



# Project Information

**CLIENT:** Core (a 501(c)(3)) is a long-term, two generational, holistic, and collective impact model serving under-resourced students (“Scholars”). Scholars are accepted into Core starting in 6th grade after a home visit and parent interview. From 6th grade through 12th grade Scholars participate in afterschool and weekend programming; concurrently, their families work with Core staff to develop support networks, continue their own education, and develop the skills necessary to be successful in the workplace. After graduation, Scholars are engaged with Core through their Alumni Network to ensure that they stay on track and continue to reach for their potential. Core’s programming focuses on the individual needs of each Scholar and their family. For the families, the goal is to create stability in the home and to provide a pathway to better jobs and education. Meanwhile, Core works with each Scholar on developing stronger character, aligning their strengths with career and college opportunities, and providing the experiences and tools needed to lead choice filled lives in and out of school.

**DESIGN CONCEPT:** **School Safety** was of primary importance when designing the campus and siting the buildings which are located at the perimeter of the site to create a **secure barrier** around an internally focused, visually connected, dynamic campus. A **single point of entry** provides access to everyone entering the facility. **Transparency** and **Visual Connectivity** are design elements proven to reduce bullying while promoting self-discipline among students. The circulation spine offers floor to ceiling glass providing excellent visibility and daylighting throughout. The client desired an aesthetic referencing “Mid-Century Modern/ Palm Springs” architecture with a sense of “whimsey and a pop of color”. The design responds to these criteria through a horizontally prevalent (single level) design with color inspired by the architecture of Mexican architect, Luis Barragan. The client envisioned an **active site** with an outdoor soccer field, basketball courts, and an area for a few raised bed garden planters. Throughout the programming and design process, the design team advocated for **Design Equity**. Regardless of budget, project location and socio-economic status of the users, this project had an opportunity and responsibility to inspire young people (and the community) through architecture and design and the client absolutely loved us for prioritizing this.

Core scholars begin their day in the Multi-Purpose room which was placed at the west edge of the site to help shade the outdoor soccer field during the harsh summer afternoons (due to its tall massing). A shaded outdoor “flex-space” provides separation between the Middle School and High School Classrooms. This space can be used by students between classes or can also be used as an outdoor classroom when needed. The Reading Nook, Recreation room and Art room are all accessed outdoors via a shaded walkway. These spaces and the adjacent Digital Technology room were used to interrupt the site and define diverse outdoor activity areas within the campus. The “Porch” was not in the clients building program but quickly became one of the favorite spaces in the project. The porch is a covered outdoor space elevated 2’ above grade and located between the Reading Nook and the Recreation Room. A minimal ADA ramp at 1:20 provides an accessible route to this area. This space will be a highly active area as Scholars use it for game activities and a hang-out space while watching soccer or basketball games. A tree bosque and raised garden area provides shade and a calming vista from the cantilevered Reading Nook.

The client (and architect) are both strong advocates for sustainable design. While the project had only reached the Schematic Design phase before the Covid-19 pandemic hit, we engaged our sustainability consultant and have designed a building that will achieve LEED Gold Certification once the project is resumed. Our goal is to further develop this community based project as an educational facility that will demonstrate the benefits of sustainability and using products created through the recycling process. Three Rs – reduce, reuse and recycle – are the way forward to manage material effectively for sustainable development. This project is all about building strong community through education and we look forward to finishing the exciting work we have only started.

*“The design that this team created was beyond expectations and a piece of educational architectural art.”*

**Lindsay Harper**, CORE Executive Director

## BUILDING PROGRAM

### LEADERSHIP SUITE

	Lobby	800 SF
	Receptionist	150 SF
	Health Center	150 SF
	Conference Room	300 SF
(6)	Private Office	240 SF/ea.
	Zen Room	300 SF
	Storage Room	240 SF
	Staff Kitchen	240 SF
(2)	Unisex Restroom	68 SF/ea.
	Copy Area	180 SF
	Open Office Area	1500 SF
	<b>Subtotal</b>	<b>5436 SF</b>

### LEARNING AREAS

	Flexible Programming Lab	1,200 SF
(2)	Middle School Classrooms	1,200 SF/ea.
(2)	High School Classrooms	1,200 SF/ea.
	Art Room	500 SF
	Digital Technology Room	600 SF
	Reading Nook	300 SF
	<b>Subtotal</b>	<b>7400 SF</b>

### GATHERING CENTER

	Multipurpose Room	4800 SF
	Kitchen	400 SF
	Storage	500 SF
	<b>Subtotal</b>	<b>5700 SF</b>

### BUILDING COMMON AREAS

(2)	Restrooms	260 SF/ea.
	Recreation Room	300 SF
	<b>Subtotal</b>	<b>820 SF</b>

### WHOLE FAMILY SUPPORT

	Food Pantry	250 SF
	Clothing Pantry	250 SF
	<b>Subtotal</b>	<b>500 SF</b>

### BUILDING COMMON USE

	Lactation Room	80 SF
	Gender Neutral Restroom	80 SF
	<b>Subtotal</b>	<b>160 SF</b>

### BUILDING MANAGEMENT

	Mechanical Room	300 SF
	Electrical Room	300 SF
	IT Room	300 SF
	Fire Riser Room	100 SF
	<b>Subtotal</b>	<b>1000 SF</b>

**Building Programming Subtotal** 21016 SF

### BUILDING CIRCULATION

General Circulation (30%) 6305 SF

**Total Building Area** 27321 SF

# Sustainable Design Intent and Innovation

The Core Academy Community Resource Center is designed with emphasis on sustainability through the following measures:

## **LOCATION and TRANSPORTATION:**

- Access to quality transit- bus routes within walking distance
- Amenities are located in close proximity
- Access to bike paths

## **SUSTAINABLE SITES:**

- Construction Activity Pollution Prevention plan
- Open and Green Space located throughout site-multifunction
- Exterior lighting will be specified LED and BUG rated with photo sensors for safety and energy efficiencies

## **HEAT ISLAND REDUCTION:**

- White reflective roof for energy efficiency
- Clusters of trees throughout to shade the building, walking and parking areas to reduce ambient temperature
- Covered parking to assist with heat island and housing solar arrays to work toward net zero energy

## **WATER EFFICIENCY:**

- Indoor water use reduction- low flow toilets, showerheads and sinks, aerators on faucets to reduce water consumption 40% from baseline
- Outdoor water use reduction- drought friendly landscaping, utilize drip irrigation
- Water meters that can track data to review building performance

## **ENERGY and ATMOSPHERE:**

- Daylighting strategies have been incorporated to reduce energy consumption and assist with establishing a healthy building incorporating circadian rhythm
- LED lights with daylight and occupancy sensors
- Fundamental commissioning – ongoing commissioning, measurement and verification
- Solar Panels on building and parking shade structures to work toward net zero energy
- VRF system/ Seer value mechanical system
- BMS system for ease of controllability to ensure occupant comfort
- Submeters to track energy consumption and teaching tool for conservation

## **MATERIALS and RESOURCES:**

- Recycled Steel and FSC-certified wood will be specified-third party certifications
- A lifecycle cost analysis to be performed for the building envelope and interiors to ensure the healthiest materials will be used at the best price point
- Construction and demolition waste management- 75% diversion rate

## **INDOOR ENVIRONMENTAL QUALITY:**

- Additional ventilation 30% above baseline
- MERV 13 filters
- Low and no VOC specifications for materials flooring, adhesives and sealants
- Entryway matting and/or inground grating
- Vestibule for physical separation and reduction of pollutants entry

## **EMISSIONS:**

- No idling policy
- Clean Diesel Practices
- Maintenance records for equipment

## **INNOVATION:**

- Community/ teaching garden
- Education program- case study on building and using technology for student labs to include water, energy and recycling



# Documentation of Specific Material Choices

Indoor environmental quality and diversion of materials from the waste stream is achieved by specifying the following (and other) materials:

## **STEEL FRAMING:**

- Recycled Steel will be specified-third party certifications

## **WOOD:**

- FSC-certified wood will be specified-third party certifications

## **FLOORING:**

- Hallways and Art Room—**Exposed (high fly ash content) concrete** sealed with a water based, low VOC, non flammable, odorless sealer. Same stain used for accents.
- Classrooms—**Forbo Marmoleum** (Forbo's main linoleum brand). Marmoleum is made from natural raw materials, most of which are harvested as annual crops. Flax plants, which provide the vegetable linseed oil, jute, used for the mesh carrier on which linoleum is calendered and wood flour obtained from the waste material of production forestry, all during their lifetime capture CO2 which is absorbed in the plants and trees that are used to manufacture linoleum. Forbo's Marmoleum product range is the only CO2 neutral resilient flooring (from cradle to gate) and the best choice for every sustainable interior.
- Offices—**Mohawk Pivot Point carpet tiles**. Pivot Point is a new collection that represents a true change in direction for sustainable resilient flooring, Pivot Point Red List Free ERT is manufactured using alternate chemistry and is designed to meet the stringent requirements of the Living Product Challenge Petal Certification.
- Multipurpose Room—**Tarkett Training Sport and Multifunctional flooring** is 100% recyclable with 100% recyclable packaging. The product is made with 22% Pre-Consumer Recycled Content. The produce is free of the following chemicals: Cadmium, Lead, Mercury, Natural Rubber, PBDE, PFAS, PTFE, and Phthalate.

## **CEILING:**

- Hallways, Art Room and Multipurpose Room—Exposed ceilings to structure above.
- Classrooms and Offices—Armstrong Calla Tegular smooth texture acoustical ceiling panels manufactured with 81% recycled content.

## **WALLS:**

- Paint—Sherwin Williams Harmony Interior Acrylic Latex helps improve indoor air quality. Through innovative technology and a zero VOC formula, Harmony paint contributes to cleaner indoor air quality by reducing VOC levels from potential sources like carpet, cabinets and fabrics. This acrylic paint is UL GREENGUARD Indoor Air Quality certified and UL GREENGUARD Gold certified. This product also contains agents which inhibit the growth of mold and mildew on its surface.
- Wall Base—Tarkett BaseWorks Thermoset Rubber Wall Base uses 2.3% rapidly renewable resources and is Cradle to Cradle Certified.
- Masonry—Cindrlite Exposed Ground Face Concrete Masonry Units. In addition to locally sourced materials and recycled content Cinderlite (a Las Vegas block company) offers their block with CarbonCure, a technology which absorbs CO2, a greenhouse gas, into the block in order to reduce its carbon footprint.

## **GLAZING:**

- Kawneer Trifab 601 Framing System. The product contributes to five (5) LEED Materials & Resources Credits and up to three (3) Indoor Environmental Quality Credits.
- Virto Solarban 70 Glass (One-inch insulated glazing system) with SHGC 0.27 and VLT 64%. Because of the exceptional solar control characteristics of Solarban 70 glass, we are able to specify smaller HVAC systems, which will provide a significant reduction in the associated up-front capital outlay in the HVAC equipment.

## **ARCHITECTURAL DOORS:**

- Curries 737-Bullet Resistant Steel Door & Frames. Curries door frames contain 34.4% Post-Consumer Recycled Content and 7.4% Pre-Consumer Recycled Content.

## **MILLWORK:**

- All millwork will be specified to meet the Architectural Woodwork Institute (AWI) standards and Quality Certification Program (QCP) and be Forest Stewardship Council (FSC) Certified. FSC certification ensures that products come from responsibly managed forests that provide environmental, social and economic benefits. The FSC Principles and Criteria provide a foundation for all forest management standards, including the FSC US National Standard (v1.0) that guides forest management certification in the U.S.

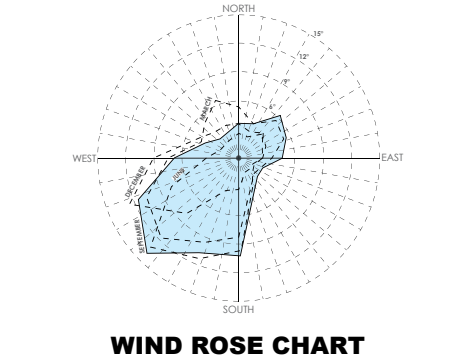
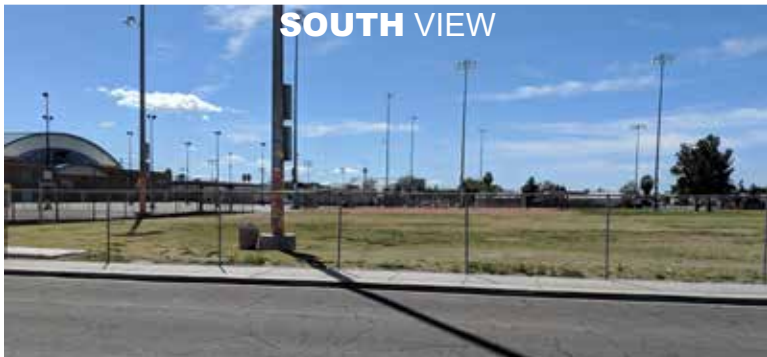
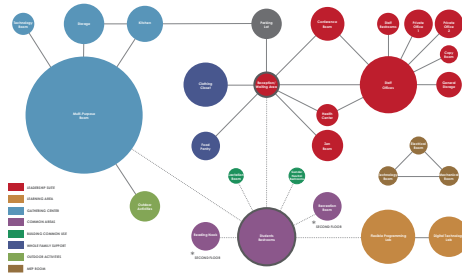
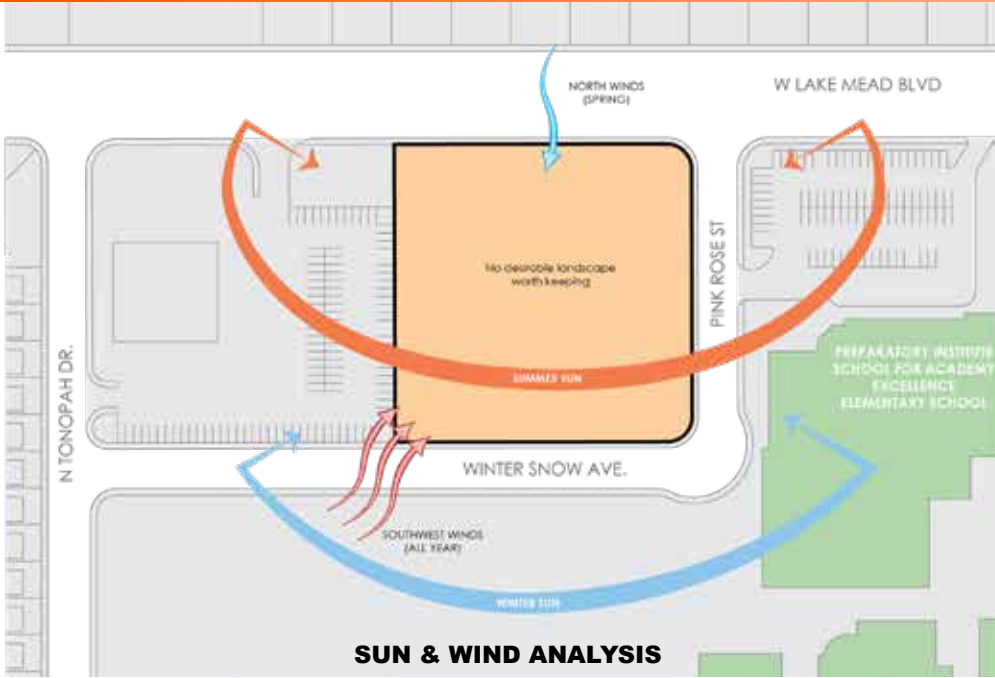


# Site Context





# Site Analysis









# Rendering



















# Rendering







# Rendering



# Rendering







# Rendering







# Rendering





# Rendering















