



901 Cherry Street
San Bruno, CA

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USD Master of Science in Real Estate

Summary



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES



- **901 Cherry Street in San Bruno, CA**
- Construction completed in 1997
- Two-story, 195,000 SF Office Building
- Originally the Corporate Office for The Gap, Inc.
- Currently **You Tube** Headquarters



Source: American Hydrotech

Key players



INTRO  DESIGN  ISSUES  FINANCIALS  CONCLUSION  SOURCES



OWNER

ARUP

MEP & STRUCTURAL ENGINEERS

William McDonough + Partners
Architecture and Community Design

DESIGN ARCHITECT

Gensler

EXECUTIVE/INTERIOR ARCHITECT



BUILDING CONTRACTOR

Consultants



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- Civil- BKF Engineers
- Landscape Architect- Hargreaves Associates
- Grasslands Consultant- Rana Creek
- Interiors Contractor- Webcor Builders



Source: www.archnews.com



Source: www.greenroofs.com

Project Impetus



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- Gap, Inc. in the early 1990's was extremely successful under CEO Don Fisher and his son, Bob Fisher
- Back office operations were in San Bruno, main operations in San Francisco
- Bob Fisher was friends with McDonough, a green-focused architect
- Commissioned McDonough to design an environmentally friendly headquarters for the company



Source: William McDonough + Partners

Design



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

“901 Cherry is designed to be a great place to work”
– William McDonough + Partners



Source: www.californiahomedesign.com

What is different?

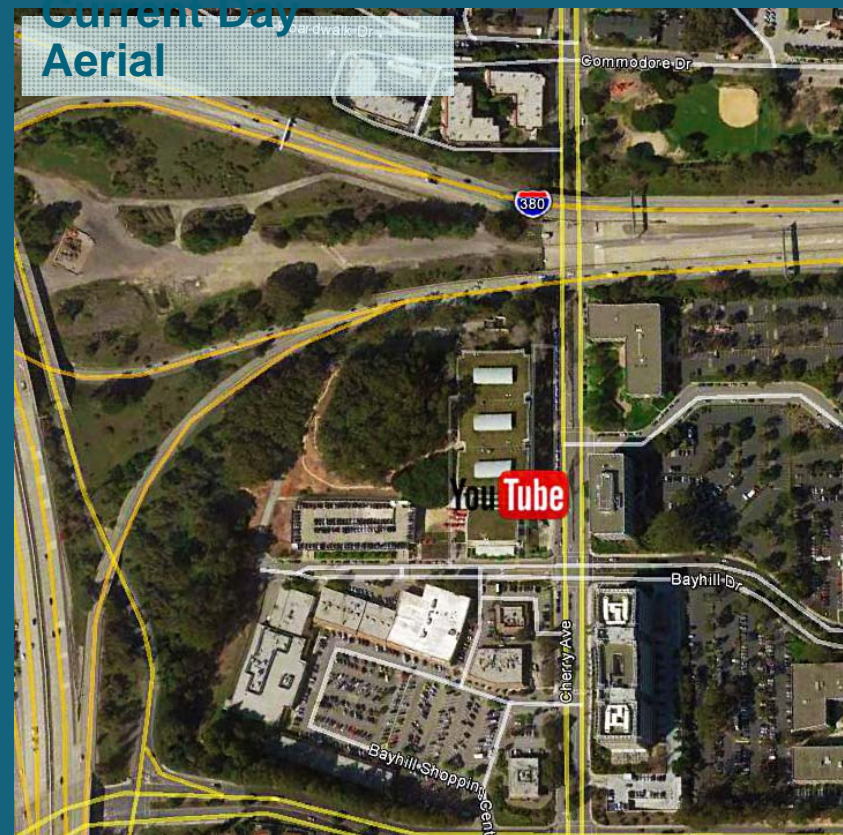


INTRO DESIGN ISSUES FINANCIALS CONCLUSION SOURCES

Original Site Plan



Source: William McDonough + Partners



Source: Google Earth

Green Roof



INTRO  DESIGN  ISSUES  FINANCIALS  CONCLUSION  SOURCES

- First extensive green roof in California

- 6-inch soil membrane (Hydrotech MM6125®)
- Planted with native grasses



Source: www.dgreenwriting.com

Green Roof



INTRO ❧ DESIGN ❧ ISSUES ❧ FINANCIALS ❧ CONCLUSION ❧ SOURCES

- Benefits
 - Habitat preservation
 - Rainwater retention
 - Assists with thermal needs of building
 - Provides acoustic barrier from nearby San Francisco Airport



Source: William McDonough + Partners

Daylighting



INTRO ❧ DESIGN ❧ ISSUES ❧ FINANCIALS ❧ CONCLUSION ❧ SOURCES

- Three main office sections are organized around a 30' x 90' atrium topped by a skylight
- Extra high ceilings
- ALL workspaces are located within 30' of windows or daylighting from atriums

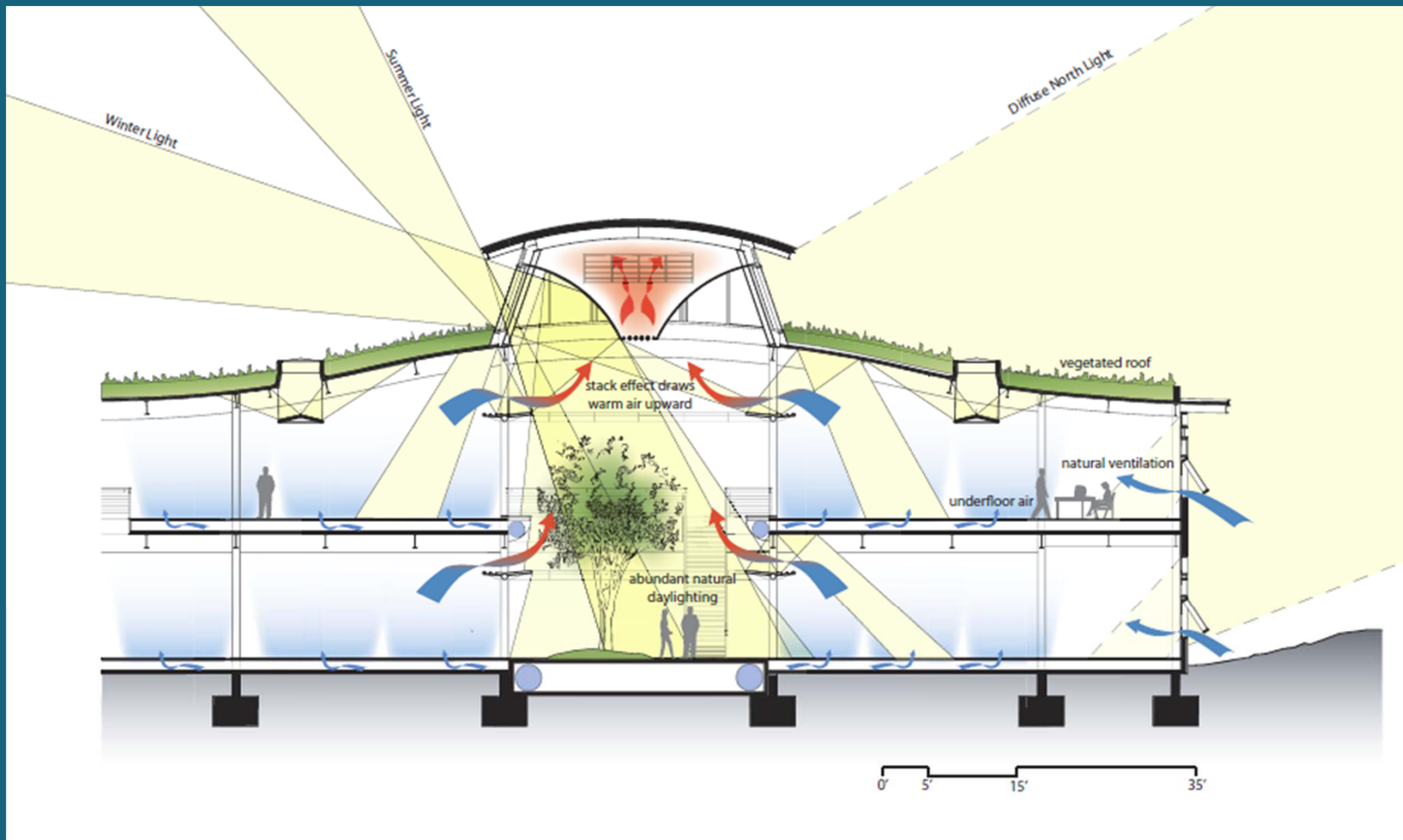


Source: www.greatbuildings.com

Daylighting



INTRO DESIGN ISSUES FINANCIALS CONCLUSION SOURCES



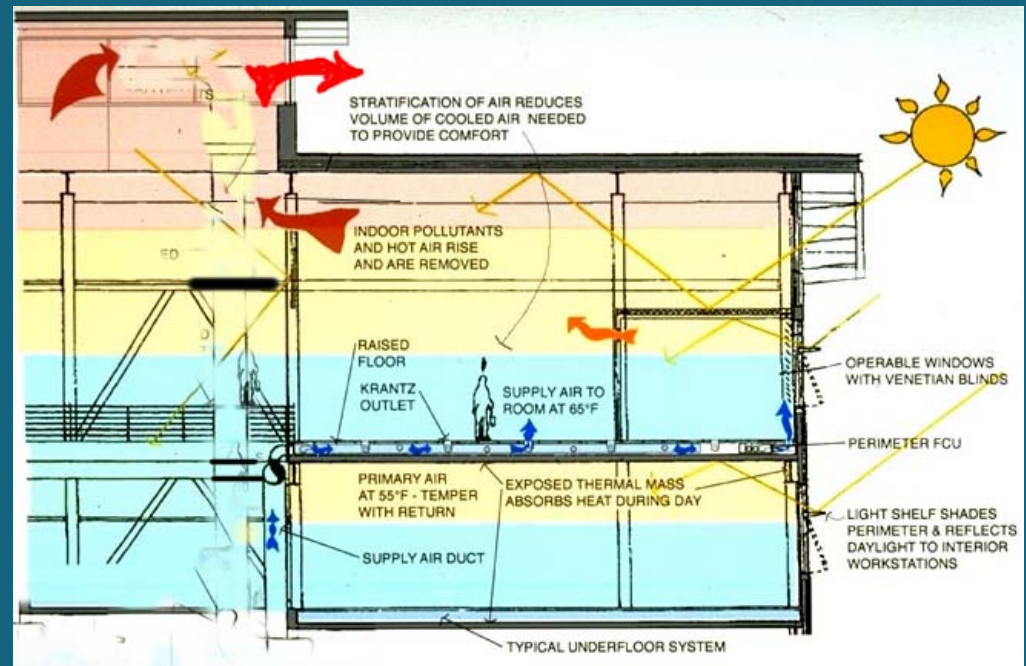
Source: William McDonough + Partners

Heating/Cooling



INTRO DESIGN ISSUES FINANCIALS CONCLUSION SOURCES

- UFAD System
 - Displacement ventilation provides local mixing of air and a smaller cooling loads
- Separate systems for perimeter offices
- Operable windows
- Nighttime precooling system
 - Climate of San Bruno is fairly temperate and ideal temperatures for thermal comfort are reached at night during summers



Source: Alisdair McGregor, ARUP

Materials Sourcing



INTRO  DESIGN  ISSUES  FINANCIALS  CONCLUSION  SOURCES



- Reduced materials use
 - Two-story design reduced need for fireproofing and associated design considerations
- FSC-certified wood in flooring, veneers and benches
- Recycled wood flooring and veneers, office furniture, interior benches, ceiling tiles
- Low-VOC paints and carpets

Source: William McDonough + Partners

Issues



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- Frequent design changes during construction
 - One of McDonough's first major projects
- Building sprawl
 - Two-story limitation
- Over-daylit
 - Largely IT-heavy workforce
- Acoustic issues within building
 - Very quiet UFAD system



Source: William McDonough + Partners

Financials



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- Total building cost: \$25 Million (~\$130/SF)
 - Core/Shell: \$110/SF
 - 10-15% Premium over traditional builds at the time
- Green Roof:
 - 130% of Conventional Roofs at the time
 - Net first costs of 185%
 - Projected payback – 11 years*

*Source: 2003 Green Roofs Awards of Excellence

Results



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- Flexible design is good design
- **30%** more energy efficient than Title 24 Mandates (4-8 year payback)
- LEED Comparison
 - Gold?
 - Not transit oriented



Source: Vanity Fair

Awards



INTRO 🌿 DESIGN 🌿 ISSUES 🌿 FINANCIALS 🌿 CONCLUSION 🌿 SOURCES

- **1998- Good Design is Good Business Award, BusinessWeek and Architectural Record**
- 1998- Pride of Place, BusinessWeek
- 1998- Design Award, BusinessWeek Magazine
- 1999- A Whole New World, Time
- 2000- DC Award of Excellence, AIA
- 2000- Savings by Design Integration
- 2001- I.D. Forty, I.D. Magazine
- **2003- Green Roofs for Healthy Cities, Green Roof Award of Excellence (New Extensive)**

References



INTRO DESIGN ISSUES FINANCIALS CONCLUSION SOURCES

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- Lehrer, David. Personal interview. 1 May 2014.
- Kelly, Tim. Personal interview. 1 May 2014.
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http://www.greatbuildings.com/buildings/Gap_Offices_in_San_Bruno.html
- William McDonough + Partners: 901 Cherry Street Offices Profile.
<http://mcdonoughpartners.com/project/901-cherry-offices/>
- The Center for the Built Environment: “Gap Office Building” Profile.
<http://www.cbe.berkeley.edu/mixedmode/gap.html>
- Greenroofs.com: “The Gap Headquarters” Profile. <http://www.greenroofs.com/projects/pview.php?id=26>
- American Hydrotech: “901 Cherry Avenue” Project Profile. <http://www.hydrotechusa.com/projects/901-cherry-avenue-gap>
- TJ Reagan: “901 Cherry (Gap)” Profile. http://www.tjreagan.com/projects/901_cherry.html
- Cal Recycle Sustainable Building Case Studies: “The Gap, Inc.”.
<http://www.calrecycle.ca.gov/greenbuilding/casestudies/Commercial/Gap.htm>