

ADAPTIVE USE DESIGN FOR THE BARTELL HOUSE HOTEL
JUNCTION CITY, KANSAS

BY

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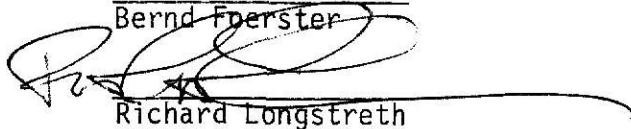


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INTRODUCTION

The process involved in this report included many phases of research. First, by means of a library search the history and development of the hotel as a building type was assembled. The history of Junction City and the Bartell House's contributions to it were researched, as was the history of the Bartell itself.

The Bartell House was next physically surveyed to determine its existing condition and extent of needed repair. A market study previously compiled by the City was used in conjunction with an economic feasibility study in order to determine possible adaptive use alternatives. In consultation with the building owner, a mixed use combination of retail space, a restaurant facility and commercial offices was selected.

A program for the design based on the above mixed-use combination was assembled, identifying spatial requirements for the new uses. Finally, the hotel was redesigned and a cost estimate developed.

An accurate restoration was economically prohibitive. Thus, a design approach which would entail restoring all of the critical historic features, while introducing new design elements in a manner not replicating the old, yet, compatible with the existing was selected.

In plan, the reuse design included: retail shops on the first floor; a restaurant, upper levels of shops, and a cafe on the second floor; and offices on the third. The basement was reserved for mechanical space and storage.

A focal point was created by introducing a central courtyard. Shops were accessed from this space which was covered with two skylights.

The exterior was repaired where needed, the shop windows restored and canopies installed. Finally, street access to the individual shops were sealed and replaced by windows for business security reasons.

The Bartell House is a critical element in downtown Junction City. Being one of the oldest existing structures in the community, one that has mostly remained vacant during the last ten years, a successful adaptive use of this building will provide a much needed stimulus for the redevelopment of the community.

CHAPTER I

HISTORICAL BACKGROUND

Development of the Hotel in the Great Plains

The hotel was an important element in early towns in the Great Plains. This building type was often among the first permanent structure constructed in the communities. The hotel was one symbol of town development. Construction of a hotel meant that more travelers and settlers would be attracted to the town, and more businesses would be established.¹ The hotel as well as the existence of a post office, the location of a legislative body, or a proposed transportation route, made a significant difference in the success or failure of a town.²

In the 1830s, Galveston, Houston and San Antonio, Texas had the first buildings designated as "hotels"³ west of the Mississippi. By the 1840s, hotels also appeared in Independence (Merchants Hotel), Westport (Harris Hotel), and St. Joseph, Missouri (Patee House).⁴ Richard A. Van Orman⁵ described such hostelries as being:

¹Richard A. Van Orman, A Room for the Night, Hotels of the Old West, Indiana University, Bloomington, 1966, pp. 8, 9.

²Ibid., pp. 10, 11.

³The hotel as described by Nikolaus Pevsner in A History of Building Types, Princeton University Press, Princeton, 1976, ". . . is nearly always larger than the inn, especially in its public spaces. The hotel has a number of public rooms, not just a tap room and some tables to eat at. But the hotel develops out of the inn . . .", p. 175.

⁴Richard A. Van Orman, A Room for the Night, Hotels of the Old West, p. 26.

⁵Ibid., p. 34.

...like the land,... a man's world, rough in furnishings, raw in features. The west had more hotels and fewer comforts than anywhere else in the world.

Amenities were added to hotels in the east while the west was being settled. The Tremont House, constructed in Boston in 1829, was among the earliest first-class hotels in the country (Figures 1, 2). This building was three and one-half stories high, and had a four-story wing constructed on each end. It was designed by Isaiah Roberts. The Tremont had high ceilings, marble mosaic floors, carpeted halls, windows with curtains in all guest rooms, and ten public spaces or parlors. Further, the Tremont House introduced a number of innovations in the development of the modern hotel. A lobby was included in the hotel design. Clerks, instead of the proprietor, minded the front desk, the baggage and bar room were separated. In addition, the reading room was introduced as an integral part of the hotel. Prior to this time, no public library or reading room was available for the common person. At the Tremont, guests were admitted to the reading room free of charge, while Bostonians were permitted to use the facility upon payment of a fee.⁶ Further innovations followed: locks were installed on the doors; a bowl, water pitcher, and soap were provided in each room of the Tremont; water closets were constructed; running cold water was provided for the kitchen, laundry, and bathing rooms. Light was supplied to the public spaces by gas lamps while oil lamps provided light for the guest rooms.⁷

The many new conveniences in the Tremont made this hotel the symbol

⁶Jefferson Williamson, The American Hotel, An Anecdotal History, Alfred A. Knopf, Inc., N. Y., 1930, pp. 16-17.

⁷Ibid., pp. 22-26.

Figure 1.--The Tremont House plan. Source: Pevsner, A History of Building Types, p. 176.

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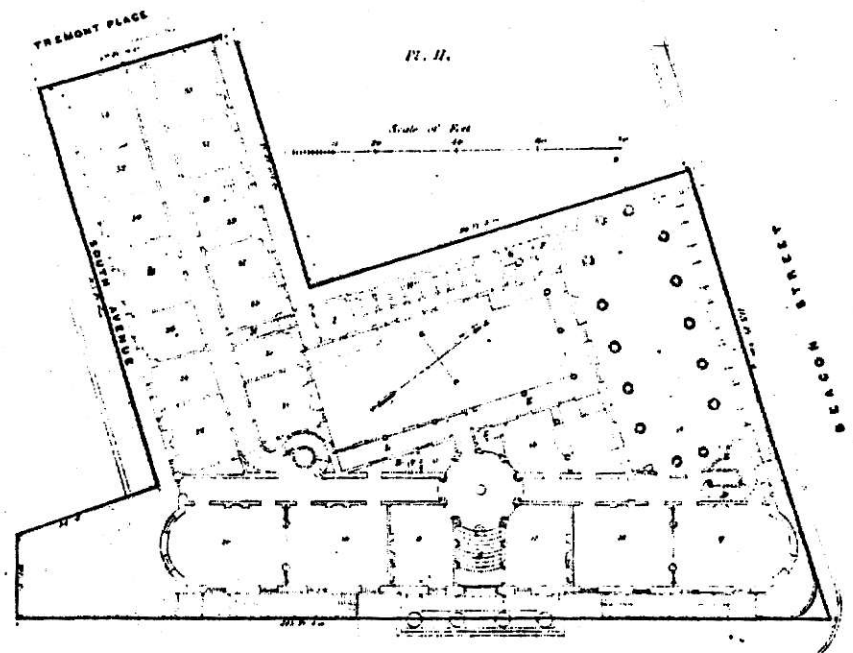
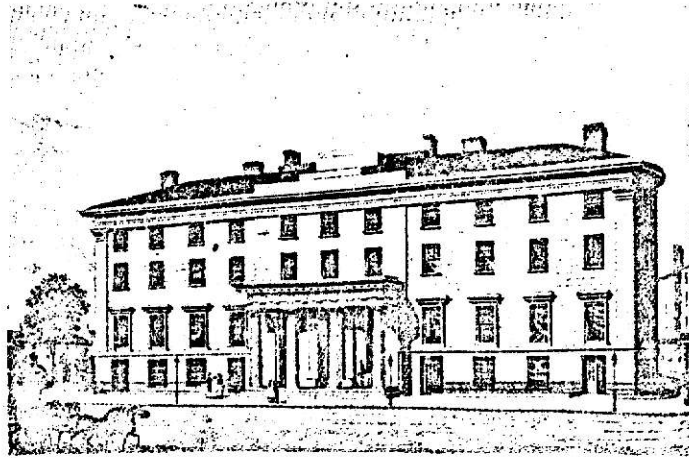


Figure 2.--Tremont House view. Source: Hamlin, Forms and Functions of Twentieth Century Architecture, p. 100.



of excellence of its day. Soon every city wanted to have one like it. This spurred competition in the hotel industry, and among towns, to have the most modern and up-to-date hotel, offering the optimum of luxury. Each new hotel attempted to surpass all others, thereby raising the criteria for a "first-class" hotel.⁸

Competition between hotels may be seen in the development of the bathroom. The first bath to be used in a hotel was in 1804 in New York City. The bath was housed in a separate structure and also functioned as a public bath. In 1833, the New England Coffee House began to provide running water to all floors by means of hydraulic pressure. In 1844, a bath was provided on each floor in the New York Hotel. By 1860, the Astor House in New York provided semi-private baths shared by several guest rooms. On the 14th of May, 1888, the Victoria Hotel in Kansas City became the first to offer a private bath with every room. Encouraged by fierce competition, the private room with bath became commonplace in American hotels by the early 1900s.⁹

Intense competition was the reason that the hotel became one of the leading contributors to technical and mechanical developments during the eighteenth and nineteenth centuries. Examples of such advancements included: steam heating, elevators, popularization of electric lights, and the telephone.¹⁰ The Western hotel responded to all of these developments in the latter two decades of the nineteenth century, rapidly introducing them to the towns of the Great Plains. The hotel thus brought a sense of urbanity to the West, much sooner than otherwise might have been the case.

The hotel in the West provided a change for the traveler and an attraction for the new settlers. It further provided a sense of unity to

⁸ Ibid., p. 73.

⁹ Ibid., p. 55.

¹⁰ Ibid., pp. 63-72.

communities separated by the vast expanses of the Great Plains. This building was often the only place to eat, drink and sleep in these Western communities. The hotel thus became one of the most important building types in the West.

Typically, the early hotel in the Plains was characterized as being a 2-3 story masonry building. A large veranda often was located on the major facade providing a shaded meeting place for guests outdoors. Ornament was often commonly very simple and minimal, concentrating on the cornice, quoins, and window surrounds (Figure 3). Public spaces were situated at the ground floor, while private sleeping rooms lined the halls and corridors of the floors above. Nearly every new community had such a structure during the last quarter of the nineteenth century.

Early History of Junction City

Junction City was a typical new western prairie town. Located in the northeast portion of Kansas, Junction City rests at the confluence of the Republic and Smokey Hill Rivers (Figure 4). Originally the area was named the "Garden of Eden" by explorers who regarded this fertile green valley as an oasis surrounded by the tall grasses of the prairie.¹¹

The discovery of this valley prompted two early, but unsuccessful, attempts at settlement. In October 1857, Junction City was founded by J. R. McClure, Daniel W. Mitchell, Robert Wilson, Freeman N. Blake, John Price and P. Z. Taylor. The following May, construction started on the first building (possibly a house) at the corner of the present day Seventh and Washington Streets. The town grew rapidly with wood frame buildings erected

¹¹John Jeffries, An Early History of Junction City. Kansas, Master's thesis, Kansas State University, 1976, p. 13.

Figure 3.--McClure's Hotel, Colorado. Source: Dallas, No More than Five in a Bed, p. 40.

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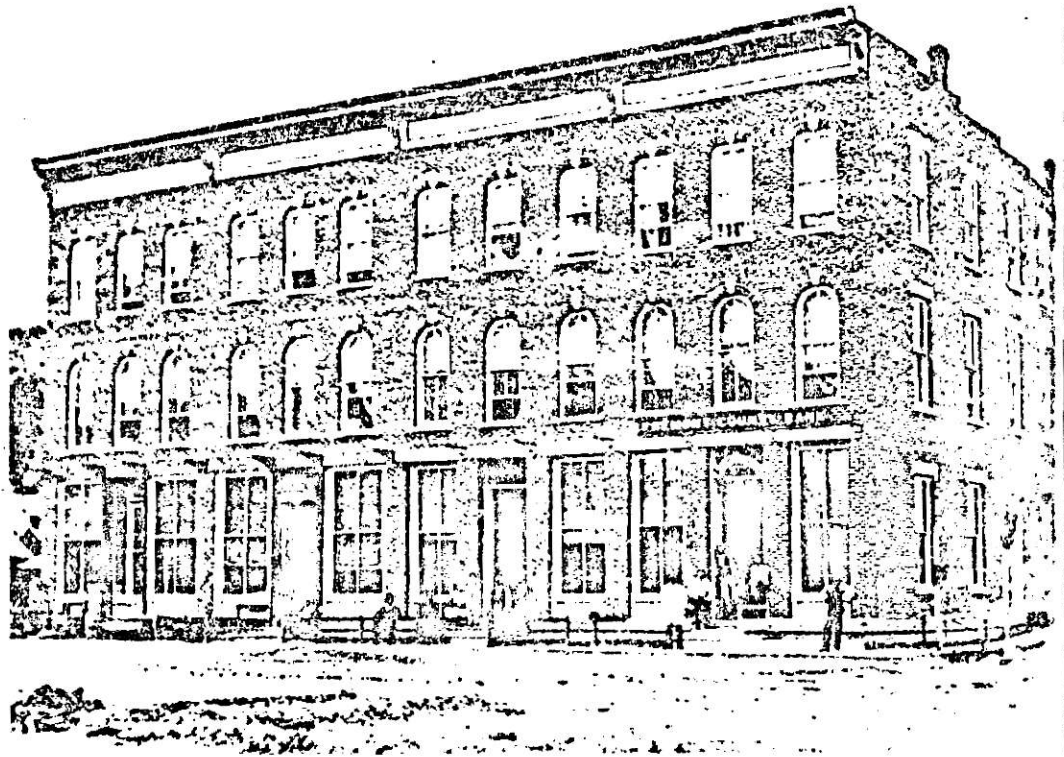


Figure 4.--Junction City, Kansas. Source: J. Jeffries, Garden of Eden, cover.

along Washington Street. On 9 February 1859, Junction City was incorporated¹² (Figure 4).

Junction City was initially intended to be an agricultural center but the newcomers to the Plains soon discovered that they could not obtain sufficient profit from the land. Their land, although fertile, was subject to droughts and plagues of grasshoppers. To supplement their incomes, the settlers began to seek alternative trades, which resulted in the creation of various businesses in Junction City, including many retail and service-oriented establishments. Many of these businesses directed their efforts at providing services to nearby Fort Riley.

Fort Riley, which had been established in 1854 as a western outpost, became instrumental in the development of Junction City. The alliance between the fort and the town grew strong; Junction City soon developed a dependence on the fort for its economic stability. When the fort was at full capacity, so was the city. Many officers stationed at the post became leading figures in the city.

On 8 March 1859 the first hotel, the Junction City House, was opened in the town by Casper Bundle, a new resident from Ogden. By the Autumn of 1860, Junction City had become a trading center for the northeast portion of Kansas. The Union Pacific tracks reached the town during the same year, establishing close ties with Topeka and Kansas City (Figure 5). In addition, the first church (Episcopal) was founded; and Junction City was established as the seat of Geary (then Davis) County. The promise of future prosperity of the city now seemed inevitable. The railroad brought new settlers, yet, it remained the city's responsibility to provide the attraction and incentives to retain the newcomers.

¹²Junction City Souvenir, Junction City: Freeman Publishing Co., 1910.

Figure 5.--Poster advertising opening of Union Pacific on 1 April 1867 in Junction City. The Union Pacific Magazine, January 1931, p. 50.

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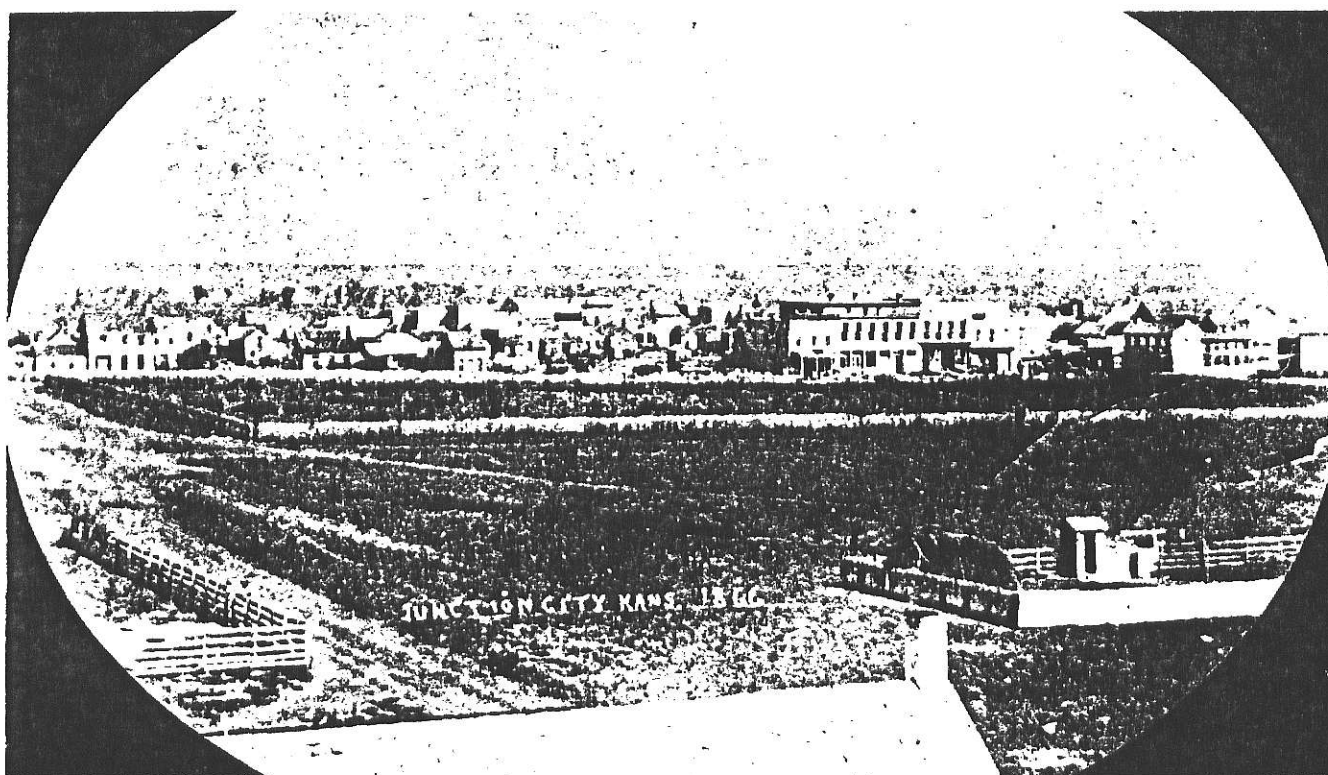


THE PACIFIC RAILROAD, WITH ITS CONNECTIONS, FORMS
THE ONLY ALL RAIL ROUTE
KANSAS CITY - LEAVENWORTH
 THROUGH FROM ST. LOUIS WITHOUT CHANGE OF CARS
 DIRECT CONNECTIONS MADE AT WYANDOTTE WITH THE
UNION PACIFIC RAILWAY
LAWRENCE, TOPEKA, MANHATTAN
FORT RILEY & JUNCTION CITY.

THROUGH TICKETS FOR SALE AT ALL THE PRINCIPAL R. R. OFFICES

W. C. LAWIE, Gen'l Freight Agent; C. B. PRATT, Passenger Agent; T. McKISSOCK, Gen'l Superintendent.

Figure 6.--Junction City, Kansas, 1866. Jeffries, Garden of Eden, p. 69.



A boom in construction took place during the two years following the Civil War (1866-67)(Fig. 6), when structures such as B. Rockwell Company Store and the Hale House were built on Washington Street (Figure 7). The Rockwell building was constructed of pine, a wood, which along with oak, black walnut, hickory, and cottonwood was used for the construction of most buildings. Wood was inexpensive and abundant in the river valleys of Junction City. The Hale House was one of the earliest limestone structures. This material, like lumber was plentiful in the area, yet due to its high cost in quarrying was not a commonplace building source until the 1880's (Figure 8).

During the 1870s and 1880s, Junction City suffered two severe fires which destroyed many of its buildings (Figure 9). During the rebuilding campaigns, residents turned to more fire resistant methods of construction. Both brick and limestone buildings began to appear along Washington Street (Figure 10). One of the first buildings to incorporate both materials was the Bartell House Hotel. This type became popular, and soon buildings of similar design began to appear along Washington Street accommodating such users as: milliners, soda water manufacturers, organ, piano, and sewing machine dealers and dentists.¹³ These structures, although varying in ornamental detail created a continuity in style for Junction City, one which continued to be popular until the 1910s (Figures 11, 12, 13).

As Junction City became more of a permanent community, new public amenities were sought. Sidewalks were constructed and lights were installed to illuminate Washington Street and the City Park. The first gristmill to supply electricity to Junction City was owned by Cornelius Fogarty, and was located one mile east of the town. Until 1901, the city owned its

¹³John Jeffries, Garden of Eden, Manhattan, 1976, p. 39.

Figure 7.--Greene and Bartell's Land Office: B. Rockwell, Merchandise.
Jeffries, A Garden of Eden, p. 36.

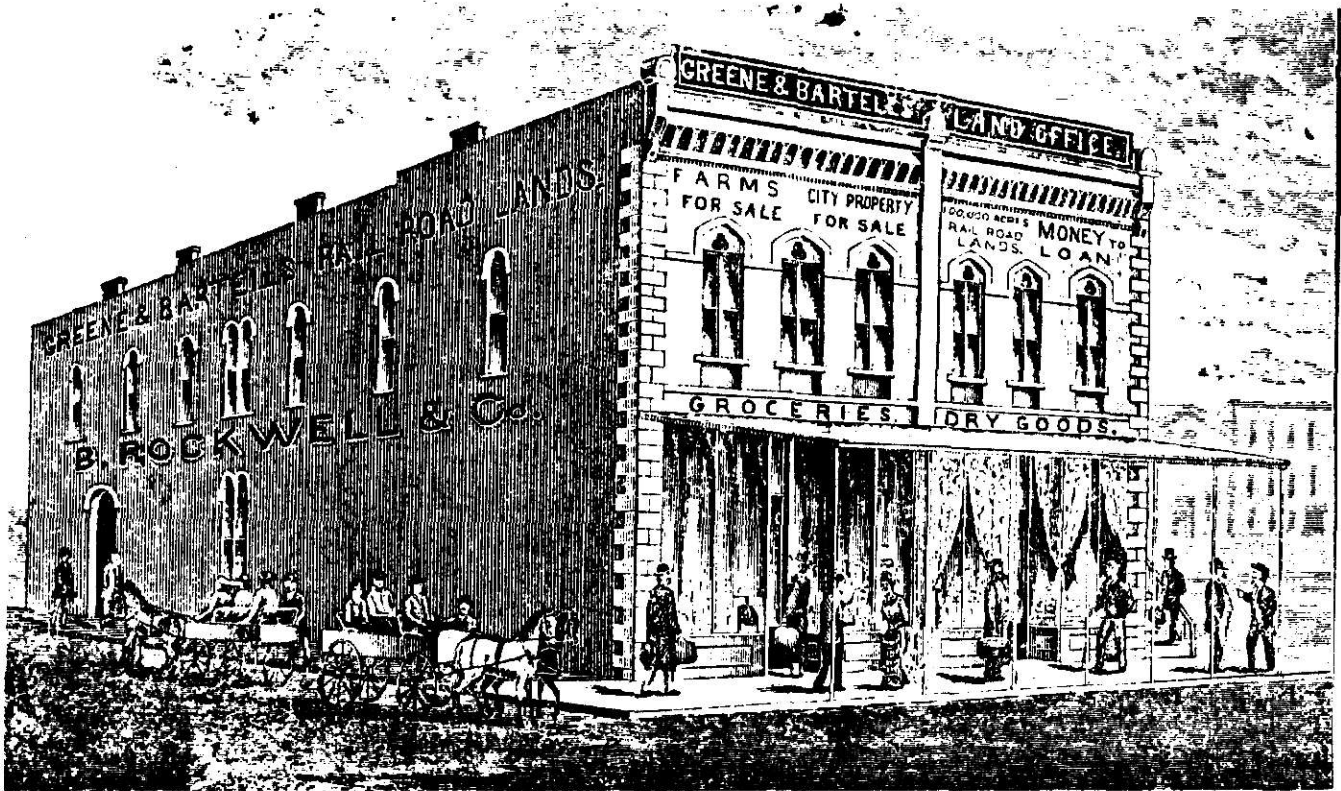
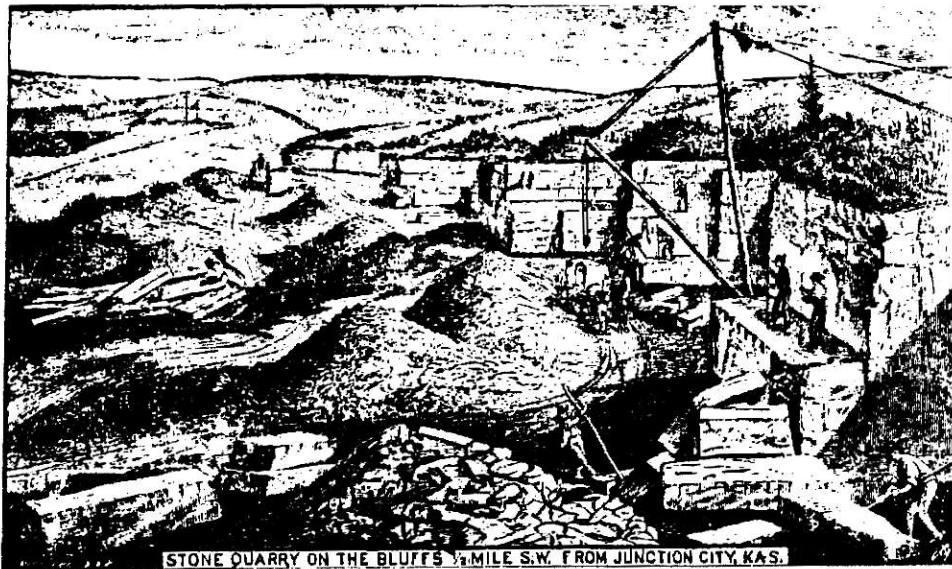


Figure 8.--Stone quarry on the bluffs $\frac{1}{2}$ mile S. W. from Junction City, Jeffries, A Garden of Eden, p. 35.



STONE QUARRY ON THE BLUFFS $\frac{1}{2}$ MILE S.W. FROM JUNCTION CITY, KAS.

Figure 9.--Rockwell block after fire. Source: Kansas State Historical Society.



Figure 10.--Washington Street east side looking south from 8th Street to 7th Street, 1874. Source: George Smith Public Library.



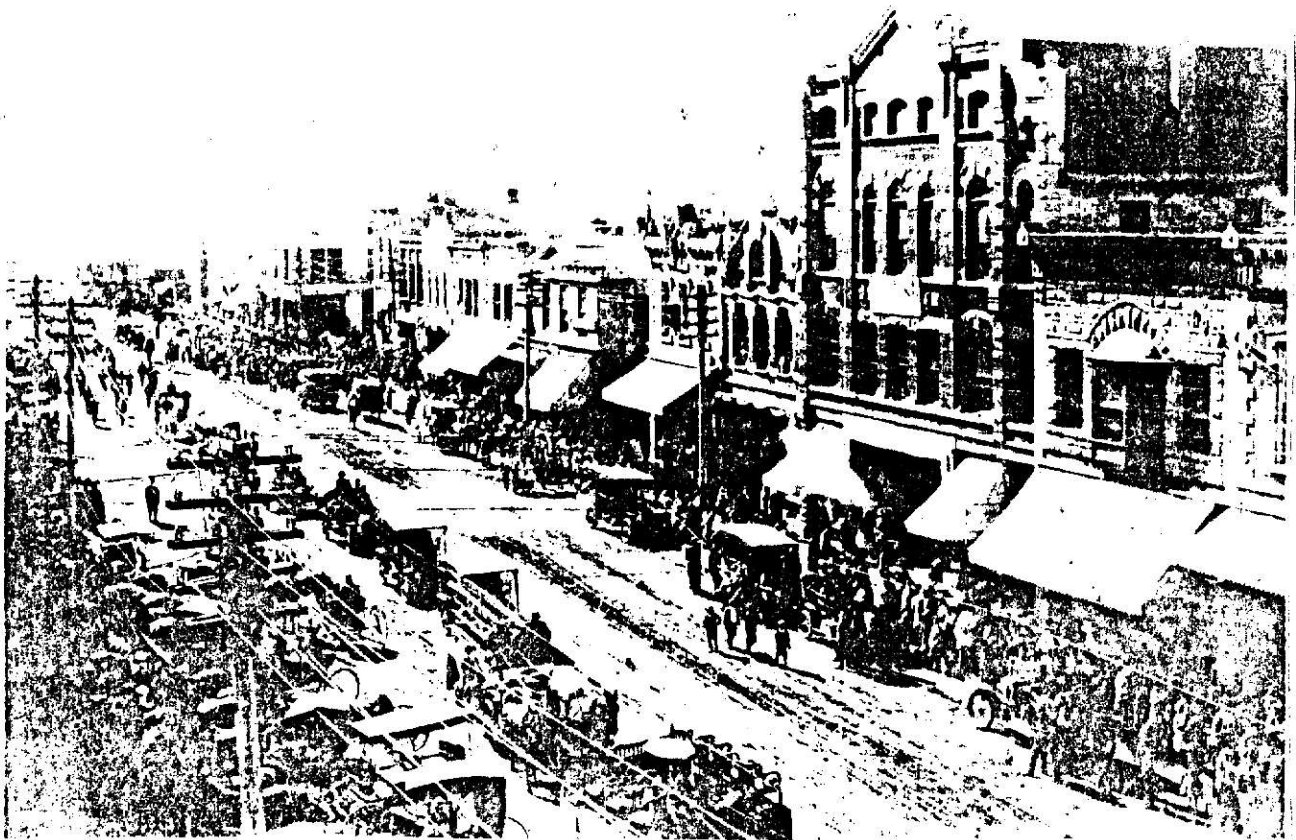
Figure 11.--Washington Street looking north from 6th Street,
1879. Source: George Smith Public Library.



Figure 12.--Junction City, 1900. Source: J. J. Pennell
Kansas Collection, University of Kansas.



Figure 13.--Appearance of Washington Street showing predominance of masonry structures (in 1911). Source: Kansas State Historical Society.



own mill and the streets were brightly lit.¹⁴ Public transportation appeared in the form of an electric trolley in 1901 connecting Junction City and Fort Riley (Figure 14). Thirteen years later, the dirt streets were paved (Figure 15). Washington Street became the commercial mainstreet, lined with canopied retail shops. Adjacent to this was the peripheral downtown with churches and civic buildings. Further to the east and west was the residential district.

Junction City continued to have a thriving downtown until after the Second World War. It was after this era that retailers began to locate their businesses on the outskirts of the city. This flight of retailers developed into the present condition of downtown Junction City, one of vacant, and delapidated structures.

History of Bartell House

During the 1870s, Junction City promoters thought that many potential settlers were bypassing the town. Other communities offered better accommodations than the small early hotels which were little more than inns. These included: the Pacific (Figure 16), the American, and the Central Hotel. In an effort to spark community interest, The Junction City Tribune proclaimed, "We must have blocks of business houses. We must have hotels. Hotels for the millions, hotels for all travelers, and hotels for the resident boarders." The need for a hotel became obvious, but no investors for such an undertaking were found. Finally, in the

¹⁴Carole Rifkind, Main Street: The Face of Urban America, N. Y., 1977, p. 112.

Figure 14.--First trolley car, 1901. Source: J. J. Pennell, Kansas Collection, University of Kansas.

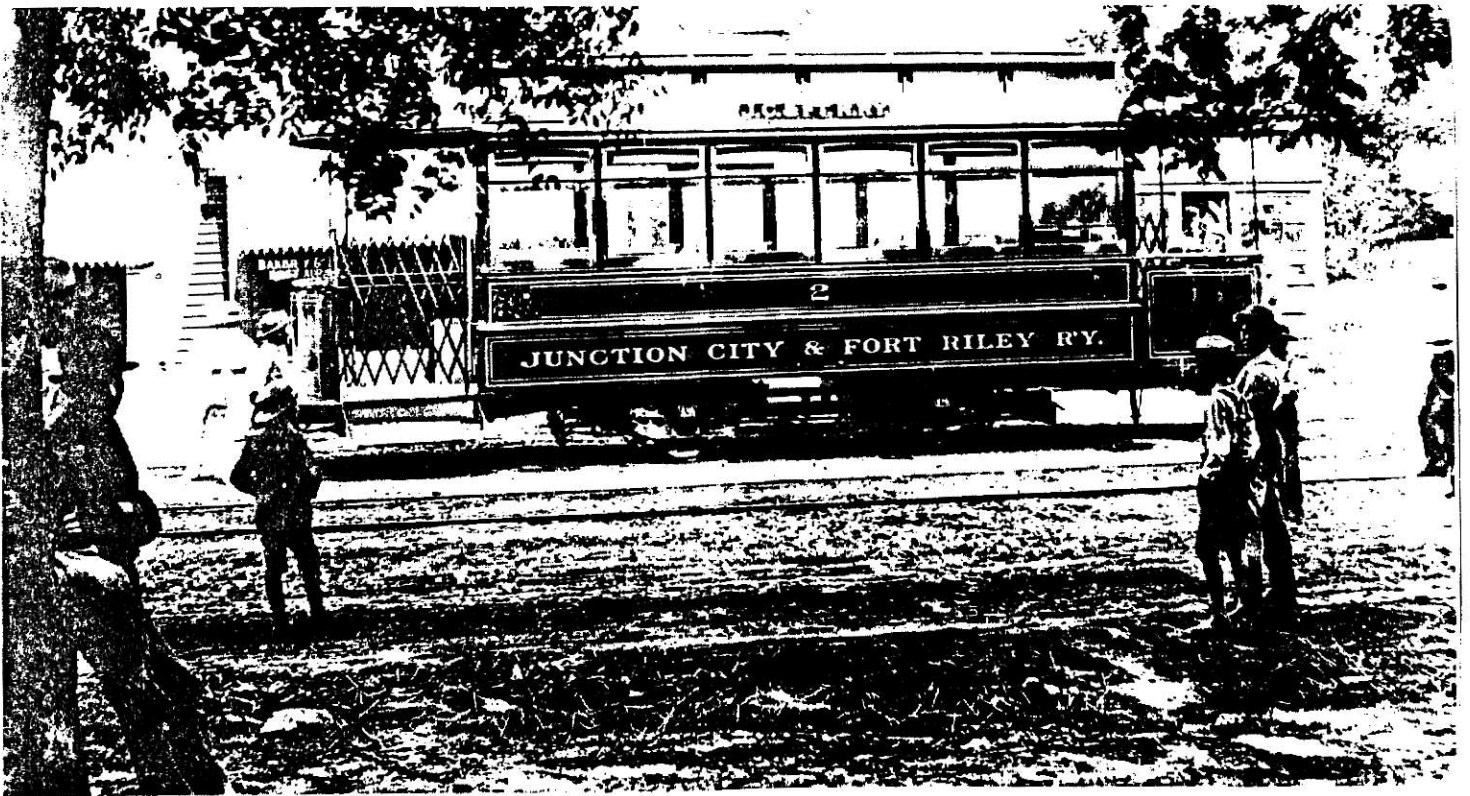


Figure 15.--Washington Street being paved in 1914. Source:
J. J. Pennell, Kansas Collection, University of Kansas.

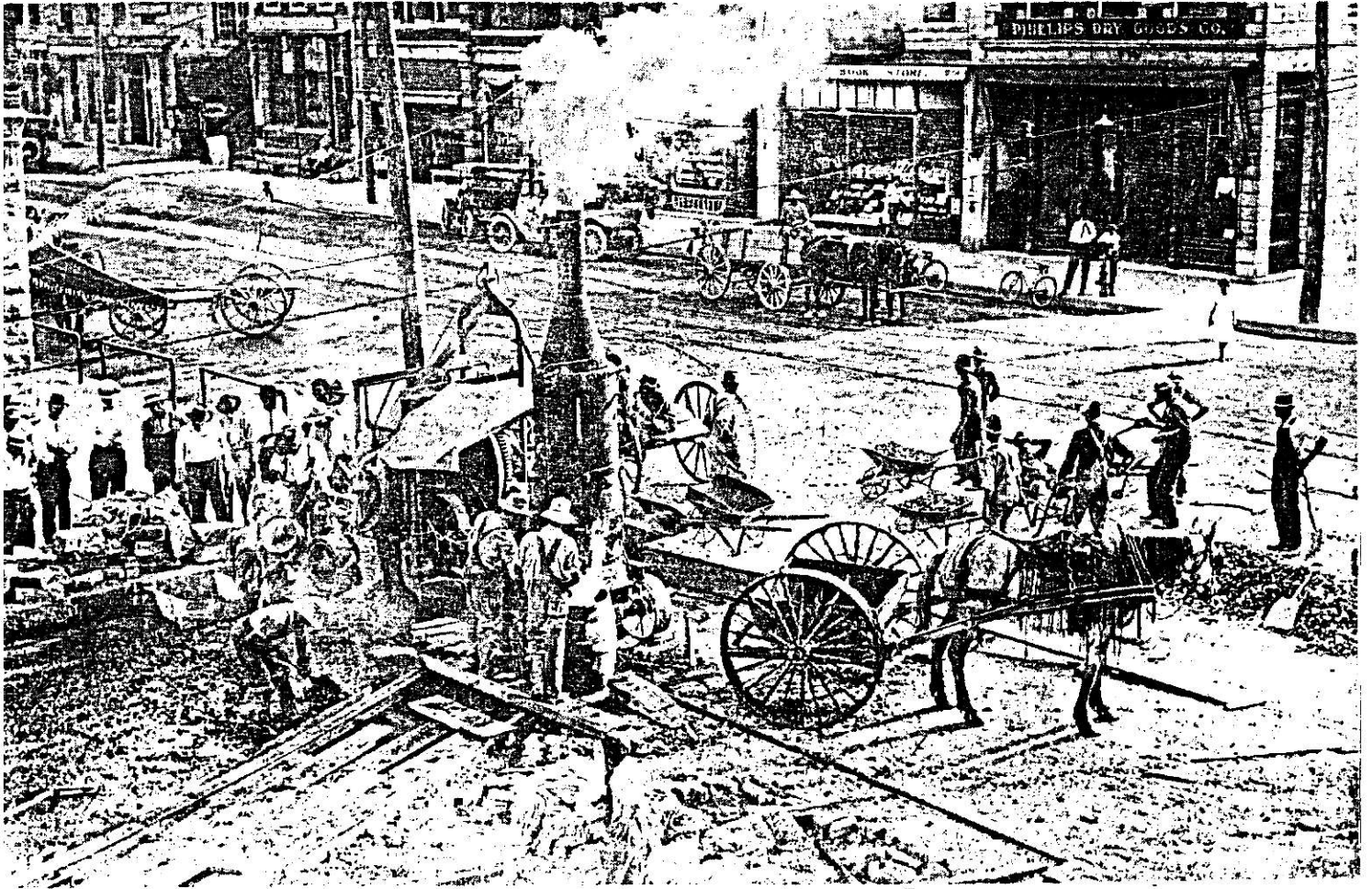


Figure 16.--Pacific House. Source: Kansas State Historical Society.



spring of 1879, Captain John K. Wright and A. H. Bartell proposed to construct a hotel at the cost of \$20,000.¹⁵

A site was selected on Washington Street between Sixth and Seventh, previously occupied by the Hale House, which had burned five years earlier (Figure 17).¹⁶ The Hale House was constructed on 4 February 1867 as an inn and boarding house with accommodations for 45 guests, by Colonel Hiram F. Hale. On 2 July 1879, ground was broken and work begun on the new hotel, which was designed by architect E. T. Carr.¹⁷ The project was sufficiently large to necessitate conversion of several neighboring buildings into shops for its construction.

E. T. Carr was the first architect to practice in the state. Perhaps it was for this reason, that the developers chose him. Erasmus Theodore Carr was born on 28 October 1825 in Greenfield, New York. At an early age, Carr became interested in construction, which led him to study carpentry. During his training, Carr was encouraged to pursue the study of architecture by the Syracuse architect, Eligha T. Hayden.¹⁸

In 1855, Carr moved to St. Paul, Minnesota, to take advantage of the city's building boom which was then occurring. There he met Colonel E. V. Sumner who was securing a construction team to work on Fort Leavenworth.

¹⁵Junction City Republic, 17 April 1952.

¹⁶Property Abstract, lots 17, 18, 19, 20. Block 28 Junction City, Kansas, 1879.

¹⁷The construction team consisted of John Holmgren, a stone mason; J. H. Strand, who was responsible for trimming and buttressing; J. O. Heaton, who installed the flooring; J. W. Wood, who installed the doors; Charley Wyler and Tom Dever, who installed the counters and wainscoting respectively; W. J. Kentze, who was in charge of brick work; Blattner and Blakely, E. G. Ahrens, and John Hanson, who installed the roofing; Pritchards and Campbell, who were responsible for the plaster work; Charles S. Stake, who was the head painter; and Peter Lynch, who was responsible for the graining and finishing of the barber shop.

¹⁸Kurt Van Achen, "Lives and Works of Early Kansas Architects." Master of Architecture Thesis, Kansas University, 1966, p. 13.

Figure 17.--Old Hale House, 1874: Ruins. Source: George Smith Public Library.



Carr joined the team and remained working on the Fort until December 1856. During the next two years, he practiced independently as an architect. In 1859, Erasmus T. Carr was named Superintendent of Construction for the Penitentiary of Kansas.¹⁹ Basing his design on the plans for the Joliet State Penitentiary (Illinois), he began work on the project in the summer of 1864.²⁰ From 1872 until 1873, he worked on the design of the State Normal School in Emporia.²¹ In 1876, Carr was appointed architect for the Kansas Building at the Centennial Exhibition in Philadelphia.²²

From March 1870, the same year as the construction of the Bartell House, until May 1885, Carr served as the State Architect for Kansas.²³ During this time he worked on various projects throughout the state including the Capitol in Topeka, Anderson Hall at the Agricultural College in Manhattan, Insane Asylums in Topeka and Osawatamie, the Institute for the Blind in Wyandotte, and the Wyandotte County Courthouse in Kansas City. Between 1885 and 1905 Carr lived and practiced architecture in Montana, returning only for a few years to Leavenworth. Finally, Carr moved to Los Angeles, where he died on 15 May 1915.²⁴

Carr's design for the Bartell House is a simplified version of the Italianate mode. The original building measured 90 feet along

¹⁹Ibid., p. 14.

²⁰Ibid., p. 16.

²¹Kansas Daily Commonwealth (Topeka), 19 March 1872.

²²Kurt Van Achen, "Lives and Works of Early Kansas Architects" op. cit., 1966, p. 20.

²³Ibid., p. 21.

²⁴Ibid., p. 23.

Washington Street, and 114 feet²⁵ along the alley to the north, forming an "L" shape. In the center of this "L" was a large open courtyard containing a well which provided the hotel with a fresh water supply. The courtyard was entered from the north by means of an arched entryway.

Three stories high, the Bartell House Hotel was constructed of red Fort Scott bricks, with window surrounds, doors and quoins of locally quarried magnesium limestone. The Bartell House had a limestone foundation, three-foot thick piers, built-up bituminous roof with a parapet, two over two double-hung window frame windows. The central feature was a fifty-foot by twelve-foot wooden veranda along the Washington Street facade, with delicately fluted columns, painted white, cream, and grey.

The first floor contained an office or counting room, a lobby, reading room, pantries, a kitchen, a laundry room, store rooms, a main staircase leading from the counting room to the second and third floors above, a ladies' stair and service stairs. The second story contained a ladies' parlor, twenty-five guest rooms, and one lavatory. The third story contained twenty-eight guest rooms and one lavatory.

The Bartell House was viewed as the only "civilized" building in Junction City at the time of its construction, dominating the many wood frame structures along Washington Street. The hotel occupied a prominent position in the city, located at the intersection of the two main streets in the commercial sector and across from the city park. This building represented the aspirations of the city for a promising future, and was a precursor of a new trend in Junction City's building design, that of

²⁵Junction City Republic, 17 April 1952.

permanent masonry construction. One account remarked that the Bartell House :

. . . rose in splendor among its surroundings of wood frame buildings and wooden sidewalks . . . it put Junction City back on its feet, and a return to prosperity and a revival of the generous and hospitable tone of the earlier days.

It was . . . the best arranged and most modernly (sic) equipped edifice in the state. And it has done perhaps more than any single establishment or agency to sustain the claim of Junction City to metropolitan proportions and importance.²⁶

On 23 February 1880, a gala opening celebration was held in the Bartell House. Noted figures from all portions of the state and other regions of the country were invited. A special train car was chartered for the occasion to bring dignitaries, including the governor, from Topeka.

The Bartell House soon became a popular hotel among visitors to the region. It served many visiting dignitaries including Adolphus Busch, General J. C. H. Lee, General Pennypacker, General Funstein, General Wood, Edward Stetteinius (Secretary of State), K. Willington Koo (Chinese Ambassador), Sally Rand, Ann Sheridan, Gene Tierney, Al Jolson, John Phillip Sousa, W. C. Fields and Gloria Vanderbilt.²⁷

The growth of patronage led to the construction of an addition extending the frontage on Washington Street to one hundred and forty feet on 25 June 1882. This construction took place on the former site of the burned P. Z. Taylor Building. This had been one of the earliest limestone masonry structures in Junction City. The Taylor stood two stories high,

²⁶ Junction City Souvenir, op. cit., p. 10.

²⁷ Junction City Republic, 24 April 1952.

provided commercial space on the first floor, with public meeting space and law offices above. The hotel addition used the same type of brick, window treatment and ornamentation as the original section. The only difference was that the addition was two, rather than three, stories.²⁸ Subsequently, more space was needed and the third story of the addition was erected in 1889 (Figures 18, 19).

In 1890, a new dining room was built in the courtyard.²⁹ By this time, the Bartell House had electricity for both arc and incandescent lamps. An omnibus service was added to transport guests to and from the hotel and the train depot, while carriages transferred the guests to their horses at the Park Livery Stable.³⁰ Figure 20 shows Bartell House plan in 1897.

Another two-story addition was constructed in 1903, extending the hotel to the west and the porch was replaced by a much smaller one (Figures 21, 22). By 1910, the Bartell House contained one hundred bedrooms, offices, reading and writing rooms, two dining rooms, parlor and baths. It also offered hot and cold running water, telephone service, electric lights throughout, a barbershop, a cigar shop, a newsstand and an auto garage (Figures 23-27).³¹

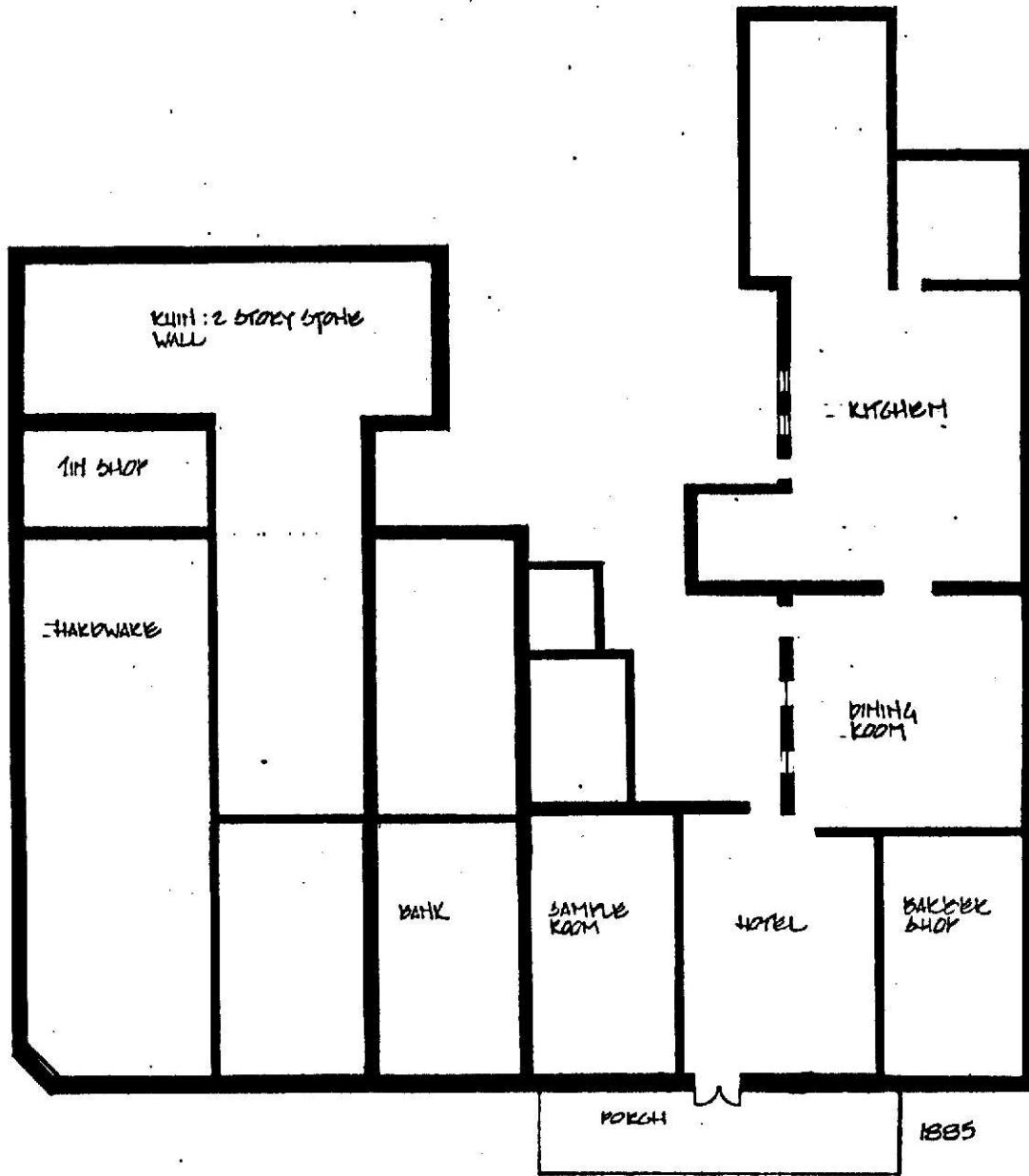
²⁸Junction City Union, 30 June 1883.

²⁹"aGeary County, Junction City and Fort Riley"--article in "Hotel Lamer" file in Kansas State Historic Preservation Office, Topeka, p. 123.

³⁰John Hay, The Mid Continental City of the United States of America, Junction City: Junction City Union Printing House, 1889, p. 21.

³¹Junction City Souvenir, op. cit., p. 10.

Figure 18.--Bartell House plan, circa 1885. Source: Sanborn Map, Junction City, Kansas.



WASHINGTON STREET



Figure 19.--Bartell House, circa 1889. Source: Kansas Collection, University of Kansas Library.



Figure 20.--Bartell House plan, 1897. Source: Sanborn Map, Junction City, Kansas.

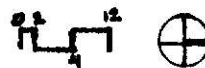
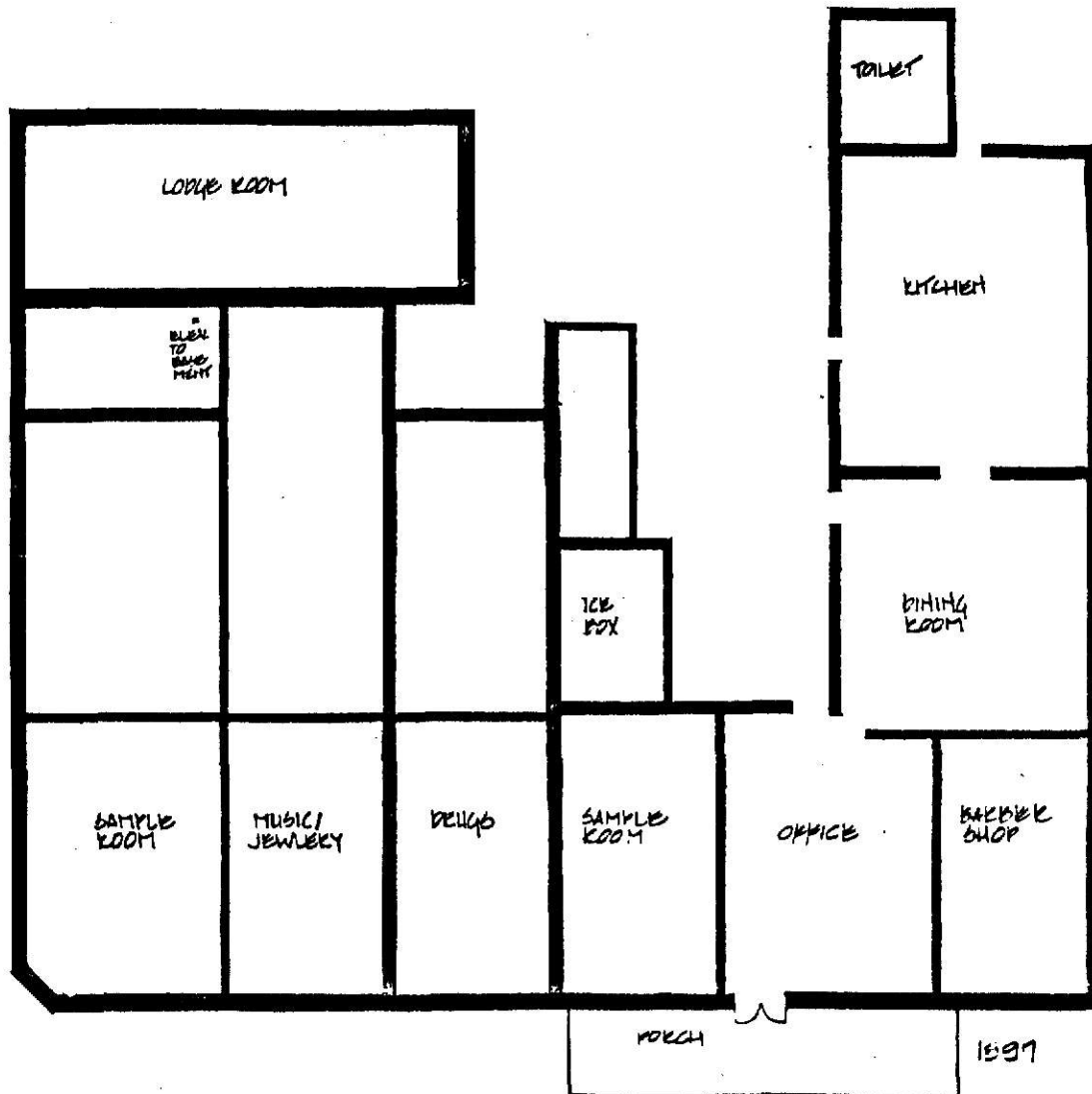


Figure 21.--Bartell House, 1903. Source: J. J. Pennell, Kansas Collection, University of Kansas Library.



Figure 22.--Bartell House, Toilet Room, 1903. Source: J. J. Pennell, Kansas Collection. University of Kansas Library.

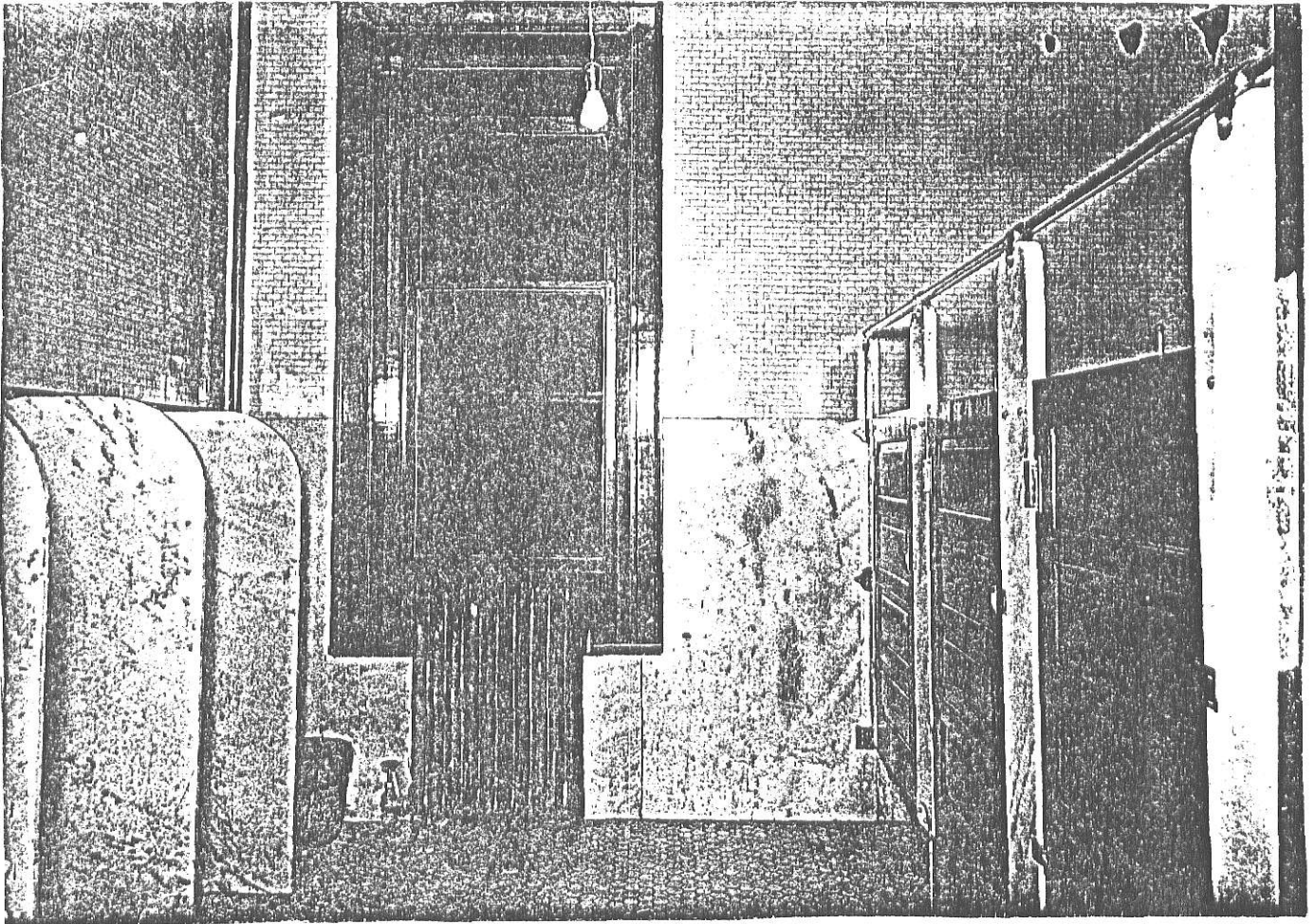


Figure 23.--Rudy Sohn's Barber Shop, 1903. Source: Bonnie Garrett, Kansas Collection, University of Kansas Library.



Figure 24.--Bartell House, 1904. Source: J. J. Pennell, Kansas Collection, University of Kansas Library.

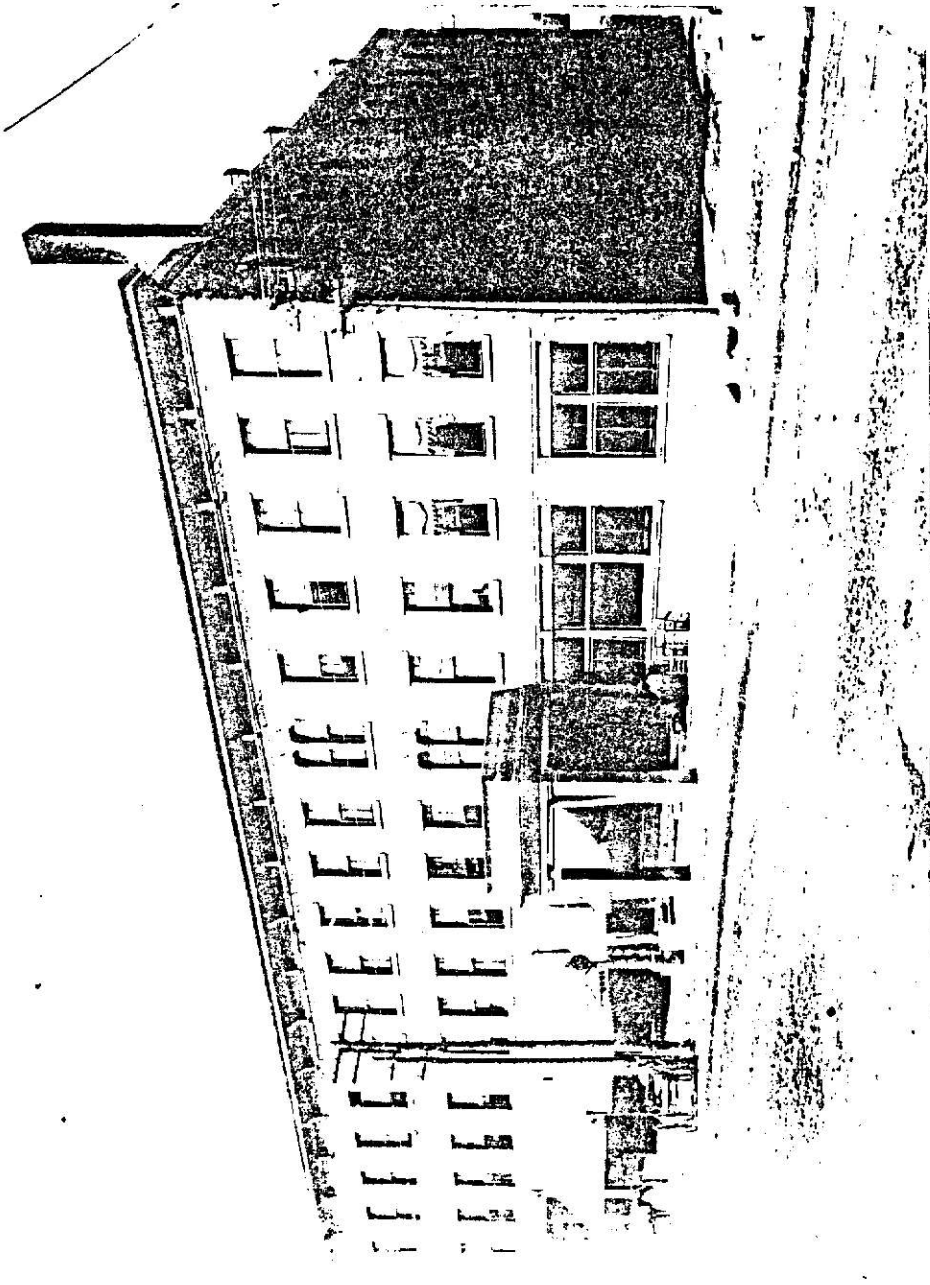


Figure 25.--Banquet in Bartell House, 1905. Source: J. J. Pennell, Kansas Collection, University of Kansas Library.

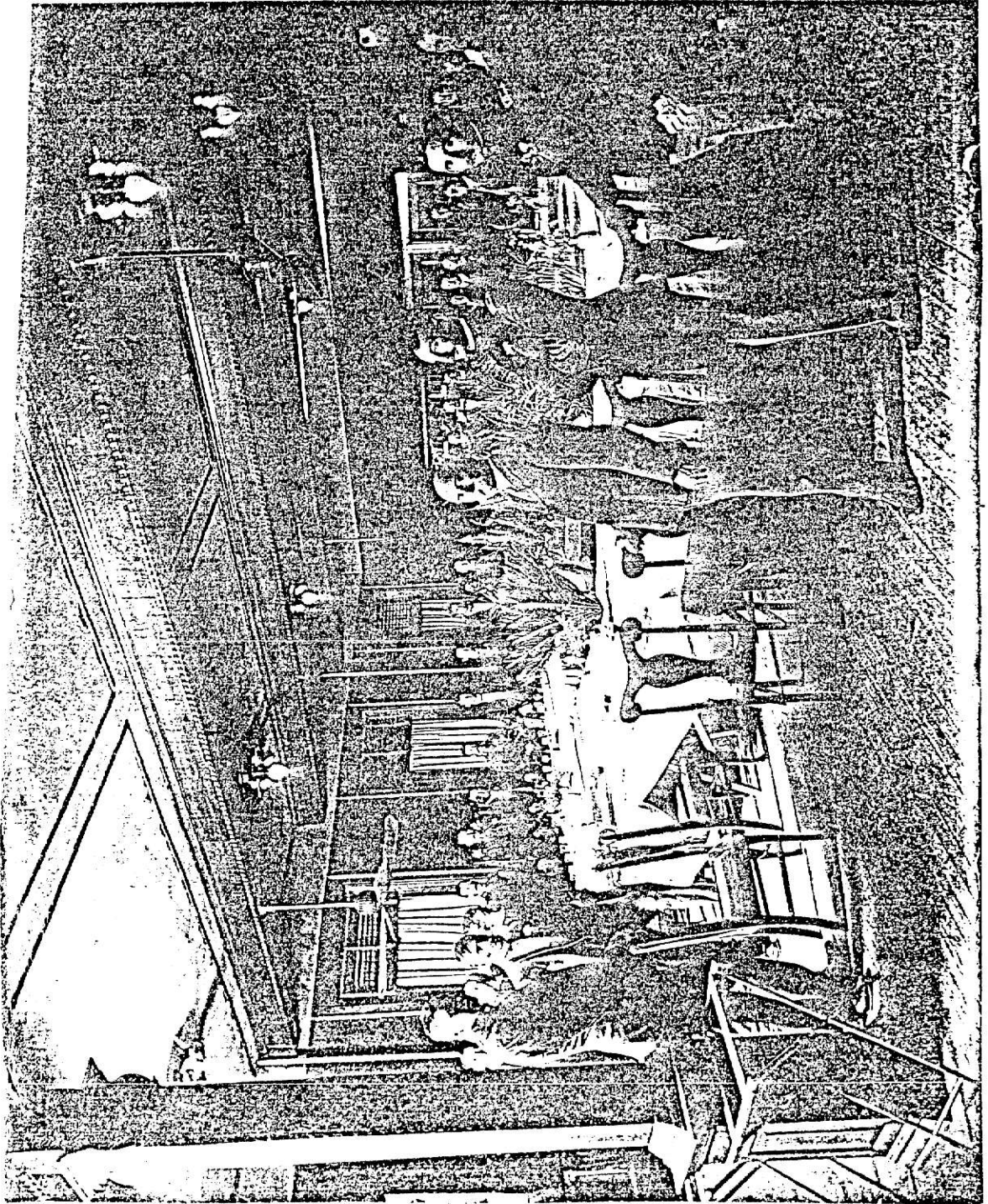
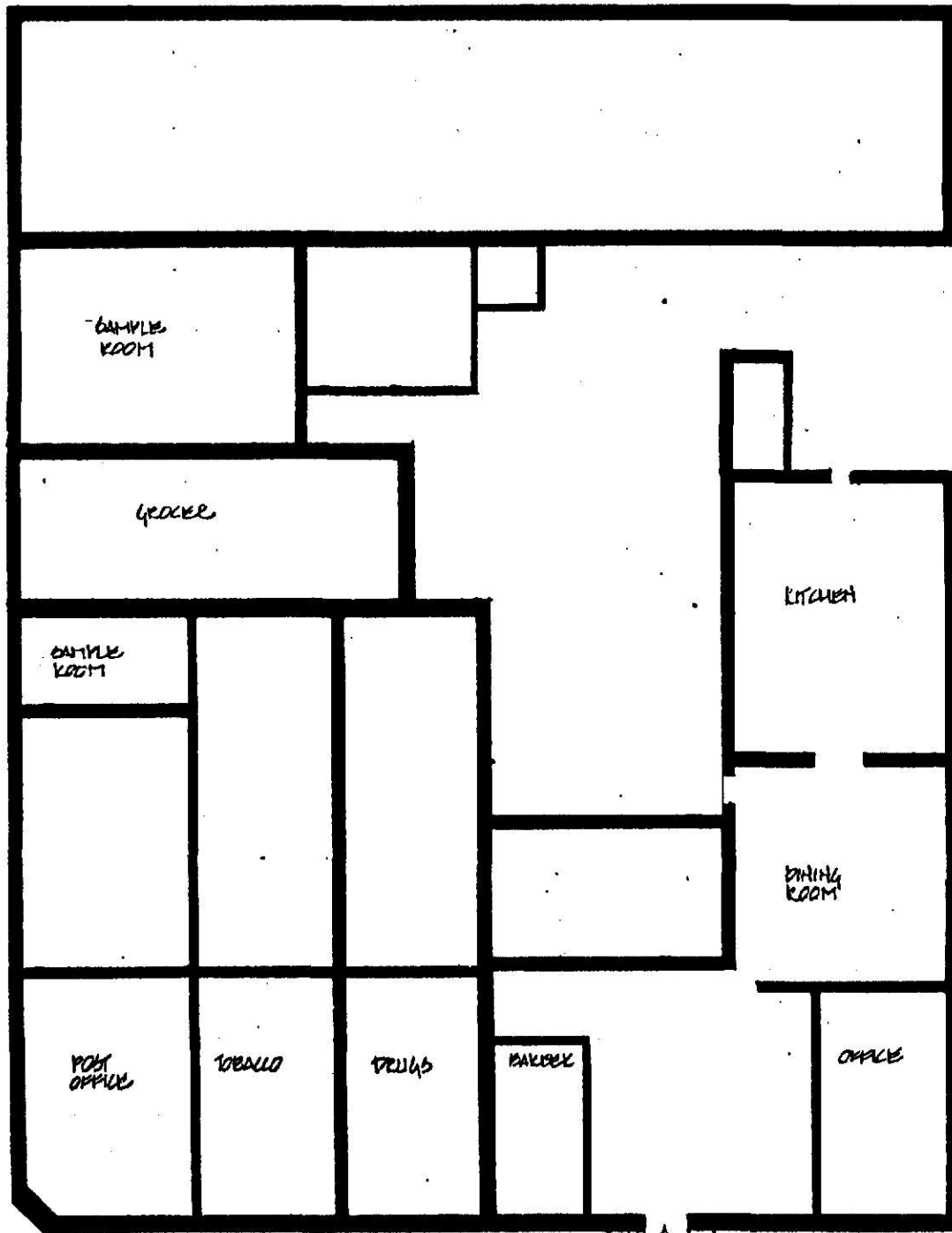


Figure 26.--Bartell House plan, 1912. Source: Sanborn Map, Junction City, Kansas.



1912

WASHINGTON STREET

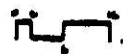
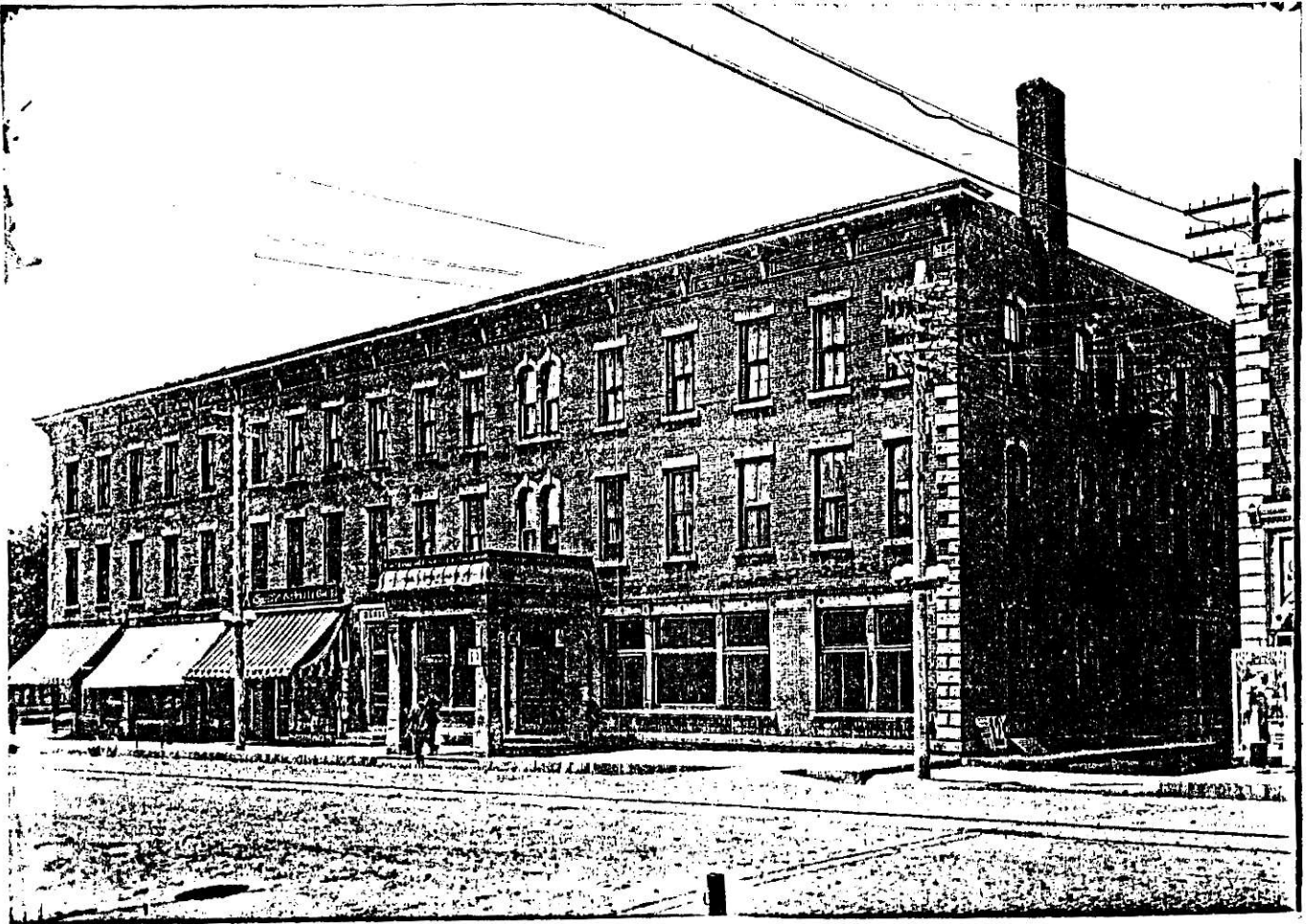


Figure 27.--Bartell House, 1915. Source: J. J. Pennell, Kansas Collection, University of Kansas Library.



Yet another story was added in 1920 to the west using the same brick as the original and previous additions (Figures 28, 29), however, limestone ornament was not used. Instead, sills were constructed in brick and painted white in order to imitate the limestone originals. During the 1940s and 1950s, the Bartell House underwent many alterations on the interior. Much of the original interior detailing was removed and replaced by paneling and suspended ceilings. The exterior was resurfaced with metal panels on the ground floor (Figure 30). With the construction of motels on the periphery of Junction City after World War II, the hotel's business declined drastically. By 1960, the hotel had become a brothel. In 1979, the Bartell House was purchased by Roy Fausnet and Ed Berney (Figure 31) who intended to retain the building because of its historic significance and put the building to a new use.

Figure 28.--Bartell House, 1920. Source: J. J. Pennell, Kansas Collection, University of Kansas Library.

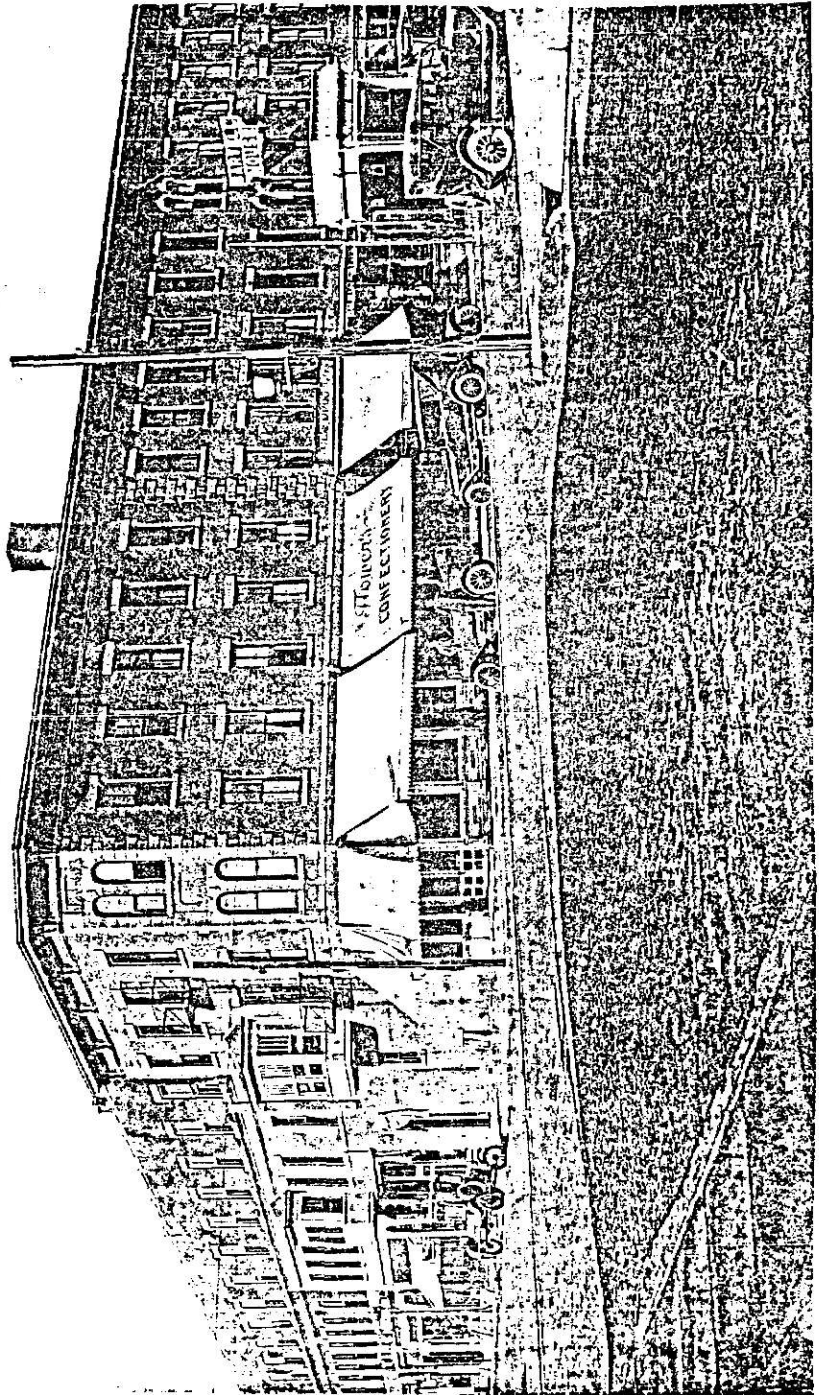


Figure 29.--Bartell House plan, 1925. Source: Sanborn Map, Junction City, Kansas.

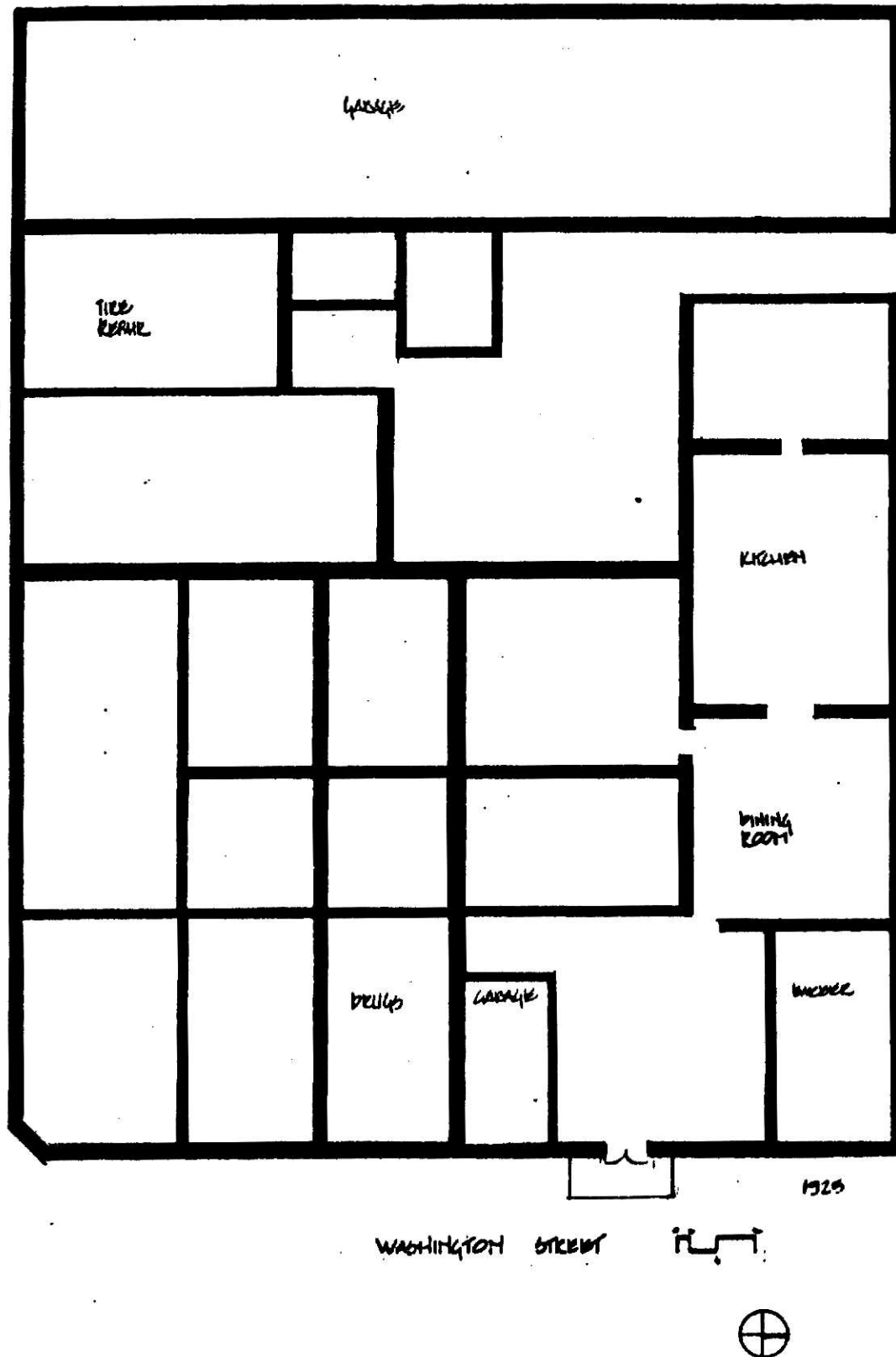


Figure 30.--Bartell House, 1954 (postcard). Source: Roy Fausnet.

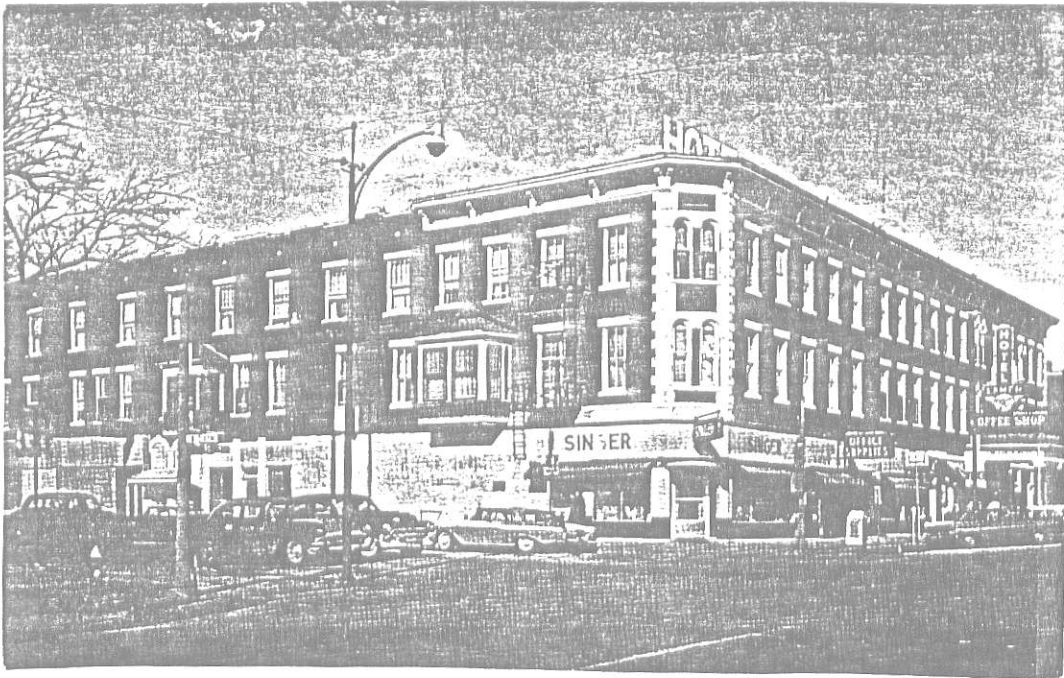
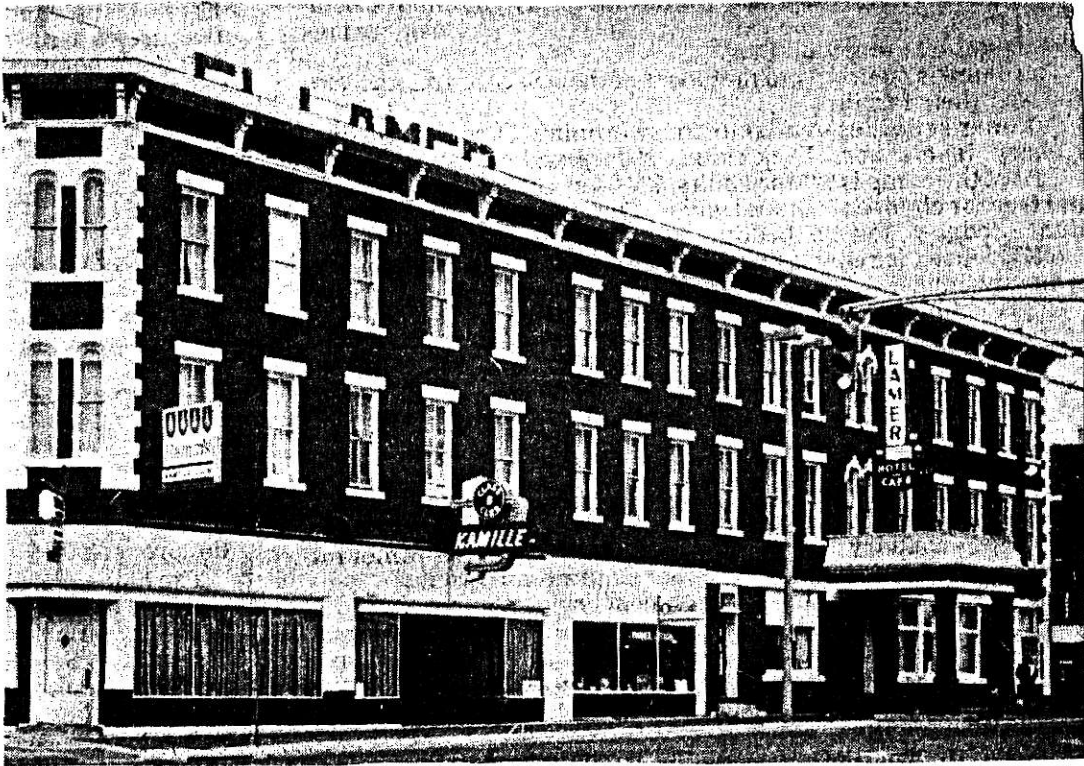


Figure 31.--Bartell House, 1980. Source: Andrea Urbas.



CHAPTER II

PROGRAM FOR DESIGN

Introduction

This chapter will assess the building, its physical condition, its significance, and determine how these factors can best be accommodated in the new use schemes. The owner's needs and desires will be analyzed as will the requirements for the users, the retail shops, the restaurant, and the offices. In the plan the Bartell House is U-shaped with a central courtyard. This central area has been altered and reduced in size with several one-story additions as the hotel expanded. The main (east) facade, located on Washington Street, is three stories high and measures 144'0" in length. Thirteen bays extend the length of this facade. The first floor consists of a tavern, retail store fronts and the main entrance to the Hotel. This floor has been significantly altered as merchants sought to modernize their stores. Modernization included the introduction of historically inappropriate materials such as aluminum and bricks of various colors. Only two bays remain which reflect the original design of the commercial fronts with a base panel, vertical supports, display windows, and transom. The main entrance is through a covered, intact portico dating from circa 1890. This has undergone only minor alterations. It has been repainted white, and the stoop has been covered with carpeting.

The second and third floors remain intact with 2/2 (two over two) double hung windows and limestone window surrounds. The corners of the

building are delineated with limestone quoins which have been painted white. The roof is defined by a bracketed cornice which, due to prolonged water infiltration, is in need of repair.

The roof is flat, and has been recently retarred. A large metal sign ("Hotel Lamer") rests on top. It is in very poor condition, with letters missing.

The south facade, measuring 186'0", is asymmetrical as a result of successive additions. Symmetry exists only for the east portion of the facade. Here again, quoins delineate the corner, and the bracketed cornice adorns the roof. The first floor commercial storefronts have been infilled with brick masonry, with the exception of two tavern windows at the corner. The four bays of the second and third stories remain unchanged, with 2/2 double hung windows. The first floor has been exposed to numerous alterations. Areas have been infilled with various colors and textures, corrugated metal, and glass. Windows have been altered, new openings have been cut out, others enlarged and aluminum replacements have been installed.

The second and third stories include a variety of double hung windows: 2/2, 4/4, 4/1 and two different oriel windows. They do not have limestone window surrounds, but rather use only white paint to hint at the same appearance. The bracketed cornice is not continued here, but rather the roof is detailed with crenulations.

The interior of the first story consists of the hotel lobby which has undergone numerous modernizations, yet has retained much of its 1910 spatial configuration. Elements of significance include: tri-colored (pink, white, blue) mosaic tile floor, three wood-encased columns, and a wooden stair employing an ornamental balustrade, with egg and dart molding. Adjoining the lobby is a barber shop with another tri-colored mosaic floor

(brown, beige, ochre). Other spaces include: a toilet room, key room, dining room, two social rooms, one kitchen and a pantry. These have all been greatly remodeled. Ceilings have been lowered, windows have been infilled, and walls have been modernized with wallpaper, paneling and dry wall. Deterioration has been great due to water infiltration from the floors above. The only elements of significance remaining include marble walls and stall dividers in the toilet room, marble baseboards and two wood encased columns in the dining wall.

Beyond the hotel lobby, the first story consists of various sized commercial spaces. These have been greatly remodeled and altered, leaving no critical historic features.

The second story consists of a central corridor which spans the entire length of the hotel. This is bisected by a series of five doors and is abutted by guest rooms of various sizes. The corridor has been altered many times and contains no features of note. The guest rooms differ in size, configuration and state of repair. The majority of the rooms have lost their critical historic features with successive remodeling campaigns. Most spaces have had walls either added or removed, and have had suspended ceilings installed.

The third floor in both plan and appearance is similar to the second, except the state of disrepair is far greater, as the roof had been in very poor condition, causing a great deal of physical damage to the building fabric.

The goal of this adaptive use design is to restore the exterior to its appearance during circa 1920. The last major addition was constructed during this period, and a restoration to an earlier time would not be ac-

ceptable, since much of the building fabric would then need to be demolished. This appearance has had the longest association with the building and would therefore be appropriate. Finally, economics being a consideration, limited the actual amount of restoration. Originally, the first floor had arched windows and a larger veranda. This had been drastically altered while a large percentage of the 1910-20 building fabric remains. Therefore, it would be far less expensive to use the circa 1920 period as the restoration target date. Historic photographs were used to prepare restoration drawings for the Bartell House. Both the Washington and Sixth Street facades are in the public view and will therefore be restored.

Due to its many alterations, the interior lacks integrity, and therefore will not be restored. Such a restoration would be far too costly to be feasible, and would not be very accurate since very little historic documentation exists for it. Instead, the interior will be treated in a modern manner. All window openings will be retained. Attempts will be made to reuse as many walls as possible, and the significant historic features which were previously described will be retained and reused. New construction will appear as new, in material, color and texture. It will attempt to complement the historic elements but not reproduce them.

Site Analysis

The Bartell House is located on a prominent corner of the central business district in Junction City, at the intersection of Sixth and Washington Streets. The adjacent area is predominantly

composed of small scale (two- and three-story) retail establishments. The main entrance to the hotel itself is on the east facade. Shops located on the first floor of the Bartell House have individual entrances along the east and south elevations. An arched entrance, sealed with a vertical lift door, is located on the north facade, adjacent to an alley. This entrance leads into an open courtyard, presently used as storage for construction materials. Other means of access to the Bartell House which historically were located on the north elevation have been infilled with brick masonry, and are no longer in use.

Although circulation is unobstructed around the entire site, parking for automobiles is limited, and presently is provided along the street. Additional parking for the increased traffic of the proposed mixed use facility may pose a problem. Such parking space cannot be created within the Bartell site without surrendering a large percentage of rentable space for this purpose. Further, no vacant land is presently available for this. Alternatively, construction of a new parking facility would necessitate the demolition of nearby buildings. Such an approach would alter the existing integrity of the area. A solution for the additional parking might be found in the future plans of the local telephone company. This firm is presently situated in the central business district, and is proposing to move to a new facility outside of this immediate area. Employees of this company have been parking their automobiles on the street and thus have encumbered many spaces, which might otherwise serve shoppers. A move out of the central business district of the telephone company, would free seventy-five parking spaces.

Open space is provided opposite the hotel on Sixth Street in the

form of a city park. It is landscaped and contains benches, a fountain, and a military monument. Across Washington Street are numerous restaurants, shops, offices, and one movie theater (presently vacant), while adjacent to the hotel are two banks, the public library and many small businesses.

The majority of the neighboring buildings were built during the period 1890-1910, and are of either brick or limestone construction. These structures have many common features including setback, roof heights, ornamental cornices, rhythm of second story windows, storefronts on the first story, and projecting metal canopies. Unfortunately, most structures have undergone many alterations which were insensitive to the character of either the individual buildings or the streetscape. In addition, cyclical maintenance has not been practiced in most instances, causing many of these structures to be in varying states of disrepair.

Space will be allocated for a variety of businesses in the Bartell. Eleven shops will be included ranging in size from 300 to 3,800 square feet. A large open space for circulation and product display will be provided in addition, space will be allotted for storage. Each shop will have easy access to the main circulation paths. This accessibility will be both visual and physical. Security will be provided after hours. Smaller shops will have the most direct access, in order to insure that they will not be overlooked by patrons of the larger establishments.

Spatial Requirements for Offices

Office space will be separated from other spaces both visually and acoustically. Eighteen offices varying in size from 300 to 3,000 square feet will be provided in order to attract users with differing needs. These spaces will be designed to be flexible to accommodate the changing needs of the businesses. While it is vital that these spaces offer privacy, it is as equally

important that they have easy access to the circulation core. Provisions will be made for security after business hours, while access will be insured for employers. Natural lighting will be provided for each office unit, and toilet facilities will be included in the common circulation cores. The offices will be designed as sequences of public to private spaces. The interior design of the individual offices will remain for the user to complete in order for the space to accommodate its particular requirements.

Spatial Requirements for Restrooms

These spaces shall be located adjacent to the common circulation core. Each unit will be 150 square feet in size.

Spatial Requirements for Restaurant

Users:

The restaurant should accommodate a variety of users. These users will include: local business people, store owners, county politicians, persons from Fort Riley, and others. Catering to the patrons' needs on an average day will be a hostess, manager, two chefs, six waiters/waitresses. The restaurant will offer spaces for both large and small group dining.

Lobby:

This is the public entrance for both the bar and the restaurant. Located here should be the cashier, coat check, and waiting space.

Square footage required: 750 square feet.

Dining Room:

Circulation should be simple and convenient for service, while privacy for individual units (tables) is needed as well. It should be

designed to accommodate a variety of group sizes. Visual excitement is important in this space. Natural lighting is desired, but is not required. Space should also be allotted for potential entertainment.

Minimal space required: 1,800 square feet.

Kitchen:

The kitchen for the restaurant should be located adjacent to the dining space. Provisions should be made to isolate both noise and smell from the dining area.

Square footage required: 4,000 square feet.

Employee Lounge:

This space which could serve both employees of the restaurant and bar, should include: storage space, a toilet and lounging space.

Square footage required: 180 square feet.

Manager's Office:

This would be located near the lobby entrance. Natural lighting is desirable, although not required.

Equipment needed: desks, chairs, couch, storage.

Square footage required: 120 square feet.

Maintenance Storage:

The adjacency of this space to the delivery entrance would be recommended. Cleaning equipment will be stored here.

Square footage required: 100 square feet.

Delivery Entrance:

This entrance should be located adjacent to the kitchen, and should be designed so as to accommodate deliveries. These deliveries shall daily include those of perishable foods; weekly deliveries of dry goods; and bi-weekly deliveries of vegetables.

Square footage required: 450 square feet.

Waiter Station(s):

The waiter station(s) shall be designed to serve the dining area and so should be appropriately oriented. It also should have easy access to the kitchen.

Square footage required: 100 square feet.

Bar:

This facility should be adjacent to the lobby. Visual access to the exterior is desired, but is not required.

Visual contact within the entire space should be emphasized, while privacy should also be available, creating an intimate environment.

Storage should be included for liquor, and supplies.

Equipment needed: seating facilities, bar.

Square footage required:	bar - 200 square feet
	seating - 400 square feet
	storage - <u>200 square feet</u>

Total - 800 square feet

Cafe:

The outdoor cafe will be separate from the restaurant, but will share a common kitchen. This space should have a separate entrance, and should have visual contact with the central courtyard.

Square footage required: 4,000 square feet.

Courtyard:

The courtyard should be treated as a focal point of the building. It should be a circulation core with entrances to shops opening into it.

Square footage required: 4,000 square feet.

Common Circulation/Lobby Space:

The common space should serve to provide access to the upper stories and the courtyard. It should be open, and provide a simple circulation path, yet, should be visually exciting.

Zoning and Building Codes

The site of the Bartell House Hotel is zoned commercial, thereby, permitting a variety of uses. Such uses include: retail, restaurant and office space. This structure is required to conform to the city-adopted building code, which is the Uniform Building Code of 1979.

Although building codes often pose problems for adaptive reuse projects, the Uniform Building Code authorizes local officials to countermand the written codes when dealing with rehabilitation of historic properties.

The Uniform Building Code requires for a mixed use commercial structure the following:

Walls

- All new walls shall have a fire resistance of one hour.
- All fixed partitions shall be constructed of noncombustible materials.
- Folding, portable or moveable partitions need not have a fire resistance rating.

Floors

- Combustible insulating boards may be used under flooring.

Exits

- Floor number one needs only have one major exit.
- Floors number two and three need at least two exits. Total number of exits per floor = occupant load of floor one. Occupant loads of floors which exit here (50%) of occupant load of first floor above, + 25% of occupant load beyond.
- Exit width = total occupant load of floor ÷ 50% of occupancy of floor above ÷ number of exits.
- Maximum distance to exits : no fire sprinklers = 150' with fire sprinkler = 200'.
- Main exit must be accessible to the handicapped.
- Maximum dead end corridor distance may be 150'.
- Exits to street or into four hour rated corridor

Corridors

- All corridors must be 44" wide at the minimum.

Stairs

- If the occupant load is greater than 50, the minimum stair width is 44".
- If the occupant load is less than 50, the minimum stair width is 36".
- Exterior stairways shall be self-closing and have a three-fourths hour fire rating.

Square Feet/Occupant

- Bar assumes one occupant per 7 square feet.
- Stores assumes one occupant per 30 square feet on the first floor.
- Stores assumes one occupant per 50 square feet on all upper floors.
- Restaurant assumes one occupant per 15 square feet.
- Offices assumes one occupant per 100 square feet.

Handicapped Access

- All uses require accessibility for the handicapped.

Awnings (Exterior)

- Awnings must have non-combustible frames which are retractable. The coverings may be combustible.
- Awnings may not project any more than two-thirds the distance of the sidewalk.
- Awnings must be at least eight feet above the ground.

HVAC

- According to the client, the HVAC has recently been brought up to code.
- The electrical system was brought up to code prior to the 1979 purchase of the hotel.

CHAPTER III

REUSE DESIGN

The design phase of this project is an attempt to synthesize the requirements for a mixed use facility into the existing fabric of the Bartell House with all work conforming to The Secretary of the Interior's Standards for Historic Preservation Projects.

The Bartell House will be reused as a mixed use facility housing: retail shops, offices, and a restaurant. The retail shops will be located at the first story of the hotel to provide the best access possible to these establishments. Historically, shops have always been located at this level. Therefore, such a plan would provide a continuation of the historic precedence.

The second story, which had previously housed private hotel rooms, will be redesigned to provide space for a restaurant. Although accessibility to the restaurant would be easier if its location would be on the first floor, it was decided that the retail shops require a more direct access than the restaurant. In addition, the square footage of space required for a restaurant would have meant that it would have occupied a large percentage of the first floor. This would not have been an acceptable solution. It was further assumed that the restaurant could attract patrons by creating visual excitement on the exterior which could be viewed and identified by shoppers.

Kansas liquor law limits the serving of alcoholic beverages to

establishments with private memberships. A non-member would not have access to the Bartell House restaurant. In order to remedy this, and provide food service to these other individuals, a cafe not serving alcohol will be located opposite the restaurant. Kitchen facilities will be shared by the restaurant and cafe. Shoppers will be attracted to this facility by one major shop, with a second story level which opens out onto the cafe terrace; as well as by a major stair leading from the courtyard.

Offices require privacy, both visual and accoustical from the very public areas of a mixed use facility. To accomplish this, the office space will be located on the third floor of the Bartell House, away from the major shopper's circulation paths. Circulation flow on this level will only be office traffic.

The Exterior

The exterior of the Bartell House will be restored to approximately its appearance of the 1920's. This was the period of the last major exterior addition on Sixth Street. An exact restoration would not be possible since uses have changed, with new requirements which would make a reuse of the hotel viable. The character of the restoration period will be retained using historic photographs as a basis for the design. Any alterations which will need to be made in order to accommodate the new functions will be sensitive to the historic fabric. The exterior has undergone numerous alterations since this period. Examples of such changes include: enlarging storefront windows; introducing new materials such as metal and opaque glass; removing canvas awnings; infilling windows; and altering the mullion designs of the windows.

Characteristics such as: the proportion width to height of openings, the rhythm of windows to solid wall, the materials, the colors, and

textures will be continued in this design in order for alterations to be sympathetic with the historic building.

Historic photographs revealed that during the 1920s the first floor facades of the Bartell had display windows typical of pattern book commercial store fronts. These included the following elements: a wood base panel, a display window, support posts, a transom, and a belt course. Examples of this design still exist on the Washington Street facade of the building, and will be used as patterns for the fabrication of the missing units.

For purposes of building security and circulation control, access into the building will be limited to two entrances. The remainder of the existing doorways will be removed and replaced by windows. These doors will then be refinished and reused in the courtyard. In this manner, the proportion of solid wall surface to window or door surface will remain unchanged. Canopies, similar to those in early photographs will be fabricated and installed above the windows. These elements will be used for both ornament and store identification.

The second and third stories of the Bartell House have retained their integrity. Portions of the window frames, sash, surrounds, cornice and brackets will require either repair or replacement.

Presently, the Bartell House facades are painted red. Some portions of the surfaces have paint that is chipped or cracking. This paint should be removed, and new paint applied. No color descriptions have been found for the original storefronts, windows, or porch; and funding for a chemical paint analysis was unavailable. Therefore, research into colors used on similar commercial buildings was conducted. From this, it was determined that the storefronts would be painted a dark brown color, beige and ochre

accents. These same colors would be repeated in the canopies above.

The courtyard of the Bartell House is a compilation of additions belonging to various periods. Many elements are intrusions, cluttering an otherwise attractive space. A large open space such as the courtyard would be desirable in the design of a mixed-use facility, to serve as a circulation center and exhibition space. It was therefore decided that these additions will be demolished. Such an approach to the reuse design would be acceptable, since it would not be disturbing the facades which are on the public right-of-way. Repairs to the facade will be made where needed.

All shops will have access from the courtyard, and will be identified by signs on shop windows and canopies. Landscaping will be located here so as to direct circulation through the space, and bench seating will be provided for shoppers. A major stair will be located at the western portion of the courtyard leading to the cafe space above. This courtyard will be usable throughout the year, and so, will be covered by a skylight. Color will be introduced here in the form of banners hanging down from the skylight frames, as well as in the space frame supports.

Interior

A majority of the interior is in great disrepair, due to a lack of maintenance. Water damage has occurred in various locations; floors are unstable; walls are very damaged, and the plaster ceilings are deteriorated throughout. Furthermore, very little evidence has been uncovered of the interior appearance of the 1920's. Floor plans have only been found for the

room arrangements of the first floor. The interior has undergone successive alterations and remodelings, as can be seen in elements such as: drywall partitions, wallpaper, carpeting and suspended ceilings. The only elements which appear to be from the early history of the Bartell House on the upper floors are: the bearing walls, the corridor doors with transoms, and the ornamental hardware.

The first story on the other hand, is in a better state of preservation. Although the shops have been drastically altered, the lobby of the hotel retains much of its integrity. Such elements include: the main wood staircase, wood encased columns, mosaic tile floors, and a pressed metal ceiling which had been salvaged from one major space in the past. Yet, even this portion of the Bartell House is greatly damaged; plaster from the walls is deteriorated; and drywall in many locations is destroyed.

Due to its generally dilapidated condition, the great expense of restoration and the need to accommodate a variety of new uses, the interior design will be new, retaining and reusing the existing significant elements.

The first floor will contain retail shops accessed by two major entrances, and lobby spaces, one on the Washington Street facade, and one on the Sixth Street facade.

The Washington Street entrance will reuse the existing entrance. Three shops will have direct access to this space, as will a new elevator and firestair. The existing non-structural walls will be demolished, and will be replaced by new walls of glazing. This will allow color and light to filter through, and will open up the lobby space, while not detracting

from the significant historic features. The existing tile floor will be restored to its original pink, blue, and white; and brown, beige and ochre colorations. A new flooring material (dark in color) will surround the tile.

Since the present ceiling is badly deteriorated a new reflective ceiling will be installed, incorporating recessed light fixtures to highlight the retained historic elements. All existing wood elements will be restored to their original appearance, and indoor plants will be introduced to the space. Circulation through the lobby will be directed by the walls to the central courtyard.

The Sixth Street entrance will be located below a projecting oriel window. This entrance will open into a two story lobby, created by demolishing a portion of the second story floor. A new brick restaurant terrace will look onto this space from the second story. This open terrace will be delineated by vines, projecting into the lobby space. Display windows will highlight the walls, and an elevator and firestair will be located here as well. Access to the courtyard will be opposite the lobby entrance.

The courtyard will be the point from where all retail shops will be entered. New shop windows will be constructed reflecting window rhythm above. These display windows will be highlighted by lights outlining their shape at night. These new windows will appear as "new" elements while being sympathetic to the historic features. The courtyard will be landscaped in a manner to provide easy circulation, and direct persons towards the small shops which need greater public visibility.

The second story will contain: a restaurant, the second floor of one retail shop, and a cafe. The restaurant will be approached either by

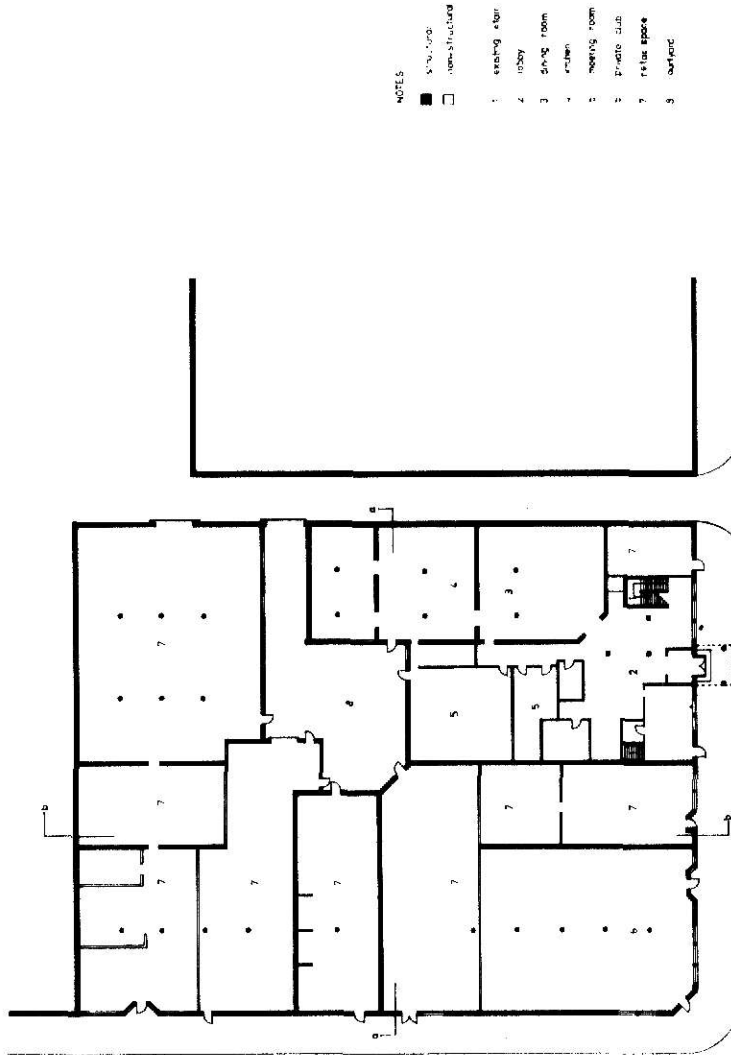
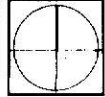
the main stair or elevator from the Washington Street lobby. It will be reached by a lobby/circulation space, containing public restrooms. The restaurant will use glass block for the new wall, in order to permit restaurant patrons to partially view the space during their approach. In plan, the restaurant will be an "L", providing various dining settings, both public and private. Windows overlooking the courtyard will be removed, so as to provide access to a new terrace seating projecting. This space will have accommodations for both the bar and for dining. Privacy will be created by the use of planting.

The cafe and the upper level of the shop will be reached by the central courtyard stair, by the elevator or stairs from the Sixth Street lobby, or by internal circulation within the retail shop. The cafe will be a large, open, terraced area providing seating under colorful umbrellas. A kitchen common to both the cafe and restaurant will be located at the north wing of the second floor of the Bartell House, and will be serviced by an elevator leading to the alley delivery entrance.

The third story will contain two separate areas. One, serviced by the Washington Street lobby, will consist of one large office suite, and many smaller units. Low skylights will provide further light for this space. The other section of the floor will consist of two office suites. Access will be provided by both the elevator and fire stairs at the Sixth Street side.

Every effort will be made to retain the present high ceiling of the spaces in the adaptive use design. New ductwork, pipes, and fire sprinkler system will be installed in existing wall cavities, and in newly constructed walls.

Figure 32.--Existing First Floor Plan.

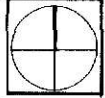


- NOTES
- existing
 - new structure
- 1 reception area
 - 2 lobby
 - 3 living room
 - 4 kitchen
 - 5 breakfast room
 - 6 private club
 - 7 relax space
 - 8 outdoor

FIRST FLOOR EXISTING

0 5 10 20 30 40 50
SCALE: 1/8"=1'-0"

Figure 33.--Existing Second and Third Floor Plans

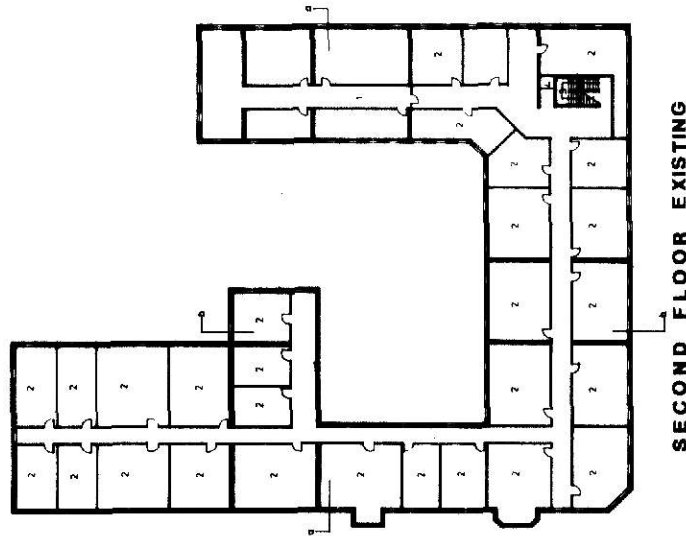
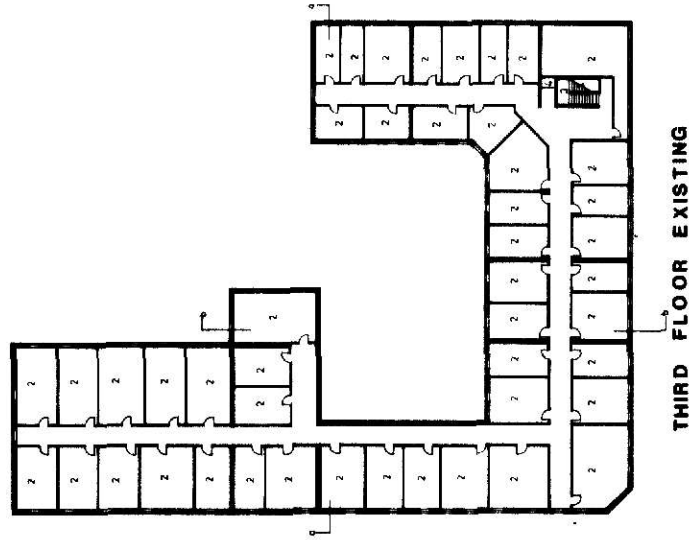


BARTELL HOUSE HOTEL

ADAPTIVE USE OF
JUNCTION CITY, KANSAS

submitted in partial fulfillment of the requirements to the degree of MASTER OF ARCHITECTURE in the graduate school of Kansas State University

- NOTES
- 1 manager's residence
 - 2 hotel rooms
 - 3 existing stair
 - 4 elevator



0 5 10 20 30 40 50
SCALE IN FEET

Figure 34.--Existing Basement and Roof

**THIS BOOK CONTAINS
NUMEROUS PAGES
WITH THE PAGE
NUMBERS CUT OFF**

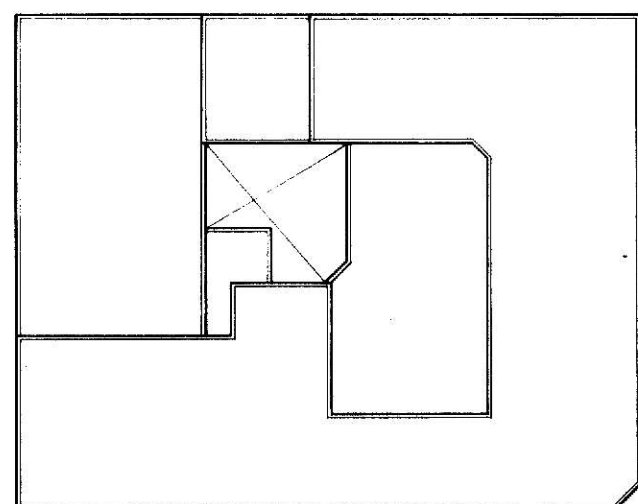
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CUSTOMER**



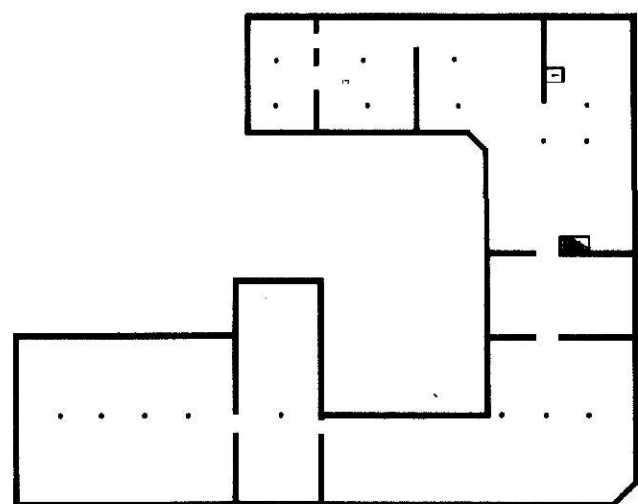
submitted in partial fulfillment of the requirements for the degree of MASTER OF ARCHITECTURE in the graduate school of Kansas State University
JUNCTION CITY, KANSAS
ADAPTIVE USE OF
BARTELL HOUSE HOTEL

101

- NOTES
- 1. elevator
 - 2. stair
 - 3. new chimney



ROOF EXISTING



BASEMENT EXISTING

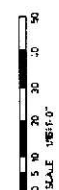
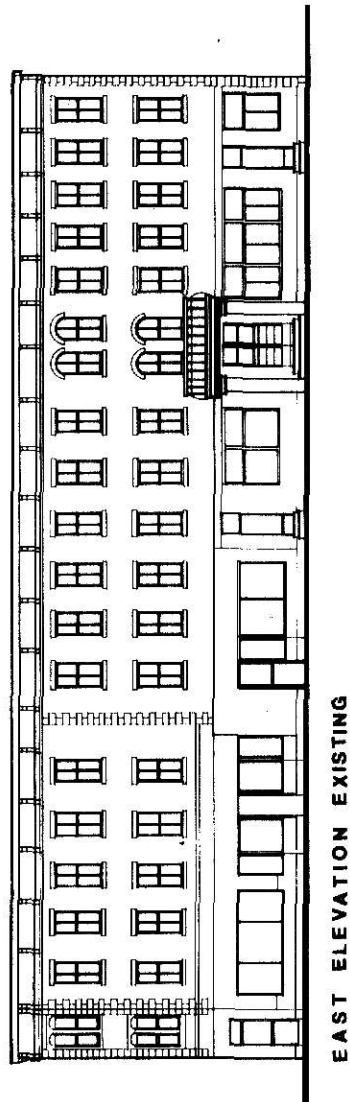


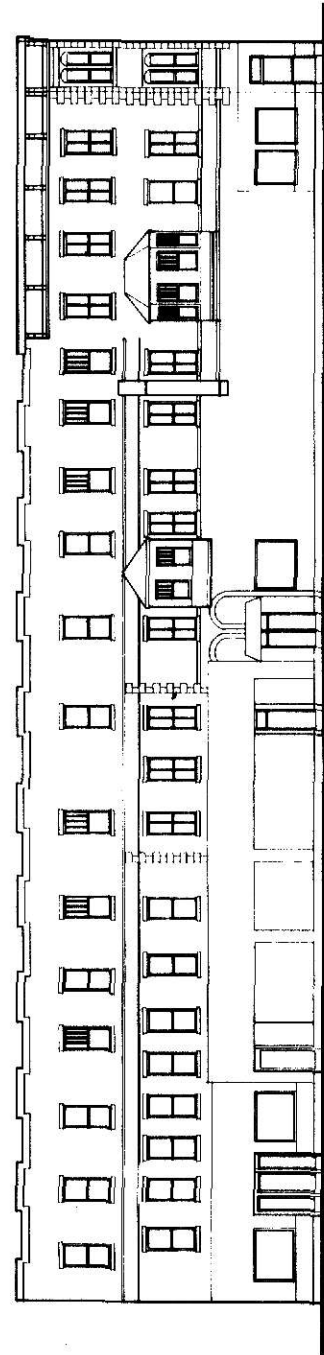
Figure 35.--Existing Street Elevations

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BARTLELL HOUSE HOTEL
ADAPTIVE USE OF
JUNCTION CITY, KANSAS



SOUTH ELEVATION EXISTING



SCALE 1/4" = 1'-0"

Figure 36.--Existing Courtyard Sections

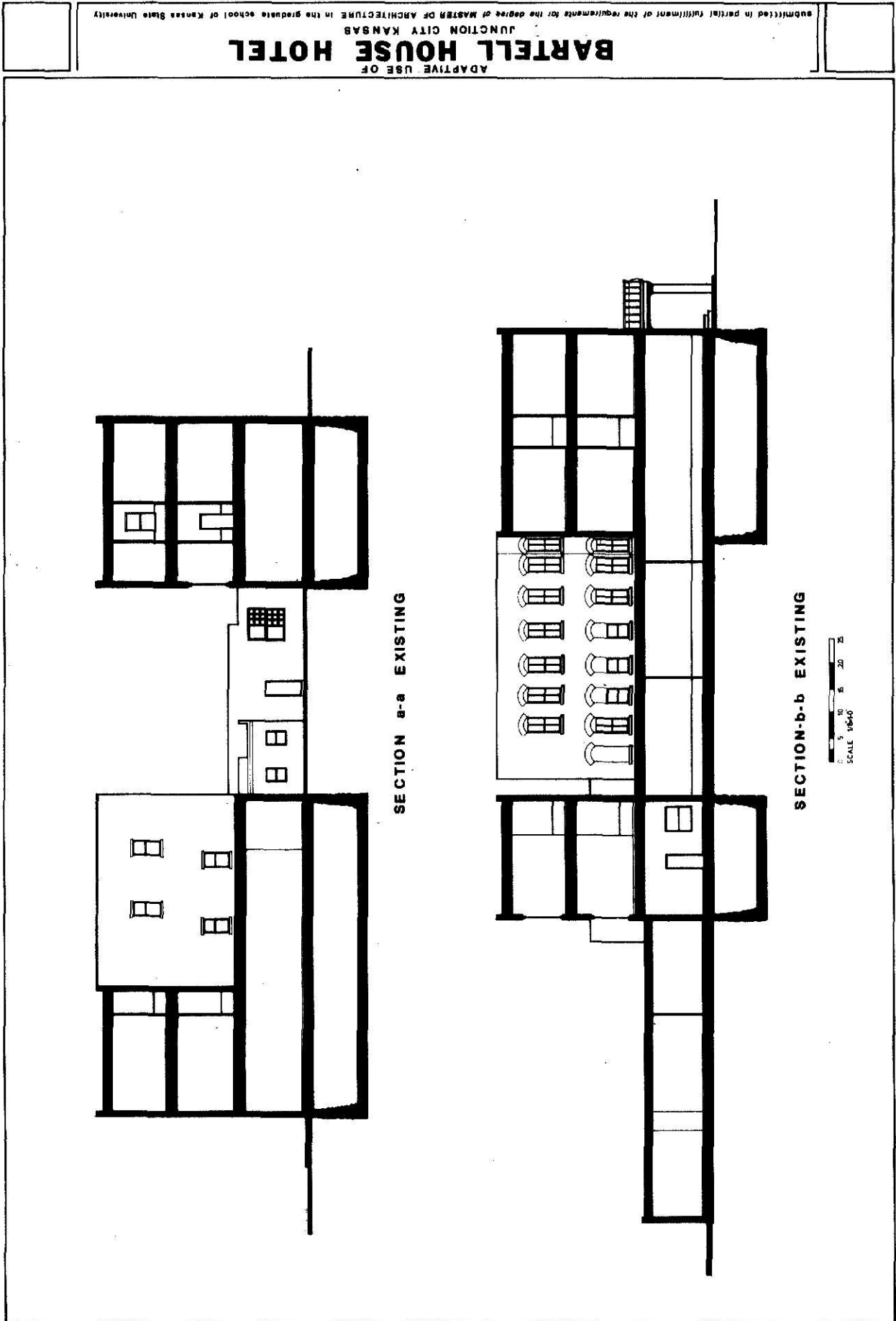


Figure 37.--Demolition, First Floor Plan.

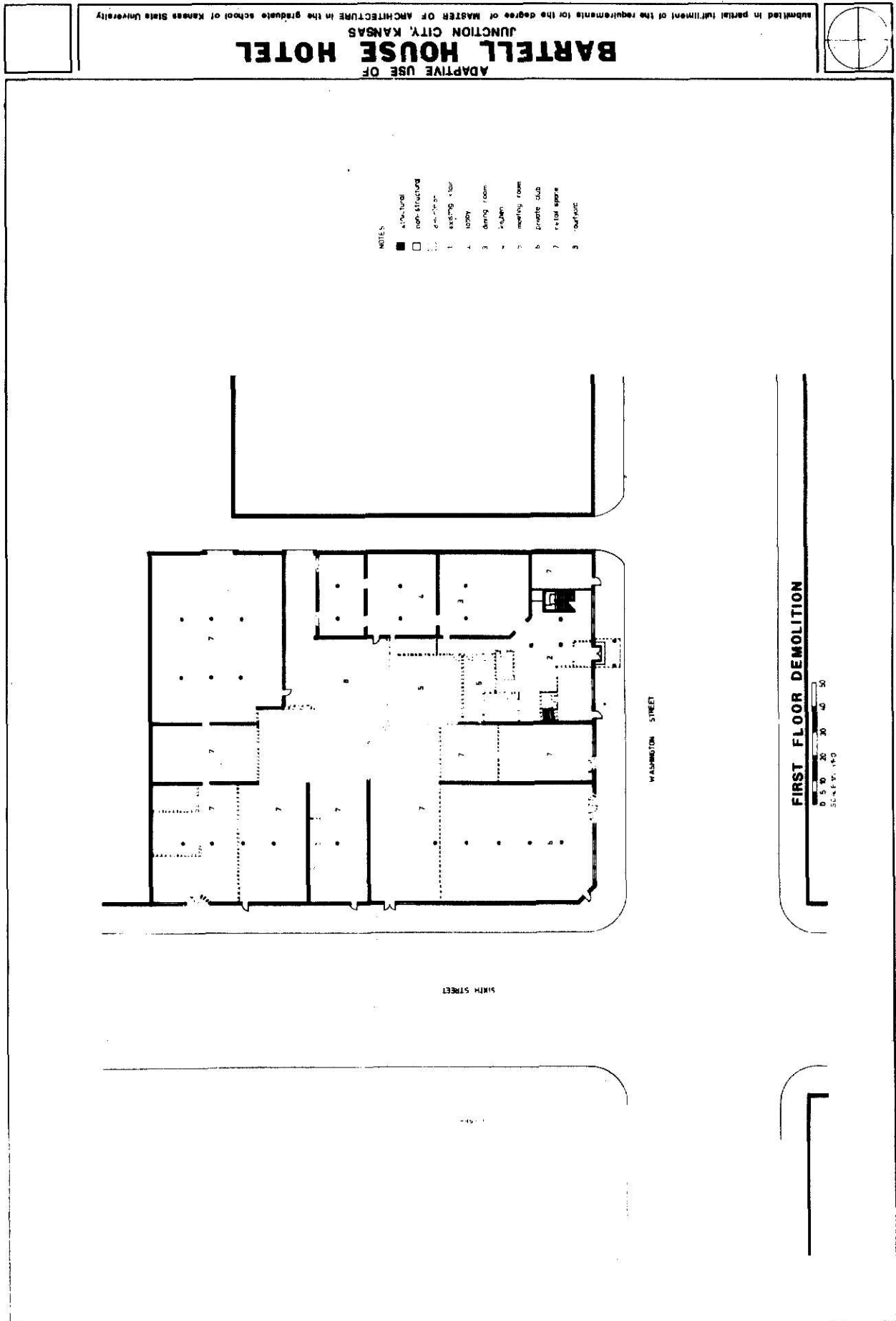


Figure 38.--Demolition, Second and Third Floor Plans.

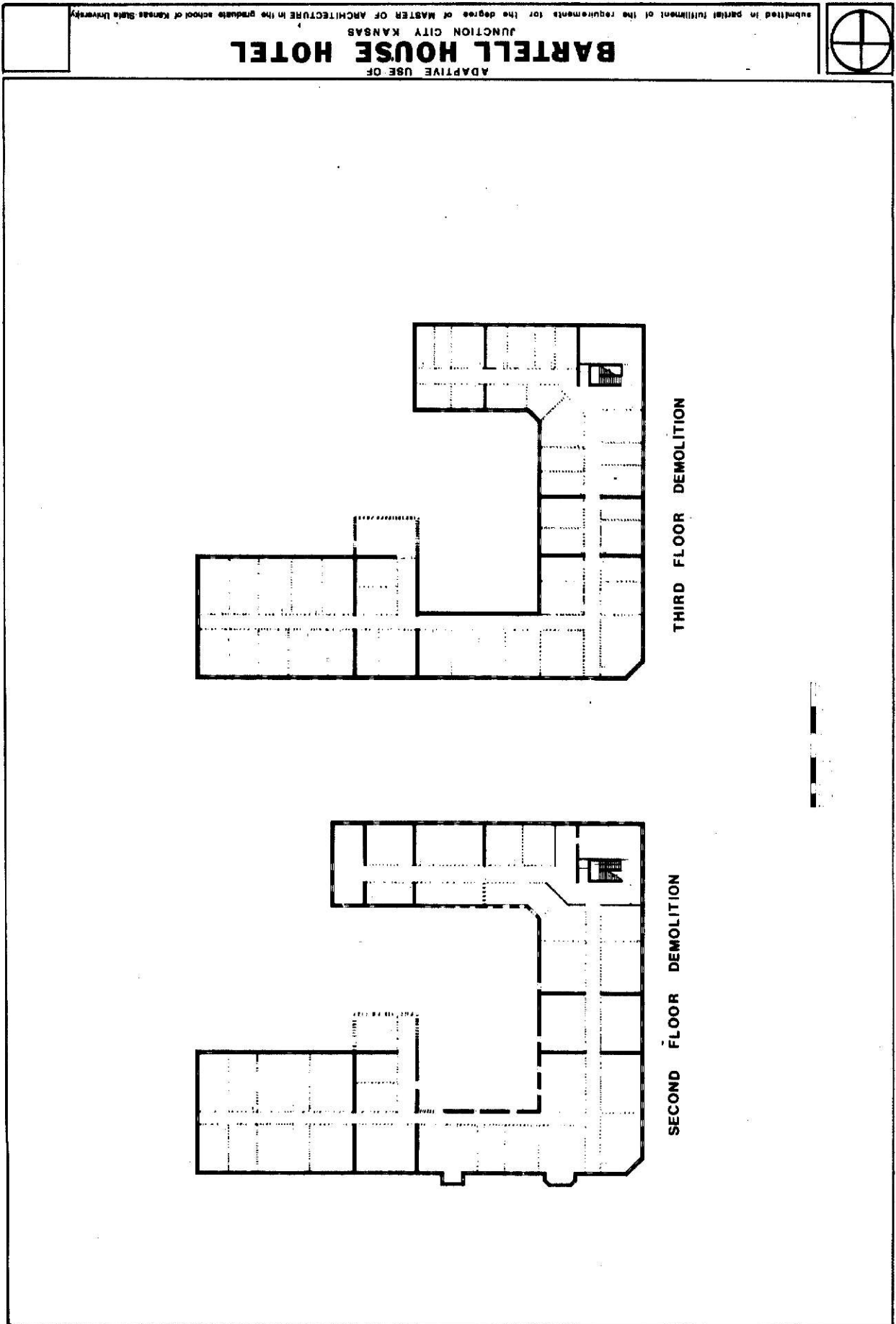


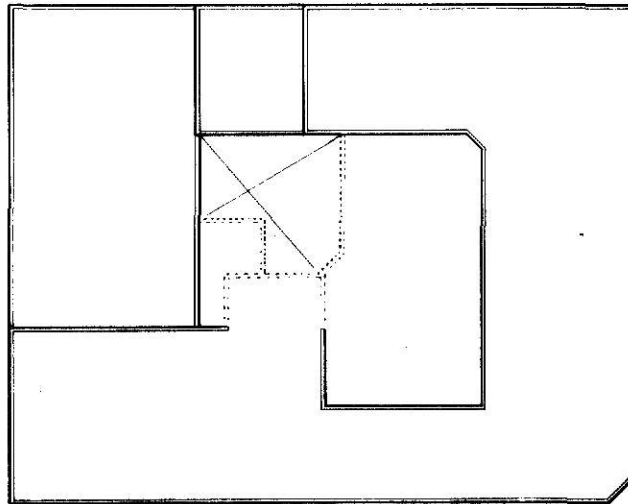
Figure 39.--Demolition, Basement and Roof

BARTELL HOUSE HOTEL

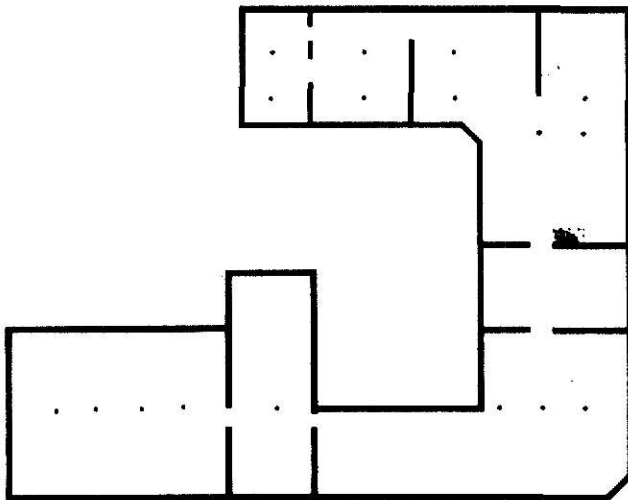
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ROOF DEMOLITION



BASEMENT DEMOLITION

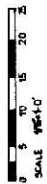
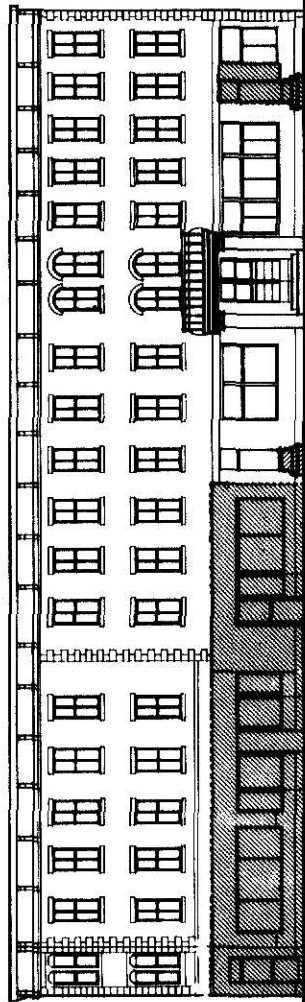


Figure 40.--Demolition, Street Elevations.

BARTLE HOUSE HOTEL

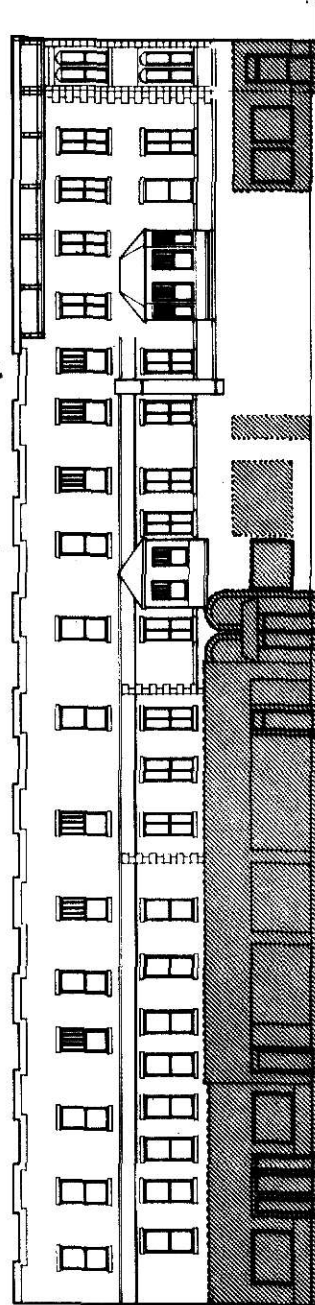
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EAST ELEVATION DEMOLITION

SOUTH-ELEVATION DEMOLITION



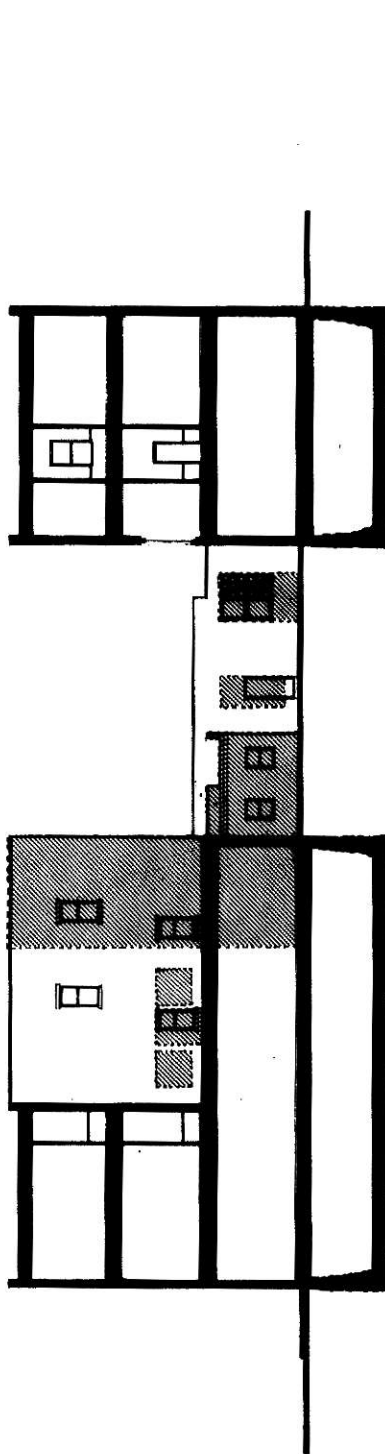
0 5 10 15 20 4
SCALE 1/8" = 1'-0"

Figure 41.--Demolition, Courtyard Sections.

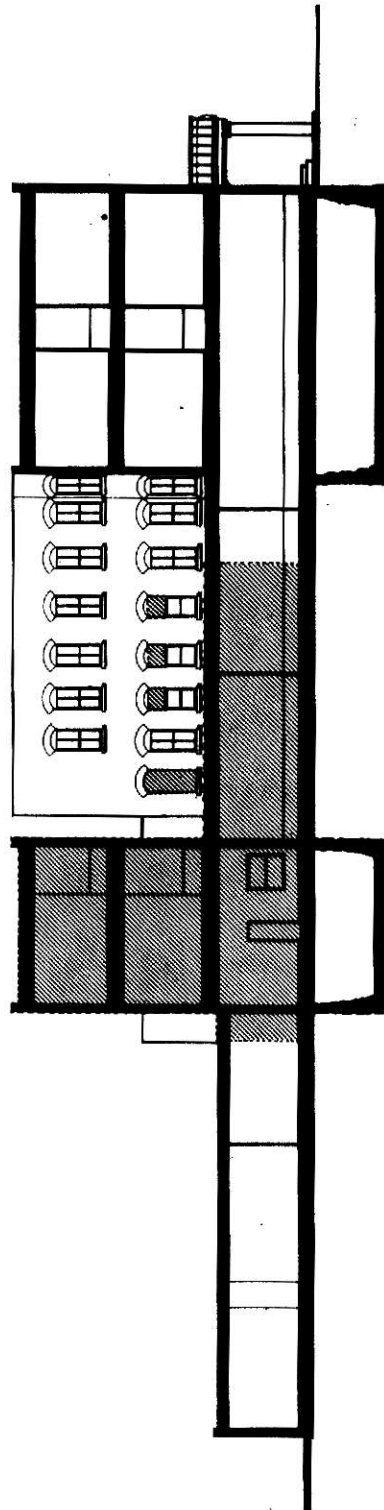
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SECTION a-a DEMOLITION



SECTION b-b DEMOLITION



Figure 42.--Proposed First Floor Plan.

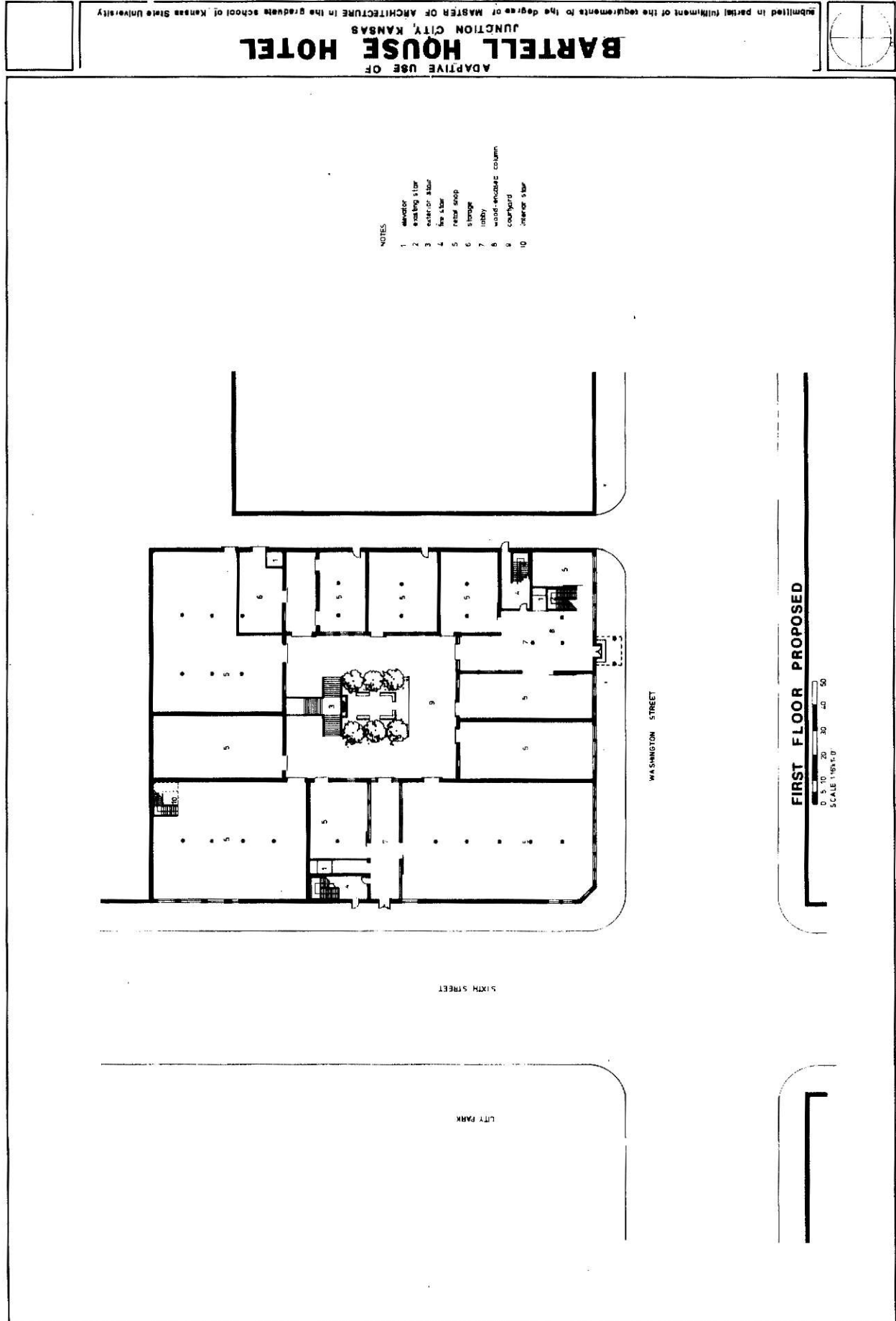
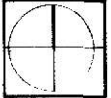


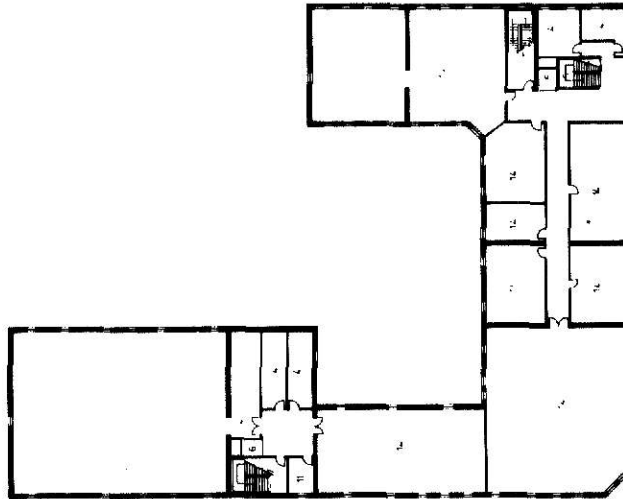
Figure 43.--Proposed Second and Third Floor Plans.



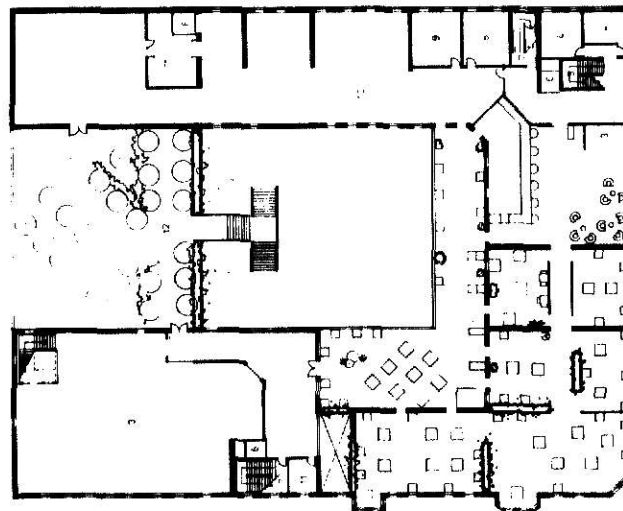
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BARTLE HOUSE HOTEL
 ADAPTIVE USE OF
 JUNCTION CITY KANSAS

NOTES

- 1 bar
- 2 restaurant
- 3 coat check
- 4 hotel
- 5 smoking room
- 6 auditor
- 7 fire stair
- 8 manager's office
- 9 employee lounge
- 10 entrance
- 11 storage
- 12 cab
- 13 retail shop
- 14 office



THIRD FLOOR PROPOSED



SECOND FLOOR PROPOSED



Figure 44.--Proposed Basement and Roof Plans.

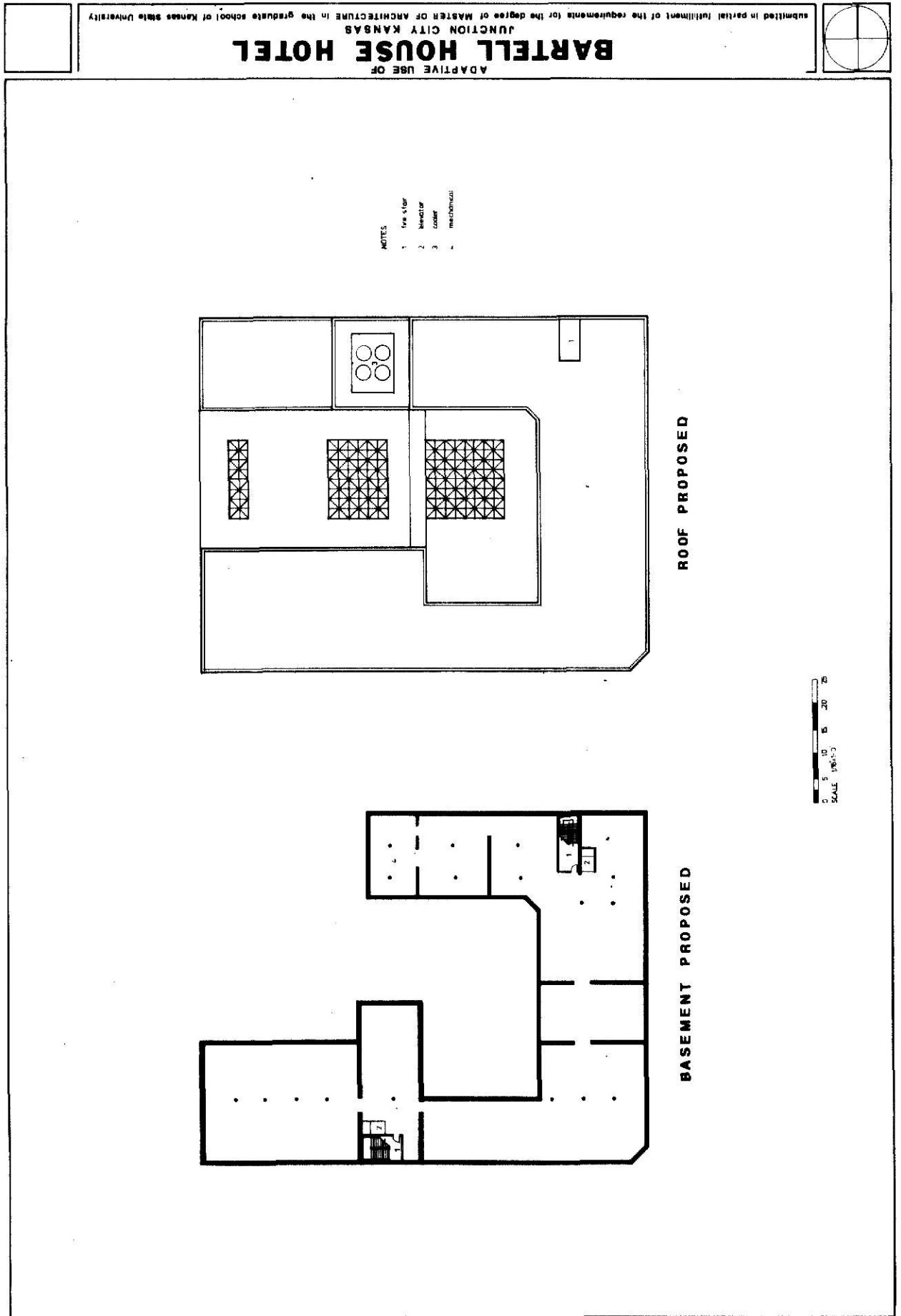
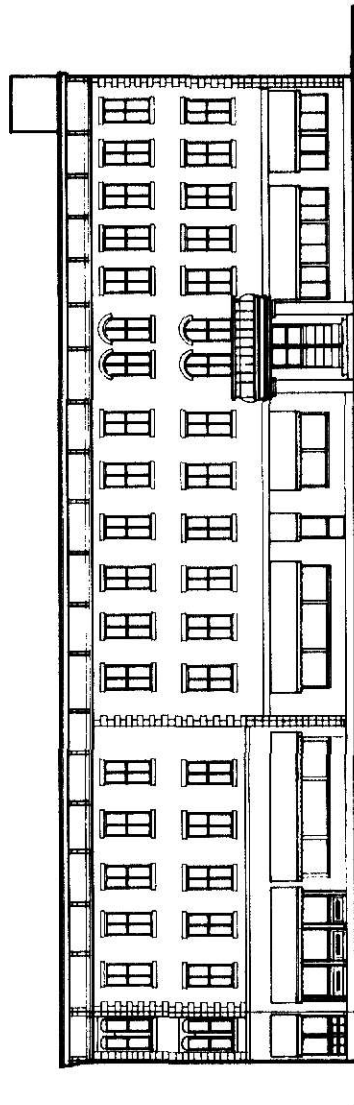


Figure 45.--Proposed Street Elevation Plan.

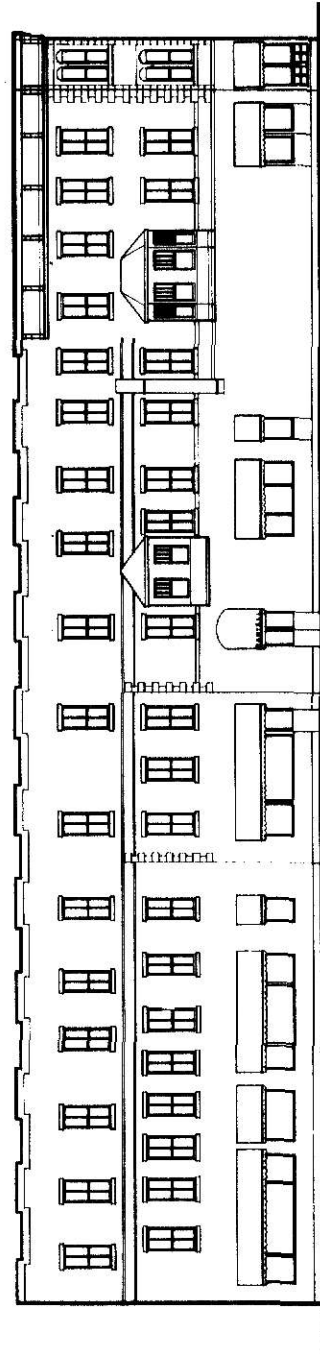
submitted in partial fulfillment of the requirements for the degree of MASTER OF ARCHITECTURE in the graduate school of Kansas State University

BARTELL HOUSE HOTEL
ADAPTIVE USE OF
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EAST ELEVATION PROPOSED

SOUTH ELEVATION PROPOSED

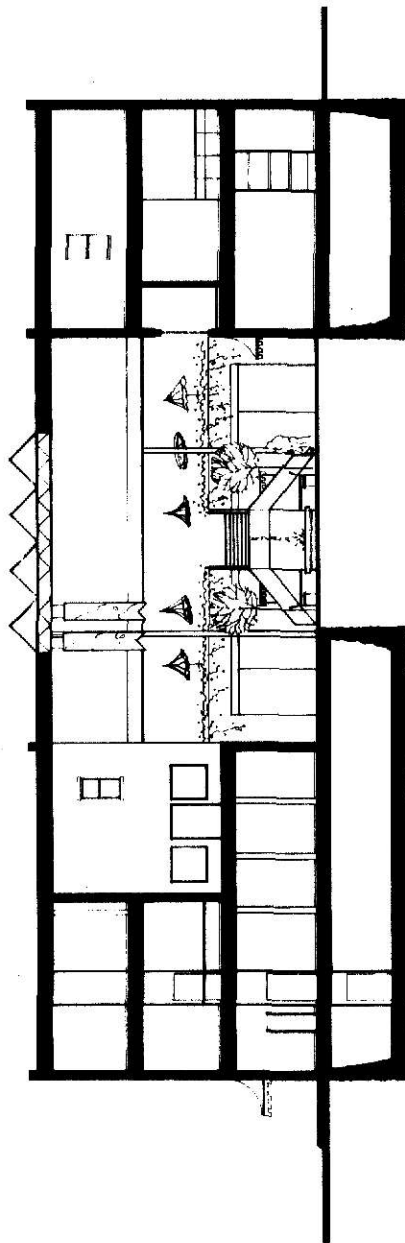


0 5 10 15 20 25
SCALE: 1/8" = 1'-0"

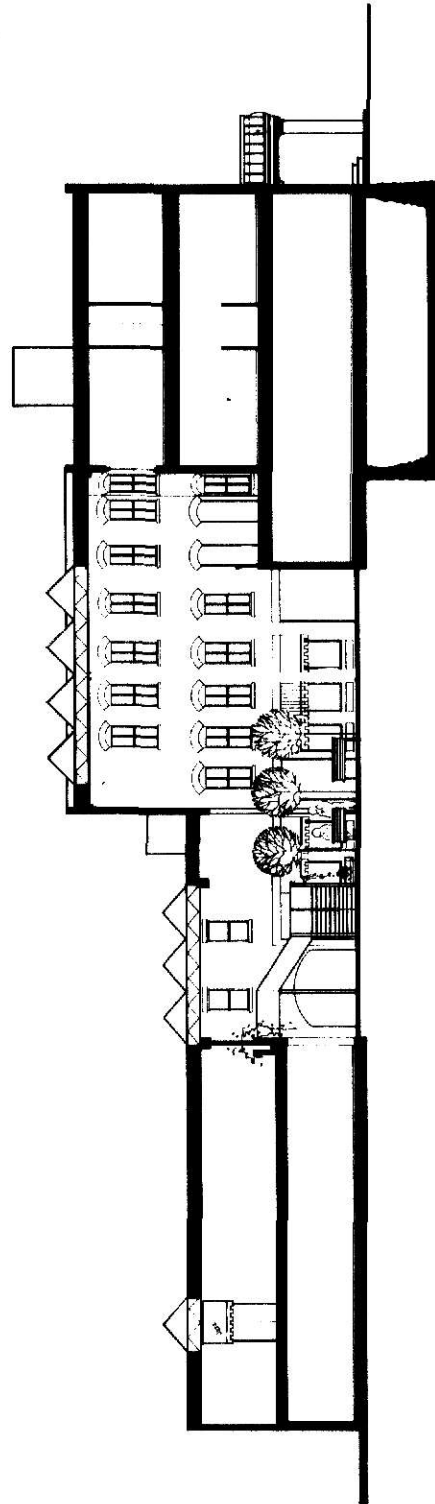
Figure 46.--Proposed Courtyard Sections.

BARTLE HOUSE HOTEL

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SECTION a-a PROPOSED



SECTION b-b PROPOSED



CHAPTER IV

CONCLUSIONS

The problem of dealing with underutilized or vacant buildings is one which is being faced by communities across the country. This thesis was an attempt to work with such a structure, to analyze and assess its assets and shortcomings, and offer a reuse design.

It was demonstrated that this design would be economically feasible if it would use the benefits of Tax Reform Act of 1976, as amended, and if the construction would be phased, concentrating first on the elevators and lobby spaces, and afterwards pursuing the rental units, as renters are found for the spaces.

At the beginning of this research, the climate for preservation was much different than it is now, one year later. The major change has been in the digression of support and encouragement from the public to the private sector. Grants that were readily available in 1980 from almost every level of government, are now almost non-existent, and it does not appear that this will change in the near future. In addition, interest rates have skyrocketed.

Alternative resources of funds would now need to be researched and considered. One possibility is tax increment funding, a technique new to preservation which is slowly being adopted by state legislators. This technique when authorized by the state allows communities to pay the public improvement costs necessary to attract a private developer into a "redevelopment area." Tax increment financing involves the use of increased real estate taxes to bear the cost of public improvements, purchases of property

or rehabilitation. Such improvements to properties increase the property values and thereby the tax revenues--or tax increment. A community can pay for the necessary improvements with existing revenues or by the sale of lands. New income is generated, yet the tax base is frozen, for the calculation of taxes due to local taxing bodies. This would be possible for application for the Bartell House if a tax increment law is approved by the Kansas legislature, the Bartell House is determined a blighted or conservation area, and finally if the support for the reuse can be generate in Junction City.

The Small Business Administration's Section 503 Development Company Program may prove to be a good source for obtaining a lower interest loan than is normally available. This rate of interest is approximately the same as the rate of interest paid by the United States Treasury when it borrows money. Such a debenture may be issued to a maximum of \$500,000 but, no more than 50% of the project cost.

In addition, other sources of income might come from the issue of commercial or individual bonds, or by securing grants from private foundations or endowments. For example, in the case of the Bartell House, contact with the Busch Corporation of St. Louis might be made since the building had been in the family's possession.

The Bartell House is a critical element in downtown Junction City. Being one of the oldest existing structures in the community, one that has mostly remained vacant during the last ten years, a successful adaptive use of this building will provide a much needed stimulus for the re-development of the community.

BIBLIOGRAPHY

Abstract, lots 17, 18, 19, 20, Block 28, Junction City, Kansas.

Advisory Council on Historic Preservation. "Adaptive Use: A Survey of Construction Costs." Report: Special Issue: Advisory Council on Historic Preservation, June 1976.

AIA Journal. "Honor Awards: New Buildings, Recyclings and Mies." April 1976, pp. 35-56.

American Institute of Architects, Life Cycle Cost Analysis: A Guide for Architects, Washington, D. C., American Inst. of Arch., 1977.

APT Bulletin. "The 1905 Catalogue of Iron Store Fronts Designed and Manufactured by Geo. L. Mesker and Co., Architectural Iron Works, Evansville, Indiana." 1977, No. 4, pp. 30-40.

Architectural Record. "Interior Changes Suggest New Directions for Reuse." September 1980, pp. 92-98.

Architectural Record. "Building Types Study: Retail Stores." May 1981, pp. 102-114.

Architectural Record. "Building Types Study: Office Buildings." March 1979, pp. 139-150.

Architectural Record. "Building Types Study: Shopping Malls in the Central City." March 1978, pp. 117-132.

Architectural Record. "Recycling Architectural Masterpieces--And Other Buildings Not So Great." August 1977, pp. 81-83.

Architectural Record. "Rehabilitation and Reuse." August 1975, pp. 67-81.

Architectural Record. "New Life for Old Buildings: The Architect's Renewed Commitment to Preservation." December 1971, pp. 81-88.

Architecture Plus. "Recycling." March/April 1974, pp. 36-87.

Brown, Floyd A., Preservation Case Studies: Rehabilitating Historic Hotels. Washington, D. C., U. S. Department of the Interior, 1980.

Buildings. "Four Variations on the Restoration Theme." July 1977, pp. 72-75.

Crump, Allison, A Word about Paints. Cambridge, Cambridge Historical Commission, 1978.

- Dallas, Sandra, No More than Five in a Bed--Colorado Hotels in the Old Days. Norman, Oklahoma, University of Oklahoma Press, 1967.
- Dean, Andrea O., "Adaptive Use: Economic and Other Advantages." AIA Journal, June 1976, pp. 26-40.
- Dierickx, Mary, "Metal Ceilings in the U.S.," APT Bulletin, 1975, no. 2, pp. 82-98.
- Fonda, John, Early Wisconsin, Madison, Wisconsin Historical Society, Collection V. 1968.
- Gray, Carol D., Adaptive Reuse: Shopping Malls from Old Buildings. Monticello, Ill.: Vance Bibliographics, 1977.
- Greene, Albert R., "The Kansas River--It's Navigation." Transactions of the Kansas State Historical Society 1905-1960. Vol. IX, Topeka, Kas. State Printing Office, 1906, pp. 317-358.
- Guthries, Susan, "Preservation Case Studies: Mainstreet Historical District." Washington, D. C., U. S. Department of the Interior, 1980.
- Hamlin, Talbot, Forms and Functions of the Twentieth Century Architecture. New York, Columbia University Press, 1952.
- Hay, John, The Mid-Continental City of United States of America. Extra Edition. Junction City, Union Printing House, 1889.
- Hoster, Jay, "The Wyandote: A Rehabilitation Effort." Urban Land, May 1979, pp. 3-8.
- Jeffries, John, An Early History of Junction City, Kansas. Master's Thesis, Lawrence, Kansas University, 1976.
- Jeffries, John, A Garden of Eden. Manhattan, A. G. Press, 1978.
- Journal of Housing. "Norfolk's Monticello Arcade: Seen as an Example of Commercial Value in Historic Preservation," March 1978, pp. 117-20.
- Junction City Republic, 17 April 1952.
- Junction City Republic, 24 April 1953.
- Junction City Republic, Kansas Centennial Issue, June 8, 1961.
- Junction City Union, 30 June 1883.
- Junction City Union, 24 June 1953.
- Junction City Union, Centennial Edition, 7 June 1961.
- Junction City Union, Bicentennial Edition, 24 June 1976.
- The Kansas Historical Quarterly. Centennial Issue, 1961, Topeka, Kansas State Historical Society, 1961.

- Insall, Donald W., The Care of Old Buildings Today: A Practical Guide. London, Architectural Press, 1972.
- Lathrop, Elise, Early American Inns and Taverns, New York, Robert McBride and Company, 1926.
- McLaughlin, Herbert P., "A Preservation Addict Looks at the Practical Side of Rehabilitation for Profit." Architectural Record, March 1976, pp. 65-68.
- Massachusetts Department of Community Affairs, Built to Last: Handbook of Recycling Old Buildings, Washington, D. C., The Preservation Press, 1977.
- Mintz, Norman M., A Practical Guide to Storefront Rehabilitation. Technical Series 2. Albany, N. Y., Preservation League of New York State, 1977.
- Mortgage Banker, "Adaptive Use: The Key to Born-Again Central Cities," December 1978, pp. 57-59 (Reprinted from Portfolio, 1978).
- National Endowment for the Arts, Downtown: Reinvestment by Design. Washington, D. C., Government Printing Office, 1977.
- Overlander, Richard, Adaptive Reuse of the Kurtz Warehouse. Master of Architecture Thesis, Ames, Iowa State University, 1976.
- Park, Sharon, Preservation Case Studies: Storefront Rehabilitation: A Nineteenth Century Commercial Building. Washington, D. C., U. S. Department of the Interior, 1980.
- Pevsner, Nikolaus. A History of Building Types. Princeton, Princeton University Press, 1976.
- Preservation League of New York State, A Primer for the Property Owner. New York, Preservation League of New York State, 1978.
- Preservation News. "Living Places." Supplement, April 1975.
- Professional Builder. "Recycling: A Profitable Opportunity that Continues to Grow," April 1979, pp. 136-153.
- Pride, Woodbury F., The History of Fort Riley. Topeka, Capper, 1926.
- Rifkind, Carole, A Field Guide to American Architecture. Plume, N. Y., New American Library, Inc., 1980.
- Rifkind, Carole, Main Street: The Face of Urban America. New York, Preservation League of New York State, 1977.
- Stithetal, D. J., Design in Wisconsin Housing: A Guide to Styles. Madison, University of Wisconsin Extension, 1977.
- Terrel, David, "The Recycling Trend: Adapting Old Structures for Modern Uses Isn't an Easy Job but Can be Successful," American Preservation, April/May 1978, pp. 21-29.

Transactions of the Kansas State Historical Society, 1905-1906. Vol. IX.
Topeka, State Printing Office, 1906, pp. 317-358.

U. S. Department of Housing and Urban Development, Recycling of Obsolete Buildings: An Information Bulletin of the Community and Economic Development Task Force, Washington, D. C., U. S. Department of Housing and Urban Development, 1977.

Van Achen, Kurt, Lives and Works of Early Kansas Architects. Master of Architecture Thesis, Lawrence, Kansas University, 1966.

Van Orman, Richard A. A Room for the Night: Hotels of the Old West. Bloomington, Indiana University Press, 1966.

Welch, Kathryn, "Adaptive Use, Boston Recycles Its Historic Buildings." Preservation News, August 1975, pp. 8-9.

Williams, Judith B., Adaptive Reuse of Existing Structures in Ohio. Cincinnati, Department of Economic and Community Development, 1979.

Williamson, Jefferson, The American Hotel: An Anecdotal History. New York, Alfred A. Knopf, Inc., 1930.

Yoder, Paton, Taverns and Travelers Inns of the Early Midwest. Bloomington, Indiana University Press, 1969.

APPENDIX A

BARTELL HOUSE OWNERSHIP HISTORY

- 1879 Ground is broken by John K. Wright and A. H. Bartell on the corner of Sixth and Washington Streets for the construction of a new hotel. E. T. Carr, architect, is contracted for the design.
- 1880 Gala grand opening is held in the hotel.
- 1890 Wright and Bartell sell the hotel to H. C. Lawrence.
- 1902 Lawrence sells the hotel to Adolphus Busch.
- 1907 Busch sells the hotel to James U. Grant.
- 1908 Grant sells the hotel to Fred I. Boone and Ellis T. Poland.
- 1914 Boone and Poland sell the hotel to Frank D. and Clara M. Coryell.
- 1939 Coryell sells the hotel to Amelia Harshbarger.
- 1944 Harshbarger sells the hotel to Mary E. Johnson and Thomas E. Rodgers.
- 1948 Rodgers and Johnson sell the hotel to Lloyd.
- 1948 Lloyd sells the hotel to Bartell House, Inc., A. W. Stedham, President. C. W. Lamer later president.
- 1970 Lamer (Bartell House, Inc.) sells hotel to Washington House, Inc., Wayne Lodwig, President.
- 1976 Washington House, Inc. sells the hotel to First National Bank of Junction City.
- 1979 First National Bank sells the hotel to Roy Fausnet and Ed Berney.

APPENDIX B

JUNCTION CITY MARKET ANALYSIS

Introduction

A market study is a method which is used to determine potential uses of a property. Such an analysis is particularly important in smaller communities where the market is limited or income level is not sufficiently high to support high rental rates.

Commonly, a market study begins by interviews conducted with local real estate personnel, contractors, local business organizations, and public planning officials. Information such as rental rates, present housing needs, and business needs may be obtained from these sources in order to identify local characteristics which will help marketability. Local socio-economic and demographic characteristics are researched next, for information regarding future population trends, income levels and employment forecasts. Using the gathered information, potential market uses are found. Further analysis commonly includes a detailed investigation of specific markets, for each use alternative, and an evaluation of competition and market saturation. Such an analysis of existing competition should provide insight into the successes of existing businesses in fulfilling demands, thereby indicating a potential market for new businesses. Finally, the locational factors are analyzed to determine the marketability of the reuse at the proposed site. All of this information is then assembled and assessed in order to provide the owner with recommendations and guidelines for the reuse.

For the Bartell House, time did not permit a comprehensive market study. Local realtors, the Economic Development Administration, contractors, and community officials were consulted. The information sup-

plied, regarding present demands and rental rates were very inconsistent. Discrepancies were found with the data supplied from the various individuals. The conclusion was reached that no comprehensive market evaluation had been conducted in the past.

The Chamber of Commerce was consulted next. Again, further discrepancies were uncovered. However, a retail market study completed in 1977 was obtained from this organization.

The retail information indicated that a market exists for a commercial reuse, while information gathered from realtors and contractors indicated that a need existed for housing, offices and for a top quality restaurant. These uses would be further analyzed in the economic feasibility study.

Location Analysis

Junction City is the County Seat of Geary County, Kansas. Its market of retail sales extends into five counties including: Geary, Riley, Clay, Morris, and Dickinson. Yet, the primary market consists of Geary County and Fort Riley.

Junction City has witnessed a continuous, yet slow population growth:

1960 - 18,700
1970 - 19,081
1979 - 19,421 (est. 0.2% per annum)
1985 - 19,654 (est. 0.2% per annum)

It cannot be overemphasized, that this retail area is disproportionally tied to the vitality of nearby Fort Riley, since approximately, fifty percent of the population of Junction City consists of military personnel and their families. If a stable Fort population is assumed, and is projected for the next five years, the following forecasts may be made:

1. Population and household growth in Geary County is not expected to be dramatic without substantial changes in employment and housing opportunities.
2. Existing industry is not anticipated to generate significant population growth over the next five years. Expected job growth could now be handled from existing workforce groups.
3. Household growth that does occur will be the result of internal formations with little net in-migration occurring.
4. Personal income and price of goods sold will naturally increase over the planning period (1975-1985) in direct proportion to the rate of inflation. Therefore, future indicators point to an increasing total retail sales figure however actual consumer goods and services sold will increase at a rate consistent to household growth estimates.

Central Business District

Junction City, as are many other communities, is faced with a declining central business district (CBD). Many businesses have been forced to close their doors to customers, because of a failure to compete with rivaling retailers in the new shopping malls, located on the community's periphery.

This has resulted in a large number of vacant buildings in this core area--including the Bartell House. The hotel, though not faced with competition from the malls, is competing with peripheral motels which offer greater services and larger accommodations as well as being located closer to I-70, the major access route to Junction City.

By preserving its past, increasing public amenities, upgrading the deteriorating physical condition, emphasizing the existing character, and its natural assets such as the city park and court house square, and improving retail competition, Junction City may begin to regain some of the past appeal of the CBD.

The attempt will be made to survey the possibilities of improving the condition of the Bartell House. The economics for its retention and adaptive reuse will be studied, so as to allow a historic structure to remain as a functioning organism, instead of a museum-like relic.

Assuming that the Bartell House reuse proves successful, this concept may be adopted by other property owners. This, coupled by city support, would result in possible spiraling CBD improvement, with increased attractiveness to consumers.

CBD Development

Assumptions:

1. Stability of Fort Riley

2. Population growth at the predicted level
3. Demand growth for 267,860 square feet of retail space in Geary County

Source: Junction City Chamber of Commerce.

TABLE 1
MAJOR BUSINESS ELEMENTS--JUNCTION CITY (1975)

Number of Employees	Name of Business	Sales Area (SqFt)	Weekly Volume (\$)	Yearly Volume (\$)
Groceries				
70	Dillons, 618 W. 6th	23,000	100,000	5,200,000
27	Safeway, 6th & Adams	15,500	55,000	2,860,000
30	Falley's, 353 Grant	18,000	53,000	2,756,000
<u>20</u>	Arensbergs IGA, 1016 W. 6th	<u>15,000</u>	<u>29,000</u>	<u>1,508,000</u>
147	Total	71,500	237,000	12,324,000
Drugs				
18	Smiths Rexall, 614 W. 6th	5,000	9,600	499,200
Department Stores				
120	Montgomery Wards, 1010 W.6th	35,000	58,000	3,016,000
18	J. C. Penney, 619 N. Washington	13,500	14,500	754,000
16	Sears Catalog Store, 308 W. 6th	<u>6,000</u>	<u>14,500</u>	<u>754,000</u>
154	Total	54,500	96,600	4,524,000
Variety Store				
12	Woolworth's, 705 N. Washington	13,000	7,700	400,400
Discount Stores				
78	Gibson's, 353 Grant	33,000	72,000	3,744,000
57	Wal-Mart, 1025 S. Washington	49,000	53,000	2,756,000
<u>36</u>	Alco, 920 W. 6th	<u>25,600</u>	<u>25,600</u>	<u>1,331,200</u>
171	Total	107,600	150,600	7,831,200
Hardware				
12	Water's, 756 N. Washington	12,000	10,500	546,000
Furniture				
12	Johnson Bros., 321 Grand	34,629	24,000	1,248,000
Clothing				
11	Long's, 600 W. 6th	4,700	9,600	499,200
5	Ashley's	7,000	5,700	296,400
<u>3</u>	Deb's, N. Washington	<u>2,750</u>	<u>NA</u>	<u>NA</u>
19	Total	14,450	15,300	795,600

TABLE 1--Continued

Number of Employees	Name of Business	Sales Area (SqFt)	Weekly Volume (\$)	Yearly Volume (\$)
<u>Automotive</u>				
5	Firestone, 128 W. 8th	3,000	4,800	243,600
<u>9</u>	Goodyear, 900 W. 6th	<u>6,000</u>	<u>8,000</u>	<u>416,000</u>
14	Total	9,000	12,800	665,600

Note: These figures are based on earlier study and are used to demonstrate the range of goods and sale volume in Junction City.

Source: Junction City Chamber of Commerce.

TABLE 2
1958 ESTIMATED RETAIL SALES AND SQUARE FOOTAGE REQUIREMENTS
GEARY COUNTY

Expenditure Category	Dollar Amount	Estimated Sales/Sq.Ft.	Estimated Required		Percent Change
			Total Sq.Ft.	New Sq.Ft.	
Food	23,584	275	85,760	18,360	+ 21
General Merchan- dise	39,725	200	397,250	82,250	+ 21
Furniture and Ap- pliances	11,274	75	151,666	30,750	+ 20
Automotive	33,425	NA	NA	NA	NA
Drug	2,100	115	18,260	4,000	+ 22
Other Retail	<u>64,925</u>	<u>100</u>	<u>649,250</u>	<u>132,500</u>	+ 20
Total	175,134	765 ^a	1,302,186 ^a	267,860 ^a	

^aTotal, but note that automotive is not included.

Source: Estimate Ard-Johnson Associates.

APPENDIX C
ECONOMIC FEASIBILITY STUDY

An economic feasibility study is a very integral part of an adaptive use project. The purpose of such an analysis is to determine the desirability of the economic investment. An adaptive use project may be targeted in one of two directions for the economic feasibility study. The project may either be sought as a means of economic profit or as a tax shelter-type investment, or both. The economic feasibility study is undertaken to determine whether or not the desired goals might successfully be achieved.

To be of greatest use to the investor, an economic feasibility study should be compiled early in the planning of a project. This should precede all design work. Time is critical to the feasibility study. The sooner it is completed, the more flexibility exists for modifications in the project in order to maximize profits.

The economic feasibility study for the Bartell House was begun after data on the building's existing conditions, its history, and its alterations had been gathered. Market information had been gathered from the Chamber of Commerce, realtors and local business people to determine the reuse potential of the building. All individuals concurred that possibilities existed for retail space, offices, elderly housing, apartments, child care facilities, and eating establishments. However, most of this information was subjective, and could not be documented. An elaborate market study would have been very time consuming, and could not have been adequately covered in the thesis period. These possible uses were discussed with the owner and were separated into the following three adaptive use schemes:

Study A. Retail space, restaurant, office space.

Study B. Elderly housing, elderly day care, children's day care, restaurant.

Study C. Apartments, recreation facility, restaurant.

Three separate economic feasibility studies were completed to compare the return on each of these reuse alternatives. The goal of this analysis was to determine which scheme would yield the greatest profit to the developer.

To begin any feasibility study, the construction cost of the project is calculated. This cost is the expense of actual building. In a reuse project, such as the Bartell House, these costs are very difficult. Many unknowns exist in a project of this type, which cannot be determined until construction actually begins. Unknowns, such as hidden structural and mechanical problems greatly increase the chance for cost overruns. In order to minimize this, two approaches may be followed. Similar projects may be analyzed in order to determine possible square foot costs; or building cost guides may be used to find average square foot costs per use. In this study, Means Building Cost Data 1980 was consulted. Square foot costs were found for each use: retail, restaurant, office, elderly housing, elderly day care, children's day care, apartment, and recreation space. Conservative figures were used, in order to protect the investment, and create a margin of safety in the feasibility study.

General Use Cost Per Square Foot

The square footage of space to be allocated for each selected use must next be determined. Such data can normally be obtained from the market study from the investors, who might have preconceived notions of what the reuse scheme should be like; from local developers or realtors, or from building cost guides.

For the Bartell House, Means Building Cost Data 1980 was consulted for the common square foot parameters for each use. The total building size was calculated as was the size of each floor. Space planning texts such as Time Saver Standards were then consulted to determine the required relationships of the spaces. Compiling this data, space was assigned to each use.

Use Square Footage Calculations

The costs per square foot by use were multiplied by the square feet assigned per use to find the cost per use (general $\$/\text{SF}/\text{Use}$) \times (Use SF) = $\$/\text{Use}$. The costs for the uses for each feasibility study were summed together to find the construction costs:

$$\$/\text{Use (1)} + \$/\text{Use (2)} + \$/\text{Use (3)} = \text{Construction } \$$$

The total capital cost was calculated next. This is the total project cost including: construction costs, acquisition costs, financing charges, and carrying charges including: insurance, taxes, fees, and rent-up costs. Data needed for this calculation may be either actual (accrued) or forecasted limits determined by the investors.

For this feasibility study, the acquisition cost, taxes, and insurance charges were those actually accrued by the owner. Interim financing charges were determined from discussion with the owner on acceptable and potential rates. Based on information supplied by the owner, the equity was assumed to be twenty percent and loan, 80 percent. Construction financing was assumed to be three years. This was determined by comparing the construction time required for similar projects. The total cost of the interim financing is then calculated using the Uniform Capital Recovery Method:

$$\frac{\text{Interest \%} \times \text{Loan \$} \times \text{Years of Financing}}{\text{Interim Financing \$}} = \text{Loan \$} =$$

Architectural and engineering fees were calculated using formulae provided in Means Building Cost Data 1980. Legal and accounting fees were obtained by averaging published cost information of other rehabilitation projects.

$$\text{Acquisition \$} + \text{Construction \$} + \text{Carrying \$} + \text{Interim Finance \$} = \text{Capital \$}$$

The total project cost was calculated. The value was assumed to be the sum of the acquisition, construction, and carrying costs.

$$\text{Project \$} = \text{Acquisition \$} + \text{Construction \$} + \text{Carrying \$} = \text{Value}$$

This total project is then financed over an extended period of time.

A lending institution will loan money as a percentage of the economic value. The economic value is the net income capitalized or the net income divided by the capitalization rate. The capitalization rate is the sum of the expected interest and the loaned money. The greater the risk involved with the project, the higher the capitalization rate. Therefore, a capitalization rate will vary with lenders.

This information was found in the case of the Bartell House from actual amounts secured by the owner. A thirty year loan at ten percent interest was obtained. This included an eighty percent loan and twenty percent equity. A debt service, or annual cost of financing was calculated. This may be found by using either mortgage tables or the Recovery Method as described in Life Cycle Cost Analysis: A Guide for Architects. In this study the Uniform Capital Recovery Method was applied.

$$\text{U.C.R.} \times \text{Loan \$} = \text{Debt Service}$$

Marketable rental rates for the proposed reuses were calculated. This information may be obtained from knowledgeable individuals such as realtors, developers, and the local Chamber of Commerce. Published information on

current market rental rates were unavailable, and the rental rates used for this study were obtained from several developers and realtors. The rate per square foot rental is multiplied by the number of square feet allocated for the use in order to determine the income for the use. Summed together the use combinations yield the total gross income to be produced. The total expenses are subtracted from the income to produce the net income.

$$\text{Rental } \$/\text{SF} \times \text{SF}/\text{Use} = \text{Income } \$/\text{Use}$$

$$\text{Income } \$/\text{Use } 1 + \text{Income } \$/\text{Use } 2 + \text{Income } \$/\text{Use } 3 = \text{Total Income}$$

A vacancy rate for the property must be assumed to reduce the possibilities of cost overruns or income shortage. This information may be obtained from realtors, property managers, or published data. In the case of Bartell House, the vacancy rate was obtained from published reuse studies. Although this is far from being a conservative value, it is based on the assumption that the need for rental space would continue, and that the military would remain strong at Fort Riley.

Most developers, in order to venture into a reuse project will require a certain return on their investment (ROI). This is often two or three percent above their interest rate. The actual ROI for each economic feasibility study is found by dividing the net income by the equity.

$$\text{Net Income } \$ \div \text{equity } \$ = \text{ROI } \%$$

For this study, the required ROI was assumed at 12 percent. If the actual ROI obtained is below this value, various approaches may be followed in order to make the project economically feasible. Such approaches include: the use of grants (such as The Department of Interior Matching Grant-in-Aid Program, The Department of Housing and Urban Development grants, Community Development Block grants, and those of private foundations), the use of

easements (whereby a portion of the building may be gifted to a non-profit organization), the use of benefits as defined by the Tax Reform Act of 1976. Since grant funding could not be guaranteed, and the risk factor was too high to assume such funding availability, this study applied the Tax Reform Act incentives.

Conditions exist which limit the properties that qualify for these incentives. To qualify, a building must: be on the National Register of Historic Places, or be in and contributing to, an historic district, be income producing, and have all work completed in accordance with The Secretary of The Interior's Standards for Historic Preservation Projects. These standards are as follows:

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purposes.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on

accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

The tax incentives may improve the feasibility of a project by providing a much larger amount of up-front money by means of accelerated depreciation. In applying this incentive, one may use either a 200%, 150% or 125% declining balance or a five year/sixty month accelerated. The selection is up to the individual conducting the study, and may be switched during the project life span to another more profitable approach.

Building Acquisition--July 1979

Assume building construction commences July 1981.

Assume building construction is completed July 1982.

Study A

Use combinations: retail space, office space, restaurant

Capital Cost

Acquisition

Data obtained from owner \$150,000

Construction Costs (Est.)

Retail Space (first and portion of second floor)

40,000SF x \$23.95/SF = \$958,000
 Square footage cost was
 obtained from Means Build-
 ing Cost Data 1980. Square
 footage calculated from
 existing plans.

Restaurant (second floor)

16,000SF x \$48.60/SF = \$777,600
 Square footage cost was
 obtained from Means Build-
 ing Cost Data 1980. Square
 footage calculated from
 existing plans.

Office Space (third floor)

26,000SF x \$40.85/SF = \$1,062,100
 Square footage cost was
 obtained from Means Build-
 ing Cost Data 1980. Square
 footage calculated from
 existing plans.

Subtotal \$2,797,700

Subtotal x Topeka in-
 dex .939

Total \$2,627,040

Fees/Taxes/Insurance (Est.)

Architectural Fee

.091 x construction cost
 .091 x \$2,627,040 = \$239,061
 Index was obtained from
Means Building Cost Data
 1980.

Structural Engineering Fee

.0123 x construction cost
 .0123 x \$2,627,040 = \$32,313
 Index was obtained from
Means Building Cost Data
 1980.

Mechanical and Electrical Engineering Fee	.047 x construction cost .047 x \$2,627,040 = Index was obtained from <u>Means Building Cost Data</u> <u>1980.</u>	\$ 123,471
Taxes	Tax P.A. x Life of interim financing, \$6,000 x 3 yrs Tax amount obtained from owner. Life interim financ- ing was assumed to be 3 yrs.	\$ 18,000
Insurance	Insurance cost (P.A.) x Life of Interim Financing \$3,000 x 3 years =	\$ 9,000
Legal and Accounting (Est.)	Amount based on cost in- curred with similar projects	\$ 5,000
	Total	<u>\$426,845</u>
Total Amount Needed	Construction Cost + Fees/ Taxes/Insurance \$2,627,040 + \$426,845	\$3,053,885
Assume: 80% Loan	.80 x \$3,053,885 =	\$2,443,108
20% Equity	.20 x \$3,053,885 =	\$ 610,777
Life of Interim Financing: 3 years		
Interest = 11%		
Total Cost of Interim Financing = Carrying Cost	Mortgage Constant (uniform capital recovery) x Loan Amount .409 x \$2,443,108 = The mortgage constant was obtained from <u>Life</u> <u>Cycle Cost Analysis. A</u> <u>Guide for Architects,</u> <u>American Institute of</u> <u>Architects</u>	\$ 999,231
Project Cost: (cost = value)	Acquisition Construction loan Carrying cost Equity	\$ 150,000 \$2,443,108 \$ 999,231 <u>\$ 610,773</u>
	Project Cost	\$4,203,116

Debt Service

Assume: 80% loan $.80 \times \$4,203,116 =$ \$3,362,493
 20% equity $.20 \times \$4,203,116 =$ \$ 840,623
 Life of permanent financing = 25 years
 Mortgage Constant (uniform capital recovery)
 x Permanent Loan = Debt Service
 $.1102 \times \$3,362,493 =$ \$ 370,547 (P.A.)
 Mortgage constant (uniform capital recovery)
 was obtained from Life Cycle Cost Analysis.
A Guide for Architects, American Institute of
 Architects.

Operating Expenses (P.A.)

Sinking Fund (1% of Project cost)
 $.01 \times \$4,203,116 =$ \$ 42,031
 Utilities (est.) \$ 8,000
 Estimate was obtained from data of published re-
 habilitation projects.
 Insurance: $.02 \times$ value =
 $.02 \times \$4,203,116 =$ \$ 84,062
 Taxes (est.) $.04 \times$ value
 $.04 \times \$4,203,116$ \$ 168,125
 Trash (est.) \$ 8,000
 Estimate was obtained from data of published
 rehabilitation projects.
 Total (P.A.) \$310,218

Total Expenses (P.A.)

Debt Service + Operating Expense
 \$370,547 + \$310,218 = \$680,765

Income (P.A.)

Retail $40,000\text{S.F.} \times \$8.25/\text{S.F.} =$ \$ 330,000
 Rental rate per square foot was the
 assumed competitive amount on a one
 year basis
 Restaurant $16,000\text{S.F.} \times \$8.25/\text{S.F.}$ \$ 132,000
 Office $26,000\text{S.F.} \times \$7.75/\text{S.F.}$ \$ 201,500
 Subtotal \$ 663,500

Gross Income Less Vacancy

Assumed vacancy 5% for retail and
office space

$\$663,500 - .05(\$330,000 + \$201,500)$ \$ 636,925

Net Income Less Expenses

$\$639,925 - \$680,765 =$ \$ -43,840

This project does not yield a profit as proposed, therefore incentives created under the Tax Reform Act of 1976, as amended will be applied.

Tax Calculations

Assumptions

1. The building is a commercial structure over 20 years old, therefore, one may use either 200%, 150% or 125% declining balance method or accelerated depreciation.
2. The tax savings applied to net income for the next year--\$69,000 profit (10% return on equity) is taken for corporation dividends.
3. The write-off amount = Project Value-Acquisition
 $\$4,203,116 - \$150,000 =$ \$ 4,053,116
4. The write-off period = 25 years
 (life of permanent loan)
5. The return on investment will be
 (R.O.I.) 12% \$ 100,875

Straight-Line Depreciation

Amount of annual depreciation
 $\$4,053,116 \div 25 \text{ years} =$ \$ 162,125 (PA)

200% Declining Balance

$2 \times \$162,125 =$ \$ 324,250 (Year 1)

Year	Amount Depreciated	Cumulative Depreciation	Net Income	12% ROI	Profit Applied to Next Year
1	\$ 324,250	\$ 324,250	\$ -43,840	\$ 100,875	\$ 179,535
2	\$ 298,303	\$ 622,559	\$ -43,840	\$ 100,875	\$ 333,123
3	\$ 274,446	\$ 897,005	\$ -43,840	\$ 100,875	\$ 462,854
4	\$ 252,489	\$1,149,494	\$ -43,840	\$ 100,875	\$ 570,628
5	\$ 232,290	\$1,381,784	\$ -43,840	\$ 100,875	\$ 658,203
6	\$ 213,707	\$1,595,491	\$ -43,840	\$ 100,875	\$ 727,195
7	\$ 196,610	\$1,792,101	\$ -43,840	\$ 100,875	\$ 779,090
8	\$ 180,881	\$1,972,982	\$ -43,840	\$ 100,875	\$ 815,256
9	\$ 166,411	\$2,139,393	\$ -43,840	\$ 100,875	\$ 836,952
Switch to Straight Line					
10	\$ 162,125	\$2,301,518	\$ -43,840	\$ 100,875	\$ 854,362
11	\$162,125	\$2,463,643	\$ -43,840	\$ 100,875	\$ 871,772
12	\$162,125	\$2,625,768	\$ -43,840	\$ 100,875	\$ 889,182
13	\$162,125	\$2,787,893	\$ -43,840	\$ 100,875	\$ 906,592
14	\$162,125	\$2,950,018	\$ -43,840	\$ 100,875	\$ 924,002
15	\$162,125	\$3,112,143	\$ -43,840	\$ 100,875	\$ 941,412
16	\$162,125	\$3,274,246	\$ -43,840	\$ 100,875	\$ 958,822
17	\$162,125	\$3,436,393	\$ -43,840	\$ 100,875	\$ 960,532
18	\$162,125	\$3,598,518	\$ -43,840	\$ 100,875	\$ 977,942
19	\$162,125	\$3,760,643	\$ -43,840	\$ 100,875	\$ 995,352
20	\$162,125	\$3,922,768	\$ -43,840	\$ 100,875	\$1,012,762
21	\$130,348	\$4,053,116	\$ -43,840	\$ 100,875	\$ 998,395
22	0	\$4,053,116	\$ -43,840	\$ 100,875	\$ 853,680
23	0	\$4,053,116	\$ -43,840	\$ 100,875	\$ 708,965
24	0	\$4,053,116	\$ -43,840	\$ 100,875	\$ 564,250
25	0	\$4,053,116	\$ -43,840	\$ 100,875	\$ 419,535

Study B

Use combination: elderly housing, elderly daycare, children's daycare, restaurant

Capital Cost

Acquisition \$ 150,000

Construction Cost

Elderly Housing (second and third floors)

52,000S.F. x \$40.95/S.F. = \$ 2,129,400

Square footage costs were obtained from Means Building Cost Data 1980. Square footage calculated from existing floor plans.

Elderly Daycare (first floor)

26,000S.F. x \$44.50/S.F. = \$ 1,157,000

Square footage costs were obtained from Means Building Cost Data 1980. Square footage calculated from existing floor plans.

Children's Daycare (first floor)

4,000S.F. x \$39.05 = \$ 156,200

Square footage costs were obtained from Means Building Cost Data 1980. Square footage calculated from existing floor plans.

Subtotal \$3,442,600

Subtotal x Topeka Index (.939)

Total \$3,232,601

Fees/Taxes/Insurance (Est.)

Architectural Fee

.091 x construction cost
.091 x \$3,232,601 = \$ 294,167
Index was obtained from Means Building Cost Data 1980.

Structural Engineering Fee

.0123 x construction cost
.0123 x \$3,232,601 = \$ 39,761
Index was obtained from Means Building Cost Data 1980.

Mechanical and Electrical Engineering Fee

.047 x construction cost
 .047 x \$3,232,601 = \$ 151,932
 Index was obtained from
Means Building Cost Data
1980.

Taxes

Tax (P.A.) x Life of In-
 terim Financing
 \$6,000 x 3 years \$ 18,000
 Tax P.A. was obtained from
 owner. Life of interim
 financing was assumed to be
 3 years.

Insurance

Insurance (P.A.) x Life of
 Interim Financing
 \$3,000 x 3 years = \$ 9,000
 Insurance (P.A.) was obtained
 from owner. Life of interim
 financing was assumed to be 3
 years.

Legal & Accounting Fees (est.) \$ 5,000
 Amount was obtained from cost
 incurred with similar pro-
 jects.

Total \$ 517,860

Total Amount Needed

Construction cost + Fees/
 Taxes/Insurance
 \$3,232,601 + \$517,860 = \$3,750,461

Assume: 80% loan .80 x \$3,750,461 = \$3,000,369
 20% equity .20 x \$3,750,461 = \$ 750,092
 Life of Interim Financing = 3 years
 Interest = 11%

Total Cost of Interim Financing = Carrying Cost

Mortgage Constant (uniform
 amount of capital recovery)
 x Loan
 .409 x \$3,000,369 = \$1,227,151
 Mortgage constant was ob-
 tained from Life Cycle
Cost Analysis. A Guide
for Architects, American
Institute of Architects.

Project Cost: (cost = value)

Acquisition	\$ 150,000
Construction Loan	\$3,000,369
Carrying Cost	\$1,227,151
Equity	\$ 750,092
	<hr/>
	\$5,127,612

Debt Service

Assume: 80% loan .80 x \$5,127,612 =	\$4,102,090
20% equity .20 x \$5,127,612 =	\$1,025,522
Life of permanent financing = 25 years	
Interest = 10%	
Mortgage Constant (uniform capital recovery)	
x Loan Amount = Debt Service	
.1102 x \$4,102,090 =	\$ 452,050
Mortgage constant (uniform capital recovery)	
was obtained from <u>Life Cycle Cost Analysis.</u>	
<u>A Guide for Architects, American Institute</u>	
<u>of Architects.</u>	

Operating Expenses (P.A.)

Sinking Fund (1% of Project cost)	
.01 x \$5,127,612 =	\$ 51,276
Obtained from published data of rehabilitation projects.	
Utilities (est.)	\$ 8,000
Estimate obtained from averages of published data of rehabilitation projects.	
Insurance (est)	
.02 x value =	
.02 x \$5,127,612 =	\$ 102,552
Index was calculated from insurance paid by owner.	
Taxes (est.)	
.04 x value =	
.04 x \$5,127,612 =	\$ 205,104
Index was calculated from taxes paid by owner.	
Trash (est.)	
Estimate was obtained from published rehabilitation projects.	\$ 8,000
	<hr/>
	\$ 374,932

Total Expenses (P.A.)

Debt service + Operating Cost	
\$452,050 + \$374,932 =	\$ 826,982

Income (P.A.)

Elderly Housing	
52,000S.F. x \$4.50S.F. =	\$ 234,000
Rental rate per square foot was the assumed competitive amount on a one year basis.	

Elderly Daycare
 $26,000\text{S.F.} \times \$7.50\text{S.F.} =$ \$ 195,000
 Rental rate per square foot was the assumed competitive amount on a one year basis.

Children's Daycare
 $4,000\text{S.F.} \times \$7.50\text{S.F.} =$ \$ 30,000
 Subtotal \$ 459,000

Gross Income Less Vacancy
 Assumed 5% vacancy only on elderly housing. It is assumed that both the elderly and children's daycare will rent as total units.
 $\$459,000 - .05 \times \$235,000 =$ \$ 447,300

Net Income Less Expenses
 $\$447,300 - \$826,982 =$ \$ -379,682

Tax Calculations

Assumptions

1. The building is a commercial structure over 20 years old, therefore, one may use either 200%, 150% or 125% declining balance method or accelerated depreciation.
2. The tax savings applied to net income for the next year--\$69,000 profit (10% return on equity) is taken for corporation dividends.
3. The write-off amount = project value - acquisition
 $\$5,127,612 - \$150,000 =$ \$4,977,612
4. The write-off period = 25 years
5. The return on investment (R.O.I.) will be 12%
 \$ 123,063

Straight-Line Depreciation

Amount of annual depreciation
 $\$5,127,612 \div 25 \text{ years} =$ \$ 205,104 (P.A.)

200% Declining Balance

$2 \times \$162,125 =$ \$ 410,209 (Year 1)

Year	Amount Depreciated	Cumulative Depreciation	Net Income	12% ROI	Profit Applied to Next Year
1	\$ 410,209	\$ 410,209	\$ -379,682	\$ 123,063	\$ -925,361
2	\$ 377,392	\$ 787,601			\$ -217,889
3	\$ 347,201	\$ 1,134,802			\$ -373,433
4	\$ 319,425	\$ 1,454,227			\$ -556,753
5	\$ 293,871	\$ 1,748,098			\$ -765,627

Study C

Use combination: apartments, recreation facility, restaurant

Capital Cost

Acquisition \$ 150,000

Construction Cost

Apartments (second and third floors)

52,000 S.F. x \$24.90/S.F. = \$1,294,000
 Square footage cost was obtained from Means Building Cost Data 1980. Square footage calculated from existing floor plans.

Recreation Facility (first floor)

14,000 S.F. x \$38.30/S.F. = \$ 536,200
 Square footage cost was obtained from Means Building Cost Data 1980. Square footage calculated from existing floor plans.

Restaurant (first floor)

12,000 S.F. x \$48.60/S.F. = \$ 583,200
 Square footage cost was obtained from Means Building Cost Data 1980. Square footage calculated from exist-

	Subtotal	\$2,564,200
	Subtotal x Topeka Index (.939)	
	Total	\$2,407,784
Fees/Taxes/Insurance (est.)		
Architectural Fee	.091 x Construction Cost .091 x \$2,407,784 = Index was obtained from <u>Means Building Cost Data</u> <u>1980.</u>	\$ 219,108
Structural Engineering Fee	.0123 x Construction Cost .0123 x \$2,407,784 = Index was obtained from <u>Means Building Cost Data</u> <u>1980.</u>	\$ 29,616
Mechanical and Electrical Engineering Fee	.047 x Construction Cost .047 x \$2,407,784 =	\$ 113,165
Taxes		
	Tax (P.A.) x Life of In- terim Financing \$6,000 x 3 years Tax (P.A.) was obtained from owner. Life of interim financing was assumed to be 3 years.	\$ 18,000
Insurance		
	Insurance (P.A.) x Life of Interim Financing \$3,000 x 3 years = Insurance (P.A.) was ob- tained from owner. Life of interim financing was as- sumed to be 3 years.	\$ 9,000
Legal and Accounting Fees (est.)		\$ 5,000
	Amount was obtained from published data of rehabilita- tion projects.	
	Total	\$ 393,890

Total Amount Needed

Construction Cost + Fees/ Taxes/Insurance	
\$2,407,784 + \$393,890	\$2,801,674

Total Cost of Interim Financing = Carrying Cost

Assume: 80% loan = .80 x \$2,801,674 =	\$ 2,241,339
20% equity = .20 x \$2,801,674	\$ 560,335
Life of interim financing = 3 years	
Interest = 11%	

Mortgage Constant (uniform amount of capital recovery)
x Loan
.409 x \$2,241,339 = \$ 916,708
Mortgage Constant was obtained from Life Cycle Cost Analysis. A Guide for Architects, American Institute of Architects.

Project Cost (cost = value)

Acquisition	\$ 150,000
Construction Loan	\$2,241,339
Carrying Cost	\$ 916,708
Equity	\$ 560,335
Total	\$3,868,382

Debt Service

Assume: 80% loan = .80 x \$3,868,382	\$3,094,706
20% equity = .20 x \$3,868,382	\$ 773,676
Life of Permanent Financing = 25 years	
Interest = 10%	
Mortgage Constant (uniform capital recovery) x Loan Amount = Debt Service (P.A.)	
.1102 x \$3,094,706 =	\$ 341,037
Mortgage Constant (uniform capital recovery) was obtained from <u>Life Cycle Cost Analysis. A Guide for Architects</u> , American Institute of Architects.	

Operating Expenses (P.A.)

Sinking Fund (1% of project cost)	
.01 x \$3,868,382 =	\$ 38,684
Obtained from published data of rehabilitation projects.	
Utilities (est.)	\$ 8,000
Estimate obtained from published data of rehabilitation projects.	

Insurance (est.)		
.02 x Value		
.02 x \$3,868,382 =		\$ 77,368
Index was calculated from insurance paid by owner.		
Taxes (est.)		
.04 x Value		
.04 x \$3,868,382 =		\$ 154,735
Index calculated from taxes paid by owner.		
Trash (est.)		\$ 8,000
Estimate was obtained from data of published rehabilitation projects		
Total (P.A.)		<u>\$ 286,787</u>
Total Expenses (P.A.)		
Debt Service + Operating Cost		
\$341,037 + \$286,787 =		\$ 627,824
Income (P.A.)		
Apartments	52,000S.F. x \$4.50/S.F. Rental rate per square foot was the assumed competitive amount on a one year basis.	\$ 234,000
Recreation Facility	13,000S.F. x \$7.85/S.F. Rental rate per square foot was the assumed competitive amount on a one year basis.	\$ 109,900
Restaurant	16,000 S.F. x \$7.85/S.F. Rental rate per square foot was the assumed competitive amount on a one year basis.	\$ 125,600
Total		<u>\$ 469,500</u>
Gross Income Less Vacancy		
5% vacancy was calculated for apartment units only. It was assumed that the restaurant and recreation facility will each rent as total units		
\$469,500 - .05 x \$234,000 =		\$ 457,800
Net Income Less Expenses		
\$457,800 - \$627,824 =		\$ -170,024

Tax Calculations:

Assumptions

1. The building is a commercial structure over 20 years old, therefore, one may use either 200%, 150% or 125% declining balance method or accelerated depreciation.
2. The tax savings applied to net income for the next year--\$69,000 profit (10% return on equity) is taken for corporation dividends.
3. The write-off amount = Project Value - Acquisition
 $\$3,886,183 - \$150,000 = \$3,736,183$
4. The write-off period = 25 years (life of permanent financing)
5. The return on investment (R.O.I.) = 12% \$ 92,841

Straight-Line Depreciation

Amount of annual depreciation
 $\$3,736,183 \div 25 \text{ years} = \$ 149,447 \text{ (P.A.)}$

200% Declining Balance
 $2 \times \$148,735 = \$ 298,894 \text{ (Year 1)}$

Year	Amount Depreciated	Cumulative Depreciation	Net Income	12% ROI	Profit Applied to Next Year
1	\$298,894	\$ 298,894	\$-170,024	\$92,841	\$36,029
2	\$274,983	\$ 573,877	\$-170,024	\$92,841	\$48,147
3	\$252,984	\$ 826,861	\$ 170,024	\$92,841	\$38,266
4	\$232,746	\$1,059,607	\$ 170,024	\$92,841	\$ 8,147
5	\$214,126	\$1,273,733	\$ 170,024	\$92,841	\$-40,592

Analysis and Conclusions

Of the three cases analyzed, only use Combination A: retail space, floor one and two, office space, floor three, and restaurant in the basement showed a profit before any tax depreciation is calculated. Only use Combination A continued to net an income after the application of tax depreciation calculations for the life of mortgage.

Based on the market study, and the economic feasibility study, the selected use for the hotel was "A". The programming and design phase of this thesis was therefore accordingly developed.

In order to make use Combinations B and C work, grant funding might be considered including: Department of Interior HCRS matching grants program.

This type of funding may make the initial development of the project feasible while a lower interest on debt, and higher rental rates would provide a greater possibility for annual profits.

Construction Costs

Upon completion of the preliminary design phase the costs of construction are calculated in order to determine whether or not the actual costs are below the projections. If the actual costs surpass those projected, the design should be revised and adjusted until the costs are below those calculated in the earlier study.

The total amount of each material for the design proposal is calculated. Using building cost guides, a unit price is found for the item. This price, in order to be accurate, should include both contractors overhead and profit. The total amount of material is multiplied by the unit price to provide the total cost for the item.

Amount of Material x \$/Unit = Total \$ for the Item

These costs are added together to find the total cost for the project proposal. In order to adjust this cost to the particular area, a locational index is used. The sources for the index again are building cost guides. The index value is multiplied by the total cost for construction to find an accurate estimate for the design.

Item	\$/Unit x Amount	Total Dollars
1. Demolition--Exterior Walls		
Masonry Wall	\$ 2.20/CF x 35,688 CF	\$ 78,514
Disposal	4.42/CY x 3,965CY	17,525
Dump Charge	16.00/Ton x 5 Ton	80
	Subtotal	\$ 96,119
--Interior		
Ceilings	\$.42L/SF x 46,000SF	\$ 19,320
Doors Frames	7.50L/Ea. x 85 doors	1,760
Linoleum Flooring	.210/SF x 307,000SF	6,497
Carpet	.15L/SF x 61,300SF	9,195
Framing/Wood Studs	.15L/LF x 3,000LF	450
Paneling	.30L/SF x 8,000SF	2,400
Baseboard	.25L/LF x 4,600	1,150
Piping:		
Horizontal	4.14L/LF x 2,100	2,898
Vertical	1.38L/LF x 1,450	6,000
Drywell	.15L/SF x 16,000	2,400
Toilet Partitions	30.0L/EA. x 5	150
Windows	9.35/EA x 27	252
Rubbish: Handling		
Chute	26.00/LF x 96LF	2,496
Debris Box	145/Day x 5 Days	925
Dust Parti- tion	.33/SF x 5,000SF	1,650
Load, Haul and Dump	.57/CF x 5,000CF	2,850
Load & Truck	14.80/CY x 550CY	8,140
	Subtotal	\$ 68,283
2. Masonry Restoration		
Cut and Patch Brick		
Masonry	\$ 6.25/SF x 6,000SF	\$ 37,500
Limestone Replacement	50.00/CF x 80CF	4,000
Tuckpointing	2.03/SF x 7,000SF	14,200
	Subtotal	\$ 55,700

Item	\$/Unit x Amount	Total Dollars
3. New Construction		
Fire Stairs	\$110/Riser x 120 Risers	\$ 13,200
Elevators	35,000/Ea x 2	70,000
Courtyard Stair	12.15/LF x 176LF	2,138
Interior Stair	125/Riser x 20 Risers	2,500
Foundations for Stairs	1.60/SF x 450SF	720
Landings	13.70/SF x 225SF	3,083
Railings	17.75/LF x 465LF	8,254
Fire Doors & Frames	278.00/ea x 10	2,780
Exit Lights	245.00/EA x 12	2,940
Walls	3.40/SF x 6,600SF	22,440
Ceilings: Gypsum System	1.74/SF x 92,000SF	160,080
Flooring:		
Carpet	13.40/SF x 6,700SF	89,780
Wood	2.23/SF x 25,000SF	55,750
Vinyl	.82/SF x 4,700SF	3,854
Stone	5.00/SF x 4,000SF	21,000
Concrete	1.53/SF x 3,728SF	5,704
Soffit	1.03/SF x 100SF	103
Fascia	1.12/LF x 150LF	168
Gutters	2.28/LF x 500LF	1,140
Skylights	15.95/SF.Hor. x 36,000SF	574,200
Roofing	2.50/SF x 15,160SF	37,900
Doors, Ext.	500EA x 7	3,500
Courtyard Grille	21/SF x 1,032SF	21,672
Interior Doors	200/EA x 32	6,400
Overhead-Existing Sliding Panel	15.00/Opening x 5	7,500
Store Systems	12.00/SF x 1,632SF	19,584
Windows (Custom)	8.60/SF x 720SF	6,192
Canopies	9.10/SF x 1,800SF	16,560
Toilet Partitions	540/EA x 16	848
Exit Signs	53/EA x 6	318
Kitchen Equipment	48.00/SF x 3,520SF	168,960
Drinking Fountains	360/EA x 6	2,160
Lavatories	150/EA x 12	1,800
Urinals	450/EA x 8	3,600
Water Closet	215/EA x 24	5,160
Fire Extinguisher	120/EA x 8	960
Lighting	118/EA x 500	59,000
Masonry	11.86/SF x 3,600SF	42,696
Trees	80/EA x 6	480
Plants	43/EA x 100	4,300
Electrical		
100 amp service	3,886/EA	3,886
Recepticle & Switch	148.55/EA x 400	59,420

Item	\$/Unit x Amount	Total Dollars
Heating System	\$3.77/SF x 40,000SF	\$ 150,800
Fire Sprinkler	1.71/SF x 10,500SF	17,955
	1.33/SF x 1,800SF	2,394
Cooling	2.30/SF x 100,000SF	280,000
Benches	140/EA x 4	560
	Subtotal	\$1,895.439
	Total.....	<u>\$2,115,541</u>

S.F. costs were obtained from Means Repair and Remodeling Cost Data 1981.

The actual cost for the proposed design is \$511,499 less than that which was initially projected. Such a savings may be either reinvested in further building improvements, or it may be converted into greater interest to the investor.

APPENDIX D

SURVEY OF EXISTING CONDITIONS

A survey of existing conditions should be made in the early stages of planning and adaptive use project. This facilitates the determination of the reuse potential of the structure and helps to identify problem areas in the building.

For the interior of the Bartell House Hotel, a room-by-room survey was conducted employing a matrix system developed by the author to assess the existing conditions.

A rating scale of 1-5 was devised in order to facilitate in the regular state of repair of the interior:

- 1 = very poor condition; needs immediate attention; top priority.
- 2 = poor condition; needs attention; although does not pose an immediate safety hazard.
- 3 = fair condition; much wear is evident; repair or replacement is desired, although not critical.
- 4 = good condition; normal wear is evident and some minor repair is desired.
- 5 = very good condition; new element, or one which needs no repair.

A survey was also made on the exterior and problem areas were identified and photo-documented. Although repairs are needed, it was determined that sufficient fabric exists for a restoration of the exterior,

These problem areas were assigned location numbers, which in turn were used to denote the areas on both plan and elevation drawings of the hotel. Recommendations were then made for the resolution of the building's

impairments. It was determined from this analysis that the interior was in too great a state of disrepair to justify the cost of restoration.

Figure 47.--Plan of Survey of Existing Conditions--First Floor
Bartell House Hotel. Source: Urbas.

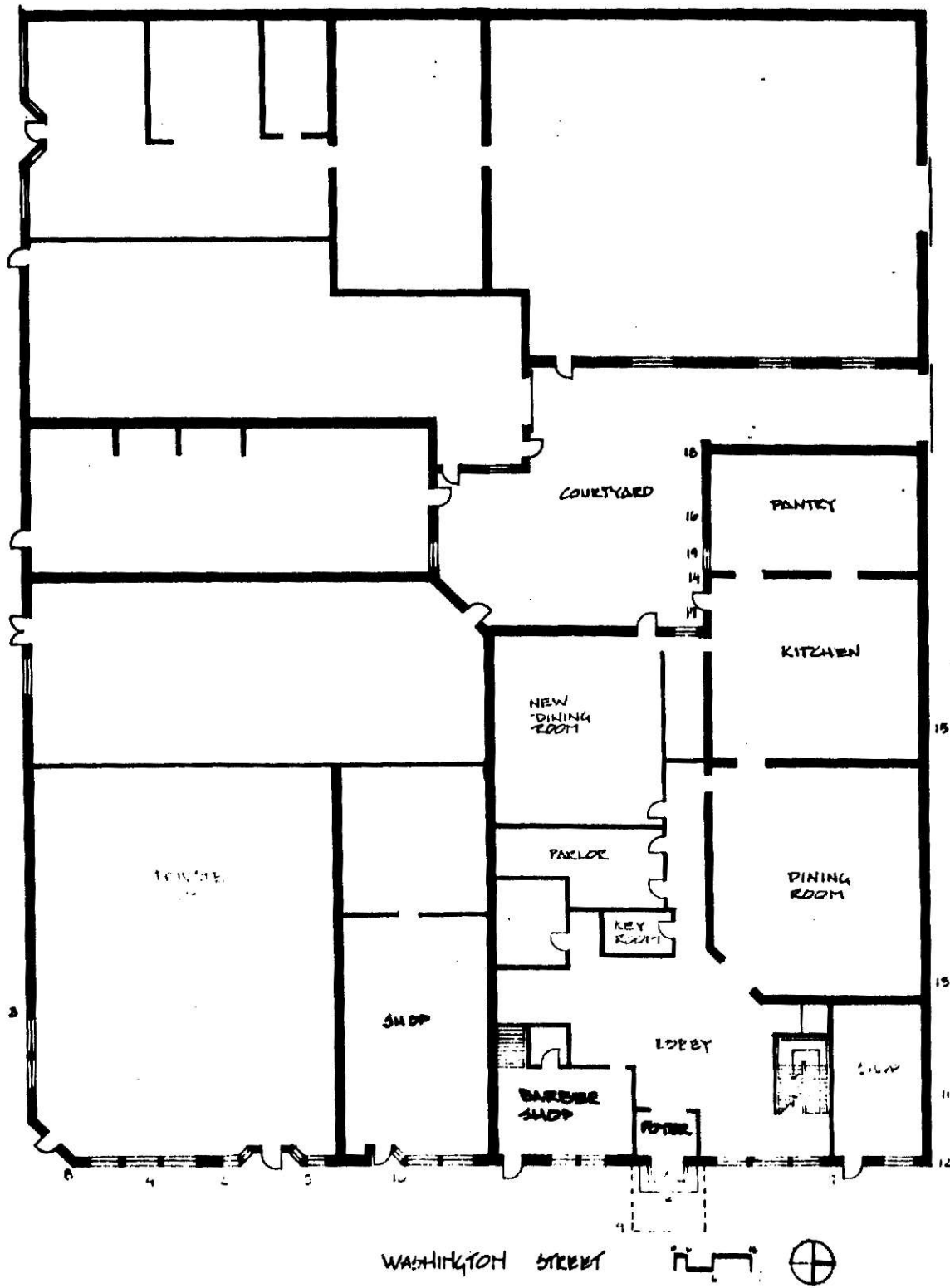


Figure 48.--Plan of Survey of Existing Conditions--Second Floor
Bartell House Hotel. Source: Urbas.

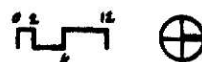
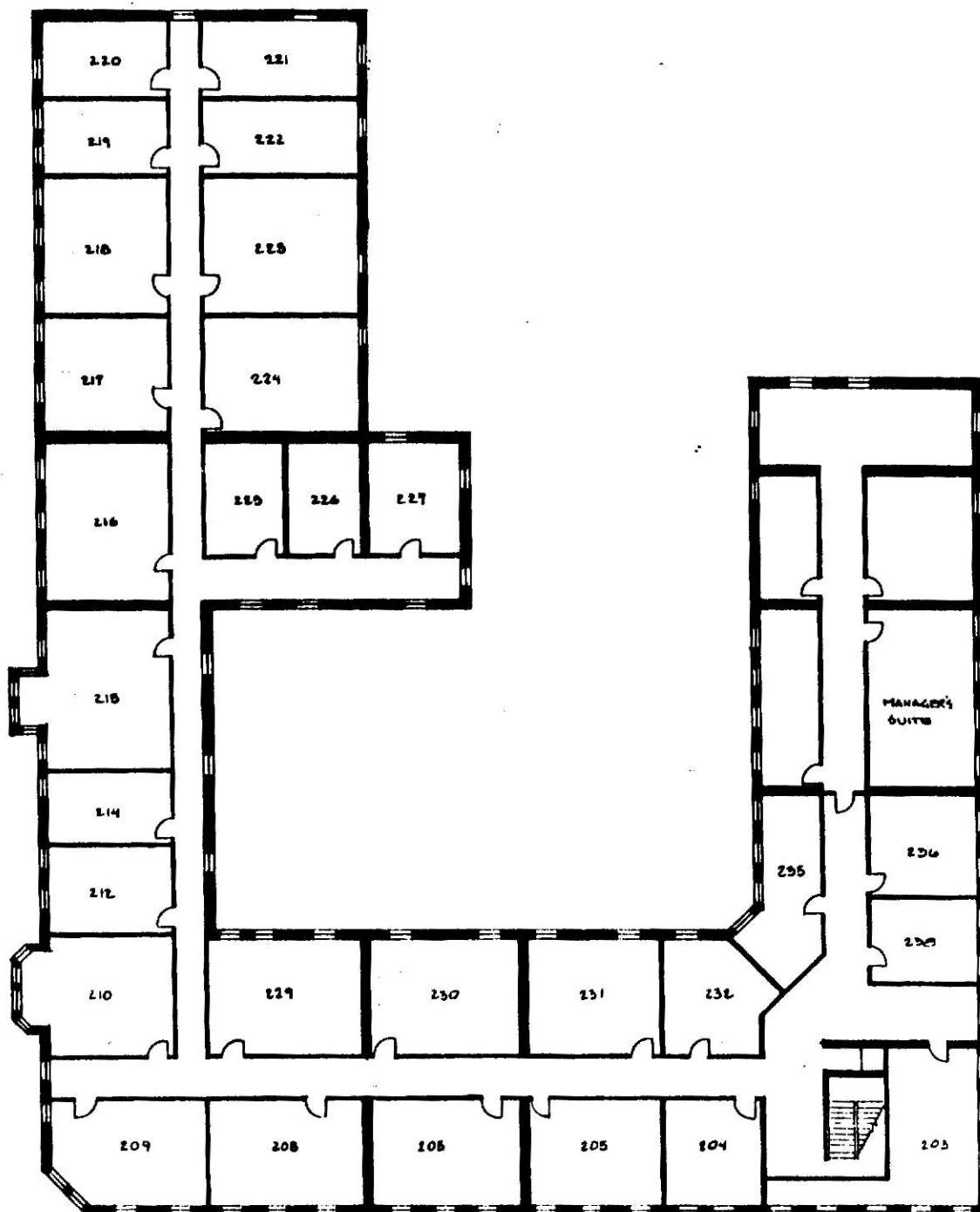


Figure 49.--Plan of Survey of Existing Conditions--Third Floor
Bartell House Hotel. Source: Urbas.

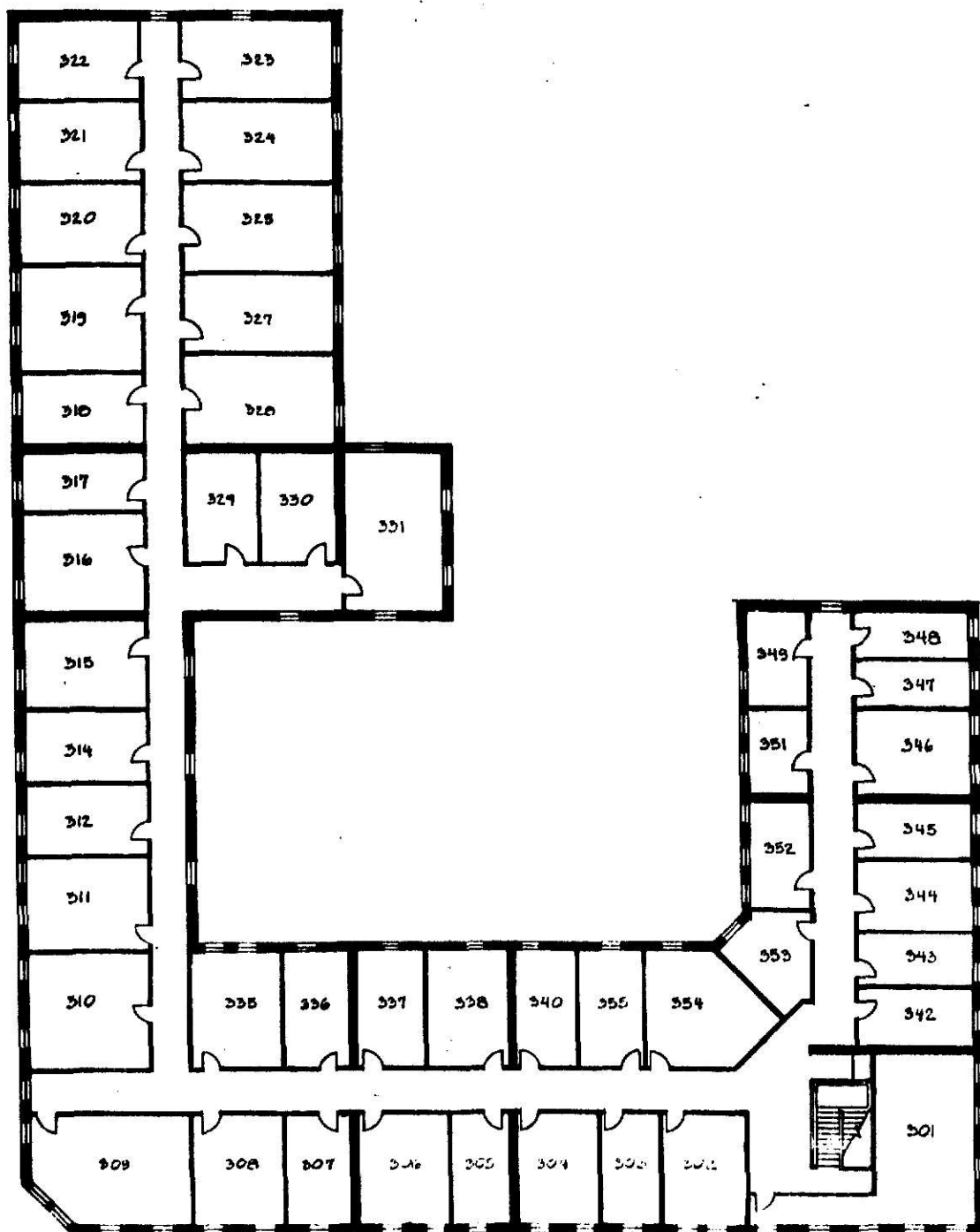


TABLE 3
SURVEY OF EXISTING CONDITIONS--DINING ROOM AND KITCHEN

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Dining Room									
Rating	3	3	4	2	2	3	NA	3	4
Materials	Linoleum	Linoleum	Wood	Suspended panels	Single-glazed covered w/asbestos	Fluorescent	NA	Steam heat	Paneled and wall-paper
Comments	Some spot cracking	Minor cracks	Refinish all doors	Stabilize, place those w/ water inf.	Remove asbestos to open up fenestra tion	Clean	NA	NA	Repair wall-paper
Room Kitchen									
Rating	3	3	4	3	2	3	NA	3	4
Materials	Linoleum	Linoleum	Wood	Suspended panels	Filled in with brick	Fluorescent	NA	Steam heat	Brick and Plaster
Comments	Needs cleaning	Needs cleaning	Refinish	Some deterioration	Remove and restore fenestr.	Clean	NA		Good condition

TABLE 4

SURVEY OF EXISTING CONDITIONS--FOYER AND BARBER SHOP

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Foyer									
Rating	3	3	2	3	3	4	NA	NA	3
Materials	Inlaid tile pink, blue and white	Marble, white	Wood-inter- ior door; metal- exterior	Plaster	Wood frame	Fluorescent	NA	Iron radia- tor/ steam ht w pine	Wall- paper, drywall
Comments	Mostly intact; Needs some some tile needs replacing; needs cleaning storatoin		Ext needs refinish; caulk & weatherst. repl.trans.glass	Some crack- ing	Needs caulk- ing & weatherst.	Needs clean- ing	NA	NA chairrail	Wallpaper is peal- ing
179									
Room	Barbershop								
Rating	3	3	3	3	3	4	NA	NA	4
Materials	Carpeting/tile	Linoleum	Wood	Plaster	Wood frame single glazed	Fluorescent	NA	Iron radi- ator steam heat	Plaster and wall- paper Some evi- dence of water infiltr.
Comments	Appears to be in good condition	Some crack- ing	Weather- strip; replace transome	Only minor water in- filtra- tion	Weather- strip & caulk	Clean	NA	NA	

TABLE 5
SURVEY OF EXISTING CONDITIONS--PANTRY AND NEW DINING ROOM

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Pantry									
Rating	4	3	NA	3	3	3	NA	NA	4
Materials	Linoleum	Linoleum	NA	Suspended panels	Single, glazed, wood frame	Fluorescent	NA	NA	Brick
Comments	Good; clean	Good	NA	Some water infiltration	Recaulk	Clean	NA	NA	Good condition
Room New Dining Room									
Rating	4	3	NA	3	NA	3	NA	NA	4
Materials	Linoleum	Linoleum	NA	Suspended panels	NA	Fluorescent	NA	Iron rad- iator steam ht. & plaster	Wallpaper on lath
Comments	Clean	Replace missing elements	NA	Some evidence of water infiltration	NA	Clean	NA	NA	Peeling wallpaper

TABLE 6
SURVEY OF EXISTING CONDITIONS--PARLOR AND LOBBY

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Parlor									
Rating	3	3	NA	2	NA	3	NA	NA	3
Materials	Linoleum	Linoleum	NA	Suspended ceiling	NA	Fluorescent	NA	Iron radiator steam heat	Wood panel
Comments	Clean	Reattach loose basebd.	NA	Much water infiltration	NA	Clean	NA	Some areas need renail-	ing
Room Lobby									
Rating	3	3	NA	2	3	3	NA	3	3
Materials	Mosaic tile covered by carpet	Marble	NA	Suspended panels	Wood frame, single glazed	Fluorescent	NA	Iron radiator, steam heat	Wood panel & wall-paper over lath
Comments	Remove carpet and clean tile	Attach loose elements & repl. miss.	NA	Much water infiltration; re-move panels refin.	Caulk, weather-strip & move panels refin.	Clean	NA	Remove panel and secure wallpaper	

TABLE 7

SURVEY OF EXISTING CONDITIONS--ROOMS 203 AND 204

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 203									
Rating	3	3	3	4	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Wood frame, single glazed	NA	NA	Iron radiator steam heat NA	lath and plaster w/wall paper
Comments	Leveled floor, good condition	Good	Transoms covered refinish door	Remove loose ceiling suspension grid & uncov. arch	Refinish frame, recaulk, weatherstrip	NA	NA	Reattach loose wall-paper	
Room 204									
Rating	3	3	3	4	3	NA	NA	3	4
Materials	Wood plank w/carpet	Linoleum	Wood	Suspended panels	Wood frame, single glazed	NA	NA	Iron radiator steam heat NA	Paneling
Comments	Good	Good	Refinish	No water infiltration	Recaulk & weatherstrip	NA	NA		Good

TABLE 8

SURVEY OF EXISTING CONDITIONS--ROOMS 205/6 AND 207

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
205/6									
Rating	2	2	3	3	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Single glazed; wood frame	NA	NA	Iron radiator; steam heat	Lath & plaster wall-paper
Comments	Floor needs stabilizing	Needs re-nailing	Refinish uncover transome	Good condition	Recaulk & weather-strip	NA	NA	NA	good
Room 207									
Rating	2	3	3	2	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Single glazed; wood frame	NA	NA	Iron radiator; steam heat	Lath & plaster
Comments	Stabilize floor	Linoleum	Refinish uncover transome	Evidence of water infiltration	Recaulk and weather-strip	NA	NA	NA	Good

TABLE 9
SURVEY OF EXISTING CONDITIONS--ROOMS 208 AND 209

Room	208	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating		2	3	3	2	3	NA	NA	NA	2
Materials		Wood plank w/carpet	Linoleum	Wood	Suspended panels	Single glazed wood frame	NA	NA	Iron radi- ator; steam heat	Lath & plaster
Comments		Stabilize	Good	Uncover transome	Water in- filtration	NA	NA	NA	NA	Swelling; water infiltration
Room 209										
Rating		2	3	2	2	3	NA	NA	2	3
Materials		Wood plank w carpet	Linoleum	Wood	Plaster	Single- glazed wood frame	NA	NA	Iron radiator; steam heat	Lath & plaster
Comments		Stabilize	Good	Repair frame	Swelling; water in- filtration	Uncover arches;	NA	NA	Radiator leakage	Some crack- ing

TABLE 10

SURVEY OF EXISTING CONDITIONS--ROOMS 210 AND 212

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
210									
Rating	2	3	3	2	3	NA	NA	NA	2
Materials	Wood plank	Linoleum	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	Stabilize	Good	Refinish uncover transome	Swelling; water infiltration	Recaulk & weather-strip	NA	NA	NA	Replaster wall
Room 212									
Rating	2	3	3	2	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	Stabilize	Good	Uncover transome	Replaster	Recaulk and weather-strip	NA	NA	NA	Re-plaster

TABLE 11

SURVEY OF EXISTING CONDITIONS--ROOMS 214 AND 215

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
214									
Rating	3	3	3	2	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radi-ator steam heat	Lath & plaster
Comments	NA	Good	Uncover transome	Fungal growth	Recaulk; weather-strip	NA	NA	NA	NA
Room 215									
Rating	2	3	3	2	3	NA	NA	NA	4
Materials	Wood plank w/carpet	Linoleum	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radi-ator steam heat	Stucco
Comments	Stabilize	Good	Uncover transome	Replaster	Recaulk and weather-strip	NA	NA	NA	Good condition

TABLE 12

SURVEY OF EXISTING CONDITIONS--ROOMS 216 AND 217

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
216									
Rating	3	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plas- ter
Comments	NA	Good condi- tion	Uncover transome	NA	Recaulk & weather- strip	NA	NA	NA	Water infil- tration
Room 217									
Rating	4	3	3	2	2	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radi- ator steam heat	Lath & plas- ter
Comments	NA	Good condi- tion	Uncover tran- some	Swelling; Replace water in- filtra- tion	NA	NA	NA	NA	Good condi- tion

TABLE 13

SURVEY OF EXISTING CONDITIONS--ROOMS 218 AND 219

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 218									
Rating	2	3	3	2	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	Stabilize	Good condition	NA	Re-plaster	Caulk and weather-strip	NA	NA	NA	Replaster
Room 219									
Rating	3	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	NA	Good condition	NA	NA	Caulk & weather-strip	NA	NA	NA	Water infiltration

TABLE 14

SURVEY OF EXISTING CONDITIONS--ROOMS 220 AND 221

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 220									
Rating	3	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Wood	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	NA	Good condition	NA	NA	Caulk and weatherstrip	NA	NA	Water infiltration fungal growth	
Room 221									
Rating	3	3	2	2	2	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	NA	Good condition	Replace frame	Re-plaster	Replace frame	NA	NA	NA	Replaster

TABLE 15

SURVEY OF EXISTING CONDITIONS--ROOMS 222 AND 223

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 222									
Rating	3	3	3	3	2	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	NA	NA	Uncover transoms	Remove suspension grid	Replace broken lite	NA	NA	NA	Blistering; water infiltration
Room 223									
Rating	3	3	2	3	2	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Panel
Comments	NA	NA	Replace frame	Remove ceiling suspension grid	Replace broken lite	NA	NA	NA	NA

TABLE 16

SURVEY OF EXISTING CONDITIONS--ROOMS 224 AND 225

Room 224	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating	3	3	3	2	2	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single-glazed wood double hung	NA	NA	Iron radi- ators steam heat	Lath & plas- ter
Comments	NA	NA	NA	Replas- ter	Replace broken lite; caulk; weatherstrip	NA	NA	Replas- ter NA	Replas- ter
Room 225									
Rating	3	3	3	2	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radi- ator steam heat	Lath & plaster
Comments	NA	NA	NA	Replas- ter	Caulk; weather strip	NA	NA	Replas- ter NA	Replas- ter

TABLE 17

SURVEY OF EXISTING CONDITIONS--ROOMS 226 AND 227

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 226									
Rating	2	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Stabilize	NA	Uncover tran-some	NA	Caulk and weather-strip	NA	NA	NA	Re-plaster
Room 227									
Rating	2	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator; steam heat	Lath & plaster
Comments	Stabilize	NA	Uncover tran-some	NA	Caulk and weather-strip	NA	NA	NA	Re-plaster

TABLE 18

SURVEY OF EXISTING CONDITIONS--ROOMS 229 AND 230

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
229									
Rating	3	3	3	3	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wooddouble hung	NA	NA	Iron radiator steam heat	Panel
Comments	NA	NA	NA	NA	Caulk & weather strip	NA	NA	Water infil- tration evident	
Room 230									
Rating	3	3	3	2	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed; wood double hung	NA	NA	Iron radi- ator steam heat	Panel
Comments	NA	NA	NA	Water in- filtra- tion	Caulk, weather- strip	NA	NA	NA	NA

TABLE 19
SURVEY OF EXISTING CONDITIONS--ROOMS 231 AND 232

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
231									
Rating	3	3	3	2	3	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed, wood double hung	NA	NA	Iron radiator stream heat NA	Panel
Comments	NA	NA	NA	Water infiltration	Caulk and weather strip	NA	NA	Water infiltration	
Room 232									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator stream heat NA	Lath & plaster
Comments	NA	NA	NA	NA	Caulk and weather strip	NA	NA	NA	NA

TABLE 20

SURVEY OF EXISTING CONDITIONS--ROOMS 233 AND 236

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
233									
Rating	3	3	3	2	2	NA	NA	NA	2
Materials	Wood plank w/carpet	Wood	Wood	Suspended panels	Single glazed wood frame	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	NA	NA	NA	Water infiltration swelling	Refinish sill; caulk, weather-strip	NA	NA	Water infiltration	
Room 236									
Rating	2	3	3	3	2	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radiator steam heat	Lath & plaster
Comments	Stabilize	NA	NA	NA	Replace caulk; weather-strip	frame; NA weather-	NA	NA	NA

TABLE 21

SURVEY OF EXISTING CONDITIONS--ROOM 238

Room 238	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating	2	3	3	2	2	NA	NA	NA	3
Materials	Wood plank w/carpet	Wood	Wood	Plaster	Single glazed wood frame	NA	NA	Iron radi- ator; steam heat	Panel
Comments	Stabilize	NA	NA	Re- plaster	Replace sill; caulk, weather- strip	NA	NA	NA	NA
Room 301									
Rating	2	3	3	2	2	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed, wood	NA	NA	Iron radi- ator; steam heat	Painted plaster
Comments	NA	NA	NA	NA	Caulk, weather- strip	NA	NA	NA	Minor cracks

TABLE 22

SURVEY OF EXISTING CONDITIONS--ROOMS 302 AND 303

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
302									
Rating	3	3	3	3	2	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed, wood double hung	NA	NA	Iron radiator; steam heat	Painted plaster
Comments	NA	NA	NA	NA	One lite missing; 2 windows +1 in bath	NA	NA	NA	Minor cracks
Room 303									
Rating	2	3	3	2	2	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Painted plaster	Single-glazed wood, double hung	NA	NA	Iron radiator steam heat	Painted plaster
Comments	NA	NA	NA	Many cracks	Broken lite	NA	NA	NA	Much cracking

TABLE 23
SURVEY OF EXISTING CONDITIONS--ROOMS 304 AND 305

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 304									
Rating	2	3	2	2	2	NA	NA	NA	2
Materials	Wood planks	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat NA	Plaster
Comments	Some weakness in floor boards	NA	Some cracking	Some cracking and chipping	Both are broken	NA	NA	Some crack-ing & chip-ping	
Room 305									
Rating	3	3	2	2	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator steam heat NA	Plaster
Comments	NA	NA	No lock	NA	Caulk and weather-strip	NA	NA	Some crack-ing & chipping	

TABLE 24

SURVEY OF EXISTING CONDITIONS--ROOMS 306 AND 307

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
306									
Rating	3	3	3	3	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glaz. wood, dble hung	NA	NA	Iron radiator; steam heat NA	Plaster
Comments	NA	NA	NA	Some cracking	Caulk & weather strip	NA	NA	Some crack-ing & chip-ping	
Room 307									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glaz. wood, dble. hung	NA	NA	Iron radiator; steam heat NA	Plaster
Comments	NA	NA	NA	NA	Caulk & weather-strip	None	NA	NA	NA

TABLE 25

SURVEY OF EXISTING CONDITIONS (NO ROOM NUMBERS)

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating	3	3	3	2	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator; steam heat	Wall-paper
Comments	NA	NA	NA	Some crack-ing & chip-ing	Caulk & weather-strip	NA	NA	NA	Some blister-ing
Room --									
Rating	3	3	3	2	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Suspended ceiling	Single, glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	Water infiltration	Caulk & weather-strip	NA	NA	NA	Water infiltration

TABLE 26

SURVEY OF EXISTING CONDITIONS--ROOM 310 AND END OF HALL

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
310									
Rating	2	3	2	2	3	NA	NA	NA	3
Materials	Wood plank	Wood	Wood	Suspended ceiling	Single glazed wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Needs stabilizing	NA	No lock	Water infiltration	Caulk & weather-strip	NA	NA	NA	Some cracking
Room End of Hall									
Rating					3				
Materials					Single glazed wood, double hung				
Comments					Broken				

TABLE 27

SURVEY OF EXISTING CONDITIONS--ROOMS 311 AND 314

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
311									
Rating	3	3	3	4	2	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	NA	Broken lite; caulk & weather strip	NA	NA	NA	Chipping & Cracking
Room 314									202
Rating	3	3	3	2	3	NA	NA	NA	4
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Panel
Comments	NA	NA	NA	Blistering; water in-filtration	Caulk & weather strip	NA	NA	NA	Good

TABLE 28

SURVEY OF EXISTING CONDITIONS--ROOMS 318 AND 319

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
318									
Rating	3	3	3	2	3	NA	NA	NA	4
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Panel
Comments	NA	NA	NA	Water infiltration	Caulk & weather strip	NA	NA	NA	NA
Room 319									
Rating	3	3	3	2	3	NA	NA	NA	4
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Panel
Comments	NA	NA	NA	Water infiltration	Caulk & weather strip	NA	NA	NA	NA

TABLE 29

SURVEY OF EXISTING CONDITIONS--ROOMS 320 AND 321

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
320									
Rating	3	3	3	2	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	Water infiltration	Caulk & weather strip	NA	NA	NA	NA
Room 321									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung.	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	Some crack-ing	Caulk & weather strip	NA	NA	NA	NA

TABLE 30

SURVEY OF EXISTING CONDITIONS--ROOMS 322 AND 323

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
322									
Rating	2	3	3	2	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Needs support	NA	NA	Some cracking	Caulk & weather-strip	NA	NA	NA	NA
Room 323									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	NA	Caulk & weather-strip	NA	NA	NA	NA

TABLE 31

SURVEY OF EXISTING CONDITIONS--ROOMS 324 AND 325

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
324									
Rating	3	3	3	2	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	Water in- filtration	Caulk & weather strip	NA	NA	NA	NA
206									
Room 325									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plas- ter
Comments	NA	NA	NA	NA	Caulk & weather strip	NA	NA	NA	NA

TABLE 32

SURVEY OF EXISTING CONDITIONS--ROOMS 328 AND 327

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
328									
Rating	2	3	3	3	1	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	NA	Broken; replace, caulk & weather-strip	NA	NA	NA	Cracked
Room 327									
Rating	2	3	3	1	3	NA	NA	NA	2
Materials	Wood plank	Wood	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Stabilize	NA	NA	Much water infiltration	Caulk & weather strip	NA	NA	NA	Cracking

TABLE 33

SURVEY OF EXISTING CONDITIONS--ROOMS 342 (CORNER ROOM) AND 301

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
342									
Rating	4	4	4	2	3	4	NA	NA	4
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed, wood, double hung	Incandescent	NA	Iron radiator steam heat	Panel
Comments	NA	NA	NA	Water infiltration	Caulk & weather strip	NA	NA	NA	NA
Room 301									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	NA	Caulk & weather strip	NA	NA	NA	NA

TABLE 34

SURVEY OF EXISTING CONDITIONS--ROOMS 343 AND 344

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 343									
Rating	2	3	3	2	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Needs stabilizing	NA	NA	Very deteriorated	Caulk & weather strip	NA	Sink only; no bath-room	NA	Chipping and cracking
Room 344									
Rating	2	3	3	3	3	NA	NA	NA	2
Materials	Linoleum	Wood	Wood	Plaster	Single glazed, wood, dble. hung	NA	NA	Iron radiator; steam heat	Panel
Comments	Needs stabilizing	NA	NA	NA	Caulk & weather-strip	NA	Sink only; no bath-room	NA	Water infiltration

TABLE 35

SURVEY OF EXISTING CONDITIONS--ROOMS 345 AND 346

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
345									
Rating	2	3	3	3	3	NA	NA	NA	2
Materials	Wood plank	Wood	Wood	Plaster	Single glazed, wood double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Stabilize	NA	NA	NA	Caulk & weather-strip	NA	Only sink; no bath-room	NA	Water infiltration
Room 346									
Rating	2	3	NA	3	2	NA	NA	NA	3
Materials	Wood plank	Wood	NA	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Stabilize	NA	none	Water infiltration	Caulk & weather-strip	NA	Only sink; no bath-room	NA	Blistering

TABLE 36

SURVEY OF EXISTING CONDITIONS--ROOMS 347 AND 348

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 347									
Rating	2	3	3	1	3	NA	NA	NA	2
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed, wood, dble. NA hung	NA	NA	Iron radiator steam heat	Plaster
Comments	Water infiltration	NA	NA	Water infiltration	Caulk & weather-strip	NA	Only sink; no bath-room	NA	Blistering; water infiltration
Room 348									
Rating	3	3	3	2	3	NA	NA	NA	4
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed, wood, double hung	NA	NA	Iron radiator; steam heat	Panel
Comments	NA	NA	NA	Burned by light fixture	Caulk & weather-strip	NA	NA	NA	NA

TABLE 37

SURVEY OF EXISTING CONDITIONS--ROOMS 349 AND 351

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
349									
Rating	3	3	3	4	2	3	NA	NA	2
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed, wood, double hung	Incandescent	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	NA	3 windows; 1 broken-replace; Caulk & weather-strip	NA	NA	NA	Water infiltration
Room 351									
Rating	3	3	3	2	2	3	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	Incandescent	NA	Iron radiator steam heat	Plaster
Comments	NA	NA	NA	Water infiltration	One broken	NA	Only sink; no bath-room	NA	Water infiltration

TABLE 38
SURVEY OF EXISTING CONDITIONS--ROOMS 329 AND 328

Room 329	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating	2	3	3	2	3	NA	NA	3	4
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed wood double hung	NA	NA	Iron radiator; steam heat	Panel
Comments	Very deteriorated	NA	NA	Water infiltration	Caulk & weather-strip	NA	NA	NA	NA
Room 328									
Rating	3	3	3	1	3	NA	NA	NA	3
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Painted plaster
Comments	NA	NA	NA	Water infiltration; fungal growth	Caulk & weather-strip	NA	NA	NA	NA

TABLE 39

SURVEY OF EXISTING CONDITIONS--ROOMS 331 AND (NO NUMBER)

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
331									
Rating	3	3	3	2	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	Cracking; water in- filtration strip	Caulk & weather- strip	NA	NA	NA	NA
214									
Room (No Number)									
Rating	3	3	3	1	3	NA	NA	3	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	Very de- teriorated; water in- filtration strip	Caulk & weather- strip	NA	NA	NA	Crack- ing

TABLE 40

SURVEY OF EXISTING CONDITIONS--ROOMS 336 AND 335

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 336									
Rating	4	3	3	2	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Suspended ceiling	Single glazed wood, dble. hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	Water infiltration	Caulk & weather-strip	NA	Sink only; no bath-room	NA	NA
Room 335									
Rating	2	3	3	4	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Needs stabilizing	NA	NA	NA	Caulk & weather-strip	NA	NA	NA	NA

TABLE 41

SURVEY OF EXISTING CONDITIONS--ROOMS 338 AND 337

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 338									
Rating	4	3	NA	3	2	NA	NA	NA	3
Materials	Carpet	Wood	NA	Plaster	Single glazed, wood double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	None	NA	Uneven	NA	NA	NA	NA
Room 337									
Rating	1	3	3	1	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Needs stabilizing	NA	NA	Very de-teriorated weather-strip		NA	NA	NA	NA

TABLE 42

SURVEY OF EXISTING CONDITIONS--ROOMS 340 AND 339

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Room 340									
Rating	1	2	3	1	3	NA	NA	NA	1
Materials	Wood	Wood	Wood	Plaster	Single glazed; wood, dble. hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Very poor condition; water in-filtration	NA	NA	Very poor; water in-filtration	NA	NA	Sink only; no bath-room	NA	Very poor; water in-filtration
Room 339									
Rating	1	3	3	1	3	NA	NA	NA	1
Materials	Carpet	Wood	Wood	Wallpaper	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Wall-paper
Comments	Stabilize; water in-filtration	NA	NA	Very poor; water in-filtration	Caulk & weather-strip	NA	Sink only; no bath-room	NA	Very poor; water in-filt.

TABLE 43

SURVEY OF EXISTING CONDITIONS--ROOMS 353 AND 352

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
353									
Rating	1	3	3	2	3	NA	NA	NA	2
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed; wood, dbl. hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	Needs stabilization	NA	NA	Water in- filtration	Caulk & weather-strip	NA	NA	NA	Crack- ing
Room 352									
Rating	1	3	3	4	3	NA	NA	NA	1
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Wallpaper
Comments	Needs stabilization	NA	NA	NA	Caulk & weather-strip	NA	NA	NA	Peeling; water in- filtra- tion

TABLE 44

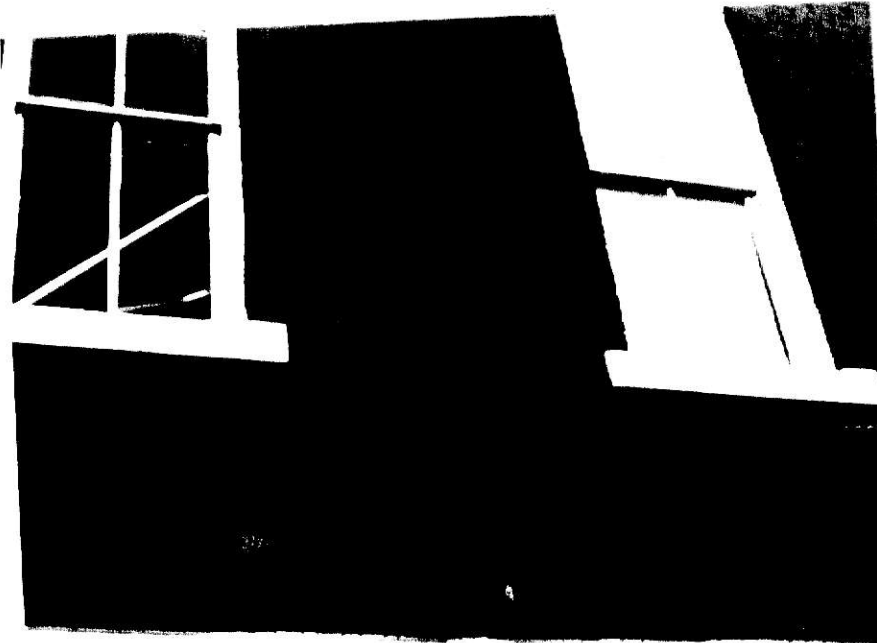
SURVEY OF EXISTING CONDITIONS--ROOMS 355 AND 354

Room	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
355									
Rating	2	3	3	3	3	NA	NA	NA	2
Materials	Carpet	Wood	Wood	Plaster	Single glazed; wood, dbl. hung	NA	NA	Iron radiator; steam heat	Painted plaster
Comments	Needs stabilization	NA	NA	Minor cracking	Caulk & weather-strip	NA	Sink only no bathroom	NA	Peeling & cracking
Room 354									
Rating	2	3	3	1	3	NA	NA	NA	1
Materials	Linoleum	Linoleum	Wood	Plaster	Single glazed wood, double hung	NA	NA	Iron radiator; steam heat	Painted plaster
Comments	Needs stabilizing	NA	NA	Badly deteriorated	Caulk & weather strip	NA	NA	NA	Very deteriorated

TABLE 45

SURVEY OF EXISTING CONDITIONS--ROOMS 312 and (NO NUMBER)

Room 312	Floor	Baseboards	Doors	Ceiling	Windows	Lighting	Plumbing	HVAC	Walls
Rating	4	3	3	2	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	Some water infiltration	Caulk & weather-strip	NA	NA	NA	NA
Room (No Number)									
Rating	3	3	3	3	3	NA	NA	NA	3
Materials	Carpet	Wood	Wood	Plaster	Single glazed, wood, double hung	NA	NA	Iron radiator; steam heat	Plaster
Comments	NA	NA	NA	Minor water infiltration	Caulk & weather-strip	NA	NA	NA	NA



Problem 1

Mortar has deteriorated from the brick joints.

Recommendation

Tuckpoint according to specifications.



Problem 2

Water infiltration and weathering of lintel.

Recommendation.

Replace, treat, and seal wood according to specifications.



Problem 3

Wood eaves have buckled due to water infiltration.

Recommendation

Replace and repaint according to specifications.



Problem 4

Brick has spalled.

Recommendations

Replace brick according to specifications.

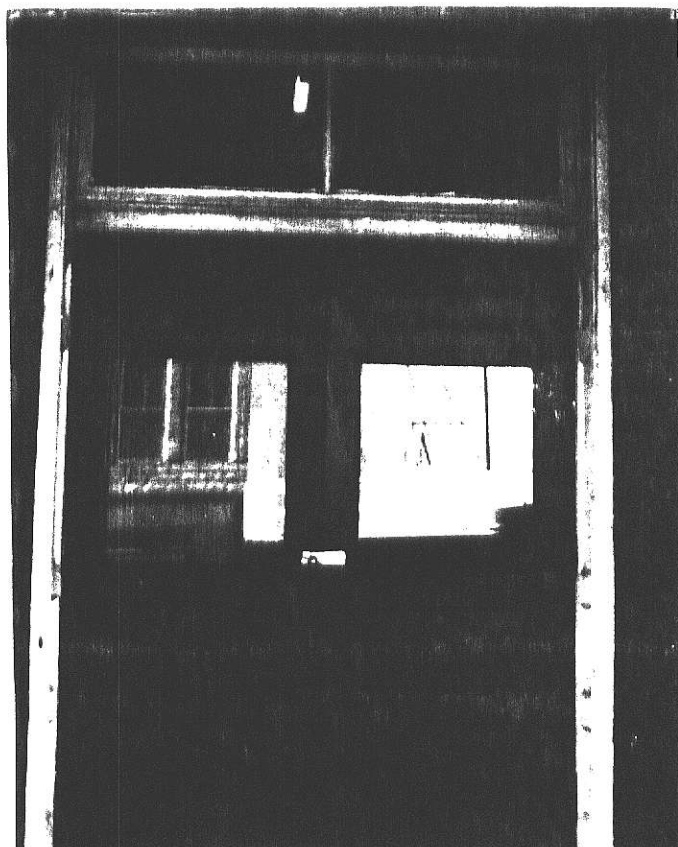


Problem 5

Window frame was weathered.

Recommendation

Repair and replace according to specifications.



Problem 6

Doorway was weathered.

Recommendation

Repair and refinish.



Problem 7

Window has been infilled with plywood; door is weathered.

Recommendation

Remove the plywood, and replace with glazing. Replace door with similar window. Reuse door in courtyard.



Problem 8

Column carara glass encasement has become loose.

Recommendation

Remove entirely, and clean brick according to specifications.

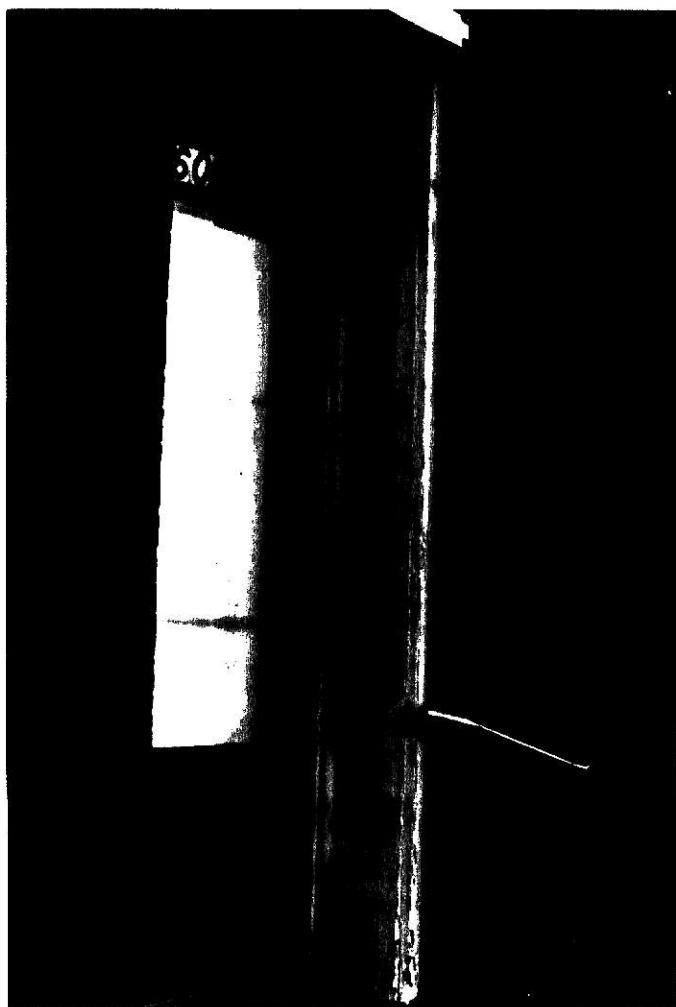


Problem 9

Gutter has deteriorated causing water buildup, and cracking paint.

Recommendation

Replace gutter, seal properly; repair, and paint cornice according to specifications.

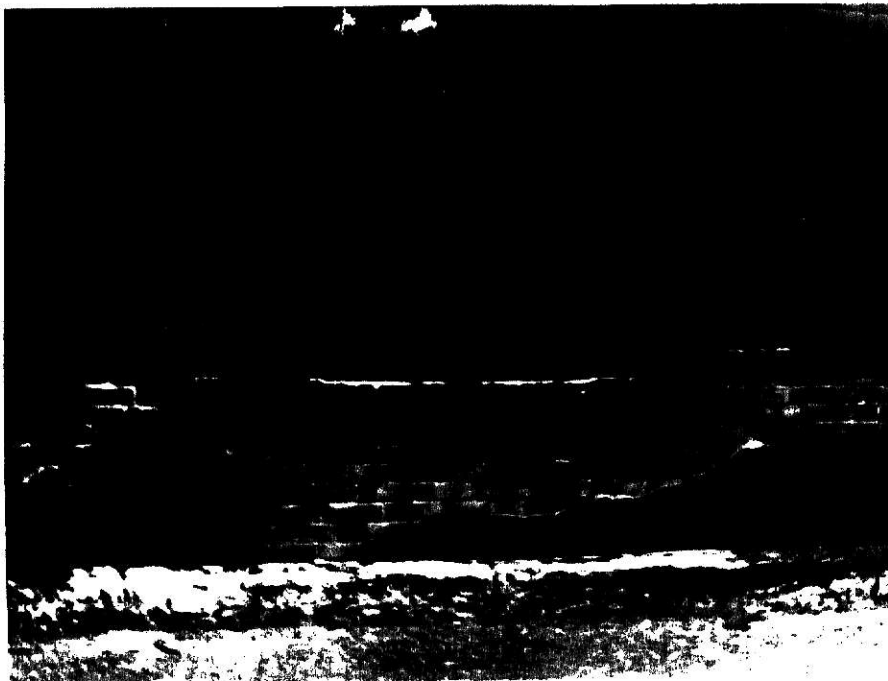


Problem 10

Paint has chipped.

Recommendation

Remove door, refinish and repair according to specifications. Reuse in courtyard. Replace with window similar to existing design.



Problem 11

Paint has chipped, joints require tuckpointing.

Recommendation

Remove paint; repoint according to specifications.



Problem 12

Window has weathered.

Recommendation

Repair and repaint according to specifications.



Problem 13

Effluorescence on brick.

Recommendation

Clean brick according to specifications.



Problem 14

Mortar has severely deteriorated.

Recommendation

Clean, repair and tuck-point according to specifications.



Problem 15

Brick has deteriorated severely.

Recommendation

Replace and tuckpoint according to specifications.



Problem 16

Spalling of the sill.

Recommendation

Replace limestone.



Problem 17

Joints have been repointed with portland cement.

Recommendation

Remove mortar and tuck-point according to specifications.



Problem 18

Brick has fallen out of buttress.

Recommendation

Replace the brick according to specifications.



Problem 19

Brick has spalled and discolored.

Recommendation

Clean and replace the bricks according to specifications.

APPENDIX E

OUTLINE SPECIFICATIONS FOR EXTERIOR RESTORATION

It is recommended that the building be restored only on the exterior to approximately 1920 when the last major addition was constructed. The purpose of this section will be to provide recommendations for the physical upgrading of the Bartell House including: the removal of infill masonry, cleaning, masonry restoration, tuckpointing, sealing and painting/staining.

Masonry

Part 1: General

Description

- A. It is the intent of this section to provide requirements for the selective removal of masonry.
- B. This section does not include the removal of any window sash or jambs, ornamental woodwork, or masonry which is to remain.
- C. The contractor shall provide for the removal from the site all demolished masonry, mortar and associated material as described in this specification unless it is to be used in replacement of other damaged masonry.

Quality Assurance

- A. Contractor shall familiarize himself/herself with the extent and boundaries of material removal.
- B. Extreme care shall be taken in removal of material so as not to damage or destroy window sash and jambs, ornamental wood work, and masonry which is to remain.
- C. Where bricks are removed adjacent to masonry which is to remain, care shall be exercised so as to preserve the integrity of the masonry edge without damaging the in-place units.
- D. Remove only those materials behind the masonry to be improved, necessary to facilitate the removal of the brick.

Masonry CleaningPart 1: General

Description

- A. Masonry cleaning is defined as the removal of all paint, dirt, and offensive surface deposits from the brick.
- B. The work covered by this section includes cleaning the exterior masonry surfaces of the building on all facades from the ground level to the roof.
- C. The contractor shall provide all labor, equipment, scaffolding, and materials necessary to execute the work as specified herein.

Submittals

- A. Before awarding of contract, the proposer shall do a test panel approximately 2'-0" x 3'-0" in a location to be designated by the architect. The purpose of the test panel is to demonstrate the intended procedure and to show the effectiveness of the technique. The owner shall enter into a contract only after the completion of a satisfactory test has been approved by the architect. Tests should be made on the north and south elevations and on both protected and unprotected areas.

Quality Assurance

- A. The architect shall make periodic inspections of the work as it is being executed. The contractor shall make his scaffold available to the architect for inspections of the work as it is being executed.

Job Conditions

- A. Temporary water and electrical energy necessary for the construction shall be provided and paid for by the owner. Connection shall be made to the nearest sources.
- B. No cleansing operations shall be performed except when temperature is over 40 degrees F. No cleaning operations shall continue when temperatures of freezing level are anticipated.
- C. The contractor shall exercise care so as not to cause damage to any wood work, windows, or doors from the use of scaffolding, workmen, cleaning operations or materials.
- D. The contractor shall provide signs, graphics, warning lights, etc. as required by the city together with all insurance policies, bonds, or other guarantees as required by the city.

Part 2: Products**Materials**

The materials selected by the Architect for the base bid are as follows:

- A. Heavy duty paint strippers. Equal products of the following manufacturers will be acceptable, subject to compliance with test panel results as stated in these specifications elsewhere.
 - 1. FX-44A as manufactured by Fox Industries, 140 West Mount Royal Ave., Baltimore, Maryland.
 - 2. Heavy duty paint stripper, as manufactured by ProSo Co Inc., 1040 Parallel Parkway, Kansas City, Kansas.
 - 3. Or equivalent approved by the Architect.
- B. Sure Klean Restoration Cleaner as manufactured by ProSo Co Inc., 1040 Parallel Parkway, Kansas City, Kansas.
 - 1. Or equivalent approved by the Architect.

Masonry Cleaner Mix

Acidic Masonry Cleaner shall be diluted 4:1 with water at the job site. This dilution is a point of beginning for the test panel procedure as described elsewhere in this section. Follow manufacturer's recommendations for diluting techniques.

Part 3: Executive

- A. Paint Remover shall be applied to the painted areas of masonry with brush or roller. Material shall be left to sit for a period of time as recommended by the manufacturer and as determined by testing. Reapply as required, after rinsing.
- B. Remove loosened paint by means of a nylon or bristle brush and water, rinsing at low pressures. Reapplications of remover and rinsing shall be used, rather than high pressure, due to the softness of the brick (400 psi nozzle pressure with a 15 degree fan tip shall be considered a maximum. Begin with low pressures, approximately 50 psi). All power scrapers are prohibited. Hand-powered tools such as wire brushes and scrapers will be permitted if the low pressure wash is not sufficient.
- C. All areas where paint remover has been used must be thoroughly rinsed. Areas where rinsing water and remover may have dripped or drifted must also be thoroughly rinsed.

Masonry Cleaning

- A. Thoroughly wet area with water prior to application of cleaning material.
- B. Apply cleaning material liberally to an area with a brush, such as a soft masonry washing brush. Allow material to remain on surface for a short period of time and reapply if necessary as determined by initial testing as described in general conditions.
- C. Scrub the area. The extent of scrubbing will be determined by initial test and shall be adhered to throughout the job to ensure uniform appearance of cleaned masonry.
- D. Rinse the area thoroughly moving in horizontal paths starting at the top and moving downwards to prevent streaking. All applied material and loosened dirt must be thoroughly rinsed.
- E. Water rinsing specifications. After the procedure is established on the test panels, modifications to the procedure shall be made only upon approval of the architect.
 - 1. Minimum 3 gal/min flow rate
 - 2. 15 degree to 25 degree fan type spray tip
 - 3. 400 psi max.
 - 4. Hold nozzle approximately 2 feet from the masonry surface.

Masonry Restoration

Part 1: General

Description

- A. It is the intent of this section to specify requirements for the replacement of damaged bricks and the setting of missing units.

Scope

- A. Since the scope of this work is limited to individual, or small groups, the architect shall visually mark each unit masonry to be replaced prior to the letting of bids.
- B. The replacement of masonry units is limited to the red brick, and the magnesium limestone ornament.

Related Work

- A. Work described herein shall occur after masonry cleaning and selective demolition.

TuckpointingPart 1: General

Description

- A. Areas to be tuckpointed shall be determined prior to the start of the work after the masonry cleaning is completed. The unit price shall be used to determine the contract amount and thereafter the contract.

Submittals

- A. A 2 foot by 3 foot tuckpointing sample of mortar colors shall be made for the inspection of and selection by the Architect, to ensure that the mortar matches the existing color.

Quality Assurance

- A. The Architect shall periodically inspect the work as it is being executed. The contractor shall make his scaffolding available to the Architect.

Job Conditions

Tuckpointing shall not be performed at temperatures lower than 40 degrees F. Tuckpointing shall not continue if freezing temperatures are anticipated.

Materials

- A. Hydrated lime conforming to ASTM C207.
- B. Sand conforming to ASTM C144. Color and quality shall be approved by the Architect.
- C. Water shall be clean and free from deleterious acids, alkalis, or organic materials.
- D. Coloring pigments: as manufactured by Color Pigments, Inc. Alternative coloring shall be determined by the Architect.

Part 2: Materials

All sand, portland cement, and hydrated lime shall conform to appropriate ASTM standards stated above and be approved by the Architect.

Mortar Mix

- A. Mortar for tuckpointing shall be one bag of hydrated lime, one-fourth bag white portland cement and three cubic feet of sand to match original.

- B. Work described herein shall occur prior to the commencement of tuckpointing, in the vicinity of this work.

Job Conditions

- A. The portion of this work designated as the "replacement of brick units" shall not be performed at a temperature lower than 40 degrees F. This work shall not continue if freezing temperatures are anticipated.
- B. The Architect shall be notified prior to the commencement of the work so that he/she can observe removal of the first unit and establish whether any damage is occurring to the adjacent units.

Part 2: Execution

Removal of Damaged Units

- A. Only those units marked by the Architect shall be removed. The contractor shall count the marked units and report the count to the Architect for confirmation.
- B. No damage such as cracks, chips, breaks, etc. shall be allowed to brick units adjacent to the ones designated to be removed.
- C. The removal of damaged units shall be done by hand. Extreme care shall be taken not to damage the edges and corners, and/or the brick units adjacent to the unit designated to be removed.
- D. The contractor shall provide labor, materials, tools, and scaffolding necessary to remove the designated units, and replace them as specified in this section.

Replacement of Brick Units

- A. Mix mortar in the same manner as specified.
- B. Use appropriate mortar color for brick being repointed.
- C. Clean out all mortar within the opening where damaged brick was removed.
- D. The masonry within the opening shall be wetted but no excess standing water shall be present.
- E. Butter all concealed surfaces of the replacement unit and insert into the opening.

Part 3: Execution

Preparation

- A. All tuckpointing mortar shall be prehydrated. Thoroughly mix all ingredients including coloring agents, except water. Then mix again, adding only enough water to produce a damp workable mix which will retain its form when pressed into a ball. After one to two hours, add sufficient water to bring it to the proper consistency; that is, somewhat drier than conventional masonry mortars.

Execution

- A. All loose and deteriorated mortar is to be cleaned out to a minimum depth of $\frac{1}{2}$ to $\frac{3}{4}$ inches.
- B. Removal of mortar shall be done by means of hand tools. Extreme care shall be taken not to damage edges and corners of the brick units. The use of power tools is prohibited.
- C. The joint profiles shall be thoroughly cleaned of loose particles with a jet of air.
- D. The masonry and all existing mortar shall be wetted at the time of repointing. No excess water shall be present.
- E. Fill and tightly pack joints flush with the outer surface of the brick.
- F. When the outer surface of the mortar is thumb print hard, it shall be tooled in a manner identical to the existing mortar joints. Joint width shall not exceed $\frac{3}{4}$ inch.
- G. Care shall be taken at all times to avoid mortar smears. All excess mortar shall be removed with burlap bags from the masonry immediately. Acid cleaning will not be permitted for this procedure.

SealantsPart 1: General

It is the intent of this specification that sealants be applied to the structure where dissimilar materials meet, and where required to provide weather-tight, waterproof construction applicable to designated areas on recommendations.

Submit color charts and manufacturers' literature for approval by the Architect.

Part 2: Products

Sealants used shall be:

1. Mono, Tremco Manufacturing Co., 10701 Shaker Blvd.
Cleveland, Ohio
2. 60 plus Unicrylic, Pecora Chemical Co., 165 Wambold
Rd., Harleysville, Pennsylvania
3. Or upon approval by the Architect

Part 3: Execution

Application shall be in accordance with manufacturer's recommendations. Joint surfaces shall be clean, dry, and free of dust, oil, grease, or other harmful agents.

Painting

Part 1: General

- A. The intent of this section is to specify standards for all the work necessary to complete the painting in a first class manner.
- B. These specifications cover the painting and finishing surfaces except as otherwise specified.

- C. The painting contractor shall familiarize himself/herself with the specifications for other trades on this project and with provisions in them relating to or affecting painting.
- D. The terms of paint or painting used in this section in a general sense have reference to sealers, primers, stains, oil, alkyd, latex, epoxy, and enamel type painting, and the application of these materials.

Scope

- A. Painting of all wood surfaces shall be in accordance with these specifications.
- B. Painting, or staining of brick masonry units shall be in accordance with these specifications, and shall be done prior to any tuck-pointing procedures.

General Requirements

- A. Painting contractor shall supply all labor, materials, tools, ladders, scaffolding and equipment necessary for the completion of this work according to the specifications.
- B. Protect work, adjacent work, and materials at all times by suitable covering. Upon completion of work, remove any spots from other surfaces. Leave work in a clean and orderly condition.

Inspection of Surfaces

- A. Before starting any work, surfaces to receive paint finishes shall be examined by the contractor carefully, for defects which might interfere with painting results. Work shall not proceed until such damages are corrected.
- B. The commencing of work in a specific area shall be construed as acceptable of the surfaces, and thereafter, contractor shall be fully responsible.

Job, Weather, and Temperature Conditions

- A. When surface temperature is below 50 degrees F, do not apply paints, varnishes, and special coatings, unless specified.

Colors and Samples

- A. Colors shall conform to those specified in the drawings.
- B. The painting contractor shall prepare a reasonable number of samples as requested in writing by the Architect until the colors are satisfactory.

- C. The samples shall be retained by the Architect to compare with the finishes as they are applied.

Materials

- A. All paints and varnishes, enamel, laquers, stains, pate fill and similar materials must be delivered in their original containers with the seals still unbroken, and labels intact, with the manufacturers' instructions printed thereon.
- B. Paint shall be well ground, shall not settle, cake, or thicken in the container, shall be readily broken with a paddle to a smooth consistency, and shall have easy brushing properties.
- C. Paint shall arrive on the job ready-mixed, except for tinting of undecoats, and possible thinning.
- D. All thinning and tinting materials shall be recommended by the manufacturer of the particular material being thinned or tinted.

Part 3: Execution

Workmanship

- A. Employ skilled mechanics to ensure the very best possible workmanship. Quality workmanship is required.
- B. Equipment shall be kept clean and in proper condition to provide a job commensurate with the intent of this specification.
- C. All materials shall be mixed, thinned, modified, and applied only as specified by the manufacturers' directions.
- D. All priming coats and undercoats shall be tinted to the approximate shade of the final coat.
- E. Remove and protect hardware, accessories, device plates, lighting fixtures, factory finished work, and similar items, or provide ample in-place protection. Upon completion of each space, carefully replace all removed items.

Preparation of Surfaces

Part 1: General

- A. Surfaces shall be clean, dry, and adequately protected from dampness.
- B. Surfaces shall be free of any foreign material which will adversely affect adhesion or appearance of applied coating.

- C. Mildew shall be removed and the surface neutralized.
- D. Remove dirt, oil, and grease with mineral spirits and wipe dry with clean cloths.
- E. Apply primers and top coats according to manufacturers' recommendations.

ADAPTIVE USE DESIGN FOR THE BARTELL HOUSE HOTEL
JUNCTION CITY, KANSAS

BY

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An abstract submitted in partial fulfillment for
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Master of Architecture
in the Graduate School of
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1981

The focus of this report is the adaptive use of the Bartell House Hotel in Junction City, Kansas.

Adaptive use is a process by which old, yet structurally sound buildings are rehabilitated for new uses. New uses are developed in order to make buildings, which have outlived their economic usefulness, more viable. These buildings may have historic importance of national, state, or local scope; may have architectural distinctions, or may be very common structures which are underutilized, yet possess possibilities for revitalization. Buildings which often fall into these categories include: apartment buildings, downtown commercial and industrial buildings, schools, warehouses, wharves, courthouses, railroad stations, and large single-family residential structures--many of which face demolition.

Often neglect fell upon such buildings as use or spatial requirements of the original uses changed. As traffic patterns were altered, the locations were no longer considered prestigious, many buildings fell victim to underuse or abandonment. In recent years however, a large number of these buildings were saved by means of adaptive use.

Today, motivating forces such as lower costs, shorter construction time, greater physical amenities, and central locations, make commercial adaptive use programs feasible and often desirable.

The Bartell House is a major landmark in the community, a relatively rare example of its type for its period in the state and a good example of the work of Erasmus T. Carr. In 1979 Bartell House was

threatened with demolition. Two developers, feeling sympathetic to the building, purchased it with the intent of reusing it in whatever manner proved to be economical. With this in mind, research was begun to develop a program and a set of proposals for the Hotel reuse.

The analysis for this study encompassed many areas, including the historical review of the bases of the community; the development of the hotel as a building type in the Great Plains; the existing conditions of the Bartell House; the economic feasibility for the reuse design programming; and the reuse design recommendation.