

San Mateo Main Public Library

Center for the Built Environment
Livable Buildings Award 2017



ehdd.

San Mateo Main Public Library

San Mateo, California

Project Dates

2000 - 2006

Size

93,000 sq. ft.

Construction Cost

\$45 million

A library designed for the future

The award-winning [San Mateo Main Public Library](#) is a technologically-advanced library whose design evolved out of an extensive public workshop process where [EHDD](#) solicited input from the community about the building's massing, the quality of interior and exterior spaces, and concerns about noise levels. The library's LEED® Gold design satisfied the desire of the community while presenting a strong civic image and establishing a landmark building in downtown San Mateo.



Architect:

EHDD Architecture
Jennifer Devlin, AIA - Principal

Interior Design:

Page & Moris
Beverly Moris - Principal

Structural Engineer:

Arup
Peter Lassetter - Principal
Kevin Clinch - Project Engineer
Hamid Fatehi, Marci Uihlein

MEP Engineer:

Arup
Alisdair McGregor - Principal
Ray Keane, John Griffiths, Michael Dimmel, Peter Balint,
Paul Switenki, Cole Roberts, Shruti Narayan, Vivian Enriquez,
Armin Wolski, Kurt Graffy, Larry Tedford

Contractor:

Charles Pankow Builders, Ltd.
Rik Kunnath - CEO
Kim Lum, Dean Browning - Project Executives
Jim Gernand, Lonnie Andrews - Project Managers
Jeff Doke, Aaron Dumdei, Steve Imbimbo - Project Superintendents
Sigrid Pfendler, Juan Alonso, Anna Horstkoetner - Project Engineers

Landscape Architect:

Royston Hanamoto Alley & Abey
Manuela King - Principal
Andrzej Karwacki - Designer

Commissioning Agent:

Taylor Engineering
Allan Daly - Principal

Awards

2008 LEED-NC Gold US Green Building Council	Mateo County, San Mateo Chamber of Commerce	California State Assembly (for receiving 2007 Green Building Award)
2008 Green Business Certification Achievement Association of Bay Area Governments	2007 Green Building Award San Mateo Chamber of Commerce	2007 Commendation Board of Supervisors, County of San Mateo, State of California
2007 Savings by Design Pacific Gas & Electric	2007 Green Building Award Sustainable San Mateo County	2006 Community Impact Award San Francisco Business Times
2007 Award of Excellence First Certified Green Business within San	2007 Certificate of Recognition California State Senate (for receiving 2007 Green Building Award)	

A two-story entry lobby, transparent to the street, serves as the orientation hub to the building.



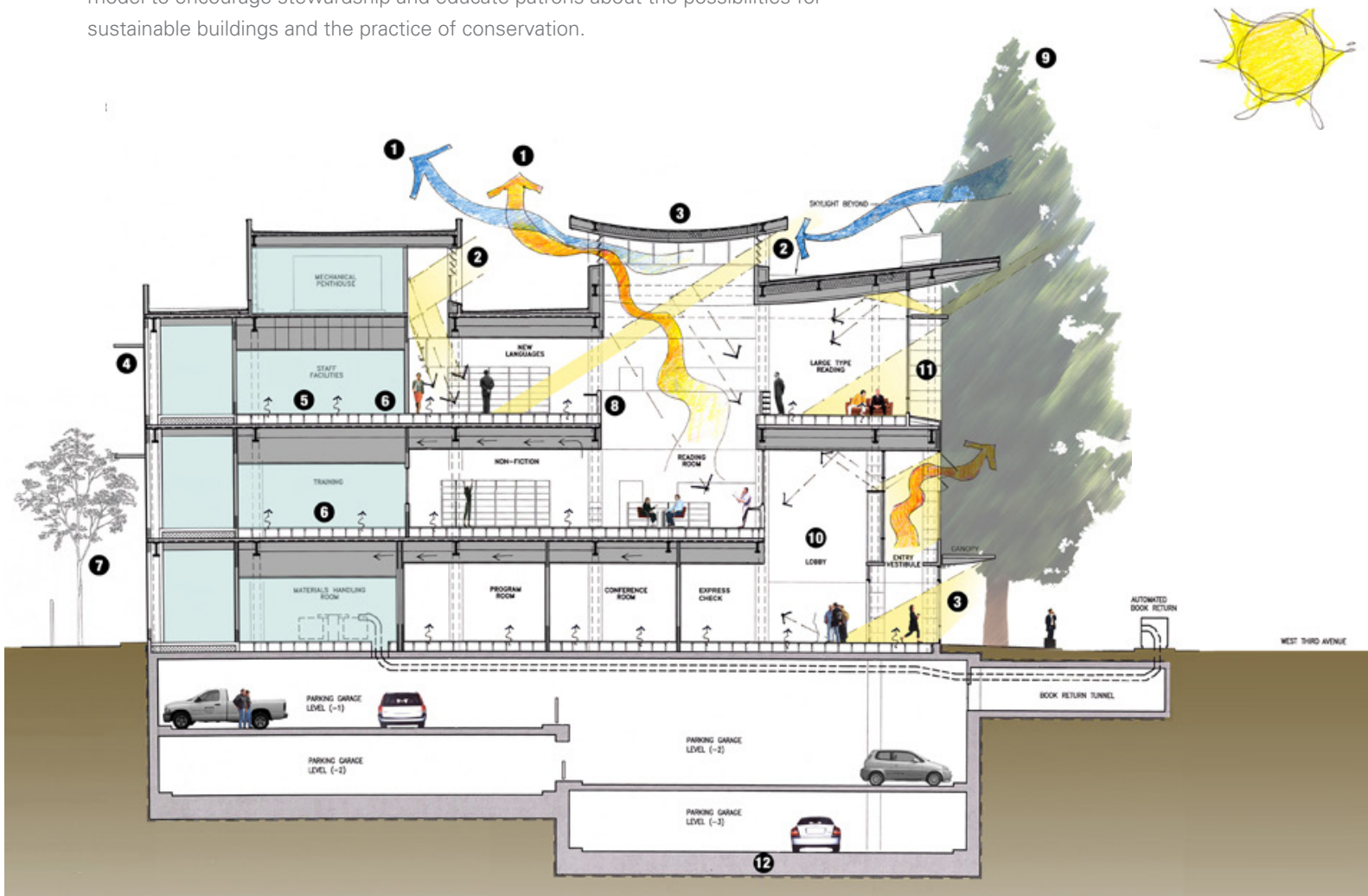


The building cuts inward in order to preserve an existing redwood grove, and a tree house-like mezzanine opens to the redwood grove with tall windows.

Designed to promote community use and to welcome all ages, the library offers a café, several meeting rooms adjacent to an art gallery space, special resource centers, wireless technology, a computer training room, a dynamic teen space, and whimsical children's area.



The library is designed to achieve LEED Gold certification and also serves as a model to encourage stewardship and educate patrons about the possibilities for sustainable buildings and the practice of conservation.



Sustainable Section

1 Vents exhaust air through the skylight and utilize westerly cool breezes

2 Maximizing controlled daylight (windows and skylights) minimizes the use of artificial light

3 Energy Star labeled roof reflects radiant heat

4 Smaller windows and window shades on south and west facade reduce heat gain

5 High efficiency fans and underfloor air supply reduce energy consumption and improve indoor air quality

6 Raised access floor provides for technology and flexibility

7 Water-efficient landscaping

8 Low Volatile Organic Compound (VOC) emitting materials such as adhesives, carpets and paints

9 Existing redwood trees block western sun and reduce heat gain

10 Lobby is open and bright

11 High performance, low emissivity glazing reduces heat gain

12 Concrete uses high-volume fly ash (a recycled industrial by-product)

Other Green Features

Bicycle storage with convenient changing/storage facilities for staff

Utilization of alternative energy resources

Ultra low-flow, water conserving plumbing fixtures

Recycled content materials and materials that were manufactured regionally

Energy Performance Data

Annual Source Energy Use (kBtu/sqft-yr)

Energy Component	Standard	Proposed	Margin
Space Heating	22.84	7.68	15.16
Space Cooling	23.88	5.00	18.88
Indoor Fans	8.90	25.72	-16.82
Heat Rejection	0.00	2.23	-2.23
Pumps	1.24	1.19	-0.05
Domestic Hot Water	7.03	7.03	0.00
Lighting	41.98	41.98	0.00
Receptacle	23.56	23.56	0.00
Process	0.00	0.00	0.00
Totals	129.43	98.94	30.59

Percent Below Title 24 Adjusted Source Energy Use

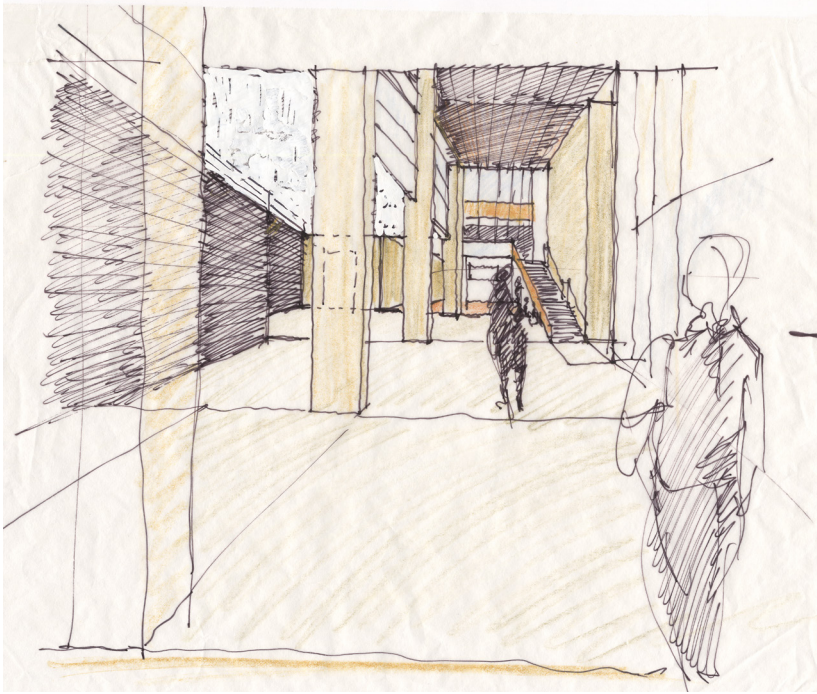
Standard Design	—	Proposed Design	=	Margin
129.43		98.94		30.59
Standard Design	/	Proposed Design	=	Margin
129.43		98.94		30.59

Annual Site Energy Use

	Standard	Proposed	Margin
Peak Demand	264.3	204	60.3
Energy Component	Standard Electricity/Natural Gas	Proposed Electricity/Natural Gas	Margin Electricity/Natural Gas
Space Heating	0/ 8,442	0/4,601	0/3,841
Space Cooling	140,780/ 0	43,808/0	96,792/0
Indoor Fans	46,088/0	159,603/0	-113,515/0
Heat Rejection	37,694/0	19,307/0	18,387/0
Pumps	35,292/0	8,637/0	26,655/0
Domestic Hot Water	0/5,968	0/5,968	0/0
Lighting	360,059/0	228,034/0	132,025/0
Receptacle	153,372/0	153,372/0	153,372/0
Process	0/0	0/0	0/0
Totals	773,285/14,410	584,279/10,569	160,524/3,841

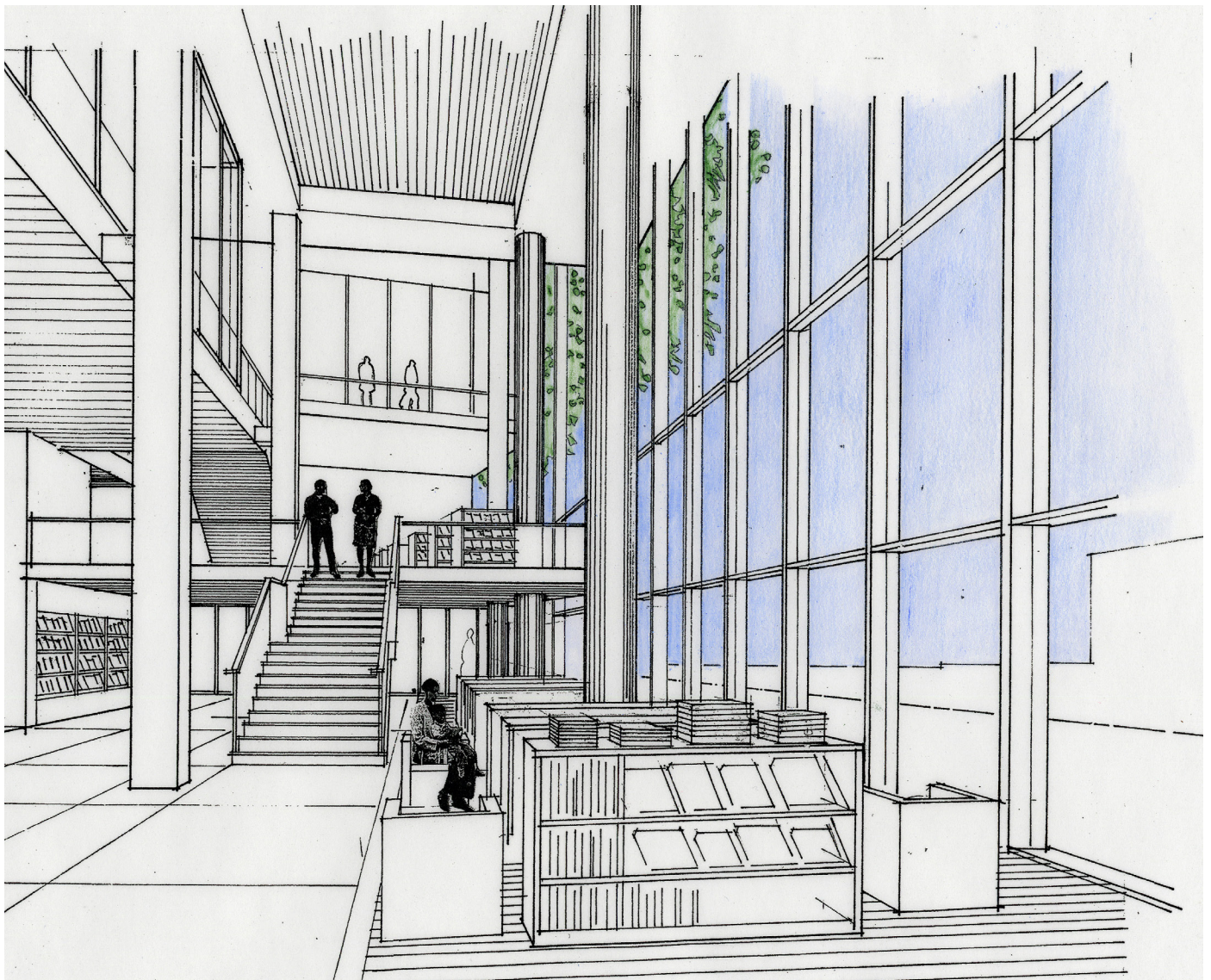



On the second floor reading room high clerestory windows brings natural ventilation and daylight deep into the interior of the building. The spaces in the library are more intimate with the use of warm woods on the ceiling walls and stacks.



Upon entering, patrons can see to all levels of the building with an information booth supplementing any direction needs. The building's form undulates inward to preserve an existing redwood grove, which is visible from the mezzanine level through tall windows. On the second floor, a two-story central reading room further aids in ease of orientation and brings daylight into the building's center from high clerestory windows, offering a comfortable space for visitors to read, study and convene.

The service approach of the library is modeled after a retail bookstore rather than a traditional public library. Display areas featuring new books and topical collections are arranged throughout, and staff circulates through the building, offering assistance to patrons.





A three piece water sculpture by artist Archie Held made of silicon bronze, features water dripping down the three horizontally striated columns finished with a brown patina, into a pool. The artist envisioned it as representing small groups of people stopping outside the library to chat and share ideas.





NAMING OPPORTUNITY
@ \$1 MILLION GIFT LEVEL

BUSINESS RESOURCE CENTER
generous gift of
FRANKLIN TEMPLETON

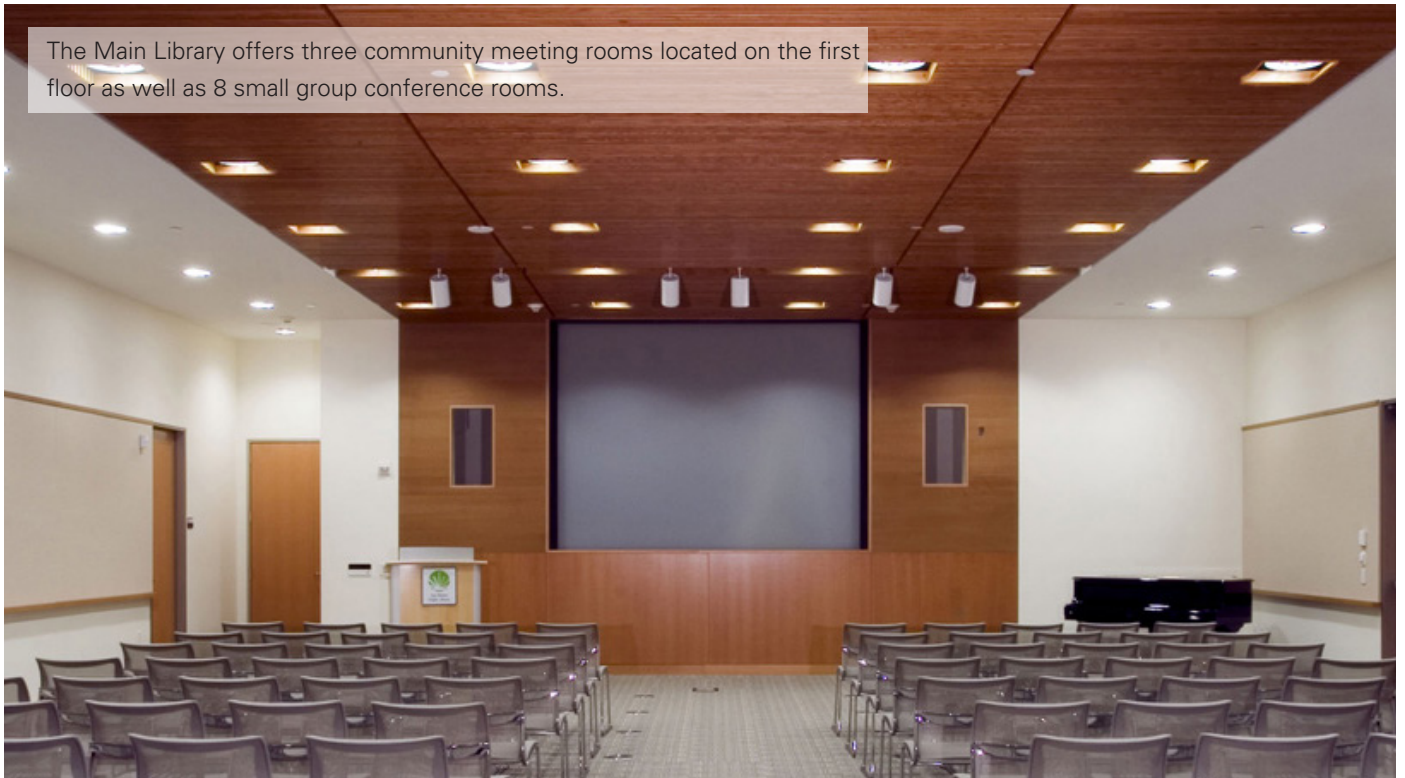
GIFT RECOGNITION
PLAQUE @ \$500 K GIFT LEVEL

new **San Mateo Public Library**
BUSINESS RESOURCE CENTER
2ND FLOOR



A state-of-the-art resource center for literacy and lifelong learning, the Library features 100 public internet terminals, expanded areas for children and teens, and a sustainable, energy efficient design.

The Main Library offers three community meeting rooms located on the first floor as well as 8 small group conference rooms.









ehdd.