

# UPPER RIO GRANDE NEW K-12 SCHOOL

Del Norte, Colorado





# Scope of Work + Budget

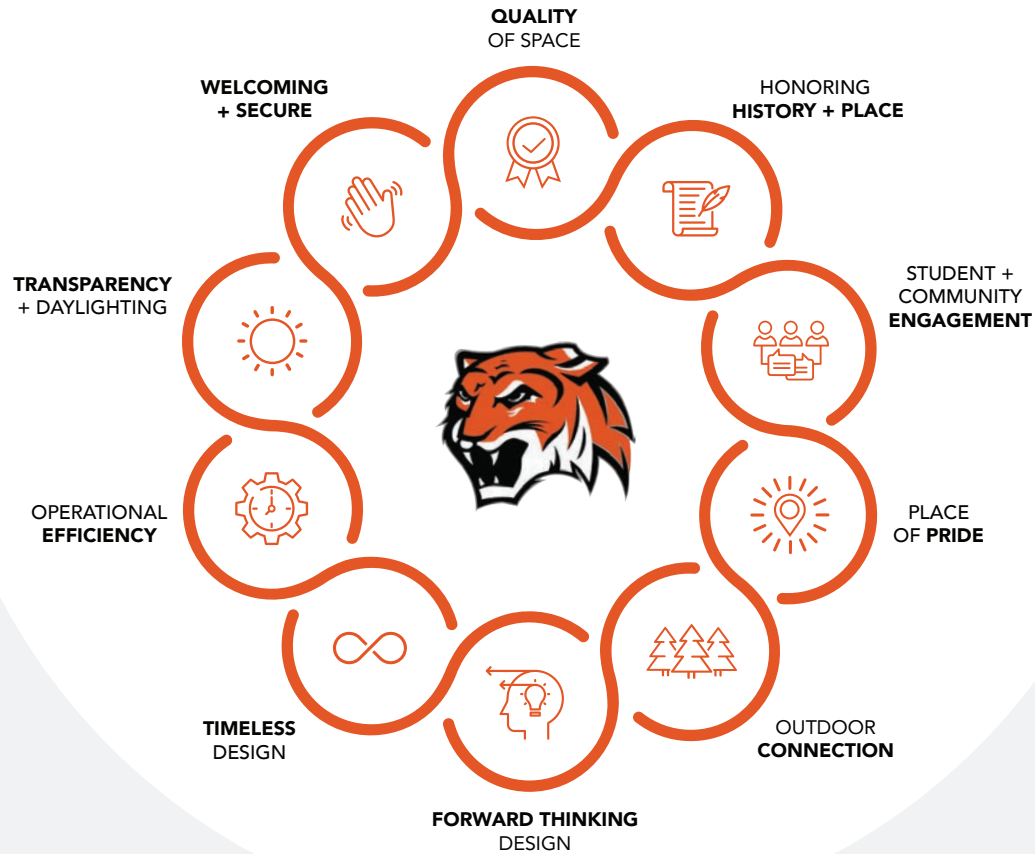
PROJECT NAME:	Upper Rio Grande New K-12 School
PROJECT LOCATION:	Del Norte, Colorado
PROJECT DESCRIPTION:	New K-12 replacement facility serving approximately 800 students
OWNER:	Upper Rio Grande School District
PROJECT DELIVERY:	Design/Build
OCCUPANCY DATE:	January 31, 2020
PROJECT SIZE:	122,000 GSF
STUDENT COUNT:	800 students
PROJECT COST:	\$45M
COST PER SF:	\$368.85
SF PER STUDENT:	152 SF



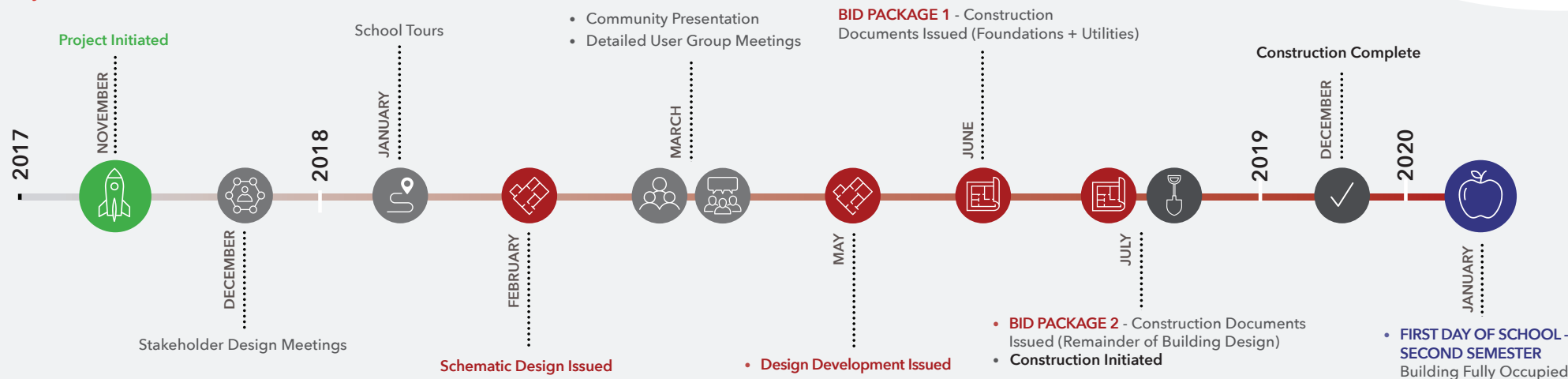
# Executive Summary

The Upper Rio Grande School District passed a bond in the fall of 2017 with one mission in mind - providing their students the same opportunities for success that would be found in an urban center school. The town of Del Norte, while remotely located, has immense pride in their schools and community and it was this drive to provide the best spaces for learning based on the values of pride, connection, quality and safety that ultimately became the fundamental core values that drove every design decision.

The result of that work was a new K-12 campus built on the site of the former football field that features a 122,000 square foot school with separate and secured entrances for elementary and middle/high school students, modern and accessible playgrounds and fields, and a comprehensive performing arts and athletics complex. **But above all, a facility that serves as the school and community nucleus, supporting education, well being, myriad functions and user experiences while showcasing community heritage and pride.**



## Project Timeline





# School + Community Engagement

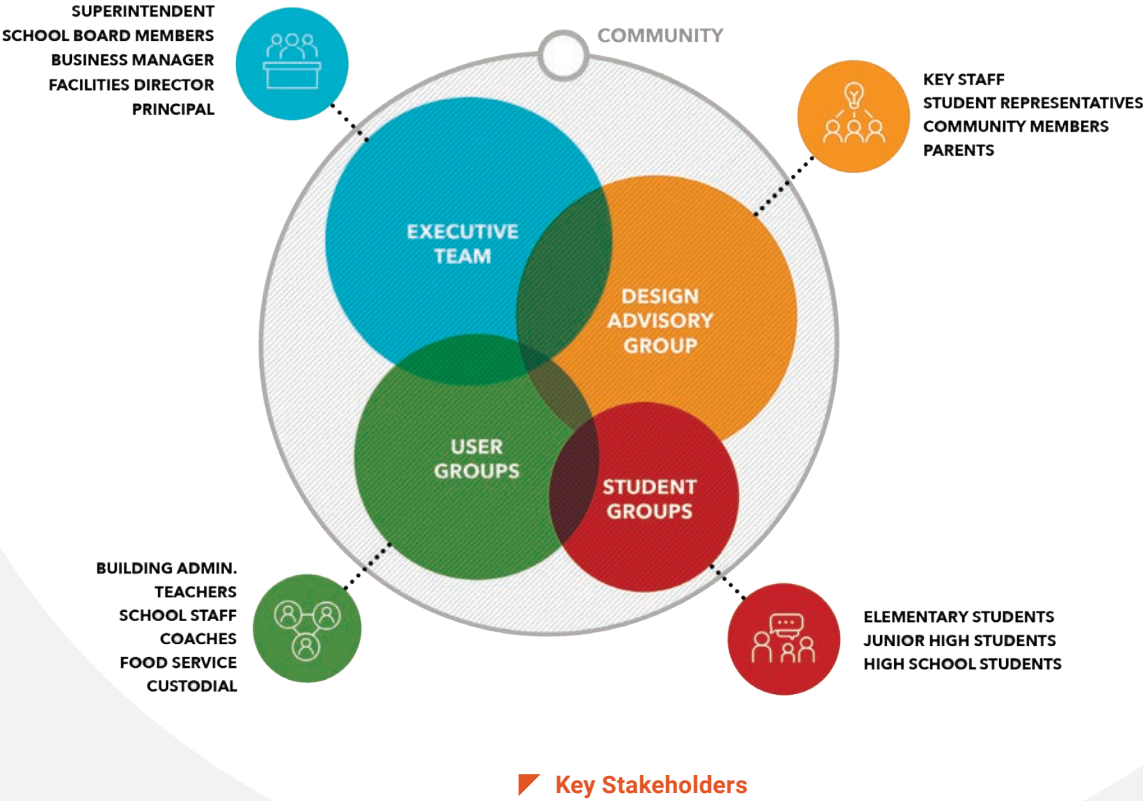
The District undertook a large cultural shift when they decided to consolidate their existing schools into one shared campus. It was a significant goal to retain the individual identities and age appropriate features of each school while **cultivating interconnection and pride as one.**

The planning took place within the framework of a community-based and transparent process alongside a Design Advisory Group (DAG) comprised of approximately 28 staff, students, parents, and community members. The vision for the school was crafted through multiple work sessions, user group meetings, and student and community meetings - **an inclusive process where the core values for the project were derived and all ideas were investigated.**



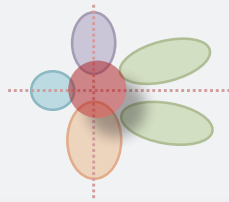
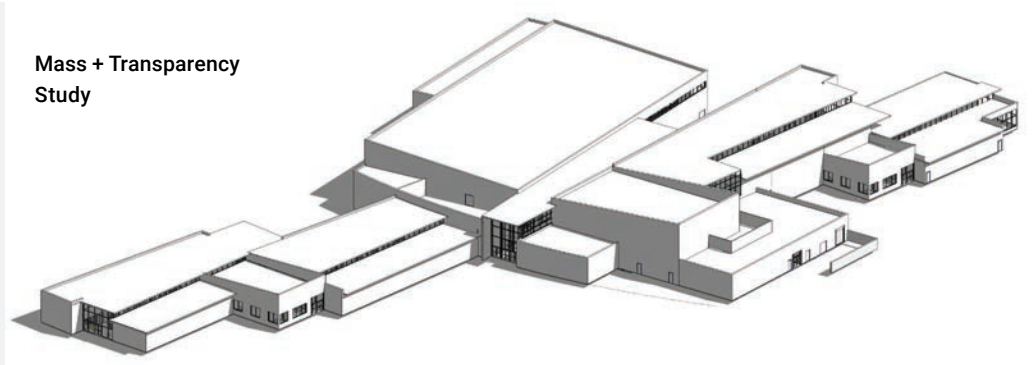
Our design process always starts with the basic question “what does a successful project look like to you?” While some respond simply with ‘staying in budget’, many participants in Del Norte responded with stories of just what the schools represented to them, their families and the community they serve. We learned that the Del Norte schools served not only as a place for learning, but also as a place of celebration and support. Their largest space - the gymnasium at the high school - was not only home to basketball and volleyball victories, but also to family reunions, community dinners, and end of life celebrations. These stories underlined just how essential and meaningful a flexible and multi-use gathering space would be in the design of the new project. **A place for students, a place for families, and a place for community - the heart.** The first line drawn in the diagram studies for what this school would become started there....

Design Advisory Group Gaming

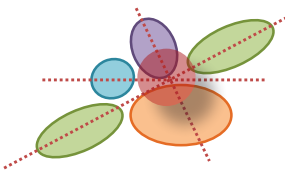




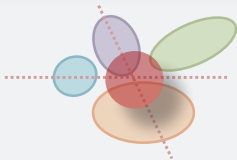
# School + Community Engagement



SCHEME A



SCHEME B



SCHEME C



**B Mirrored  
Selected  
Concept**





# Educational Environment Design + Results

It was established early in the process by the staff and administration that they wanted to create a school that was equal to those you might find in a more urban setting. There was a keen desire to provide learning environments that encouraged collaboration and cross-curricular work, was transparent and well daylit, was inclusive for all learners, provided equal learning opportunities for its students, and reflected the unique aspects of the environments and geographies that make up the San Luis Valley. This drove the layout and orientation of the building and the features that tied it together.

The design positions the elementary school and middle/high school wings as separate but physically connected schools, arranged in a “school-within-a-school” concept. Elastic learning environments create visual and physical connections between classroom learning spaces, team centers, makerspaces, and learning resource amenities allowing teachers and students to interact in new ways. A place for every learner in a safe and secure environment that supports exploration, independence and connection.

Elementary School Maker Space



Middle School Team Center



The Hearth

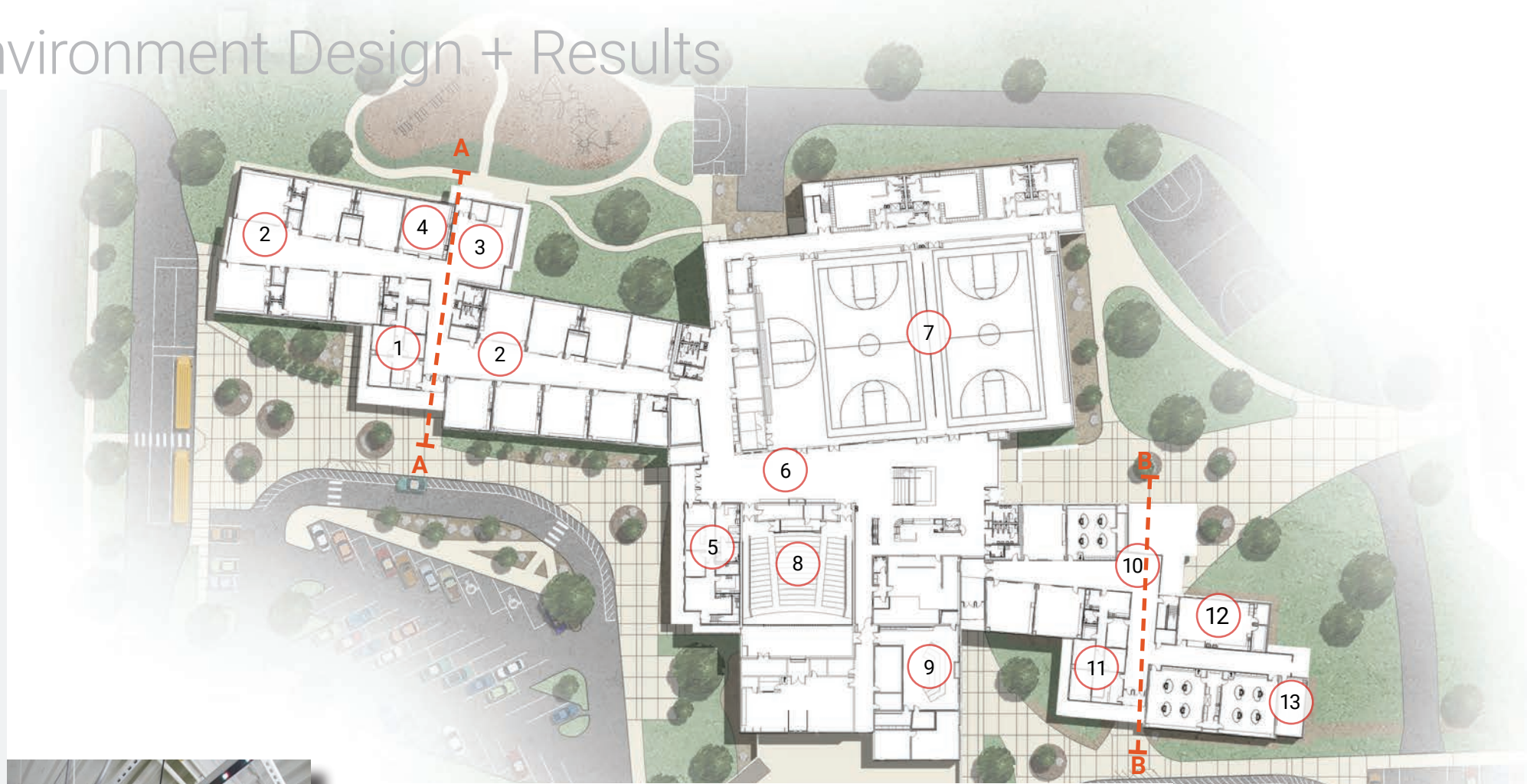




# Educational Environment Design + Results

## Main Level

1. Elementary Administration
2. Elementary Team Center
3. Maker Space
4. Elementary Art
5. District Administration
6. Cafe Commons - The 'Heart'
7. Gymnasiums
8. Auditorium
9. Music
10. Middle School Team Center
11. Middle / High School Administration
12. Middle / High School Art
13. Aquaponics



Elementary School Team Center



Aquaponics



Section A



Section B

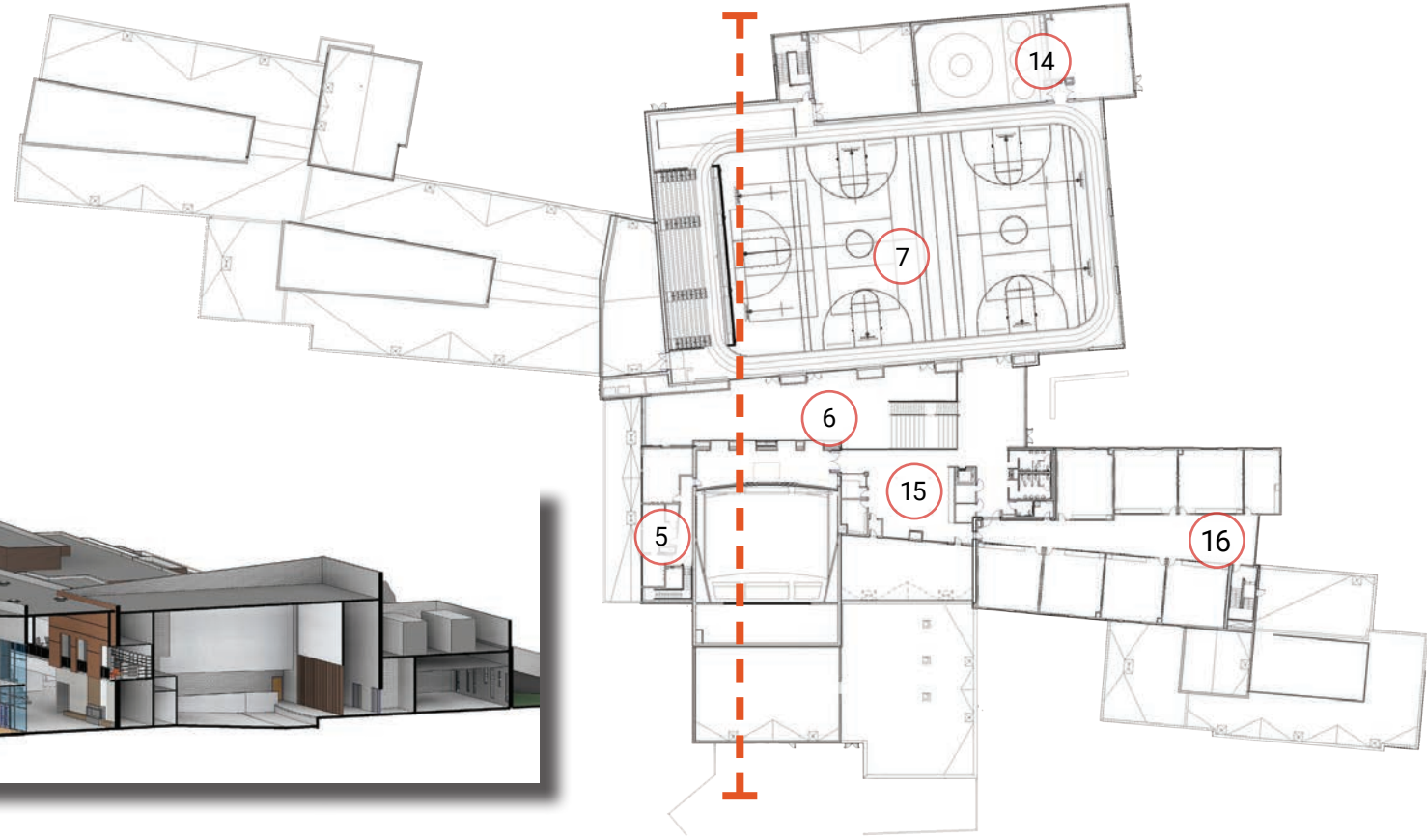




# Educational Environment Design + Results

## Upper Level

- 5. District Administration
- 6. Cafe Commons - The 'Heart'
- 7. Gymnasiums + Running Track
- 14. Weights and Wrestling
- 15. Middle / High Media Center
- 16. High School Team Center



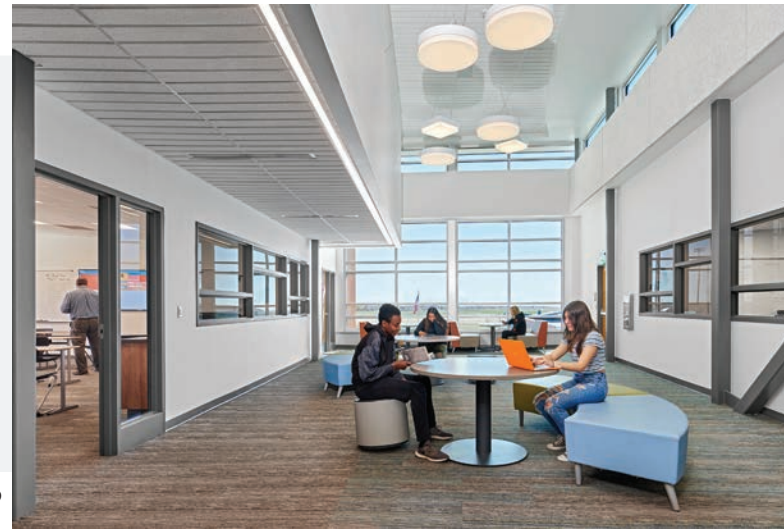
Section



Gymnasiums with Running Track



High School Team Center



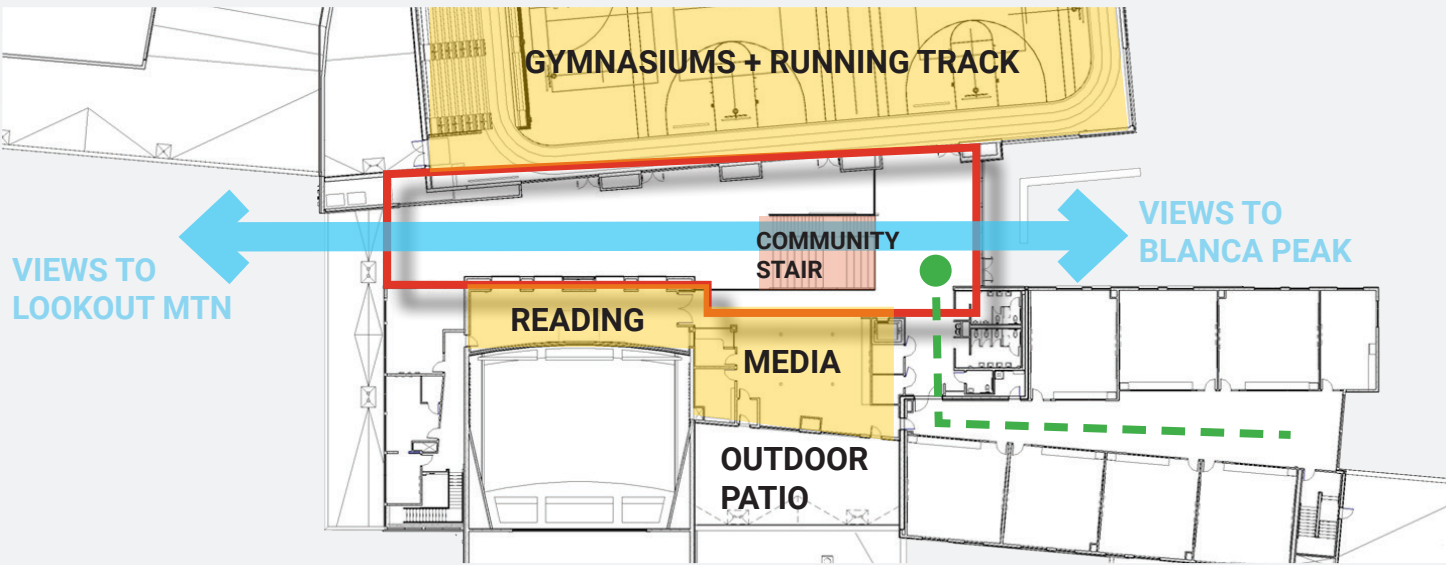
Dining Space in the Heart



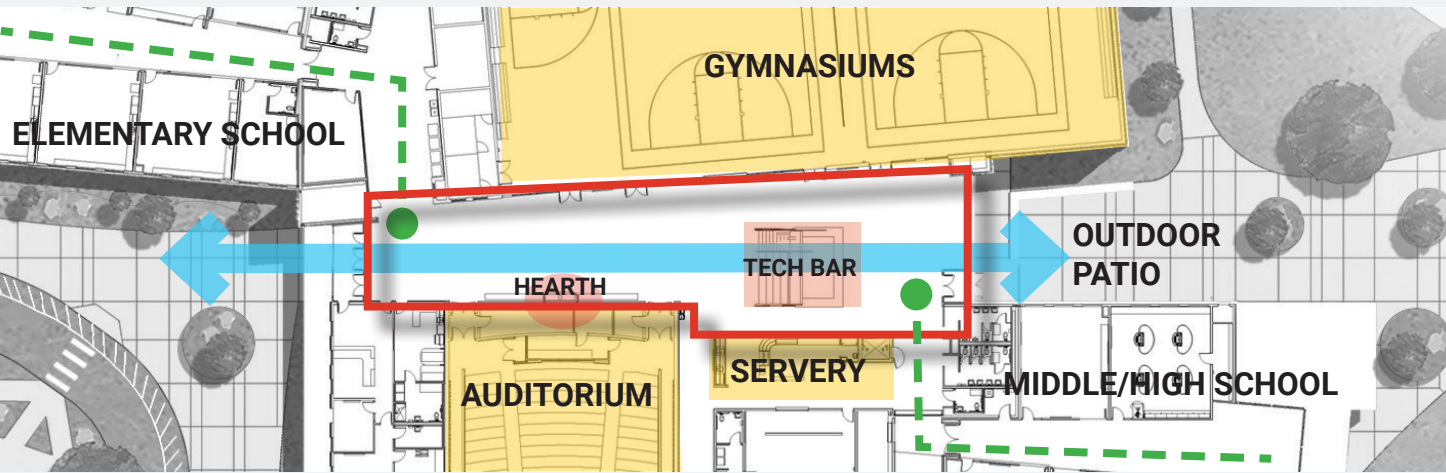


# Educational Environment Design + Results

Coming back to the heart of the school, that place where the first design lines were drawn. Gathering at the hearth. Ubiquitous technology. Connection through shared activity. Celebration. Community. The outside materiality and forms brought inside, layered transparency, integrated acoustics, local artist installations, and diffuse daylighting throughout demonstrate the significance of this space and honor the core values set forth by all those that participated in the design process.



UPPER LEVEL



MAIN LEVEL

The Hearth



Tech Bar



Outdoor Patio





View to Gymnasiums and Local Art Installation



Community Stair



View to Mount Blanca and Athletic Field



View to Media Center, Auditorium and Lookout Mtn





# Physical Environment Design + Results



Northern San Juan  
Mountains



Sangre De Cristo  
Mountains



Great Sand Dunes  
National Park



Blanca Peak



San Luis Valley



New Upper  
Rio Grande School



Rio Grande River



Southern San Juan  
Mountains

**Del Norte, Colorado, is a rural town located in the beautiful San Luis Valley. Set on the eastern edge of the San Juan Mountain Range, Del Norte is a beneficiary of world-class outdoor recreation opportunities and immediate connections to the natural environment.**

Established in 1874, Del Norte was originally a mining town. However, the Ute Indians settled here long before that due to the large abundance of natural resources. With its unique location, one can find almost every type of natural habitat from riparian to tundra and forest to canyon. These rich contextual and historical webs provided endless inspiration for the school design, ensuring a facility that truly belonged to this place.



# Physical Environment Design + Results

## Site Plan

1. Bus Drop-Off
2. Elementary Main Entry
3. Elementary Parent Drop-Off
4. Staff and Visitor Parking
5. District Offices / Activity Entry
6. Vocational Arts Yard
7. Middle / High School Main Entry
8. Middle / High School Parent Drop-Off
9. Visitor Parking
10. Staff and Student Parking
11. Field House / Ticketing
12. Outdoor Activity Courtyard
13. Middle / High School Court
14. Football Field and Track
15. Elementary Playground
16. Elementary Turf Field





# Physical Environment Design + Results

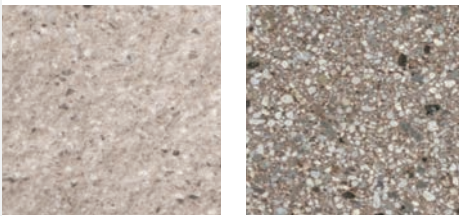
The design of the school was envisioned to fit naturally into the context of the rural valley environment, celebrating the spirit of place.

Interior and exterior design concepts using coloration and textures of the regional grasslands, the Rio Grande River Basin, and the majestic mountain ranges were woven into the design throughout the school. Additionally, local artists provided 2-D, 3-D and kinetic art, instilling local pride throughout the learning environment.

Natural stone, wood roof decking, masonry, and regionally appropriate stucco systems all work together in a palette that is relaxed in its setting. Large expanses of high performance glass and broad openings from all learning spaces provide abundant daylighting and create natural connections to the beautiful outdoor environment.

Outdoor Patio

Elementary School and Community Entrances





# Physical Environment Design + Results

Using surrounding ecology for wayfinding and interior design inspiration and details.





New Track and Field



Elementary School Playground



Green Play and Outdoor Learning Space



Middle and High School Entrance





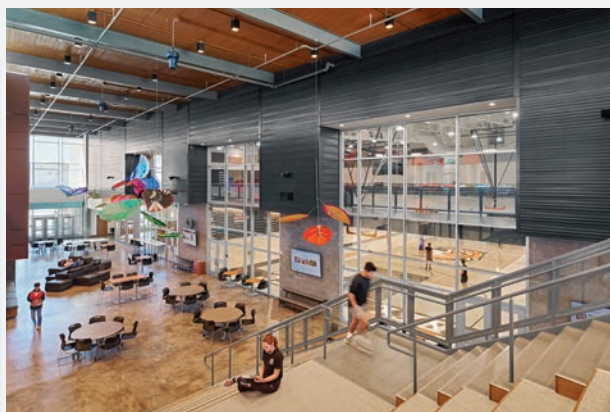
# Community Environment

As with most rural schools, the campus serves as an extension of the community, becoming the central hub for many activities and celebrations. With this in mind, the core facilities of the new school and campus were envisioned to provide the greater Del Norte area with shared amenities and access, including:

- 350-seat state-of-the-art performing arts theater
- Large two-story commons space with both a rooftop terrace and a ground level patio
- Two full-size gymnasiums connected by a suspended running track
- All-weather running track and field

Perhaps above all, the facility needed to be a source of community pride, and this particular letter from one of the elementary students after the first day of school says it best:

My name is Chassity Villa and I'm a Junior this year. Thank you for all the effort put into this amazing building in which many future generations will attend and create memories. I remember when all of the construction first started and now that it's finished there are so many people who should be proud. My favorite part is the grand entrance. Everything from the fireplace to the stairs is put together very well. It all makes the school feel and look super welcoming. Thank you for all your effort!





# Sustainability + Wellness



With this new school facility, the District had an opportunity to not only provide their students with educational environments in which they could thrive but also a facility that would preserve as many capital dollars as possible. In this way, more future funding would be available to enhance the student experience rather than paying the energy bills. Because of this, achieving the highest level of LEED Certification as possible within the budget was the goal from the start. **With careful design consideration, energy modeling and perseverance the project was awarded LEED Silver!**

Connection to the outdoors and daylighting wherever possible were fundamental requirements and drove the east-west orientation of the classroom wings. Clerestory elements in the academic areas and in the Heart as well as intentionally placed tubular skylights and glazing and sunshades tuned toward each elevation face achieve this goal while a building envelope designed to exceed code required U-values helps ensure maximum passive efficiency. In addition to this, the following measures were taken:

- Low water-use landscaping in addition to artificial turf for both the athletic and elementary fields
- LED lighting throughout, dimmable in the classrooms
- Operable windows in all regularly occupied spaces
- Evaporative cooling
- 87% efficient boilers and 92% efficient furnaces

Student well-being in the form of safety and security informed the use of many 'left-over' types of spaces, in turn crafted to provide areas for individual work as well as small group collaborations. Acknowledging the need to provide for introverts and extroverts alike, students are provided a choice throughout the facility in how much they want to participate in a larger group setting. The neighborhood-like grouping of grades provide a sense of community while observation points, the outdoor patios, community stair, reading areas and hearth support the social needs of the moment. In addition, the inclusion of an indoor running track in the dual competition gyms ensures that on the hottest and coldest days physical activity is still available to all.

The end result is not only a facility that provides a 25.9% annual energy cost saving over the 2015 IECC Standard Reference Design, but a true 'third place' for staff and students that has the ability to support both physical and mental wellness.

Elementary Reading Connected to Outdoors



Reading Area Overlooking the Heart



Suspended Running Track



Respite and Gather at Heart



Elementary Team Center





“Our design team has been extremely committed to the Upper Rio Grande School District (previously Del Norte School District) in listening to all ideas and thoughts our employees and community have had regarding the design of our new school. They have taken all of those things into consideration and designed a school that is even greater than what we initially dreamed of.”

Chris Burr, Former Superintendent  
Upper Rio Grande School District

