

GREAT FALLS HIGH SCHOOL / ADDITION AND RENOVATION

DESIGN NARRATIVE ARCHITECTURAL DESIGN NARRATIVE

Known as "The Electric City", Great Falls, MT was noteworthy early-on for its hydroelectric power, copper processing and, later, oil fields. Founded in 1883 and incorporated in 1888, Great Falls had a post office, lumber yard and mill, bank, school, and newspaper as well as a station along the Great Northern Railway. By 1890, Great Falls' symmetrical, Cartesian grid masterplan included over 880 acres of parkland, shaded streets and boulevards with electricity and telephones. Great Falls continued to enjoy growth and industrious developments for decades.

By 1930, Great Falls had grown to nearly 29,000 inhabitants and Great Falls High School opened their doors that fall. The Late Collegiate Revival style building was designed by Bird & Van Teylingen, a local firm, and Croft & Boerner Architects of Minneapolis. The largely symmetrical Main building was listed on the National Register of Historic Places in 2013 and features an iconic bell tower, ornate brick work and an ornate 900 seat auditorium. Thankfully, much of the historic elements remain well maintained throughout including original plaster ceilings and walls, oak trim and cabinetry, terrazzo and hardwood floors as well as the original light fixtures in the corridors and Auditorium.

A 1954 addition, designed by McIver, Hess & Haugejaa Architects, added a second floor to the southeast corner of the school to accommodate the choir, orchestra and band program. In 1963, McIver & Hess designed another addition off the east exterior elevation forming a "T" of classrooms on the first and third floors and a Library on the second floor. This addition also created a new east Main Entrance to the school which reinforces an east-west axial relationship opposite the Bell Tower entrance. Both of these additions fall within the period of significance and are, therefore, listed on the National Register of Historic Places.

Later additions and modifications include a 1986 window replacement throughout the Main building. The original double-hung windows were replaced with Kalwall Insulated panels and single aluminum windows. The hope is to restore the original character and install new insulated double-hung windows. In 1975 the Industrial Arts building was added southwest of the Main building. In 1979, the South Campus Field House was built which houses a Gym, pool and fitness facilities. A 1997 addition to the west of the S. Campus added classrooms, and in 1998 the Westing Addition was added to the north end of the Main Building.

In 2017, Great Falls Public Schools and the design team of NE45 and Bassetti Architects engaged in planning discussions; identifying cost effective ways to improve the indoor air quality of the Main building and programming requirements for an addition to the south. Early meetings between the Owner and design team identified several guiding principles that would help inform design decisions. Guiding principles are the lens with which the success of the project is measured. The Great Falls High School guiding principles include:

- Healthy, Safe and Secure Environment
- Personalized
- Learner Centered
- Community Pride
- Technology
- Stewardship

DESIGN APPROACH: Great Falls High School – Narrative Outlining the Proposed Addition

The following overview addresses the proposed addition to Great Falls High School and how it relates to the landmark school and site. Areas of significance within the historic school and site have been gleaned from the National Register of Historic Places Registration Form dated 3/20/13.

Programmatically, the proposed addition serves six primary purposes:

1. The addition serves as an indoor link between the historic building and the detached South Campus. The link addresses ADA concerns, access in inclement weather, and security concerns of having outdoor connections within the campus. A single entry is preferred to aid in control and lock down situations.
2. The new addition will house the primary entry to the school. The historic west entry beneath the 1930 tower was difficult to find and access and, therefore, was displaced in 1963. At this same time, a new entry on the east side of the landmark building opened, however, it requires visitors to wander through the school in order to find the main administrative office. Current concerns regarding school violence, render this entry unsafe and impractical. A new, secure, entry vestibule immediately adjacent to the administration office will provide a safe entry sequence and improved supervision over visitors entering the site.
3. The new addition will also house a secondary entry from the west side of the site (at the corner of 4th Ave S. and S. 18th St) primarily used for bus and parent drop-off and pick-up.
4. A new student HUB will be located in the new addition. This dynamic space will accommodate food service as well as a centralized student social commons. Further uses for the HUB include: an informal presentation space for student activities, a foyer for athletic events in the gym, a center for student services, and an indoor/outdoor connection to the Lawn connecting the historic school and the stadium.
5. The addition will house critical Career and Technical Education spaces including shops, labs and classrooms focused on supporting project based learning skills.
6. Last, the new addition will house the major service areas of the school including: loading dock, kitchen, custodial area, boiler room and electrical room.

The layout, massing, and detailing of the new addition was developed to both meet the program needs outlined above as well as reinforce the defining characteristics of the landmark campus. Primary defining characteristics of the historic school and district include the siting, architectural style, massing, materiality and cultural importance of education within the community.

The siting of the historic campus arranged the school and stadium on parallel north/south axes and the primary entry, tower, flag pole and stadium (50 yard line) oriented on an east/west axis centered on 3rd Ave S. The tower immediately became an urban landmark terminating views from the west along 3rd Ave S. The Lawn, centered on S. 18th St, formally connected the stadium and school. The South Campus Field House, constructed in 1977 and 1997 was located across 4th Ave S, south of the historic campus. The proposed addition will span from the southern edge of the historic building to the northern edge of the Field House. New entries into the addition (both the east and west) are centered on 4th Ave S in keeping with the historic entry alignment with the city grid. Additionally, the new addition provides closure to the historic Lawn connecting the stadium and the school. Last, the new addition allows for the removal of the 1975 Industrial Arts Building that was, unfortunately, located in the middle of the Lawn.

The landmark school along with additions in 1954 (music and arts), 1963 (classrooms) and 1998 (wrestling) were all designed in the Collegiate Gothic Revival style popular in America during the eclectic early 20th century. Massing, fenestration and cladding all contribute to the Gothic imagery of the historic building. Other additions include the Industrial Arts Building (1975) and the South Campus (Gym and Pool 1977 and classrooms 1997) took a more modernist and post-modernist approach.

Our design approach to the proposed addition is to develop a contextual design response that references the massing, fenestration and cladding without replicating the original structure. In keeping with the Secretary of Interior Standards for Historic Preservation. The contextual response employs a variety of masses, variable masonry colors and patterns, rhythmic fenestration and axial entries that all reference the historic school.

The massing and materiality of the proposed addition was designed to complement, but not compete with, the grand historic school. The landmark school is composed of an assemblage of discreet masses gathered around the central tower. Original elements included the 5-story tower and a 3-story central wing of classrooms, the 2-story old gym to the north and the 3-story theater with its 4-story fly loft to the south. Each element of the assemblage was constructed with a 3-color blend (dark, medium and light) of veneer brick in varying patterns. Later additions included a 2-story music and art studios (1954) adjacent to the theater to the southeast, a 3-story classroom addition (1963) to the east, and a 1-story wrestling room addition (1998) to the north. The additions continued the use of three brick colors in varying patterns. In general, later additions were both volumetrically smaller and shorter than the original building.

The proposed project continues the approach to develop additions with smaller scaled masses utilizing the 3-colors of brick along with split-faced concrete masonry units (CMU) organized to provide a discreet separation from the historic building while also providing a new north face to the unsympathetic South Campus structures. In response to the sloping site, the new addition steps down the hill in a series of 1 to 1-1/2 story masses distinguished by varying material palettes derived from the historic school materials. From the east, the new entry and administrative area is distinguished by using a 1-1/2 story dark brick mass framing a lower blended brick zone. The darker brick will match the original dark brick of the historic building and be laid in a running bond with a diamond shaped diaper pattern reflecting historic brick detailing. The fenestrated brick blend beneath the dark brick will be laid in a running bond typical of areas within the historic building. The contrasting colors are designed to give prominence to the new entry without competing with the prominent tower of the historic structure. South of the entry along the east facade, the 1-story counseling area repeats the blended brick pattern of the administration area. The new service area completes the additions to the east elevation by introducing a banded brick and CMU facade that mediates between the South Campus and the historic building.

The north and west elevations of the proposed addition house the HUB and the gallery leading to the new CTE spaces and the west entry. Similar to the proposed new entry, a dark brick mass frames the HUB area signifying its importance while clearly separating the new addition from the existing facade of the historic theater. Sliding beneath the dark, diamond patterned brick, a new facade of banded brick and CMU transitions from the HUB to the west entry, stepping down the slope, forming the south elevation of the Lawn and wrapping the corner with a glazed entry. The proposed addition is completed along the west elevation with the dark brick, cladding the automotive shop and serving as a transition to the South Campus building. Capping the new masonry additions are precast concrete parapets which reference the cast stone and terra cotta of the original building. Recessed above the new HUB, visible from the West facade, is a mechanical penthouse clad in a metal panel with a simple, metal parapet cap.

In the late 1980's, the original double-hung, wood windows of the Main historic building were replaced with an energy-efficient, insulated, composite panel. The downside was this greatly reduced daylight into classrooms. Recently, the school has fund raised and replaced roughly (22) of these panels with true-divided, wood clad, insulated glass, double-hung windows which closely resemble the original. During the course of this project, the remaining insulated panels will be replaced to match the double-hung windows.

One of the notable characteristics of the original school was that it embodied the value of a new model of education emergent in America in the early 20th century that incorporated traditional learning environments with specialized instructional areas for science, industrial arts, creative arts and formalized athletics. Similarly, the proposed addition signifies a similar commitment to new educational models by focusing on integrated, hands-on learning (STEM) spaces coupled with student centered social spaces.

EXISTING CONDITIONS

EXISTING NORTH BUILDING PHOTOS



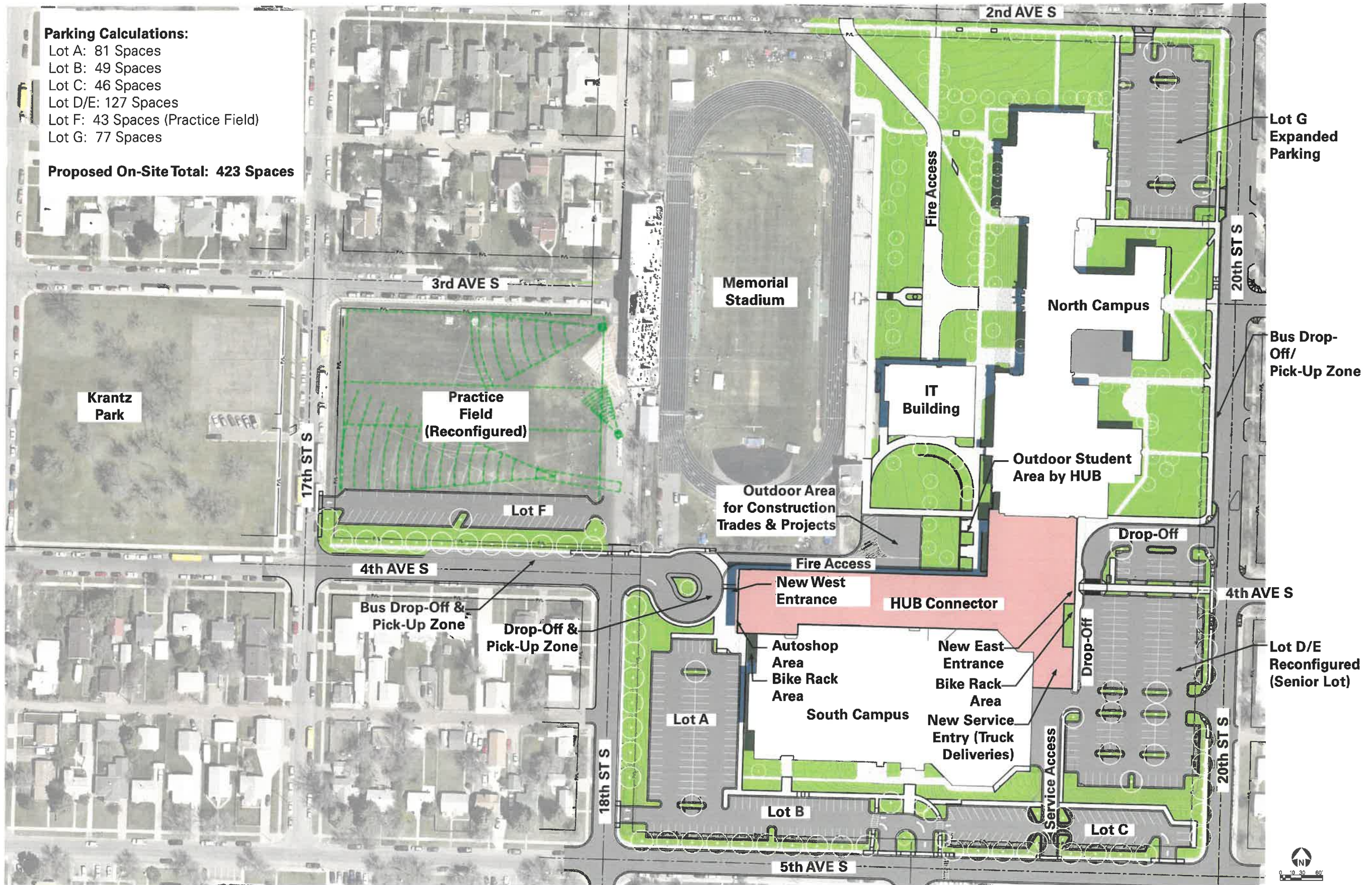
EXISTING SOUTH BUILDING PHOTOS



EXISTING VIEW FROM 20TH STREET



GREAT FALLS HIGH SCHOOL / UPDATED CAMPUS SITE PLAN



GREAT FALLS HIGH SCHOOL / BUILDING ELEVATIONS



GREAT FALLS HIGH SCHOOL / VIEW FROM 20TH ST. SOUTH



OVERALL EAST ELEVATION

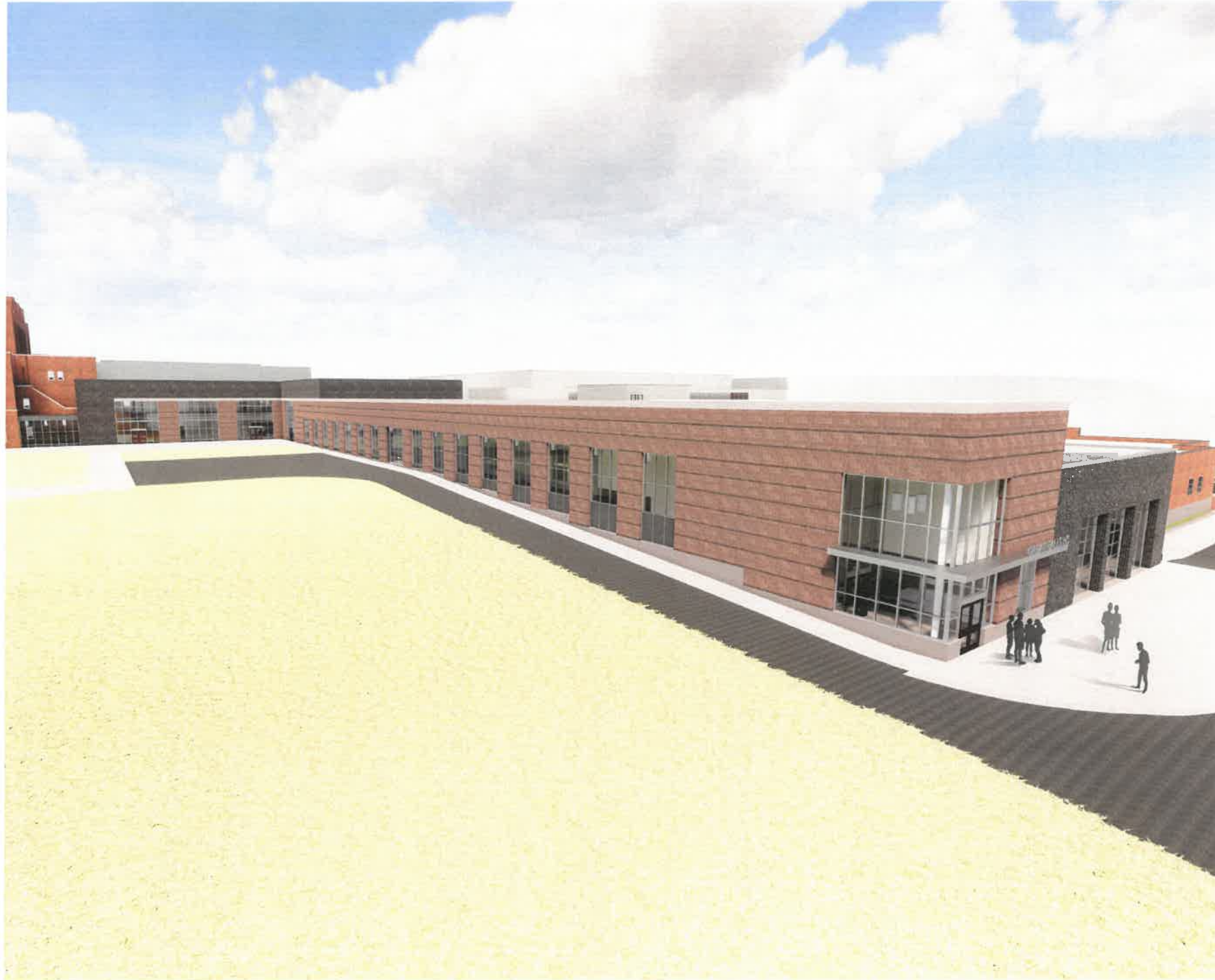
NOTE: TREES AND OTHER PLANTS NOT SHOWN



EAST ENTRY

NOTE: TREES AND OTHER PLANTS NOT SHOWN

GREAT FALLS HIGH SCHOOL / OTHER BUILDING VIEWS



OVERALL NORTH AND WEST FACADES

NOTE: TREES AND OTHER PLANTS NOT SHOWN



HUB ENTRIES

NOTE: TREES AND OTHER PLANTS NOT SHOWN



WEST ENTRY

NOTE: TREES AND OTHER PLANTS NOT SHOWN