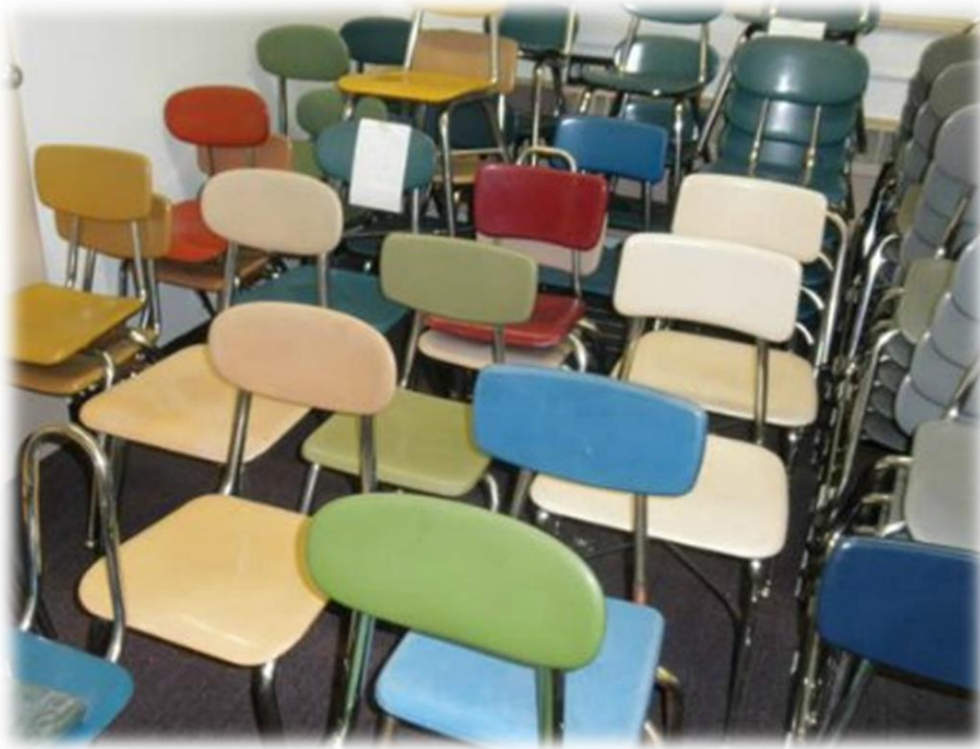


Rapid City Postwar Schools
Historic Context and Recommendation of National Register
Eligibility



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Prepared for Rapid City Historic Preservation Commission
June 2022

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Abstract

The purpose of Rapid City Postwar Schools historic context report is to provide city personnel with a resource for future educational programming and to identify schools that may be eligible for the National Register of Historic Places (NRHP). Specifically, this report provides background information for the city to fulfill efforts to identify and document the significance of schools built within this period. This report focuses on the architecture of elementary and junior high (middle) schools built between 1949 and 1972. The report provides an analysis and history of the property type and incorporates individual site survey forms for five buildings.

This report focuses on physical design features implemented throughout the city following World War II. While the schools that are the subject of this study were built as a response to intense growth and need for modernization in Rapid City, several are threatened with demolition because of similar pressures today. None of the schools are currently listed in the NRHP. In 2021 an interpretive essay entitled, “The Modern School: Postwar School Architecture in Rapid City” was prepared. Additionally, statewide contexts for Post-World War II Architecture in South Dakota prepared by Michelle L. Dennis for the South Dakota State Historic Preservation Office, *Modern Residential Architecture in South Dakota, 1949-1975*, and *Schools in Nebraska* contexts were undertaken by the state. These combined documents, along with supplemental newspaper, primary, and secondary research provide a detailed analysis of the history of the era, its resources, and its historic significance to the city. This document will focus on the history and design of school buildings in this era and the essays mentioned above should be referenced for broader or policy issues throughout this period.

The post war era in Rapid City was a time of significant population growth and city expansion. The increase in population and shifting densities resulted in a public response to provide services to newly populated areas. Schools, parks, neighborhoods, and convenience services were constructed to respond to these pressures.

Introduction and Administrative Information

Rapid City Postwar Schools Historic Context was prepared for the City of Rapid City through their historic preservation commission by Historic Resources Group, Inc. (HRG) in 2022. This historic context study addresses the built environment in Rapid City, specifically school buildings. The document provides a historic context for school buildings constructed during the post-World War II era and will provide eligibility recommendations for any schools that may meet NRHP standards. Fourteen schools were identified and photographed during initial field investigations in March 2022. This document discusses a temporal period of mid-twentieth century planning and educational needs beginning in 1949, through 1972 when geo-political demands and architectural tenants shifted. The report will build the history of the era and provide a basis to evaluate physical integrity and historic significance of the resources. This report will provide foundational information for a determination of eligibility, but not fulfill all the requirements of NRHP listing. Individual preliminary eligibility forms provided by the South Dakota State Historic Preservation Office (SHPO) are provided for seven individual buildings within city limits. Evaluation methodology will also be described to further assist with future planning projects for the city.

Following the context and significance development discussions, are evaluations of individual buildings that provide additional physical descriptions of the seven schools surveyed. These descriptions document the existing features and characteristics, changes over time, and the level of historic integrity (design, materials, workmanship, location, setting, feeling, and association). It will also identify those features that make the buildings unique and specific to their place in Rapid City.

Fourteen properties were included in a reconnaissance field inventory, seven SHPO survey forms were prepared, and four buildings are recommended NRHP eligible.

Setting and Location

The study area for this document includes the city limits of Rapid City. Rapid City. It is the second most populous city in South Dakota and the county seat of Pennington County. It is named after Rapid Creek which bisects the community today and is where the settlement developed. Its population at the 2020 Census was 74,703 citizens. Rapid City is often recognized as the Gateway to the Black Hills and the City of Presidents because of the life-size bronze sculptures in and around the downtown area. Its elevation is 3,202 feet and it encompasses a total area of approximately 55.5 square miles.

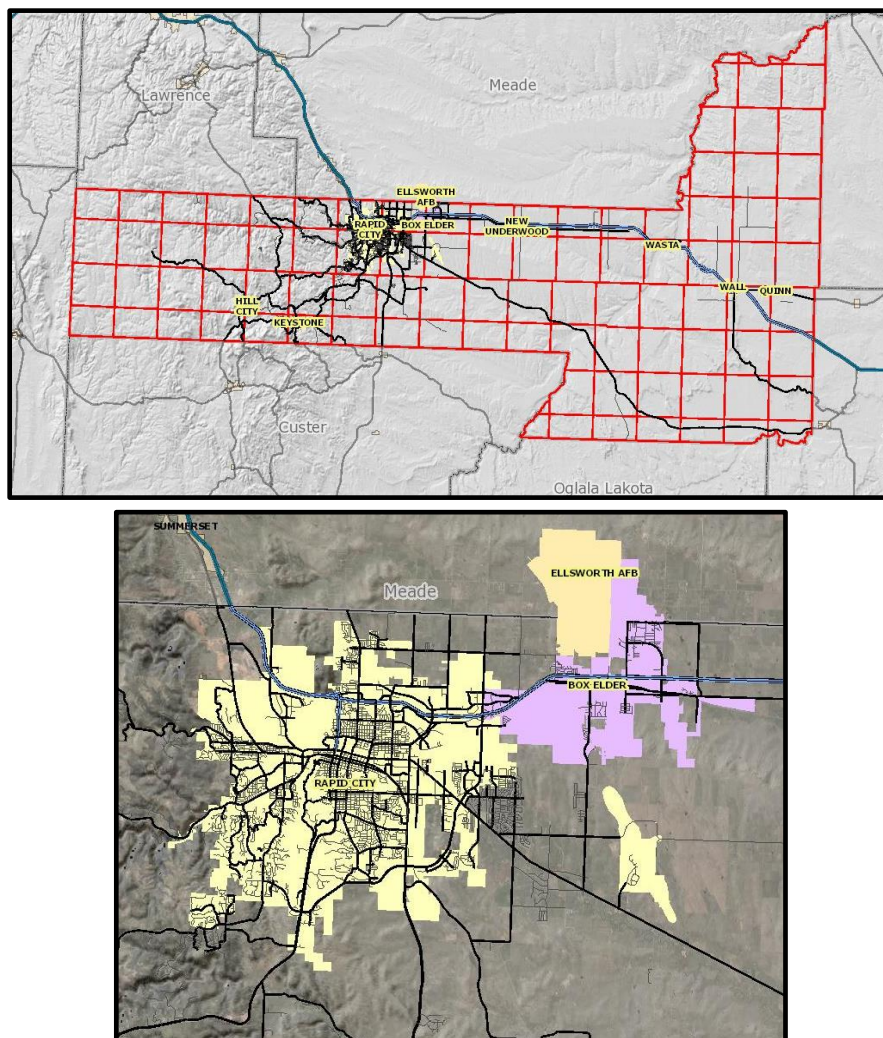


Figure 1. Project boundaries illustrating Pennington County above and Rapid City administrative boundary below. Images from Rapid Map at www.gis.rcgov.org

Rapid City Area Schools is the school district that administers public education in the community. There are three high schools within the district which include Rapid City Central High School, Stevens High School, and Rapid City High School. Five middle schools are East, North, South Southwest, and West.¹ Additionally, sixteen elementary schools serve the district. These include Black Hawk, Canyon Lake, Corral Drive, General Beadle, Grandview, Horace Mann, Kibben Kuster, Knollwood Heights, Meadowbrook, Pinedale, Rapid Valley, Robbinsdale, South Canyon, South Park, Valley View, and Woodrow Wilson. Among the public schools are also several private schools. The map above illustrates the project location.

National Register Criteria for Evaluation

The National Register of Historic Places (NRHP) was established as part of the National Historic Preservation Act of 1966 (as amended) and documents the nation's list of property's worthy of preservation. One important feature of this act is that it authorized the Secretary of the Interior to expand the recognition of important properties to those that possess local and state significance in American history, architecture, archeology, engineering, and culture. Previous legislation recognized only those properties with inherent national significance. The NRHP then documents the appearance and importance of districts, sites, buildings, structures and objects. To identify these properties, NRHP Criteria for Evaluation have been established. These recognized criteria were developed to maintain consistency with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation which established universal national standards for preservation activity.²

Criteria for determinations of eligibility are set forth in 36 CFR Part 60.4 (70) and are described in *National Register Bulletin How to Apply the National Register Criteria for Evaluation*. For a property to be determined eligible it must retain a high degree of historic integrity and possess significance. Location, design, setting, materials, workmanship, feeling and association are the seven aspects of integrity defined by the NRHP. In general, most of the seven integrity aspects

¹ The five middle schools were designed and built as junior high schools. The earliest reference to middle schools in Rapid City Journal is in the early 1970s. Though all formally called middle schools today, newspaper references routinely refer to them as junior high schools through the present day. For consistency and because this report documents the historic era, they will be referred to as junior high schools

² "National Historic Preservation Act." www.nps.gov/subjects/historicpreservation/nationalhistoricpreservationact Accessed May 5, 2022.

must be present for a property to convey historic significance. Extensive alterations to properties diminish their ability to physically convey significance. Historic significance must also be present in one of four categories:

- *Criterion A*-Properties that are associated with events that have made a significant contribution to the broad patterns of our history.
- *Criterion B*-Properties that are associated with the lives of persons significant in our past.
- *Criterion C*-Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- *Criterion D*-Properties that have yielded, or maybe likely to yield, information important in prehistory or history.

These integrity and significance issues are bolstered by individual site research and field survey.³

Existing Documentation

Rapid City Historic Preservation Commission has produced several documents studying the context of post war schools within their jurisdiction. Additionally, the South Dakota State Historic Preservation Office has two thematic studies that relate peripherally to the topic and were consulted as part of this study.

These include the following:

- *The Modern School, Postwar School Architecture in Rapid City, 2021*
- *Schools in South Dakota, Multiple Property Documentation Form, 1998*
- *Post-World War II Architecture in South Dakota, 2007*
- *Modern Residential Architecture in South Dakota, 1950-1975. Thematic context study, 2017*

³ Linda McClelland. "National Register Bulletin 16A" U.S. Department of the Interior, rev. 1997, 37.

Photographic and archival collections from South Dakota State Historical Society and the Minnilusa Historical Association were consulted. City planning documents, maps, and newspaper sources provided contextual information regarding the growth of the city and the philosophical ideals of educational buildings and needs during the study period. The documents above, primary and secondary research of this rich history and onsite field survey conducted in March and June 2022, contribute to the recommendations in this report.

Purpose and Need

When studying a thematic area of history, especially how historical movements are represented in cultural resources and the built environment, it is valuable to recognize the purpose and need to direct and focus the study area. Often, thematic studies can become far reaching with temporal and geographic boundaries that are difficult to identify. Need for this study is to explore and acknowledge the importance of post-World War II schools in Rapid City, while understanding the continuing need for change and the context within which they responded to city needs at the time.

The purpose of studying this building type is to understand why they look the way they do, and if their physical appearance represents significant architectural design or simply served as a response to community growth and development pressures. Interpreting these building styles and types which tend to be one-story masonry construction with rambling floorplans and multiple additions, can be accomplished by recognizing the temporal boundary within which they developed.

Technological needs and changes in both building materials and educational philosophies contributed to the need for these new buildings on the landscape. Building materials, comfort systems, philosophies, land availability, and politics/government contribute to physical changes in building appearance. Shortages of steel and other building materials led to innovations in alternate materials. Aluminum and plastics were used in creative and new ways, premanufactured structural systems became widely available, and expanded comfort systems included central air conditioning. Fluorescent lights were available by the 1930s, and commonly in use following the war.⁴

⁴ Lindsay Baker. "A History of School Design and its Indoor Environmental Standards, 1900 to Today." *National Institute of Building Sciences*, and National Clearinghouse for Educational Facilities (Washington, DC) January 2012, 9-12.

Educational materials and philosophies also progressed by leaps and bounds from the inception of organized education to the end of the twentieth century. Colonial era lessons were recorded on horn books or wooden paddles for students to share. Chalkboards were first in use in 1801 at West Point Academy and a device called a magic lantern was a precursor to the overhead projector or slide show was used in the 1870s. At the turn of the twentieth century mass produced wooden pencils were available to students. Though graphite as a tool to write and create art has been in use for centuries, the standard yellow pencil was not mass produced until around 1890. It was yellow in color because the finest graphite in the world came from China and yellow symbolized royalty and importance in China. It was widely seen as a method to communicate the quality of the pencil.⁵ This changed classroom function in a significant way, when during the Industrial Revolution wood pencils and paper were widely available. The first “on-air” classes were heard on the radio in the 1920s, an early method of virtual learning many today are all too familiar with, and the overhead projector was available in the 1930s, but not widely used until the 1960s.⁶

This brief accounting of technological changes in education from its earliest days in this country up to the period immediately following World War II is quite remarkable. Following the war classroom items like headphones, ball point pens, the mimeograph machine, and handheld calculators were widely available. Scantron tests in the early 1970s marked the introduction of computer technology to the classroom. These advances, developed over hundreds of years, pale in comparison to technology changes from the last thirty years. Beginning in 1990 the internet was at its infancy and personal computers were becoming common. Cellular phones, used for making phone calls only, were also becoming popular with the general public. In the last twenty years, computers and other virtual learning devices compete with books in the classroom, and personal devices are a standard part of back-to-school equipment. The need for physical change in the built environment to respond to the technological and societal changes is great. Many older buildings are challenged to serve a modern educational environment because of these changes, among many

⁵ Caroline Weaver. *Pencils You Should Know: A History of the Ultimate Writing Utensil in 75 Anecdotes*. (self published, 2020); Henry Petroski. *The Pencil: A History of Design and Circumstance*. (Alfred A. Knopf, New York, 2010)

⁶ “The Evolution of Technology in the Classroom.” Timeline of Technology in the Classroom-Curriculum and Instruction. www.gradschools.com/degree-guide/technology-in-the-classroom-timeline-curriculum-planning. Accessed March 2022.

others. This does not diminish their value or ability to respond to these changes, but physical construction methods from the post war era can present challenges to needed physical space and general educational efficiencies.⁷

Historic Background Information

Introduction

Rapid City is on the eastern edge of the Black Hills and was founded in 1876 by a group of gold prospectors. Before the initial survey of the town, the land was home to the Lakota and other American Indians for generations prior. The Black Hills represented significant spiritual importance to the American Indians. The area was largely populated by white settlers when gold was discovered. A group of prospectors founded Hay Camp near the Black Hills, and this was later renamed Rapid City after the limestone spring stream that runs through its boundaries. In 1876, a group of eleven founders laid out the original town site, a square mile business district that was soon home to more than 100 people.⁸

Fluctuations in populations stabilized in the 1880s when many permanent educational, social, and governmental facilities were established, and slow steady growth was seen into the 1920s. President Calvin Coolidge relocated his White House staff to the Black Hills in 1927 which brought attention to the community and influenced place names around town. Gutzon Borglum began the monumental Mount Rushmore carving the same year which compounded attention and tourism to the area nationwide.

The economic down-turn from the Great Depression was felt in Rapid City and public works programs left a legacy within the built environment including notable attractions like Dinosaur Park. As the United States entered World War II, the War Department created the Rapid City Air Base, now Ellsworth Air Force Base, and after the war the base and booming economy fueled growth in Rapid City.

⁷ Purdue Online. "The Evolution of Technology in the Classroom."

www.online.purdue.edu/blog/education/evolution-technology-classroom, accessed March 13, 2022.

⁸ "History of Rapid City." Rapid City Public Library Resource pages, www.resourcepages.weebly.com/history-of-rapid-city.html

Prologue to Post-War Rapid City

Rapid City's population grew between 1910 and 1920 as many sought to work in the city and left rural farmsteads. Tourists flooded the area on their way to newly established recreational resources like Wind Cave National Park, Jewel Cave National Monument, Custer State Park, Badlands National Park, and Mount Rushmore National Memorial, all established between 1903 and 1927. When President Calvin Coolidge chose to move his summer White House to Custer State Park in 1927, he and his staff stayed for a prolonged period in Rapid City. Coolidge and his staff used space in the former Rapid City High School as offices upon their arrival and transition to the Custer State Game Lodge.⁹

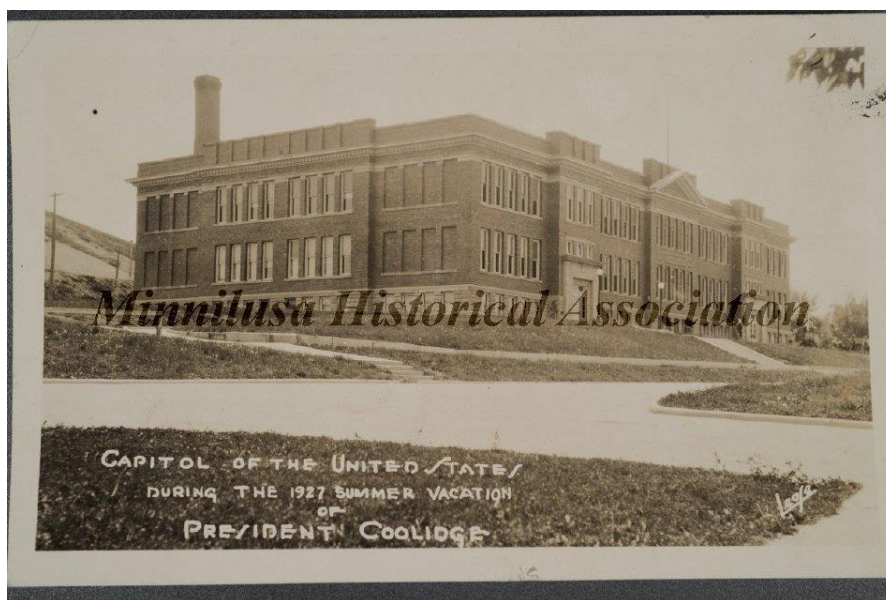


Figure 2. The former Rapid City High School where President Coolidge had offices. It was later renamed Coolidge High School.
Photo: Minnilusa Historical Association, 1927 #CHL562

Soon after, Rapid City became the largest city in the region with a population of 10,464 in 1930. This was nearly double the 5,777-population taken from the 1920 census.¹⁰ The Great Depression decimated the regional urban and agricultural economies, and many found seasonal work at parks in the area or subsisted by working in Depression-era programs which built infrastructure like highways and bridges as well as parks like Dinosaur Park. Rapid City's economy was bolstered

⁹ Eric Steven Zimmer and Eric John Abrahamson. "Our History, Our Future: A Historic Context Document for Rapid City, South Dakota." Prepared for Rapid City Historic Preservation Commission, April 2021, 21.

¹⁰ Census data from www.census.gov

when the military opened the Rapid City Army Air Base in 1942 at the northeast edge of the city. Construction of the base and the influx of population brought jobs and a new diversity to the area, with the first significant African American population from those serving in the Quartermaster Corps.¹¹



Figure 3. Rapid City Air Force Base dedication. Photo:

Following the war, the economy and the population boomed, across the country and the region. The Rapid City Army Air Base was renamed Ellsworth Air Force Base in 1953 and continued to serve as a major economic stabilizer in the community. It was a training base and bomber wing for the Air Force and was a critical headquarters for the Strategic Air Command.

The first city plan was completed in 1949 to address burgeoning pressures for growth. The city grew physically to accommodate the population boom by annexing and platting new neighborhoods primarily north south and west of the existing city proper.¹² Rapid City's physical

¹¹ Zimmer and Abrahamson, 22.

¹² 1949 City Plan.

boundary saw no increases between 1880 and 1940. Population almost doubled between 1940 and 1950 rising from 13,844 to 25,312. Physically, the city also grew by 5,448 acres of new annexed land for planned subdivisions in the north, south and west areas of town.¹³ Affordable housing and availability of labor and materials spurred many new residential subdivisions. For the first time housing was built by development rather than on an individual basis for a single client. Large tracts of land in areas between Baken Park and Canyon Lake were designed with curvilinear streets and generally modest one-story and split-level single-family residences. Similar residences were built almost production-line style, often with specific trades coming in to lay concrete, then build foundations, finish walls, and roofs.¹⁴

Like with school construction, developers building tract homes and planning new developments utilized new materials, prefabricated building components, and new methods of construction. Much of this efficiency was derived from technological advances developed and refined during the war and applied to mass-produced housing.¹⁵

¹³ Population and statistical information provided by Rapid City Planning Department and U.S. Census records.

¹⁴ Cultural Resource Analysts, "Modern Residential Architecture in South Dakota, 1950-1975: A Thematic Context Study," August 2017, prepared for the South Dakota State Historical Society, 101-103.

¹⁵ Vantage Point. "A Home of One's Own: Postwar Residential Development in Rapid City, 1945-1972" 3. Prepared as part of Rapid City Historic Preservation Commission's historic context development.

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Year-By Decade	Population	Acres Added
1880	939	3,833
1890	2,128	0
1900	1,342	0
1910	3,454	0
1920	5,777	0
1930	10,464	0
1940	13,844	3,609
1950	25,312	1,839
1960	42,390	1,349
1970	43,846	3,567
1980	16,492	8,002
1990	54,523	3,930
2000	59,607	9,066
2010	67,956	598
2020	76,541	819

Figure 4. Population and growth chart

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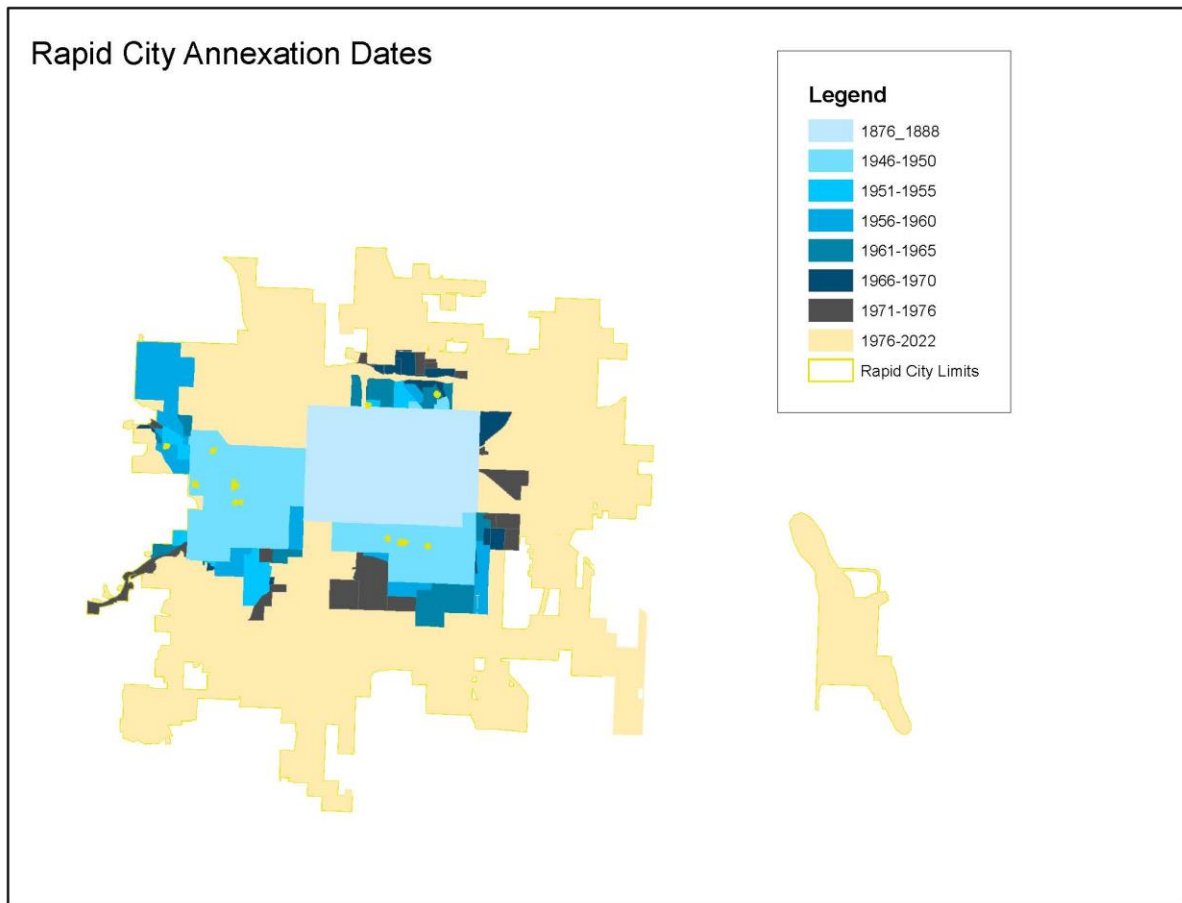


Figure 5. Rapid City Annexation Map.

Houses built to respond to this growth were often selected from a limited set of plans that could be customized by add-ons, such as a garage or carport. Most were simple, modest plans that responded to a need whether it was for housing or educational buildings. However, with enhanced resources, buildings adopted national trends that epitomized modern life and implemented specific design elements of the era. National design ideas in both residential and educational buildings were influential by the mid-1950s.

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Figure 6. South Canyon Area aerial, 1971-72. Photo: Minnilusa Historical Association

In 1954 *Better Homes and Gardens* magazine advertised a “Home for All America” campaign where the ranch house was held as the ideal concept for modern living. It promoted the “Idea Home” which were essentially local model homes used as advertising devices for new developments. In Rapid City an Idea Home was built by contractor Dallas Smith in the Strathavon Addition to great success. More than 10,000 toured the building in 1956, including home economics classes from Rapid City High School.¹⁶

Builders responded to continued demand, and often constructed housing developments before infrastructure like roads and sewer were in place. They looked for shortcuts including substituting gravel streets for paved streets in their neighborhoods. In 1962, Mayor Bill Ruff went so far as to veto a low-cost housing development northeast of the city because of the developers plan to gravel streets rather than provide hard surfaces.¹⁷

¹⁶ Ibid.: “1956 Idea Home Has Quality of Highly Functional Charm.” *Rapid City Journal* (Rapid City, SD) 8. The residence was at 2017 Selkirk Place and was designed to address the “problems of an American family with four growing youngsters.”

¹⁷ “Raff Vetoes Council Action on Housing, Cites Reasons.” *Rapid City Journal* (Rapid City, SD) 11 May 1962, 3.

School locations were a critical element for newly developed neighborhoods, like the Canyon Lake area and Canyon View Subdivisions. Both were early developments that advertised their proximity to the new Canyon Lake Elementary and Horace Mann Elementary schools.¹⁸ Rapid City's residential construction levels were among the fastest in the nation, when considered on a per capita basis. Population growth rates dwindled in the 1960s, and though still increasing were not as aggressive as the previous decade. This shift influenced discussions in 1961 regarding location of a new high school, and it was decided that an updated city plan was needed, given the intense growth since the 1949 plan was developed.

In the 1960s the city's development focus shifted to urban renewal and downtown improvements and away from neighborhood and residential development. The concept of blighted areas and the need for an improved downtown core to continue to compete with shopping malls and the suburban experience was considered key to a vital community. Revitalization activity, improvements to the core, and a continued emphasis on affordable housing came to an abrupt halt when a historic flood decimated the community's downtown in 1972. Nearly fifteen inches of rain fell in six hours near Nemo with four to twelve inches in the Rapid Creek watershed causing it to breach its banks and flood downtown Rapid City. Devastation included 238 casualties, 3,057 injured, and \$160 million in property damage. This was considered a once in 500-year event.¹⁹ An influx of federal and state funds combined with donations contributed to recovery and reconstruction efforts. This continued well into the 1980s, and this year the city is commemorating the 50th anniversary of the tragedy.

Rapid City's growth described above pressured the public school system with a dire need to expand and serve the influx of young families who were purchasing new houses in recently annexed and developed neighborhoods.

¹⁸ Vantage Point, Home. 6.

¹⁹ Janet M. Carter, Joyce E. Williamson, and Ralph W. Teller. "The 1972 Black Hills-Rapid City Flood Revisited," United States Geological Survey, April 2002, 1-2.

Rapid City Schools Up to 1939

Rapid City School District number one was established in April 1877 by the newly formed county commissioners. This first district encompassed approximately 400 square miles, with an area ranging ten miles north and south of the city and forty miles east and west. One teacher and a small number of students occupied a rented building at Main and Seventh Streets that housed the first public school classes. The fledging district signed a contract with Edward LeGro for twelve cords of wood with instructions to make desks for the students. Early records show that teachers were paid \$50 per month and to contain costs, advanced students and older students taught the lower grades. Students paid a tuition of \$1 per month along with an expectation for additional services through monetary contributions or labor. In 1880, the first school levy established a building fund of \$1,380 to construct a new school. C.R. Spencer was given the contract for a new building on Kansas City Street between Fifth and Sixth Streets. The new two-room building opened for classes in the fall of 1881 and tuition increased to \$1.50-\$2.00 depending on the number of children from a family attending school.²⁰



Figure 7. First Rapid City High School on the south side of Columbus between 6th and 7th Streets. Photo: Minnilusa Historical Association, #CHL485

²⁰ "School Functions Explained During Education Week." Rapid City Journal (Rapid City, South Dakota), 15 November 1953, 8. The building was rented for \$10 per month and was located where the Sweeney Hardware building stood in the 1950s.

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The school system remained manageable and continued to grow steadily with a high school complex, several elementary schools, and junior high schools. Calvin Coolidge's summer White House utilized the high school for meetings and activities in 1927, and he became the namesake for the junior high school. The last major construction prior to this study period completed in 1936 was the four-story Rapid City High School building that created a campus with auditoriums and gymnasiums inside the large building complex.



Figure 8. The former Rapid City High School, built in 1923 was listed in the National Register of Historic Places in 2010 for its historical and architectural significance. It served as the only Rapid City high school from 1937 through 1969 when Steven's High School was built. Photo: Author, June 2022.

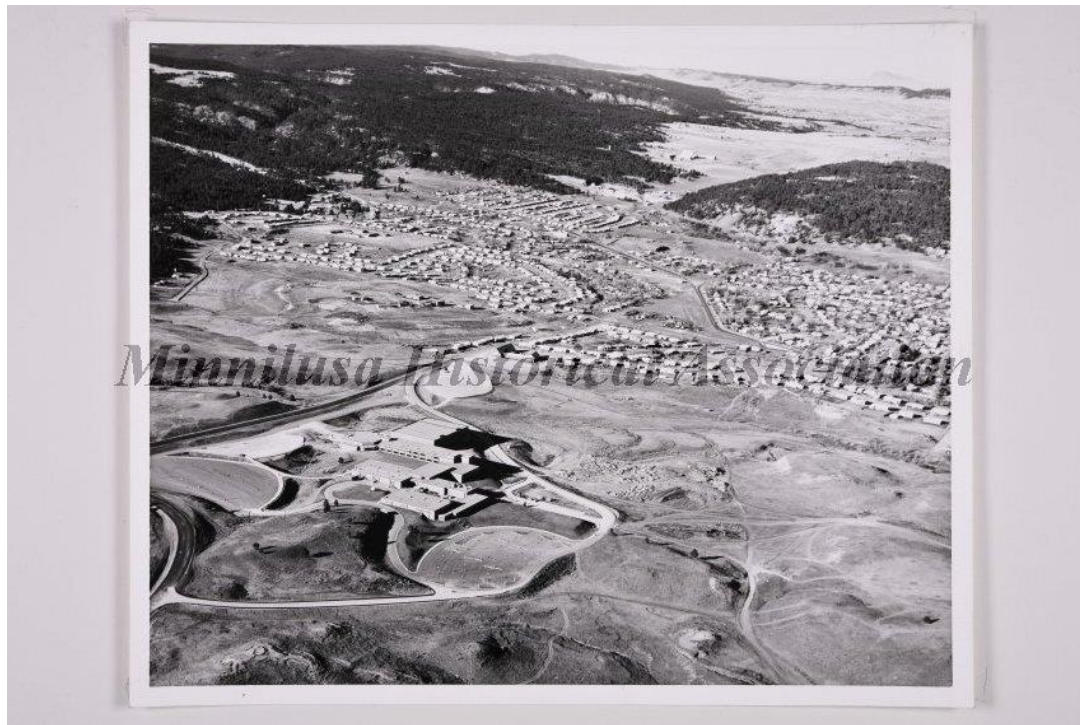


Figure 9. South Canyon area showing Stevens High School, 1971-72. Photo: Minnilusa Historical Association.

Post War School National/ Regional context

Traditional school buildings from the mid-nineteenth into the early twentieth century generally followed a standard plan. They were three to four story masonry buildings with a central raised entrance, and symmetrical classrooms on either side of a broad double-loaded central corridor. Often a formally ornamented auditorium served gatherings of the school and community. This general plan was expressed across the country in both urban and rural areas. Rectangular classrooms had blackboards on one or two walls, and a bank of windows on one long side for efficient lighting. Children's desks were in rows facing the front where the teacher's desk was located. This physical arrangement established a clearly defined formality, order, and sense of authority.²¹

Generally, construction of school buildings stalled during the Depression-era. Though funding was widely available through many of the make-work programs established by President Franklin D.

²¹ Amy F. Ogata. "Building for Learning in Postwar American Elementary Schools." *Journal of the Society of Architectural Historians*, vol. 67, no. 4, December 2008. 563-4.

Roosevelt's New Deal, those buildings constructed at local educational facilities were often ancillary support structures like free-standing gymnasiums, auditoriums, and athletic fields rather than the primary school building itself. These resources extended the longevity of the older buildings by relieving overcrowded spaces and diversifying students across a school campus rather than focused in one building.²²

Bridging the gap between the period from the late 1930s to a nationwide population and construction boom during the 1950s, several architects, intellectuals and educational consultants studied the needs and changing demands of the American educational system. Their studies focused on how to best modernize it using technology, design, and educational philosophies, while establishing partnerships to market and influence standardization and acceptance of plans. Well known architects like Richard Neutra experimented with school designs in Los Angeles that favored open classrooms, extensive windows or window walls, and easy access to the outdoors, all housed within a long low one-story plan. Gardens and outdoor spaces were also important elements. Initially, these buildings were modeled around concepts of light and air in education, but also a response to incorporating an interaction with the outdoors and interior spaces in the warmer climates. Neutra's plan as developed in the Bell School in Bell, California contained an L-shaped plan with broad windows that was equipped with moveable chairs and tables, rather than desks and designed to accommodate an indoor-outdoor curriculum.²³ The concept of flexibility was an important one in the changing climate of educational standards and was often emphasized. Rigid rows of desks that faced a single figure (the teacher) were no longer considered efficient or effective ways to teach or organize a space.

²² Michelle L. Dennis. "Federal Relief Construction in South Dakota, 1929-1941." South Dakota State Historic Preservation Office, 1998. This general reference and personal reference as part of field survey for this project identified the majority of public work buildings in Rapid City were in parks and government buildings, rather than schools.

²³ Ogata. "Building for Learning." 565

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Figure 10. Bell School, 1939. Photo: Los Angeles Public Library Photo Collection



Figure 11. Bell School, 1953. Photo: Getty Research Institute, Los Angeles

These new building concepts were visibly different from previous iterations of educational architecture and were considered avant-garde and conceptual especially in integrating progressive elementary education and learning concepts. Child-centered rather than teacher-centered classrooms created spaces where children could freely interact with and move around the room. Materials other than textbooks were used in primary curricula. Movable furniture, rather than desks, accommodated hands-on projects that explored and interacted with both indoor activities and outdoor experiences. Another influential prototype building design was the Crow Island School in Winnetka, Illinois designed by Eliel and Eero Saarinen. It incorporated curriculum and design with a pin-wheel plan that accessed a central block where auditorium and workshops were located. Long corridors connected L-shaped classrooms with individual gardens easily viewed through the expansive use of windows. Lower ceilings more common in residential buildings were utilized to provide a sense of comfort. Classrooms were based on an understanding that children were overwhelmed by bigger buildings and big spaces. Each room was self-contained with a workroom, storage facilities, counters, sinks, and toilet. Interior designs included fabric draperies,

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colorful shelves, built-in seating, plywood chairs and tables that were easily moved and rearranged. The expectation was that the new classroom plans would provide a sense of security through an inviting home-like setting.²⁴



Figure 12. Crow School, Winnetka Illinois, 1940. Photo: www.greatbuildings.com

An important step away from symbolism through architecture was evident in these new buildings. Where older schools illustrated a formality in design with applied ornamentation linking to former architectural styles, new construction was notably contemporary and devoid of ornament. Publicity surrounding this new educational building type was marketed via a travelling exhibit organized by the Museum of Modern Art in New York called *Modern Architecture for the Modern School* and was sent to communities across the country between 1942 and 1946. Not only did the exhibit present the new architectural ideals as the preferred standard but lobbied that this building type could benefit children. Exhibit curator, Elizabeth Mock advocated for these changes in school design across the country.²⁵ Advertising the ideal school was similar to the “Idea Homes” marketed by Better Homes and Garden magazine and described above.

²⁴ Ogata. “Building for Learning,” 567.

²⁵ Ibid.

Though the high architectural style and interior design created by Saarinen and Neutra was not obtainable by all, the general concepts of a low-rise building, with a single or double loaded corridor, naturally lit from both sides, with self-contained classrooms and lower ceilings would eventually be widely applied to new schools across the country. New ideas about lighting design, the use of inexpensive building technologies and materials, along with flexible furnishings were widely accepted.²⁶

Another exhibit, this one sponsored by the Henry Ford Museum and Greenfield Village called *Schoolroom Progress USA* toured the country from two railroad cars in the mid-to-late 1950s. This exhibit included model classrooms, and the evolution of school design was widely embraced by architectural firms across the country. Several national firms became leading school designers and collaborators and included Caudill Rowlette Scott of Texas, John Lyon Reid of San Francisco, The Architects Collaborative of Cambridge, and Perkins and Will of Chicago.²⁷ Perkins and Will eventually became the architectural design consultant for the new building program for the Rapid City schools constructed during the 1950s.²⁸

These firms played a critical role in applying designs from the conceptual architectural models to more economical construction that could be adopted at local levels across the country. It could be interpreted that they executed a program publicized and supported by architectural elites and conceptual education programmers. It is rare in architectural history that a building program was sponsored, advertised, and publicized by national organizations to influence local decisions that impacted the built environment across the country. The building styles also influenced residential properties with the proliferation of the ranch style house across the country.

Technological advances and use of materials widely available following the war included poured concrete slabs for low-rise buildings, lightweight steel frames with exposed trusses and joists, radiant heat floors and expanses of glass all became more economically flexible options.²⁹ Building flexibility was key in school design from this era and would be surpassed in the next

²⁶ Lindsay Baker. "History of School Design." 11-13.

²⁷ Ogata. "Building for Learning," 567.

²⁸ Ibid.

²⁹ Michelle L. Dennis. "Post World War II Architecture in South Dakota," 10.

decade by an even more flexible and open concept of school design. Flexibility was achieved through open corridors, partition walls, and contemporary zoned heating and ventilation systems. Interior design features like folding walls for small groups movable cabinets, lightweight furniture, and bright colors were incorporated into new designs.

Though most schools were funded and built at the local level, the Cold War and politics following World War II, funneled federal funds into local school systems through the National Defense Education Act of 1958. This afforded a funding pool for school buildings and equipment, but also to develop lesson plans in science, math, and foreign languages. Critical questions were posed about the education system and its role in fostering democracy, an especially sensitive issue during the 1950s, and many communities, including Rapid City chose not to utilize funds or to utilize them for equipment rather than building design and lesson plans.³⁰

Because of rising anxieties associated with the Cold War, many believed that the low-level, one-story schools were safer and easier to evacuate. The National Council on Schoolhouse Construction stated that stairs were hazardous, expensive, and not necessary. Readily available post war materials like steel made one-story steel framed schools affordable, easily built, and flexible. Studies in the 1940s on lighting, color, and furniture designs in American schools was widely adopted. Incorporating these new designs were architectural firms that consulted nationally and brought standards to buildings across the country. Perkins and Will and Caudill Rowlett Schott were among those who incorporated homey features like fireplaces, casual seating, large windows, and lower ceilings to deliberately resemble residences. However, many of their designs were economically out of reach for most communities.³¹

By 1959, school design ideals began to change again. The broad corridors with self-contained rectangular classrooms were deemed inflexible and formulaic. Designers began criticizing the box or rectangular classroom and advocated for open plans with large spaces, few walls or windows

³⁰ Ibid.; Vantage Point. *The Modern School. Postwar School Architecture in Rapid City*. Rapid City Historic Preservation Commission, Historic Context Document, May 2021, 218.

³¹ Lindsay Baker. "History of School Design." 12.

with only partitioned folding panels and ceiling lights. Concepts like team-teaching, mixing grade levels, and individual instruction necessitated temporary spaces that could be converted quickly.³²

The open system was considered economical and a standardized building plan called School Construction Systems Development or SCSD was developed. It comprised prefabricated standard components that could be quickly installed. The hope was that if adopted large-scale, purchase of modular systems could facilitate interchangeable configurations in schools across the country. Buildings could accommodate open spans of 60 to 70 feet that could be easily partitioned with no throwback to rows of classrooms along a corridor or rows of students within a box. To make the elements of the building readily accessible to all, the SCSD structural components folded for easy shipping. Other innovations included a “service sandwich” system where wiring, air ducts and plumbing were between the roof deck and ceiling. With ceiling lights embedded in movable panels and air ducts that could be moved to any line along a five-foot grid, entire rooms could be reconfigured in a very short amount of time.³³ Though this actual prefabricated package was available, the concepts it presented were more widely integrated within the built environment and elements of the design adopted.

The use of new and readily available building materials like aluminum contributed to quick production and construction projects. Aluminum was used not only in the aircraft industry, but for windows, doors and siding on buildings and by 1950, aluminum production was greater than it had ever been. Other materials like stainless steel, structural steel, and concrete were used extensively in the built environment. Concrete was versatile in its many forms including concrete block or masonry units, cast stone, reinforced poured concrete slab, and pre-cast concrete. Technology contributed to popular cladding materials like Perma-Stone or fake stone and masonry. Typically made of cement, epoxies and fiberglass it could be formed to take on the appearance of a variety of stone or masonry coursing. Transparent elements like large plate glass windows and glass block were widely used and more efficient with thermal panes and insulative qualities, all new additions to the technology.³⁴

³² Ogata, 570

³³ Ogata, 582.

³⁴ Lindsay Baker. “History of School Design.” 13.

Many South Dakota architects adopted the modern architectural language and incorporated these materials in their designs. Among these are Harold T. Spitznagel, Perkins and McWayne, and Hugill and Blatherwick of Sioux Falls. In Rapid City the firm of note was James Ewing and Adrian Forrette who designed several postwar commissions, including many of the schools evaluated within this report. They were responsible for the Gambles store built in 1947, the Municipal Building in 1955, and the Pierre Municipal Airport in 1958. One of the team's most notable designs in Rapid City is the Cathedral of Our Lady of Perpetual Help designed by Adrian Forrette in 1962. Spitznagel's design of the Miller Grade School (1949) in Belle Fourche, South Dakota was unlike any other school in South Dakota at the time and it contributed to a standardized plan for school construction throughout the state in the 1950s.³⁵

Post-War Schools in Rapid City

The first post-war schools completed in Rapid City were Canyon Lake and General Beadle (no longer extant) Elementary schools in 1949. These buildings set the tone for a massive construction effort that continued throughout the decade of the 1950s. In 1950, Annie Tallent, now South Park Elementary and Lincoln Elementary were built. E.B. Bergquist (no longer extant), Horace Mann, and South Canyon followed in 1952 with Robbinsdale Elementary and West Middle School in 1955. 1955 was a pivotal year in school development because voters passed a \$3.1 million bond issue to construct new buildings and additions to existing buildings that were already populated to capacity. Among the newly constructed buildings were Meadowbrook Elementary in 1957, Pinedale Elementary in 1958, South Middle School and North Middle School in 1959. Grandview and Knollwood Heights Elementaries were completed in 1961 and 1963 respectively, and Stevens High School finalized the construction effort in 1969.³⁶ Design concepts established at the national level are expressed in many of these buildings. Streamlined construction was required to respond to the local population boom, so the question of whether these buildings were a reflexive response to a need, or significant architectural expressions can be explored. The architectural teams employed by the school board certainly contributed to a comprehensive design standard that incorporated modern building ideals.

³⁵ Ibid. 11-34.

³⁶ Vantage Point. The Modern School, Postwar School Architecture in Rapid City. March 2021

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Figure 13. Canyon Lake Elementary School, 1949.

Rapid City experienced the greatest growth in South Dakota immediately following World War II. Population skyrocketed from 13,844 in 1940 to 17,117 in 1945, and nearly doubled to 25,179 by 1950.³⁷ At this time the discipline and program of city planning was new in the city and across the region. For the first time consideration of transportation systems, zoning, and other community projects were wholistically evaluated in a long range plan to provide appropriate school buildings in the right locations for the city's growth. The 1949 Comprehensive Plan for Rapid City had a section on schools and school planning. The adopted plan committed to the six-three-three facilities system. This meant that three distinct buildings would provide education to elementary students from kindergarten to sixth grade, junior high schools to educate seventh through ninth grade, and high schools for tenth through twelfth grade. As of 1948 school enrollment was as follows:

- Elementary schools, 2,051
- Junior High schools, 836

³⁷ Michelle L. Dennis. Post-World War II Architecture in South Dakota. 6.

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- Senior High schools, 754
- Total Public Schools, 3,600
- Parochial Schools, 600
- Total 1948-1949 school enrollment, 4,280

To support the planning process, the Board of Education hired educational consulting firm Englehardt, Englehardt and Leggett of New York City whose study was titled “A Study of School Building Needs of Rapid City.” This report was useful but limited in that it only addressed the children already in the district and did not accommodate estimates based on possible future growth of the city and environs. Plans had to be made for when the city reached a population of 50,000 residents which was on the horizon and approximately two times the population when the plan was written.³⁸

In 1949-50 school year attendance increased by almost 300 from 3,680 to 3,979 within the year.³⁹ Rapid City prepared for a population of at least 30,000 by 1950 with a school enrollment of 7,500. The newspaper ran a series of articles documenting and describing recommendations from the city’s new master plan, which included constructing two to three new junior high schools and six elementary schools as a response to population statistics. City planners A.C. Godward and Joseph Zalusky incorporated these results in a long-range school plan, namely identifying the future location of school buildings. In 1949, they identified residential growth to the northeast, southeast, and west. Predictions indicated that residential development in these three areas would house between 16,000 and 18,000 residents and the city would eventually reach a population of 50,000. They recognized that steady growth rather than sudden increases was the norm for Rapid City and that school plans should follow to accommodate the existing overcrowding as well as anticipate new needs. Canyon Lake Elementary school was soon to open and another proposed elementary

³⁸ 1949 Rapid City Plan.

³⁹ “Board Inspects Possible Sites for School Building.” Rapid City Journal (Rapid City, South Dakota), 11 October 1949, 4.

for the north part of town was in progress.⁴⁰ Topography divided the city naturally and contributed to these planning efforts.

Three junior high schools were needed in the Canyon Lake, Roosevelt Park, and South Park areas. Planners also expected that residential areas outside city limits would seek annexation and future school buildings would be required to serve those needs in west Rapid City. Estimates identified the need to serve 1,500 senior high school students, 2,000 junior high school students, and 4,000 elementary school students. Planning for this growth helped identify land acquisition sites and save the city money by acting early. Use of land around the Sioux Sanatorium near Canyon Lake Drive was proposed for redevelopment into a park and could contribute to land needs for the school system. Plans to develop this area included a junior high to serve Canyon Lake and an elementary school opposite Soo San Drive and another at the east end of the park near where Canyon Lake drive crosses Rapid Creek by Baken Park.⁴¹

New buildings and considerable changes were needed and city planners Englehardt and Godward noted that, “changing conditions, obsolescence, safety deficiencies, or improper location” must be addressed. Their opinion was that only Canyon Lake, Washington, and Jefferson schools along with the high school and junior high be included in a permanent plan. All others were obsolete or located in areas that did not serve the public. Garfield school had potential to be renovated at its present location.⁴²

Canyon Lake elementary school was opened in the Fall of 1949 and General Beadle and Annie Tallent were ready for opening the following year, and despite these additions, the school population continued to overcrowd the system. Another new building was planned on West Street near Quincy and E.B. Bergquist, school superintendent, attempted to expedite planning to let contracts as early as possible with the goal to have them occupied by fall of 1951. An additional 300 students in elementary grades were anticipated with another 100 in junior and senior high schools, adding pressure to the system. Canyon Lake was at capacity the day it opened.

⁴⁰ “City Planners Advise School Development in Three Areas; Foresee Enrollment of 7,500.” Rapid City Journal (Rapid City, South Dakota), 18 March 1949, 5.

⁴¹ Ibid

⁴² Ibid

Challenging the city was shifting population centers and unequal distribution of pupils. The city thought to respond to immediate demands by constructing temporary buildings before permanent plans could be made.⁴³

According to the National Education Association only 28 percent of all students attending public schools were transported by school bus. Statistics showed that 120,000 school buses were used daily and cost \$200 million annually. Rapid City fell well below those statistics with about 150 students residing more than two and a half miles from their school and thus requiring bus transport. Most of those students were in the seventh and eighth grades and lived in the Canyon Lake and South Canyon school areas. A planned new junior high in the west part of town eliminated most of that transportation need. Some transportation needs were also required by students from the airbase attending junior high. At the time, the school district comprised 18 square miles which was larger than the town itself, and there were large areas north, south and west of town that sent children to the local schools. School board philosophy at the time, led by Superintendent E.B. Bergquist was that no child should be more than half a mile from their school and nearly 90 percent of the school population met this goal.⁴⁴

Proposed junior highs were discussed in 1953 with the hope one would be located in north part of town and the “desirability of one-story school buildings of the type now being erected in the city was explained from the standpoint of safety, economics and flexibility.”⁴⁵ Streamlined budgeting and financial efficiencies were a priority for the school system, particularly when asking for additional funds. In 1953 maintenance issues were addressed by proposing to add full time carpenters and painters rather than contracting out maintenance work. Maintenance staff at individual sites could manage minor repairs, but major repairs were contracted to outside sources. By employing painters and carpenters year-round, the school board hoped to diminish costs and deterioration, and delay major repairs. At the time, five men were employed as maintenance men, two painters, and one carpenter encompassed the entirety of the maintenance staff. Systems operations such as water, fuel, telephone and electricity were delegated to individual school principals to manage. With school buildings constructed at a rate of one per year, the school board

⁴³ “Time, Pupil Census Crowd School Board.” Rapid City Journal (Rapid City, South Dakota) 12 May 1950, 4.

⁴⁴ “School Transportation Problem Relatively Easy.” Rapid City Journal (Rapid City, South Dakota) 24 April 1953, 3.

⁴⁵ “School Plans Explained For North Rapid.” Rapid City Journal (Rapid City, south Dakota) 15 May 1953, 3.

acknowledged that mistakes could be made, but oversight and cooperative agreements with city inspectors and local architects helped limit construction errors. New building materials were also considered to streamline costs. It was proposed that some could be adapted to school construction with considerable savings, though no specific materials were identified. Building costs and efficiencies were critical and personnel consumed most of the budget with teachers' salaries over 70% of costs. In 1953 teachers were put on a salary schedule to compete with Sioux Falls, Aberdeen and Cheyenne for needed teachers. The district had \$219,000 in federal funds that could be used to construct new buildings or equip buildings. The school board was not in favor of using the funds for new construction, because the funds came with required federal oversight of the building plans which could add a two-month delay. The need was so great, that they chose to use the funds for equipment, so as not to delay new construction any longer than necessary. Also discussed were the merits of incandescent versus fluorescent lighting at Pinedale school. The challenge being that one system was more expensive to install and more economical to operation (fluorescent), but the board chose to stay with the incandescent lights called for in the plans⁴⁶

A four-point program was outlined by school superintendent Paul Stevens for the 1955-1956 school year. Among the four points were improvement of the instructional program, continuation of the building program, improved public relations program, and updated personnel policies. He included the need to revise study guides, expand shop and vocational training programs with an emphasis on programs to meet the needs of girls, and expand special education program. Stevens noted that, "special emphasis should be placed on the teaching of moral and spiritual values, which are so essential to good living." Additionally, he emphasized the need to continue the school building program as student populations grew and pressured the existing built environment. He anticipated a 51% student population increase which equated to an additional 3,056 pupils in the following five years. He identified the need for three new elementary schools, two new junior high schools and additions to General Beadle, Robbinsdale, Annie Tallent, and Horace Mann elementary schools along with remodeling Washington building for use as a high school. Plans

⁴⁶ "School Board Comments on Need of Economy, Seeks Ways to Save." Rapid City Journal (Rapid City, South Dakota), 25 April 1957, 3.

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were underway for Meadowbrook elementary.⁴⁷ It is important to note that the new buildings constructed were almost immediately at capacity and within only a few years required additions to accommodate the school population.

In 1955, a \$3.1 million bond issue was proposed to maintain the “current high standards” of education in Rapid City and was widely discussed in local media and emphasized by an advisory council at a public meeting. The city’s population in 1940 was 13,884 and by 1955 there were nearly 40,000 residents. In 1945 there were 2,688 children attending public schools. By 1955 that number grew to 6,571 and by 1959-1960 school year was estimated at 9,100. Rapid City approved previous bond issues totaling about \$3.5 million since 1948, but by 1955 there were still more than 500 children attending school in classrooms that were considered sub-standard.⁴⁸ To accommodate the pressure children were bussed to schools outside their area and the possibility of half school days were proposed. Pressure on the system was sustained throughout the 1950s.

During an informative session, building needs, plans and methods for action were brought forward. A special election for the bond was held in November. The following issues were identified:

- \$840,000 for a new 700-student northside junior high school.
- \$1.2 million for a 1,000-student southside junior high school.
- \$380,000 for a 380-student elementary school at 50th and Chicago Streets in South Canyon
- \$240,000 for a 240-student elementary school in south Rapid City.
- \$147,000 for a 240-student eight room addition to Robbinsdale school.
- \$82,000 for 120-student four room addition to Annie Tallent School
- \$134,000 for 240- student eight room addition to General Beadle School
- \$79,000 for 120-student four room addition to Lincoln School.

⁴⁷ “Superintendent Outlines Program For Public Schools.” Rapid City Journal (Rapid City, South Dakota), 29 August 1955, 3.

⁴⁸ “Rapid City Faces A Crucial Decision.” Rapid City Journal (Rapid City, South Dakota), 14 November 1955, 9.

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Rather than presenting a total bond dollar amount for a single public vote, each individual school and line-item cost were presented separately for a vote from the full community. Each item required a 60% majority to pass. The city spent \$3 million to construct new schools since 1948, but the need for building space had reached a point where the standard annual taxation would no longer support population requirements. It was also noted that it would take a year to eighteen months to plan and get through the purchase, design, and permitting process before school construction could begin, so efficient planning and execution was necessary. All schools in Rapid City were operating beyond their capacity, and statements regarding the significant population boom included, “The babies in the World War II period were nothing compared to the baby boom now.” And, “The present high school bulge is from children born during World War II years. What will happen to us when the present baby boom hits?”⁴⁹

The bond issue passed despite near-zero temperatures on voting day. A voting record for a school district election was achieved when the overall vote for the eight proposed projects was better than 85 percent. 4,917 people voted which set a new record compared to the 609 voters the previous year. The historic record for an election was 6,021 people in 1954 during a municipal election.⁵⁰

Robbinsdale elementary school had a student population of 455 which did not include two sixth grade classes that were bussed to Wilson School. Sixty-four kindergarteners were enrolled, but at the beginning of the 1955 school year there were 112 attending, primarily due to accelerated residential construction in Robbinsdale since January of 1955 when an initial school survey was taken. Annie Tallent School also exceed their survey numbers for the 1955-1956 school year. New residential developments in southeast Rapid City included construction of 940 homes. Annie Tallent School, built in 1950 had a six-room addition in 1951 and the new Robbinsdale School was completed 1954. The bond included additions for the schools that had already grown from their original footprint. The new south junior high proposed as part of the bond was in a critical area of overcrowding and concern.⁵¹

⁴⁹ “Need for \$3,100,000 Bond Issue For Schools Stressed.” *Rapid City Journal* (Rapid City, South Dakota) 5 October 1955, 3.

⁵⁰ “School Bonds Win Heavily.” *Rapid City Journal* (Rapid City, South Dakota), 16 November 1955, 1.

⁵¹ “South Rapid Enrollment Recounted.” *Rapid City Journal* (Rapid City, South Dakota), 31 October 1955, 3.

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In 1956 the school board approved final plans for additions to General Beadle and Annie Tallent elementary schools funded by the 1955 bond issue. Ewing and Forette, the Rapid City architectural firm affiliated with Perkins and Will of Chicago were identified as the official designers for the entire building program. The scope, quality and construction in accordance with that plan defined the new building program.⁵²

A 1958 article identified schools as the city's biggest business with construction going on across town. Schools had the biggest payroll, largest capital outlay, purchase thousands of dollars of supplies, and consume the biggest share of Rapid City's tax dollar. At the time the oldest schools in the city were Main High School, Coolidge Junior High, Jefferson, Garfield, Washington, Roosevelt Wilson and Upper Rapid elementary schools. Since 1947 Beadle, Bergquist, Canyon Lake, Lincoln, Horace Mann, Robbinsdale, South Canyon, Annie Talent, and Meadowbrook elementary schools were added along with a new vocation school next to the high school.⁵³ The last school constructed during this era was the high school in 1969. Between 1969 and 1972, construction activity was limited to basic maintenance. In the early 1970s, a nationwide shift toward middle schools rather than junior high schools was underway. The Middle School Movement formed in the early years between 1963 and 1979. It was not until the 1980s when the movement established practices including team teaching, interdisciplinary curriculum, and advisors. Middle school was also often associated with grade levels sixth through ninth or fifth through eighth.⁵⁴

The buildings constructed as junior high schools in Rapid City are all now called middle schools, however it seems both names are widely and interchangeably used.

⁵² "Plans for Two Elementary School Additions Approved." Rapid City Journal (Rapid City, South Dakota), 19 January 1956, 3.

⁵³ "Schools Are Rapid City's Biggest Business." Rapid City Journal (Rapid City, South Dakota) 11 March 1958, 18

⁵⁴ Mary Beth Schaefer, Kathleen F. Malu & Bogum Yoon. "An Historical Overview of the Middle School Movement, 1963-2015." Research in Middle Level Education (RMLE) Online, www.tandfonline.com/journals/umle20

Field Investigations and Methodology for Individual School Buildings

HRG conducted field investigations for this study in March 2022. At that time fourteen schools identified in the table below were photographed. Schools marked with an asterisk below included SHPO survey forms.

School	Year	Photo
Canyon Lake Elementary 1500 Evergreen Drive	1949	
Lincoln Elementary 1325 Quincy Street	1951	
Annie Tallent Elementary (now South Park Elementary) 207 Flormann Street	1951	

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Horace Mann Elementary School 902 Anamosa Street*	1952	
South Canyon Elementary School 219 Nordbye Lane	1952	
Robbinsdale Elementary School 424 E. Indiana Street	1953	

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West Middle School 1003 Sioux San Drive*	1955	
Meadowbrook Elementary School 3125 W. Flormann	1957	
Pinedale Elementary School 4901 W. Chicago Street*	1958	

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North Middle School 1501 North Maple Street	1959	
South Middle School 2 Indiana Street*	1959	
Grandview Elementary School 3301 Grandview Drive*	1961	

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Knollwood Elementary School 1701 Downing Street*	1963	
Stevens High School 4215 Raider Road	1969	

Research was conducted on each building to begin to form a comparative analysis and context for NRHP recommendations of eligibility. Seven schools were selected for individual survey and to complete South Dakota State historic building survey forms for and digital submissions of forms on South Dakota's Cultural Resource Grid pursuant to the South Dakota Survey Manual. These seven schools were identified following site investigations to collate a pool of representative examples of early, mid, and late period construction along with representation among the elementary and junior high schools. These seven schools include:

- Canyon Lake Elementary, 1949
- Horace Mann Elementary, 1952
- West Middle School, 1955
- Pinedale Elementary, 1958
- South Middle School, 1959
- Grandview Elementary, 1961
- Knollwood Elementary, 1963

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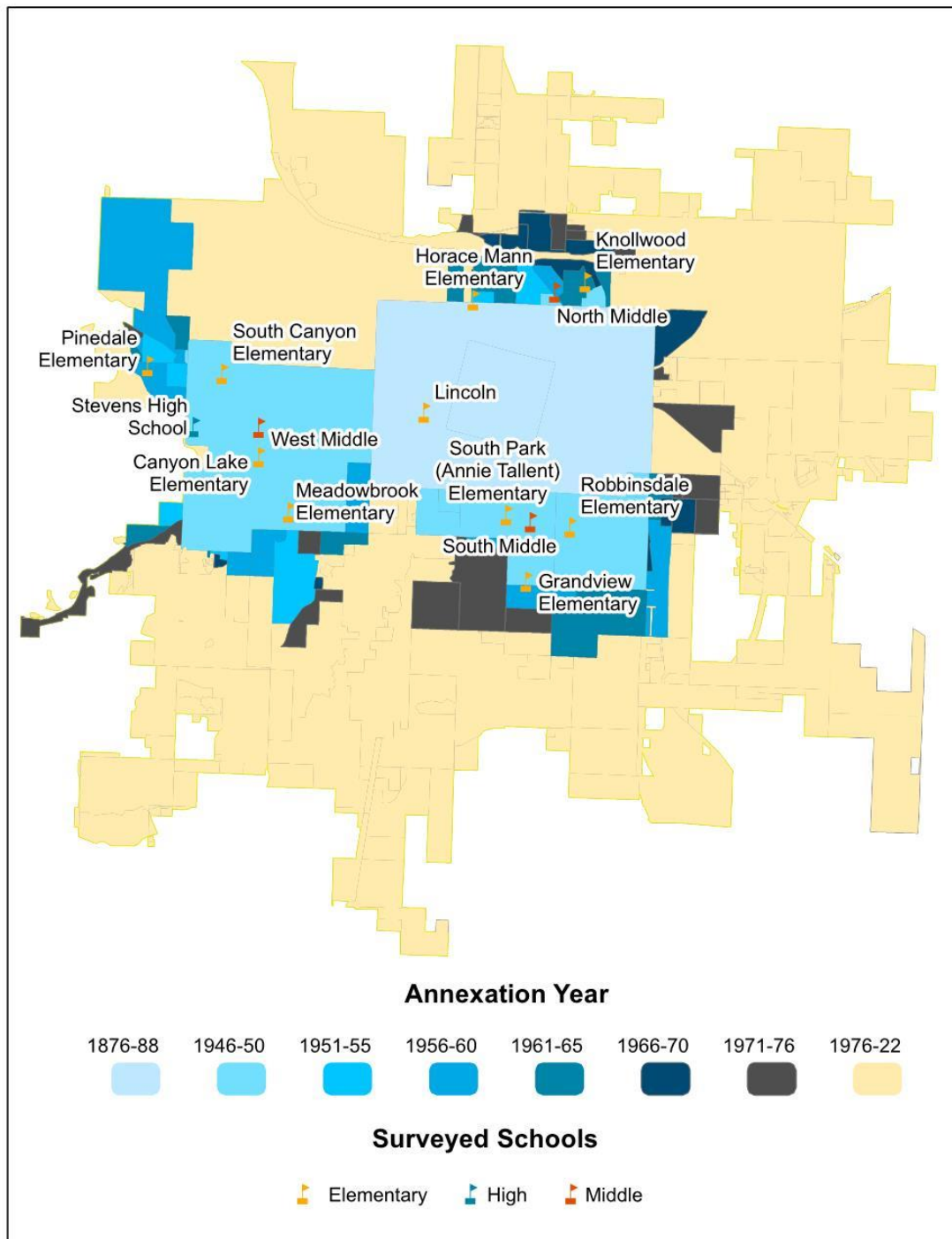


Figure 14. School locations within annexation map

Evaluation Methodology

Evaluation methodology for this study was built on an understanding of school design from the period and how that influenced local buildings. The evaluation process identified the significance of each resource within the established historic context. That along with physical integrity contributed to recommendations of NRHP eligibility. The period of significance of this study begins in 1949 and extends through 1972. To be considered under this context an educational building must fall within this temporal boundary. Significant properties must be evaluated within their historic context, patterns, and trends.

Post-war schools may be eligible for their historical associations as well as their architectural design. A building is only required to meet registration requirements for one of the NRHP criteria but can also be eligible under multiple criteria. Schools in this study will be eligible at the local level of significance. Evaluation criteria are established by the National Register Bulletin: *How to Apply the National Register Criteria for Evaluation*. Here the significance and integrity of sites, structures, districts, objects, and buildings are considered with recognition that properties may have historical value associated with an important event or person, design or artistic merit, or may offer important information to the historical record. The NRHP criteria were previously described and in order to be considered eligible as part of this context the following considerations have been identified:

Criterion A: Events

To be considered for listing under Criterion A, a property must be associated with one or more events important in the defined historic context. For this study, the context is the development of postwar schools in Rapid City. Each property must have an important association with the event, trend, or period and must retain historic integrity. All postwar schools in Rapid City share the common association in that they were built between 1949 and 1969 in response to the population swell. All schools eligible for the NRHP under this context will be significant under Criterion A. Their important association with the community's growth and changing design standards have inherent value. Schools eligible under this criterion will be significant in the areas of education and possibly community planning/development. Schools expressed the role of education in the community and designs reflected significant shift in educational philosophy. Concepts of

education emphasized flexibility, personalized development and a practical and informal, child-centered curriculum. Schools can be eligible in the area of education for their association with mid-century teaching trends. Eligible schools should explicitly illustrate ties to mid-twentieth century movements in school reform and curriculum. These schools will be significant at the local level.

Criterion B: People

Under Criterion B properties must be associated with individuals significant to the past who have documented connections to the resource. These properties must illustrate that importance and not be commemorative in nature. To be eligible under Criterion B, one must first determine the importance of the individual and then the nature of their association with the property. Examples may include the home of an important person, the studio of a significant artist, or a business headquarters of an important industrialist. The significant accomplishments of the individual must be directly linked to the property. E.B. Bergquist Elementary School was named after, the long serving school superintendent. However, this naming is commemorative in nature and Bergquist did not achieve his significance as a direct association with this building. Additionally, the building is no longer extant with new construction from 2008. This study does not anticipate Criterion B association for any of the schools included.

Criterion C: Design/Construction

This criterion applies to those properties with significant physical design, construction, or artistic merit. Areas may include engineering, architecture, landscape architecture, and objects (artwork, sculptures, gates, etc.). This area is multi-faceted and includes those properties that embody distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value. The way in which a property was designed, or its technical and aesthetic achievements of the architect or craftsman are supported here. Under Criterion C distinctive types are defined by those properties with a pattern of features common to an identified class of resources, the individuality or variation of features within that class, the evolution of that class, or the transition between classes within a resource. Typically, buildings that represent a certain architectural style like a Gothic Revival church, or an Art Deco commercial building fall

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within this category. Features to consider include form, proportion, structure, plan, style, and materials. Design intent can be generally related to a method of combining plans, forms, or precise ways of combining varying materials to create a whole.

As a type, period, or method of construction, properties must be related to a cultural context or tradition and follow a form or methodology within that context utilizing available materials and technology. Though there are many types of construction, a property must be demonstrated to be significant as well.

Schools in this context that may be eligible under Criterion C should retain distinctive characteristics of the modern style including the use of modern building materials like aluminum, concrete, glass, and other premanufactured elements. These elements should be considered important and distinctive characteristics of the building. Other buildings that may use more traditional methods or materials may illustrate or embody the distinctive characteristics of the time, but also need to be significant. Though most buildings were designed by local architects, they do not rise to the level of significance as the work of a master. Comparative properties clearly illustrate that the Ewing and Forette the local architects under Perkins and Will of Chicago have other properties within Rapid City that reflect high style design and are more associative with their creative abilities where the schools represent a practical application of design principals that responded quickly to an intense need within the city.

Schools should retain and be good representatives of mid-century design, illustrate innovative design, include use of new materials, construction methods, and technologies or represent the significant work of important architects. Features to consider include the plan, materials used, and design elements.

Additions and alterations can be permissible, however if the addition overwhelms the original scale of the building it can diminish the design intent and the form or type of building plan. Additions should not impact the historic massing and exterior form, roof forms, wall materials, and fenestration patterns. Other common design elements could/should include flexible interior spaces, indoor/outdoor spaces or courtyards, horizontal emphasis, use of masonry, and location in residential neighborhoods surrounded by large open lots or play areas.

Criterion D: Information Potential

Properties that have the potential to answer research questions about human history in whole or in part are eligible under Criterion D. The most common property types under this criterion are archeological properties. None of the resources included in this study have the potential to yield information under Criterion D.

There are seven considerations to the criteria described above. These include the following:

- Religious properties
- Moved properties
- Birthplaces or graves
- Cemeteries
- Reconstructed buildings
- Commemorative properties
- Properties less than 50 years old

No resources within this study are subject to any of the above Criteria Considerations.

The final evaluation consideration for NRHP eligibility is physical integrity. Aspects of integrity are identified as location, design, setting, materials, workmanship, feeling, and association. Integrity is the physical ability of a property to convey its significance. To be considered eligible, a property must retain physical integrity and be significant. Most or all aspects of physical integrity should be retained to be considered eligible. Deterioration is not a consideration when evaluating integrity. A property may be deteriorated but retain all its physical components and thus have physical integrity intact. Each of the seven integrity standards are discussed below.

Location

The relationship between the property and its location is key to understanding the significance of the property. If a property has moved it has often lost one of its key components. All the schools evaluated here retain their integrity of location.

Design

Design is defined as the combination of elements that create the form, plan, space, structure, and style of the property. Conscious decisions made during the planning stages include elements like spatial organization, proportion, scale, technology, ornamentation (or lack thereof), and materials. Design can include considerations of structural systems, massing, fenestration patterns, textures, colors and types of surface materials. For postwar schools in Rapid City a building should retain its general form and massing. This includes the long-low feeling of the façade. Vertical additions would not be in keeping with the design intent of these buildings. Additions should be set back and not integrally related to the main façade of the building. They should be appropriately scaled and not diminish from the primary design features, and not overwhelm the original plan. Windows were critical elements in school design and window replacement may be acceptable in terms of physical integrity if the general size, configuration, and patterning remains intact. Making windows larger or smaller may render the building not eligible, particularly if the new proportions alter the historic ratios. Original cladding materials must remain intact. Ornamentation on new additions should be in keeping with the original design intent. Mostly these schools read as long low buildings, even if they are multi-story. Since many were designed with corridors associated to a central common space like gymnasium, cafeteria, or auditorium, the presence of additions may impact the design intent. Features that are sought as part of this era like expanses of windows, use of alternate or new materials are important to the physical integrity. Buildings should retain their window openings. Size and configuration are key elements to the design and window openings that have been significantly reduced in size or reconfigured have an impact on physical integrity.

Design changes that diminish physical integrity include additions on main façade, that are significantly taller than the original building, that overwhelm the scale of the original building, and that use materials inconsistent with the original design. Window replacements that do not match the original window configuration, type, or that reduce the size of the opening are not favorable. Significant alterations to rooflines, entrances, and interior features that cover or mask original design are not desirable.

Setting

Setting is the physical environment of a historic property. Schools included in this study are located within residential neighborhoods and are associated with houses that are similar in design intent to the school. A mid-century school building in a neighborhood where houses have been torn down and replaced with commercial structures, multi-family units, industrial properties, or residences that are no longer compatible with the scale and period of the school may have lost its integrity of setting and feeling. Setting can also be defined as the physical or topographical features as well. Hills, vegetation, and relationships between buildings and open spaces should be considered. Schools should retain their relationship with the surroundings.

Materials

Materials are the combined physical elements of a property that compose its character defining features. Material selection reflects the design intent, available technologies, and time periods of the property. Key exterior materials from the period of significance must be retained. Schools in this study have additions, many of which were added soon after initial construction and materials may differ as buildings change over time. Like materials are important for additions or associated buildings.

Workmanship

Workmanship is the physical evidence of the labor and skill in constructing or altering a property. Workmanship can showcase methods lost to today's craft or no longer in use. This area is often seen in the differentiation between additions and original buildings.

Feeling

Feeling is the property's expression of a sense of a period of time or aesthetic. Physical features, when considered together, convey the historic character. Feeling can be experiential as well. A person should be able to look at a resource and experience the time within which it was built.

Association

Association is the direct link between significance and the property as the place where the important event happened, or the important person achieved significance. Along with feeling, association can be experiential and based on individual perceptions

All schools evaluated here retain their integrity of location and association. Other aspects of integrity may be compromised or diminished by changes to the buildings or neighborhoods over time

Schools in this study all have additions, many of which were added soon after initial construction. Design, materials, and workmanship can be impacted by these additions. Materials and workmanship may also differ as the buildings change over time.

National Register Evaluation

Postwar schools in Rapid City reflect the gamut of mid-century design ideals espoused by architects, planners, and education specialists of the time. HRG conducted reconnaissance level field inventory of the fourteen extant schools that fall within the time frame of 1949-1972. Two schools constructed during this period, the E.B. Bergquist Elementary named for long-time school superintendent was constructed in 1952 was demolished in 2006, and General Beadle Elementary was built in 1949, but partially demolished and rebuilt in 2007.

Comparative analysis of the remaining fourteen schools shows a clear delineation between the larger schools built as junior highs (now middle schools) and the smaller scale elementary schools, especially early in this building era. The elementary schools were meant to serve neighborhoods, were smaller in scale, and often appear to be a quick reaction to construct a serviceable building as a response to immense pressure on the system. Whereas the junior high schools were meant to accommodate a larger student body, were constructed later in the era, and appear to have incorporated design concepts that took hold in the mid-1950s.

Local designers Ewing and Forette in partnership with educational building consultants Perkins and Will of Chicago were the design team that implemented most of the buildings. A second local design team of Auckerman and Mazourek designed several of the later elementary schools and addition to the junior highs, also under the partnership with Perkins and Will of Chicago. Perkins and Will were widely recognized as leaders in school design. James Ewing and Adrian Forette's legacy on the built environment across South Dakota consists of the Cathedral of Our Lady of Perpetual Help in Rapid City and the Pierre Municipal Airport in Pierre. Auckerman and Mazourek designed Rapid City High School and were largely involved with buildings into the 1960s.

Of the fourteen buildings included in the field reconnaissance survey, seven were identified to complete South Dakota State Historic Preservation Office survey forms. Those seven include the following:

- Canyon Lake Elementary, 1949
- Horace Mann Elementary, 1952
- West Junior High, 1955
- Pinedale Elementary, 1958
- South Junior High, 1959
- Grandview Elementary, 1961
- Knollwood Elementary, 1963

These were chosen as representatives across the spectrum of construction dates and function. Canyon Lake was the first constructed during this era, so is a good marker of the period. South Middle School is currently slated for demolition and its evaluation can act as a preliminary recordation of the building and contribute to the context. Horace Mann, West Junior High along with Pinedale, Grandview, and Knollwood Elementaries illustrate the stylistic differences as the period progressed.

Utilizing contextual information established in this document and applying aspects of physical integrity and significance, this report recommends that Pinedale Elementary, Horace Mann Elementary, and West Junior High Schools are NRHP eligible. Grandview and Knollwood Elementaries illustrate a shift in style from the 1960s, and both have design features reflective of the time period. However, each of the buildings have non-historic additions that double the size of the footprint and diminish the physical integrity.

Pinedale Elementary, Horace Mann Elementary, and West Junior High retain a good deal of physical integrity and though they have additions, most of the physical expansion of the buildings occurred during the historic period. West has a new (non-historic) community center connected to the building by a corridor. The new building reads as a new and separate feature in the complex, and the historic compound remains the dominant feature of the site. Pinedale's layout and additions responded to the terrain and its series of stepped rooms with access to the exterior along with the

courtyard retains physical integrity as well as historic significance. Horace Mann has a U-shaped plan with two cluster additions that were completed during the historic period. These schools are recommended eligible at the local level under Criterion A for their contribution to the postwar growth and planning in Rapid City and Criterion C as examples of a type. Each surveyed property is described at the end of this report.

The Rapid City Historic Preservation Commission had a special request to consider adaptive reuse options for these schools if they no longer serve the community in an education capacity. These schools are important elements to walkable, livable, and sustainable communities. They contribute to viable and exciting neighborhoods. Every effort should be placed on retaining the schools for their intended purpose. Historic Schools are a valuable resource within the built environment to all communities. Every consideration should be given to their retention, continued use, and maintenance to preserve the embodied materials, energy and consider their importance to the community.

The discussion below represents an online survey of examples of reuse opportunities at other like buildings across the Midwest.

Future of Postwar Schools

School buildings have been creatively rehabilitated across the country for many years. Many buildings follow a generally standard plan which can provide developers an opportunity for interior programming that can be universally applied. For example, schools from the first quarter of the twentieth century with a raised entry, double loaded corridor, and rectangular classrooms have been successfully renovated into residential units. An apartment can be modeled inside a classroom and unique features such as chalk boards, coat hooks, and built-in shelves offer tenants an opportunity for living in a sustainable, creative, and efficient home. Other schools of this era have remained in the public realm and been converted for use as community centers, libraries, or offices. The challenge is to find a beneficial and efficient use that will convert the old building into a vital new resource for the community. Sometimes “mothballing” or closing and securing a building for

future consideration is appropriate. Pritzker-winning architect Anne Lacation stated, “Demolition is a waste of many things—a waste of energy, a waste of material, and a waste of history.”⁵⁵

Mid-century schools built following World War II pose a unique challenge for alternate uses. The buildings tend to be sprawling campuses with broad corridors that consume valuable, leasable square footage. Concepts for renovation can fall under the category of private investment/development, public development, or a public/private partnership. Financial incentives afforded by cities, states, and the federal government are important considerations in the viability of the reuse of buildings. Other considerations can include acquisition costs, property taxes, availability of materials, and cost. Public/private partnerships can be successful and lucrative in many ways by providing the public with necessary services for profit businesses under one roof.

Though speculative development can be very successful, it is also risky for many involved. Understanding the needs of the community is key when considering rehabilitation of historic buildings. A market study identifying gaps in services, needed retail, and business improvements should be a critical first step. This type of study should then be considered along with city planning documents where growth patterns, priorities, and infrastructure are incorporated into planning. Redevelopment plans to actively market to developers and new owners is also a valuable tool. Beyond architecture and design, the appeal of renovating a historic school building incorporates sustainable ideals. They are typically located in walkable or bikeable areas. They are often more affordable than new construction, especially when considered with demolition costs. They can be more effective for mixed-use adaptive reuse project because they already contain a wide arrange of amenities like kitchens, gyms, spacious hallways, and courtyards.

Examples of potential rehabilitation uses include:

Housing

Housing has been successfully implemented in a variety of school buildings across the country. Housing can be flexible based on the occupants. Schools, especially one-story postwar schools, can be ideal for senior housing. Classroom sizes can be individual residential units or subdivided into multiple units. Large windows with surrounding landscapes provide bright spaces that interact

⁵⁵ Andreea Cutieru. “The Refurbishment and Adaptive Reuse of Brutalist Architecture.” www.archdaily.com

with the outdoors. Broad corridors and former libraries, cafeterias, and gymnasiums can be incorporated into a housing/service plan with common spaces for socializing and gatherings. Other options can be market rate housing, condominiums, low-to-moderate income housing, or student housing. In Kansas City the Faxon School Apartments provided 46-unit affordable housing for residents age 55+ and the building includes studios, one-bedroom, and two-bedroom apartments. The auditorium was converted for neighborhood meetings and common areas and a fitness center are both community-wide popular features of the rehab. The Phenix Elementary School in West Des Moines was renovated into 17 one-, two-, and three-bedroom apartments with many units rented to community artists. Though open and available to anyone, artists are given preference. The residents live and work in the school and utilize shared studio space.

In Grinnell, Iowa a former Junior High School was converted into Hotel Grinnell, a 45-room boutique hotel that includes a 300-seat ballroom, a 450-seat auditorium, a lobby bar, and an outdoor patio. Classrooms were converted into hotel rooms, lockers were re-purposed into benches and other decorative features, and the old gymnasium is now the ballroom that hosts weddings and other large events.

Community Services/Non-Profits

Public uses can vary greatly and be based on community needs. In Washington, D.C. the Merritt Middle school built in 1976 was converted to the Metropolitan Police Department's headquarters for the 6th District and Youth Investigation Division. The completed project for the headquarters includes a gymnasium, community room, parking, and offices. In Eagle Bend, Minnesota a need to expand senior meals program was identified, so a wing of a former school was converted into a commercial kitchen with future plans to rehabilitate the rest of the school for housing and performing arts. A school in Grand Rapids, Minnesota had more common area than leasable space and was not a good option for housing, so the building was converted to the Visitors and Convention bureau with some commercial tenants.

Maintaining a school function and converting to private schools or charter schools is an easy transition also. Additionally, focus schools like a performing arts school, STEM school, alternative schooling, or district headquarters should be considered.

Mixed-Use

Community Centers that include resources like computer labs, cafes, conference rooms, gymnasiums, fitness centers, dance studios, and other non-profit partners or offices are a good adaptive re-use. In Detroit, the former St. Vincent Catholic School built in the 1960s was redeveloped into a three-story office building for small businesses and start-ups. In Kansas City, the former Graceland Middle School was redeveloped into the Mary Kelly Community Center with technology labs, conference rooms, fitness areas, classroom spaces, and non-profit offices.

Mixed-use medical clinics or even urgent care clinics can be a good fit for this type of building.

Commercial

Office buildings with private offices or office share spaces can contribute to community development. Industrial or manufacturing can also be positive uses. In Haddam, Kansas there is a honey packaging plant in the cafeteria in the old elementary school. In Cuba, Kansas the gymnasium in the old high school is home to a flatbed and grain trailer manufacturing center. In Lansing, Michigan the former Eastern High School will provide offices and conference space for a major hospital system. In Portland, Oregon the Kennedy Elementary School was converted into a mixed-use facility that included hotel rooms, restaurants, a movie theater, bars, gardens, restaurants, and display areas. Other mixed-use ideas to utilize the large open public spaces can include storage in spaces like the gymnasiums, cafeterias, and libraries.

Conclusions and Recommendations

Post-World War II schools in Rapid City survey is based upon a windshield survey of fourteen properties, primary research, and secondary source materials. The study builds on relevant and thorough information collected by the Rapid City Historic Preservation Commission as part of their historic context development. The goal of this effort was to document the post-war schools, recommend NRHP eligibility, support their continued use, and illustrate the importance of their development to serve residential neighborhoods. Their locations as part of vital and walkable neighborhoods represents a pride of place to the community, and they should be considered important features within the built environment.

A study period beginning in 1949, the date of construction of the first school constructed after World War II, extended through 1972 a pivotal year in Rapid City history. That year, the

community was devastated by a major flood event. Historic Resources Group, Inc. surveyed seven schools using the South Dakota State Historic Preservation Office's survey form and that effort identified three schools that are recommended eligible for the NRHP. These three schools include Pinedale Elementary, Horace Mann Elementary, and West Middle School. These three schools represent buildings that have undergone minimal change since the historic period, retain physical integrity, and tell the story of the movement of education philosophies and building design from the era. South Middle School was included in the survey and would most likely be considered an eligible property, but the building is slated for demolition upon completion of a new building which was underway at the time of this writing. The other schools surveyed include Knollwood Elementary, Grandview Elementary, and Canyon Lake Elementary. Canyon Lake Elementary was the first school constructed following the war. Knollwood and Grandview Elementaries reflect designs from the 1960s but have diminished physical integrity because of additions that double their size and mask the original design intent of the buildings.

Schools surveyed represent embodied energy and valuable materials that should be considered in their future use. NHRP eligibility is a method to categorize and document a property but is applied through an established set of standards and should be considered an element of importance. It is not the penultimate arbiter of the importance of a property to a community. Buildings in this study contribute to vital neighborhoods. The study also recognizes that educational standards, budget concerns, and technology challenges as well as shifting population concentrations, often pose insurmountable obstacles in maintaining these buildings. Historical information provided within this report can contribute to the decision-making process and understanding the historical and cultural context within which these resources were established.

Other Rapid City surveys including the East of 5th Architectural Survey document many other mid-twentieth-century buildings across the community. This study recognizes the contributions of not only neighborhood development and new housing types that influenced the location of schools, but commercial and civic development that supported the growing community. Given the number of valuable mid-century resources, consideration should be given to the completion of a Post World War II Architecture in Rapid City Multiple Property Document. School contexts are well developed by other existing documents including Vantage Point's essay on, "The Modern School:

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Postwar School Architecture in Rapid City.” Commercial and residential development from this same era has been identified in previous surveys and many excellent examples remain across the community.

Rapid City grew quickly during this era and housing and schools are not the only imprint in the cultural environment. Many commercial buildings, signs, tourist attractions, and institutions remain that tell a comprehensive story of how this era was expressed in the built environment. Comprehensively, these resources weave a rich and fascinating tale that interpret Rapid City’s history in a physical and tangible way. Future study is recommended to develop this type of document with school buildings as an important component.

Individual Eligible Building Descriptions

All photos in the following sections were taken by the author in March and June 2022.

West Junior High School, 1955
1003 Sioux San Drive
Eligible

West Middle School is a two-story brick building with flat roof. The main bay of the building was built in 1955 with two main entrances at the north and south ends of the east facing main façade. Notable in this building is the heavy horizontal repetition of extensive window banding and roof accents. The original building was designed by school architects Ewing and Forette. Like many others in Rapid City this school was quickly overcrowded and required attention. A new addition was developed in 1963 and connected to the older building by a glass enclosed corridor with a large rectangular stone element at the north end of the corridor. The corridor attached to the old building at the south entrance on the main façade and connected to the new building. The main massing of the new addition was freestanding from the original building and connected only by the corridor.

Large groupings of mostly tripartite fenestration units extend across all elevations of the building. The windows have been replaced with new units and partly infilled with black and grey panels. The new addition added 39,000 square feet to the existing building and was designed by local architects Auckerman and Mazourek. This almost doubled the size of the building, and incorporated science classrooms, regular classrooms, arts, craft, homemaking with a kitchen, living room, sewing room, and fitting rooms, and restrooms. Of note was the mixed-use space called a cafetorium which combined the cafeteria and auditorium in one space. The addition was completed in 1963.⁵⁶

Another addition was added in 2003 when the Rapid City Community Center West was completed. The community center is connected to the school, but via one small corridor at the south end of the addition. The two-story building has a much smaller footprint but does have taller massing. However, given the strong physical elements of the original core and the addition, this new bay does not adversely impact the character defining features of the building.

⁵⁶ "School Board Accepts Junior High Addition." Rapid City Journal (Rapid City, South Dakota), 17 December 1963, 4.

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Historic Context and Recommendation of National Register Eligibility

This building is recommended National Register eligible. Its' design, execution, ornamentation, massing, and innovative uses represent significant design under Criterion C and the postwar school historic context under Criterion A. The addition dates to within the historic period and therefore is significant. The new community center is outside the period of significance but is attached in a way that does not detract from the original design intent.

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West Junior High School main façade looking northwest



West Junior High main elevation looking south.

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West Junior High main façade looking southwest



East façade cafetorium addition looking southwest

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East façade looking west at connection between school and community center.



Interior corridor looking south

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Cafetorium looking southwest



Cafetorium looking northeast at stage area

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Class murals



West Junior High location. Map: RapidMap

Pinedale Elementary School, 1958
4901 West Chicago
Eligible

Pinedale was among the \$3.1 million building program established in Rapid City in 1955 and designed by architects Ewing and Forette. It opened in 1958. It originally contained 13 classrooms for kindergarten through sixth grade. As the area grew, so did the school. An additional six rooms were added in 1962 with provisions for future expansion to include another six rooms. It is in western Rapid City and the open courtyard was a valuable teaching tool for the school. Children planted vegetable gardens of pumpkins, corn, and tomatoes along with flowers.

Pinedale had 13 classrooms, approximately 24,000 square feet and accommodated 420 pupils upon its completion. It had wood sash windows with hopper-type ventilators, acoustical plaster ceilings, asphalt tile over concrete floors, tar and gravel roofs, forced air heating, and fluorescent lighting. In 1962 an additional 11,000 square foot addition housed six classrooms plus one kindergarten, restrooms, storage, corridors, and an enclosed play area which played a critical role in the educational program. Another construction project in 1966 enclosed six classrooms.

Stylistically, Pinedale is an excellent example of the postwar school from the 1950s that incorporated experientially learning with the indoor/outdoor spaces, lower scale and massing to read more residential and the use of windows and applied ornament to define spaces. The building reads as one story, but terrain carries the building over many levels. It has a shallow cross gable roof, with the gable end over a projecting bay housing the main entrance at the east end of the north facing façade. Wide overhanging eaves contribute to the horizontal feel of the building.

The entry bay has a corner floor to ceiling asymmetrical window with the school mascot as an infill panel. The main entry is recessed under the projecting gable eave and accessed by a walk with broad rectangular brick columns defining the outside edge of the roofline. Within this sheltered walk is a geometric panel of yellow, white, red, orange, and turquoise tiles. The yellow theme is carried throughout the building with yellow doors and infill panels.

Fenestration extends across the main bay with one large central panel subdivided by individual units. Windows have been replaced and infilled with a top panel, but the unit configuration and repetitive nature along with a reference to the hopper top operation of the original windows maintains the feeling of the original design. Brick coursing is a combination of soldier courses near the main entrance and standard running bond elsewhere. The general design of individual bay with a shallow gabled roof has been repeated to address the challenging topography. Each level contains two classrooms and an outside door for easy access to the playground. The grounds are expansive with a central garden that today contributes to learning.

Pinedale's interior retains a high degree of historic integrity. Upon entering through the yellow paneled doors, the office area is immediately to the left and is a wood frame and glassed-in space. The combination gymnasium/auditorium/cafeteria has exposed angled or boomerang shaped beams. The courtyard is a shaded landscaped and paved area with tables and plantings that is well-maintained and used by students today.

An interesting technological note in Pinedale's history is that it was the first school in South Dakota to have a page on the internet. A 1996 news article describes students visiting the world via the Internet. The article likened a home page to a table of contents in a book and introduced new words all in quotes such as "home page," "under construction," "links," "information super highway," and "chat". The article talks about the information being often times unfathomable and mind-boggling. Students suggested content for the page including, "a picture of our grossest school lunch, chicken chow mein and burritos." This also marks the beginnings of the technology pressures felt by many schools today to accommodate internet use.⁵⁷

Pinedale Elementary is recommended eligible under Criterion A for its contribution to post-World War II education system and development in Rapid City. It illustrates the benefit of educational buildings in the growing neighborhoods to maintain service to the community. It is also eligible under Criterion C as an example of a type with its central, protected garden, response to the terrain, and design features that illustrate an effort to incorporate new ideals into the built environment and the educational environment.

⁵⁷ "Pinedale students visit world via Internet." Rapid City Journal (Rapid City, SD) 11 June 1996, 11.

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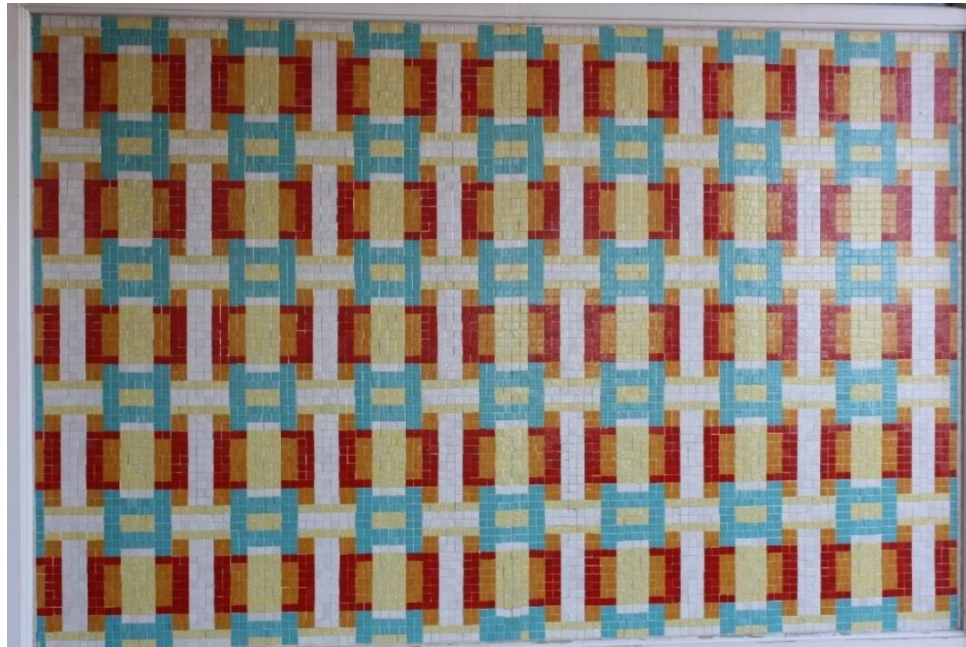


Pinedale Elementary School main entry bay looking south



Pinedale Elementary School main door and classroom wing looking southeast

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Detail of entry tile panel, looking west



Pinedale classrooms and additions looking southeast

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Office area looking southwest toward main entry doors.



Gymnasium and cafeteria

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Courtyard



Corridor adjacent to courtyard

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Pinedale Elementary location. Map: RapidMap

South Junior High School, 1959
2 Indiana Street
Potentially Eligible-Slated for Demolition

South Junior High opened in 1959 and all 7th, 8th, and 9th grades were removed from Central High School to the new building. The Rapid City Journal identified the building as elaborate and the most expensive individual building to date at a cost of \$1.2 million, fully one-third of the entire \$3.1 million building program. The design was a rambling glass and brick plan with a three-level tier of classrooms at the back of the long, low rectangular structure. The building was designed with 17 classrooms and was meant to accommodate 850 students with 1000 students maximum. Amphitheaters were proposed at the two new Junior Highs (North and South), but were very expensive, so plans only included grading for possible future fit-out. Streamlined costs quickly eliminated these features.

Predominant design features were large, attractive glass fronts in brick walls. The front section of the south side rectangle plans contains general offices and the home making department. An auditorium is at one end with an entrance arranged so the remainder of the building could be sealed off. Shop rooms and the boiler rooms were at the opposite end of the footprint with classrooms and library in the back tier over three levels.

When the permit was let for construction of the building it was the largest building permit in the history of Rapid City. The estimated valuation was \$909,870, the next closest permit was for the Alex Johnson Hotel in 1928 in the amount of \$850,000. The general contractor for the school was the M.A. Garland Construction Company, Howard Jacobs Plumbing and Heating for mechanical and Interstate Electric Company held the electrical contract.⁵⁸

Construction of the South and North Junior High Schools sparked dialog within the community. Public meetings regarding school expenditures, energy efficiency with the extensive use of windows and ancillary structures like amphitheaters created the sense of a design by committee with public input gathered. The new designs were both lauded and criticized as impractical. When the school opened, however, it was praised for its bright naturally lit corridors with large window walls, courtyards, spatial planning, and unique spaces like the cafetorium.

Applied stone cladding on the main façade with yellow paneled doors and wall panels along with green cornices expresses design ideals of the era more than most other buildings in the community. Though the building retains a high degree of historic integrity and is significant for its design as well as the movement of school planning in Rapid City, a new building is planned for this site and it is slated for removal. It is included in this survey for documentation purposes and comparative analysis, but plans at this site are already determined.

⁵⁸ "Permit Largest in City History." Rapid City Journal (Rapid City, South Dakota) 21 October 1957, 3.

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South Junior High School looking north



South Junior High School looking northwest at north bay

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Main façade looking east



Detail of main entry doors

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Gymnasium

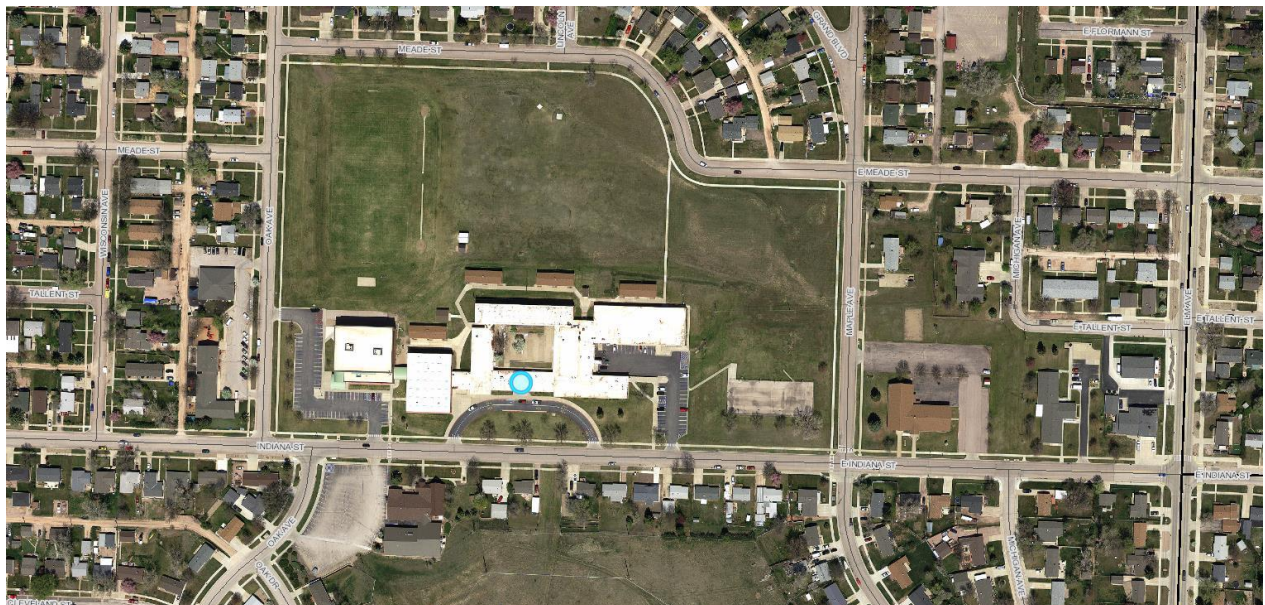


Cafeteria

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Entry lobby near office



South Junior High location. Map: RapidMap

Horace Mann Elementary, 1953
902 Anamosa Street
Eligible

Horace Mann Elementary School is in north central Rapid City near the Interstate 190 and 90 interchange. It was built in 1953 under the direction of school architects Ewing and Forette, with a 1963 addition by Auckerman and Mazourek.

Horace Mann Elementary is a one-story masonry building constructed on a u-shaped plan. A central projecting bay has double door entrance sheltered by simple wing walls and a flat roof overhang. The main office area entrance is in the west end of the south façade and is sheltered by a simple flat roofed overhang supported by two metal posts. The “Horace Mann” sign is above a tripartite window open with aluminum overhang. A band of clerestory windows at the center bay illuminate the interior and break up the main façade with a stepped central bay. These windows illuminated the large gymnasium space. The east and west legs of the ‘U’ that project from the main bay have large bands of windows sheltered by a flat overhanging roof projection.

Two cluster additions were completed in 1963 and added four classrooms each. These cross-shaped clusters were added at the north end of each leg of the u-shaped plan. These match the brick masonry and general fenestration pattern of the original building but are differentiated by a vertical cornice band rather than the flat overhanging roofline. Unlike schools built just a few years later, Horace Mann does not have a courtyard or garden type experience space. Like Canyon Lake the school plan has play area behind the building.

The interior of Horace Mann retains a high degree of historic integrity. Linoleum tile floors have spots of multiple colors and blonde colored glazed brick walls extend from floor to ceiling. Blonde wood doors with transoms lead into classrooms. The monochromatic scheme provides uniformity to the corridors. The east and west legs of the U-plan have built in display cabinets framed in blonde wood to match the glazed brick walls.

It was built with one multi-use gymnasium, cafeteria, and auditorium that still serves the students today. The glazed brick walls extend into the space at corridor height with concrete masonry unit walls to the full ceiling height. Here the clerestory band of windows are present at the exterior. The glazed brick surrounds the stage area giving definition to that space. The transition between the original building and the 1963 additions is clear on the interior. The glazed brick walls shift to standard brick walls and the floor materials change to carpet.

School surveys and discussions identified the school location and its name immediately following construction of Canyon Lake Elementary in 1949. It was estimated that elementary population would increase from 2,106 students to 2,330 that year and new schools were needed to relieve

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Historic Context and Recommendation of National Register Eligibility

pressure on the existing and accommodate growth. with the other earliest post-war schools. At the time of its construction, it was just outside of the city limits. It was named for Horace Mann who was the first U.S. Education Commissioner and is considered the father of the American public school system.⁵⁹ Bergquist Elementary was built at the same time and named for E.B. Bergquist, longtime school superintendent. The two schools were built on the same plans. As the city continued to grow, so did pressure on the schools and an addition was completed at Horace Mann in 1963. The addition consisted of two four-room classroom clusters that were added to the north elevations at each end of the u-shaped footprint. This design was under the direction of Auckerman and Mazourek. The school was on shortened days along with Pinedale and Robbinsdale Elementaries to accommodate for the overcrowding. Otto Johnson, Horace Mann principal in 1963 stated that 70 new students were enrolled within a six-week period because of an influx of Boeing Co. employees.⁶⁰

Horace Mann is recommended eligible under Criterion A for its contribution to post-World War II education system in Rapid City. It illustrates the benefit of educational buildings in the growing neighborhoods to maintain service to the community. It also retains a high degree of historic integrity with few alterations over the years. Its combination gymnasium, cafeteria, auditorium is in use today and requires a significant amount of maintenance to set -up and break-down every day.

⁵⁹ "Grade School Named for Superintendent." Rapid City Journal (Rapid City, SD), 24 June 1952, 3.

⁶⁰ "Four New Classrooms Open at Horace Mann." Rapid City Journal (Rapid City, SD) 30 Jan 1963, 3.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Main façade looking north



Office/main entrance at west end of south façade looking northeast.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



South and east elevations looking northwest



Northwest cluster addition looking southeast.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



West corridor looking north from main office

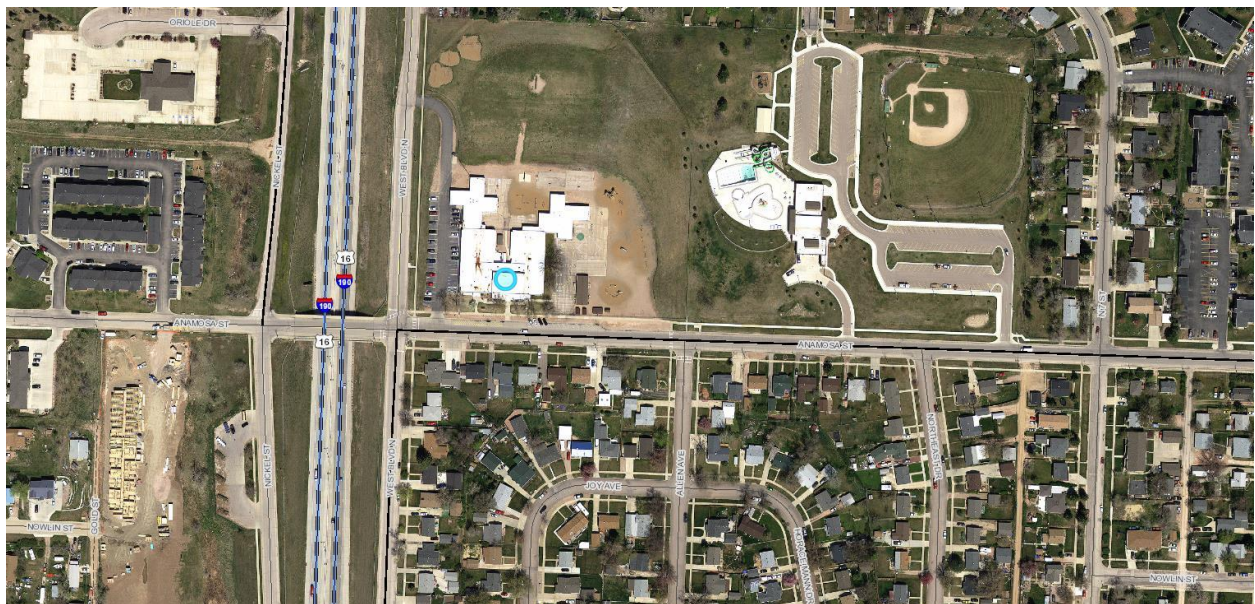


Stage area within the gymnasium

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Transition between original building and 1963 addition.



Horace Mann Location. Map: RapidMap

Individual Not Eligible Building Descriptions

Canyon Lake Elementary School
1500 Evergreen Drive
Not Eligible

Canyon Lake is a one-story brick building with an asymmetrical entry mass on the south side of the main facing west façade. The main elevation is punctuated with large expanses of grouped windows. Each window grouping is surrounded by a soldier course of brick in a contrasting brown color to the façade's reddish brick. The window openings have been reduced in size with cream colored panels and small aluminum windows. A raised concrete foundation has carved horizontal bands. The main entry has an enclosure addition in an alternate shape brick (Roman brick) which are typically longer and flatter than traditional brick, with three openings. Two former doors have been infilled for windows and one remains an open entry way. A large addition behind the building houses gymnasium and additional classrooms and was added in the 1950s. Several sheds and temporary classroom buildings are on the site.

The setting has an open front yard with Y-shaped sidewalk to the entry. The grassy area has a flagpole and bench with simple shrubs near the foundation.

Its location was up for discussion with debate whether it should be located east or west of the gap. The school board committed to abandon the Lincoln building after this was constructed in 1949. Lincoln was built in 1908 and was surrounded by valuable commercial land with a decrease of nearby residential buildings to populate the school. Canyon Lake Elementary School was built in 1949 and was the first postwar school constructed in Rapid City. Pressure was intense to get the school open to relieve the overcrowded system. Emergency measures were taken to make sure the new school opened for the fall term in 1949. Rapid City contractor M.A. Garland won the general contract work to complete two seven room elementary schools that each housed 250 students following the design of local architects Ewing and Forrette. Systems were critical issues here and the sewer was connected to what was the Sioux Sanitarium line to get the building open on time.⁶¹ Despite this Canyon Lake students lost two weeks of school because of the delayed opening of the

⁶¹ "School at Canyon Lake to Be Ready for Fall Opening." Rapid City Journal (Rapid City, South Dakota) 9 August 1949, 4.

new building and teachers and students were required to attend Saturday morning classes for six weeks in order to catch up.⁶²

Canyon Lake Elementary School is not recommended eligible. It represents the initial response to overflowing school system in the city, but physical alterations including the window infill across all elevations diminish its physical integrity. As a small scale building this infill has a great impact. The simple box design is functional and utilitarian but does not represent significant architectural innovations.

⁶² Saturday Classes Planned to Catch Up at Canyon Lake.” Rapid City Journal (Rapid City, South Dakota) 8 September 1949, 11.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Canyon Lake Elementary main façade looking east



Canyon Lake Elementary main entry detail looking east.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Entry detail looking northeast



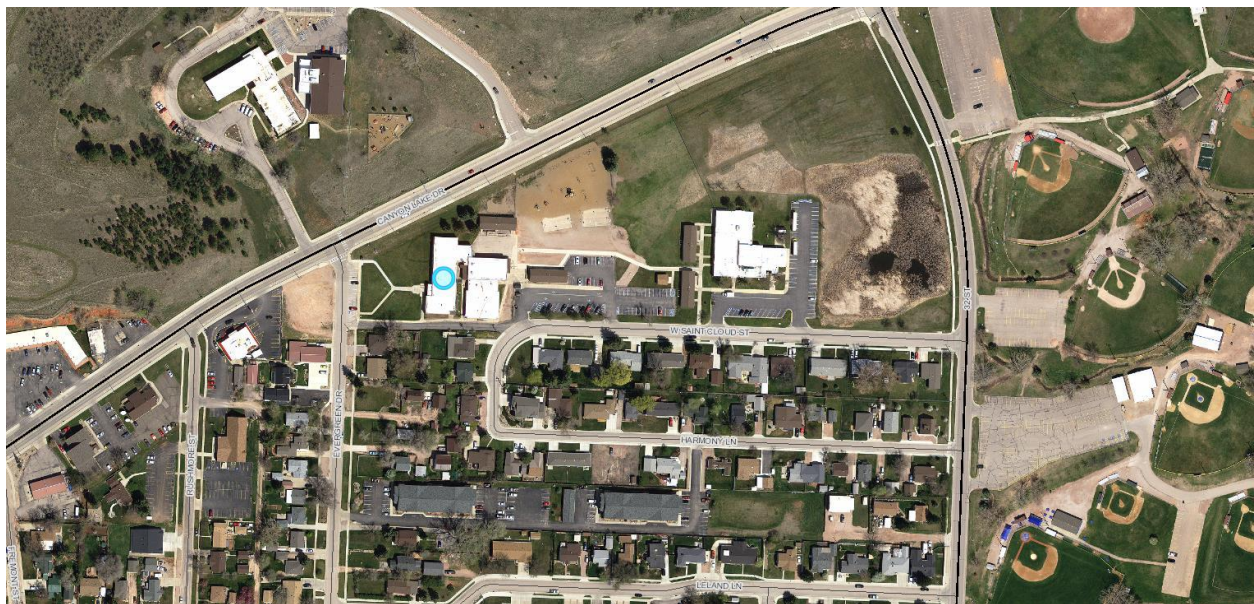
Gymnasium, auditorium, cafeteria space

Rapid City Post War Schools

Historic Context and Recommendation of National Register Eligibility



Corridor with glazed block walls and tile floors



Canyon Lake Elementary Location. Map: RapidMap

Grandview Elementary, 1961
3301 Grandview Drive
Not Eligible

Grandview Elementary is a definite departure of school architecture in Rapid City from the 1950s. The building still retains a low horizontal plan, but visual interest in stepped cornices, fenestration configuration, and projecting features provides a sense of new design ideals. The main entry bay has a shallow triangular pedimented brick wall with a stepped windows in the center. Above the paired stepped windows is an attached projecting gable window hood. The geometric window pattern is found throughout the main bay. Visual interest across the façade comes through a variety of brick coursing that adds a sense of texture to each elevation. A combination of soldier coursing, herringbone patterns, and standard running bonds are a creative solution to a relatively flat wall surface.

One story wings with flat roofs and expansive fenestration extend from the main bay. Today one ancillary classroom building is located west of the main building by the basketball courts.

In 1963 the instruction center at Grandview Elementary School addition, design by Perkins and Will of Chicago in association with Aukerman and Maourek of Rapid City was the subject of an article in the American School Board Journal. The room was designed for lectures, demonstrations, films, discussion groups, recordings, educational television and live music and drama. The combination space had a stage area located between the instruction center and multipurpose room and with sound-controlled doors it could be used by people in either space. The 1600 square foot space was the equivalent to two classrooms and with flexible seating arrangements it could accommodate from 120 to 200 students. Furniture concepts included black and white television, draperies, tables and chairs with supplemental folding chairs to provide flexibility through using movable furniture. Its multi-purpose use also included a library center, training meetings and small community gatherings.⁶³ In 1992 a \$1.45 million nine classroom addition with gym, library, classrooms, and learning center was added to Grandview Elementary. The project was awarded to Glen Barber and Associates The addition nearly doubled the size of the school.⁶⁴

The continued maintenance and updated building plans to keep these schools viable contributing resources within the education system, have impacts their physical integrity within the National Register context. With these schools is in the continued maintenance and updated building plans to keep them viable contributing resources within the education system. Non-historic additions that nearly double the size of the buildings diminish its physical integrity. The additions largely blend with the original design, but the increased footprint is a significant step away from the

⁶³ "Grandview School Layout Written Up In Magazine." Rapid City Journal (Rapid City, South Dakota), 6 February 1963, 3.

⁶⁴ "School district to spend \$10.2 million on building." Rapid City Journal (Rapid City, South Dakota) 29 May 1991, 23.

Rapid City Post War Schools

Historic Context and Recommendation of National Register Eligibility

original design intent of the building. Grandview Elementary is not recommended National Register eligible. Its architectural design, planned flexible interior spaces, and use of brick illustrate period influences from the shift from 1950s design into the 1960s. However, the sizable additions have doubled the size of the building and diminished the physical integrity from the original design intent.



Grandview Elementary School main façade entry bay looking southwest



Grandview Elementary School main façade entry bay looking northwest

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Combination gymnasium, auditorium, cafeteria.



Looking into new front addition toward library.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility

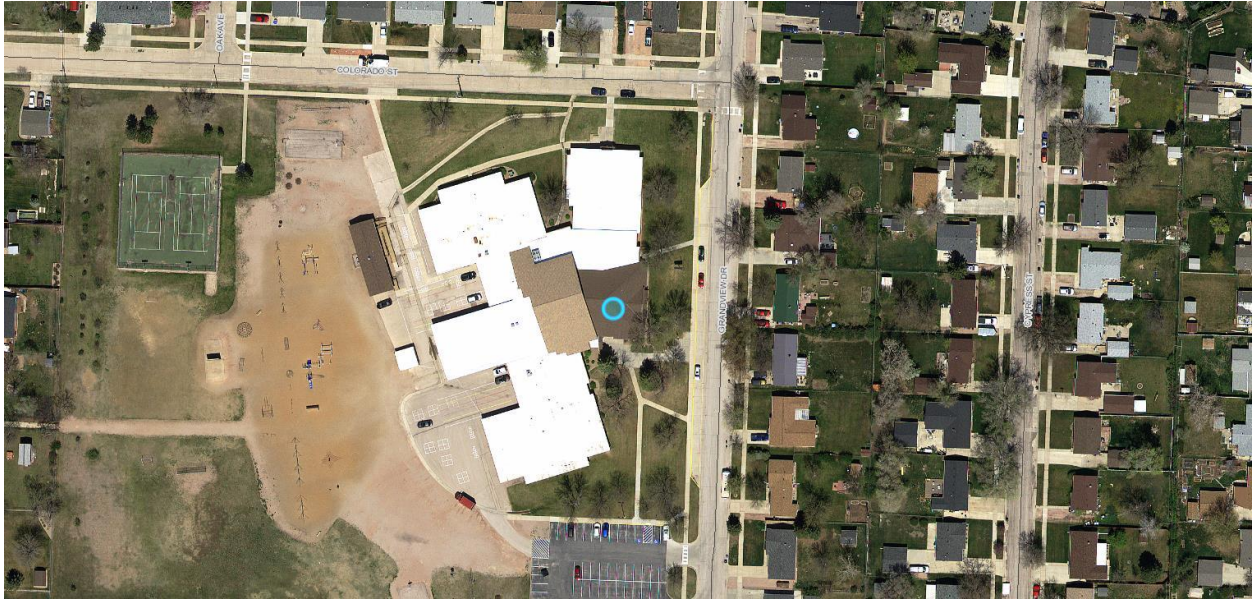


New gymnasium



New corridors

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Grandview Elementary location

Knollwood Elementary, 1963
1701 Downing Street
Not Eligible

Knollwood Elementary is a rambling one-story brick building with a projecting shallow gable entry bay at the center of the footprint. Classrooms are in wings with flat roof and wide rectangular cornice with expansive windows that emphasize the horizontal feeling. Spatially, the central bay is connected by broad corridor to wings on either side forming a roughly dumbbell shaped footprint. Similar to Grandview, the brick cladding provides visual interest in the façade by utilizing varying coursing methods. Knollwood was planned with 13 classrooms with dimensions measuring 115 x 316 feet. It was built of fire-resistant masonry construction with brick facing. The school opened in 1963 with 270 students. It was built for \$371,000 and had 25,308 square feet of floor space. It was part of a \$1.5 million expansion program that also included additions at Pinedale and Robbinsdale elementaries.

An addition was constructed in 1988 that doubled the size of the school. The addition houses 14 classrooms with four sections of each grade level.

The continued maintenance and updated building plans to keep these schools viable contributing resources within the education system, have impacts their physical integrity within the National Register context. Non-historic additions that nearly double the size of the buildings pose physical integrity challenges. The additions largely blend with the original design, but the increased footprint is a significant step away from the original design intent of the building. Grandview Elementary is not recommended National Register eligible. Its architectural design, planned flexible interior spaces, and use of brick illustrate period influences from the shift from 1950s design into the 1960s. However, the sizable additions have doubled the size of the building and diminished the physical integrity from the original design intent.

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Knollwood Elementary School main entry bay looking southwest



Knollwood Elementary School looking northwest

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Knollwood Elementary looking southwest at window wall corridor



Corridor and paired doors into gymnasium

Rapid City Post War Schools

Historic Context and Recommendation of National Register Eligibility

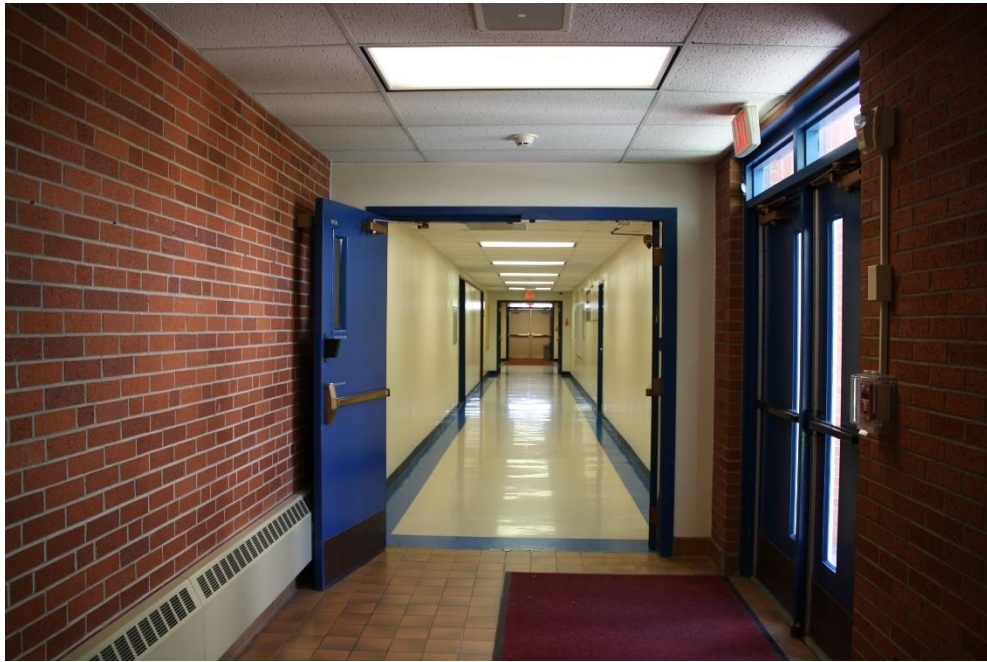


Combination gymnasiums, auditorium, cafeteria



Interior corridor with window wall

Rapid City Post War Schools
Historic Context and Recommendation of National Register Eligibility



Transition to new construction.



Knollwood Elementary location. Map: RapidMap

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