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**THE EVOLUTION OF
GILBERT R. HORTON, ARCHITECTS**

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1991

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INTRODUCTION

We can state without fear of contradiction that we have consistently produced better values, dollar for dollar, year in and year out during the past eighteen or nineteen years than any other firm practicing continuously or operating during the bulk of this time.¹

Thus wrote Gilbert R. Horton in 1931. The words reveal an important aspect of Horton's approach to the practice of architecture in North Dakota. The need to economize, to bring maximum design quality while considering cost, was keenly felt--and rewarded--in a state with limited resources to spend on building.

The number of commissions the Horton firm received is testimony to the response to his approach. The firm, which remained in operation in 1991, counted some 320 projects of all size and scope between 1913 and 1939. Records at the State Archives for projects of all types total 258, of which 168 were counted as "complete commission units" (generally, new building projects or major additions).²

The firm's influence was widespread. The Horton firm dominated architectural practice in the east central part of the state between but not including Fargo and Bismarck. Some 84 communities or counties enjoyed at least one Horton commission. Most were concentrated about Horton's home base, Jamestown. Horton buildings may be found in communities along the north-south highway from New Rockford down to Ellendale. School commissions, which comprised the largest single building type in his practice, were more widely distributed than other types. Horton schools can be found in the east half of North Dakota, except for the northeast corner of that half and the immediate Fargo hinterland.

Gilbert Robinson Horton was born on November 10, 1888 in St. Paul, Minnesota. He died on November 2, 1985 at the age of 96 at Jamestown, North Dakota. He first moved to his new home town, Jamestown, in the early 1910s and set up his architectural practice early in 1913.³

Horton was an early advocate of licensing architects and other attempts to professionalize the practice of architecture. E.H. McFarland, a former Horton employee, recalled that, "Gil Horton...-being an active man and very friendly as well as being honest did work hard to further the 'cause' [licensing law]...."⁴

On October 25, 1917 Horton became the tenth architect in North Dakota to be licensed under the new state licensing law. When the North Dakota Association of Architects was founded in 1922,

Horton's name was among the eight charter members. Four years later he became a member of the American Institute of Architects (AIA). He later served as vice president, then president of the North Dakota State Board of Architecture during a lengthy term of service, 1941-55. Horton was also a charter member of the North Dakota Chapter of the AIA.⁵

In 1968 Horton was named a Fellow of the American Institute of Architects. He was the first North Dakota architect to receive this prestigious honor. Less than four percent of the AIA's members were Fellows. Horton achieved the honor because of his experimentation with new construction materials and techniques.⁶

Several of Horton's outside interests had a relationship with his professional career. He developed an early and sustained affection for the automobile. It was a natural occurrence, given the amount of time he spent on the road meeting with clients. At first he traveled by rail, but when the automobile became available, he embraced the new technology with fervor. Probably due in large part to the time spent on unimproved North Dakota roads, Horton was an early and avid advocate of good roads. According to a 1917 account, "He [was] especially active in the good roads movement, as he realizes the close connection between the development of a district and its highways."⁷

In later years Horton estimated he had driven 2.5 million miles over his long career, owning 23 different kinds of vehicles over the years. He owned a series of fancy cars, including a Buick, Franklin, Mercedes Benz, even a Rolls Royce. The many automobile-related commercial commissions the firm received neatly reflected Horton's longtime interest in the motor vehicle.⁸

Horton loved to travel. By 1968 he had visited eighteen countries in Europe and the Pacific, all but one Canadian province, and all the states in America except Alaska. The opportunity to view architecture from all over the world was considered of such importance to the development of an architect that the AIA Fellow form specifically asked what countries the potential Fellow had visited.⁹

Horton's sons characterized the professional personality of their father as likeable. They said his honesty was appealing to clients. And he was a hard worker; he covered the state. The assessment is not a bad epitaph.¹⁰

I. DEVELOPMENT OF GILBERT R. HORTON, ARCHITECT

DEVELOPMENT OF GILBERT R. HORTON, ARCHITECT

Early Training and Experience

Gilbert R. Horton spent his early years in Litchfield, Minnesota. His father was a traveling salesman. In 1908 the would-be architect graduated from Litchfield High School.¹¹

Horton received his initial drafting training while still in high school. For six months over the winter of 1907-08 he studied architectural drafting and detailing four nights each week at the "Schelde Vocational and Training School." The school was more of an apprenticeship opportunity than it was an organized educational institution. Jeff Schelde, a Danish contractor, operated a contracting business in Litchfield.¹²

Following the training with Schelde, Horton attended the schools of engineering at the University of Minnesota (1908-09) and the University of Washington (1910-11). He likely decided to take classes in Seattle after having traveled to the Alaska-Yukon-Pacific Exposition held in Seattle in 1909. The visit was an early manifestation of his curiosity about the world.¹³ He likely visited Seattle over the summer of 1909 following his time at the University of Minnesota in 1908-09.

Horton's youthful activities between the end of the Minnesota college term in 1909 and the summer of 1910 are not known. It is likely he was working, for he had to support himself and pay for his college training. Sometime after his visit to the coast in 1909, he returned to the Midwest and spent the summer of 1910 working for the county surveyor in Litchfield, Minnesota. It appears that Horton then returned to the west coast and attended the University of Washington for part of the 1910-11 school year. He apparently spent the winter of 1911 in Los Angeles working for the Home Telephone Company assembling telephones.¹⁴

Horton may have seen North Dakota initially as part of a traveling threshing crew. That introduction to the state may have been a factor in his decision to move to Jamestown and to remain there. He greatly appreciated the place and its people. "The prairie appealed to me...I can't really say why...but I think it was the people. They were open and friendly...They didn't take a friend for granted...and there were those wide open spaces."¹⁵

Horton came to Jamestown on May 11, 1911. He worked as a draftsman for the J. Schelde Company, his former teacher's business, between 1911 and 1912. In the early winter of 1912 Schelde moved on, to Sioux Falls, South Dakota. Horton chose to remain in Jamestown and in January of 1913 opened his own office as Gilbert R. Horton,

Architect. A factor in his decision to settle in one place may have been personal, for in 1913 he married a local girl, Evangelyn Roberts.¹⁶

Schools a Specialty

Horton perhaps suspected that he would not starve on his own, that there was work to be had. The Stutsman County school superintendent, Mary Cusator, was an early backer. "She liked the fact that I avoided offering local school boards stock plans. And I continued the supervision until the job was done. She recommended me to other school boards in other counties and in Montana and South Dakota."¹⁷

A good reputation among school boards was an important asset to Horton's nascent practice. He reportedly gained many commissions by word-of-mouth. Competition could be a fierce thing. It was not uncommon to have four or five architects making presentations at a school board meeting. The Horton brothers felt their father did not have the degree of intense competitiveness of others, and that the schools boards sensed and respected this trait. Other architects may have tried to gain work by "wining and dining" school board commissioners, but Horton did not. According to the brothers, his "innate honesty" served him well.¹⁸

Not only was Horton sensitive to the interests of the school boards, he devised technological innovations that improved country schools. Late in 1913 he began experimenting with insulated glass (then termed "double glazing"). In an area known for its harsh climate, means that would save energy and costs and also increase comfort were highly desirable. Double glazing eliminated the need to purchase and install storm windows. State education regulations stated that 20 percent of a school's wall surface had to be glass. Thus it was important to have all those windows well constructed. Horton's 1913 experiments revealed an early interest in grappling with the harsh North Dakota climate in an economical manner.¹⁹

By using first grade sheet or plate glass, Horton eliminated distortion problems. Another problem to solve was moisture condensation between the two panes. Often air leaked into the space or moisture traveled through the wood sash. To lessen this leakage, Horton had the outside glass installed using a heavy layer of putty. The inside glass was secured with wood stops, then screwed in place with brass screws. Thus it was removable for cleaning and maintenance. The wood sash was treated with oil all around to lessen the moisture problem. Horton found the technique to be useful and continued to employ it until commercial insulating glass became available.²⁰

Horton also thought about the foundations of school buildings. When he first began designing simple one-room schools, most were constructed on a concrete slab. But he thought that a basement

could economically fill some important functions and free up space in the classroom. He recalled, "The basement was a place for the stove and provided a lunch and playroom for the kids." The basement was a place to go during bad weather, an alternative to the classroom. Later, the basement also contained toilets.²¹

The majority of Horton schools were of two types, hipped roofed or flat roofed. The hipped roofed examples were wood frame and contained but one or two classrooms. Stylistic details were limited to the entrances and were either Craftsman or Colonial Revival.

Flat-roofed schools had more than one classroom, were brick-faced, set upon a raised basement, and had trim brick and perhaps concrete trim. These schools accounted for nearly 60 percent of the schools in the Horton Collection at the State Archives. Ornamentation was typically akin to the Transitional Brick Commercial style and consisted of flat geometric patterns and moulded or patterned courses. A few examples, usually larger buildings, displayed limited Tudor Revival influences.

Horton's school designs met with approval. In a two year period, 1914-16, he reportedly designed and supervised construction of 22 schools.²² Records at the State Archives contain plans for 17 specific schools between 1914 and 1918 (and for eight from 1914 to 1916.)

Horton Expands Operations

Records at the State Archives show 48 Horton projects of all kinds between 1913 and 1918. Forty of the 48 were for new buildings (complete commission units), rather than alterations or remodelings. In addition, Horton designed during the 1910s a number of prototype schools which could be tailored to individual school district's requirements.

Twenty-eight projects have a specific date and show how the firm's work was increasing. There were five complete commission units each year in 1914, 1915, and 1916. The number increased to nine in 1917, then slowed to but three during World War I. Materials shortages and government restrictions on building were likely factors, for in 1919 the number of complete commission units bounced back up to eight.

The 1910s, the early years of the Horton practice, saw a steady increase in work of all sorts. School commissions dominated, but the firm also received commercial, residential, religious, semi-public and public work. In short, within a few years Horton had established his specialty but also set a broad base of work of all kinds.

The Horton firm came to associate certain styles with certain types of buildings. Although these stylistic/building type relationships were not rigidly adhered to, certain patterns are evident. Houses frequently displayed Craftsman stylistic elements, were gabled, and faced with stucco. Brick-faced schools and commercial buildings sported geometric patterns from the Transitional Brick Commercial style. Smaller wood frame hipped roof schools had limited Craftsman or Colonial Revival stylistic motifs at their entrances. Public and semi-public buildings of brick often displayed classical motifs at their entrances. Auditoriums and gymnasiums from the Depression era had Art Deco elements; they also typically had broad wood laminated arched roofs and wall surfaces of wood, stucco or local fieldstone.

The 1920s were a period of intense activity for the Horton firm. Between 1919 and 1929, the firm had between seven and 20 complete commission units each year, based on records at the Horton Collection in the State Archives. The peak period occurred in the mid-1920s when the firm enjoyed 16 new building projects in 1924, 20 in both 1925 and 1926, and ten in 1927.

With the increased workload, one architect working alone could not adequately serve his clients. No one person could spend the time gaining commissions, working with clients, designing and drafting the building, and then supervising construction. Thus, Horton brought in architects and draftsman to assist him between 1920 and 1927. There were apparently several draftsman of limited duration whose names appeared on several plans in 1925 and 1926.

J. Howard Ganley. In 1920 the many commissions rolling into the office led Horton to employ Joseph Howard Ganley. Beginning in 1921 the firm was known as Horton & Ganley (shown on plan 47633).

Ganley received his license to practice architecture in North Dakota on April 6, 1920. The license was canceled in 1927 when he did not pay the renewal fees. According to Horton, by 1931 Ganley was employed by a large construction firm in the Twin Cities.²³

Ganley drew and possibly designed 12 plans of all types for the Horton firm during his brief stay. Half were school projects.

E.H. McFarland. Son of the president of Valley City Normal School, Eugene H. McFarland was in a position to bring in commissions from Valley City as well as to assist Horton in the practice. He received the fifteenth license to practice from the North Dakota Board of Architects.²⁴

McFarland was responsible for some of the more interesting designs the Horton firm produced in the mid-1920s. With the exception of one Canadian summer house and a private garage, no other residential work by him is found in the State Archives. There are 13 school designs, a dozen commercial projects, and five public or

semi-public designs. In all McFarland was responsible for 36 designs during his time with the Horton firm.

His designs were characterized by the use of bold shapes, whether three dimensional or as flat geometric patterns. Ornamentation was not directly derived from previous styles. It might be heavy or strong in shape and size. In some cases, broad expanses of unadorned brick wall were played against another large expanse of flat geometric pattern or perhaps some strong shapes.

Despite his work with geometric patterns, McFarland later stated:

I was primarily intrigued by Tudor and Gothic. I drooled while examining the works of Cram, Goodhue and Ferguson, especially Goodhue's marvelous pen and inks. Cram was a traditionalist but Goodhue varied his efforts to the point of breaking away and doing some remarkable things on his own as untraditional and as new in inventiveness as Sullivan or Wright....²⁵

In playing with shapes, pattern, and form, McFarland may have been attempting the same untraditional approach, the inventiveness he ascribed to the work of Louis Sullivan and Frank Lloyd Wright. Other of his statements revealed an awareness that the architect's preferences for the untraditional were not likely to be well received in a conservative state like North Dakota. Whether this was a factor in his decision to leave is not known.

McFarland began as an employee of Horton's. By 1926, however, the firm was described on plans as Gilbert R. Horton & E.H. McFarland. McFarland left abruptly in 1927. In 1928 he did not renew his license to practice architecture in North Dakota and it was therefore canceled. By 1931 he was working for the Fox Film Corporation in New York City. His involvement with the film industry persisted, and he later moved to California. He wrote a book on the cinema in 1955.²⁶

Hard Times

Following McFarland's departure, Horton made no further attempts to bring in a partner. The worsening economy and related fall in commissions after 1929 may have been a factor. He did employ a Norwegian draftsman, Ingeman Hoveland. Hoveland began work for Horton by at least 1926 and continued to work for him for many years.²⁷

Following the stock market crash in 1929 and the nationwide Great Depression of the 1930s, architectural work stopped everywhere. It was as though a great construction spigot had simply been turned off one day. Horton was fortunate to be offered the position of city engineer for Jamestown, a position he held between 1932 and

1938. Among his duties was planning and supervising a variety of construction work for the city.²⁸

Times were hard. Horton sold the lovely house he had designed and built for his family and moved to an acreage on the east edge of town. There they raised chickens and eggs.²⁹

Technological Experimentation. An important project in Jamestown funded by the Works Progress Administration (W.P.A.) was a large auditorium for McElroy Park. The McElroy Park auditorium (not extant) was quite large, 120' across by 200' long. In his continual study of architectural and engineering advances, Horton had read in Engineering News Record of an arch patented by a Salt Lake City engineer, J.H. Keefe. The arch was built of laminated and bolted wood and appeared to suit the need for a clear span.

Horton designed the building and acted as construction supervisor and consulting engineer, and the engineer provided the design for the arch and the footings. The auditorium design appears to have ranked as the first practical demonstration of the arch in this country. The previous year the University of Illinois had begun testing the technique, which was first devised in Europe in 1907 and widely used there.³⁰

In North Dakota the W.P.A. funded a number of large halls-- auditoriums, combined gymnasiums with auditoriums, and community centers featuring a large hall. Some were prominent additions to schools. Horton designed nearly a dozen halls in the 1930s. For these designs a clear span unimpeded by columns was desirable and Horton therefore seized upon the broad laminated arch concept to accomplish the clear span, especially for the larger designs.

W.P.A. projects were intended to provide work for as many men as possible. The more labor intensive a project, the better. Horton's McElroy Park auditorium offered many grueling manhours for acquiring and preparing materials as well as the actual construction. The total cost, \$17,000 was considered a bargain. The City of Jamestown provided \$5,000 and the W.P.A. the rest. It happened that a vacant flour mill constructed of massive heavy beams was to be razed. The owners donated the lumber in return for having the mill removed. Workman tore down the mill, then ripped the timbers by hand using a whip saw. Most of the timbers were 12"x18".³¹

The timber arches were laboriously fabricated on the ground using bolts and long wood pieces taken from the old mill. Foundations were put in place, and as an arch was finished it was erected in place using hand winches to operate the derricks. No power machines or tools were used during the entire operation. The result was a modern building employing modern engineering concepts and modern stylistic influences, the Art Deco. Yet the means for accomplishing it were notably less than modern.³²

The arch design and fabrication was evidently successful; Horton went on to design and build similar W.P.A. projects in the area. One was 90' wide but the others did not call for such wide spans as McElroy Auditorium. At least six were built in the 1930s.³³

Horton adapted the concept of labor intensive projects to other aspects of W.P.A. work. He developed a method for using the hard granite fieldstone that is common in North Dakota. There were few experienced stone masons available, but Horton found one in Kulm. Together they taught men to break the rock by hand to the desired face. Horton later recalled, "Watching those boys learn to select the right rock for the right place and building a wall was a real thrill for me....The walls: they're just as sound as the day they were put in place."³⁴

The stone was six to eight inches thick and was laid against a poured concrete wall that had a minimum amount of reinforcing steel, another cost saving feature. The school gymnasium at Dickey (47613) was the first of these halls. The ashlar stone was laid in either coursed or random fashion; the finish remained rock faced. Like the laminated arches, the technique was less expensive for materials and more labor intensive than others. The technique exemplifies and illustrates Depression-era responses to hard economic times.³⁵

Horton also experimented with hollow brick walls in the late 1930s. Construction materials shortages and the cost savings were factors. The 1938 school auditorium/gymnasium at Rogers, North Dakota (47618) was apparently his first efforts at using hollow brick for the walls. The walls were eight inches thick; stretchers and headers alternated along each course, leaving a 3 1/2 inch hollow core. There was no reinforcing.³⁶

Architectural Legacy

During his career Horton worked out of Jamestown continuously, with the exception of the World War II period. He worked in Fort Worth, Texas for a year, then spent 1944-45 with the National Home Administration (NHA) on work in Nebraska and Kansas. Horton remodeled buildings to provide housing for war workers for the NHA.³⁷

His son Gilbert E. joined the firm before World War II was declared and was registered as an architect in North Dakota in 1951. And in 1956 the younger son Kent, an engineer, left the Bureau of Aeronautics to return to Jamestown and join the family firm. Following their father's death in 1985, the brothers have continued the practice.³⁸

The design of a structure must reflect the hopes, aspiration and purpose of the individual for whom it was built. The design should also give continuity, order and

beauty to the community and the culture it serves. Each building must contribute to the esthetic health of its surroundings.³⁹

Writing in 1968, Gilbert R. Horton expressed some of the philosophy that lay behind his designs. His constant attention to cost properly reflected the needs of his clients. Yet he also included ornamentation, adornments that brought "order and beauty" to the community. His buildings were not stark, not clinically functional. As such, they reflected the "hopes and aspirations" of the people he served.

Horton consistently reserved certain stylistic influences for particular building types. Many houses were in the Craftsman Style. Schools and commercial buildings displayed the geometric brick patterns of the Transitional Brick Commercial. Public and semi-public buildings often displayed classical motifs. The Art Deco Style was employed for auditoriums from the 1930s. References to exotic styles, especially Spanish or Mission Revival styles, signaled an unusual building type and were used for a mortuary and a Knights of Columbus hall.⁴⁰

Often the principal or only stylistic details were clustered about the main entrance. Detail was continued in a limited fashion and served to tie the design together. The approach provided a soupcon of ornamentation to contribute to "esthetic health." But by limiting the amount of ornamentation, costs were held down. The Horton firm's designs were affordable yet more than merely functional. Ornamentation thus played an important role.

Horton's approach to residential design revealed the juggling between financial constraints and distinctive design.

The thing I always tried to do was build a home, not just a house. And I suppose I always managed to get my own personality into it. In those days an architect designed everything, the windows, the woodwork, the doors, were all cut to his specifications by the mill. I was concerned with comfort but I also had to be concerned with economy. I still marvel at some of the houses....details have always fascinated me.⁴¹

Residential designs accounted for nearly a quarter⁴² (22 percent) of the plans in the Horton Collection at the State Archives, the third highest category after schools and commercial buildings. Commercial building commissions accounted for another quarter of the building designs (40 out of 168) at the State Archives. Thirty-six percent of the total complete commission units at the State Archives were for schools, making them the dominant building type represented in that collection.

It has been claimed, with justification, that "there's hardly a central Dakota resident over 50 who has not at some point attended a Horton-designed school." Horton said he designed over 100 schools between 1912 and 1931. Records at the State Archives show sixty schools from the period, and it appears correct that the Horton firm dominated east central North Dakota school design. Although the exact number cannot be verified, it has been suggested that the firm designed 256 schools (probably including additions) in North and South Dakota and also eastern Montana.⁴³

Horton's selection of materials further revealed the nature of architectural practice in North Dakota and the firm's response to the economic realities of the place. The Horton firm was sensitive to the financial standing of its clients; their designs do not feature such costly materials as Bedford limestone or terra cotta. Ornate interiors employing a variety of costly materials are not typical. The firm called for permanent materials, stucco for houses, brick for flat-roofed schools and for commercial buildings. But the selections came from the lower range of cost; they were not the most expensive. The fieldstone auditoriums from the Great Depression era epitomize the firm's approach to materials. They wed the natural and economic resources of Horton's adopted state with architectural design.

The Horton firm also left a human legacy, for it served as a workshop for dozens of architectural students over the years. Horton made a special effort to employ architectural students during their vacations from school. Over 40 spent time with the firm. Most graduated as architects, and twelve went on to head their own firms. Horton's own sons, Gilbert E. and Kent, received on-the-job training with their father and carried on the family operation.⁴⁴

II. WORKS BY GILBERT R. HORTON, ARCHITECT

SCHOOLS

Significance

The Gilbert Horton firm designed more schools than any other type of commission. Since many of the schools were brick and of some size and cost, they may well be extant, if vacant, in small communities across the central part of the state. They may be the only architect-designed building in the community and function as local landmarks imbued with layers of symbolism, memories, emotional attachment, and pride.

Because of their distinctive appearance, examples of the Geometric Subtype are particularly notable within the Horton corpus of school design. The approximately 50 examples form a major design group in the evolution of the firm. Identifying features include the use of brick, rectangular flat-roofed shape, and geometric patterns, such as basketweave diamonds, "drip" motifs, end pilasters, and slender rustication. The Geometric Subtype can also be related to the commercial designs of the firm and thus provides a link between two functional building types.

The schools illustrate features and practices the Horton firm used which school boards found desirable and attractive. Their large representation within the body of Horton's work provides an insight into the firm's success in working with clients by providing durable, reasonably inexpensive, well planned designs.

Quantity

According to records at the ongoing firm of Gilbert R. Horton, the firm was responsible for 151 school-related projects between 1913 and 1939. The State Archives contains 109 schoolhouse commissions or designs, including 49 which were prototype plans, additions, and remodelings of existing buildings. Of the 109, 59 were for school buildings and one (47604) was a significant addition for Mandan High School and thus was counted as a "complete commission unit." These 60 designs constituted the principal commissions that were analyzed in this study, although basic plan types were not neglected. Thirty-seven Archives designs were undated (making analysis more difficult), 26 were plan types not for a specific commission, and the remaining 46 were dated commissions. (Seven plan types are dated--four from 1914, one from 1919 and two from 1928.)

Distribution

Horton school commissions blanketed southeast North Dakota. They did not extend into the Fargo hinterland which Fargo architects

presumably covered, but they extended as far west as Mandan and as far north and west as McLean and McHenry Counties. A ride along several highways would bring one to many Horton schools. There were ten commissions between Mayville and Coal Harbor on highway 200, five on highway 52 (the diagonal "Green Trail"), and eleven on or near highway 281 (the "Black Trail").

As might be expected, the bulk of the firm's commissions lay in a radius extending from the home base of Jamestown in Stutsman County in the east central part of the state. Stutsman County commissions, including Jamestown, totaled 19 at the State Archives and ranged in date from 1919 to 1927. (A few were undated.) Adjacent LaMoure County to the south accounted for five more, and Foster County to the north had three known Horton commissions.⁴⁵

Horton's work met with sufficient approval to lead to more school commissions in some places. Four counties had two commissions, one each had three or four school projects, and Stutsman County an even a dozen. Six towns each had two Horton school projects. Work outside North Dakota was not a significant part of Horton's practice, and there was only one school in South Dakota and one in Montana represented in the State Archives collection.

Chronology

The first dated schoolhouse design coincided with the onset of Horton's independent practice, 1914. The 1920s appeared to be the key time for Horton school commissions. In the 1914-19 period there were 21 school commissions (35%). Between 1920 and 1926 the Horton firm designed 38 (63%) of the 60 1914-1930 schoolhouse commissions located at the Archives. After 1927 the number of school designs fell dramatically, with only eight school designs between 1927 and 1930 and one after that, a reflection of economic hard times in the country.

The list contained at the State Archives is not complete but appears to be representative. Other sources such as newspaper articles list other commissions for which there were no plans at the State Archives, and the Horton firm counts many more school designs, 151. This number likely includes additions and alterations projects in addition to those absent from the Archives collection.

Dated School Commissions

	<u>1914-19</u>	<u>1920-29</u>	<u>1930-39</u>	<u>Total</u>
Archives	21	38	1	60
Horton Firm	63	77	11	151

Characteristics

Horton designed a full range of schools, from modest one room country schools to high schools. There were Horton designs for one-, two-, and four-room schools, for schools of unspecified use, for high schools, and for combined grade and high schools.

Horton schools may be usefully classified by roofline. Two subtypes dominated the practice, hipped roof schools and flat-roofed schools. Nearly 60 percent of Horton schools at the State Archives were flat-roofed. By far, most of the latter were examples of the "Geometric Subtype," a term coined for this report. Gabled schools were rare--only two examples were represented in the State Archives collection.

Few Horton schools displayed the stylistic influences often associated with educational design. The Tudor or Elizabethan Revival was used quite sparingly. In those relatively rare cases when it was present, historical references were limited and confined to the entrances. Another stylistic influence sometimes associated with educational design, the Georgian Revival, was also absent from Horton schools.

By far the dominant stylistic representation among Horton's brick flat-roofed schools was the Transitional Brick Commercial. Geometric brick patterns, moulded and patterned courses, and coursed or rusticated foundations adorned the relatively flat wall surfaces. Wood frame hipped roof examples typically displayed limited Craftsman or Colonial Revival stylistic elements, especially at the entrance.

Distinctive and expensive interior details were virtually nonexistent for Horton schools. Horton plans typically included interior details--picture mouldings, blackboard trim, hook strips for closets, simple wood trim for doors, staircases, newels. But most of these features were extremely simple and conventional. It is likely that Horton's clients, school boards working with limited budgets, did not seek costly interior features. Most Horton schools were located in small communities.

School Subtypes.

Hipped Roof Schools. Horton reserved the hipped roof for less expensive designs. Most were wood frame one- or two-room schools. Of the 36 examples at the State Archives, 23 were dated and for specific commissions, and a dozen listed specific communities or school districts but lacked dates. Two were for alteration projects and therefore were not analyzed in detail. The names of school districts did not always reveal the community or county where the district was located.

Elevations for a 1914 "Type C"⁴⁶ one-room school (47627) and a one-room school in Stutsman County's Winfield School District No. 41 (47745) in 1926 exhibited typical features of the hipped roof subtype. (See Figures II.1. and II.2.) Both had of course the hipped roof, which was covered with wood shingle and had a relatively broad overhang. Wall surfaces were clapboard, and there was limited wood trim (water table and continuous entablature or lintel course. Groups of windows provided ample light for the classroom(s) and had some type of multiple pane arrangement. Examples with a basement often had small basement windows and a concrete block foundation.

An entry porch or canopy (either hipped or gabled) shielded the entry or entries and displayed the principal stylistic references. These entry porches or canopies almost invariably had large scale Craftsman triangular knee braces or Colonial Revival rounded columns.

Many plans represented in the State Archives collection were variations on a basic theme. Most contained one or two classrooms for 30 pupils each, separate cloakrooms for boys and girls, separate toilet facilities, a book room, and a vestibule. The latter was especially welcome in a state known for its cold temperatures and sweeping winds, for it served as a buffer between the warmth inside and the weather outside. The presence of separate cloakrooms was not standard in general schoolhouse design.

Entry placement was variable. Some examples had separate access for boys and girls, and their respective cloakrooms and toilets flanked the classroom space, as shown on the Woodbury Type Plan (47772).⁴⁷ The plan also showed an early instance of provision for a basement. In this example, it contained the furnace and space for fuel storage, general storage, a kitchen, and a play room. (See Figure II.3.)

The cloakrooms and toilets were sometimes clustered at the end of the school where the primary entrance was also located. An additional secondary entrance might occur on a side or rear facade to provide access to fuel storage. When there was no basement, a fuel room might be appended to one end of the plan as shown for the James River School Plan (47772). School boards apparently found the presence of a basement to be a desirable feature. (See Figure II.4.)

Two-room plans often were simply mirror images of one-room plans. They had a basement and a centered entrance (or two entrances) on the long end of the rectangular plan. Plan Type 2-L (47773) was a typical example of a Horton two-room plan. (See Figure II.5.)

Examples of Horton's 36 hipped roof schools were commissioned at quite regular intervals from 1914 to 1929, and the relatively inexpensive design apparently met with favor.

Hipped Roof School Characteristics

- hipped roof
- wood shingle roof
- sheathed in clapboard
- relatively broad overhang
- grouped windows
- simple entablature
- hipped or gabled entry porch or canopy
- principle stylistic reference confined to entry
- Craftsman or Colonial Revival motifs
- water table
- plan variable, but most had one or two classrooms and separate cloakrooms and toilets for boys and girls, might have a vestibule(s), basement with furnace

Flat-roofed Schools. Flat-roofed schools were clearly of the twentieth century. Like courthouses by American architects from the period,⁴⁸ these schools were flat-roofed, rectangular, and had a centered entrance or entrances on the long end of the rectangle. Bell towers, domes, and other intrusions to the roofline have been rejected in favor of a clean--modern--look.

Unlike many early twentieth century courthouse examples of public architecture which carry heavy symbolism, Horton's flat-roofed schools generally exhibited little or no stylistic references. Rather, the emphasis was on geometric shapes. Patterns were executed in contrasting brickwork, concrete, or stone. There was a general flatness to the wall surface. In many ways the design of these schools was allied with commercial buildings of the period (although their shape is similar to other public buildings). Indeed, the North Dakota Archeology and Historic Preservation Division has termed the style "Transitional Brick Commercial."⁴⁹

Geometric Subtype. The vast majority of Horton flat-roofed schools fell within the "Geometric Subtype." The Geometric Subtype and the approximately 50 examples⁵⁰ thus constituted an important grouping within the body of the Horton school designs.

The Geometric Subtype appeared as part of Horton's repertoire as early as 1915. The school for the Strong School District No. 30 in Woodworth, North Dakota (47715) is an instructive early example. The design consisted of two stories set upon a raised basement, was rectangular (60x37') with a flat roof and centered entrance, and had groups of windows having continuous lintels or sills or both). (In this early example they were rather widely spaced but united.) Window panes for the Woodworth school were 6/1; some sort of multiple pane configuration was typical of these designs. (See Figure II.6.)

Trim brick and concrete on the Woodworth school contrasted with the face brick. Simple geometric patterns--a key identifying feature--included brick outline panels between some windows and vertical brick end panels (or "pilasters") topped with geometric cement caps. The latter shape was repeated at the entry and could have been a forerunner of Horton's brickwork "drip motif" used the following year.

Additional trim features were restrained and simple for the Woodworth school. Concrete coping topped the design. Courses were used to form continuous lintels and sills. The shaped parapet was slightly arched at the center. Below that arch lay a course that rose to a shallow centered arch over the staircase window. This shape was repeated on the entry porch, as was the slight arch of the parapet, an effective interplay of shapes. The raised brick basement, with its contrasting concrete courses, provided a proper foundation to the composition.

The plan for the Woodworth school was as typical as the form. The basement contained the gymnasium, furnace, and toilets. There were two 40-pupil classrooms on each of the two upper floors. Divided stairs led off a small squarish (11x15') entry corridor which opened directly into each of the classrooms. The corridor, stairs, and classroom coat rooms occupied the front elevation. No windows were located along the short sides (or ends) of the rectangle, and a band of five windows along the back of each classroom provided natural light.

The Woodworth design apparently met with favor, for the Horton firm repeated the general design (with slight modifications) no less than six times between 1915 and 1920.⁵¹ Horton seldom repeated design motifs so slavishly. It may have been that local school boards saw Horton plans and specified they wanted one "just like" the school or school plan they saw. Two schools were located near Carrington and dated from 1915 and 1916, suggesting that familiarity with another district's school design could have been a factor. The two 1920 plans were in the same county and were drawn a week apart; Traill County is directly east of the Carrington area, on the state line with Minnesota.

As early as 1915 Horton, had introduced design and plan features which he continued to draw on through the 1920s. For example, the 1915 school for the Guilford School District No. 3 at Medina, North Dakota (47762) had a small room tucked above the staircase to the second floor. Generally labeled office or library, the small room was thus tucked behind the raised shaped parapet. Horton frequently included the extra room in 1910s and 1920s designs. (See Figure II.7.)

The Medina example as well as Grade and High School Building at Ellendale, North Dakota (47776) also illustrated some less common Horton design approaches: the presence of two front entrances and

the use of Tudor Revival stylistic motifs. The Medina school is 56x76', yet has only three classrooms on each floor because of the considerable space given over to the two sets of stairs and related space. The Ellendale example from the same year also had two entrances but was considerably larger (75x124'). Two means of access made sense for safety reasons and to separate grade and high school students. (It was certainly possible that the Medina school board requested two entrances, and Horton supplied them to satisfy his clients.)

The year 1916 brought more school commissions to the Horton firm (three) and motifs were used that were later repeated on other Horton designs. The schools for the Mercer School District No. 56 in Mercer, North Dakota, (47780) and for Lincoln School District No. 4 in Robinson, North Dakota (47764) both exhibited a diamond shape with herringbone or basketweave brick pattern inside. In addition to the basketweave pattern, the Mercer school had a basket arch pediment of galvanized iron over a basket arch entry, another Horton motif. (See Figure II.8.)

The 1916 design for the Robinson school (which was very similar to the Woodworth school discussed above) also had a distinctive brickwork "drip" motif placed at the ends of the cornice and flanking the entry. The Horton firm used the attractive motif frequently for both school and commercial designs. The Robinson and Woodworth school designs show how Horton played with motifs within a basic framework to create distinctive designs.

In 1917 Horton introduced still other recurring school motifs. The Grade and High School Building for Independent School District No. 1 in Veblen, South Dakota (47760) has a rusticated brick and stone basement consisting of narrow courses, outline panels with a diamond pattern infill, and staircase windows with prominent star-shaped patterns. These elements were in addition to earlier Horton features: two entrances, the Tudor arch (here with open books in the spandrels), "drip" brickwork motif, and presence of both Tudor Revival and geometric designs.

The 1920s Schools. As noted, in the 1920s, Gilbert Horton employed two architects to help with his growing architectural practice. J.Howard Ganley was in the office between 1920 and 1921, E.H. McFarland from 1923 to 1927. It appears the two brought design features to the Horton practice while retaining many established Horton elements. For example, several of Ganley's school designs called for considerable amounts of contrasting light trim brick. And two other of his designs had attractive small terraces that outlined and called attention to the entrance (47632, 47633).

Between October 6, 1920 and May 24, 1921, Ganley drew (and may have designed) six schools.⁵² (The plans note that Ganley drew them but ultimate design responsibility was not stated.) Two of the six

(47632A, 47632) were different versions for the same job--one was a less expensive version. All but one (the less expensive version, 47632A) were examples of Horton's geometric subtype. They exhibited features Ganley may have brought to the subtype and other motifs that Horton used and Ganley continued or refined.

These six Ganley-era schools displayed considerable use of contrasting trim brick and also rusticated brickwork similar to what Gilbert Horton had introduced in 1917. The 1920 four-room school for the Bohnsack School District in Traill County (47712) featured short narrow brick panels in a basketweave pattern, brick in a herringbone pattern and also a rusticated brick base. Like a number of other examples of the geometric subtype, a small room (here an office) was tucked above the stairs and behind the shaped parapet. The 1920 four-room school for the Englevale School District (47631) featured an even more active wall surface. Dark, light, and also medium shades of brick formed geometric patterns, including diapering in vertical bands, garden wall bond, and a soldier course continuous lintel.

Ganley's four-room school for the Banner School District in LaMoure County (47633) also displayed an effective use of contrasting brick. Lighter brick was used for the base, then continued up and around the window groupings and entry. The result was an interesting play of geometrics through contrasting shades of brick. (See Figure II.9.)

For several years after the departure of Ganley, Horton practiced alone. He is known to have designed four schools in the three months between May 3 and July 22 in 1922. Some time in 1923 McFarland came on board. McFarland school work was dated between August 28, 1923 (47628) and July 18, 1927 (47608) when he drew only part of the plans.⁵³

McFarland's first design was markedly different from previous Horton schools. The 1923 School Building for the Eckelson School District No. 45 in Barnes County (47628) had a prominent smokestack and a one-story offset gymnasium. The unusual gymnasium placement was used for at least two other of the firm's schools (47637, 47639).

The dominant theme in McFarland designs was strong geometric pattern and bold shapes. Even chimneys and gymnasiums called attention to themselves by being set apart in a bold fashion. Ornamentation was also bold, even heavy. The Eckelson school in Barnes County illustrates this approach. The thick coping (here crenelated) and thick concrete rectangles to cap piers and elsewhere in the design were features that reappeared on McFarland designs. Flat geometric patterns of brick covered extensive space. Surprisingly few windows appeared on the main facade and those that were present were covered with ornamental wood grills. The small scale X-shape pattern of the grills echoed the larger scale X's of

the brick panels below them. McFarland also favored a starburst motif and diamond patterns. (See Figure II.10.)

At the entrance of the Eckelson School in Barnes County were vaguely Elizabethan or Tudor Revival features: a quoin surround and moulded arch. But the arch span was elongated, the traditional shape of the Tudor arch only suggested. McFarland employed Tudor Revival motifs on occasion, most notably for the High School at Mandan (47604) in September of 1923. Considerable attention was lavished on the entrance where there were paired crockets, spandrels having a trefoil effect, and many multiple pane windows.

The use of bold shapes continued in McFarland's work. Rusticated brickwork was used imaginatively in the September 3, 1923 plan for a Grade and High School for the Sheridan Consolidated School District in Marion (47639) for the foundation, but also appeared in slender bands at the top and bottom of the composition as well as to highlight the entry bay. (McFarland also employed this motif in his commercial work. In another example a broad Romanesque arch (filled with starburst grillwork) called attention to the entrance of the Grade and High School Building for the Cherry Grove School District No. 7 (47640) in Braddock. And there were large distinctive round arched windows and stone "cannonballs" arrayed along the parapet coping with a recessed slit below them extending into the wall surface for the School Building for the Fort Yates School District No. 4 (47607) at Fort Yates.

McFarland also experimented with gymnasium placement for smaller one-story schools. The Grade and High School Building for the Greenland Consolidated School District No. 47 (47641) in Barnes County in 1925 featured a centered gymnasium. The entry vestibule opened directly on to the gym space. There were two classrooms on each side of the gym. Four other schools designed by the Horton firm employed the centered gymnasium (47607, 47645, 47608, 47706). The centered gymnasium school design constituted a minor but interesting plan of the Horton firm's schools.

Art Deco Influences. Only three Horton schools exhibited Art Deco influences (47706, 47707, 47710). One of these (47710) was primarily an example of the geometric subtype with Transitional Brick Commercial stylistic influences. And 47706 was a one-story version of the two-story 47707. Horton did design a number of additions exhibiting Art Deco stylistic influences, which are discussed in the section on public and semi-public buildings.

Geometric Subtype Characteristics

Primary Characteristics

- absence of (or limited) reference to historical styles
- geometric patterns
- raised basement

- brick with trim brick
- rusticated brickwork
- brick outline panels
- centered entry
- windows grouped in front, more windows grouped in rear, fewer windows at the basement window, often no side windows
- double doors
- rectangular shape; may have offset gymnasium, boiler room or both

Secondary Characteristics

- shaped parapet
- contrasting coping, sometimes with crenellations
- small, slightly projecting entry porch
- tall smokestack (rare)
- basement may contain gymnasium, furnace, toilets
- one story examples: gymnasium may be centered with classrooms off it
- library or office space tucked behind centered parapet, over the stairs

Other than Geometric Subtype. As might be expected, the Horton firm did not limit itself exclusively to hipped roof and flat-roofed designs--much as this limitation would simplify analysis of their designs. E.H. McFarland apparently designed a two story brick gabled school for the Kulm Special School District in Kulm in 1924 (47603). The entrance was centered on the gable side and inset within rather heavy round arches, a motif McFarland used on other occasions. An ornate sheet iron ventilator on a wood shingle base graced the ridgeline. Another unusual McFarland design was the School Building for the Banner School District in La Moure County (47743), for it included a Community Room affixed to the basic school plan. The roofline consisted of two hipped sections.

COMMERCIAL BUILDINGS

Significance

Commercial buildings accounted for about one-quarter of the complete commission units in the collection at the State Archives. Because of their prominence along main streets in fourteen North Dakota communities, the influence on community countenance was strong. That prominence was especially pronounced in Jamestown, for the Gilbert Horton office designed as many commercial buildings in Jamestown as it did for clients over the rest of the state.

Buildings specifically designed for automobile-related businesses formed in important subset of the Horton commercial work. These auto-era buildings were larger in order to accommodate vehicular storage related to sales and service. The advent of the automobile age affected the shape and appearance of main street commercial buildings in small towns all across the state.

Quantity

There were a total of 57 commercial commissions listed among the Gilbert Horton records at the State Archives. Forty of the 57 were complete commission units (new building designs) and thus best illustrated design and other considerations of the firm. The others were remodeling jobs or additions or the type of project is not clear because of incomplete records.

Distribution

Half of the 40 projects were for Jamestown clients. Seventeen more were clustered in the Jamestown/Valley City vicinity: two in Valley City, six along the highway running north and south of Jamestown, three just west of Jamestown in Medina, and six to the north and south of Valley City.

Commission locations stretched to the Canadian border, but only because of one community, Cavalier (47834, near Pembina). This was the northernmost commission represented in the entire Horton collection. An automobile garage (47901) in Wahpeton was the southeasternmost location. And three west river sites extended Horton work beyond Bismarck, two in Mandan (47902, 47841) and one in Hebron (47839). Commercial commissions for places outside North Dakota were as rare as for other types of Horton work; a minor addition to a bank in Kimball, Minnesota (47923) was the sole example.

Chronology

The period between the close of World War I and the onset of the Great Depression was a time of considerable work for the firm. Of the 40 commercial buildings, 28 (70%) dated from 1920-29. The year 1925 was the peak year, with 11 commercial building designs. Records at the present Horton firm for all kinds of commissions showed a similar distribution.

Commercial Commissions

	<u>1914-19</u>	<u>1920-29</u>	<u>1930-31</u>	<u>1930-39</u>	<u>Total</u>
Archives	8	28	4		40
Horton firm	14	50		24	88

Characteristics

Half of all the 40 commercial complete commission units in the State Archives collection were for projects directly related to the automobile. Another mode of transportation, the railroad, accounted for two buildings, both in Jamestown. Four projects (two buildings and two remodelings) were for banks. With the exception of the automobile-related buildings, no other specialized grouping of commercial buildings dominated in the Horton firm.

Most examples (29 out of the 40) were for one story commercial buildings. Seventeen of the 20 auto-related projects were one story, likely a response to the special needs of the specialty. Dimensions were variable, but in general automobile-related buildings were notably larger than other commercial buildings. The width of commercial lots of course influenced building size, especially for non-automobile examples, and nine buildings were approximately 25' wide. Most non-automotive commercial buildings measured between 25 and 40 feet in width and from 60 to 110 feet in length.

Most commercial examples had body brick with contrasting trim brick, often with limited concrete trim as well. There were a few instances of three brick colors, clay tile used in combination with brick, and, rarely, stone trim. Automobile-related buildings did not differ in the use of materials from other commercial projects.

By far the dominant stylistic influence was the Transitional Brick Commercial. Other stylistic representations included an Early Brick Commercial example (47933) from 1923, a pre-World War I bank in Edmunds (47922) having classical acroteria, scallops, and an egg-and-dart course, the two railroad buildings executed with Craftsman stylistic overtones (47830, 47831), a limited Prairie School-influenced addition in Valley City (47829), and a Mission Revival funeral parlor from 1931 (47847).

Three automobile-related designs exhibited Tudor Revival elements. Beginning in mid-1929, there were five examples with Art Deco stylistic ornamentation. And one design (47916) from 1929 offered the client the choice of three different styles, Mission Revival, Art Deco, and Craftsman or diluted medieval elements, each applied to a basic design.

Facade treatment ranged from the simple to the more complex. The latter exhibited more patterns and more than one brick color. In general, two story examples had more elaborate patterns than one story commercial buildings. This was likely a function of the cost of the building and also the amount of wall surface available to adorn.

A particularly effective design motif was the application of "pilaster panels" at the ends of the main facade to frame the composition. "Capitals" and "bases" of contrasting material or simply a different geometric pattern were used to call attention to the motif. An example was the 1925 Store and Apartment Building for Mrs. Anna Schmitz in Jamestown (47920). Quoins and other squared or rectangular geometric shapes were employed to frame the design. Other examples used the pilaster panel to achieve the effect. (See Figure II.11.)

The Store and Office Building for S.H. Funk & Sons in Hebron (47839) from 1917 also employed the pilaster panel at the ends of the storefront windows. There were a number of other characteristic features as well: shaped parapet with tile coping; treatment at the ends of the facade--basketweave brick diamonds up high; trim and body brick course at the storefront windows; cornice with drip motif; brick window surrounds; a lintel course uniting the storefront windows; recessed entrances. Door placement reflected the several uses of the building. Two entries provided separate access to the furniture store and the market on the ground floor (plus a tin shop to the rear) while the third provided access to the second story offices, lodge room, and apartment. The basement was designed to accommodate the heating unit, furniture storage, a casket room, and an embalming room. (See Figure II.12.)

Motifs used for school designs by McFarland were also in evidence for his commercial buildings. The Store Building for J.W. Hintgen in Mandan (47841) from June of 1923 had a series of round-arched upper windows and a broad diaper or diamond pattern in brick, also thick concrete coping--all favored McFarland elements. McFarland designed the J. B. Clabotts garage in Jamestown (47903) the following month and it too had familiar features. Three colors of brick were used. Geometric patterns focused attention on the many (eleven) upper windows for the two apartments. Brickwork created a sort of rusticated or quoin effect between, above and at the ends of these windows, and even on the chimney. The rusticated effect further called attention to the windows, while the "pilaster panels"--here with heavy concrete "pilasters" and "bases"--were

effective framing devices. (See Figure II.13.) The Filling Station for the Home Oil Company in Jamestown (47925) displayed similar rusticated or quoin effects.

Beginning in August of 1929 (47853), Art Deco stylistic influences were evident on the firm's commercial designs. Between 1929 and 1931 the firm designed a limited number of complete commercial units, six. Art Deco influences were apparent on some of them--a certain streamlined effect, striated vertical panels, linear motifs. These were typically applied to a familiar storefront, as for the Store Building for T.I. Strinden (47853) of Litchville. The Business Building for Dingeldein & Nelson (47845), also in Litchville, displayed a stronger Deco influence with its metal windows, setbacks, and linear brickwork. (See Figure II.14.)

Automobile-Related Designs. Two Horton designs from the 1910s were related to the automobile (47926, 47902). And fully seventeen of the 28 1920s era commercial buildings related to the automobile. These 19 projects accounted for 47.5% of the total building commissions, and the 17 constituted 61% of the 1920s era work. Auto-related designs thus ranked as a significant representation in the Horton body of commercial work. In light of Gilbert Horton's strong and early interest in good roads and the automobile, the representation was apt, perhaps even inevitable.

The special needs of the motor vehicle directly affected the design of automobile-related buildings. Many examples from the Horton firm had a prominent garage door on the front facade. Its presence clearly showed the modern, thoroughly up-to-date automotive use of the building, while also providing necessary access. The garage door access was integrated into the main facade, not relegated to the back. A typical example was the Garage for C.J. Hoffmann at Wahpeton (47901) from June 6, 1925. The display room and office flanked the centered driveway, and there was also a centered rear exit. Most of the space was given over to vehicular storage, a typical arrangement. In other cases, the large storage area also had space set aside for auto repairs and related activities such as vulcanizing tires. (See Figures II.15, II.16.)

Because vehicles had to be moved into and out of these larger buildings, additional large exits were also necessary. These garage door entries were found on the front and side facades as well as the rear. Thus, corner locations and ones consisting of more than one traditional commercial lot were desirable. The need for additional space and for maneuvering vehicles may well have expanded the areas given over to commercial use in communities.

In contrast to other commercial buildings, a significant group of automobile-related buildings were 40-50' wide and 130-140' long. The large size accommodated all those gleaming new automobiles. The 1926 design for the H.W. Lyons Motor Company in Jamestown

(47905) offered nine different floorplan choices for storing from 51 to 63 cars.

The term "garage" might encompass several functions related to selling and servicing the motor vehicle. Horton designed "garages" that consisted of showrooms lacking substantial repair facilities, showrooms with repair service, and service stations. The latter might have space for dispensing gasoline, for vulcanizing tires, and for battery care in addition to a display room and storage space. Filling stations, a somewhat later and smaller building type, concentrated on selling fuel but might have some repair capabilities as well. Later examples of all types (garages and filling stations) frequently incorporated a gas pump in a special space, a cutaway corner of the building. The 1925 Service Station for Bernard Sullivan in Valley City (47910) had space for a number of these specialized uses, including the cutaway corner.

In addition to these garage types, the Horton firm designed automobile-related buildings for even more specialized uses. The 1920 Garage and Cleaning Plant in Jamestown (47904) was just 26x25' and contained space for two washers, a "tumbler," and a floor drain. Vehicles entered at the right side rear for cleaning, then angled to the garage door exit on the left side of the main facade. The Horton firm also received commissions for a battery shop (47909) and a tire shop (47854), both in 1925.

In many cases the basic form and design of the building was the Transitional Brick Commercial. Motifs differed little from those of other Horton commercial buildings from the period. But a significant concentration were decidedly fanciful. The building in effect served as an advertisement. For example, the Tire Shop for L. Rockwood in Jamestown (47854) was a charming cottage-like design having a gambrel roof, wood brackets along the front, and a Tudor Revival round-arched entry door. The building design advertised it to be new and different. Its fanciful appearance announced its relationship with a new and distinctive technology, the automobile.

Fanciful designs and other features were considered appropriate and useful to trumpet associations with the new and modern. Horton automobile-related designs included features not repeated on other, more staid commercial work. These included green diamonds adorning the main facade (47926), prominent contrasting concrete rectangles arrayed like sticks along and extending above the coping (47910), and bold concrete outline circles. The presence of prominent garage doors on the main facade clearly showed the automotive use of the building; large showroom windows with expanses of plate glass (and no prism lens transoms) enabled passersby to view the shiny chrome and metal vehicles.

Especially with filling stations, distinctive designs were intended to lure the tourist or traveler to stop. The Horton designs for filling stations personified early 20th century approaches toward

marketing the automobile. Between 1924 and 1930 the Horton firm designed seven filling stations. (One project (47916) consisted of three possibilities, using Mission Revival, Art Deco, and Craftsman or medieval stylistic influences.)⁵⁴

As a visual enticement, the Filling Station for the Home Oil Company (two versions: 47925 and 47917, both in 1924) employed a highly distinctive octagonal shape topped with a polygonal roof. The unusual roofline was further topped with a wind vane depicting a man and his beloved car. The octagonal shape recalled a medieval battlement, and the crenelated cornice, the brick with contrasting concrete, and the quoins together imparted a Tudor or Elizabethan Revival flavor to the design. With his trusty steed, the automobile, the motorist was prepared to do battle with North Dakota roads. (See Figure II.17.)

The design was also distinctly modern, as befitted a building of the auto age. Features of the 20th century included a highly decorated canopy arrayed with electric light bulbs, large plate glass windows, and geometric brickwork.

Designed in March of 1925, the Service Station in Carrington (47911) continued features seen on the Jamestown example. It too was octagonal (but freestanding and flat-roofed), had crenellations, and brick with contrasting trim (here, stone quoins, courses, overflow spout, decorative discs at the intersection of the walls, and coping). Multiple pane windows further contributed to the medieval flavor of the design. The tiny office was just 16x16'; below grade was a garage door entrance to a basement storeroom. The octagon was placed at the corner of a cutaway pump island.

Two other filling station designs assumed a more domestic cottage-like appearance, both for the Dacotah Oil Company of Jamestown. The 1924 plan (47914) featured a tile gabled roof, a brick raised foundation, and stucco walls and chimney. A 1929 design (47916) consisted of a series of gables with stucco and vertical strips recalling half timbering. Both displayed features found on Horton residential designs.

Two Horton service station designs employed the Art Deco style (one of the three proposals for 47914 and the 1930 design in Valley City, 47915). Stucco wall surfaces were combined with wood trim, an unusual (but inexpensive) combination for the Art Deco. The stylistic features included corner pilasters consisting of vertical striations, zigzags and other linear designs, metal windows, and a stepped effect. (See Figure II.18.)

Commercial Building Characteristics

- one or two story
- flat roof

- 25-40' x 60-110'
- Transitional Brick Commercial is dominant stylistic influence
- pilasters, panels, or other framing effect at ends of main facade
- geometric patterns, including "drip" motifs, basketweave patterns, diamonds, patterned brick courses
- ample storefront windows
- brick with trim brick, concrete trim

Automobile-Related Building Characteristics

- one story
- flat roof
- 40-50' x 130-140'
- Transitional Brick Commercial, but also Tudor Revival, Craftsman, Art Deco stylistic influences
- design may serve as flamboyant advertisement
- garage doors
- cutaway corner with fuel pumps
- brick with trim brick, concrete trim; also stucco, stone trim, wood trim

RESIDENTIAL BUILDINGS

Significance

Residential buildings accounted for approximately one-quarter of the new building work (complete commission units) by the Horton firm. Especially during the 1920s they formed an important part of the firm's work. Unlike other Horton firm designs, interior details played a larger role in individual projects. Although the details were quite typical examples of Craftsman Style materials and motifs, they did enrich the homes of Horton's clients and reveal the type of interior detailing the firm could offer when clients wanted it.

Quantity

The Horton Collection at the State Archives contained 56 residential projects of all kinds, including remodeling projects and incomplete records. Designs for new houses, a dormitory, and several apartments (complete commission units) totaled 37.

Distribution

Twenty-one of the 37 complete commission units were located in Horton's home base, Jamestown. (There were also two residential garages the Horton firm designed for Jamestown clients.) Four more houses were located in Valley City, six were north and east of Jamestown, and only one was south of there. A 1914 bungalow design was not associated with a specified location and Millarton was not found on the map. Horton designed two houses for Minnesota clients and a summer house in Canada as well.

Chronology

Records at the State Archives showed a peak year of 1926 for residential commissions, with seven house designs on file. Residential commissions were much more scattered than school and commercial work and were not represented in every year.

Residential Commissions

	<u>1913-19</u>	<u>1920-29</u>	<u>1930-46</u>	<u>1930-39</u>	<u>Total</u>
Archives	14	18	5		37
Horton firm	18	35		12	65

According to records compiled at the Horton firm, the company designed 51 houses between 1940 and 1949, clearly government-sponsored projects.

Characteristics

The Craftsman Style was the best represented among Horton designs, and was used in 14 examples. Another four combined Craftsman motifs, massing, and materials with Tudor Revival, Colonial Revival or Four-Square influences.

Common Craftsman features included gable-side roofline (often continuing forward to form the porch roof), 1.5 stories, prominent gabled or shed-roofed dormer or dormers, triangular knee braces, exposed rafter ends, 6/6 windows or other combination of multiple panes over a plain window, rounded or notched vergeboards, flared or eared window surrounds, applied vertical wood decorative strips, flower boxes, and two wall surface materials.

Many of the designs were simple and typical examples of the Craftsman house. The 1917 O.N. Hedahl House in Mercer (47979) and the pre-World War I Dr. A.N. Treat House in Pingree (47978) were similar. The Hedahl House had such familiar Craftsman elements as a broad overhang, gable end boards with rounded ends, and simple porch columns resting on a clapboard skirt. (See Figure II.19.)

The H.C. Flint House in Jamestown (48005) is of interest, for the accompanying garage design from 1913 was the earliest dated Horton design of any kind in the State Archives. In addition, the house was large and exhibited features found on other Horton house designs. A typical feature was the gable-side roofline having two prominent front-facing gables or gabled dormers (here with a centered entrance between them). Other Horton features were the windows grouped in three's, applied decorative strips or simulated half-timbering, flat-roofed side porch, gabled entry canopy, and multiple panes (here for side lights). The garage continued the motifs and materials of the house. Unlike other examples, the Flint House had a large amount of hall space (8x11') and the owner's bedroom was also unusually large (14x19') compared to other Horton plans. (See Figure II.20.)

The Tudor Revival was the next most represented stylistic influence for Horton houses, with four examples in addition to a Tudor/Colonial Revival house and a Craftsman/Tudor example. Examples dated from 1916 (47943). The distinctive W.T. Martin House in Edgeley (47943) was designed in 1916, three years after the Flint House. While its massing was notably similar to the Flint House, additional details and stylistic elements marked it as an example of the Tudor Revival Style.

The Martin House ranked as the most elaborate Horton house design represented in the collection at the State Archives. There is a

flat-roofed porte cochere and balancing "sun parlor" on the other side, a five-sided conservatory bay, and an attractive unifying high brick foundation. Tudor Revival features included the multiple window panes--some in diamond patterns--simulated half timbering, prominent gables with vergeboards, and the suggestion of a Tudor arch for some windows and also for interior woodwork details. (See Figures II.21. and II.22.)

Minor stylistic influences represented in the Horton houses were the Prairie School/Colonial Revival (48001), a rare and unique Spanish Eclectic Style example (47960) featuring one panel of elaborate low relief decoration, an Art Deco-influenced design (47950 in 1937), and a sort of medieval/Mediterranean house designed in 1914 (47946). None were pure examples and the stylistic influences tended to be either quite diluted or were simply applied to a basic house shape.

Stucco was often used in combination with other materials (brick, vertical wood strips, clapboard or "rough siding", even randomly placed cobblestones). Brick was sometimes used to create a high and noticeable foundation (47945, 47943), which might double as a continuous sill for first floor windows. The roofline often had a notably broad and shallow pitch, making for a pleasing sweeping line (47979, 47980).

Most Horton houses were gabled, including intersecting gables, gables with additional prominent dormers, and a gable-side form that continued forward to form the porch. There were three gambrel examples (47948 in 1921, 47962 and 47953 in 1926). Hipped roofs were also represented, and the shape was typically reserved for those with Colonial Revival influences (48004) and of course 4-Square designs. In addition, a stucco Art Deco-influenced example from 1937 had a truncated hipped roof and additional gables (47950). The most distinctive roofline the firm employed combined an unusual thatched effect with cutaway corners (47963 in 1926 and 47952 in 1921).

Plans for houses were variable in arrangement but typically featured a living room, dining room, kitchen, bath, and from one to three bedrooms. One bedroom might be found on the first floor. Provision was sometimes made for a sunroom, porch, large entry hall, den, conservatory, sewing room, or library. Some examples had a side bay (47944), sunroom and breakfast alcove bays (47980), or prominent brick chimneys (47944, 47945).

A number of the pre-World War I commissions lacked a bathroom. For example, the Dr. A.N. Treat House in Pingree (47978) had a maid's room but no bathroom. The prototype Five Room Bungalow (48003) offered space for a bathroom or a pantry, whichever the client found more necessary.

Postwar examples might (but seldom did) include an attached garage. The O.A. Amundson House in Jamestown (47948) from 1921 was 24x32' plus an additional 12' for the attached garage. The John D. Gray House in Valley City (47947) and also the Mrs. and Mrs. R.M. Poindexter House in Jamestown in 1937 (47950) included attached garages.

Notable interior details were more in evidence than for Horton schools or commercial buildings. For example, the living room of the Sigurd Grande House in Jamestown (47956) featured crossed ceiling beams and a personalized fireplace. The owner's initials were carved in the heavy oak mantel. The 1926 Max Moore House in Valley City (47963) had built-in bookcases and a patterned brick fireplace with a heavy oak Craftsman mantel.

Most of the Craftsman style houses had Craftsman interior elements, but in some cases the interior detailing was at odds with the exterior. Delicate classical or Colonial Revival motifs replaced or existed alongside the heavy woodwork associated with the Craftsman Style.

Many if not most of the residential designs were modest and commonplace, differing little from patternbook Craftsman houses. Indeed, one example from 1921 was designed for the Colonial Homebuilders of Jamestown (47942). An interesting exception was the rustic Craftsman cottage Horton designed for W.B. Denault of Jamestown in 1921 (47952). Cobblestones comprised the foundation, battered columns and three prominent chimneys. They were also randomly placed in the stucco on the remaining wall surface. The shingle roof had an unusual thatched effect with rounded edges and cutaway corners on the gables. Interior details were similarly rich in materials: tile floors in the den, entry hall, living room and breakfast room, a beamed living room ceiling, and two fireplaces. (See Figure II.23.) But in the main, few were elaborate, a function of the available clients and their financial resources.

Gilbert Horton designed most of the houses represented at the State Archives. Ganley was responsible for the Colonial Homebuilders design (47942). It appears that various draftsmen⁵⁵ drew four during the period E.H. McFarland practiced with Horton, the busy mid-1920s. McFarland apparently concentrated on school and commercial projects, and he is known to have drawn only one residential design, a Canadian summerhouse (47958).

Only four designs for apartments were included in the Horton Collection at the State Archives, and the earliest was an incomplete set dated November 24, 1922 (47964). Dating from 1922-1939, a common feature for these designs was the lack of any strong stylistic influence. The small number and commonplace quality of the designs reduced them to minor status. Limited, vaguely classical elements were in evidence, more as patterns than as references to a particular style. The 1928 Jamestown Apartment

Building for Carl Lindberg (47937) had slender apparently stone courses reminiscent of rustication at the cornice and keystones. There was also a round arched door surround consisting of four rows of brick, and attention was entirely focused on the entry.

Residential Characteristics

- Craftsman Style, alone or in combination with others
- Gabled roofline
- Stucco with brick, clapboard, cobblestone, wood trim
- Attractive interior woodwork, ceiling beams, fireplace

PUBLIC AND SEMI-PUBLIC BUILDINGS

Significance

Building projects discussed in this section were categorized under three functional categories: public, semi-public, and arts and recreation. A unifying factor was that many were the product of group decisions. Public agencies or committees composed of members of an organization were likely responsible for commissioning these types of works, unlike the case with residences and stores. In the latter category, one person, family or small board of directors was the commissioning agent.

Another similarity among these functional groupings was that the buildings were intended for public use either by public or institutionalized groups. Publicly funded institutional buildings such as the dining hall addition for the State Hospital for the Insane and city halls were included in the public category. These types of public buildings were intended for use by a large group, were publicly funded, or both.

These building types were considered together for a practical reason as well. Their limited number--27 designs in all--made individual detailed analysis less productive. Comparison of the similarities among the examples in the three functional categories seemed more worthwhile.

The arts and recreation functional category includes additions of an auditorium/gymnasium to a school, freestanding auditorium/gymnasium buildings, multiple use community centers, an armory, grandstands, and a variety of public or semi-public halls. All had a large open space--whether a drill room, meeting room, or gymnasium--intended to hold a body of people.

A number of the pre-1929 halls included in the arts and recreational category were commissioned by semi-public groups and thus could also fit within the semi-public category. But because of the presence of a large open space and the possibilities for comparison with other arts and recreation halls, they have been considered with and counted as examples of the arts and recreation functional category.

Eleven⁵⁶ of the sixteen halls dated from 1934-40 and were generally funded by the federal Works Progress Administration. They provided an interesting concentration of similar stylistic and functional similarities from the Great Depression era to study. A number reflected Gilbert Horton's experimentation with labor-intensive inexpensive building techniques, an important aspect of his contribution.

Quantity

A total of 27 complete commission units was considered in this section. Two addition/alteration projects for semi-public buildings were not included. Semi-public complete commission units other than those with meeting halls totaled four (including a large hospital addition).

The five public commissions included a large courthouse addition (47801) and a large dining hall addition for a state institution (47803). There were no addition/alteration projects among the public commissions.

In the arts and recreation category were 19 designs, including three auditorium additions which are considered along with the freestanding building commissions.

Distribution

The 27 projects were liberally scattered in small communities north and south of Jamestown as well as in the Horton home base. There were also more scattered projects east and west of Jamestown. No obvious distributional patterns were evident.

Chronology

With the considerable exception of schools (discussed separately), the Horton architectural firm apparently gained relatively few public and semi-public commissions before World War I. Only three projects dated from before World War I, the Farmer's Union Hall in Sterling (47820), and a proposed civic center (47825) and a hospital (47802), both for Carrington. A memorial hall was commissioned in October of 1919 for Turtle Lake (47815) to honor World War I veterans.

Work increased in the 1920s along with the rest of the Horton practice. Between 1920 and 1929 ten projects were commissioned. They ranged from a state fish hatchery that resembled a dwelling (47817), to two hospital designs, to a distinctive Knights of Columbus Hall (47810).

Public and Semi-Public Building Commissions⁵⁷

	<u>1914-19</u>	<u>1920-29</u>	<u>1930-40</u>	<u>Total</u>
Public		4		4
Semi-Public	1	2	1	4
Arts & Rec.	3	4	12	19

Characteristics

Hospitals. After placing those semi-public commissions with large halls in the arts and recreation category, four hospital designs remained. They were designed between 1915 and 1938. The pre-1930s hospitals were for Carrington, Hettinger, and Jamestown. The Horton firm preferred classical stylistic influences, especially the Colonial Revival, for these pre-1930 hospital designs. Classical details were typically concentrated at the entrance. For example, the 1920 Adams County Hospital in Hettinger (47804) had a Colonial Revival wood flat-roofed entry porch. The porch displayed a freely interpreted classical frieze, smooth columns, a keystone, and a fanlight.

Classical details were employed for these examples, but the basic form was frequently similar to the geometric subtype Horton used so often for another institutional building, the school. Like schools of the geometric subtype, the 1915 hospital for the Carrington Hospital Association (47802) had a shaped parapet, decorative diamonds, a centered entrance, and a moulded cornice. Unlike school designs, the hospital also had additional wings.

The 1925 four story rectangular addition (on a raised basement) to Trinity Hospital in Jamestown (47822, 47805, 47806) was among the most elaborate and large (43x112') of the firm's projects. Drawn by E.H. McFarland, the center of the main facade had his favored wood grills over windows (for the toilet rooms). The design also displayed considerable classical motifs, including a dentil course and quoins for window surrounds and for a series of vertical panels between the parapet and the cornice. The prominent entrance featured four fluted pilasters, an attractive stone wall surface, and a heavily moulded stone course between the pilasters. The treatment is similar to the firm's design for the dining hall at the State Institution for the Insane (47803). (See Figure II.24.)

The Horton firm's hospital designs revealed an awareness of modern hospital design principles. The designs provided private rooms in addition to traditional wards. Another modern provision were the sunrooms. It was then thought that fresh air and sun light provided key recuperative qualities. There were also operating rooms located on the top floor to take advantage of natural light and such modern technological features as X-ray rooms.

The 1938 design for a city hospital in New Rockford (47808) bore little resemblance to the earlier designs. It was only one and one-half stories, had an "L" shape, and Art Moderne stylistic influence. Moderne motifs included use of a porthole shape, bands of windows, and streamlined horizontal ornamental lines.

The Horton firm has continued to provide hospital designs over the decades and considers it one of their specialties. According to their records, they worked on 48 hospital projects between 1913 and

1979. Only seven dated from before 1939 and 25 dated from 1960 to 1979.

Public Buildings. The public building category was diverse: 1922 fish hatchery building at Spiritwood Lake (47817), 1924 Medina fire station (47818), 1925 dining hall addition for the State Hospital at Jamestown (47803), 1925 addition to the Stutsman County Courthouse (47801), and the 1928 Mandan city hall (47819).

The fish hatchery resembled a rustic dwelling and had a gambrel roof with cornice returns, cobblestone and stucco wall surface, and small pedimented Colonial Revival gable-end entry porch. As with otherwise dissimilar designs from the public and semi-public category, Colonial Revival motifs were favored, here combined with rustic materials as befit the use and location of the building.

The fire station, dining room addition, and courthouse addition were all drawn by E.H. McFarland during the firm's highly productive mid-1920s period. All were brick with concrete, stone, or brick trim in some combination. Of modest design, the fire station had simple geometric patterns (such as lintel courses of upright or soldier pattern bricks) and a prominent three-part wood paneled front door to accommodate the fire engine. The dining hall design reflected McFarland's preference for considerable ornamental detail and shared characteristics with the dining hall at the State Hospital. The entry bay was faced with large stone blocks and had four widely spaced pilasters with decorative capitals. There was a wealth of classical detail: acroteria, dentils, corner quoins, and elaborate cresting with acroteria and shell motifs.

The courthouse addition displayed attractive large round-arched windows united by five brick courses. However, these windows, which should have a regular rhythmic placement, were not located uniformly along the facade. The rounded shape was repeated for the entrance. The design is troublesome due to the window treatment. It also does not appear to take into account the appearance of the original courthouse.

The 1928 Mandan City Hall dated from after McFarland's departure from the firm, and Horton's draftsman, Ingeman R. Hoveland, drew the plans. Certain motifs appeared to refer to the Art Deco Style, which, if so, would make this an early use of the style by the firm. The cornice was stepped, simple pilasters and imparted a verticality, narrow windows had decorative brickwork uniting them, and the cornice had a series of slender brick features set at an angle. These motifs were concentrated on the higher portion of the two-part two story building. The lower section had more familiar geometric motifs, including brick surrounds and a patterned course topped with concrete coping. The building contained space on the first floor for fire engines (access on the main facade), a city office, jail cell, and machine shop. Two offices, a lounge,

shower, and dormitory were located on the second story. (See Figure II.25.)

Arts and Recreation Buildings. Pre-Depression era examples employed the classical vocabulary in combination with Transitional Brick Commercial features and geometric school subtype elements. The Turtle Lake Memorial Hall (47815) (which had attractive basket arches for windows and the entry) and the prewar Farmers Union Hall (47820) both displayed a flat-roofed wood entry porch topped with a wood balustrade and squat pedestals. The union hall exhibited strong shapes--a strongly moulded triangular pediment connected to paired windows. (See Figure II.26.) The 1920 Salvation Army Citadel (48011) confined classical designs to the main facade where quoins, two entry pediments with cornice returns, pilasters and keystones, all of stone, adorned the surface.

The stylistic influence of the 1925 Knights of Columbus Council Building in Jamestown (47810) was unique among Horton's public and semi-public designs. Spanish or Mission Revival motifs as well as classical details were executed in distinctive materials, including faience tile, clay tile, brick, stone, and wrought iron. The architect called for "Mission Tile" in random lengths in salmon to red colors for the gabled roof. An ornate cornice of "zinc shells and cresting" highlighted the clerestory windows. These square windows had wood grills (the typical McFarland feature) and were separated from the wall surface below by a heavy moulded course. The design was elaborate, atypical in stylistic influences, rich in materials, and reflected McFarland's influence. (See Figure II.27.)

Beginning in 1933, the Horton firm's hall or auditorium designs displayed changes in style, materials, and building technology. Nine showed Art Deco stylistic features, two Art Moderne influences, and one with undetermined influences.

Although wood is not ordinarily associated with the Art Deco, Horton was able to wed the seemingly disparate material and style rather well. The 1935 School Auditorium in Hannaford (47765) employed vertical wood strips to unite upper and lower windows and also for pilasters at the ends of the main facade and above the centered entrance. A geometric frieze of vertical lines and triangles, a small stepped entry canopy, and a large circular name plaque also conveyed Art Deco influences. The principle wall surface was 10" wood siding. (See Figure II.28.)

A factor in the use of the less costly wood was the economic troubles of the Great Depression. Only three of the hall examples from 1933-1940 were of brick (1933 Salvation Army building (47836), armory (47827), and the Rogers School Auditorium (47618)). Wood, stucco, concrete, or fieldstone were the favored materials.

Gilbert Horton devised a method for using local fieldstone. The technique was inexpensive, since the fieldstone was readily available, and also labor intensive, thereby providing employment for the needy. It appears that five Horton halls used stone facing in some way: 1937 Edgeley Community Building (47812), 1938 Kennison Township Hall and Community Building in Nortonville (47835), 1939 Medina Village Hall and Community Building (47814), 1939 Steele City Hall (47813), and the 1939 School Addition in Dickey (47613). (See Figure II.29.)

Horton also experimented with and perfected a means of using a laminated wood arch to span the open space of a hall. The first example dated from the 1934 McElroy Park Auditorium in Jamestown (47826). The building's dimensions were 120x200'. Each of the ten arches consisted of two stacks of 4x3" timbers (the web) that were sandwiched between eight 1x12" planks (the flanges) and bolted together. To bend the web timbers it was necessary to rip them for several feet from each end so they would bend more easily. The necessity of a long span for the primary open space of this type of building resulted in a characteristic shape for Horton's halls, a gently curving arch with flat topped sections at the side.⁵⁸ (See Figure II.30.)

At least six and possibly seven Horton halls from the period used the laminated wood arches. The 1938 School Auditorium for Rogers (47618) was a good example of the shape and Art Deco motifs of these halls. Broad piers extended above the arching roofline to provide an interesting study of shapes. The strong shapes and their interplay continued with the flat-topped end bays, the striated panels at the windows, and the high water table. The design was simple and effective. (See Figure II.31.)

The presence of a mezzanine floor was a recurring feature of this property type. Toilets often flanked an entry lobby that spanned the front of the building. One example, the Carrington Civic Center Building had first floor toilets labeled the "Farmer's Room" and the "Farm Women's Room." In the basement were more toilets, labelled the "Smoking Room" and the "Women's Parlor."

Some hall examples housed a number of uses under one roof. In addition to the auditorium, the Turtle Lake Memorial Hall had the fire department, a kitchen, toilets flanking the entrance, and a basement banquet hall. The Medina Fire Hall Building (47818) contained the fire hall on the first story, and a meeting room occupied all of the upper story. The Jamestown Salvation Army Citadel (48011) offered a servicemen's room, toilets, Sunday School room, and kitchen in the basement, the first floor auditorium, and living quarters in a partial upper story. The 1925 Knights of Columbus Council Building in Jamestown (47810) contained both a gymnasium and a hall (with musicians' balcony), a lounge, ample lobby, showers, and cloak rooms.

RELIGIOUS BUILDINGS

Significance

Only four church designs were contained in the Horton Collection at the State Archives, an extremely limited representation.

Distribution

Two of the churches were for Jamestown congregations. The others were located south of Jamestown in Ellendale and Montpelier. In addition to the four churches, the firm prepared plans for the alteration of three churches between 1917 and 1930.

Chronology

The Ellendale (48019) and Montpelier (48018) designs were undated but appeared to come from the pre-World War I period, based on the lettering style employed. The other two designs dated from 1920 and 1926.

Religious Commissions

	<u>1914-19</u>	<u>1920-29</u>	<u>1930-39</u>	<u>Total</u>
Archives	2	2		4
Horton firm	2	6	1	9

Characteristics

The Horton churches conveyed a muted Gothic and Tudor Revival impression. References to historic styles were restrained, more suggested than strongly stated. Gothic references included pointed arches, tracery, small buttresses, rose windows, decorated vergeboards, all in simplified form. Tudor Revival influences were similarly plain and included the use of multiple panes (some in diamond patterns), quoins at corners and for door and window surrounds, basket arches, and heavy wood double doors with decorated metal hardware. The bracketed hipped roof entry tower of the 1920 Seventh Day Adventist Church in Jamestown (48014) recalled an Italian campanile.

All three examples where materials were specified called for a stucco wall surface and brick trim. Decorated vergeboards, brackets, and decorative knee braces were wood.

The 1926 Swedish Lutheran Church in Jamestown (48013) displayed qualities in evidence with the other Horton churches. Swedish immigrants are known to have favored small gable-front churches topped with a prominent steepled entrance.⁵⁹ But ethnic influences were very limited on this example. There was a gable-end entrance but without a steeple. Interior framing was visible, decorated, and distinctive and conveyed a certain Scandinavian quality. (See Figure II.32.)

MISCELLANEOUS COMMISSIONS

Over the decades clients commissioned from the Horton firm a highly varied assortment of plans and designs. These included the following:

- The plot plan for four fuel tanks (47832)
- Boiler and laundry unit for Trinity Hospital (47805)
- Dairy stable for State Hospital for the Insane (47807)
- Porte cochere for State Hospital for the Insane (47823)
- Livestock sales pavilion (47850)
- Mausolea for Jamestown and Wimbeldon clients (48015, 48010)

Industrial Commissions

Industrial commissions were surprisingly limited for the firm. The industrial commissions did not reflect an approach markedly different from the Horton firm's commercial work. Several were minor and extremely utilitarian, such as the Trinity Hospital boiler.

There were but a handful of larger commissions, and these dated from between 1926 and 1933. Both the Jamestown Bottling Works of that community (47849) and the Purity Dairy Company Creamery in Mandan (47843) were drawn by E.H. McFarland in 1926. The design for the bottling works was specifically tailored to the client's needs. Five kinds of flooring were used for the six rooms:

Office - maple floor
Tobacco room - earth floor
Cigar room - brick floor
Bottling room - terrazzo
Candy room - concrete
Storage room - concrete

The design was otherwise typical and familiar, employing brick and concrete in geometric patterns.

The creamery for the Bridgeman Russell Company also contained specialized uses, as might be expected. In addition, a 13' high milk can was shown as a mighty advertisement atop the building. Like other McFarland designs, there was thick coping and thick concrete capitals on attractive piers, soldier pattern courses, and considerable blank wall space as part of the design.

PROPERTY TYPES SUMMARY

The types of buildings the Horton firm designed have been discussed above in detail. Below is a summary of the important identifying characteristics these buildings commonly display. Some functional types are insufficiently represented in the Horton collection or of such diverse design that identifying characteristics are minimal.

Schools

Hipped Roof School Characteristics

- hipped roof
- wood shingle roof
- sheathed in clapboard
- relatively broad overhang
- grouped windows
- simple entablature
- hipped or gabled entry porch or canopy
- principle stylistic reference confined to entry
- Craftsman or Colonial Revival motifs
- water table
- plan variable, but most had one or two classrooms and separate cloakrooms and toilets for boys and girls, might have a vestibule(s), basement with furnace

Geometric Subtype Characteristics

Primary Characteristics

- absence of (or limited) reference to historical styles
- geometric patterns
- raised basement
- brick with trim brick
- rusticated brickwork
- brick outline panels
- centered entry
- windows grouped in front, more windows grouped in rear, fewer windows at the basement window, often no side windows
- double doors
- rectangular shape; may have offset gymnasium, boiler room or both

Secondary Characteristics

- shaped parapet
- contrasting coping, sometimes with crenellations
- small, slightly projecting entry porch
- tall smokestack (rare)
- basement may contain gymnasium, furnace, toilets
- one story examples: gymnasium may be centered with classrooms

off it

--library or office space tucked behind centered parapet, over the stairs

Commercial Buildings

Commercial Building Characteristics

--one or two story

--flat roof

--25-40' x 60-110'

--Transitional Brick Commercial is dominant stylistic influence

--pilasters, panels, or other framing effect at ends of main facade

--geometric patterns, including "drip" motifs, basketweave patterns, diamonds, patterned brick courses

--ample storefront windows

--brick with trim brick, concrete trim

Automobile-Related Building Characteristics

--one story

--flat roof

--40-50' x 130-140'

--Transitional Brick Commercial, but also Tudor Revival, Craftsman, Art Deco stylistic influences

--design may serve as flamboyant advertisement

--garage doors

--cutaway corner with fuel pumps

--brick with trim brick, concrete trim; also stucco, stone trim, wood trim

Residential Buildings

Residential Characteristics

--Craftsman Style, alone or in combination with others

--Gabled roofline

--Stucco with brick, clapboard, cobblestone, wood trim

--Attractive interior woodwork, ceiling beams, fireplace

Public and Semi-public Buildings

Hospital Characteristics

The sample is too small for useful characterization. However, several examples displayed classical details, smaller wings applied to a basic rectangular shape, and displayed an awareness of current hospital design principles.

Public Building Characteristics

Again, the sample is small and diverse, making characterization of the property type an unfruitful exercise.

Arts and Recreation Characteristics

- Laminated wood arches may be present
- Fieldstone, wood, stucco, brick, or concrete
- May display exotic stylistic influences (such as Spanish or Mission Revival) or Art Deco, Transitional Brick Commercial, Art Moderne
- Mezzanine floor present
- May combine several uses under one roof

Religious Buildings

Religious Characteristics

The sample is quite small and diverse, making characterization of the property type an unfruitful exercise.

- Gothic and Tudor Revival stylistic influences
- Stucco, brick, wood wall coverings

III. MECHANICS OF THE PROJECT

THE PROJECT

The purpose of this planning project was to review and evaluate the works of two North Dakota architectural firms (Gilbert R. Horton, Architect and Van Horn & Ritterbush)⁶⁰, then prepare contexts analyzing and characterizing their contribution. The project an unusual but challenging one. The Archives of the State Historical Society of North Dakota holds plans from these two architectural firms. There are hundreds of projects represented. A total of 541 were looked at individually and entered into the data base (281 for the Horton collection and 260 for the Van Horn & Ritterbush collection).

These represent a formidable body of work to study, one rich with potential for learning about North Dakota architectural practice. Well preserved and accessible collections of such large sets of architectural plans are a rarity. This type of research tool, which may have high research value, has been used very little in state historic preservation projects.

Unlike other projects contracted for by the State Historical Society of North Dakota, this project did not call for the formulation of property types (although almost by definition a study of an architect's work produces such an analysis), for a list of research questions and data gaps, or for prioritized goals other than the scopes of work. The four required products were those found in this document (context statement, standard methodology for reviewing archival materials, criteria for evaluation of National Register eligibility, and scopes of work for intensive level surveys). The project report was prepared as specified in the initial request for proposals and thus followed guidelines found in National Register Bulletin 16.

The Form

In order to analyze the data, a standard methodology for the systematic review and evaluation of the hundreds of drawings and specifications was created. This format could be applied to future similar projects. A form (see Figure II.35.) was filled out for virtually every project in the two collections. Fragments of projects were generally not included, although incomplete sets were.

The first page of the form is a checklist of 23 separate items. Each item is numbered so that if there is additional information or commentary it can be listed on the back of the form (in item 24).

Item 1., Archives Number. The number assigned by the archives also served as the identification number for this project. In addition,

the letters "VHR" and "GH" was used to distinguish between the two collections.

In the course of studying the plans, it became apparent that noting the job number the firm assigned a project would at times be useful. The job number for many post 1917 Van Horn & Ritterbush projects often revealed the year the project was drawn. For example, a job number of 2009 indicated that the project was the ninth one the firm undertook in 1920. The job number emerged as a key dating method for the Van Horn & Ritterbush plans because they rarely had a separate date on them. Projects drawn by Arthur Van Horn were undated and also lacked job numbers. Since he was known to have practiced alone until 1917, works by him were not dated more precisely than pre-1917.

Item 2., Function. Principle function categories (and a few sub-categories) were entered on the form and into the data base. The following are the nine functional categories that were used, also examples of the types of buildings that could be included within them. Not all examples were included in the body of the two collections.

1. Commercial
store, bank, department store, hotel, office building, transportation-related, restaurant, warehouse
2. Arts and recreation
theater, hall, grandstand, resort, gymnasium, auditorium, armory, major auditorium/gymnasium addition to a school
3. Industrial
factory
4. Residential
apartment building, house, dormitory
5. Public
courthouse, jail, state institution, city hall
6. Semi-public
hospital, lodge hall, library
7. Religious
8. School
public, collegiate
9. Other
agricultural, funereal

Item 3., Name. The name of the project as shown on the plans is entered here.

Item 4., Client. The name of the client as shown on the plans is entered here. After the data is sorted by client name, a group of commissions for one client may be analyzed as a unit and yield information otherwise not apparent.

Item 5., Location. The town or county for the commission was entered here. If the address was known, it was written on the form

but not placed in the data base. Most commissions were of course for North Dakota locations. Work from outside the state was sorted under the classification, Non-North Dakota. For example, a commission in Des Moines, Iowa would be entered as "Non-North Dakota, Iowa, Des Moines."

Item 6., Date. The year of the commission as shown on the plans is entered first, then the month and year if known. If no date was given, the notation, "no date," or a dashed line was written on the form.

Item 7., Stylistic Influence. Stylistic categories and numbers from the NDCRS Site Form Training Manual (1989) were used. Generally, only the number was entered on the form. For prominent designs the major design elements that define the style were typically discussed in Item 24. If more than one stylistic influence was evident, both were entered on the form and the data base.

Item 8., Special Features. Noteworthy elements might be noted here. Not all commissions had features worthy of comment. In the course of the project, it became the practice to avoid this line in favor of placing all comments on the back page in item 24.

Item 9., Primary Materials. The principal wall surface materials from the NDCRS Site Form Training Manual (1989).

Item 10., Secondary Materials. Trim or other secondary wall surface materials from the NDCRS Site Form Training Manual.

Item 11., Dimensions. Dimensions for the building, in feet.

Item 12., Shape. Plan shapes from the NDCRS Site Form Training Manual (1989) were used. Other possible shapes were H-shaped and cross-shaped.

Item 13., Structural System. Notations on the structural system were entered here. The NDCRS Site Form Training Manual (1989) served as a guide.

Item 14., Stories. The number of stories were entered as 1, 1.5, 2, 2.5, etc. If the ".5" refers to a raised basement or an attic story, this was noted or the building was described as "2 stories with raised basement".

Item 15., Roofline. The principle rooflines were irregular, complex, gabled, hip, flat, shed, and gambrel.

Item 16., Windows. Because windows are often changed, the windows as shown on the plans were described briefly ("6/6 double hung," "multiple panes," "Chicago style").

Item 17., Interior. If there was a strong and important relationship between interior spaces and the form and massing of the exterior, this was noted. In most cases, it was found that prominent interior spaces were not part of these commissions.

Item 18., Designer. If the plans were signed or initialed by a particular designer, this information was noted. This was found to be very useful for tracing changes in the firm, the arrival and departure of partners, and the contribution of various architects.

Plans by an architect not associated with Ritterbush/Van Horn or Gilbert Horton would also be noted here. Architectural firms sometimes acquire plans from the original architect when they undertake a remodeling job. There was a very small number of these types of plans.

Item 19., Record Type. The type of record in the archives was noted here. This information was of little use in analyzing the firms. However, that a particular set of plans was incomplete was important to know.

Items 20-22. These items are intended for use primarily in a field survey. They would be used to check the setting, degree of alteration, and the current status of the building.

Item 23., Significance. The item attempts to categorize how the project fits within the body of the firm's work. The item refers to the design rather than to the building, is preliminary, and is intended as a guide to 1) prepare scopes of work for subsequent work, 2) alert the field surveyor in subsequent projects, 3) assist in understanding the development of the firm. Designations should not be interpreted as a statement of National Register eligibility.

Item 24., Continuation. The space was used to make additional notations that amplify on the checklist of items 1-23. The archives number was repeated, since forms photocopied later may not be double-sided and could become separated from the first page.

The Data Base

Data from the first six lines of the form were then entered into a data base. The function of the data base is to sort the hundreds of commissions by various categories. Items 1, 2, 4, 5, 6, and 7 on the form are marked with an asterisk, which shows that they are part of the data base for the project.

Commissions could readily be sorted by type of commission (function), name of client, location, year, and stylistic influence, or combinations of these items. The notation "0000" was used on the data base when information on a particular item was lacking.

The data base as well as other information on the forms formed the basis of contextual analysis, that is, the context report on the evolution and nature of the particular architectural firm.

The Context

The analysis section formed the heart of the context that was prepared for each architectural firm. Areas of interest included biographical information, the evolution of the firm's work, design approaches and hallmarks, the role of ornamentation and materials, and other essential elements that define a building and its site.

Biographical research, both of the principal architects and of the firm, was very useful in understanding changes in design approach or in simply understanding the circumstances behind the firm's development. For example, Gilbert Horton's statements on his application to be a Fellow in the A.I.A. revealed something of the philosophy that had guided him for decades. Conversations with his two sons and with Robert Ritterbush's son provided invaluable insights.

It was particularly useful to map the locations of the hundreds of projects, for the exercise graphically revealed locational patterns. Because of the many school commissions the Horton firm enjoyed, these were mapped separately, and all other types of projects were placed on a second map. Such was not the case with the Van Horn & Ritterbush firm, which had by far the bulk of its work in Bismarck, and a single map was used.

In order to understand the place of certain functional building types within the practice of the particular architectural firm, the commissions were analyzed in detail. Factors considered were the quantity, distribution, chronology, and characteristics of the building type.

In many ways, the process was one of constant sifting and winnowing and of combining and recombining data. Were, for example, school design characteristics represented on other building types? What stylistic influences were preferred and were certain styles reserved for certain building types? What materials were or were not typically used? Was there a marked preference for a particular shape or roofline for a particular building type? These and a host of other questions, variables, and problems were looked at and attempts were made to analyze and to understand the architectural contribution of the particular architectural firm.

The Constraints

Initial plans called for having a series of slides prepared of key representative designs. The principal reason for choosing slides was that the plans from one of the firms seen in the course of another project were too large to be photocopied properly.

Fortunately, few of the plans in the two collections were outsized. Elevations and floorplans were easily reduced to fit on an 8 1/2x14" sheet, and photocopies of the plans became a key part of the project.

Copies of the plans were used to analyze specific projects and also to illustrate them in this report. Examples were selected because they illustrated a particular feature discussed in the text, because they were highly representative, because they were unusual and atypical.

It must be recognized that not all of the work of the two architectural firms is located at the State Archives and thus was not part of this project. Subsequent research showed project numbers from the ongoing Horton firm that were far higher than those in the State Archives. Projects not (apparently) present in the archives were mentioned in other sources. E.H. McFarland cited the Burl Carl residence as an example of a Prairie School-influenced work, but no Carl house is listed in the archives.

The Van Horn & Ritterbush firm has an old handwritten notebook that appeared to list more projects than those in the State Archives. More schools are named than are represented at the archives. A current employee of the firm said that residential work was so casually done that a formal and full set of plans was often not prepared. And whatever plans were done were likely given to the homeowner for these small project.

The projects deposited at the State Archives are thus incomplete for both firms. In addition, a number of the plans that are at the archives are incomplete. Many lack such important information as a date or location, making it difficult to place them within the body of the firm's work. Others have only partial elevations and floorplans. If the degree of incompleteness was too serious, these examples were removed from thorough analysis. Alterations, additions, and remodelings were also removed from consideration (unless they were a major addition). Such projects tended to be minor. And since the architect did not begin with a blank page--the existing building could have affected design decisions--these projects were less likely to reveal insights into the architectural development of the firm. The term, "complete commission unit," was coined for this report to refer to the projects that remained after "throwing out" the incomplete, minor or otherwise less than illuminating projects.

Despite these constraints, a case can be made that there was a sufficient number of plans for each of the architectural firms to allow analysis of their development. The more than 200 projects for each firm are of sufficient size to be representative and allow characterization of each firm, especially when combined with other research. Care was taken not to make too much of isolated examples, to avoid drawing substantial conclusions from them.

Research Questions and Data Gaps

The goal of this project was to test the advisability of studying a large body of plans and specifications and then to develop the context and related property types of the particular architectural firm as a vehicle for determining significance. We feel that the merit of studying the plans can be demonstrated by the findings of this report. Whether the findings can be efficiently applied to intensive level surveys and to National Register nominations remains to be determined.

Beyond historic preservation surveys and nominations, we believe the project was of value to learn about the nature of architectural practice in North Dakota. We found that the two firms studied in this project received all manner of commissions, that they had specialties for which they were known, that they had a territory of concentration, and that many of designs were conventional and competent, seldom featuring exotic or unusual stylistic influences or materials. In many cases, they reflected the spirit of the times and of the clientele for whom they were intended.

In the course of the study, certain questions arose that could not be answered with the available resources for the project. In some cases, intensive level survey work will provide additional insights and data. Listed below, in no particular order, are a series of research questions and data gaps.

--Should the presence of Horton's original double glazed windows be a major factor in considering the architectural significance of his schools? Is it possible to determine which of his schools had these windows?

--What do alterations to the facades of his buildings reflect--functional deficiencies in his designs, weatherization responses to the harsh climate, uninformed decisions on the part of owners, economic considerations?

--Is there additional information available about the South Dakota and Montana work of the firm?

--What was the role of the state board of education (or similar body) in directing school design in the state (e.g., standards for lighting, heating and plumbing, fire resistance)?

--Is it possible to learn more about the early years of Horton's life? When did he attend school in the state of Washington? When was he in Los Angeles?

--What became of J. Howard Ganley and E.H. McFarland?

--Why did the firm's designs show little influence of Frank Lloyd Wright and Louis Sullivan?

--Is the "Geometric Subtype," a term coined for this study, a building type applicable to other architect's work? Where does it fit within the Transitional Brick Commercial style?

--Is the concept of a hierarchy of interior spaces useful in assessing National Register eligibility? How much weight should be given to interior design and condition?

--In some cases, data from the plans did not provide complete information. For example, school commissions for both architectural firms sometimes only identified the school district, not the community or even the county where they were located. Archival research into maps and conversations with the knowledgeable former state archivist revealed no source for the location and boundaries of school districts from the early 20th century.

Ranked Goals

For a discussion of future goals and the priority they should have, see the appendix, Scopes of Work.

Evaluation Criteria

Analysis of the type, quantity, chronology, distribution, and characteristics such as stylistic influences results in a picture of architectural contribution--a context within which to view buildings designed by an architectural firm. By definition, significant examples would be evaluated for National Register (NR) eligibility under Criterion C as works of a master, for the buildings were studied and evaluated as the product of an architectural firm. As such, significant examples may:

- illustrate an important aspect of the firm's work, or
- express a particular phase, or
- express a particular idea or theme.

These aspects, phases, ideas, and themes are those features identified and discussed in the contextual analysis of this report.

The above is taken from National Park Service Bulletin 16 and serves as the basis for evaluating specific examples. But questions arise about assigning significance to these specific examples. An unaltered but commonplace, representative example may be NR eligible simply as a survivor because it is so very representative of an important specialty of the work of a master. An example that is the only architect-designed building in a small North Dakota town is not automatically significant, but it may be NR-eligible because it illustrates the nature of the firm's smalltown commercial commissions, an important portion of their practice. However, a property designed by the architectural firm may be significant as a representative of a particular style or other Criterion C issue, but that significance is outside the evaluation criteria of this project.

Works by Gilbert R. Horton, Architects, 1913-1941. The period of significance for the property type, Works by Gilbert R. Horton, Architects, is 1913-1941. (A subtype may have a more specific time frame.) The period begins with the year Horton established an independent architectural practice and ends in 1941 because of the "fifty year rule." Significant examples are eligible under

Criterion C as examples of the works of a master. It is entirely possible that properties are eligible for the National Register under other Criteria.

Criteria for Eligible Properties.

Associative Characteristics. Eligible properties must have these associative characteristics.

1. The design of the property is attributable to the architectural firm.
2. The design of the property is of sufficient quality to embody distinctive and successful characteristics of the firm's work, as outlined in the context statement.

Physical Characteristics. A property possessing good integrity might be eligible for the National Register if it falls under at least one of the following categories.

1. It represents a major area of specialization.

Example: Horton schools

2. It expresses a particular phase in the development of the master's career.

Example: Horton's rock-faced auditoriums

3. It displays characteristic motifs or other hallmarks of the firm's design.

Example: Horton geometric patterns

4. It expresses a particular idea or important theme associated with the architectural firm.

Example: Horton's technological experimentation

Integrity matters.

1. Alterations must not impair appreciation of the quality of the design.
2. Original exterior materials and elements--wall covering, foundation, trim and other details, form, window and door openings, setting--must be present to a sufficient degree to recognize the architectural form and qualities of the building
3. Residential building types. Minor exterior alterations are acceptable. This would generally not include the application of replacement siding, although replacement siding that

replicated the scale of the original and where important original details were retained may be acceptable. Residential examples should generally retain most important original details, wall coverings, porches, and window shapes.

4. Commercial building types. Storefront remodelings are common for commercial buildings and may be acceptable if sufficient other original features remain. Changes must not obliterate the original design intent of the property. The simpler the original design, the less it can tolerate change.
5. Industrial building types. Additions and alterations are expected for an active manufacturing concern. If the changes are not intrusive and the original design intent is apparent, they are acceptable.
6. Public, semi-public, religious, and arts and recreation building types. In general, more elaborate designs have a higher degree of tolerance for such expected changes as replacement windows and doors and handicapped access ramps. The number and quality of other features often offsets the detrimental effect of these changes.

Alterations to windows are expected and may include opaque transoms; window changes should not detract prominently from the overall appearance of the building

Provision of access for the handicapped, including concrete ramps and metal railings, is expected and acceptable if not visually intrusive

Additions (often to serve the public better) are acceptable if well designed so they do not visually intrude upon the significant features of the building. Successful additions generally extend from the side rear or rear of the original building and are of scale, materials, and mass that do not overwhelm the original building.

Interiors. In assessing the National Register eligibility of a property, the appearance and condition of its interior has traditionally been a secondary issue. Since the public is most likely to view only the exterior of a property, its appearance and integrity are paramount. However, of late, consideration of interiors has received more attention. This is especially the case with public and semi-public buildings. Not only is the public much more likely to view these interiors, they may well exhibit distinctive details. Examples include courthouses, libraries, and lodge halls.

Interior features are one of twelve considerations mentioned in guidelines in NPS Bulletin 16 (pp. 60-61). Guidelines state that

the following should be considered and described in a NR nomination, if appropriate:

Significant interior features (such as floor plans, stairways, functions of rooms, spatial relationships, wainscoting, flooring, paneling, beams, vaulting, architraves, mouldings, and chimney pieces)

Significant interior features may be a major and integral part of certain types of properties potentially eligible as examples of works by a master. When this is the case, their appearance should be an important consideration in assessing National Register eligibility. Each example should be examined individually and the following guidelines applied.

It should be determined whether significant interior design features were part of the original design as shown on the plans. In addition to those mentioned above from Bulletin 16, the presence or absence of a hierarchy of spaces should be determined. This is likely to refer to public and semi-public buildings where there is a formal arrangement of spaces. In these cases the hierarchy was created to separate the public from workers, to aid in the flow of pedestrian traffic, to place the public in large open spaces such as auditoriums. In addition, residential designs may exhibit distinctive hierarchical arrangements which should be assessed. These include elaborate entry halls, living rooms, dens, parlors or libraries, and dining rooms.

Where these hierarchical spaces are clearly articulated (likely using distinctive materials and other details), a higher degree of integrity is important. But, to take an extreme case, if a building designed with significant interior and exterior features retains all its original exterior features, but none of the interior, the property could still be considered National Register eligible. Interior features are but one of a number of important considerations. The presence of unaltered significant interior features can enhance the importance of a nominated property, but their absence does not (generally) remove a property from consideration. Each example must be considered individually.

APPENDICES

APPENDIX A

Figures

- II.1. Front elevation, "Type C" School (47627), 1914.
- II.2. Front elevation, School for Winfield School District No. 41, Stutsman County, ND (47745), June 29, 1926.
- II.3. Woodbury Type Plan, basement and first floor (47772), no date.
- II.4. James River School Plan (47772), no date.
- II.5. Plan Type "2-L" (47773), no date.
- II.6. Front elevation, School for Strong School District No. 30, Woodworth, ND (47715), 1915.
- II.7. Section, School for Tuttle Special School District No. 54, Tuttle, ND (47630), 1922.
- II.8. Front elevation, School for Lincoln School District No. 4, Robinson, ND (47764), 1916.
- II.9. Front elevation, Four Room school for Banner School District, LaMoure County, ND (47633), May 24, 1921.
- II.10. Front elevation, School for Eckelson School District No. 45, Barnes County, ND (47628), August 28, 1923.
- II.11. Front elevation, Store and Apartment for Mrs. Anna Schmitz, Jamestown, ND (47920 and 47934A), May 6, 1925.
- II.12. Front elevation, Store and Office Building for S.H. Funk & Sons, Hebron, ND (47839), 1917.
- II.13. Front elevation, Garage for J.B. Clabotts, Jamestown, ND (47903), July 13, 1923.
- II.14. Front elevation, Business Building for Dingeldein & Nelson, Litchville, ND (47845), August 10, 1929.
- II.15. Front elevation, Garage for C.J. Hoffmann, Wahpeton, ND (47901), June 6, 1925.
- II.16. Main floor plan, Garage for C.J. Hoffmann, Wahpeton, ND (47901), June 6, 1925.

- II.17. Front elevation, Home Oil Company Service Station, Jamestown, ND (47925 and 47917), 1924.
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- II.20. Front elevation, H.C. Flint House, Jamestown, ND (48005), 1913.
- II.21. Front elevation, W.T. Martin House, Edgeley, ND (47943), 1916.
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- II.25. Front elevation, Mandan City Hall, Mandan, ND (47819), July 19, 1928.
- II.26. Front elevation, Farmer's Union Hall, Sterling, ND (47820), undated.
- II.27. Side elevation, Knights of Columbus Hall, Jamestown, ND (47810), 1925 with 1926 revisions.
- II.28. Front elevation, School Auditorium, Hannaford, ND (47765), 1935.
- II.29. Front elevation, Kennison Township Hall and Community Building, Nortonville, ND (47835), August 27, 1938.
- II.30. Section and elevation of arch, Municipal Auditorium, Jamestown, ND, (no archives number), 1937.
- II.31. Front elevation, School Auditorium Addition, Rogers School District No. 94, Rogers, ND (47618), 1938 and 1939.
- II.32. Front elevation, Swedish Lutheran Church of Jamestown, Jamestown, ND (48013), 1926.
- II.33. Map. School projects of Gilbert R. Horton, Architects.
- II.34. Map. Projects of Gilbert R. Horton, Architects.

II.35. The form used to compile data on individual projects by the architectural firm.