

FIRST FLOOR PLAN



SECOND FLOOR PLAN



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|-----------------------------|---|--------------------------------------|----------------------------------|
| 1 - Admin + Secure Entry | 6 - Specialized Learning Resource | 11 - Gymnasium | 16 - Teaching + Community Garden |
| 2 - Library | 7 - Pre-K Classroom Pod | 12 - Outdoor Teaching Space | 17 - 2nd + 3rd Classroom Pod |
| 3 - Commons/Cafeteria | 8 - K-1st Classroom Pod | 13 - Pre-K + Kindergarten Playground | 18 - 4th + 5th Classroom Pod |
| 4 - Music & Performing Arts | 9 - Future Specialized Learning Classroom | 14 - Covered Play Area | 19 - STEAM Partner/Resource |
| 5 - Custodial/Receiving | 10 - Future Classroom Pod | 15 - Fields + Playground | 20 - Future Classroom Pods |

Art Rutkin Elementary School Tour

BORA ARCHITECTS
TIGARD-TUALATIN SCHOOL DISTRICT



Art Rutkin Elementary School

TIGARD-TUALATIN SCHOOL DISTRICT

“Art’s spirit will be forever woven into this school.”

– Barry Albertson, TTSD School Board Member

In 2011, the Tigard-Tualatin School District decided its first new school in decades would be named for Art Rutkin, a longtime principal and school board member. Art had dedicated 25 years of his life to the District, epitomizing the finest qualities of an educational leader: innovative, compassionate, enthusiastic, resourceful, and beloved.

Nestled into the Hillside

With a sweeping building form oriented to the southern sun, the new school’s design evokes the patterns and textures of the surrounding landscape, clearly expressing its timber structural system and maximizing connections to the natural world.

Sitting at the edge of the Urban Growth Boundary, the 9.5-acre site has roughly 80 feet of elevation gain north to south. A public multi-modal path runs through the site and connects a series of natural features throughout the larger neighborhood, including a significant stormwater pond, a learning garden, a playground, and a soccer field—amenities also available to the broader community.

Spaces for Learning and Gathering

The school contains 29 classrooms as it steps up the hill, arranged in two parallel bars linked by a central community gathering space which also functions as the cafeteria. The south bar contains administrative and public spaces, while the north bar contains the school’s classrooms and collaborative areas. Open courtyards to the east and west create indoor/outdoor connections to the landscape while bringing in daylight.



PROJECT GOALS

Respect the site. Embrace the opportunities presented by its topography, ecological capacity, solar exposure and views.

Create a welcoming and comfortable school for students and the community, one that upholds the dignity of its occupants and feels inviting, not institutional.

Advocate for a healthy, enduring building. Maximize project resources and champion sustainable and net-zero strategies.

Innovate a beautiful place for teaching and learning. Maximize the use of natural light and leverage a design approach that brings insights from work on other project types to inspire the educational environment.

PROJECT DATA

Size
80,000 SF

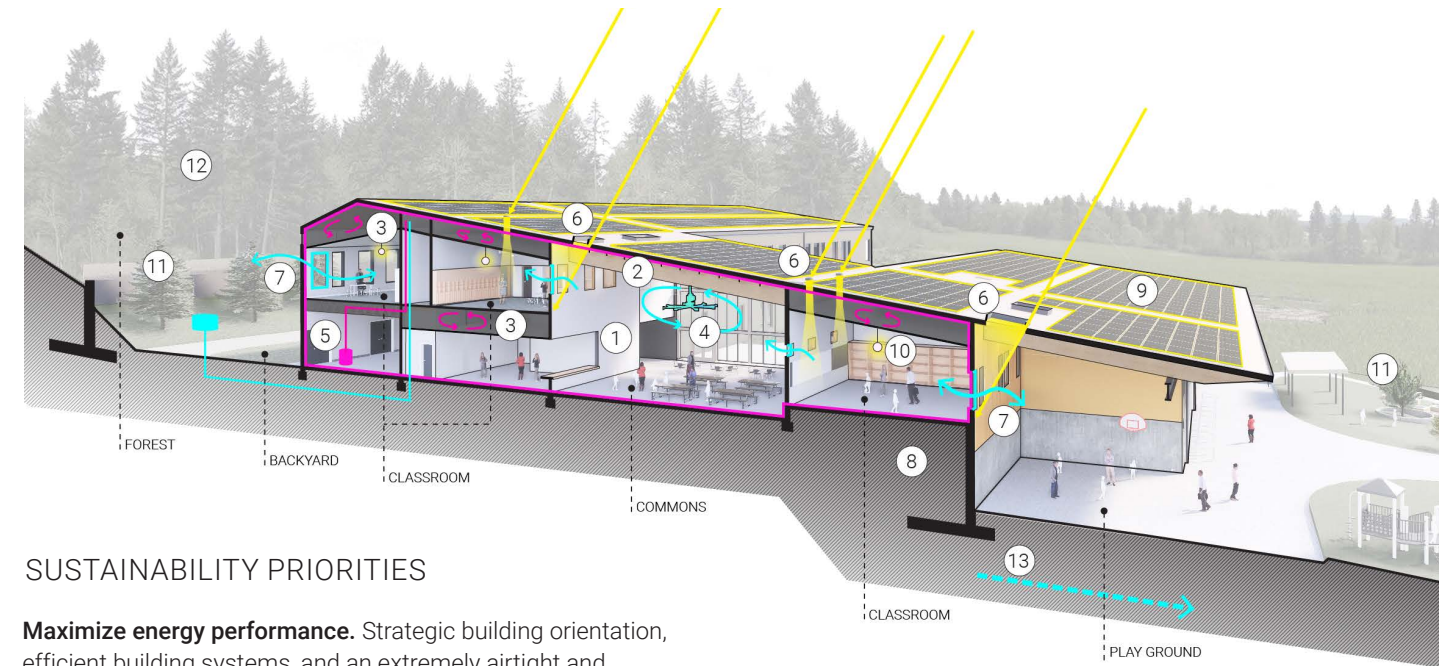
Number of Students
650 (Grades PK-5)

Delivery Method
CM-GC

Completion
2023

TEAM MEMBERS

Owner Tigard-Tualatin School District	MEP Glumac	Landscape Architecture Lango Hansen
Owner’s Representative OTAK CPM	Structural Engineer Catena	Envelope Consultant RWDI, QEC
Architect Bora Architecture & Interiors	Civil Engineer KPFF	Food Service Halliday Associates
General Contractor P&C Construction	Acoustical Engineer Listen Acoustics	Cost ACC Cost Consultants



SUSTAINABILITY PRIORITIES

Maximize energy performance. Strategic building orientation, efficient building systems, and an extremely airtight and well-insulated building envelope minimize energy demand.

Net-Zero Electricity. The school houses its entire program under a broad, sweeping, standing-seam roof oriented to optimize on-site photovoltaic production. Combined with other energy-efficient strategies such as daylight design to offset lighting power, passive heating, and high-performance fiberglass window systems, the 275kW PV array on the roof will allow TTSD to achieve its goal of creating the first Net-Zero Electric elementary school in the District.

A Net-Zero Electric Building produces as much electricity on-site as it uses over an annual basis, but may utilize alternative energy sources other than electricity for specific building functions. A local dashboard displayed in the Commons will monitor building energy end uses and on-site generation to tell the energy story to occupants.

Minimize embodied and operational carbon. The school’s mass timber structure as well as traditional wood framing offsets the use of common and carbon-intensive concrete and steel. Glulam beams define large-span spaces such as the Commons and gym. Combined with safe, non-toxic interior finishes in the building, the use of wood promotes a healthy, relatively low-carbon, long-lifespan building with biophilic benefits for its users.

Promote health, wellness and community. In addition to abundant natural light and low- to no-VOC interior materials, the mechanical systems utilize direct delivery of outside air through energy recovery ventilators (ERVs) that control to maintain space carbon dioxide levels. This elevates and ensures healthy quantities of fresh air are provided to the learning environment. The ventilation system is also equipped with clean air scrubbers that effectively remove dust and other contaminants from the building. Publicly accessible EV charging stations are available for staff and community use to promote sustainable transportation in the area.

HIGH-PERFORMANCE SYSTEMS (ABOVE)

- ① Energy Use Intensity of 23kBtu/sf/year
- ② Airtight and well-insulated envelope
- ③ Classrooms with dedicated 4-pipe fan coil units and shared energy recovery ventilators
- ④ Ceiling fans in common spaces for enhanced thermal comfort
- ⑤ User-friendly system controls
- ⑥ Even, effective daylighting from windows + skylights
- ⑦ Operable windows for natural ventilation
- ⑧ Thermal mass to regulate temperature swings
- ⑨ 275kW solar photovoltaic array
- ⑩ Advanced LED lighting and controls
- ⑪ Native landscaping to minimize irrigation demand
- ⑫ Preservation of existing trees
- ⑬ On-site stormwater management and wetland preservation