

Peter Kirk Elementary School

Lake Washington School District
Kirkland, Washington



01 Executive Summary

A New Peter Kirk

The decision to replace the 1975 Peter Kirk Elementary School came after increasing maintenance issues and capacity concerns with the aging facility. Upon completing a Rebuild vs Remodel study, the district decided to move forward with the decision to rebuild as a more cost-effective strategy. The old facility comprised multiple buildings connected by annexed walkways – The new Peter Kirk brings all of the school's functions under one roof, decreasing access points and increasing safety for the school. With close community ties, Peter Kirk has the advantage of an actively engaged administration, staff, parent network, and neighborhood. Keeping in the spirit of the old Peter Kirk, the new school was designed with robust stakeholder collaboration process, helping to ensure all of the well-loved characteristics of the old school would be incorporated, creating a new building that is definitively Peter Kirk.

Collaborative, Adaptable

Drawing on current and future needs of the community, the school is thoughtfully programmed with a mix of collaborative and quiet spaces, and adaptable for different use requirements. As teaching styles evolve, and we continue to learn the ways that space affects each student's learning process differently, Peter Kirk lends the flexibility needed to evolve with strategies and philosophies. The school was designed for a 50-year lifespan with emphasis on changing the floor plan layouts—classrooms were designed around shared spaces with minimal structural walls between rooms, enabling future generations to shift space as needed.

Spaces are vibrant and engaging, with the intentional use of calming colors and a natural palette. Views to the outdoors from each classroom and space within the school were incorporated, providing generous natural light while decreasing dependence on interior lighting.

Sustainable Solutions & Site Considerations

Sustainable solutions are present throughout the design, taking into account the natural resources of the existing site, and the goal to reduce the facility's environmental impact over time. The significant wetlands and forested areas of the site were carefully studied and strategies were used to mitigate disturbance of the critical areas, demonstrating an appreciation for the natural elements surrounding the new school.

Recognizing that the site was also a great asset to the Peter Kirk students and staff, outdoor education areas were created to encourage learning within the natural environment. Embracing the school's location, connections to the surrounding neighborhoods were also created through pathways, trails, and a community-shared greenspace, furthering the deep connection with the surrounding community.



02 Scope of Work & Budget

Peter Kirk Elementary School is a new in-lieu elementary school, replacing the previous 1975 structure. With capacity for 550 K-5 students, the facility houses 30 classrooms, a new gymnasium, library, administration and staff resources, and flexible commons space with a stage for presentations, and also doubles as a cafeteria.

The design process included preliminary planning and visioning, which involved stakeholder workshops with the district, school staff, parents, students, and community members. In order to minimize disruption to students and staff, the school was constructed on the occupied site while the existing school was still in use. This required thoughtful construction phasing and diligent coordination with the school and construction teams to ensure clear signage and separation of the construction zone to ensure the safety of students and staff.



Owner:	Lake Washington School District
Location:	Kirkland, Washington
Site Area:	15 acres
Building Area:	80,138 SF (78,000 SF District Site)
Student Capacity:	550 Students (690 District Site)
Grades Housed:	K-5
No. of Classrooms:	30
Occupancy Date:	September 2019
Construction Cost:	\$37,000,000
Cost per SF:	\$462/SF
Delivery Method:	GC/CM

03 School & Community Engagement

The Community of Kirkland

Kirkland, an east-side suburb of Seattle located on the shore of Lake Washington. It is bordered by the communities of Bellevue, Redmond, and Kenmore. An established residential neighborhood, Kirkland is filled with families and young professionals. Beach parks and wooded areas are preserved throughout the city, giving residents plenty of opportunity to enjoy the outdoors in an urban environment. Kirkland has undergone significant growth in recent years, driven by changing job markets and technology-oriented businesses taking up residence in nearby neighborhoods.

Due to the region's steady growth, capacity at the existing Peter Kirk Elementary School was strained as the facilities aged. The District made the decision to replace the existing school with a new-in-lieu facility, placed at the same location as the existing school.

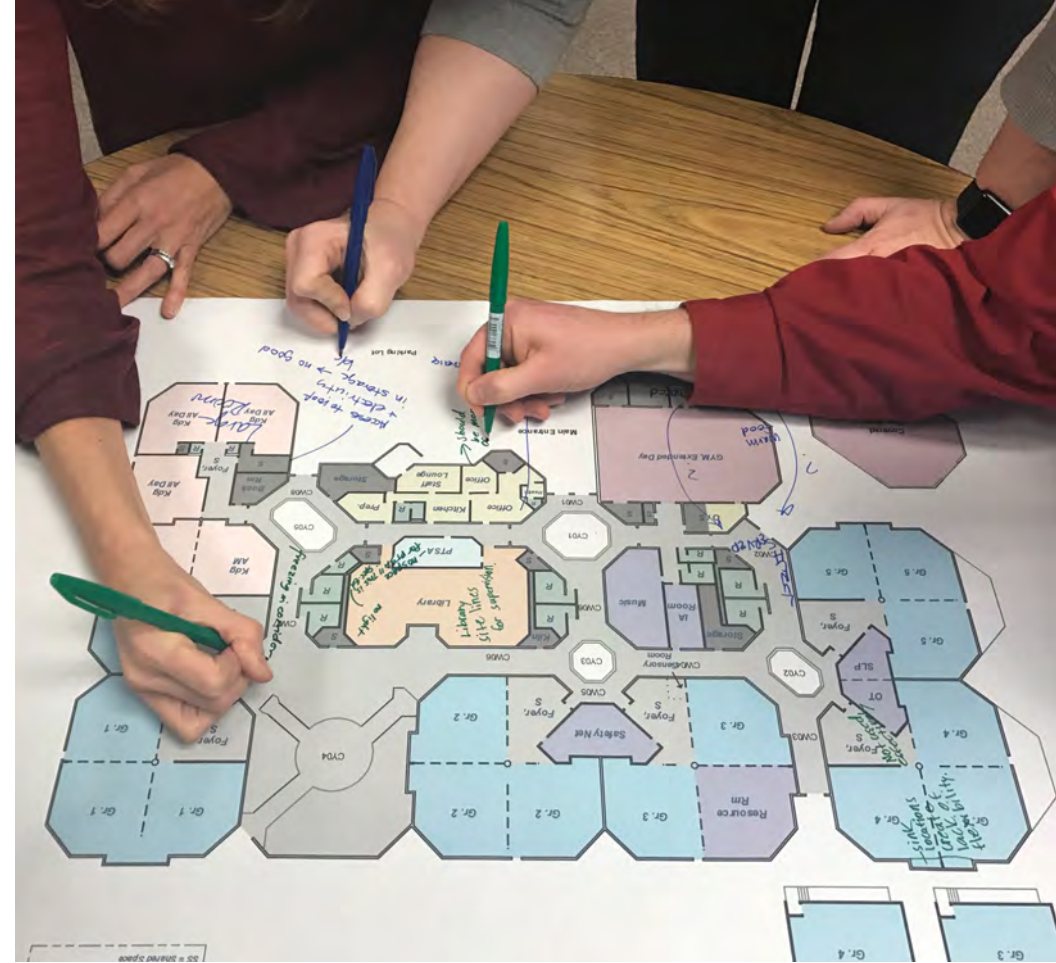
School Construction Input Team Process (SCIT)

Kirkland is a community with active resident participation, the community engagement portion of the project was integral to the early design process for the new Peter Kirk.

To gather important data to inform the design of the new school, the design team engaged a representative group of District staff, teachers, administration, parents, students and community members. Through multiple workshops, it was apparent that the community had strong ties to the school, and plenty of ideas for what should be included in the new facility. When describing the existing facility, themes included active spaces, a collaborative spirit, and a student-centered ethos. In designing the new school, these themes would be carried into the new building, helping to create something familiar with the new structure.

Throughout the collaborative process, various design goals were also established. These early goals were helpful in driving the design forward, prioritizing the educational needs and balancing aesthetic wishes. Of utmost importance were the goals to create a sustainable facility that fosters collaboration, is flexible and creative, that encourages support from the community while nurturing student leadership, and is forward-thinking.

The SCIT team also provided key input for the programmatic layout of the new Peter Kirk, communicating the importance of separations and adjacencies of programs that reflect the wants and needs of both parents and staff. These insights include locating the kindergarten classrooms near the drop-off area as parents walk the younger students directly to their classrooms, separating the gymnasium from the classroom wings to isolate



noise, and centralizing library and art spaces to encourage a school-wide sharing community.

Available Assets and Challenges

Peter Kirk also has the advantage of an established, wooded site. With the goal to conserve wooded areas as much as possible, a key design goal was to create connection to the natural setting through incorporating the preexisting outdoor learning area, creating views throughout the building, utilizing low-impact sustainable design strategies, and bringing in as much natural light as possible.

While an asset, the site itself presented a number of challenges. With a stream running through, a significant effort was required to ensure a Low Impact Design with a significant wetland mitigation plan. Security was an important consideration, due to the stream and the school's connection to the Cross Kirkland Corridor.

The new Peter Kirk was designed and developed on the site with the existing school still operational. This alleviated the need for a move to an interim site, and helped the district avoid additional cost and logistical considerations. While advantageous from an operational standpoint, it also presented the challenge of fitting the new school on the site, with its numerous natural obstacles, and maintaining proper safety separation. The school was completed through meticulous planning, mindful coordination, and constant communication between the district, school staff, contractor and design team.

The School Construction Input Team participated in a number of activities to inform the design of the new Peter Kirk. Below, students help celebrate groundbreaking, deepening each student's connection to and ownership of the new school.



04 Educational Environment

VISION: Every Student Future Ready

MISSION: Peter Kirk is a creative learning environment where children feel they are valued and safe. Staff and community collaborate to provide the highest quality education to prepare students to be life long learners.

Every Student Future Ready

Recognizing different learning styles, the diversity within the district, and the many different pathways that students may choose upon graduation, the district's goal of "every student future ready" helps to prepare students for college, to join the workforce, and to pursue personal success, regardless of what that may mean for each individual.

The work to achieve the district's "future ready" goal begins at the earliest levels of education, by providing support needed to continue a future of engaged learning. Peter Kirk's mission is to provide "a creative learning environment where children feel they are valued and safe. Staff and community collaborate to provide the highest quality education to prepare students to be life-long learners". With a new facility to support this mission, and the tools and spaces to fit their needs, staff and administration are better able to serve this mission.

Flexible Spaces for Changing Needs

Guided by the mission of the school and the goal of the district for "every student future ready" the new Peter Kirk encompasses a diverse mix of spaces, both active and quiet, for student and staff use. Providing students plenty of options for peace and calm in tucked-away nooks or separate work rooms was important for learning styles that require minimal distraction, focus, and introspective thought. For active learners who thrive in more high-energy arenas, group collaboration spaces were provided throughout the school to encourage interaction and teamwork.

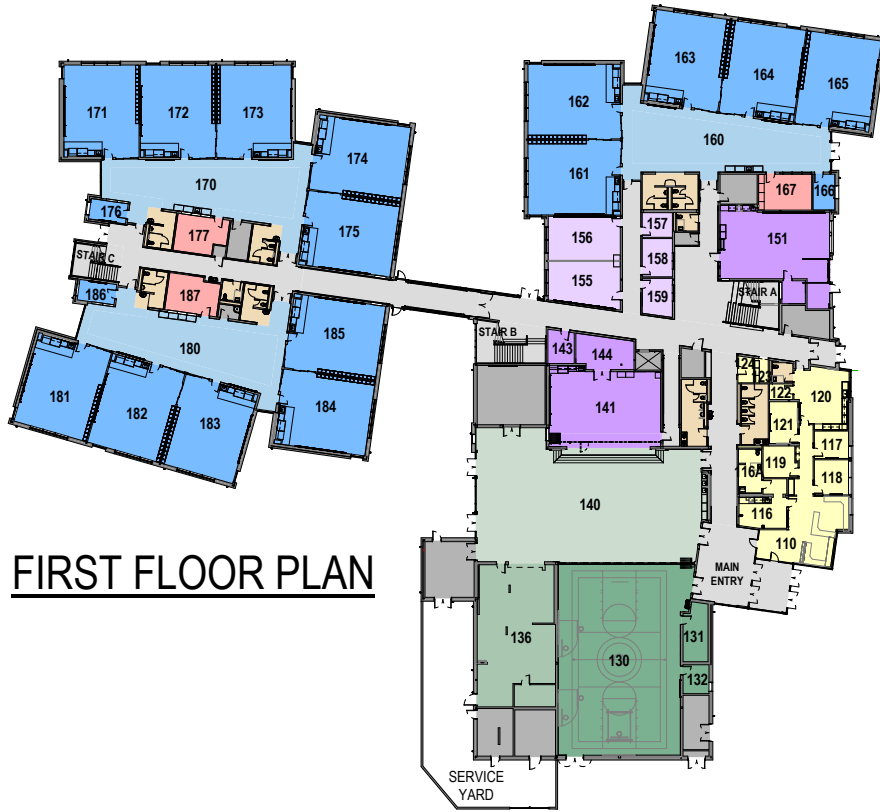
Technology was a key component in the classrooms, as we move toward more technology-based learning every day. Each classroom includes smart boards and computer-based projectors, and is wired to incorporate changing technologies as more advanced tools become available.



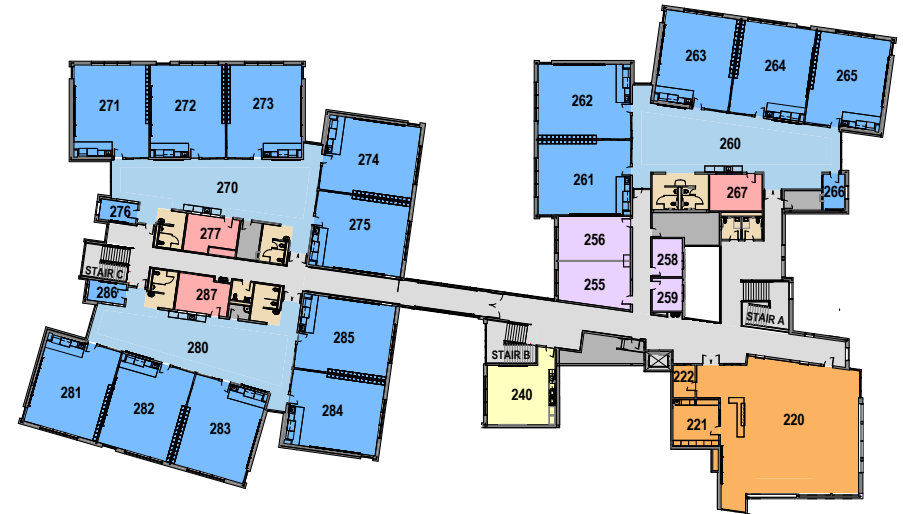
The configuration of the classroom pods, with five class spaces around a shared collaboration area, provides a dedicated space for each grade to interact with one another within the pod. The use of sliding glass doors between the classrooms' shared walls and to the collaboration space provides added flexibility for group teaching, inter-classroom projects, and grade level projects.

Peter Kirk's exterior spaces provide additional outdoor learning areas. Accessible by exits at each pod, the outdoor spaces include seating options and level greenspace for outdoor teaching opportunities. Native, low impact plants were selected as not only a sustainable choice, but as a nod to the natural environment and history of the site, providing opportunities for teaching and drawing connections between the past and present.














Programming efforts at Peter Kirk resulted in a pod-style classroom layout with collaboration spaces at the core. Administration spaces, specialty classrooms, the library, and the commons are centrally located and easily accessible by all grades. Quiet spaces are located throughout the school, strategically positioned under stairs, in corners, and at the end of corridors.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

- | | | | |
|--|-------------------------------|---|-------------------|
|  | ADMINISTRATION |  | LIBRARY |
|  | ART / SCIENCE / MUSIC |  | RESTROOMS |
|  | CLASSROOMS / CORE INSTRUCTION |  | SHARED LEARNING |
|  | CIRCULATION |  | SPECIAL SERVICES |
|  | COMMONS |  | TEACHER PREP |
|  | GYM |  | UTILITY / STORAGE |
|  | KITCHEN | | |

Classroom pods are organized around a central shared space, providing flexibility for group and individual learning, quiet time, or student socializing. Classrooms are connected with sliding glass doors and partition walls that can be expanded for increased capacity and group teaching.



Each classroom is technology enabled, utilizes soft and hard-form seating, and uses movable furniture for flexibility. Views to the outdoors are present in each classroom.



Outdoor views abound at Peter Kirk, giving small breakout spaces a sense of serenity.



05 Physical Environment

Physical Attributes

Peter Kirk Elementary is approached from an entry plaza connecting the school to the public parking and drop-off loop from the south and a bus loop from the northwest. To the west of the entry plaza are the primary outdoor play spaces including a covered play area, grass field, and soft playground area. The school is split into two 2-story building wings (North and South) connected by a corridor or "Bridge". The teaching spaces feature 30 classrooms divided into six shared learning areas or 'pods' housed in both building wings.

The exterior of the building is predominantly masonry, with the inclusion of vibrant metal panels. The overall aesthetic of the building creates visual interest at a variety of scales, viewing angles, and lighting conditions. The exterior is comprised by concrete masonry units in a palette of various colors and textures. Patterning of random horizontal lines using three CMU types and colors echoes the layering, textures, and tones found in the site's natural environment. Darker materials were chosen to allow the building to recede from the street, while contrasting yellow metal panels punctuate special areas of the building.

The main entry is accentuated by a butterfly roof with a sunny yellow soffit below that continues into the main office and administrative space. Storefront windows surround the entry and administrative space providing clear views to the entry plaza and play areas. As you continue into the school, a double-height lobby provides space for gathering outside the Gym/Commons. The balance of the South wing features the Music room which doubles as a stage opening into the Commons, Art/Science room, Resource rooms, Library, and two classroom pods. The central stair connects the floors visually through a two-story opening lit by a skylight. The North wing contains the remaining four classroom pods.

All vertical circulation in the building is accompanied by gathering spaces expressed through changes in material and scale. Both building wings have different floor elevations to better accommodate existing site grades. Connection is made through the 'Bridge' by slightly sloped corridors lined with windows linking the interior of the building with the surrounding environment. The separation of the two buildings also allows for space between the wings to provide ample daylight into the classrooms and adjacent spaces.

Community Context

Peter Kirk Elementary School is located in a well-established residential community, tucked into a wooded site. The existing vegetation was used to enhance the site, acting as a screen from the surrounding community and residences, and reinforcing the wooded character of the existing school's setting which was so important to community members and parents. The site is adjacent to the Cross Kirkland Corridor, and site design



was meant to encourage exploration of the surrounding wooded area through connecting trails, while also providing another means of access for neighbors, parents, and students.

The school's grass play field is situated at the west boundary of the site, between the two main entrances to the school. The significant open space is part of a joint partnership with the City of Kirkland, encouraging community use and interaction. The play field is accessible from both parking lots, providing ease of access for community events.

Inspiring Spaces for Growing Minds

Utilizing the natural environment, the spaces cultivate a sense of calm within the school. Windows throughout provide abundance of natural light and views to the outdoors, while graphic representations of nature also included in interior common areas help to create a sense of being "in the trees". The interior color palette uses warm natural materials, and contrasting shades of blues and greens, while strategic pops of bright color create add vibrancy to active spaces.

05 Physical Environment

The spaces themselves are flexible and varied. By incorporating an array of mixed spaces, both active and quiet, students are able to move through the school and find a space that meets their specific needs. Classrooms are designed with glass doors connecting to the adjacent classroom, encouraging multi-class teaching and learning, and providing adaptability for changing curriculum. The use of open collaboration spaces at the center of the classroom pods further inspires cross-class participation, providing students with the space to work together. Quiet spaces tucked within the school, such as beneath stairwells and at library nooks, give students space for introspection and peace.

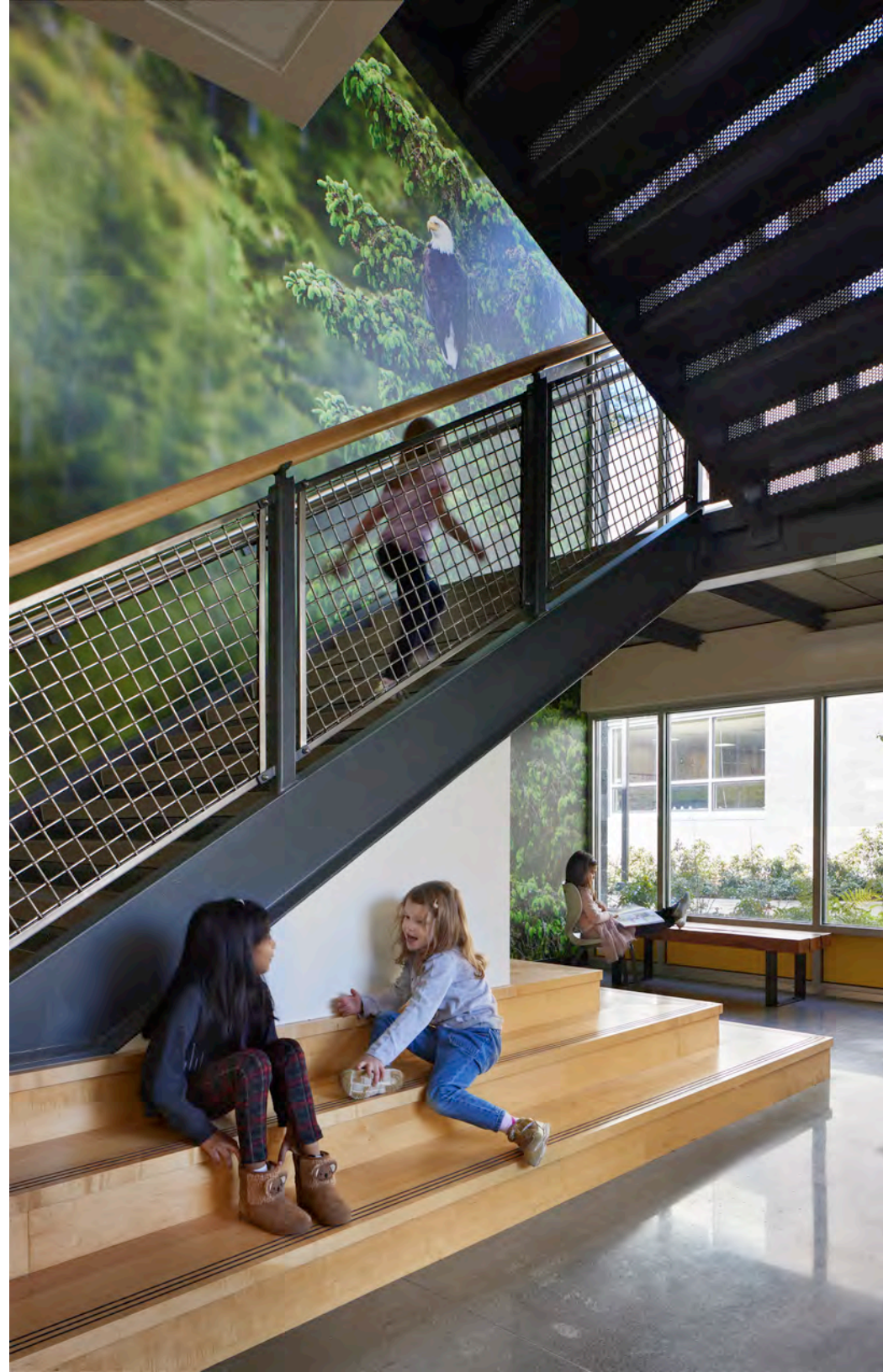
The configuration and signage throughout the school encourages growth and continuous learning. Classrooms pods, arranged at angles to capture the maximum amount of natural light, are organized by grade. The youngest grades are located closest to the administration area and move deeper within the school as grades progress, creating a sense of increasing independence as students progress throughout their time at Peter Kirk. At the entrance of each classroom pod students are welcomed by signage depicting the profile of a Washington state mountain. As a student ascends grade levels from year to year, the height of the mountain ascends as well, with the Kindergarten pod entry welcomed by a depiction of Mt. Si, and the fifth grade wing represented by Mt. Rainier. This fosters a sense of progression and connection to the local environment.

Sustainability

Sustainability was at the core of the design for the new Peter Kirk, taking into account the existing site and the goals outlined by the Design Advisory Team. Due to the forested areas and slope, a significant wetland mitigation plan was put into place early in order to minimize the impact to the critical natural areas. This led to a Low Impact Design strategy for the western portion of the site, creating setback from the main building and using natural vegetation and rain garden-style landscaping.

To power the building and reduce environmental impact, geothermal wells are used to generate heat for the building. Over 30 geothermal wells contribute to the efficiency of the new Peter Kirk. On the roof, the building is ready for future installation of photovoltaic panels to generate solar energy. Throughout the school, energy efficient fixtures and lighting were utilized, as well as the addition of ceiling fans for cooling in the warmer months.

To further minimize the footprint of the new school, the use of existing trees that needed to be removed for construction were utilized throughout the building's interiors. Trees were used for the casework at the administration main counters and hallway benches. There was also an old house on the site that was removed prior to construction. Boards and beams were salvaged from the house and transformed into the library desk area, with decorative paneling reaching the ceiling, connecting the old with the new.



Biophilic design principles are utilized throughout, with the use of interior graphic elements, natural material choices, and views to the outdoors. Benches are strategically placed for accessible student quiet spaces.

Welcome



The Sky Bridge connects the main administration and commons areas to the classroom wing, capitalizing on views of the wooded site and landscaped areas below, and allowing natural light to enter both wings.



A student plaza outside of the Commons provides extra space for socializing, outdoor activities, and small group learning.



The grounds surrounding Peter Kirk are carefully curated using low impact design strategies.



The exterior utilizes different colors and textures of CMU, metal panels, patterning, clean lines, and pops of color to create visual interest.



06 Results of the Process & Project

Achieving Educational and District Goals

With a variety of adaptable and flexible education spaces, and the preservation of outdoor learning areas, the new Peter Kirk helps to achieve Lake Washington School District's goals for "future ready" students, in a collaborative and hands-on learning environment. The diverse mix of spaces provides areas for different learning and teaching styles, ensuring students are comfortable and able to feel safe knowing there's a place for them. Incorporating technology into all of the school's learning areas ensures the facility is "wired" for success, enabling students to use tech in every day lessons and future-ready for evolving teaching philosophies.

Community Support

Through enhancing the school site's connection to the Cross Kirkland Corridor and the shared green space in partnership with the city of Kirkland, the community is able to interact with the new Peter Kirk in a way that is organic and unfettered. Community events are held on the school's green space and it is not uncommon for neighborhood families to visit Peter Kirk to utilize the playfields, play structures and covered basketball areas.

Unintended Results

In light of COVID-19, the adaptable spaces were utilized to provide proper social distancing for students, in accordance with CDC guidelines. The extra spaces were utilized to meet space requirements, and also provided students additional safety when returning to in-person learning.

While the inclusion of significant outdoor greenspace provided an opportunity outdoor learning, the school was able to expand outdoor learning opportunities on their own after occupying the school. With the expansive outdoor spaces, the Peter Kirk Parent-Teacher Association was able to install raised planters on the (south) side of the school, further expanding the outdoor curriculum.

Budget

The owner, design team, and contractor were actively involved during the GCCM to make suggestions during the design process to achieve cost savings during construction. An example of this is the selection of exterior siding and glazing. Initially the project included a wider variety of materials, but the contractor was able to achieve cost savings through streamlining materials such as the CMU for the majority of the exterior wall material and using all storefront systems instead of a combination of storefront and fiberglass. The result was a discount for volume pricing and reduced labor and mobilization costs by having the work performed by fewer trades.



Outdoor play is separated from the main entry plaza by thoughtful landscaping elements. The green space is a joint partnership between the school and the City of Kirkland, and makes an excellent space for community.



