

2016 Exhibition of School Planning and Architecture

Mat-Su Career & Technical High School Addition

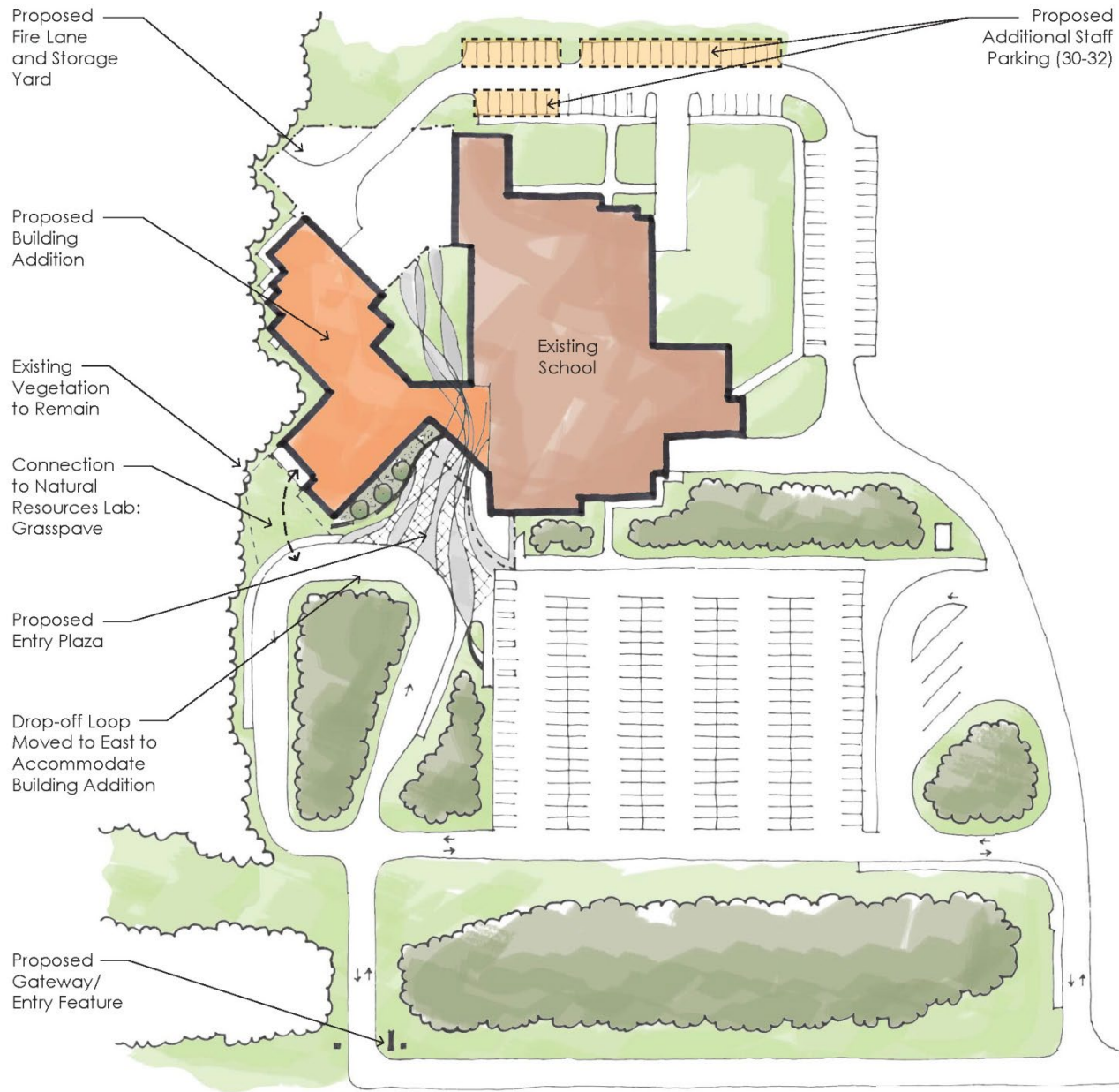
Category: New Construction/Addition

Mat-Su Borough School District
Wasilla, Alaska



SIGNATURE PHOTO

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION





Community Environment: Serving a borough the geographic size of Delaware with a population of less than 80,000, the Mat-Su Career & Technical High School's constituents range from small cities to sparsely populated subsistence-based communities. Building on the overwhelming success of the original building, a 2008 MacConnell finalist, the program included adding 3 new pathways and a learning commons. Remaining true to the original facility's innovative plan, the addition focuses on creating environments that encourage collaboration and cross-discipline learning.

ORIGINAL SCHOOL ENTRY

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION

Community Environment:

While functioning as a comprehensive full time high school the facility also serves part time students through its integrated learning network. Distance learning programs reach out to remote areas of the borough, state, and world. Integrating academics, the program co-locates academic and technical spaces to support the academy style curriculum.

The seamless transition between the original school and the addition is leveraged to provide informal learning opportunities





Community Environment: Inspiring and motivating, this bold facility brings the power of the Alaskan landscape and technology together. The new addition creates a positive and visible focus for borough CTE programs with strong connections to the community and local business partners. At once fun and serious, students respond with pride to its strong sense of purpose and unique expression.

EXPANDED ENTRY PLAZA

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION



Learning Environment: Designed for meaningful community interaction, the expansive and flexible “learning commons” creates an excellent after-hours venue where large gatherings can easily be accommodated while maintaining building security. An overhead door provides access for large equipment, vehicles, and exhibits. Teacher collaboration spaces in each pathway integrate with expert instructors providing peer-to-peer learning experiences for the faculty.

Learning Environment:

Agile instructional spaces are essential to the educational concept that adapt to the changing community employment and economic needs. The program co-locates academic and technical spaces to support the academy style curriculum. The flexible instructional spaces support individual, small group, and large group learning with offices, technical laboratories, resources, and storage for project-based learning. Shared core functions can change use and configuration throughout the day to meet multiple needs and future program changes.





Learning Environment: New laboratory spaces, such as the Transportation Lab with its bridge crane, promote real world, hands-on experiences, while other spaces like the Natural Resources Lab are designed around outdoor learning. Particularly popular with students are 2nd floor ‘perches,’ informal learning spaces that overlook the common areas.



A FAVORITE PERCH

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION



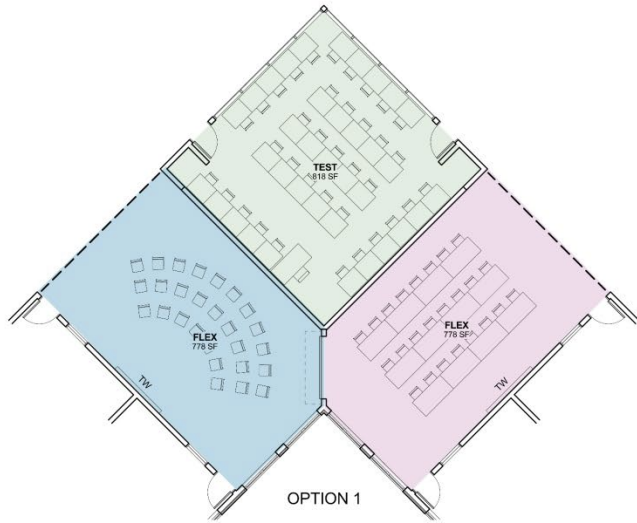
FUN FOUND SPACES

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION

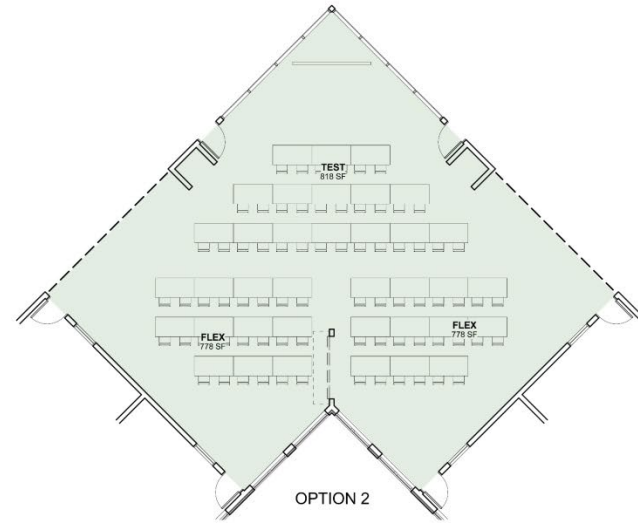
Learning Environment:

Pathway identity portals incorporate angular shapes, distinctive colors, and custom logos showing individual identities for each pathway. Each pathway connects to the whole school through the student commons/media center, creating layers of community. As one moves through the portals, each small learning community further expresses its own personality, culture, and supporting environment. On a specific day each month students wear their pathway colors (t-shirts, caps, and khakis) as an expression of their identification with their chosen pathway.

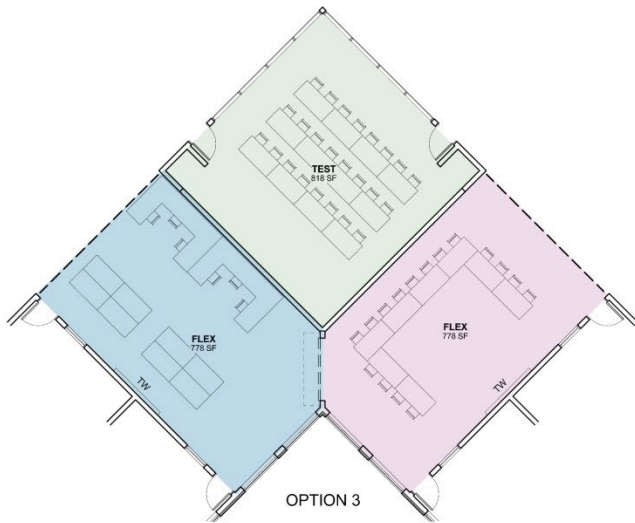




OPTION 1



OPTION 2



OPTION 3



OPTION 4



Learning Environment: Transformational spaces like adaptable labs, flexible learning areas, and agile student commons/media center respond to changing community needs. Seismic braces located at the perimeter of the modularly designed learning spaces allow for adaptation over time to a more individual based learning or other program model.

Physical Environment:

The building teaches by exposing construction features and advanced engineering systems, including glazing of mechanical spaces, challenging students to learn more about the world around them. Visible systems include cable distribution, ductwork, lighting, and an innovative buckling restraint seismic bracing system. Balancing future and current needs, transformational spaces, like adaptable labs, flexible learning areas, and the reconfigurable “Learning Commons” respond to changing community needs.

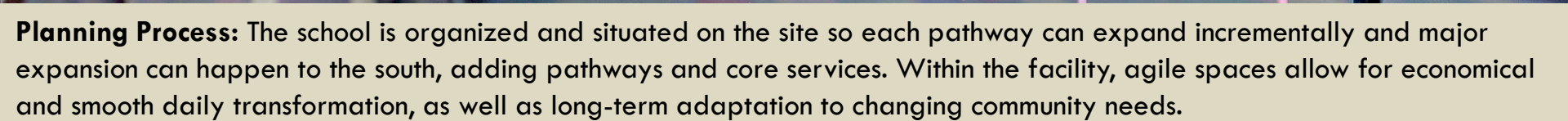




Physical Environment: The addition seamlessly integrates with the architecture and learning environments of the existing school, reflecting the program's relationship to the local economy and dramatic Alaskan landscape. Outdoor Learning areas are oriented towards the sun, protected from prevailing winds and weather, connecting visually and programmatically to the interior learning spaces. Learning, socializing, and celebrating spills out into the sun-filled patio areas through a large overhead door.



Planning Process: With less than two months to explore new directions, update the Ed Spec, and create a concept design, the project team adopted an integrated approach that combined concept design activities with visioning exercises in a series of interactive user-driven workshops. A key component of the planning process was extensive interviews with maintenance staff, teachers, and students about the performance of the existing school. A diverse group of more than 50 participants—school, community, and business partners—provided highly relevant feedback to the process.



VERSATILE PRESENTATION SURFACES MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION





PRECIOUS NORTHERN LIGHT

MAT-SU CAREER & TECHNICAL HIGH SCHOOL ADDITION





Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	McCool Carlson Green Architects
Project Role	Architect
Project Contact	Michael Carlson
Title	Principal Architect
Address	421 West 1 st Avenue, Suite 300
City, State or Province, Country	Anchorage, Alaska
Phone	907-563-8474

Joint Partner Firm:	ThinkSmart
Project Role	Educational Planner
Project Contact	Molly Smith
Title	Educational Planner
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City, State or Province, Country	
Phone	

Construction Firm:	Collins Construction
Project Role	General Contractor
Project Contact	Greg Waisanen
Title	Owner
Address	PO Box 87-1827
City, State or Province, Country	Wasilla, Alaska
Phone	907-376-8299

Exhibition of School Planning and Architecture

Project Details

Project Name	Mat-Su Career & Technical High School Addition
City	Wasilla
State	Alaska
District Name	Mat-Su Borough School District
Supt/President	Dr. Deena M Paramo
Occupancy Date	August 2015
Grades Housed	9-12
Capacity(Students)	800
Site Size (acres)	20
Gross Area (sq. ft.)	75,000 original + 33,000 addition = 108,000 GSF
Per Occupant(pupil)	135
gross/net please indicate	1.4
Design and Build?	no
If yes, Total Cost:	
Includes:	
If no,	
Site Development:	\$500,000
Building Construction:	\$11,000,000
Fixed Equipment:	\$500,000
Other:	
Total:	\$12,000,000