

# **2023 Exhibition of School Planning and Architecture Northeast Region**

Cristo Rey Philadelphia High School

Philadelphia, PA



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**Community Environment:** Cristo Rey Philadelphia is an independent, Catholic high school for students of all faiths, who could not otherwise afford a private education. Cristo Rey Philadelphia opened at its first location in 2012 and its curriculum combines rigorous academics with professional work experience in businesses where the students are mentored by college-educated adults. To date, there are 37 Cristo Rey Network high schools operating successfully across the United States.

The Cristo Rey community had a vision for neighborhood revitalization. They found an overgrown site with a derelict warehouse that was a danger for the surrounding community and together we transformed it into a welcoming place of vibrancy, warmth, and a home away from home for its students.





# A Home for 600

**Community Environment:** In 2016, Cristo Rey Philadelphia purchased a 7-acre site, located at 17th and Allegheny Avenue, that included a 5-story, 55,000sf heavy timber and masonry warehouse building. Cristo Rey Philadelphia chose to rehabilitate the warehouse as part of the development of their new high school campus. This new high school includes the renovation of the historic warehouse building and a new 48,000sf addition for school program spaces to accommodate 600 students. The image below shows the exterior plaza and garden that becomes a buffer between the parking lot and the school and is a space for dining, outdoor instruction, and informal gathering. It allows the school to expand its learning environment to the outdoors and creates a secure and private space, an amenity, which students growing up in the city rarely experience.





# Learning Labs

**Learning Environment:** The school provides Cristo Rey with 24 classrooms, including art, science, and STEAM labs, a cafeteria, administrative offices, a chapel, a fitness center, and a gymnasium with seating for 600. The site also includes a new turf soccer field, parking, and outdoor instructional and gathering spaces. Construction was complete for the 2019-20 school year.





# Space for Collaboration

**Learning Environment:** The plan is designed to ensure both independence and safety by including spaces where the students can work collaboratively, expanding beyond the classroom. These spaces are strategically placed near faculty or administration suites, so an adult is always able to observe student activities without interfering with their sense of independence and autonomy. The warehouse space is designed with classrooms on the exterior walls opening onto a central collaboration space as shown in the photo to the right. There is no defined media room/library in the school, so instead of going to a library, the library comes to the students, as they can connect to online resources in a variety of spaces throughout the building.





# The Tricycle Factory

**Physical Environment:** The heavy timber and masonry warehouse on the purchased property was the A. Mecky Company Building in the Allegheny West neighborhood of Philadelphia. The 5-story building was built in 1910 and is red brick with cast stone and terra cotta detailing. The industrial building was of local significance as the only manufacturer in Philadelphia of “juvenile wheeled goods” which included tricycles, wagons, and wheelbarrows. A. Mecky was an innovator in this field and the period of significance was from 1910 until 1931 when the company was purchased and relocated to Rochester, NY. The building was placed on the National Register of Historic Places in 2017.





# Heavy Timber Challenges

**Physical Environment:** The renovation of the existing warehouse offered significant challenges. The building had fallen vacant in 1980 and it was during this time that the roof had caved in. Due to this, water easily infiltrated the building and over time the heavy timber wood decking and structure started to deteriorate. When construction began in 2017, nearly 40% of the heavy timber structure and decking needed to be replaced. In the northern section of the building, the top 2 floors had partially collapsed. The heavy timber pulled from the warehouse was saved for reuse and was recycled into the project as furniture, flooring, and wall finishes throughout the new school.



BEFORE



BEFORE



# Historic Replica Windows

**Physical Environment:** The scope of work for the renovation included repair and repointing of the existing red brick on the north and south facades. The terra cotta coping along the parapet was replaced where missing and the flat roof was replaced. When the property was purchased, the windows on the north elevation were boarded up and on the south elevation, the windows in place were non-historic aluminum windows. Only a couple of the original wood 12/12 double-hung windows remained as shown to the right. These were used as a template for the approximately 50 aluminum, double-paned, historic replica windows that were made custom for this historic building.





# Exposed Materials

**Physical Environment:** On the interior of the warehouse, the design intent was to expose as much of the building's industrial elements as possible in order to convey the historic industrial character of the building. Heavy timber structure and wood decking at the ceiling were hand scraped and coated with a clear sealant. The interior brick was left exposed wherever possible. The existing stairways were removed as they were no longer code-compliant, but the elevator shaft was able to be reused by removing the existing freight elevator and replacing it with a new passenger elevator. The "scar" of the removed stair is still visible on the exposed brick in a few classrooms.





# Mixing Old and New

**Physical Environment:** One of the main design drivers throughout the project was how to integrate new construction with historic construction. The project team felt strongly that there needed to be modern elements represented in the warehouse and characteristics of the warehouse in the new addition. The open floor plan of the historic warehouse was adapted to accommodate a cafeteria on the first floor and classroom space on the floors above and it showcases more modern fixtures and furniture. In the new addition, red brick is used on the exterior to match the warehouse. There are details in the elevation of the addition that are meant to be related to, but not match, the warehouse. The interior of the new addition showcases the reclaimed timbers that were salvaged during the renovation. Heavy timber beams were used to fabricate the front entry reception desk and the framed openings to all the classrooms.





# Developing Design Drivers

**Planning Process:** A rigorous process of collaboration and inclusiveness led to the design of the project. The process began in the spring of 2016, when workshops led by Wonder By Design, were held with the various constituents, including teachers, students, administrators, parents, board members, and the surrounding community. At these workshops, the participants were encouraged to think beyond the walls of their existing building and the confines of their existing pedagogy, imagining a future for their new campus. From these workshops, a manifesto was created that included seven design drivers that shaped the design of the physical environment that has become Cristo Rey's new campus. The design drivers for the new Cristo Rey campus embodied dignity, inclusiveness, preparedness, spaciousness, levity, transparency, and vibrancy.

Our students, through their actions and attitudes, embody the spirit we wish to release in the wider world.

Our new campus must become the physical embodiment of the values we wish to instill in our students -- and throughout the city we love.

This is our path, and our future.

I see benches around the atrium -- and kids sitting comfortably with a feeling of joy.

I see an open lounge area that also has spaces for privacy.

I see brightness -- and bright ideas. Colorful and unifying.

I see a playing field on top of a building.

# Creating an Entry

**Planning Process:** Once the programming and conceptual phases were completed, the work started on developing a new campus design with Cristo Rey. Placed along Allegheny Avenue, the new classroom addition is separated from the historic warehouse by a two-story, double-sided glass lobby. This lobby allows the students and faculty that utilize public transportation to commute to the school to enter the building from Allegheny Avenue and the people coming from the parking lot to enter from the north side of the building into the same secure lobby space. The double-story glass allows views from the street straight through the building to the outdoor plaza, energizing the view from the sidewalk and creating transparency for the neighborhood.



ALLEGHENY AVENUE



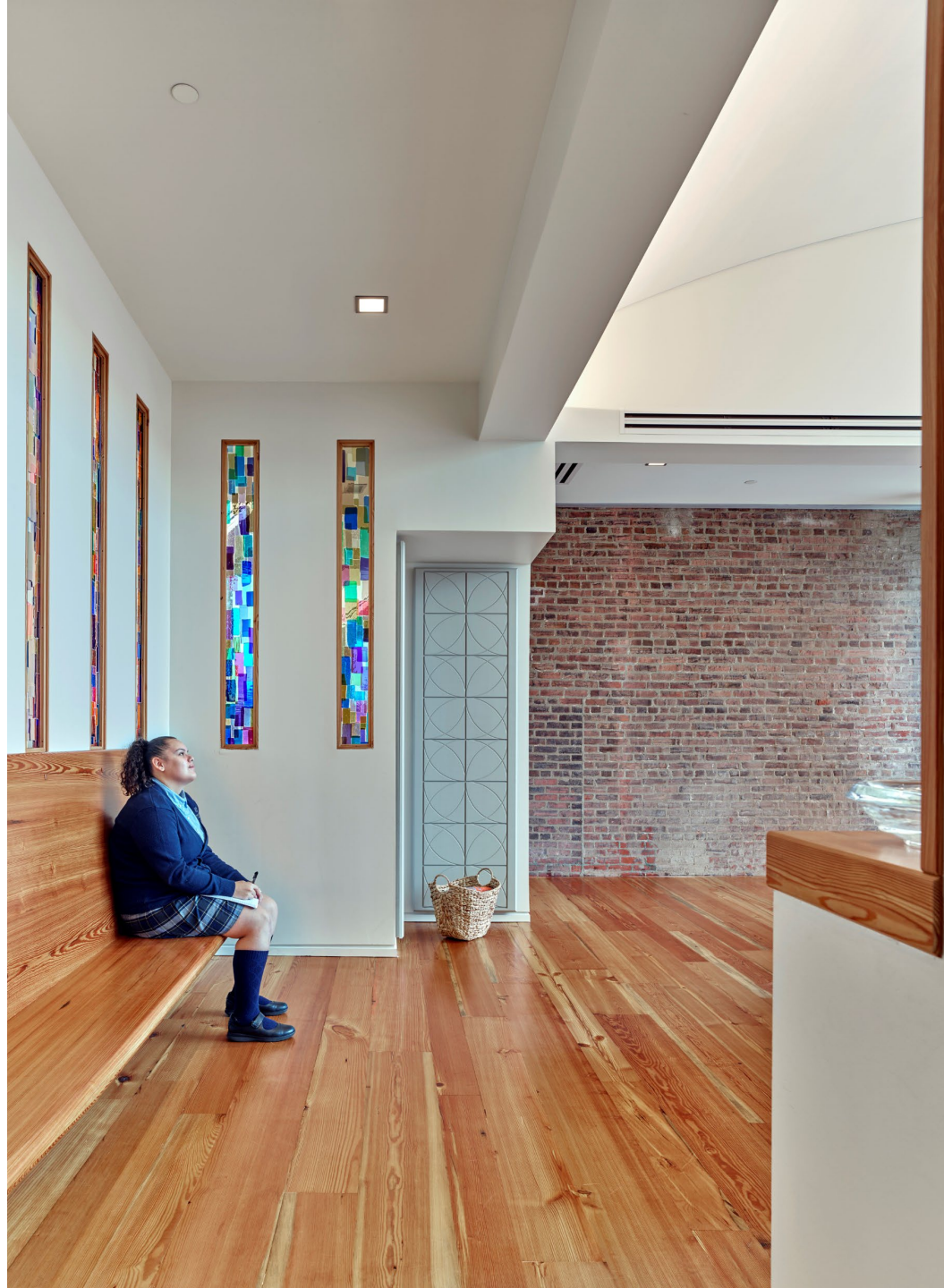
# A Variety of Spaces

**Revolutions in Learning:** The building plan provides for a variety of types of spaces, as well as an abundance of ways to connect to technology and furniture that can be reconfigured as needed, accommodating the program as envisioned today and the changes that will inevitably arrive in the future. It is in these spaces that the students gain the tools to be prepared for a changing world, and the physical space must provide the flexibility to change along with the needs of the academic program. The Cristo Rey Philadelphia campus has become a place that can face the challenges of today and will respond to the changing world. It has become a place that students are proud to call their school and is a catalyst for community revitalization.



# A Place to Realize Potential

**Revolutions in Learning:** Cristo Rey's students are faced with many challenges each week, from a rigorous academic program, and a workday in an unfamiliar corporate environment, added to the stresses of living in low-income neighborhoods in the city of Philadelphia. Their new campus has been designed to be "a place where the students can leave their emotional worries behind, where they can walk with light-heartedness." It was designed to feel like a home that reflects their values, in a vibrant environment that challenges and encourages them with space to experiment and explore, and comforts them with a feeling of safety, security, and peace. Breathing new life into this historic building, while creating a school that inspires its students to "realize their full potential" invigorates us, as architects, as we strive to improve the lives and communities we serve by creating exceptional architecture.





# First Floor Plan



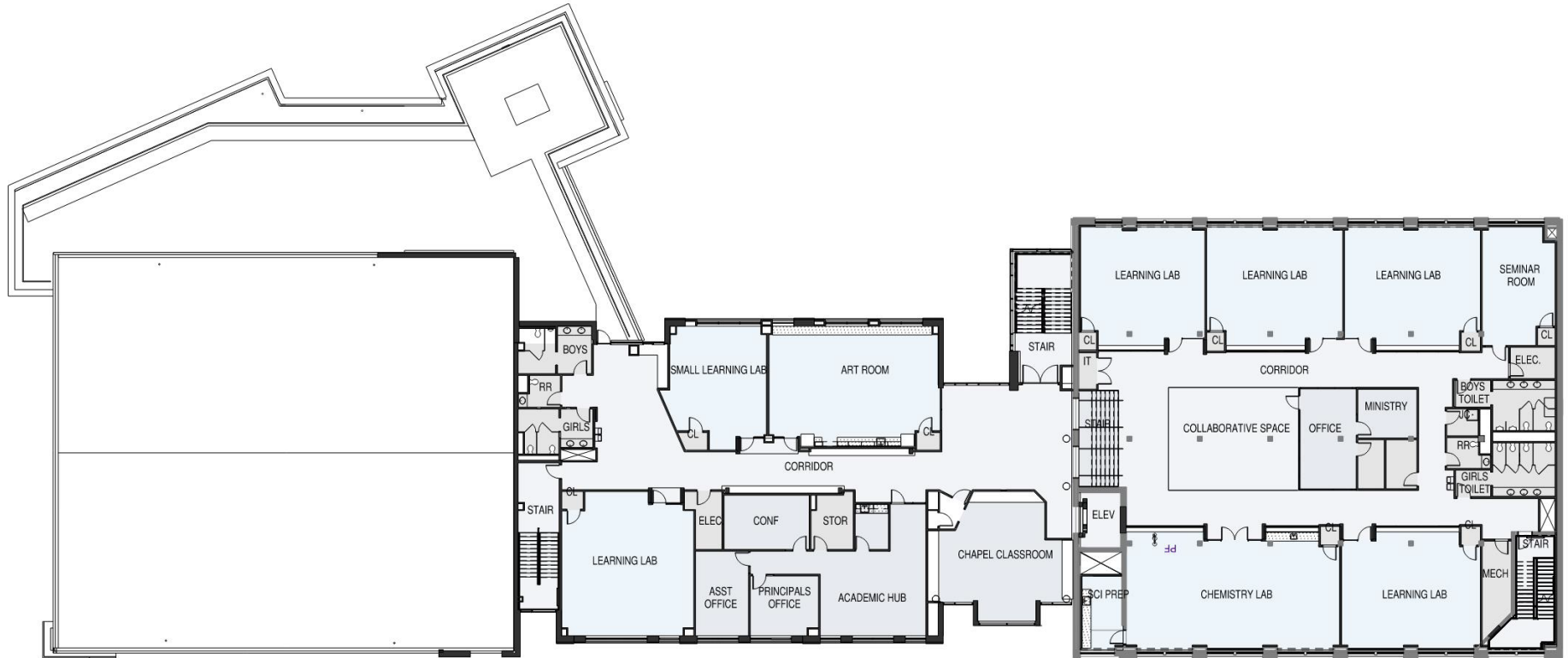


The floor plan for the second floor includes the following labeled areas:

- Top Left:** MECHANICAL, ELEC., FITNESS ROOM, WC/ SHOWER, WC/ SHOWER, LEARNING LAB, STAIR, FLEX SPACE, FITNESS CORRIDOR.
- Bottom Left:** A large open area with a diagonal cross pattern.
- Center:** NURSE, STAIR, SMALL LEARNING LAB, OFFICE, OFFICE, OFFICE, STORAGE, COUNSELING SUITE, CONF, CONF, OFFICE, CORRIDOR.
- Bottom Center:** STAIR, LEARNING LAB, LEARNING LAB, LEARNING LAB, a large open area with a diagonal cross pattern.
- Right Side:** LEARNING LAB, LEARNING LAB, LEARNING LAB, SEMINAR ROOM, ELEC., BOYS TOILET, JC, RR, GIRLS TOILET, COLLABORATIVE SPACE, OFFICE, OFFICE, OFFICE, COLLEGE COUNSELING, PRINT/ COPY, BIOLOGY LAB, LEARNING LAB, MECH, STAIR.
- Bottom Right:** SCI PREP.

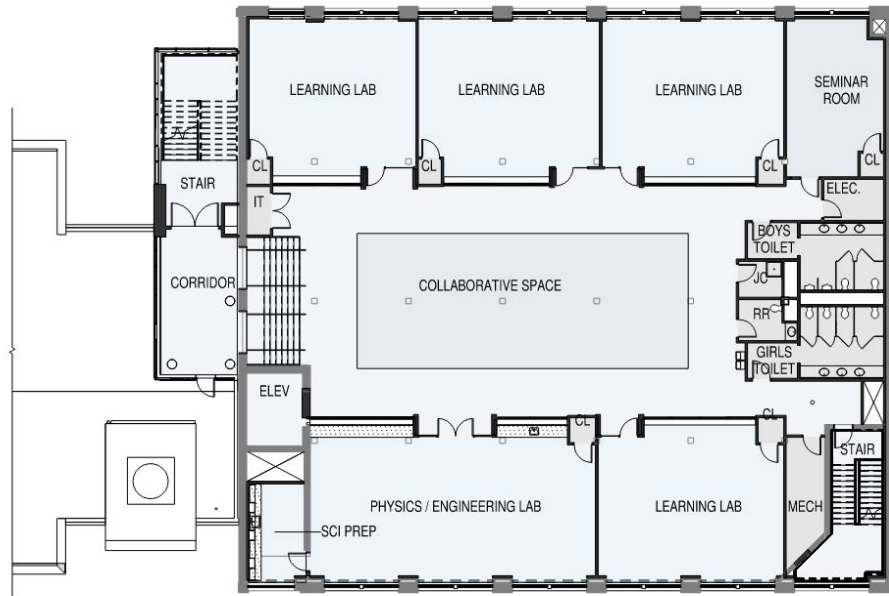


# Third Floor Plan

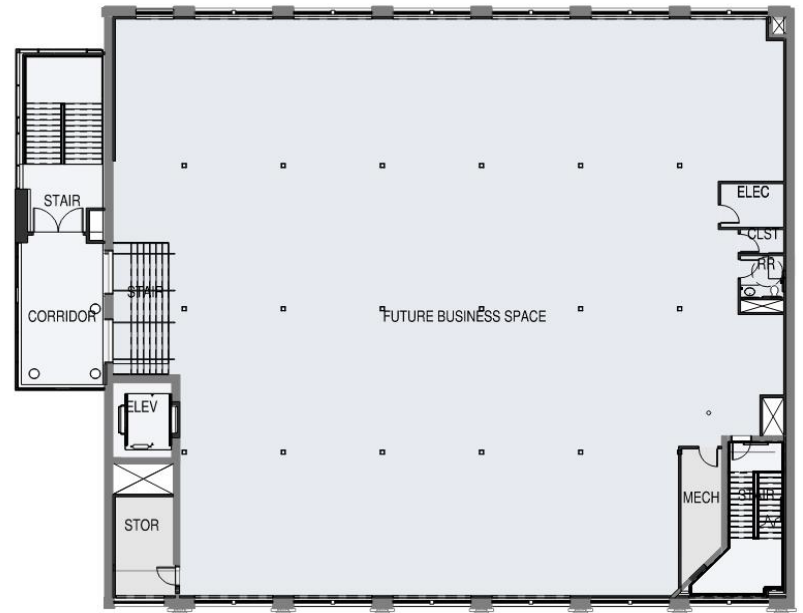




# Fourth & Fifth Floor Plan



Fourth Floor



Fifth Floor



# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	Blackney Hayes Architects
Project Role	Architect
Project Contact	Jennifer Crawford / Carmen Bushong
Title	Principal in Charge/ Architect
Address	600 Chestnut Street, Suite 1200
City, State or Province, Country	Philadelphia, PA 19106
Phone	215-829-0922 ext. 118

Joint Partner Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Planner on Record:	Blackney Hayes Architects
Name	Same as above
Address	Same as above
City, State or Province, Country	Same as above
Phone	Same as above
Email	cbushong@blackneyhayes.com

Construction Firm:	Clemens Construction Company, Inc.
Project Role	General Contractor
Project Contact	Steve Pouppirt
Title	President
Address	1435 Walnut Street
City, State or Province, Country	Philadelphia, PA 19102
Phone	215-567-5757

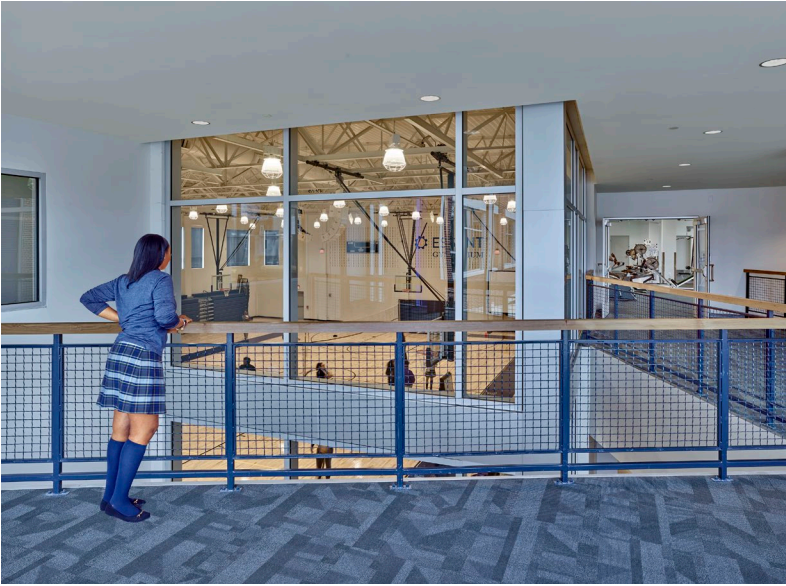
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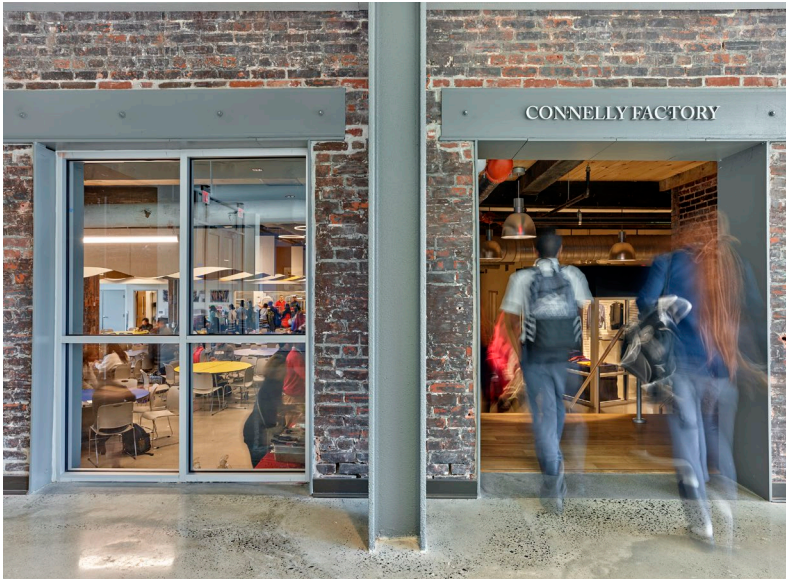
<b>Project Name</b>	Cristo Rey Philadelphia High School
<b>City</b>	Philadelphia
<b>State</b>	Pennsylvania
<b>District Name</b>	Philadelphia
<b>Supt/President</b>	Current: Tom Shoemaker During Construction: John McConnell
<b>Occupancy Date</b>	Fall 2019
<b>Grades Housed</b>	Grades 9-12
<b>Capacity(Students)</b>	600
<b>Site Size (acres)</b>	7-acre site
<b>Gross Area (sq. ft.)</b>	107,279 SF
<b>Per Occupant(pupil)</b>	30sf/ occupant
<b>gross/net please indicate</b>	net in classroom
<b>Design and Build?</b>	
<b>If yes, Total Cost:</b>	
<b>Includes:</b>	
<b>Site Development:</b>	\$3 Million (estimate)
<b>Building Construction:</b>	\$32 Million
<b>If no,</b>	
<b>Other:</b>	
<b>Total:</b>	\$40 Million



## Additional Images



Gymnasium



Social Hall



# A Chapel for Students of all Faiths

The interior of the new addition showcases the reclaimed timbers that were salvaged during the renovation. This slide highlights the chapel and the wood used in the chapel was reclaimed from the warehouse renovation and was used for the flooring, bench, stained glass window trim, and liturgical appointments. A special moment on the project was seeing a Sister's watercolor painting translated into stained glass for this project. The chapel was designed in collaboration with Lee Casaccio of Bernardon

