

## CHIARAVALLE MONTESSORI SCHOOL, NEW WING ADDITION







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*“Education is a natural process carried out by the human individual, and is acquired not by listening to words, but by experiences in the environment.” – Maria Montessori*

Chiaravalle Montessori School’s North Wing Addition transitions 21st century Montessori learning into action, embodying Maria Montessori’s concept of free activity within a “prepared environment” tailored to specific characteristics of children. The design team replaced a 60-year-old gymnasium wing with a new 19,000 sf addition that now serves as a central hub connecting spaces within the school. To ensure the layout focused on human-centered design, the team used a four stage process:

- **Discover:** Observe and shadow classes; uncover patterns and opportunities; and interview parents and students for first-hand insights.
- **Activate:** Ease student transitions; support student independence; welcome families; and celebrate the Chiaravalle community.
- **Strategize:** Empower Montessori principles; achieve design goals; and reimagine program areas.
- **Launch:** Develop and implement the solutions; creation the architecture itself.

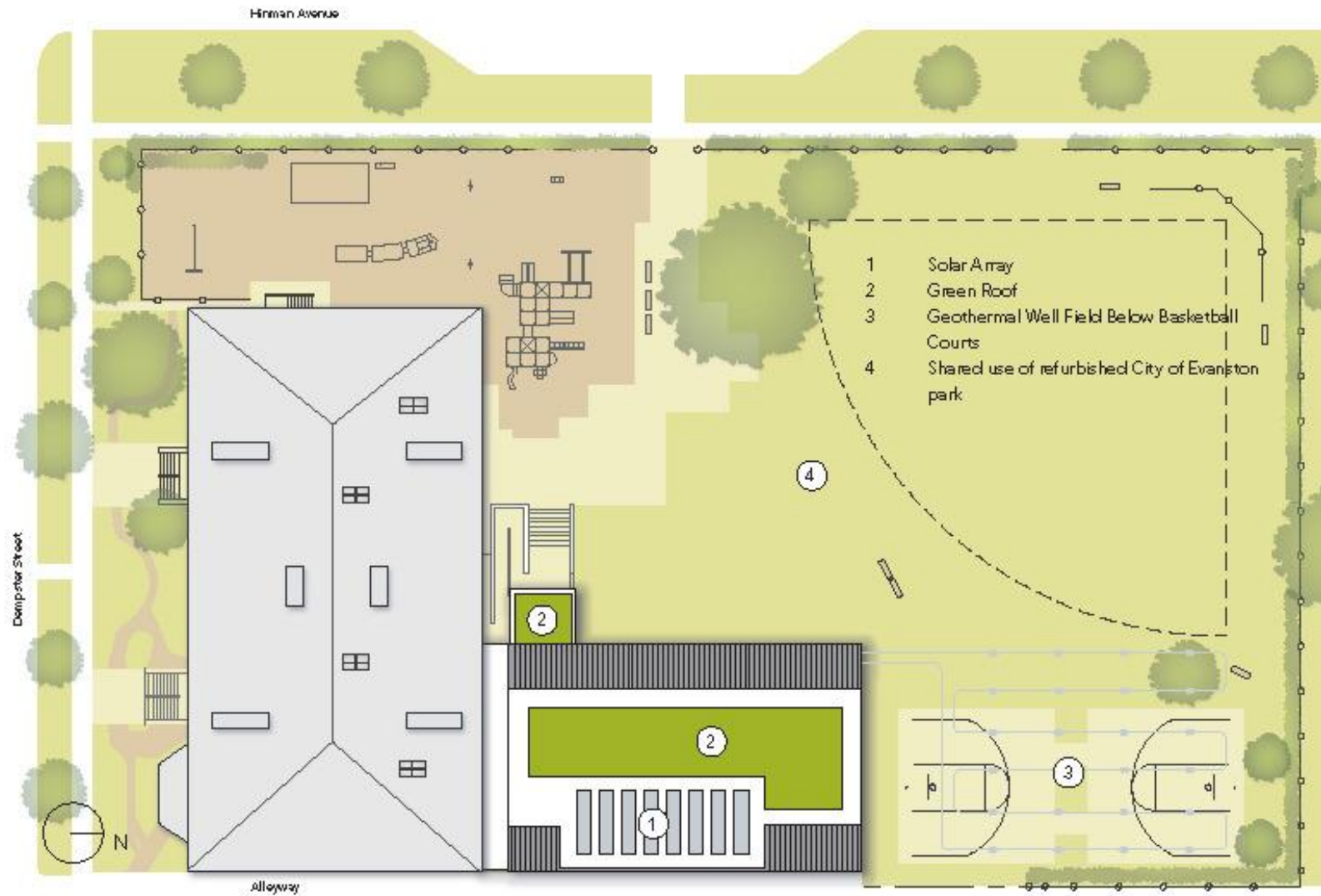
The resulting design solution features a spacious and welcoming main entrance, parent cafe and adjacent central gathering space (The Hub) that strengthen school/community sense by providing comfortable spaces for parents and students to linger. A drama studio and another movement and music studio expand the school’s creative and performing arts offerings. The new gymnasium – double the previous facility size – accommodates multiple functions

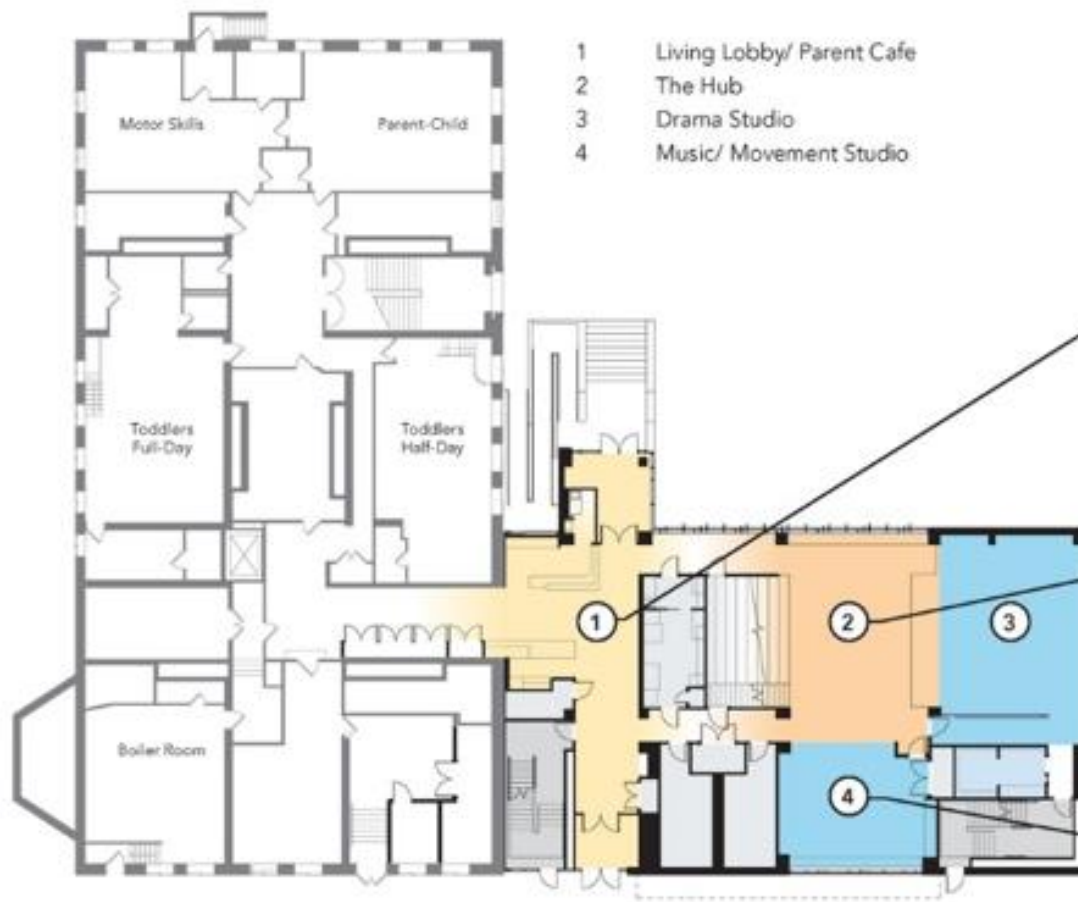
simultaneously. A centrally located library, Think Thank, a Global Learning Lab and a Da Vinci Workshop integrates art and design with the study of science, technology, engineering and mathematics.

Sustainable and cost-effective design features making the project one of the notable projects recognized in USGBC’s 2016 Top 10 States for LEED (and LEED Platinum certified) include roof-mounted photovoltaic panels, a geothermal heating and cooling system, low-VOC materials and abundant natural lighting. Others include:

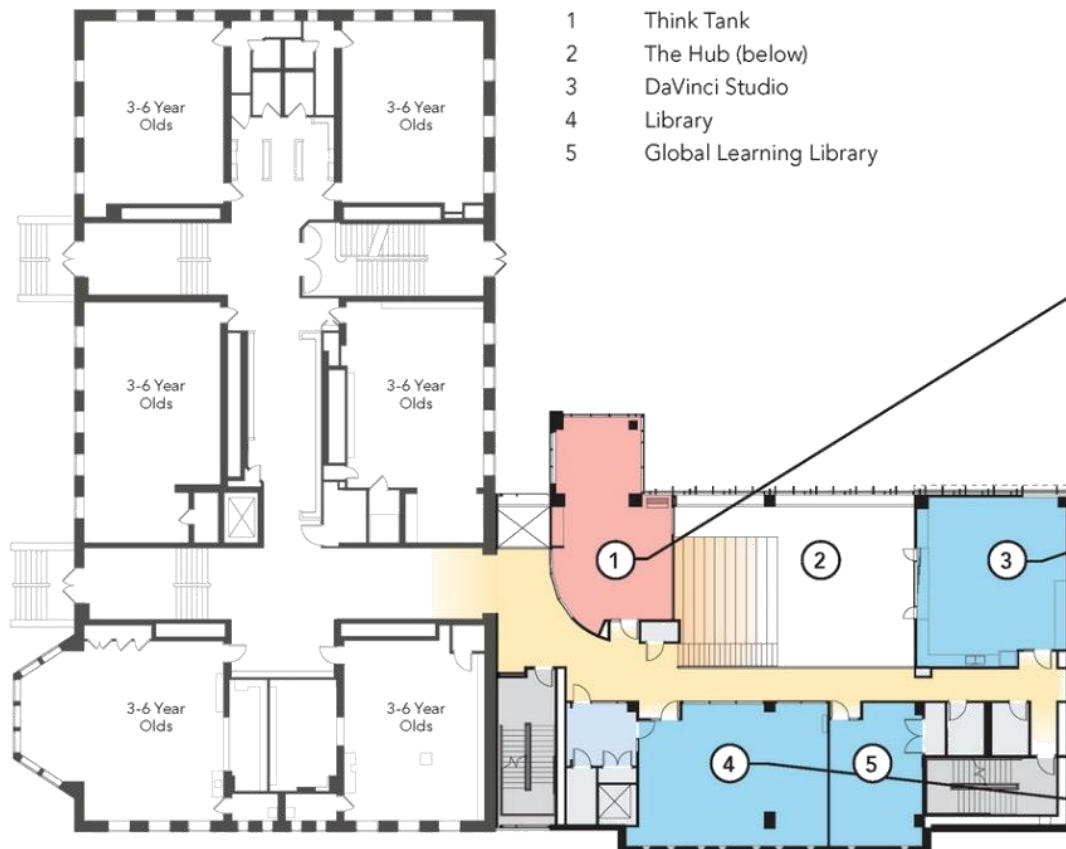
- Addition designed to consume 50.8 percent less energy than ASHRAE 90.1 2007 baseline
- On-site renewable energy through a 7kW roof-mounted photovoltaic array, which produces more than five percent of the building’s energy
- Vegetated roof covers roughly 30 percent of flat roof area
- Plumbing fixtures save 42.5 percent of water from baseline
- Zero parking spaces provided on dense urban site with access to public transit
- Recycled materials make up 42.4 percent of materials used on the project (by value)
- 71.7 percent of new wood products are FSC-certified (by value)
- 79.4 percent of core learning spaces utilize daylight, as are 76.2 percent of regularly occupied spaces

## SITE PLAN





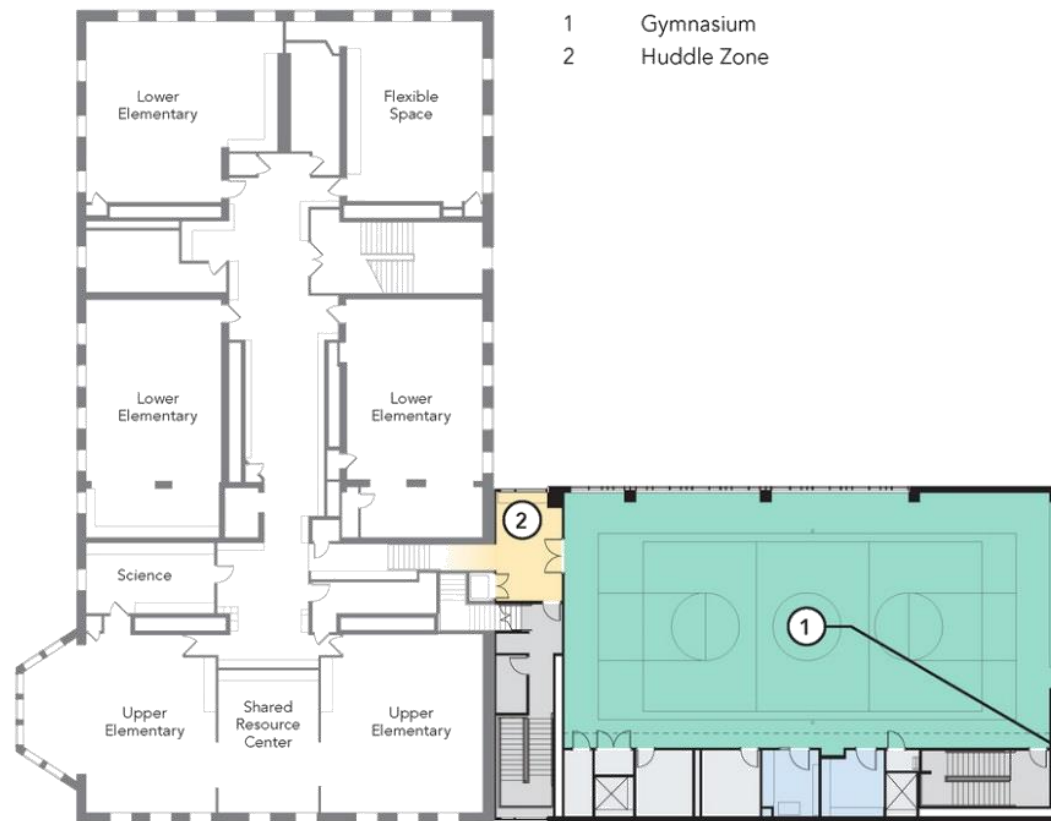
**FIRST FLOOR**



- 1 Think Tank
- 2 The Hub (below)
- 3 DaVinci Studio
- 4 Library
- 5 Global Learning Library



**SECOND FLOOR**



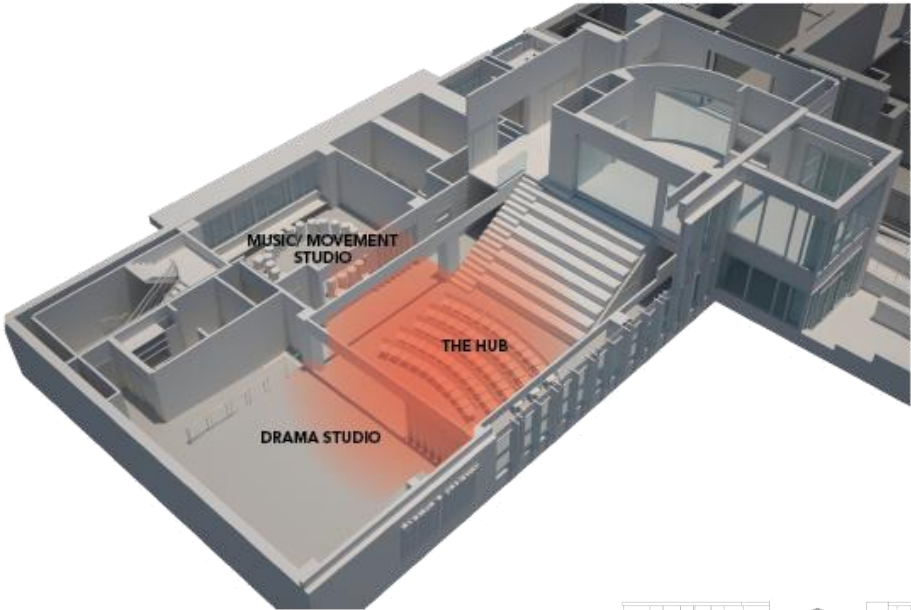
- 1 Gymnasium
- 2 Huddle Zone



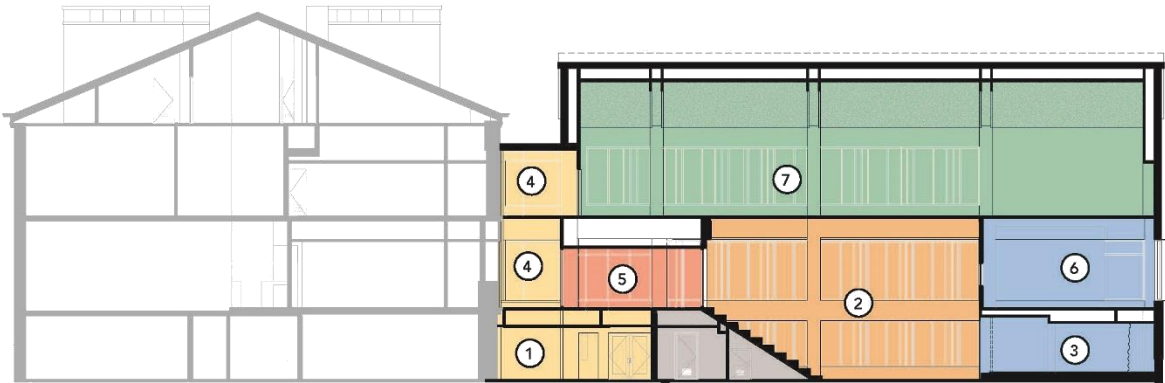
**THIRD FLOOR**



**BIRD'S EYE VIEW**



- 1. LOBBY/PARENT CAFE
- 2. THE HUB
- 3. DRAMA STUDIO
- 4. CIRCULATION
- 5. THINK TANK
- 6. DAVINCI STUDIO
- 7. GYMNASIUM



**NORTH – SOUTH SECTION**

**THE HUB**



**DAVINCI STUDIO**





## SUSTAINABLE FEATURES PLAN





**ORIGINAL ANNEX**



**NEW WING**

