



WARREN TECH SOUTH

Association for Learning Environments | Planning + Design Awards 2022

Littleton, Colorado

Grades 9-12

EXECUTIVE SUMMARY

The design approach for Warren Tech South is one that aspires to be an open and inviting for all, be a building that has its own identity considering its proximity to Dakota Ridge HS, displays the great work of the students and faculty within the building. The school should be a home away from home as the majority of students are traveling here from other communities. The open main commons will act as a living room space that connects to the outdoors where students can gather, collaborate, and have larger functions.

Masonry and metal detailing on the exterior will start a theme of craft and pride in workmanship. The exterior will have volumes from high bay spaces (theater, commons, and hanger) that are balanced by classroom spaces. This theme will continue into the inside. Detailing and craft are very important to this theme so everyone will be thought through with this theme in mind. The community faculty and students have a lot of pride in the great career and tech education/work that goes on with in the building so the building will be a show case of that work. A large mural within the commons will be a first impression piece that showcases the students applying the skill they have learned. Interior windows will give people a glimpse into the programs and what is going on inside the learning spaces.

A modern industrial theme is a goal within the project to inspire students that the skills they are learning here are appreciated and needed within the community.

SCOPE OF WORK

Warren Tech South is a high school CTE program open to all Jeffco Public School high school students. This project is a part of the Jeffco Public Schools 2018 Bond Program. The one-story 28,000 SF school specializes in audio and video production, hospitality, physical therapy, and Aviation programs. The center of the school holds a 200-seat theatre for students to perform and learn lighting, rigging, sound and video production. An airplane hangar houses the aviation program where students are able to work on full scale airplanes and a classroom with simulators. The design for the school is inspired by the idea of craftsmanship on display, where the building is a teaching tool for the students.

PROJECT DATA

- **Location:** 13299 West Coal Mine Avenue on the Dakota Ridge High School Campus, Littleton, CO
- **Specific Use:** Public School Career and Technical Education Center, serving all Jeffco District Students
- Jeffco Public Schools
- **Project Delivery Method:** CMGC
- **Occupancy Date:** August 2021
- **Student Body:** Designed for Approx. 150-200 Students
- **Project size:**
 - Site Size: 2 acres
 - Gross Area: 28,000 GSF
 - Area per student: 186 GSF per student at capacity
- **Project Costs:**
 - Site development & Building Construction: \$9.8 M
 - Cost/sf: \$350/ sf



Community

Warren Tech now has 3 campuses that serve the high school students of Jeffco Public Schools. This south campus was created closely with industry partners, and District and school leadership to create real opportunities and prepare students for when they graduate high school. The specific programs at Warren Tech South were created to reflect the current marketplace and workforce needed in our communities as well as create exciting career focused experiences for the students of Jeffco. Once the programs were established, the design team worked closely with the Design Advisory Group to create a design that supported goals for each program. The team met regularly to review design concepts, site and floor plans, 3-D walkthroughs, and building materials and finishes.

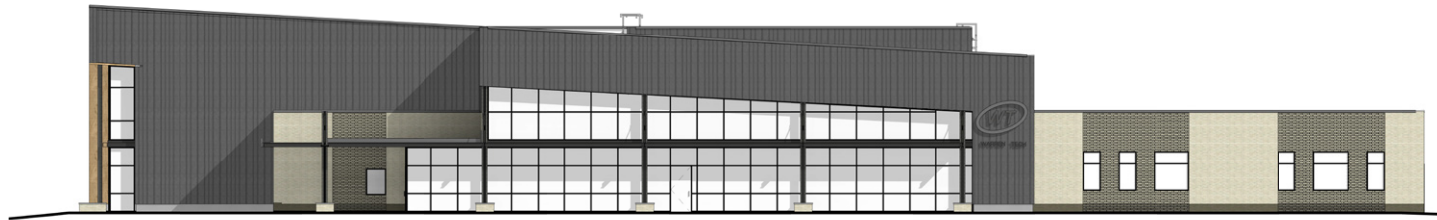




MAIN ENTRY (SOUTHWEST CORNER)

Community

Warren Tech South engaged the students and community from the very first discussions on what programs should be within the space. The team at Warren Tech wanted to make sure to provide education based on the specific needs of the community and workforce in the local area, as well as student interest. The industry partners will have opportunities to collaborate on projects with students as well as teach within the building. The 200-seat theatre will be open to community use for community productions. The building sits adjacent to Dakota Ridge High School and the students are able to walk over to Warren Tech South to take classes during the day. The large south-facing glass opens up to Coal Mine Avenue for the community to see into the school while driving by. A large mural and signage can be seen along within the south lobby of the building.



SOUTH ELEVATION (PUBLIC FACE)



WEST ELEVATION (CAMPUS FACE)

THE WARREN THEATRE



Educational Environment

Each space within the project was designed closely with the users of the building to reflect the programs that were to be taught in each space. The audio and video production spaces are designed so that a performance within the 200-seat theatre could be recorded and edited within the adjacent classroom spaces during a performance. The audio production spaces are set up as recording and editing studios and the Video production space was designed with a green screen for video productions as well. The theater classroom is located at the back of the theatre to allow students to see firsthand how to provide sound, lighting, rigging, and AV for each performance. The hospitality classroom opens up to the Commons for real-life event planning during performances. The Commons doubles as a pre-function space during a performance as well as an area for students to gather and study during the day. The Physical Therapy classroom is designed flexibility with the equipment needed for hands-on learning. The Aviation classroom has pilot simulators for students to be introduced to the world of aviation. The classroom is situated directly adjacent to the Aviation Hangar where students will learn how to work on full-size airplanes. The large hangar also has a 40' wide hangar door to allow for planes to be rolled outside to start engines and to have an environment that opens up directly to the exterior. These spaces have large areas of glass to provide natural daylight in the space, but also give the community a glimpse at what the students at Warren Tech are working on.

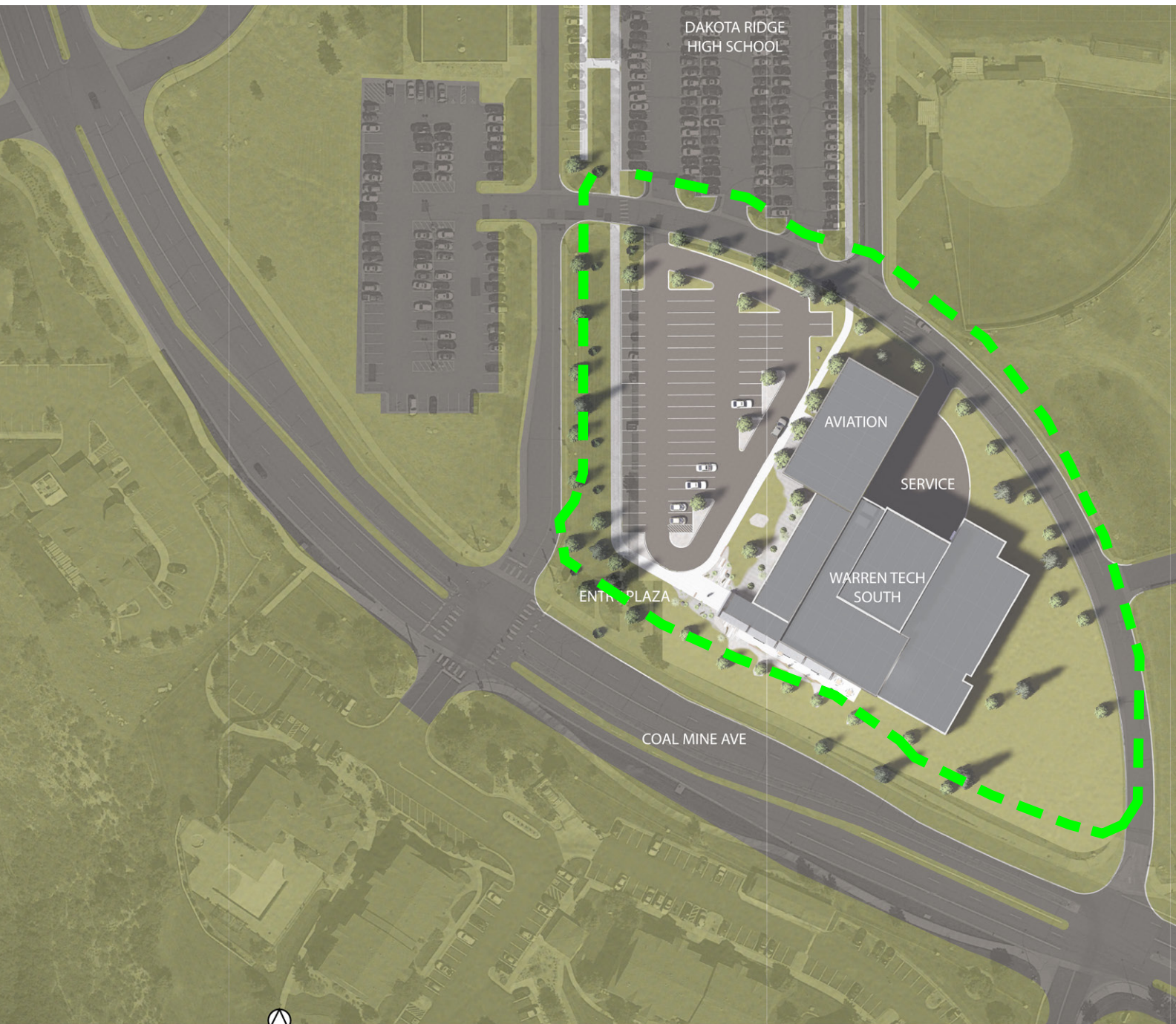






The true courage of space flight is not sitting aboard six million pounds of fire and thunder as one rockets away from this planet. True courage comes in enduring... persevering, the preparation and believing in oneself.

-DR. RONALD E. MCNAIR



Physical Environment

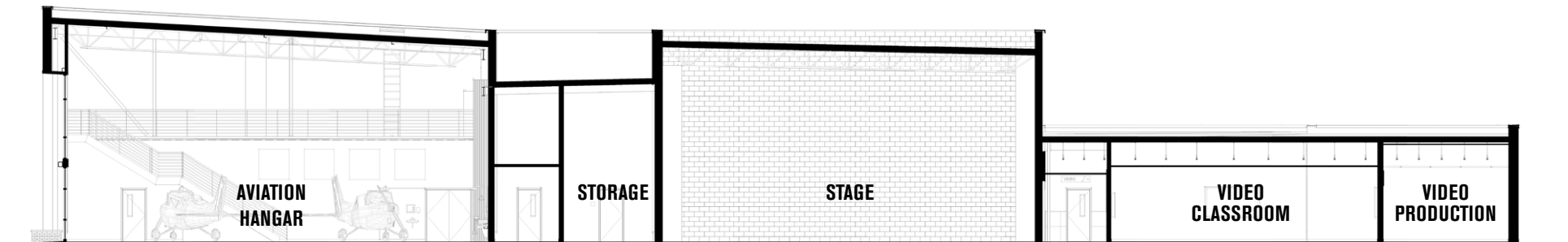
The main design concept was the idea of **craftsmanship on display**.

The programs were to be visible to all students within the building as well as large windows looking in from the surrounding community. Masonry and metal detailing on the exterior start a concept of craft and pride in workmanship. The exterior has volumes of high bay spaces (theater, commons, and hanger) that are balanced by lower volume spaces including classroom and administrative spaces. The materials for the school include brick with special coursing to provide a textured look, vertical metal panel, a canopy of structural steel and metal grating, lots of natural light and a large aviation hangar door at the Aviation Classroom. Detailing and craft are very important to the concept and are expressed in the details throughout the building. Orange structure is highlighted throughout the interior as well as graphics that showcase the programs within each space including a large mural at the Commons that provides a first impression to everyone that visits or attends the school. Interior windows give everyone a glimpse into each program. The staff and students have a lot of pride in the great career and tech education work that goes on within the building so the building is a showcase of that work. A modern industrial theme is a goal within the project to inspire students that the skills they are learning here are appreciated and needed within the community.



FLOOR PLAN

VIDEO CLASSROOM



BUILDING SECTION



THEATER CLASSROOM

Wellness

Connecting with peers and with industry leaders from the outside community is a focus of WarrenTech's programs. The ability to help students find meaning and purpose as they work towards a career path is essential to their well-being. Having the support of real-world instructors, inspiring quotes throughout the spaces, and a sense of pride instilled by displaying their work, all contribute to building up the students' self-esteem and motivation. Views to the outside environment, views between different programs within the halls, and common, overlapping workspaces and social spaces all encourage a camaraderie that results in the overall wellness of those taking class at Warren Tech.

Physical Therapy



Results

The new facility has resulted in a series of interconnected educational spaces, on display to one another and to the surrounding community. With the support of students attending from across the district, and from industry partners, Warren Tech has created a small community of robust technical and practical opportunities within its small footprint. The ability to offer such specialized instruction and resources can only come from its district-wide approach. The open and transparent nature of the facility makes sure to imply that the CTE facility belongs to the community at large, rather than being tucked back behind the high school whose campus it shares.