Devereux House.

Jennings' profitable business enterprises led to his purchase of the old Staines property from Joseph Angell Young for \$24,000 in February 1867.²² Jennings purchased additional land on the city block and renamed the property the Devereux House after his mother's family residence in England.²³ Various spellings Devereaux, Devereux, or Deveroux, this report uses the spelling used by the Jennings family, as their Davis County property was known as the Devereux Farm,²⁴ and a descendant was named Devereux Jennings.²⁵ It appears that Jennings was not attracted to the Carpenter's Gothic cottage, but rather to the gardens and orchards which surrounded the residence and its proximity to downtown. In future years Jennings tore down the cottage but expanded on the gardens and orchards, proudly taking inventory of the trees and plants on the property.

In 1867 Jennings more than quadrupled the living space of the residence by adding a west addition constructed of brick. It appears that the old adobe Staines cottage was kept only for temporary living quarters until the new home could be constructed. There was no attempt to make the second story floor levels of the cottage and addition match up, suggesting that demolition of the cottage was anticipated from the start. The central stair hall provided an opportunity to connect to any future construction located to the east.



Figure II-5. William Jennings.

The Journal History records the dedication of the new west wing as follows:

Dedication—Yesterday evening Wm. Jennings, Esq., had his new house, erected in the 16th Ward, dedicated. Among the invited guests were Presidents B. Young, George A. Smith and Daniel H. Wells, with Elders Orson Pratt, Wilford Woodruff, Franklin D. Richards, George Q. Cannon, Joseph F. Smith, B. Young, Jun., Joseph A. Young, Bishop Edward Hunter and William Paul, the architect, and their ladies. The building is well designed, with harmony pervading all its parts; and inside it does great credit to the owner's taste, discrimination and judgment. In the principal drawing room, the pattern being green and gold, the workmanship, pictures and picture frames are fine specimens of home art, home taste, and home productions. Mr. R. Ramsey did the carving; and Mr. Edward Martin furnished the gilt picture frames. Among the pictures in one—Christ blessing children—by Bro. Dan. Wegland [sic], which is a very fine specimen of art. The massive gilt frame is also of home manufacture, and is the workmanship of Bro. Wm. Gregg.

The sleeping apartments are well arranged and elegantly furnished, and the height and roominess throughout are conducive to good health and exhibit a proper appreciation of the sanitary rules requisite in the construction of first-class dwelling houses.

The guests sat down to a regal repast at about six o'clock; and after a most pleasant reunion all separated with hearty wishes for the prosperity of the owner and his family.

We congratulate Bro. Jennings on the taste and judgment displayed in all parts of the building, and are pleased to see such palatial residences rising among us.²⁶

Figure II-5. A view of the Devereux House before 1874 with the original Staines cottage on the right and the new west wing on the left.



The laudatory description is short on details, with the exception of the identification of a green and gold color scheme in the Drawing Room, gilt frames for the pictures, and Danquart Weggland’s *Christ Blessing the Children* hanging on the wall.

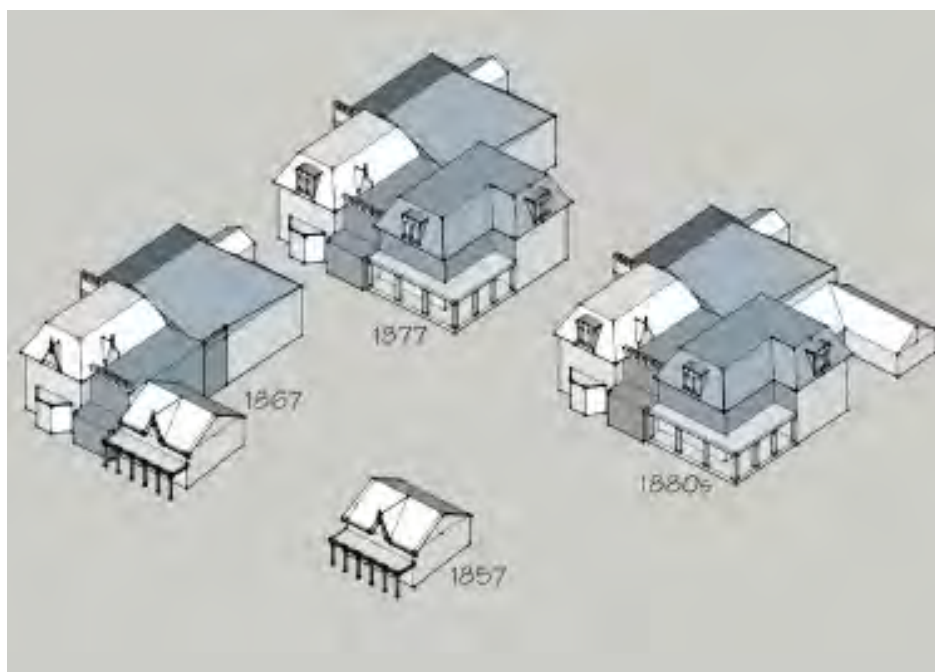
One of the unique features of the west wing of the Devereux House was the use of hardwood in its construction. Reportedly, Jennings saved the oak and black walnut planks from the wagons hauling goods across the plains to his store and used these in the construction of his home.²⁷ The original staircase was made of this wagon box oak, and by inference it seems likely that the parquet floor in the ballroom would have used the more durable oak as well. Unfortunately, the 1979 fire eliminated this eastern hardwood that was hauled across the plains by draft animals.



Figure II-6. Danquart Weggland’s *Christ Blessing the Children* which originally hung in the Drawing Room.

The west addition is essentially two houses abutted to each other: a mansard roof building facing South Temple Street, and a hipped roof building behind. It is likely that Jennings wished space for both of his families in the residence, and Paul did not have design experience with such a large home and so he accommodated the required program by installing two homes back to back. In 1870 three years following the construction of the first half of Jennings’ mansion, the census listed five children “at school,” and seven more “at home.” His first wife was listed as “keeping house,” while his second wife’s profession, occupation, or trade was merely listed as “none.”²⁸ In 1871 Jennings’ first

Figure II-7. Diagrams showing the evolution of the phases of construction of the Devereux House, starting at the bottom and progressing clockwise.



wife, Jane Walker, died at age 35, so that the future addition to the home was not based on needs of the families, but rather on the desire to display the wealth and prominence that had come to Jennings.

In 1877 the Staines cottage was torn down and the east wing built to complete the home. William Paul was the architect and builder of this addition as well.²⁹ It featured a Library and Dining Room on the lower floor, with additional bedrooms on the second floor and servant quarters on the third. Paul continued to work for his son-in-law as he did an addition to Jennings' Eagle Emporium in 1885.³⁰ As was suggested above, both the east and west wings may have been designed at the same time, with their construction phased for convenience.

Significant changes had occurred in Utah between 1867 and 1877, as the railroad brought eastern goods to the Great Basin with reduced shipping costs. No longer would salvaged hardwoods from wagons be used in a home, as railroads could deliver virtually any building material desired without the heavy shipping fees that accompany wagon train cartage. The large panes of glass and the wrought iron cresting on the roof are easily identifiable changes due to the railroad. Other changes are more subtle, such as the machine production of millwork instead of hand planing and carving.

The 1880 census was taken at the height of Jennings' influence and wealth. Of his ten children living at home, the two oldest sons were listed as following the professions of miner and cattle dealer, with six others listed as "school girl" or "school boy."³¹ The Devereux House was viewed as perhaps the most prominent residence in Utah. Visiting dignitaries often stayed in the Devereux House, despite the fact that the Gardo House, begun by Brigham Young in 1877, was intended to fill that role. Jennings had a well stocked wine cellar³² and was in a position financially to entertain well. Jennings' election to the Council of Fifty in 1880³³ suggests that his role as host was appreciated (if not requested) by the Church leaders in Salt Lake City. Some of the more prominent dignitaries he hosted were President Ulysses S. Grant, General Tecumseh Sherman, and President Rutherford B. Hayes. Interestingly, the property remained the premier site for hosting visiting dignitaries, despite the complete change in the



Figure II-8. The Devereux House with both the east and west additions about 1880, PH3135.

residential building. Since the only common element between the Staines cottage and the Devereux House is the gardens, it appears that the landscape was an important feature in the decision for an appropriate hosting location.

Jennings first ran for political office in 1874, losing to the prominent incumbent Daniel H. Wells. He was successful in 1882, and served a single term as Mayor. He was denied a second term as mayor under the terms of the Edmunds Bill because he had been a polygamist prior to his first wife’s death eleven years earlier, but this did not lessen his local prominence. Notices in the newspapers of receptions following concerts or lectures, “Vienna Teas,” and other social events occurred every few months. The lawns and gardens of the Devereux House were universally praised in these accounts.

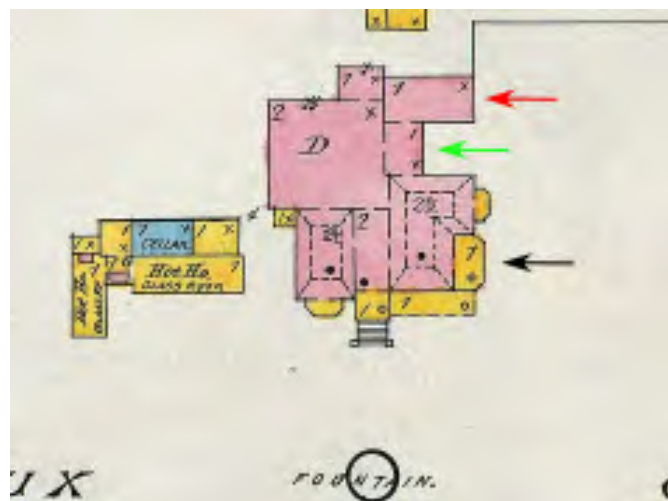
The 1889 Sanborn fire insurance maps show that a single story conservatory was built into the east side of the porch (Figures II-9 & 10). Since there were hot houses on the property (perhaps dating from William Staines’ ownership) the conservatory was likely provided with a wide array of plants and flowers. Also there was a single story addition adjacent to the kitchen (probably expanding the facilities that were used for lavish entertaining) and a single story gable addition that was identified by the HABS research team in 1967 as a laundry based on an interview with a granddaughter of Jennings.

When William Jennings died on 14 January 1886 his will deeded his estate of \$940,000 to his surviving wife, Priscilla Paul Jennings, and to his children from both marriages.³⁴ Priscilla Paul Jennings



Figure II-9 (left). A detail from an 1880 photograph showing the Conservatory tucked underneath the porch roof.

Figure II-10. The 1889 Sanborn Fire Insurance Company plan of the Devereux House showing the conservatory (black arrow), kitchen addition (green arrow), and laundry (red arrow).



continued to reside in the Devereux House until the mid 1890s. When she moved out she reportedly took one of the mantelpieces carved by Ralph Ramsey with her.³⁵ Jennings' oldest son lived in the home from 1886 until 1903. From an interview with Katherine Jennings Peterson it appears that the descendants had difficulty maintaining such a large home, an opinion which is supported by the selling off of parcels of land for a concert hall, firehouse, and later railroad facilities.



Figure II-11. A picture of the Devereux House during the years it was used as the Keeley Institute. Note the conservatory visible off the porch to the right.

The Devereux House had a serious flaw—it was located to the west of Temple Square and the business center of Salt Lake City near the railroad station. As the rail yards grew, a portion of the Devereux House block was occupied by a roundhouse. Industries dependent upon rail transportation also began to establish themselves in the area, and the Devereux House soon became an elegant residence surrounded by industries. No longer desirable as a residence for high society, the Keeley Institute, an addiction recovery service, occupied the building from 1904 until 1919.³⁶

The J. J. Coan family is associated with the home following the Keeley Institute years. The Deseret News archive has a photograph of Bud Coan standing on the steps in 1918, and a photograph of Mr. and Mrs. Coan standing on the property in 1939. By 1943 it served as a warehouse and office for the J. J. Coan Company, a mining equipment supplier.³⁷ By 1967 the Devereux House had vehicles parked on the ballroom floor and a truck scale installed where the dining room bay window had been located. However, its value and history were appreciated at this point, and the home was the subject of a Historic American Building Survey (HABS) recording project that year. Measured drawings and



Figure II-12 (left). A photograph of Bud Coan on the front steps of the Devereux House in 1918, Deseret News digital archive.

Figure II-13 (right). Mr. & Mrs. J. J. Coan in front of the Devereux House in 1939, Deseret News digital archive.





Figure II-13. A view of the Devereux House in 1971, *Deseret News* digital archive.

photographs record its condition at this time. The original stairway with its wagon-box oak is recorded in photographs, as are the Ralph Ramsey carvings in the Drawing Room. In 1970 the Utah Heritage Foundation studied the feasibility of restoring the mansion,³⁸ but apparently lacked the resources to follow through with their plans.

These initial efforts by the Utah Heritage Foundation were taken over by developers who viewed the mansion as an opportunity to spark development of what had become a low-rent area in Salt Lake City. The State of Utah purchased the property in 1977³⁹ and Terracor Corporation initially assembled plans to build a shopping and office complex on the block. Terracor was going to help secure \$1.5 million in state and federal funds, and contribute technical expertise to restore the mansion.⁴⁰

In the midst of these plans the derelict mansion was set ablaze by vandals in 1979.⁴¹ Although the fire destroyed irreplaceable handcarved woodwork, the financial commitments and state and federal appropriations were already in place, and their momentum carried the project forward. The insurance money received by the state after the fire was used to hire architect Burtch Beall Jr. to conduct studies on the home, its landscaping, and the feasibility of restoration.⁴² Studies conducted by Beall suggested that a restaurant could be sustained in the building. A \$1.3 million Housing and Urban Development Department grant was used to restore the exterior of the Devereux House, and an addition was constructed—presumably the kitchen wing to the north.⁴³ As part of the plan to adaptively reuse the home as a restaurant, the smaller bedrooms

Figure II-14 (below). A rendering of the Triad Center plan from the *Deseret News* digital archive.

Figure II-15 (right). A rendering of a proposed high rise in the Triad Center, *Deseret News* digital archive.



were combined into larger spaces more efficient for restaurant and banquet use, and stairs and restrooms were built in their former locations.

With federal grants used to fund restoration of the exterior, private developers were expected to fund the interior restoration.⁴⁴ However, Terracor had financial difficulties and sold the development rights to the Saudi Arabian arms dealer, Adnan Khashoggi.⁴⁵ With Khashoggi's entrance into the project, plans became ever more grandiose. Following the successful development of the Salt Lake International Center near the airport, Khashoggi created plans for a residential, entertainment, and office complex that was called "Rockefeller Center West."⁴⁶ The project was named the Triad Center, a reference to Khashoggi and his two brothers. The reference to Rockefeller Center was an apt comparison as the project was centered on the Devereux House and an ice rink/amphitheater. Khashoggi, a wealthy and high rolling figure was able to bring in The Travelers Insurance Company as a major investor without significantly exposing himself financially.⁴⁷ Under his leadership the first phase of the project, including the Devereux House restoration, ice rink/amphitheater, and the office buildings known as Triad 3, 4, and 5 were completed. However, when Khashoggi was indicted and fled the country due to questionable arms dealings, the project went into bankruptcy. Many architects, contractors, and suppliers were financially compromised or forced out of business as a result.

Without the high rise residential and office buildings with their tens of thousands of occupants, the retail and restaurant establishments did not have sufficient clientele to survive. Most of these businesses closed with the exception of the restaurant in the Devereux House. However, this restaurant struggled as well. Mark Petrey moved his reception center from the McCune Mansion to the Devereux House in 1987, but by 1991 his business closed and the Chart House restaurant chain leased the space.⁴⁸ This business operated successfully for several years, and the home was used by the State of Utah to entertain dignitaries and professionals during the 2002 Winter Olympic Games.⁴⁹

Following the purchase of the Triad Center by the Church of Jesus Christ of Latter-day Saints in 2005⁵⁰ the Devereux House has been operated as a reception center by Temple Square Hospitality. Currently the level of activity in the reception center does not meet financial projections for the property.

Notes

- ¹*Deseret News*, 15 Feb 1897, p 18, col. 1 “Camp of Israel: On the pioneer trail” “...Friday, Feb 19. Near this date, William C. Staines arrived in Winter Quarters. In October he had been called by Bishop George Miller of the Ponca settlement to go on a mission to the Ponca tribe, consisting of 2,000 Indians. It was hoped that he might be able to assist them and help maintain good relations between them and the Mormons. Elder Staines remained with them at their winter hunting grounds for more then four months.”
- ²“Reminiscences of William C. Staines,” *The Contributor* 12 (1890-91): 121-23.
- ³See for example the advertisement in *The Mountaineer*, 1 September 1860, p. 210, col. 3. Ironically the advertisement for Staines, Needham and Co. is accompanied in column 2 by one for William Jennings’ dry goods store. Ultimately, Jennings’ mercantile empire will grow and enable Jennings to purchase the Staines property.
- ⁴*Deseret News*, 10 Nov 1868, p. 2, col. 1. “Remarks. By President Brigham Young, delivered in the New Tabernacle, Salt Lake City, Oct. 8th 1868. Reported by David W. Evans” “...A few words with regard to our Emigration Fund. We are going to continue our donations to this fund. We started our new subscriptions here on Tuesday night, and what do you think they amounted to? To two thousand dollars. That was a pretty good beginning...On the 1st of February, the time we thought of sending our agents East, we had nine thousand dollars, but on the 17th of the same month when brothers Clawson and Staines started we had a little over twenty-nine thousand...”; and *Deseret News*, 24 March 1881, p 4 col 4. “The ‘Mormon’ Situation” ...W. C. Staines, of the Mormon Church, who is the Utah emigrant agent in this city...”
- ⁵Peter Goss, “Report to the Restoration Architect on the History of the Devereaux House “ p. 14.
- ⁶Goss, p. 14.
- ⁷Clarissa Young Spencer and Mabel Harmer, *Brigham Young at Home* (Salt Lake City: Desert Book Company, 1972), p. 17. “Brother Staines the gardener was a genius at making things grow under glass, and the first and finest strawberries or other fruits of the season naturally found their way to Father’s table.” Clarissa was born in 1863, and her memories date from the years following the sale of the Staines cottage to Jennings. Note that this differs from Goss’ conclusion that Staines left his gardening career upon his return from his mission to England in 1863, see Goss, p. 17.
- ⁸*Deseret News*, September 26, 1855, p. 224, col. 3.
- ⁹James B. Allen and Glen M. Leonard, *The Story of the Latter-day Saints* (Salt Lake City,: Deseret Book Company, 1976), 244-45.
- ¹⁰William C. Staines journal, 1852 August-1860 May, MS 1580, Church Archives, 18 September 1857. Not only did Staines enjoy his own produce, he reports selling grapes for 30 cents per pound and peaches for 20 cents per pound, *ibid*, 21 September 1857.
- ¹¹William C. Staines journal, 1852 August-1860 May, MS 1580, Church Archives, 21 August 1857.
- ¹²*Ibid*. “I was hounered with a visit from the Chiefs of the Navoo Leigon some 26 the Evening was spent in Singing & Speaking the Spirit of the Lord was with us his people...”
- ¹³William C. Staines diary 1857 September-1859 February, MS 2453, Church Archives, 21 March 1858. “I am pleased that I have a good House and orchard to Burn I thank God that he has Blessed me also with his spirit so that I am willing to suffer the sparking of my Goods for the Gospell of Jesus Christ my House and property is worth from 10 to 1200 dollars every man is awake to prepare for a move when the word comes” Note that the move south was not necessarily anticipated to be a short one. Staines says, “...saw Pr B Young as I told him I was at his service if he wanted me to do any thing for him he said he would like me to git some of this Gardens together and commence to pack our small fruit trees, seeds, &...” [24 March 1859]. Staines also was requested to move his library of books south as well.
- ¹⁴William C. Staines diary 1857 September-1859 February, MS 2453, Church Archives, 29 March 1858. “I am keep close to home and are engaged with A. Cumming & Kane many call to see them. Col. Kane is one of the most Gentlmanly men I ever meet which I am sorry to say I cannot say so much for Gov Cumming he is to free with the Girls about the House going to & fro from Parlour to Kitchen & this is very anoying to the Girls...”
- ¹⁵Ray R. Canning and Beverly Beeton, *The Genteel Gentle: Letters of Elizabeth Cumming, 1857-58* (University of Utah Library: Salt Lake City, 1977) p. 77-8. Cummings also mentions purchasing the strawberries and vegetables raised by

Staines in his gardens.

- ¹⁶For example, Brigham Young's Beehive House, Lion House, Governor's Office, Presidents Office, and the Tithing Office were all built of adobe brick covered with stucco.
- ¹⁷The three story Beehive House exterior walls were 24 inches thick and interior walls 16 inches thick, but the smaller story and a half Staines Cottage would not have required such thick walls.
- ¹⁸1860 United States Census, 16th Ward, Great Salt Lake City, Salt Lake County, Utah, 13 July, record # 1242. Note also that Staines was listed as owning \$25,000 in real estate, and a \$20,000 personal estate.
- ¹⁹Goss, 17.
- ²⁰Goss, 19.
- ²¹Account Books of Wm. Jennings, Ms. F 435, LDS Church Archives. Jennings' accounts include the following entries: Western Pasture, Soda Springs Adventure, Deseret National Bank, Merrill Calf Adventure, Knowlton Homestead, Utah Southern RR., Cottonwood Ranch, Utah Central RR, Big Spring Improvement, Scull Ranch Interest, Cedar Posts, Magnolia Mine, Sulfer Mine, Newfoundland Tunnel Co., Plymouth Mine, Mill No. 2, East Canyon, Third Term Mine, Townsend House, Webber Canal, Continental Hotel, Utah Southern & Castle Valley RR, Castle Valley Coal Co., Tintic Iron Co., Kanarah Coal Co., Utah Iron Manufacturing Co, 1st National Bank of Ogden, Horne Silver Mine, Utah Telegraph Co., Grand Gulch Mining Co.
- ²²Goss, 19.
- ²³*Deseret Evening News*, 24 August 1901, p. 14, col. 5, "The Historic Devereux Mansion."
- ²⁴*Salt Lake Herald*, 20 December 1883, "Jennings Bros. Empire Meat Market."
- ²⁵*Salt Lake Herald*, 30 December 1900, pg. 15, col. 1, "Children's Party."
- ²⁶Goss, 22, quoted from *Journal History*, 23 December 1868.
- ²⁷*Deseret Evening News*, 24 August 1901, p. 14, col. 5, "The Historic Devereux Mansion." "The staircases are of oak, made from wagon boxes, which came across the plains. The railings are in black walnut."
- ²⁸1870 United States Census, 16th Ward, Great Salt Lake City, Salt Lake County, Utah, 11 July, page 3, record # 11.
- ²⁹*Latter-day Saints' Millennial Star*, vol. 39, p 367. "Hon. Wm. Jennings has pulled down the older portion of his mansion on South Temple Street. This was the original portion, and years ago, when W. C. Staines, Esq., owned it, was considered one of the neatest and prettiest residences in the city. That was about the time of the "Buchanan war," at the close of which Governor Cummings lived in the building for a short time. We understand it to be the intention of Mr. Jennings to build on the old site an addition to the present more modern part of his residence, and in a similarly palatial style. Mr. Wm. Paul, Sen, architect and builder, has charge of the work." See also *The Salt Lake Daily Tribune*, 1 January 1978, "Salt Lake City." "...a new brick addition to the residence of Mr. William Jennings, at a cost of about \$15,000..."
- ³⁰*Salt Lake Herald* 3 May 1885, p 1, col. 5, "Four Score and Two."
- ³¹1880 United States Census, 16th Ward, Salt Lake City, Salt Lake County, Utah, page 2, Supervisor's Dist. No. 136, Enumeration Dist. No, 48, record # 12.
- ³²Goss, 29.
- ³³Klaus J. Hansen, *Quest for Empire: The Political Kingdom of God and the Council of Fifty in Mormon History* (East Lansing, Michigan: Michigan State University Press, 1970) p. 226.
- ³⁴Goss, 30.
- ³⁵Goss, 30. Goss cites Alice Merrill Horne, *Devotees and Their Shrines: A Handbook of Utah Art* (Salt Lake City: Deseret News, 1914) p. 32.
- ³⁶Goss, 31.
- ³⁷Marc Haddock, *Deseret News*, 19 October 2009, "Devereaux House: Salt Lake City's stately estate."
- ³⁸Paul Richards, *Deseret News*, 12 Sep 1970, "Panel May Restore 'Devereaux'"
- ³⁹*Deseret News*, 3 March 1977, "Utah House rattles regents" "A bill to allocate \$700,000 to purchase the historic Devereaux mansion, 344 W South Temple, was passed, but only after the House trimmed the appropriation to \$200,000." See also *Deseret News*, 3 March 1978, "Validity challenged: Court sets arguments on bills" "The bills

declared unconstitutional because of procedural errors were the Devereaux Mansion purchase costing \$750,000...”

⁴⁰*Deseret News*, 9 November 1978, “Devereaux House: What is the best restoration method?” “...Terracor is proposing to build a commercial shopping and office complex on property adjacent to the Devereaux House plat. The company is willing to guarantee \$1.5 million toward the restoration, with perhaps some of this money coming from federal funds that would not be available to the state unless a private developer is involved. Terracor also would furnish technical assistance in restoring the old mansion.”

⁴¹LaVarr Webb, 9 August 1979, *Deseret News*, “Flames sweep Devereaux house: Fire only a setback, restoration planners say.”

⁴²*Deseret News*, 17 January 1980, “\$62,750 OK’d for Devereaux study” “...A plan suggested by architect Burtch W. Beall Jr. on how the money will be spent has been approved by the State Building Board. Money to cover the cost will come from \$84,000 the state received in fire insurance when the dilapidated building was gutted by fire several months ago...Beall said the \$62,750 will be spent this way: \$4,500 for architectural historian; \$9,500 for landscape architect, \$4,000 for a feasibility report, \$250 for report on wood stabilization; \$10,000 for interior design, \$4,500 for structural engineer; and \$30,000 for Beall’s work.”

⁴³*Deseret News*, 9 December 1982, “Firm submits low bid on Devereaux project” “Robert Williams Construction Co, 7365 S. 32nd West, West Jordan, is the apparent low bidder to build an addition onto the historic Devereaux House, 334 W. South Temple, which is being restored. The company bid \$24,960 which is under the \$28,000 estimate...While the addition is being constructed, workmen from Paulsen Engineering and Construction Co. will continue their work on restoration of the house under a \$1,300,000 Housing and Urban Development Department grant.

⁴⁴Max B. Knudson, *Deseret News*, 18 February 1983, p. B11, col. 1, “Triad Center construction progresses on schedule.” “Triad Utah was to begin one of the largest sustained concrete pours in Salt Lake history Friday as work on the first phase \$50 million redevelopment of the Devereaux House and grounds into Triad Center continues on schedule...Meanwhile restoration work on the Devereaux House is proceeding under a \$1.5 million federal Urban Development Action Grant ... The mansard roof of the mansion has been removed and will be totally replaced. Much of the exterior walls were also unsound, said Nordlun, and are being rebuilt. Most of the UDAG money will go to restoring the exterior of the mansion and the carriage house. Interior restoration costs will be borne by Triad and whoever eventually leases the space.”

⁴⁵*Deseret News*, 21 Jan 1987, p. A5, col. 4. “Khashoggi in Utah: From 1975 to 1986” “February 1981—A. K. (for Adnan Khashoggi) Utah Properties Inc. has been renamed Triad (for Khashoggi and his two brothers) Utah. Triad buys the development rights from local company Terracor to renovate the historic Devereaux House on west South Temple. Triad tells Salt Lake City Council members it plans to buy all of the property on three city blocks around the Devereaux—the so-called “Gateway District” and build a \$500 million office/retail/entertainment complex...” See also Carrie Moore, *Deseret News*, p. A4, Col. 4, “Businessman says fast foreign buck backfired in S. L.”

⁴⁶Max B. Knudson, *Deseret News*, 10 June 1994, “California firm buys part of Triad Center”

⁴⁷*Ibid.* “Travelers was the primary lender for the ambitious project that Khashoggi and his Utah manager, Emanuel A. Floor, once envisioned as “Rockefeller Center West,” Only the first phase was completed before the complex went into bankruptcy...The center piece was to be and remains today the restored Devereaux Mansion, home for the Chart House national restaurant franchise. None of the original retail shops, restaurants and private clubs made it much past the first chaotic years of 1984-845 when it became clear that Khashoggi had given the project the blessing of his name and reputation—his Salt Lake International Center business park had been a success—but not his personal funding.”

⁴⁸Max B. Knudson, *Deseret News*, 3 June 1988, “Devereaux gets a new lease on life—as reception center” “...Running the show is Mark Petrey, who moved his reception center from the McCune Mansion on north Main to the Devereaux last September in what he admits was a gamble. It paid off and Petrey has now signed a five-year lease on the mansion with Triad Center (although the house is owned by the state). ...We hosted 7 parties at the Devereaux House last December (and) have had 60 receptions booked from April through July. Our business has doubled since the move.” 15 October 1991, *Deseret News*, “Restaurant Chain Leases Devereaux House”

⁴⁹Marc Haddock, 19 October 2009, *Deseret News*, “Devereaux House: Salt Lake City’s stately estate”

⁵⁰*Ibid.*

III. Devereux House Building Description

Exterior

The Devereux House in its current arrangement consists of three basic parts: 1. The west wing constructed in 1867 consisting of the southern half with a mansard roof and adjacent flat roof element, and the northern half with a hipped roof; 2. The east wing with a mansard roof constructed in 1874, and; 3. The north kitchen and laundry wings added in the 1880s. Walls are covered with a terra cotta tinted stucco with white painted joint lines, and darker projecting quoins at the corners.

South Elevation

The south elevation is dominated by two mansard roof volumes corresponding to the east and west wings, separated by a crenelated parapet. A glazed entrance pavilion is centered between the wings and corresponds to a central stair hall. To the west is a projecting polygonal window bay, while to the east is a single story porch covering the frontage of the east wing.

West Wing

Constructed as part of the 1867 west wing, the glazed entrance pavilion features four Corinthian pilasters set on wood plinths. The wide central void has a set of double doors with a single glazed panel stretching most of the height of the door. The glazed panels have a rounded head and a curved bottom. Above the door is a semicircular fan light with frosted glass. Sidelights have two lites and a wooden raised panel flanking the door and one lite flanking the semicircular panel above. The pilasters support an entablature featuring double Italianate brackets above each pilaster, and molded



*Figure III-1.
The south
elevation of the
Devereux
House.*



Figure III-2. The entrance pavilion on the south elevation.



Figure III-3. The entrance pavilion before restoration.

dentils underneath the projecting cornice. A wood balustrade is set above the entablature of the entrance pavilion.

The second story above the entrance pavilion has a single window topped by a projecting horizontal cornice supported by a single Italianate bracket on each side. Above the window is a crenelated parapet that joins the two mansard roofs.

The original entrance doors had solid wood panels and were not glazed, as is evidenced by the chain which was installed through holes drilled in the wood panels (Figure III-3). Indeed, with side lights and a large fan light above the doors, glazing would not have been required to adequately light the central hall.



Figure III-3 (left). The window bay on the south elevation.



Figure III-4 (right). The window bay prior to restoration.

The projecting polygonal bay has three large two over two double hung sash windows with a slender engaged fluted column between each window. Windows have a thin panel of decorative scroll work above and below each window: the panels above use a vine motif, while the panels below are based on a pinwheel shape. The entablature above the windows has single Italianate brackets above each engaged column, with molded dentils that are similar to those on the entrance pavilion but with a carved foliate motif on the bottom. The entablature is capped by a wood balustrade matching that of the entrance pavilion.

The following table is copied from the Burtch Beall drawings, box 13, University of Utah Archives:

Drawing room bay				
<u>Element</u>	<u># needed</u>	<u># reused</u>	<u>#duplicated</u>	
Top cornice bracket	4	4	0	
Top cornice Dentil	36	36	0	
Column capital	4	4	0	
Upper Scrolled panel	3	0	3	match existing
Column shaft	4	0	4	ea has 3 pieces
Column base	4	3	1	
Base dentil board	3	0	3	
Base bracket	8	2	6	
Lower scrolled panel	3	0	3	

As can be seen, original elements in the polygonal bay were reused where possible. The only elements completely replaced were the column shafts, but even these had extant fragments to guide restorers in an accurate duplication.

The two over two sash windows were commonly used in the 1860s and 1870s, and are known as “Italianate windows.” Freighting the large panes of glass in wagons probably would have required many extras to account for breakage, although by 1867 the railroad had reached Wyoming, reducing the length of the wagon journey.



Figure III-5 (left). A mansard roof dormer.

Figure III-6 (right). An original dormer cut from the roof and resting on the ground during restoration (the photograph has been rotated for clarity).



The second story of the west wing has a large one over one sash window matching the window above the entrance pavilion. The slated mansard roof above is supported by widely spaced Italianate double brackets with a turned drop element. Roof slates have polygonal butts.

A dormer is centered in the mansard roof and has two round headed one over one sash windows separated by diminutive pilasters (Figure III-5). The dormer windows have a shallow horizontal cornice supported by brackets, which is then capped by a segmental top. The top of the slated mansard roof pitch has a wide wood cornice and a decorative wrought iron cresting. The existing dormers were cut out of the roof during the restoration process and photographed on the ground (Figure III-6). At the time of the restoration there was a light green paint on the wood surfaces. The sides of the dormer were clad in soldered sheet metal. It is presumed that a significant quantity of original ornament was incorporated into the new dormers.



Figure III-7. A detail of a pre-1877 photograph showing the original gabled dormer which matched the one on the Staines cottage.

The original dormer on the west wing of the Devereux House was designed to match the dormer on the Staines cottage (Figure III-7). This dormer had decorative barge boards running along the raking cornice and a wood finial at the peak, in the Carpenter's Gothic style. In addition to the dormer on the south elevation, there was another dormer facing east behind the crenelated parapet.

When the east wing was constructed, it appears that the Carpenter's Gothic dormer visible in Figure III-7 was removed and reinstalled facing the east dormer behind the crenelated parapet. The two dormers which face each other over the low slope roof between the mansard roofs are shown in Figure III-9. However, these dormer have been completely rebuilt. The finial is all new material, and the raking cornices are of new material as well.



Figure III-8 (above). A view of one of the gabled dormers in the mansard roof in 1967, HABS #U-37, photo #14.



Figure III-9 (right). A view of the gables facing the low slope roof area between the east and west mansard roofs.

A 1967 photograph of one of these dormers (Figure III-8) shows a broken finial with a turned knob at the base. The raking cornices have a bead molding on the bottom, a common vernacular molding profile at the roof edge for which many early Utah carpenters would have had the molding planes to produce. The many visible knots in the lumber (particularly on the left hand side of the dormer) is consistent with the quality of lumber seen in other pioneer era buildings.

The vertical wall under the dormer roof had a stucco surface over wood lath that had eroded after years of exposure. The round-headed double doors originally had glazing but planks were nailed in place covering the openings, presumably because the glass was broken by that time.

A photograph from about 1880 (Figure III-10) shows a wrought iron crest on the mansard roof replacing the original wood balustrade (Figure III-7). It is assumed that with the arrival of the railroad in Utah in 1869 that the less fashionable locally made wood balustrade was replaced with decorative wrought iron when the east wing was built in 1877.



Figure III-10. A view of the Devereux House about 1880.

East Wing

The porch on the east wing has square sectioned double columns which are joined at the top and bottom (Figure II-13). The double columns bear on a plinth which matches the height of the wood balustrade of the porch. Above each double column is a bas-relief amphora (a two-handled Greek vase), topped by a pair of small brackets. The same wood balustrade above the entrance pavilion and the west polygonal bay extends along the porch. Note, however, that the plinth heights and entablature widths between the east and west wings do not line up (note the left hand side of Figure III-13).



Figure III-11. A view of the Devereux House prior to restoration showing the missing porch, west mansard roof, and east projecting window bay.

Figure III-11 shows that the porch was missing prior to the 1980s restoration. A comparison of the original porch (Figure III-12) and the reconstructed porch (Figure III-13) show that it was accurately reproduced by restorers.

Windows underneath the porch roof are large one over one sash windows, capped by a U-shaped molding which runs over the window head and extends about eighteen inches down each jamb. The molding terminates into a turned drop. The two windows of the second story and the mansard roof match the form and details of those on the west wing.



Figure III-12. The porch on the east wing about 1880.



Figure III-13. The porch on the east wing in 2011.

East Elevation

The east elevation features a projecting pavilion topped by a mansard roof with a polygonal window bay centered on the projection. The porch wraps around from the south elevation and terminates into the south wall of the pavilion. A small stair provides access to the porch from the ground level. A single window under the porch and a single window above the porch match those on the south elevation. A narrow door leads from the porch to the interior through the south face of the projecting pavilion.



Figure III-14. A partial view of the east elevation.

The window bay has three one over one sash windows, but none of the detailed ornament of the window bay on the west wing. Simplified double brackets support a cornice with a subtle wave motif at the edge. No balustrade is placed on the window bay roof. The second story has two windows matching those on the south elevation, and the mansard roof has a dormer matching those on the south.

Prior to the restoration the window bay was removed and a covered truck scale installed adjacent to the building (Figure III-15). The porch was removed as well. An arched opening was punched through the brick wall of the hipped roof section of the west wing, reportedly to permit covered vehicle parking in the ballroom. The outline of a missing gabled roof addition is visible to the right in Figure III-15.



Figure III-15. A view of the east elevation in 1967, HABS #U-37, photo #11.

To the north of the mansard roof section of the building is a three sided courtyard formed by former additions to the home reconstructed in the 1980s. Figures III-15 & 19 show the configuration of the building in 1967 before the reconstructions.

The courtyard is framed by the projecting pavilion in Figures III-14 & 15,, a reconstructed single story kitchen addition, and a reconstructed laundry addition. The south side of the courtyard has a nearly blank wall, with two four over four sash windows located on the western side of the second floor.



Figure III-16. A construction period photograph from the northeast showing the reconstructed laundry addition in the foreground



Figure III-17 (above). A view of the home from a similar vantage point as Figure III-16.

The kitchen addition has a glazed door and transom and a six over six sash window. The second story above the shed roof on the hipped roof west wing has two small four over four sash windows which currently provide light for the restrooms. While the roof eave of the first floor shed roof is unornamented, the second story eave has simplified double brackets.

The north side of the courtyard has no windows on the reconstructed laundry addition. The roof eaves match that of the reconstructed kitchen addition.



Figure III-18(left). The north elevation of the Devereux House in 1967, HABS #U-37, photo # 7. Note the outline of the missing roofs of the shed roof kitchen addition (left arrow) and the gable roofed laundry addition (right arrow).

North Elevation

The north elevation is dominated by the two story volume with a wide dormer set into the hipped roof. A single story shed roof addition covers the east half of the two story volume. This single story addition also forms the north side of the courtyard discussed above.

The dormer on the two story volume has a single six over six window with a wood finial at the peak. The dormer is wide, and is not separated from the wall below by a cornice or eave. The second story has two six over six windows with no wood moldings articulating the perimeter. The windows are asymmetrically placed to the east, matching the position shown in the 1967 HABS photograph (Figure III-19). The first story of the two story volume is covered by a shed roof addition. This roof extends to form a porch protecting the door leading from the rear hallway to the patio.

The kitchen addition has two six over six windows on the north elevation, and an entrance door. Below the windows is a ground level air intake for the building's mechanical system.

High masonry walls screen transformers and electrical equipment located to the north of the building visible in the lower right of Figure III-19. These walls continue to the west to enclose the patio on the west side of the building.



Figure III-19. The north elevation of the Devereux House with a large dormer above and a shed roof addition covering the first story.



Figure III-20 (left). A view of the mansard roof section of the west elevation.



Figure III-21 (right). A view of the south facing porch below the crenelated parapet.

West Elevation

The west elevation is divided into two parts: the mansard roof volume to the south, and the hipped roof volume to the north. The mansard roof portion of the elevation has two six over six sash windows on the second story. These windows have no visible lintel, no wood trim, and only a projecting sandstone sill. There are no windows on the first story, and a chimney exits through the slated mansard roof. The cornice below the mansard roof matches that on the south elevation. A crenelated wall faces south where the mansard and hipped roof volumes of the building are offset.

On the south facing wall there is a small porch on the first floor with a short flight of steps. The wood balustrade matches that on the east wing porch. The double column of the porch is also similar to the east wing porch. Glazed double doors lead to the ballroom from the porch, with a projecting wood trim surrounding the doorway. The porch roof has a wood balustrade matching that on the south elevation, and glazed double doors providing access from the second floor. No wood trim is applied to the doorway perimeter on the second floor, but it has a horizontal cornice above.



Figure III-22. The west elevation of the Devereux House.



Figure III-23. A view of the west elevation during construction in 1983.

The west elevation has four six over six sash windows on the first floor and three on the second (Figure III-22). The windows have no articulated header. Construction photographs show that originally these windows had a flat arch of brick above the window head covered by stucco, so that the current detailing of the windows matches that of the original building. There are no jamb moldings on the exterior, but there is a projecting sandstone sill. The eave of the hipped roof has simplified double brackets.

A photograph from the restoration period shows that this hipped roof section of the building was demolished and entirely rebuilt during the 1980s restoration (Figure III-23). The original construction was a brick exterior wall covered with stucco. Construction photographs show that many of the soft brick had weathered significantly, and the decision was made to demolish and replace the walls using concrete masonry units (CMU) that were then covered with stucco on the exterior and plaster on the interior. It is speculated that CMU was used in part to permit steel reinforcement of the wall for seismic resistance.

Patio

The west patio is surfaced with clay tile pavers. A wrought iron fence set into a heavy concrete curb is located to the south and west, with a solid masonry wall to the north. A solid masonry wall is also located to the west behind the building, screening the transformers and mechanical equipment. A gate in the south wall provides access to the patio from the grounds, while the north door in the hipped roof volume provides access from the interior. A ramp provides ADA access from the north door. While this patio is not a part of the historic past of the home, it provides a desirable amenity for receptions.



Figure III-24. A view of the west patio.

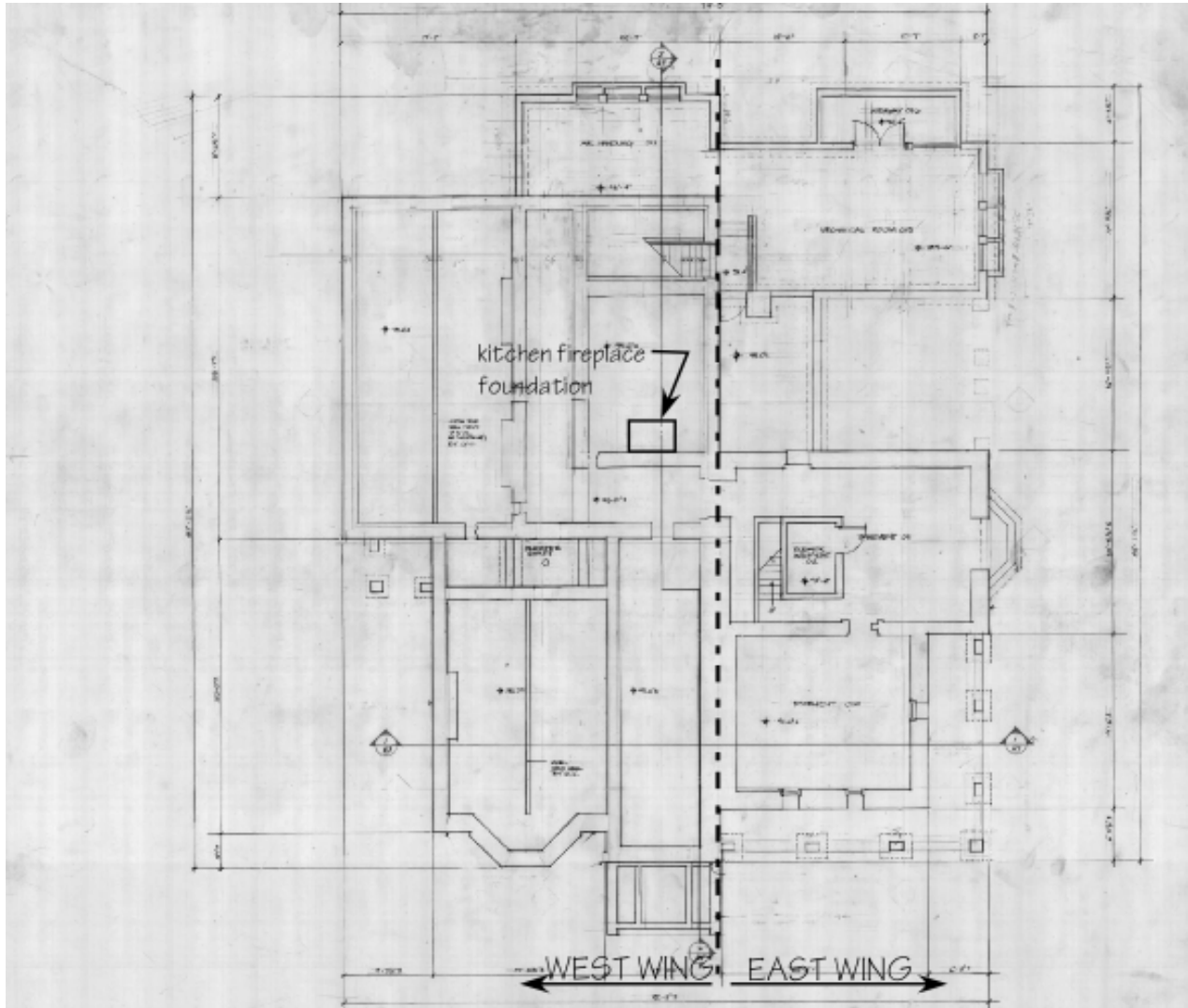


Figure III-25. The basement plan of the Devereux House prepared for the 1980s restoration, Burtch Beall collection, University of Utah archives, with superimposed annotations.

Interior

Basement

The basement is composed of three primary sections: 1. The dirt floor crawl space under the west wing; 2. The excavated basement under the east wing; and, 3. The mechanical basement under the rear portion of the kitchen housing the boilers, water heaters, and air conditioning equipment. Original foundations are red sandstone, and new foundations are poured concrete.

The original randomly coursed red sandstone foundations support the load-bearing masonry walls of the home below grade (Figure III-26), while larger squared and dressed stones are used on the principal elevations. Most stones below grade are 12-16 inches in length, and vary from a few inches to about 9 inches high. Typical of foundation walls from this period, the individual stones are no



Figure III-26. A view of a typical sandstone foundation wall.



Figure III-27. A view of a 5 inch core of the foundation wall showing white lumps of lime in the mortar.

larger than a single worker can carry and position. The mortar is relatively hard and has white lumps of lime visible on broken surfaces. Figure III-27 shows a core that was bored through the foundation wall during the restoration process and left in the crawl space. The mortar is sufficiently tenacious to hold the stone pieces together, and the black arrow points to a lime lump typical of early mortars where the lime was slaked and not ground into powder. Foundation walls typically have a small shelf built into the top of the wall upon which floor joists are supported (Figure III-28).

Fireplace hearths were made by framing around an opening in the floor, and then using wood lath to support an arch made of mortar. A large hearth stone was then set into position above the mortar arch. The combination of the thick mortar arch and the hearth stone protected wood flooring and framing from fire.



Figure III-28. A detail of the floor joists under the Drawing Room supported by a shelf in the foundation wall.



Figure III-29. Floor framing underneath the fireplace hearth in the Library.



Figure III-30. The foundation of the original kitchen fireplace in the west wing, and a new support wall bearing on a concrete footer.



Figure III-31. Original joists and cross bracing in the east wing. Note the new plywood floor above.

The stone foundation for the original kitchen fireplace measures approximately five by five and a half feet (Figure III-30). This is large enough for a fireplace and perhaps a small bake oven. Alternatively, the foundation simply provided a noncombustible support for a large iron cook stove, since more fuel efficient cook stoves were attractive for use in timber-poor Utah .

Wood framing supporting the first floor is unpainted rough sawn lumber in the unexcavated portions of the basement, and white-washed rough sawn lumber in the excavated areas of the east wing (Figure III-31). Whitewashed surfaces are typically used in basements used for food storage and/or production. Wood joists have stout two by two cross bracing fastened with cut nails. Where original joists are still present they are either sistered with new joists placed adjacent to the original, or fitted with a new support wall at the mid span (such as the support wall in Figure III-30).



Figure III-32. A fragment of original flooring found in the crawl space.

Flooring has been replaced throughout the building, but a fragment of pine tongue and groove flooring approximately one inch thick was found in the vicinity of the ballroom (Figure III-32). This fragment appears to have come from a floorboard whose end was covered by a base molding, with a build up of varnish where the base molding rested on the flooring. It is assumed that with the exception of the parquet floor in the ballroom most floors would have had varnished tongue and groove flooring like this.

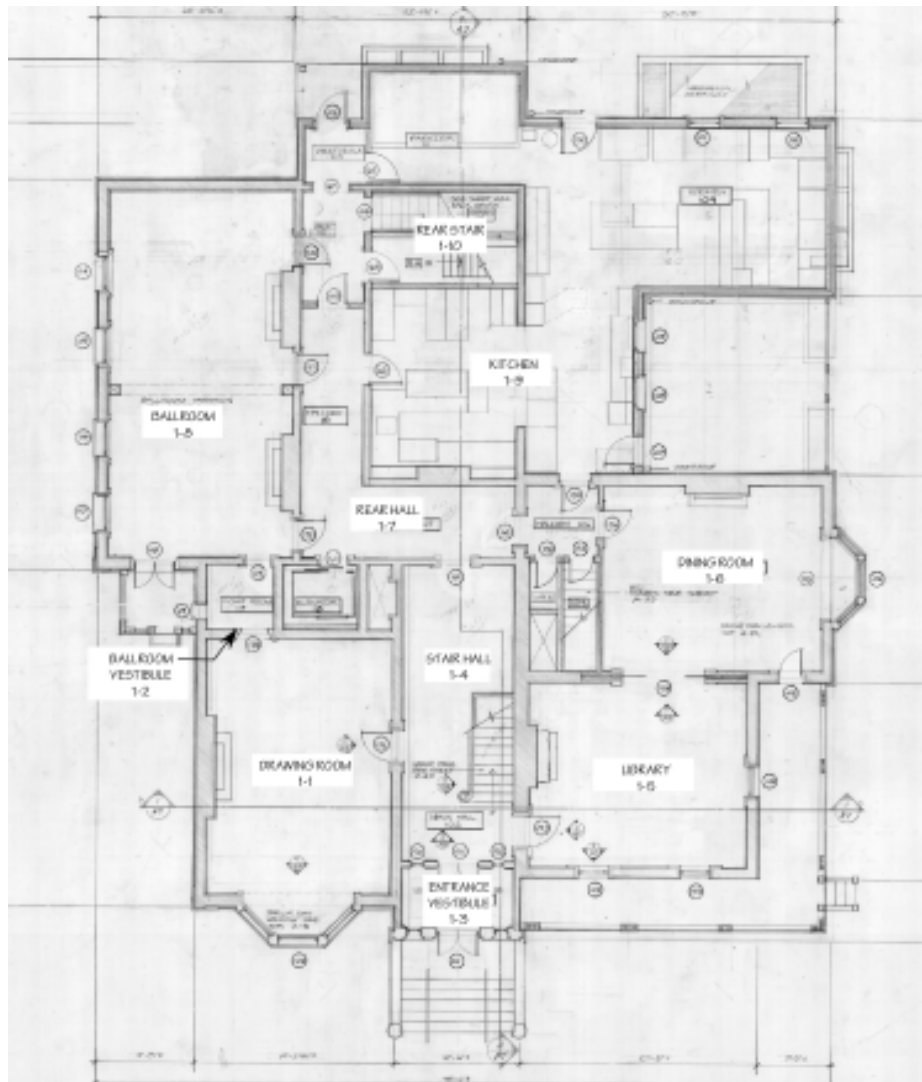


Figure III-33. The first floor plan of the Devereux House prepared for the 1980s restoration, Burtch Beall collection, University of Utah archives, with superimposed annotations.

Interior

First Floor

1-1 Drawing Room [18' x 27']

The Drawing Room is the most ornate room in the home. It has the 15 inch high base moldings found in the remainder of the home, and surfaces are grained in imitation of a walnut burl. It has a polygonal bay with windows to the south, a fireplace on the west, a door leading to a small room to the north, and an ornate door leading to the central hall on the east. A patterned carpet covers the floor, and the plaster walls are a cream color with two shades of violet used on the wide plaster cornice moldings. The ceiling is white, with a large plaster rosette painted the lighter shade of violet. A chandelier hangs from this rosette, which is an electric fixture imitating a gas one, complete with knurled knobs for adjusting the burners.

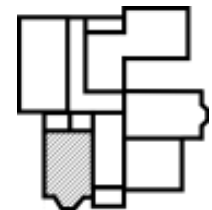




Figure III-34. A view of the projecting window bay on the south wall of the Drawing Room.

The projecting window bay to the south has three windows with four over four double hung sash and 20 x 44 inch lites (Figure III-34). The window bay is framed with an elliptical arch supported by fluted pilasters. One pair of pilasters faces north into the room, while the other pair is set directly underneath the paneled arch facing each other across the opening. Framing each of the windows are smaller pilasters set between the sash. These pilasters are only three flutes wide, and rest on the window sills. Above the arch is a projecting cornice with approximately 70 small turned spindles

hanging from the soffit. Above is a running motif of alternating circular and cruciform shapes, cut from a thin board. The projecting moldings of the cornice complete the composition. The ceiling of the projecting bay is made of panelwork with a hanging cluster of carved grapes in the center.



The fluted pilasters and bases framing the opening have worn surfaces and edges on the lower five feet, consistent with wear and tear one expects on a building of this age. Splices have been inserted to repair some of the wood surfaces to which the fluted pilasters are fastened, suggesting that much of the existing wood paneling was preserved and repaired as necessary (Figure III-36). Wood knots which have distorted the faux grained finish suggest that the arch is

Figure III-35. The projecting polygonal bay in 1967, HABS #U-37, photo #1.



Figure III-36. A pilaster base showing a splice where a repair was inserted.



Figure III-37. A photograph taken prior to restoration showing the plaster grapevine motif on the ceiling and walls, and a wallpaper border below, HABS #U-37, photo # 17.

made of wood from local canyons which typically had many knots and imperfections, and not from imported lumber which could be selected for quality.

While most of the woodwork was repaired keeping the original, the grape cluster which hangs from the soffit of the projecting bay is a replacement [Burtch Beall Collection Box 30, U of U Archives] (Figure III-39). Photographs taken during construction show significant damage to wood paneling on the soffit (Figure III-38). The projecting bay was completely dismantled and rebuilt as part of the restoration process, and this wood paneling was replaced. As can be seen in the photographs the restoration accurately replicated the wood paneling. The plaster vine motif molded into the ceiling and crown molding has been accurately duplicated as well. It was missing on the west wall, and only half of the ceiling rosette was intact when restoration began [Burtch Beall Collection Box 14, U of U Archives].

The fireplace in the Drawing Room is centered on the west wall, set into an 11 feet 7 ½ inch wide



Figure III-38. A view of the projecting bay soffit before restoration, HABS #U-37, photo #19.



Figure III-39. The grapevine cluster and wood soffit after restoration.



Figure III-40. The fireplace in the Drawing Room.

wall projection (Figure III-40). Ductwork grilles are located on the north and south sides of the projection, suggesting that the fireplace projection was widened to accommodate modern heating and cooling ducts. The mantelpiece has the same faux graining as the remainder of the woodwork. The mantelpiece legs are large scrolls with a hanging leaf and garland motif on the front face. The mantel shelf is supported by a 13 inch deep block with carved rosettes above the scrolls, and a central cartouche framed by a bas relief vine motif above the firebox. Flat surfaces are irregular, suggesting a hand produced object. This mantelpiece was probably salvaged from another historic property and

installed during the 1980s restoration. The firebox is framed by a dark green marble with lighter veining and a matching hearth. The firebox is 32 inches deep, while most 19th century fireplaces were half that depth in order to project heat into the space. There is an irregular seam in the brick on the sides of the firebox suggesting that it was deepened at the time of the 1980s restoration.

The doorway on the north wall has splayed jambs and a head to make the transition from a 36 inch wide opening in the Drawing Room to a 30 inch wide opening in room (1-2) . Panel work on the splayed jambs gives a false perspective effect when viewed from the Drawing Room.

The doorway to the Stair Hall features a door frame with fluted pilasters matching those of the arch over the projecting bay. They support an elliptical pediment with a broken cornice, as if a carved ornament were to be placed there. A two dimensional cartouche is placed in the pediment. The door is an eight-panel door with modern joinery at the styles and a concealed closer in the top rail. Four hinges match those in other areas of the home.



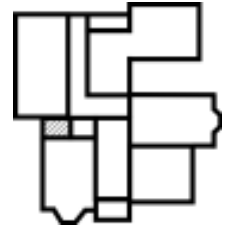
Figure III-41 (left). The door leading to the Stair Hall.

Figure III-42 (right). The door leading to the stair hall before restoration, HABS #U-37, photo # 19.



1-2 Ballroom Vestibule [9' x 6']

This small room provides direct communication from the Drawing Room to the Ballroom in the rear without having guests pass through the Rear Hall where servants would be busy passing back and forth from the Kitchen. It is lit by a small four over four sash window with a splayed jamb. This window is a replacement dating to the 1980s restoration.



1-3 Entrance Vestibule [6' x 11']

This space has glazed double doors leading to the exterior and to the Stair Hall. The floor is glazed tile, the walls are off-white, and the plaster cornice molding is dark violet. A plaster rosette painted the same dark violet is centered in the white ceiling and a small chandelier hangs from the rosette. This vestibule projects from the front of the house, and is covered by the porch roof. The outer double doors are 2-7/16 inch thick. They have a narrow beveled glass lite with a rounded top. The hinges match those in the remainder of the home. The transom above the outer doors has a frosted glass with a radial sunburst pattern. The sidelights have frosted glass with floral or sunburst motifs. The sidelight construction is similar to that of the inner sidelights, except that there is a mullion dividing the glass on the exterior set. The internal doors were damaged by the fire, and the entire doorway, framing, and both interior and exterior doors date from the 1980s restoration. Hinges and door knobs were likely salvaged and reused. Fire alarms, motion detectors, and wiring have been integrated into these door frames.

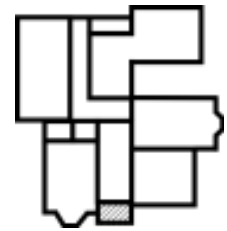
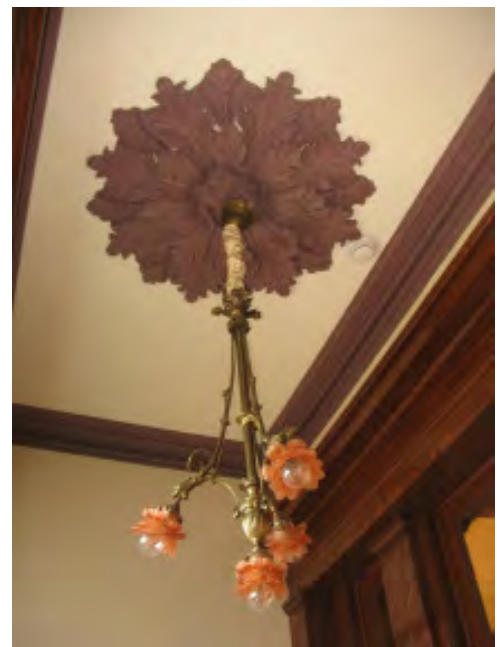


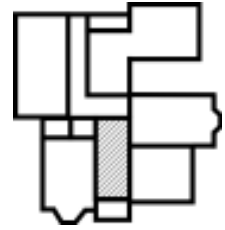
Figure III-43 (left). A view of the internal doors of the Entrance Vestibule.

Figure III-44 (right). The plaster rosette on the ceiling of the Entrance Vestibule.



1-4 Stair Hall [28' x 13']

The Stair Hall lines up with the main entrance and provides access to the Drawing Room, Library, and to the Rear Hall to the north. The floors are five inch wide oak boards. The walls are a cream color, and the plaster cornice molding is a dark violet. The plaster rosette from which the chandelier hangs is also painted dark violet. The chandelier matches those in the Library and Dining Room.



Photographs show heavy fire damage in the Stair Hall. Everything in the room is a replacement. Doorways have pilasters given a brown faux marbling, with other woodwork either stained oak or faux grained dark oak. Doorways have a broken pediment with a stylized scroll and leaf motif in the center (Figure III-48). Under the raking cornice and horizontal cornice are a series of 4-1/2 inch diameter projecting roundels. The pediments are supported by scrolls topped by a square block, also ornamented with the roundels.

As was noted in Chapter II, the Stair Hall was one of the few (and perhaps the only) room in pre-railroad Utah to have hardwood moldings and woodwork. Unfortunately, this pioneer novelty was destroyed in the 1979 fire. Figure III-45 shows the Stair Hall in 1967 with the original hardwood stair still intact, and Figure III-46 shows the room during restoration, with all new framing and flooring installed.

The newel post is a replica of the Ralph Ramsey original documented by photographs and HABS measured drawings (Figure III-49). Balusters are oak, and date from the 1980s restoration. The panelwork under the stair is faux grained, and matches very well with the oak above.

Following the fire doorways and woodwork were heavily charred (Figure III-47). However, the door



Figure III-45 (left). The Stair Hall in 1967, HABS #U-37, photo #2.

Figure III-46 (right). The Stair Hall during restoration, showing that all plaster and woodwork was destroyed by the fire in 1979.





Figure III-47 (above). A photograph of a charred doorway in the Stair Hall.

Figure III-48 (right). A replicated doorway.



leading to the Library had sections which were relatively untouched by the fire and were used as a pattern from which the replacements were made [Burtch Beall Collection, Box 14, U of U Archives]. These doorways have triangular pediments supported by scrolled brackets. The pediments have a series of roundels placed under the horizontal and raking cornices.

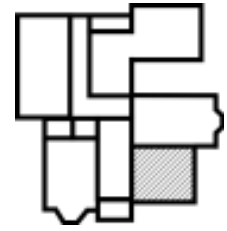
The double doors and glazed side lights leading to the vestibule are capped by a triangular pediment which spans their full width. Similar to the pediments above the other doorways, it has the same roundels under the horizontal and raking cornices. However, the pitch of the raking cornice is shallower to bridge the width without hitting the ceiling, and it is missing the scroll and leaf ornament in the center.



Figure III-49. A view of the replicated newel post.

1-5 Library [22' x 18']

The Library has a double wide pocket door leading to the Dining Room to the north, a one over one double hung sash window to the east, two identical windows to the south, and to the west a door to the Stair Hall and a fireplace. The floor is covered by a wall to wall patterned carpet matching that in the Drawing Room. Woodwork is given a faux grained dark walnut finish. Walls are a cream color, with a substantial plaster cornice molding painted a peach color. The ceiling is white, with a large plaster rosette in the center painted a peach color from which the chandelier is hung. The rosette matches that in the Drawing Room, while the chandelier similarly imitates a gas fixture.



The double wide pocket doors are framed by fluted Doric pilasters with a decorative elliptical pediment above. In the center is a lyre on a carved pedestal resting on a shell, all framed with leaves and garlands. On the cross piece of the lyre is a carved head. The pocket doors are eight-paneled, and have pegged mortise and tenon connections and surfaces consistent with hand crafting. The fluted pilasters have worn surfaces and edges consistent with the age of the building. These doors and their surrounding woodwork are original.

The Library received significant smoke damage, but was relatively untouched by the 1979 fire. Figure III-51 shows the lyre missing from the pediment, but its shadow is visible in the smoke, indicating that it was in place during the fire. Likely it was removed in order to protect it during restoration. The Library is part of the east wing of the home, constructed about 1874 following the arrival of the railroad to Utah. No document specifically ties Ralph Ramsey to the carvings in the east wing of the home, but given the high quality carving it is probable he was involved.



Figure III-50 (bottom) The double wide pocket doors in 1967, HABS #U-37, photo # 21.

Figure III-51 (top right). A detail of the woodwork following the 1979 fire.



The west wing of the home has no figural carving, so the introduction of the man's head (perhaps intended to be William Shakespear since this was the Library?) is a new element in the home. It was during these years that Ramsey was working on the Salt Lake Tabernacle organ case carvings, and his copying of the Boston Music Hall organ case involved numerous angelic figures. Perhaps the man's head reflects his greater skill and confidence after successfully completing so many figural carvings for the organ case (Figure III-52).



Figure III-52. A detail of the lyre in the double pocket door pediment.

The door to the Stair Hall is also flanked by fluted Doric pilasters, and is topped by a broken triangular pediment with a segmental arch joining the horizontal cornice sections above the pilasters. Below the segmental arch is a carved wreath with leaves and berries, fastened to a raised panel with an outline of ogee curves and deep scallops. This pediment and its ornament were likely removed and reinstalled during the restoration as there is a concealed door closer in the door head. Figure III-53 shows significant charring of the door and the door jambs. Apparently the closed door served as a firebreak and protected the Library from damage.



Figure III-53 (left) The door leading to the Stair Hall following the 1979 fire.

Figure III-54 (right). The door in 2011.





Figure III-55. A detail of a window sash with a finger joint at the corner.



Figure III-56. Window latch hardware.

The windows on the east and south walls all are one over one sash with 52 ½ by 29 ½ inch lites. They are flanked by fluted Doric pilasters matching those of the pocket doors. Each window is capped by a horizontal projecting cornice. The windows have matching locks mounted on the top rail of the bottom sash. No other hardware is placed on the sash. The style and rail of the sash are connected by a finger joint. This type of joint is more easily made with power equipment, while hand made sash typically have mortise and tenon connections. These windows were not handmade, but likely were ordered from a catalog and delivered by rail, much like the hardware. The glass is distortion free and dates to the 1980s restoration, although the large size of the glass lites suggests these, too, would have originally come by rail.

The bottom sash of the window has a narrow horizontal panel which acts as a kick plate. Three of these panels were found in the basement. Figure III-57 shows where these had been installed. Original graining is found on the inside face (Figure III-58) and exterior paint on the outside face. Note



Figure III-57. An original window panel that had been stored in the basement placed adjacent to a window.



Figure III-58. A detail of the graining on the original window panel.

the white primer, ocher base coat, and dark glaze tooled to look like wood grain.

The Library fireplace is placed on a wall projection 8 ½ inches deep and 6 feet 2 inches wide. The mantelpiece is cast iron, painted black with faux marbled panels imitating a bresciated marble with black and dark brown fragments separated by lighter veins. The firebox is integral with the mantelpiece, and is a type commonly used with coal, although currently there is a gas fixture with gas logs installed. There is a crack in the mantle shelf where a heavy object broke the cast iron. The firebox was manufactured by G. B. Evans Co. of Cincinnati, Ohio. A brown marble with lighter veining is used for the hearth.

No historic photographs of the Library fireplace have been located to date, so it is not known if this mantelpiece is original to the home. However, it does date from the same time period, fits the size of the masonry backing, and has the matching firebox built into the masonry. As was noted in the discussion of the basement, the framing and mortar arch underneath the hearthstone are original as well.



Figure III-59. The mantelpiece in the Library.

IV. Devereux House Conditions Assessment

The conditions noted in this assessment of the Devereux House are based on visual observations made in August 2010, and March, May, and June of 2011. No inspection openings were made in the building fabric, and the only samples taken were for paint color analysis.

Foundations

The sandstone foundation of the Devereux House consists of ashlar sandstone blocks on the South Temple Street elevations and the east wing (Figure IV-1), and randomly coursed sandstone on the west side. The ashlar stone has a red pigmented mortar, and the blocks are in generally good condition. However, the randomly coursed sandstone on the west side has an unpigmented mortar and is severely eroded. Figure IV-2 shows where erosion of the sandstone has left the harder cement mortar projecting from the surface. Note especially how the weathering is deepest immediately adjacent to the mortar. This condition is typical when soft stones are laid up or repointed with hard mortars with high percentages of Portland cement. Thermal movements and freeze/thaw expansion caused accelerated weathering of the stone.

Because the Portland cement mortar clings tenaciously to the stone, removal likely is not possible without further damage to the sandstone. It may be possible to grind out a relief cut in the mortar that can be pointed with a high lime content mortar, but given the level of damage present in the stone there likely would be little benefit. If erosion of the stone threatens to undermine the water table course above, replacement will be required.

Future repointing should select a mortar that is weaker and more porous than the sandstone. Type M and S mortars must not be used. Mortar selection is best done after analysis of stone properties. It is likely that the appropriate mortar will be a blend of Type N and O mortars.



Figure IV-1. A detail of the southwest corner of the Devereux House foundation.



Figure IV-2. A detail of the west foundation wall showing the eroded sandstone around the hard mortar.

Stucco

Shrinkage Cracks

The rose-tinted exterior stucco has numerous cracks present in the surface (Figure IV-3). The majority of these cracks are less than 1/16 inch in width. Given the relatively low level of weathering observed on the surface since the 1980s restoration it is assumed that this is a Portland cement based stucco. The pattern of cracks is typical of shrinkage in Portland cement based renders and stuccos. Shrinkage cracks typically occur soon after curing, especially when the stucco is not kept moist during the curing process to permit complete hydration of the Portland cement. Therefore the cracks probably have been on the building since shortly after the application of the stucco. Such cracks can permit water entry behind the stucco surface. If significant quantities of moisture were to enter behind the stucco one would see damage to interior finishes and freeze thaw damage to the stucco. However, in the absence of such evidence, the moisture admitted in the cracks appears to be sufficiently small in quantity that the brick wall system is able to disperse it and pass the water vapor back out the stucco.

Moisture entry can be prevented by applying an elastomeric coating selected to bridge the crack openings. However, such a coating would retard the escape of moisture from the interior of the building. If the building returns to a restaurant function, higher humidity levels are likely to be present in the building. Such a coating would run the risk of trapping moisture behind the coating. Moisture entry in cracks can also be prevented by routing out the crack and installing a sealant. While this is an effective treatment, it would accentuate the cracks and create an undesirable look. Since these cracks probably have a long history of not causing problems in the relatively arid Salt Lake climate, it is recommended that the stucco and interior finish be monitored for problems, but that no action be taken unless there is observed distress of interior or exterior finishes.



Figure IV-3. A detail of the stucco surface and quoins showing the cracking pattern on the stucco surface. Cracks have been outlined for clarity.



Figure IV-4. A close-up of the stucco surface showing the painted joint lines and cracks.

Bay Window Lintel Bearings

Cracks are present at the Drawing Room bay window lintel bearing points (Figure IV-5). These cracks are much wider than the shrinkage cracks discussed above--estimated to be greater than 1/8 inch in width. The construction drawings for the 1980s restoration indicate that steel lintels were used on the building. No inspection openings were made to investigate conditions in the wall, but this pattern of cracking is often associated with corrosion of lintel bearings. A likely scenario for the observed condition is that the expansion and contraction of the steel lintel due to temperature changes initiated the cracking, and then when moisture was free to enter the wall, corrosion of the lintel commenced. As steel corrodes the corrosion product expands, opening up the cracks even further. Note also that corrosion of the lintel may be accelerated by a roof leak in the region which is discussed below.

Since no distress was observed in the masonry above the lintel, the structural capacity of the lintel does not seem to be compromised. It may be possible to rout and seal the crack to prevent future moisture entry and prolong the life of the steel lintel. While silicone sealants have the best longevity, most paints will not adhere to them. If an appropriate color of silicone sealant cannot be located, a paintable polyurethane sealant may be the better option, but will require more frequent replacement.

If corrosion continues on the lintel, repairs are made either by removing the lintel, removing the corrosion, applying a corrosion resistant coating (such as a zinc rich primer), and reinstalling the lintel with flashing to protect it in the future; or removing the lintel and installing a stainless steel lintel. Such a repair sequence requires substantial removal and shoring of building fabric.

The same pattern of a U-shaped crack approximately eight inches high at a lintel bearing location is observed on the east elevation at the Dining Room bay window (Figure IV-6). As was discussed in Chapter IV, this bay window was reconstructed during the 1980s restoration. It is anticipated that unless moisture entry is prevented, observed cracks will increase in width over time without remedial action.



Figure IV-5. A detail of the crack at the location of the lintel bearing at the Drawing Room south bay window.



Figure IV-6. A detail of the cracks at the location of the lintel bearing at the Dining Room east bay window.

Exposed Chimneys

The exposed chimneys above the roof line are capped by decorative terra cotta flue caps. Most of these caps are grouted solid, but some are still functional (Figure IV-7). The chimneys have an elastomeric coating applied to the surface (Figure IV-8). This coating in many cases has failed cohesively with the substrate and developed bubbles. Efflorescence due to excess moisture is visible where the elastomeric coating has failed and been breached. Such coating failures are common when there is a moisture drive from inside to outside. The elastomeric coating prevents water entry, but also prevents moisture escaping from the system.

Cracks were observed in the terra cotta caps (Figure IV-9), and shrinkage of the grout has left hairline cracks at the grout/terra cotta interface. The observed cracks and the horizontal surface of the grout which can pond water can introduce moisture inside the chimney which is then trapped by the elastomeric coating. It is also noted that the sandstone coping on the chimney is porous as well, and provides another path for moisture entry.

It is recommended that the elastomeric coating be removed from the chimneys. Moisture can be prevented from entering the tops of the chimneys by installing metal flashing on top of the grouted terra cotta flues, and routing and sealing cracks in the terra cotta flues. Alternatively the terra cotta flues and sandstone chimney top can be coated with a clear sealer. Since most sealers require periodic application to maintain effectiveness, and since the flues are high above the ground, the metal flashing/sealant repair will likely provide the most durability with little visual change to the building.



Figure IV-8 (top). A chimney with a bubbled elastomeric coating and efflorescence staining the surface.



Figure IV-7 (left). A detail showing the grouted and functional terra cotta chimney flues.



Figure IV-9 (right) A cracked terra cotta flue.

Quoins

The decorative quoins at the corners of the Devereux House appear to have been formed using an Exterior Insulated Finish System (EIFS). This EIFS system was used to inexpensively build up a surface that projects from the stucco surface and has a different color, in imitation of the polychromatic treatment of the stucco surface seen in the photographs of the Staines Cottage and west addition built by William Jennings.

A quoin on the wall of the east wing, south elevation, above the porch roof has underlying insulation which has separated (Figure IV-10). Currently the breach funnels water sheeting down the exterior of the wall into the interior. Since the breach is located behind the porch balustrade, routing and sealing the breach would not be noticeable by an observer on ground level. The sealant selected should have a low modulus of elasticity to avoid causing further damage to the EIFS quoin. Dow-Corning 790 sealant is commonly specified for EIFS applications due to its low modulus.



Figure IV-10. An EIFS quoin with a horizontal crack which allows water to enter the wall system.



Figure IV-11. Water stains underneath the porch roof on the east elevation.

Stucco Stains

Stains on stucco surfaces were observed under the porch and at roof intersections (Figure IV-11). It is not known if the stains are due to current leaks, or if there were leaks in the past that have since been corrected. Areas of staining should be observed during significant rain events. During observation site visits no evidence of active leakage was seen.

Roofing

Porch Roofing

The porch roofing consists of soldered sheet metal with a coating applied to the surface. Based on the low relief of the soldered seams it appears that the metal sheets were not joined with double lock seams, the most durable connection for sheet metal roofing. Peeling of the coating at the edge of the roof was observed (Figure IV-12).

The level of the porch roof varies, with the east porch roof meeting the building wall just below the stone sill of the windows, and the south porch meeting the wall at the level of the lintels. Between the lintels the metal turns up and is terminated in a reglet (a recess in the wall) at the base of the stucco surface. This is an effective way to waterproof the junction between roofing and a wall. However, the sandstone window sills interrupt this termination (Figure IV-13), and instead sealant is applied to the perimeter of the sill to prevent water entry behind the roofing.

The condition of the sealant that has been applied varies. Some sections of sealant have failed cohesively with an alligatored surface, typical of weathered urethane sealants (Figure IV-14). Other areas feature newer sealant installed over older sealant (Figure IV-15, a practice which does not correct adhesive failure in the underlying sealant. Still other

Figure IV-14 (below left). A detail of a failed sealant bead at the junction of a sandstone sill and the wall.



Figure IV-12. A detail of the edge of the porch roof showing the coating over the soldered metal peeling away.



Figure IV-13 (above). A sandstone sill which interrupts the upturned leg of the metal roofing.

Figure IV-15 (below). A detail of newer sealant installed over older sealant.



areas have sealant beads which have long failed, leaving an open path to the wall interior (Figures IV-14 & 16). The junction of the metal roofing, sandstone sill, and the reglet at the base of the stucco wall creates a difficult condition to waterproof, and open breaches were observed at this junction (Figure IV-17).

When sealant joints are relied upon for waterproofing, they must be replaced at appropriate intervals (which intervals are determined by sealant type and exposure to UV rays). Previous sealant should be completely removed, and when installed as a fillet (installed into a corner), bond breaker tape should be used to avoid triaxial shear conditions. Given the different sealant conditions observed, it is assumed that sealants were applied to correct leaks in a specific area, and not replaced as part of a systematic maintenance procedure.

Since sandstone is porous, continuous rains or drifted snow may saturate the sandstone permitting moisture to pass behind the sealant and metal roofing. Covering the sills with metal flashing which is then integrated into the porch roof system would effectively keep water from getting behind the porch roofing. Since these sills are screened from view by the porch balustrade, there would be little change in appearance from the ground. However, occupants of the second floor would no longer be able to see the sandstone sills. Application of a clear sealer to the sandstone sills may provide a sufficient barrier to moisture without significantly altering the appearance of the window sills.



Figure IV-16. A detail of a window sill with an open breach where it meets the stucco wall.



Figure IV-17. A detail at the junction of the turned up edge of the metal roofing and window sill.

In the Entrance Vestibule water damage to the plaster crown moldings was observed directly underneath the junction of the porch roof and the stucco wall (Figure IV-18). A sandstone window sill is also located immediately above the observed damage. Replacement of sealants and installation of flashing over sandstone window sills will protect these finishes.

The wood balustrade on the porch roof has wood moldings which cover the junction between the roofing and the balustrade support posts. It is presumed that the metal roofing turns up with sealant applied behind the wood trim.

It is presumed that the soldered metal roof underneath the coating was installed at the time of the 1980s restoration, and that the coating was applied to extend the life of the roofing. Identification of the coating type and its date of application, and an evaluation of the condition of the metal roof underneath will determine the expected usable lifespan of the porch roof.



Figure IV-18. Water damage on a plaster crown molding in the Entrance Vestibule.

Slates

Many slates on the mansard roof are weathered (Figure IV-19). Where they are weathered the color of the slates is typically a lighter gray. When they have separated into thin layers and retain water, they tend to be darker. This is typical of slates that have trace amounts of sulfates in the stone. These sulfates form gypsum which then weathers leaving a slate surface which separates into thin layers. No samples of roof slates were taken and no chemical analysis was conducted. However, conditions typical of sulfate content in the slate were observed.

High quality slates are assumed to last 100 years. Obtaining high quality slates requires identification of the source quarry of the slates, and comparing the track record of the slates from that source. Purchasing directly from the quarry, or purchasing from slate brokers with long standing relationships with the appropriate quarries, greatly increases the odds of obtaining appropriate materials.

Failure of slate nails was also observed on the roof. In areas where slates are missing, the underlying plywood was observed. This plywood was approximately ½ inch thick, which may not provide sufficient “bite” for the nail (Figure IV-20). Under repeated swelling and shrinking, nails with less than a ¾ inch embedment can work out of the wood. Slates are fastened with copper nails, which is one of the preferred methods for attachment.

Missing slates were observed on the roof. Slate repairs are made by cutting the nail heads and removing the broken slate. Then a sheet metal tab is slid underneath and hooked on the slates above. A new slate is slid into position, and then the sheet metal tab is bent up at the bottom of the new slate to hold it in place. Some repairs were made by using lead tabs which have softened in summer heat and let the slate slide out of position (Figure IV-21). Repairs should be made with copper tabs—any lead tabs should be removed and replaced with copper ones. Figure IV-22 shows several slates with copper



Figure IV-19. A detail of weathered slates on the south elevation.



Figure IV-20. An area of missing slate showing the building paper and plywood underneath.



Figure IV-21. Slate repairs using a lead strip which has failed to hold the repair slate in position.

tabs, along with lead tabs holding adjacent slates. Note also the gray perimeters of the slates which may be an indication of gypsum formation due to weathering.

Evidence of roofing problems were observed in areas of the slate roof. Sealant applied to roof slate perimeters suggests that roof leaks have been experienced, but such a repair method has a low probability of success (Figure IV-23). In most cases slates on steeply pitched roofs do not readily admit leaks. More probably the condition prompting the sealant application was due to a leak at the roof junction above, or flashing failure below. Heat tape was noted in many areas of the roof where there are constricted geometries that can trap snow and ice. Such heat tape is important to a well-functioning roof system.

Given the weathering of the existing slates and the inadequate thickness of the plywood underlayment it is anticipated that yearly maintenance costs of the slate roof will increase. Photographic evidence shows wood shingles, and perhaps a metal shingle roof installed over the wood shingles on the steep mansard roofs. The 1898 Sanborn Fire Insurance map lists the mansard roofs as slate. However, the 1967 HABS photographs show the mansard roofs with wood shingles. It is unlikely that slates would be removed and replaced with wood. It is possible that a street observer updating the fire insurance maps in 1898 might have mistaken tin shingles for slates. What is known is that wood shingles were on the roof for most of its existence. Wood shingles would be a better choice from a historical accuracy standpoint. Photographs show the original wood shingles to have plain butts--not the octagonal butts used during the 1980s restoration.



Figure IV-22. A detail of slates repaired with copper and lead tabs. Note the missing slate in the center of the photograph.



Figure IV-23. A section of roof slates on the east wing with sealant applied to the slate perimeters.

Low-Slope Roofs

The mansard roofs which have slates on the steeply pitched section have a nearly flat roof above. These roofs are similar to the porch and bay window roofs below. They are uncoated soldered metal on the perimeters and on top of dormers, and fabric-reinforced coating over soldered metal in the field of the main roof (Figure IV-24). Both east and west roofs have a wrought iron cresting installed at the perimeter.

The east and west wings each have similar sized low slope roofs, but the west wing has a projection of the elevator shaft extending about two feet above the main roof. No significant areas of ponding water were observed on the west wing, but the east wing had a puddle of water at the west edge of the roof (Figure IV-25). Roof systems perform better when they shed water, as opposed to holding standing water.

Breaches in the fabric-reinforced coating were observed on the west wing roof (Figure IV-26). Several areas of stained and collapsed insulation were observed under the east wing roof (Figure IV-27). From the extent of the staining it is assumed that leaks have been present for an extended period of time. Based upon an identification of the fabric-reinforced coating, either the coating should be removed and replaced, or a new compatible coating applied.

Figure IV-27. Staining due to roof leaks in the mechanical room under the east wing roof.



Figure IV-24. A detail of the southwest corner of the west wing roof, showing the uncoated metal roof outside the perimeter of the cresting, and a coating applied to the field inside the cresting.



Figure IV-25 (above). A view of the east wing roof showing ponding water at the west edge.

Figure IV-26 (below). A breach in the fabric-reinforced coating of the roof.



The metal cresting at the perimeter of the upper roof is fastened with screws that penetrate the roofing (Figure IV-28). The cresting has a foot with an open slot in which the screw is inserted. The foot rests on a small iron plate that is set on the roofing with a bed of sealant. In some cases the cresting has slipped off of the retaining screw fastener. The sealant has also pulled away from the plate, providing a potential path for water entry. The screw does not have a washer or sealant to prevent water entry at the screw hole. Crestings should be refastened to secure them to the roof. Given the observed condition of sealant at the perimeter of the plate, these plates should be removed, cleaned and repainted, and set in a new bed of sealant. Sealant or a washer should be installed below the cresting foot to prevent water entry through the screw hole.

The black painted surface of the cresting is weathered, and some signs of corrosion are present on the surface. It may be more cost effective to remove the cresting, prepare the surface for painting by a light grit blasting, and then shop paint with a high performance coating. Fluoropolymer coatings and urethane coatings may have lower life-cycle costs due to their superior longevity. Warranties of 15-20 years may be achieved by proper selection of primers, number of coats, and manufacturer.



Figure IV-28. A detail of the supporting foot of the metal cresting which has slipped out of position.

Galvanized Metal Flashings

Flashings at roof penetrations are of galvanized steel sheet metal (Figure IV-29). Galvanizing provides an effective protection against corrosion by using the zinc coating as a sacrificial layer. However, as the zinc layer is consumed, the steel underneath is unprotected. For many types of exposures, 40 years is the “rule of thumb” for the functional life of a hot dipped galvanized coating. Corrosion visible on existing steel flashings indicates that these flashings have reached their functional life span.

As can be seen in Figure IV-29, galvanized flashings will stain adjacent building materials readily when the zinc coating is consumed. In the example below, the vent opens on to the valley between the two mansard roofs, and is not visible from the ground. However, were this to be located on another elevation, it would be unsightly and potentially cause considerable expense to remove the stains.

Best practice matches the expected longevity of building materials. If a flashing material underneath has a shorter expected life span than the roofing above, the money invested in the roofing material will not fully benefit the owner. When using quality roofing materials it is most economical to use flashings made from copper or stainless steel. Coatings on the flashings can imitate the tinned surfaces typically used in 19th century buildings. “Freedom Gray” coated copper or TCS II coated stainless steel are examples of long-lived sheet metals that imitate historic tinned metal and will outlive most materials placed over them.



Figure IV-29. A mechanical room air duct penetrating the slate roof on the east wing.

Wood Shingles

The gable roof of the rear wing is covered with wood shingles (Figure IV-30). These shingles have a five to six inch exposure and a random width. It is presumed that these shingles were installed at the time of the 1980s restoration. The existing wood shingles exhibit splits and breaks (Figure IV-31). Roofing nails holding the course of shingles below are visible in some of the splits, providing a potential path for moisture infiltration.

In addition nails were observed between shingles, suggesting workers installing shingles did not take care to place nails where they would be covered by the next course (Figure IV-32). It is noted that anticipating the location of the next row of shingles when installing random width shingles is not easily done, but exposed nail heads do not provide a sound roof. Some metal tabs were observed inserted into the shingle field (Figure IV-33). It is presumed that these tabs cover exposed splits or nail heads.

The shingles do not exhibit excessive curling or warping, the weathering of exposed surfaces is moderate, and no sign of rot was observed. If the exposed nail heads and splits are repaired with metal tabs, the roof is likely to provide a few more years of service. However, wood roofs with untreated shingles are expected to last about 30 years, meaning that replacement should be anticipated in the near future.



Figure IV-30. A view of the rear wing roof.



Figure IV-31. A split shingle which has exposed the nail of the shingle underneath.

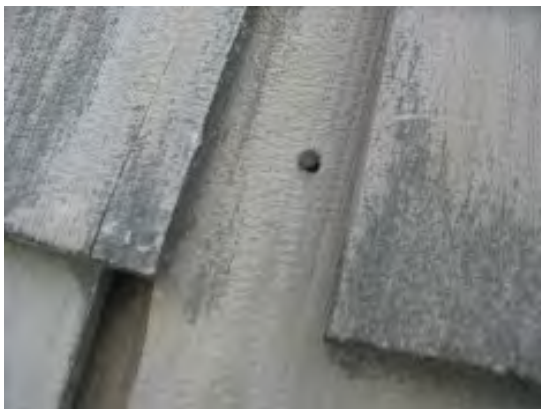


Figure IV-32 (left). An exposed nail head between shingles.

Figure IV-33 (right). A metal tab inserted where a shingle has split.



Roof Kickouts

Intersections of walls and roofs create challenges for management of water flowing down roof surfaces. Good practice involves the installation of kickouts (flashing to direct water towards the center of roof edges) to keep water from splashing on wall surfaces. Figure IV-34 shows the lower kitchen roof on the east side. Staining and biological growth is present where water splashes from the roof onto the stucco surface. Staining is present also on the stucco wall below the lower roof. Water flowing along the flashing at the roof/wall interface can drop between the end of the gutter and the stucco wall. This condition is especially acute because a downspout discharges water onto the roof above, so that large quantities of water flow in this location. The moss and biological growth on the roof indicate that the area is often wet.

Installation of a kickout flashing at the roof edge above the gutter will shift water into the gutter and away from the wall. Extending the downspout leader over the lower roof and directly into the gutter below will remove the concentrated flow of water from the wood shingles.

Kickouts should also be installed where bay window roofs intersect walls, and in all locations where gutter ends intersect walls.



Figure IV-34. A view of the lower kitchen roof showing water staining on adjacent stucco walls.

Windows and Trim

The wood windows and trim were observed in August 2010 and again in spring 2011. During that time the woodwork was painted and wood elements repaired. In 2010 paint had peeled to the point where large patches of wood were exposed to weathering (Figure IV-35 & 36). Paint serves two primary functions: one is to reduce the absorption of moisture into the wood (preventing the establishment of fungus and rot), and the other is to protect wood from ultraviolet damage to the lignin which binds wood fibers together.

Most paints and coatings have an expected life span of about eight years. That is reduced when the underlying wood is heavily weathered, or if moisture is entering the wood behind the paint. Given the budgetary process for allocations, paint surfaces on windows and trim should be carefully evaluated each summer. Any signs of weathering of the paint surface should trigger a request for funds, anticipating the weathering that will happen over the following fall, winter, and spring before actual repainting can occur.

Single pane windows will often develop condensation on the inside of the glass during winter months if there are significant moisture-generating activities (such as cooking or assembly of many persons). Interior finishes on wood muntins and sash rails can be damaged by moisture, leading to discoloration, weathering, and in extreme cases deterioration of wood members (Figure IV-37). An aggressive maintenance and refinishing schedule for interior window finishes will significantly extend the life of existing sash, whether they be original to the home or later replacements.



Figure IV-35. Peeling paint in 2010 on the south elevation prior to repainting.



Figure IV-36. Peeling paint in 2010 on the south elevation.

Figure IV-37 (below). A detail showing a deteriorated window sash where condensation pools at the bottom rail.



Patio

The outdoor patio on the west side of the Devereux House is paved with clay tile units matching the sidewalk surfaces used in the Triad project (Figure IV-38). It is assumed that a concrete slab on grade supports the clay tile pavers. The patio is fitted with drains and the patio surface slopes towards the drains. Some ground subsidence has occurred, as the sealant installed against the north enclosing wall records the original level of the patio (Figure IV-39). Since this subsidence occurs in line with a series of patio drains, it is assumed that the trench for the leader was not backfilled and compacted properly, leading to the observed subsidence. Stains also indicate where ponding of water occurs.

New sealant should be installed where water can get between the perimeter concrete wall and the slab to prevent saturated soils from heaving during freezing temperatures.

Movement in the enclosing walls of the patio also suggests that soils were not properly prepared prior to installation of these elements (Figure IV-40). Gaps are detrimental aesthetically, but not functionally.

Fence posts are set into a low concrete wall. Corrosion of the fence post sleeve has spalled the concrete on some posts (Figure IV-41). It is anticipated that other sleeves will eventually exhibit similar spalling over time and require replacement.



Figure IV-38. A view of the patio surface.



Figure IV-39. An area of subsidence in the patio slab. Note the level of the sealant installed at the original patio level, and the staining caused by ponding water



Figure IV-40 (left). A patio screen wall which has pulled away from the main building.

Figure IV-41 (right). A fence post sleeve which has corroded and spalled the surrounding concrete.



V. Paint Analysis

There are only limited opportunities for the identification of original paint colors in the Devereux House. The entire north half of the existing building has no original building fabric, and therefore has no original paint layers to be uncovered. Construction photographs indicate that most interior plaster was removed as well. The porch and east window bay are all new construction, and many elements were replaced during the 1980s restoration.

Original exterior elements that might contain original color information are identified in a number of ways: worn edges on moldings and boards, a significant thickness of paint buildup, and identification of molding profiles that have a historical usage in the correct time frame. Representative samples of paint from exterior brackets and window jambs were sampled and submitted for Munsell color matching. Samples were taken with a sharp 3/4 inch wide wood chisel. A thin layer of wood was removed along with the paint sample in order to identify the base layer of paint which is the primary object of the study.

The only historical reference to colors is the description of the dedication of the west wing of the home in 1867 which identifies a green and gold color scheme in the Drawing Room. Since the opportunity for finding original finishes in the interior if the home was so low, it was decided not to mar interior finishes by sampling for paint colors.

Exterior Brackets

These elements are present on the main roof cornice, porch cornice, bay window cornices, and horizontal cornices above windows and doors. Brackets supporting the horizontal cornices above the second floor windows are easily accessible from the porch roof. It was assumed that the same color scheme would be

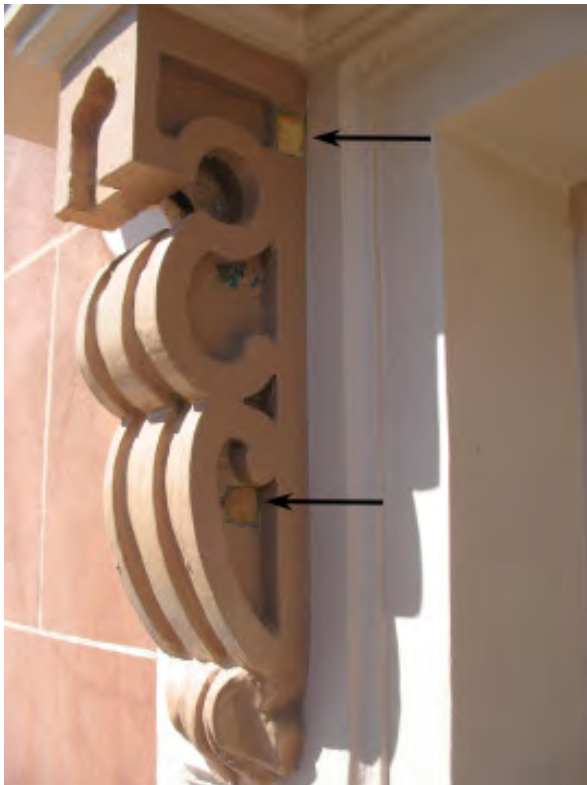


Figure V-1 (left). A bracket showing the paint sample locations.

Figure V-2 (below). Paint scraping of a window jamb showing the ranges of colors used on the molding.



used on all exterior brackets, regardless of location. Figure V-1 shows the sampling locations for a typical bracket. Because contrasting colors were often used in order to emphasize ornament in the Italianate style, paint was sampled from both projecting and recessed areas to look for color differences. The sides of the brackets were used to minimize the visual impact from the sampling.

Windows

Window jamb moldings and window sash were sampled from the second floor porch. The selection of these windows was based on the identification of these windows as original to the building, easily accessible, and not easily seen by the public since the sampled areas are screened by the porch balustrade. In addition to the samples taken, paint layers were carefully scraped in order to reveal the layer sequence (Figure V-2). This was done to ensure that the sampling would be done in an area that had many layers of paint, and therefore was likely to have the original paint layer at the base.

The three boards stored in the basement which came from the bottom panel of the doors or windows have a bottom layer on the exterior weathered side that was identified as red (Figures V-3 & 4). However, the red paint adheres to a surface which is weathered, suggesting that this might not be the original paint layer. (Figure V-7) A detail of the 1880 view of the building shows the first floor windows with the bottom sash raised up and a 'mosquito bar' or screen placed in front of the opening (Figure V-4). The panel at the bottom of the sash is clearly white in the photograph.

The interior unweathered side of the three boards have a strip of faux grained paint, coinciding with a panel on the inside face. This faux graining has a base coat of white, an orange layer, and then a dark glazed which has been combed and patterned to look like wood graining. As can be seen in Figure V-6 the match with the restored woodwork is an accurate one.

Discussion

The base paint layer of the brackets, second floor window jambs, and second floor sash is white, the original finish color. This finding is corroborated by a photograph circa 1880 of the south elevation of the Devereux House (Figure V-5). Although there are slight changes in the shade of gray where elements are in shade or full sun, all elements in the sun have a similar gray, all elements in shade have a similar gray, and



Figure V-3. The weathered side of saved window panel boards



Figure V-4. The interior side of saved window panel boards



Figure V-5(left). A detail of the Devereux House c. 1880 showing the change in gray hue as the window jamb molding passes from light to shade (upper arrow) and the brackets in sun (lower arrow).

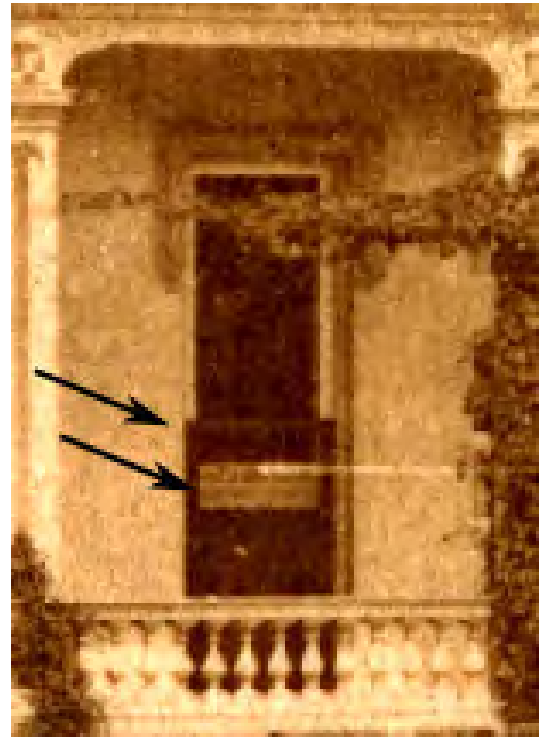


Figure V-6 (right). A detail c. 1880 showing the dark painted screen (upper arrow) and a raised white painted sash with a panel (lower arrow).

elements which bridge between sun and shade match the respective grays. While paint analysis shows that bolder colors were later painted on the exterior ornament, paint analysis and inspection of historic photographs agree that the initial paint scheme was a simple white.

While most Italianate buildings in the eastern United States would have had multiple colors highlighting the curvilinear ornamentation of the brackets, it is noted that in Utah the Italianate style came primarily by way of carpenter's manuals, such as the books by Downing and Allen mentioned in earlier chapters. They were illustrated with steel engravings, but no color could be printed at this time. Therefore, it took travel and observation to match the high style colors in vogue in the east. Also, 1867 would have been relatively early for



Figure V-7. The weathered surface of a painted board originally part of a panel on the bottom sash of a window.



Figure V-8. A comparison of the original graining on the window sash panel and the restored woodwork.

a complicated paint scheme. The three and four color paint schemes common in the Italianate style were in part due to the introduction of ready mix paints at the end of the civil war. While an all white paint scheme is hardly unexpected in 1867, the east addition constructed in 1874 has the same white paint. Apparently it took time for the more elaborately colored styles to reach Utah.

The layers of paint on the brackets indicate that such paint schemes eventually did come to Utah. Of the two brackets sampled, each has a different paint history--one has a series of dark brown paint layers, while the other has alternating dark red and dark green colors. It is not known why the color histories of brackets on the same elevation of the house would have such different paint histories. A complete listing of paint color samples and layers is found in Appendix B.

Stucco

The stucco of the west wing of the home constructed by Jennings had a paint applied to the surface to make the stucco look like ashlar masonry (Figure II-2). However, a photograph from about 1900 shows a uniform color to the stucco (Figure V-10). Note the railroad cars in the foreground that show how closely the railyards intruded on the grounds of the mansion at this time. It is probable that at this time the original paint had faded and the stucco had a uniform color. Craig Paulson recorded that at the time of the 1980s restoration the stucco surface was scored to look like cut stone and quoins were colored to look like granite (Figure V-9) [Craig Paulson, "A Brief History of the Reconstruction Work on the Devereaux Mansion," p. 2.]. Currently the stucco surface is not scored, but the effect of cut stone is rendered with a paint line.



Figure V-9. A detail of the existing stucco surface and quoins during restoration.



Figure V-10. A view of the Devereux House circa 1899.

VI. Adaptive Reuse Potential

The Devereux House is isolated on the south side of a city block surrounded by lawns and plantings. Access amenities include a surface parking lot to the west, a multi-level parking deck to the northwest, and a light rail stop (TRAX) immediately in front of the building. These parking and public transportation options will support a wide range of uses. The city block on which the Devereux House is located has general office, education, media, and restaurant functions. To the west is the Gateway Center with a large concentration of retail, restaurant, and entertainment venues. To the south is the Delta Center, a major sports and entertainment venue.

Retail

Although there is a considerable amount of traffic that passes by the site (especially due to the TRAX station) nearby retail is located across 400 West in the Gateway Center. Since most retail uses depend upon nearby retail venues to provide a critical density to create a shopping destination, being located across the street isolated in a city block is asking shoppers to walk a sizable distance. This is especially true since the Union Pacific railroad station blocks the west side of 400 West Street from the Gateway center behind. A retail function is less likely to do well in the Devereux House unless it were a specialty retail niche that draws its own traffic without depending upon the contribution of surrounding retail outlets.

Restaurant

The Beall analysis of the property identified a restaurant function as a viable use. This remains one of the stronger options for the property, partly due to the fact that a significant investment in a commercial kitchen has already been made. Equipment and utilities have been provided to support a restaurant/reception function. Taking advantage of the existing facilities is a strong incentive to consider a restaurant function. One of the impediments to a viable restaurant activity in the past was the lack of site traffic. Plans for the Khashoggi Triad development included large residential and office towers that would bring many potential diners to the block. Without the traffic generated by these residential and office facilities nearby, restaurants in the Devereux House have not enjoyed long term success. However, with the Gateway Center, Delta Center, two college campuses, offices and media venues nearby, there is currently a much larger pool of potential customers upon which to draw.

The physical arrangement of the Devereux House with its multiple rooms on two levels is adequate for a restaurant function. Some rooms can be used for private parties, while general seating can make use of virtually all rooms. Broad hallways provide good access to potential dining areas, although the single elevator used by both staff and patrons would be a potential bottleneck during peak usage. Restroom facilities are likely inadequate for times of high occupancy. It is assumed that parking arrangements can be worked out for patrons using the adjacent surface parking lot.

Reception Center

The reception/meeting function that the Devereux House currently serves also makes use of the food preparation infrastructure present at the building. The Devereux House has a significant weakness in this regard, and that is the lack of a large indoor hall that will accommodate groups of more than about 60 persons. However, it does have a large outdoor patio that will accommodate larger groups.

Currently the table umbrellas on the patio provide shade, but do not protect against inclement weather. A large tent or multiple tents on the patio could provide sufficient weather protection to attract clients requiring larger spaces. This would be especially true if there were a direct connection between the largest indoor space, the Ballroom, and the outdoor patio. Converting the two central windows into doors, perhaps leading to a raised area above the patio, would make the Ballroom and Patio feel more like contiguous spaces and enable patrons to freely move between the spaces without having to take the circuitous path out the north door. Cost for such a modification would be relatively modest. Since the rear portion of the west wing of the Devereux House was completely rebuilt from the foundation up during the 1980s restoration, introduction of a new door leading to the patio directly from the Ballroom would not involve the destruction of historic building fabric. It would, however, change the historic functional usage pattern.

Since the rear portion of the home is all new construction, a potential avenue for creating a larger indoor seating area is to combine the Ballroom with the Rear Hall and portions of the Kitchen. Currently the Ballroom is about 18 feet wide, and combining it with the Rear Hall would increase the width of the room to about 26 feet. Such a move would eliminate the ceiling divider and fireplaces, both of which were restored to forms that do not match the original. While it is possible to engineer a system to span the entire 26 feet, preservation practice seeks to record and interpret spaces as they were originally. The presence of the wall can be registered by a row of supporting columns, the fireplace locations identified by flooring changes, and the ceiling divider can be reinstalled in its original form. Elimination of the Rear Hall would place the elevator directly in the Ballroom, necessitating either a patron renting the entire facility, or installation of a vestibule to screen the elevator lobby from the enlarged Ballroom. Such a restructuring of the building should only be undertaken if the financial benefit from having a larger interior space will cover the cost of renovations.

Another issue involved with increased occupancy is the restroom capacity. Currently the number of fixtures is low for the size of the building, and for groups using the patio it is a long pathway from outside to the second floor restrooms. It is assumed that less kitchen space will be required for a reception center than for a restaurant. The southwest area of the Kitchen could be converted to restrooms. It is assumed that one entrance to restrooms would be through the short leg of the "L" so that it is screened from combined Ballroom/Rear Hall, and the other entrance could be from the corridor leading to the basement stairs. Alternatively a restroom addition could be constructed against the north wall of the Ballroom, incorporated into a new exit to the Patio.

The Devereux House has several strong advantages as a reception venue. The primary one is the unique and ornate interior. The same features that made Jennings' residence so attractive to host visitors to Utah in the 19th century also makes it attractive in the 21st century. This is especially true for functions that traditionally involve photographs, such as weddings and family reunions.

Adaptive reuse of the Devereux House is most likely to be successful when full advantage is taken of its unique elements.

Currently reception activities at the Devereux House are arranged through Temple Square Hospitality, which has developed a very strong wedding reception “brand” at the Lion House. Some of the elements that have made the Lion House successful are its proximity to Temple Square, a menu which plays off of the Lion House history (i.e., rolls and pastries), and a large third floor banquet space that will handle larger groups. The menu that has proved successful for the Lion House will not create a distinct brand for the Devereux House. A more contemporary food list, or even one that is more reflective of a wealthy Victorian era social class (as opposed to a pioneer era family) will help distinguish the Devereux House as a venue.

Likewise the reception areas at the Joseph Smith Memorial Building have a successful record, owing in part to the attractive spaces and proximity to Temple Square. Once again, developing a unique opportunity based on the positive qualities of the Devereux House will enhance its marketability.

The Devereux House provides a desirable location for medium -sized wedding parties with its lavish interiors. Its distance from Temple Square can even be to advantage as it permits a grand entrance and exit at the circular drive in front. Open house formats also would work well as the Devereux House provides multiple spaces for mingling and food service. The nearby parking would allow well-wishers to come and go throughout the evening.

The bar currently installed in the Dining Room does little to add to the building. It has no historical basis and it does not blend well with the original home style. It is assumed that liquor is not going to be served given the Church ownership, and therefore the bar simply occupies space that would be more valuable as seating or reception area. A fireplace could be re-introduced into the Dining Room if desired.

While the patio provides a large area for reception gatherings in good weather, it has the odd arrangement of a solid masonry wall in the direction of a grass berm to the north (which would effectively block views to the rear of the site without the wall), yet has an open wrought iron fence facing the parking lot on the west. Since photographs are a large part of a wedding reception, the parking lot background does not make an attractive background. More dense plantings, a solid wall, or even a decorative fountain placed on the wall, would all increase the attractiveness as a venue for wedding receptions.

The clay tile pavers on the patio match the paving used in other areas of the site. However, they have no inherent historic value and require yearly maintenance to repair broken tiles. If replacement is considered in the future a colored concrete will provide a more durable surface and aesthetically be a more neutral element, letting the Devereux House read as the strongest design element.

Business social events and meetings for Church departments would also fit into the reception func-

tion. The home is large enough and provided with sufficient hallways and circulation that multiple groups of thirty or less could be accommodated in the home by distributing them to the east and west sides of the first and second floors (i.e., Library/Dining Room, Drawing Room/Ballroom, Southeast/Northeast Rooms, and the Northwest Room).

Given the proximity to Temple Square youth conference activities might take place in the Devereux House with groups moving between activities on or near Temple Square and smaller classroom group activities in the Devereux House. Evening events could be staged on the outdoor patio.

Education

With both the LDS Business College and the BYU Salt Lake Center immediately to the north, the Devereux House could also serve as administrative offices and classroom space. Since the original home was designed to be separated into public and private zones, the same divisions could be used to secure administrative offices with confidential records. Larger rooms (such as the Ballroom and Library) could accommodate classes in the day and then be switched to reception areas in the evenings as required for the institutions. Third floor rooms could be used as seminar rooms for small classes. Note, however, it would be difficult to provide desks that could be easily switched around for evening uses, and carpets would need to be selected for the expected traffic from daily classes.

The large commercial kitchen would have little use should the building be used for administrative offices. It could be easily renovated into classroom space. However, smaller food preparation areas would be useful for hosting students, faculty, potential donors, or for a lecture series intended to draw in the public and raise the visibility of the institutions.

The north door of the Rear Hall would be the natural entrance for students walking from the Triad 3 or Triad 4 buildings. However, this door is currently cut off from the rear by the walls and transformers on the north side of the Devereux House. Reconfiguration of the access from the north would be desirable if classes are held in the building.

While it is understood that BYU and the LDS College are separate institutions it is noted that the Stair Hall naturally divides the Devereux House, and accommodation of the two organizations in a distinctive and unique space may be possible.

Office

Use of the Devereux House as office space would also provide a high profile venue for a business. Using historic mansions for office space has a long history in Salt Lake City, as many Brigham Street residences have been adaptively reused over the years. Interestingly, Terracor, the firm that unsuccessfully attempted to redevelop the Devereux House property in the 1970s, was housed in the Keith Brown mansion approximately 10 blocks to the east.

Since the home already has adequate power and mechanical systems supplying the spaces, little new infrastructure would have to be added to the building. With wireless network systems no additional wiring would be necessary to outfit office spaces. However, power distribution points would have to be developed for workstations. Large spaces, such as the Ballroom and the second floor Northwest

Room above are well adapted to studio or office pool areas. On the first floor, power receptacles installed in the floor could service desks, copiers, and other electronic equipment. On the second floor a cubicle system with integral power distribution may prove more effective for adapting spaces. Private offices either would be very large, or not very private as multiple occupant share rooms. Despite some of the inefficiencies of space, the architectural distinction of the building would likely be attractive to a business, especially one with a high profile and connected to either the broadcast, entertainment, or retail businesses located in the immediate neighborhood.

As most businesses have clients who come for meetings and consultation, adaptive reuse of the Devereux House as offices would require some change to the building access. The circular drive does provide limited visitor parking, but some businesses may require an expanded visitor parking adjacent to the building. Since the TRAX stop crosswalk is just to the west of the circular drive of the Devereux House, additional parking would have to be coordinated with pedestrian pathways for those walking to the LDS Business College and BYU Salt Lake Center.

VII. Executive Summary and Recommendations

Summary

Maintenance

The Devereux House is a generally well maintained historic property. During the time period of the field investigation, daily and weekly maintenance of the building and the grounds was of a high standard. Periodic maintenance, such as repainting, reroofing, and revarnishing, was performed only after problems occurred instead of anticipating the maintenance need.

Restoration

The restoration of the Devereux House combined several different treatments: Restoration, Rehabilitation, and Reconstruction. The south half of the building was restored by refinishing existing woodwork in the:

- Drawing Room
- Library
- second floor Southeast Room

or accurately replicating charred woodwork based on lightly damaged examples in the :

- Stair Hall
- second floor Southwest Room
- second floor Southeast Rooms

In contrast, the northern half of the building is a total reconstruction, with all new material from the foundations up. In the Ballroom woodwork installed during the restoration does not match historic photographs of the room.

On the exterior all roof structure and roofing dates from the 1980s restoration. Original cornices and wood brackets are present on the south elevation and can be distinguished by their many paint layers. Ornament on other elevations date to the 1980s restoration. Of the exterior building extensions, only the window bay in the Drawing Room and Entrance Vestibule contain original material. The porches and east window bay in the Dining Room are reconstructions dating to the 1980s restoration.

Function

The Devereux House was a showpiece in Salt Lake City in the late 1870s and 1880s, and its restoration continues that status. The combination of expansive grounds, bold Italianate ornament on the exterior, and elaborate wood moldings and cornices on the interior make it a property of distinction. Business activities which benefit from the visibility and quality of the Devereux House will be the best fit for the property.

Recommendations

Maintenance (see Chapter IV.)

1. Maintain the first floor rooms: Drawing Room, Library, Dining Room, Stair Hall; and second floor rooms: Upper Stair Hall and Southeast Room, as high quality historic interiors. Activities should be scheduled to minimize furniture moving or other activities that might damage interior finishes in these rooms. Likewise, functions that require modification to the interiors should be relocated to the northern half of the building.
2. Schedule replacement of the roofing of the Devereux House in the near future. The functional life of the current roofing can be extended, but increasing maintenance costs will eventually benefit reroofing. Use appropriate flashings and kickouts as discussed.
 - a. Wood Shingles—Existing shingles are split and weathered. Replacement is recommended before significant leaks occur. Plan for future replacement on a 25-30 year schedule (page IV-14).
 - b. Slates—It is doubtful that slates ever were placed on the mansard roofs historically. Replace with wood shingles with plain butts (page IV-9, 13).
 - c. Low Slope Roofs—Low slope roofs on the porches, window bays, and upper roofs have the soldered sheet metal roofing installed during the 1980s restoration covered with newer roofing materials, indicating that the original metal roofing has failed. Coatings have failed on the upper roofs, and sealants on the perimeter of the porch and window bay roofs have failed. If the soldered sheet metal roofing is replaced, double lock seams should be used for durability. If coatings are applied to extend the longevity of the roofing, reapplication of coatings and attendant sealants should be scheduled according to the manufacturer's recommendations and in accordance with yearly inspections by maintenance personnel. (page IV-6, 11).
 - d. Cresting--Remove, recoat, and reinstall addressing the roofing penetration of fasteners (page IV-12).
 - e. Kickouts--Install kickouts where roof edges intersect walls (page IV-15).
3. Address moisture infiltration potential at steel lintel bearings spanning window bays (page IV-3).
4. Remove elastomeric coatings from chimneys and reinstall stucco. Flash the top of the terra cotta flue caps, and rout and seal cracks in flue caps (page IV-4).
5. Repair failed EIFS quoins to prevent moisture entry into walls (page IV-5).
6. Repaint exterior woodwork on at least an eight year schedule. Adjust the schedule as needed if paint coatings deteriorate more quickly. Revarnishing of window sash interiors should be on the same schedule as exterior woodwork due to consistent wetting of the sash from condensation forming on single glazing (page IV-16).
7. Repair Patio fencing and clay tile pavers as required (page IV-17).

Recommendations, Cont.

Function (see Chapter VI.)

Review the space requirements for the function selected for the building (i.e., restaurant, reception, office, education). Reconfigure the north section of the building as needed to maintain a viable business. Maintain the integrity of the historic building fabric in the south section of the building.

The following include the functions most likely to succeed in the Devereux House:

1. Restaurant—This is the function initially selected by the Beall study in 1980, and formed the basis for the restoration and reconstruction with large kitchen facilities built into new additions on the north.
2. Reception—This is the current function of the building. The landscaped surroundings, ornate interiors, availability of parking, and its downtown location are all favorable to success of this enterprise. Marketing efforts which capitalize on the unique qualities of the Devereux House will strengthen its viability. If the building is marketed to larger groups, first floor restrooms and a direct connection from the Ballroom to the Patio may benefit the business. If warranted, enlarging the Ball room (which does not contain historic building fabric) may increase the functionality of the building.
3. Education—With the LDS Business College and BYU Salt Lake Center adjacent to the Devereux House, the location of administrative offices, classrooms, and reception space in the building would provide a high profile public face to these institutions.
4. Office--The Devereux House could provide a high profile location for a business for which visibility is important. Electrical power for workstations would have to be introduced in rooms.

Appendix A

Secretary of the Interior Standards for: Restoration Rehabilitation Reconstruction

Secretary of the Interior Standards for Restoration

1. A property will be used as it was historically or be given a new use which reflects the property's restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
8. 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.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.

Secretary of the Interior Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive 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. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
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. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
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. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Secretary of the Interior Standards for Reconstruction

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.
2. Reconstruction of a landscape, building, structure, or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color, and texture.
5. A reconstruction will be clearly identified as a contemporary re-creation.
6. Designs that were never executed historically will not be constructed.

Appendix B

Paint Analysis Report

Devereaux House Salt Lake City, Utah Finishes Analysis April 26, 2011

On Monday, April 11 2011 David Arbogast, architectural conservator, of Davenport, Iowa, received a set of six samples and then two additional samples a week later. The samples were sent by Dr. Elwin C. Robison of Kent Ohio and were collected on the 23rd of March, 2011, from the exterior of the Devereaux House in Salt Lake City, Utah. They were submitted for analysis to determine historic finishes on the exterior of the house.

The samples were visually examined during the following days in the laboratory of Mr. Arbogast in Davenport utilizing an optical Olympus microscope having magnification between 14 and 80 power. Each layer observed was color matched to the Munsell System of Color utilizing natural north light. Only opaque, pigmented layers (i.e. paint layers) were matched. It is impossible to color match finishes such as metallic paints and leafs and varnishes because their color is directly affected by the translucency and reflectance. It should be noted that "varnish" is used consistently throughout this report to refer to any clear finish. It is possible that shellac was used on the woodwork originally. Thus, although all clear finishes are described as varnishes in the report, some may actually be other types of clear finishes, such as shellacs.

The Munsell System of Color is a scientific system in which colors have been ranged into a color fan based upon three attributes: hue or color, the chroma or color saturation, and the value or neutral lightness or darkness. Unlike color systems developed by paint manufacturers, the Munsell system provides an unchanging standard of reference which is unaffected by the marketplace and changing tastes in colors.

The hue notation, the color, indicates the relation of the sample to a visually equally spaced scale of 100 hues. There are 10 major hues, five principal and five intermediate within this scale. The hues are identified by initials indicating the central member of the group: red R, yellow-red YR, yellow Y, yellow-green YG, green G, blue-green BG, blue B, purple-blue PB, purple P, and red-purple R. The hues in each group are identified by the numbers 1 to 10. The most purplish of the red hues, 1 on the scale of 100, is designated as 1R, the most yellowish as 10R, and the central hue as 5R. The hue 10R can also be expressed as 10, 5Y as 25, and so forth if a notation of the hue as a number is desired.

Chroma indicates the degree of departure of a given hue from the neutral gray axis of the same value. It is the strength of saturation of color from neutral gray, written /0 to /14 or further for maximum color saturation.

Value, or lightness, makes up the neutral gray axis of the color wheel, ranging from black, number 1, to white at the top of the axis, number 10. A visual value can be approximated by the help of the neutral gray chips of the Rock or Soil Color chart with ten intervals. The color parameters can be expressed with figures semi-quantitatively as: hue, value/chroma (H, V/C). The color “medium red” should serve as an example for presentation with the three color attributes, 5R 5.5/6. This means that 5R is located in the middle of the red hue, 5.5 is the lightness of Munsell value near the middle between light and dark, and 6 is the degree of the Munsell chroma, or the color saturation, which is about in the middle of the saturation scale.

Samples one through six were submitted in manila coin envelopes with locational data and numbers written on them. Samples seven and eight were entire boards sent in a separate package. Following the listing of layers some brief commentary is given providing some insight as to probable historic finishes. The quality of the samples ranged from good to excellent.

	Sample 1	Munsell
Rose	2.5YR 6/4	
Dark brown	2.5YR 2/4	
Dark green	2.5BG 4/6	
Very dark gray green	2.5BG 3/2	
Gray	N 4.75	
Brown	2.5YR 5/4	
Dark brown	2.5YR 2/4	
Dull brown	2.5YR 5/2	
Dull brown	2.5YR 5/2	
Dull brown	2.5YR 5/2	
Dull brown	2.5YR 5/2	
Dull brown	2.5YR 5/2	
White	5Y 9/1	

The first sample was taken from inside the left lower portion decorative sawn work of a roof bracket. The paint sample revealed thirteen layers of paint, of which white is the oldest surviving layer. It was relatively thick and prominent. Although no other prime coat was observed, it is possible that this was not used as a prime coat but as the original finish coat. The dull brown layer had glints of a very high gloss finish.

Sample 2	Munsell
Rose	2.5YR 6/4
White	N 9.5/
Dark green	2.5BG 4/6
Very dark gray green	2.5BG 3/2
Brown	2.5YR 5/4
Dark brown	2.5YR 2/4
Dull brown	2.5YR 5/2
Dull brown	2.5YR 5/2
Dull brown	2.5YR 5/2
Dull brown	2.5YR 5/2
Dull brown	2.5YR 5/2
White	5Y 9/1

Sample two was obtained from an outer area adjacent to the first sample of the roof bracket. It contained twelve layers of paint which were very similar to those of the first sample. The second layer of white appeared on only one side of the sample.

Sample 3	Munsell
Rose	2.5YR 6/4
White	N 9.5/
Dark green	2.5BG 4/6
Very dark gray green	2.5BG 3/2
Blue-green	2.5BG 6/2
Gray	N 4.75
Blue-green	2.5BG 6/2
Gray	N 4.75
White	5Y 9/1

The third sample was from another bracket of the house. It had nine layers of paint of which the oldest surviving finish layer is white. Missing were the older set of dull brown layers seen in the first two samples.

	Sample 4	Munsell
Rose	2.5YR 6/4	
Dark green	2.5BG 4/6	
Gray	N 4.75	
White	5Y 9/1	

Sample four was removed from yet another roof bracket. Although it revealed only four layers of paint it appears that it retained various intermediate layers and the oldest white layer seen in the previous samples with the oldest white layer of those samples at the base of this sample.

	Sample 5	Munsell
Pink	5YR 8/2	
Rose	2.5YR 6/4	
Dark red	10R 3/6	
Dark green	2.5BG 4/6	
Dark red	10R 3/6	
White	5Y 9/1	
Dark green	2.5BG 4/6	
Dark red	10R 3/6	
Gray	N 4.75	
White	5Y 9/1	

Sample five was apparently taken from a second floor window. It contained ten layers of paint of which the oldest surviving finish layer was white. The layers were quite distinct with vibrant dark red, dark green, and white layers.

	Sample 6	Munsell
Rose	2.5YR 6/4	
White	5Y 9/1	
White	5Y 9/1	
Dark red	10R 3/6	
Dark green	2.5BG 4/6	
Dark red	10R 3/6	
White	5Y 9/1	
Dark red	10R 3/6	
White	5Y 9/1	
Dark red	10R 3/6	
White	5Y 9/1	

Sample six was acquired from the sash of same window as sample five. It revealed eleven layers of paint of which white is the oldest surviving finish layer. Again, there were very distinct layers of the same colors as seen in sample 5, but in an entirely different order.

	Sample 7a	Munsell
Dark glossy varnish	-----	
Light orange	7.5YR 8/6	
White	N 9.5/	

Sample 7a was from one side of the large board. A stripe approximately one inch in width ran down its center stopping at each end approximately the same distance as from the sides. It was grained to resemble a dark wood. The top layer represents the graining and the light orange coat represents the probable base coat for the graining. The white layer was a probable prime coat for the graining.

Sample 7b	Munsell		Munsell
Clear glossy varnish	-----		
White	5Y 9/1		
Off-white	2.5Y 8/2		
		Dark red	10R 3/6
		Dark red	10R 3/6
White	5Y 9/1		
White	5Y 9/1		
Dark red	10R 3/6		
Light green	5G 7/2		
Dark red	10R 3/6		

Sample 7b was from the opposite of the board of 7a. The top paint layer was sealed with a very thin, clear, glossy varnish. There were nine layers of paint, which were roughly similar to those of samples 5 and 6. The oldest surviving finish layer was dark red. The light green layer probably corresponds with the dark green paint seen in previous samples.

Sample 8a	Munsell
Clear glossy varnish	-----
Light orange	7.5YR 8/6
White	5Y 9/1
Glossy varnish	-----

Sample 8a was from the board labeled as sample 8. It corresponded closely to the surface of sample 7a and was, as well, a one-inch wide stripe graining along the center of the board. It revealed two layers of paint and two layers of varnish. Beneath the oldest surviving paint layer of white was a distinct layer of yellowed glossy varnish, which was the apparent finish coat.

	Sample 8b	Munsell
Clear glossy varnish	-----	
Dark red	10R 3/6	
Light green	5G 7/2	
Dark red	10R 3/6	
White	5Y 9/1	
Gray	N 4.75	
Dark red	10R 3/6	
White	5Y 9/1	
Gray	N 4.75	
Light green	5G 7/2	
Dark red	10R 3/6	
Light green	5G 7/2	
Dark red	10R 3/6	

Sample 8b corresponded to sample 7b, being the opposite side of the board. It revealed a similar set of finish layers as seen in sample 7b, but in a very different sequence. In this case there were three layers of light green, one of which was relatively recent.

Appendix C

Selected HABS Drawings Utah #37, 1967

