

2015 Exhibition of School Planning and Architecture

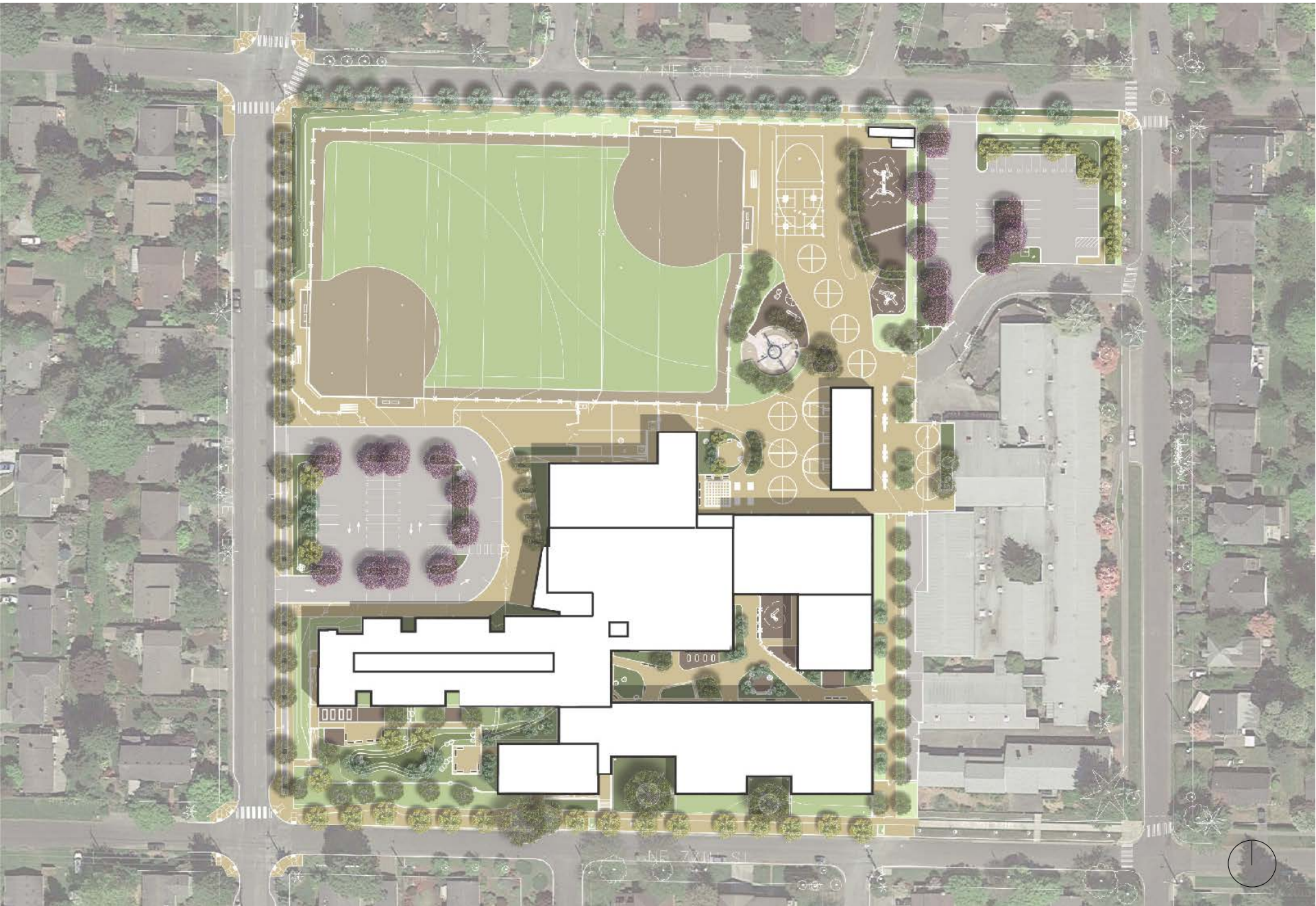
New Thornton Creek Elementary School

Seattle Public Schools, Seattle, Washington

New Thornton Creek Elementary School



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Community Environment



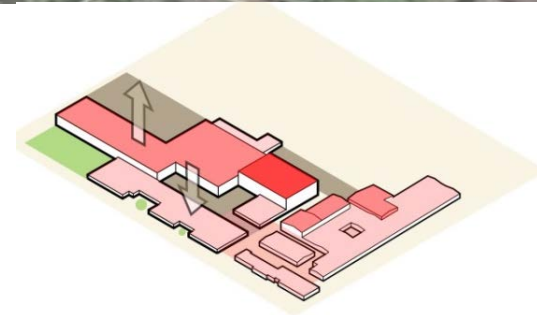
The new Thornton Creek Elementary School site is encompassed by a tight-knit residential community that is actively engaged in school activities. Interior and exterior public amenities have been strategically designed to invite community participation in the educational process. The southwest corner of the site is a learning garden - as well as a community park - that integrates raised garden beds that are maintained by both the students and the community. The garden is anchored by the library creating a civic presence and a space for after-hours events that can extend from the library into the learning garden. The commons, gym, music classroom, stage and art classroom are co-located to create a versatile space for larger community events.

Community Environment



The new school is being built adjacent to the existing school, which will remain on the 9.9 acre site as a flexible use building for the District. Consideration of the existing building's scale as well as the neighboring single-family homes drove the design solution of a single-story volume fronting the street with two-story volumes pushed further back into the site.

The learning garden provides a pedestrian-scaled setback between the street and the two-story volume. A redesigned sports field and playground are shared school and community resources providing spaces for league sports, family recreation and exploratory play.



**VOLUME ADJUSTMENT TO MAINTAIN
PEDESTRIAN SCALE ALONG THE STREET**

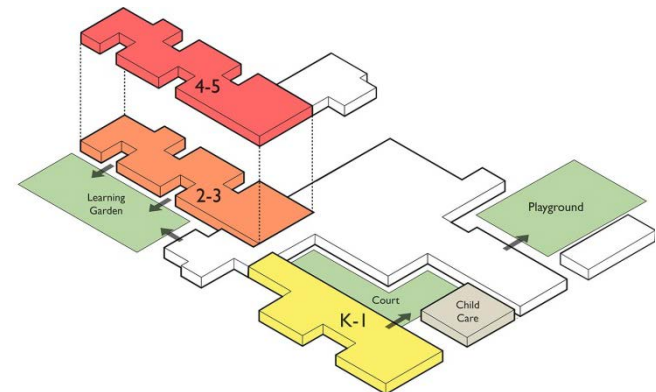
Community Environment



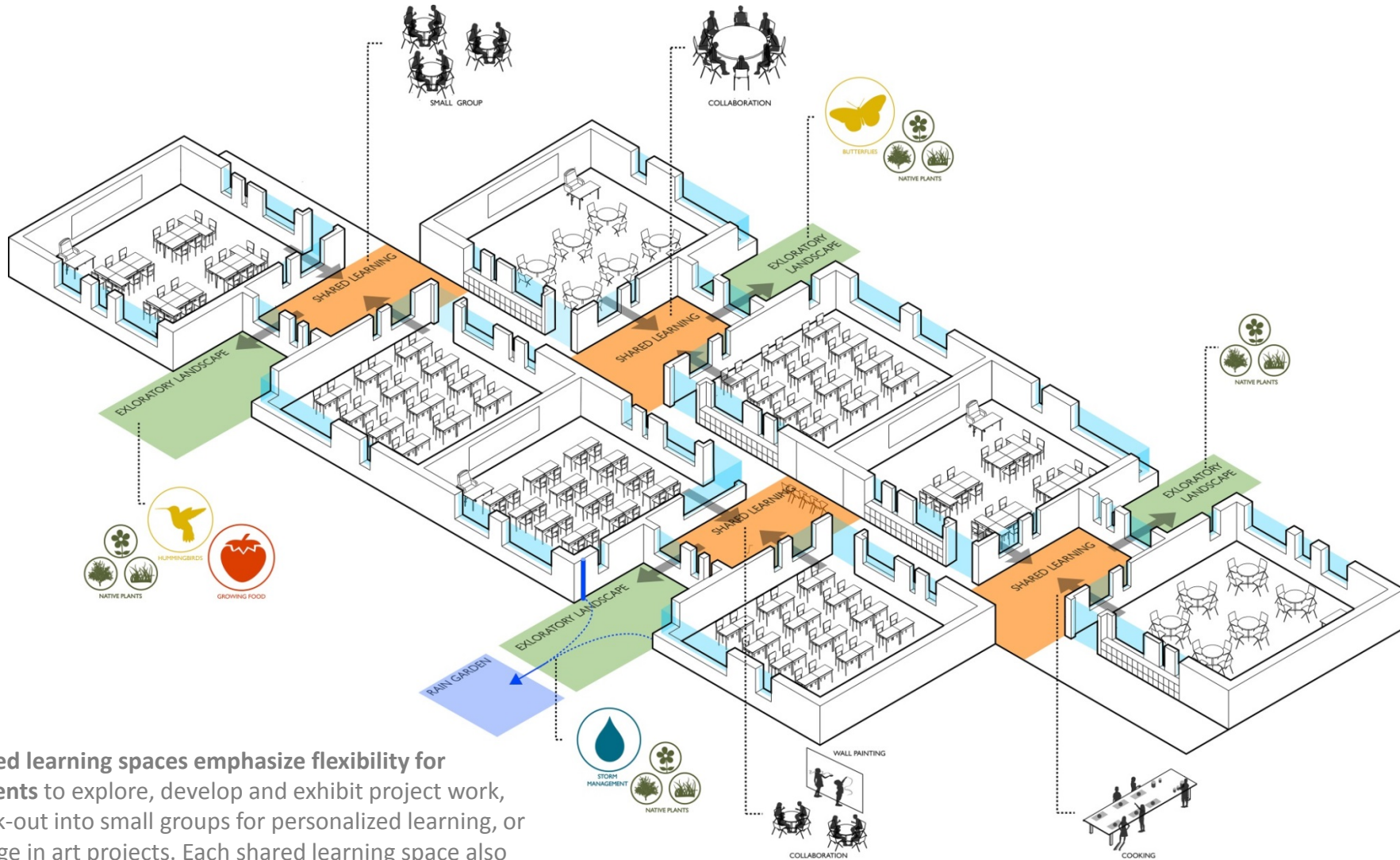
Learning Environment



The pedagogical structure of the school is based on a looping system that creates three distinct communities of K-1, 2-3, and 4-5. The design places the core classroom spaces, special education, art, and associated shared common areas in two offset wings. The two-story west wing contains 2nd-3rd and 4th-5th grades with art and special education book-ending the wing. The one-story east wing contains Kindergarten and 1st grade with art, daycare and special education bookending their wing. Scaled learning spaces interspersed between classrooms break down the scale of the wing to create intimate communities of students with strong relationships to their teachers within the larger school culture.



Learning Environment

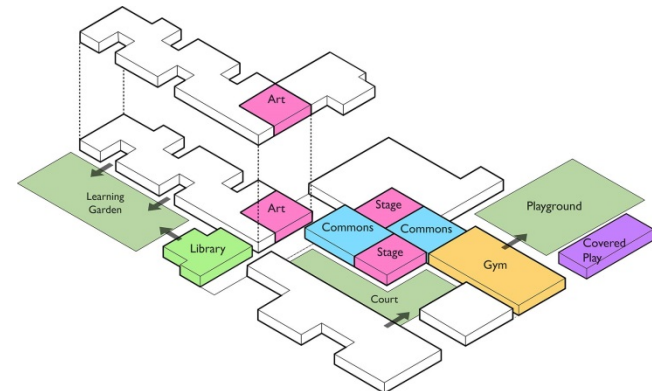


Shared learning spaces emphasize flexibility for students to explore, develop and exhibit project work, break-out into small groups for personalized learning, or engage in art projects. Each shared learning space also has direct access to an exterior exploratory landscape. On the interior, a high level of transparency between classrooms and shared learning facilitates project-based learning and blurs the line between social and educational spaces.

Learning Environment



The core classroom spaces, special education, art, and associated shared common areas are located in two offset wings. The offset classroom wings create a courtyard for a separated play space for kindergarten and daycare. This courtyard functions as a transitional sheltered play space and an outdoor exploratory lab consisting of garden beds, dirt pits, water runnels, native planting and a sound garden wall. The shared learning spaces for the Kindergarten wing are also oriented to open out onto this courtyard to provide a seamless transition between indoor and outdoor learning.



Learning Environment



Oriented for optimal north and south solar exposure, the classroom wings, commons, gym and library will all benefit from natural daylighting. The building location and site amenities are in prime locations for solar exposure, public view and community access. Fields and playgrounds for community and school use will be easily accessed from the adjacent sidewalks and via car from the central parking area.

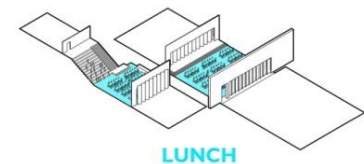
The school's main entry is located in-between the administration/public spaces and classroom wings at the "heart" of the school, providing a central access point to most spaces in the building. The secure entry vestibule guides you into the administration reception area as a visitor, or directly into the "heart" during the start of the school day.

Learning Environment

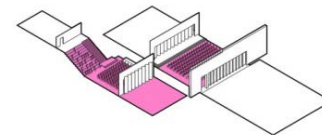


The commons is divided into two volumes, offering students a choice between a smaller or larger scaled environment for eating, socializing, or learning. Adjacent, multi-purpose spaces can be opened up to provide flexibility for different sized performances and school uses.

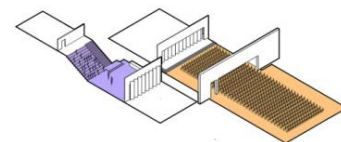
The stair to the upper level is integrated with forum seating that allows the smaller commons to be used for team teaching, presentations, lectures and smaller performances. The larger commons extends into the gym through an operable partition that can house close to 900 for larger events and performances.



LUNCH



SMALL PERFORMANCES



TEAM TEACHING /
LARGE PERFORMANCE

Learning Environment



The library is an extension of the common spaces and integrated into the student flow (as opposed to being a destination), but remains private and acoustically isolated from the busy play and courtyard areas for students who prefer quiet reading time instead of the busy atmosphere on the playground.

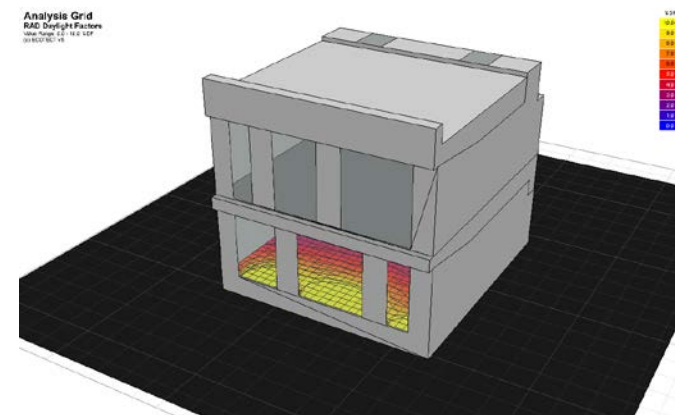
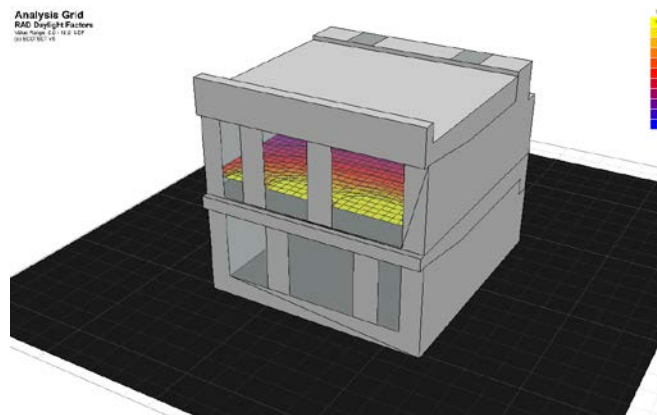
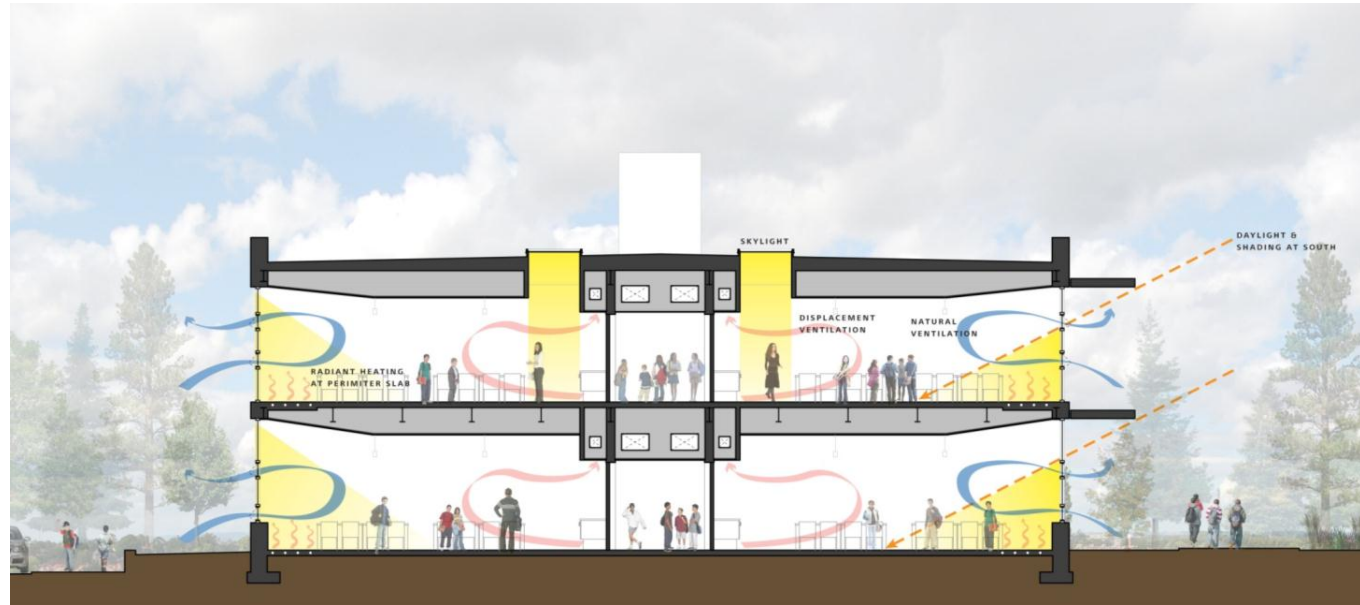
Physical Environment

Sustainable priorities were established through an eco-charrette and continuous dialogue with Seattle Public Schools, including: outdoor education spaces, stormwater infiltration through bio-retention areas and integration of raingardens.

Indoor environmental quality is enhanced by maximizing the benefits of natural daylighting, providing operable windows in each classroom, and by using resilient flooring in all teaching spaces.

Significant reductions in energy use are anticipated due to high-efficiency fiberglass windows, ultra low-flow plumbing fixtures and kitchen equipment, a hybrid mechanical system consisting of integrated heat recovery units and geo-thermal wells that will provide 25% of the energy needs of the new building.

40% of the roof area is designed to accommodate future photovoltaic arrays.



Planning Process



While the Education Specification defined the programmatic, functional, spatial and environmental requirements, a **School Design Advisory Team (SDAT)** was established to engage in a collaborative dialogue to guide principles, pedagogical direction, community integration parameters and help refine the design concept to the specific needs of the program. The team included the school's principal, representative school teachers, parents and neighborhood community members. A series of visioning and design charrettes - along with tours of comparable schools - helped guide this process. Through these discussions ideas emerged regarding the ideal learning environment, including themes around a nurturing and communal space, being of nature, function, relevance, being in balance, and being worldly.

First Level Floor Plan

PROGRAM LEGEND

- ADMINISTRATION
- CLASSROOM
- SPECIAL ED
- LIBRARY
- MUSIC / ART
- CAFETERIA / COMMONS
- KITCHEN
- GYM
- CIRCULATION
- SUPPORT



Second Level Floor Plan

PROGRAM LEGEND

- ADMINISTRATION
- CLASSROOM
- SPECIAL ED
- LIBRARY
- MUSIC / ART
- CAFETERIA / COMMONS
- KITCHEN
- GYM
- CIRCULATION
- SUPPORT



Exhibition of School of Planning and Architecture Project Data

Submitting Firm :	Mahlum
Project Role	Architect
Project Contact	David Mount
Title	Principal
Address	71 Columbia, Floor 4
City, State or Province, Country	Seattle, WA 98104, USA
Phone	206.441.4151

Joint Partner Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Exhibition of School of Planning and Architecture Project Details

Project Name	Thornton Creek Elementary School
City	Seattle
State	Washington
District Name	Seattle Public Schools
Supt/President	Jose Banda
Occupancy Date	September 2016
Grades Housed	Kindergarten – Fifth
Capacity(Students)	660
Site Size (acres)	9.91 acres
Gross Area (sq. ft.)	92,500 SF
Per Occupant(pupil)	140 SF
gross/net please indicate	
Design and Build?	In construction
If yes, Total Cost:	MACC \$28,710,00
Includes:	
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	