



SAN DIEGO STATE UNIVERSITY

Aztec Student Union

AUA June, 2011

- 
- Opened 1968
 - Student Enrollment = 10,000
 - 97,000 GSF

The Aztec Center

Aztec Center was showing its age in the 21st Century

2002 Ballot Initiative for A New Aztec Center

SDSU's Aztec Center has 3.57 SF of union space per student
National average of SDSU's peer institutions is 10.5 SF per student.

"a supporting role to the campus as a total living/learning environment".

Tentative Student Body Center Fee Program:

\$91/semester Proposed Fee increase for replacement of Aztec Center

Tentative Timeline:

Fee Referendum

March 2002

Schematic Design –Start EIR /Master Plan

April 2002

Project Completion, Occupancy

September 2007

Project Team

Brailsford & Dunleavy, Student Polling & Analysis

Hardy Holzman & Pheiffer, Planning

O'Connor CM, Estimating

2002 Ballot Initiative

\$80 Million, 230,000 GSF

All New Construction

Increased Student Activity Fee \$95/Semester

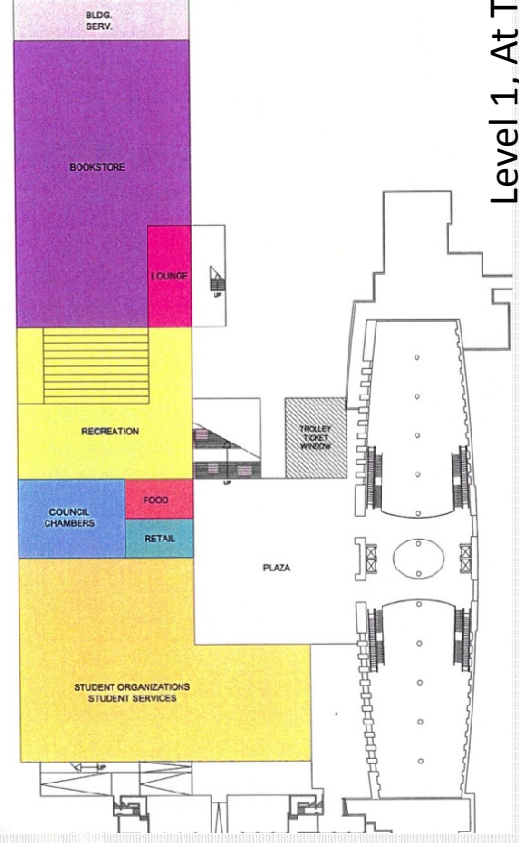
Voter Turnout = 8.30%

Yes = 356 (10.4%)

No = 3,072 (89.6%)



Level 2, At Centennial (campus level)



Level 1, At Trolley Mezzanine

Trying Again

2006 Ballot Initiative for A New Aztec Center

\$51 Million, 130,000 GSF
Primarily Renovation

Increased Student Activity Fee \$56/Semester

Voter Turnout = 13.83%

Yes = 2,200 (54.4%)

No = 1,845 (45.6%)

Conference &
Meeting Space

Bowling & Games

Pub & Grille

Food Court

Satellite Fitness
Center

Lounge Space

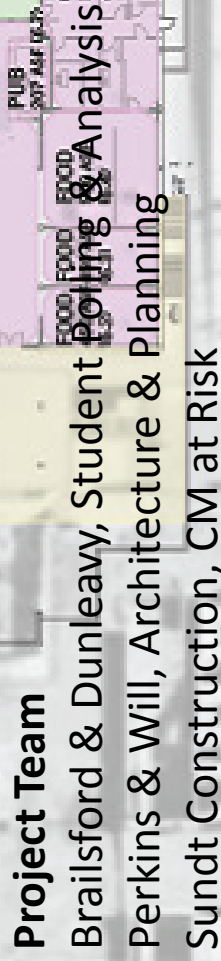
Student Org
Space

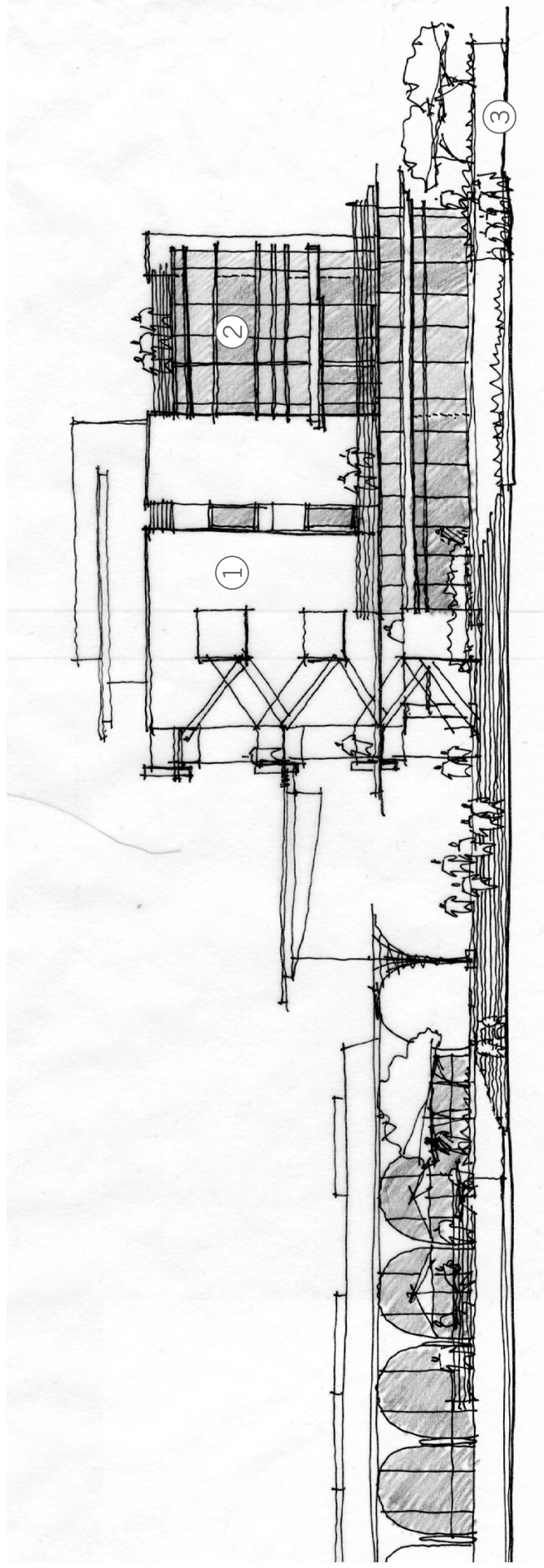
Student
Leadership
Center

Associate Students
Office Space

SAN DIEGO STATE
UNIVERSITY

Renovate





Modern Space 2008, 1st Try

New Aztec Center - West



Exist. Aztec Center - North

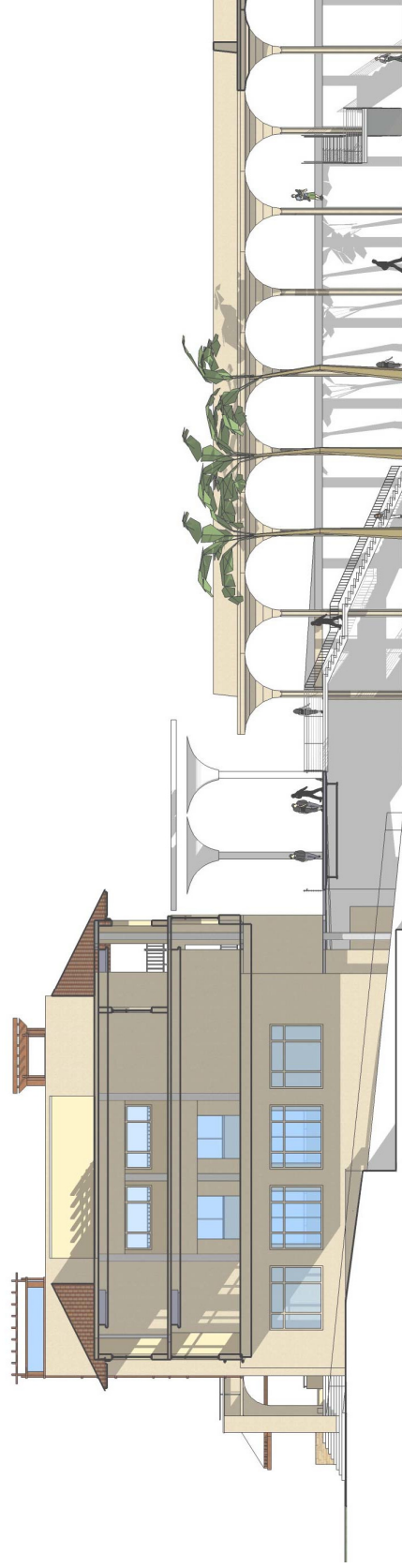
PERKINS
+ WILL



New Aztec Center - North

PERKINS
+ WILL





San Diego State University
San Diego, California
Aztec Center - Student Center
Schematic Design

November 18, 2008



EAST-WEST
SECTION
SC

Modern Space 2008

Perspective Rendering – Garden Level

PERKINS
+ WILL



SCHEME A (Budget Be Damned)

\$51M+

- 100% Program / Optimal Layout
- Full Renovation 100%
- Full New Construction (100% = 50,000 SF)
Garden and Levels 1 through 3
- Additional Fee

Realities

++ Expand Montezuma Hall / Conference

Capabilities

++ Full Fitness Program (100%)

++ Revitalized / Expand Food Service

++ Expand Student Orgs (100%)

Remodel existing space

++ Total Code Upgrade

new toilets

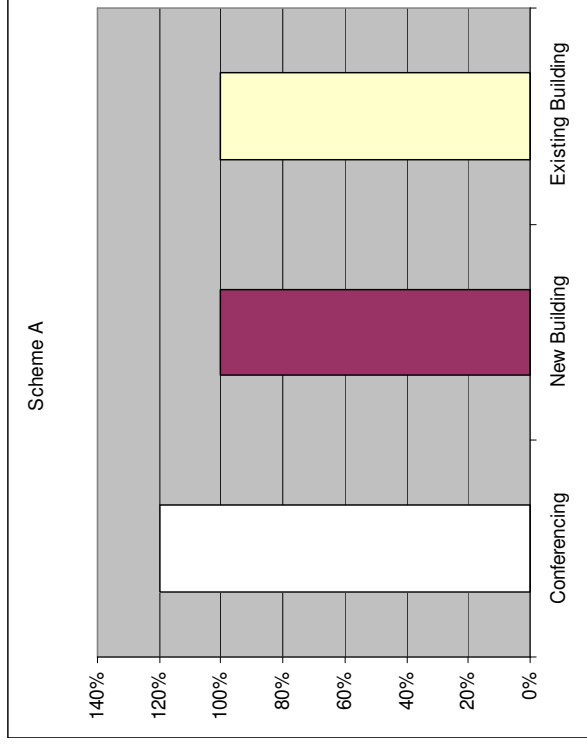
new elevator

new stairs

seismic upgrades

++ Both Buildings LEED / Green

smaller carbon footprint



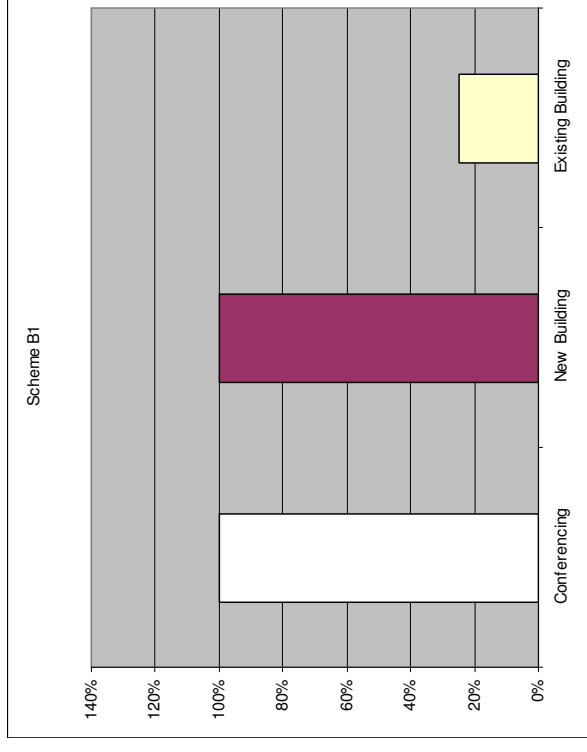
SCHEME B (Mostly New Construction)

\$51M

- 95% Program / Compromised Layout
No Montezuma Hall expansion
- Minimal Renovation (less than 25% Threshold)
No Code Upgrades, New Air Handling Units
- Full New Construction (100% = 50,000 SF)
Garden and Levels 1 through 3
- No Additional Fee

Realities

- - No Expansion / Conference Capabilities
- ++ Full Fitness Program (100%)
- + Upgrade Food Service
- + Partial expansion of Student Orgs (90%)
Fit into existing space
No remodel
- - No Code Upgrade
no new toilets, no new elevator,
no new stairs, no seismic upgrades
- Existing Building = No LEED / Green



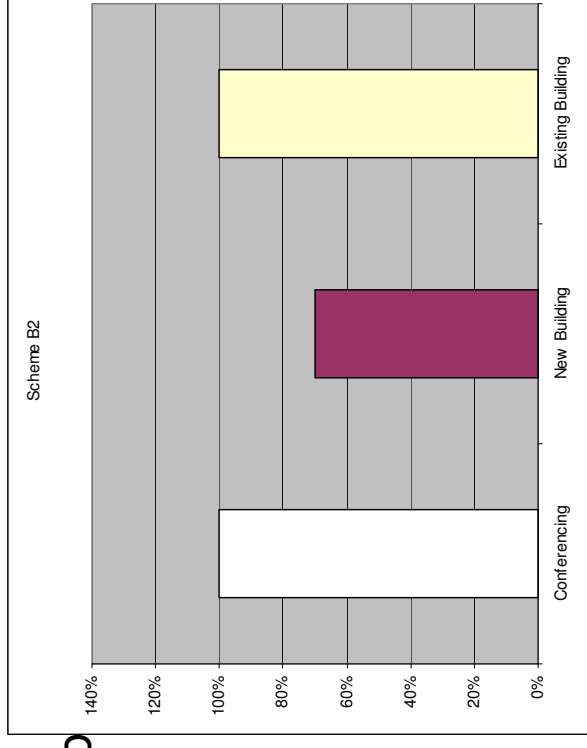
SCHEME C (Mostly Renovation)

- 85% Program / Compromised Layout
All areas reduced by 15%
- Full Renovation
- Partial New Construction (70% = 35,000 SF)
Garden and Levels 1 through 2
- No Additional Fee

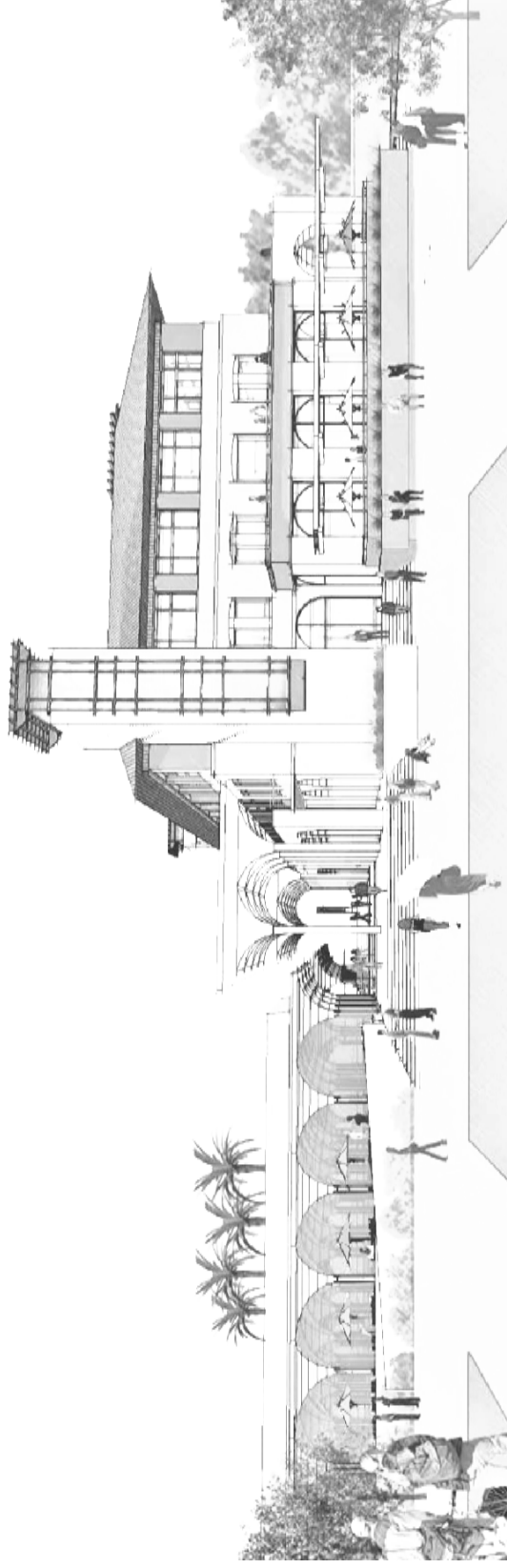
\$51M

Realities

- ++ Expand Montezuma Hall / Conference Capab
- Reduced Fitness Program (75%)
- + Revitalized / Expand Food Service
- Partial expansion of Student Orgs (85%)
Remodel existing space
- ++ Total Code Upgrade
 - new toilets
 - new elevator
 - new stairs
 - seismic upgrades
- + Existing Building LEED / Green



PROJECT RE-EVALUATION



Aztec Center-
Student Center
Budget Study

SDSU

Aztec Center

r e n o v a t i o n i s s u e s



SUNDT

SDSU Aztec Center

- Retrofit Concerns for Existing SDSU Aztec Center
 - LEED Issues w/Existing Facility
 - Structural Issues w/ Existing Facility
 - ADA Issues w/Existing Facility
 - Hazardous Abatement Issues w/Existing Facility
 - Mechanical, Electrical & Plumbing Issues w/Existing Facility

SDSU Aztec Center

- General Issues w/Existing Facility
 - Unforeseen conditions are greater in an existing facility and require an increased level of contingency. In addition, schedule can also be impacted.
 - The existing structure limits design of program areas.
- *The cost of using the existing facility and adding a new adjacent facility, is more expensive than complete demolition and a new facility*

modernspace

STUDENT UNION EXPANSION

- **February 2009** – Announcement project is delayed due to these significant factors:
 - Increased costs due to additional seismic reinforcement and building code required upgrades to the existing Aztec Center building, and
 - ✓ Rapid escalation in construction costs driven by a multi-year escalation in commodity prices, coupled with the collapse of U.S. financial markets has resulted in a spike in lending rates which has increased the debt service of the project, and
 - ✓ Reduced enrollment at SDSU – because of the state budget crisis – has decreased the amount of student fee revenue available to the project.

2008 Ballot Initiative for A New Aztec Center

\$101 Million, 190,000 GSF
Demolition & Replacement

Increased Student Activity Fee \$94/Semester

Voter Turnout = 13.83%

Yes = 2,200 (54.4%)

No = 1,845 (45.6%)

What's Different This Time?

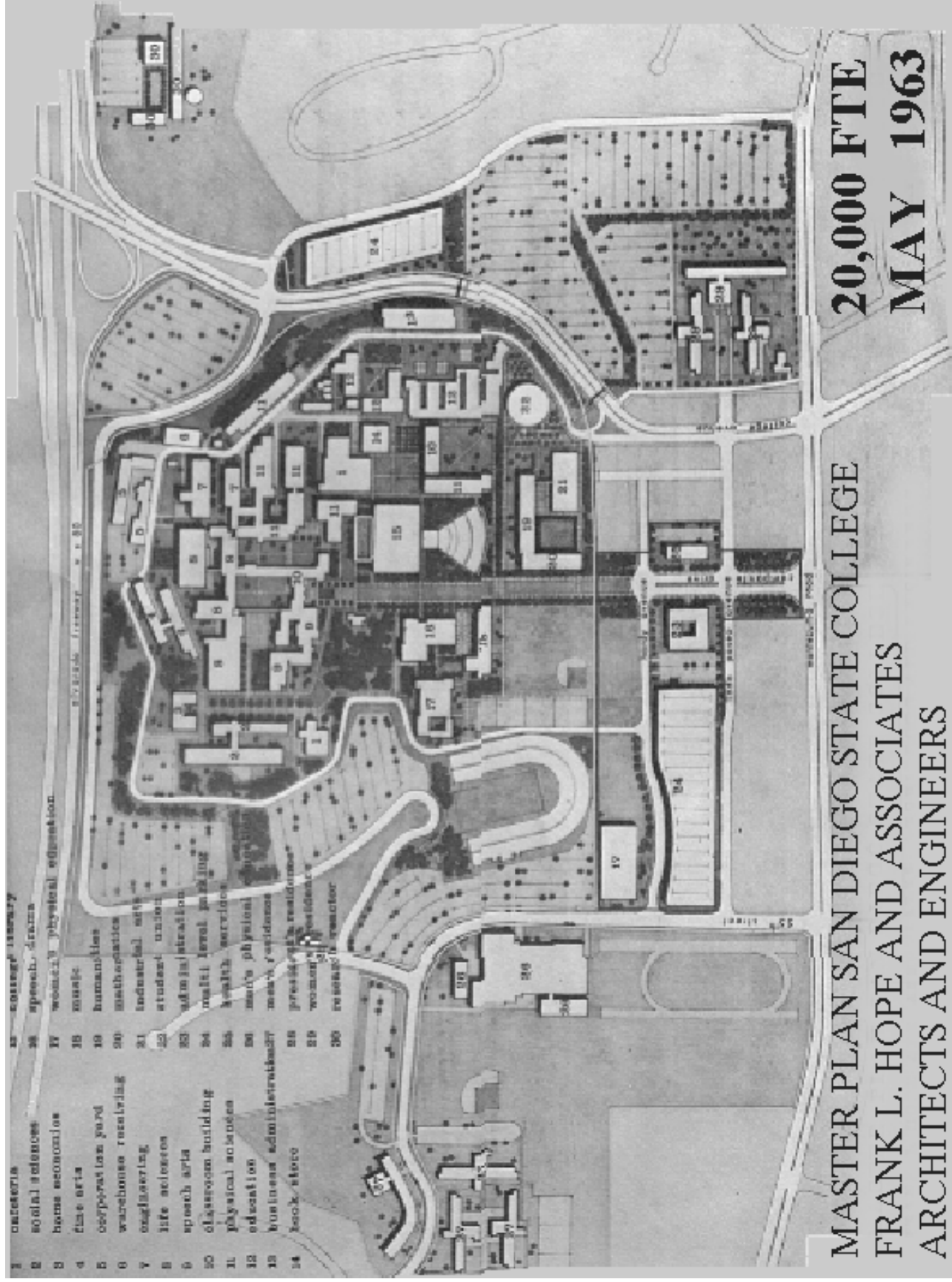
- The First LEED Platinum Student Union
- Expanded Program Space
- Appropriate Architecture
- *Cost based on Schematic Design*

Project Team

Brailsford & Dunleavy, Student Polling & Analysis

Cannon Design, Architecture & Planning

Sundt Construction, CM at Risk



Campus Master Plan, 1963



SDSU in 1962



SDSU Today



AZTEC
CENTER

Plaza
Linda
Verde

SDSU tomorrow



The campus vernacular



1950 - 1964



Dramatic Arts, 1967



Music, 1969



Love Library, 1971



Student Services

Manchester Hall



Growth Around The Aztec Center



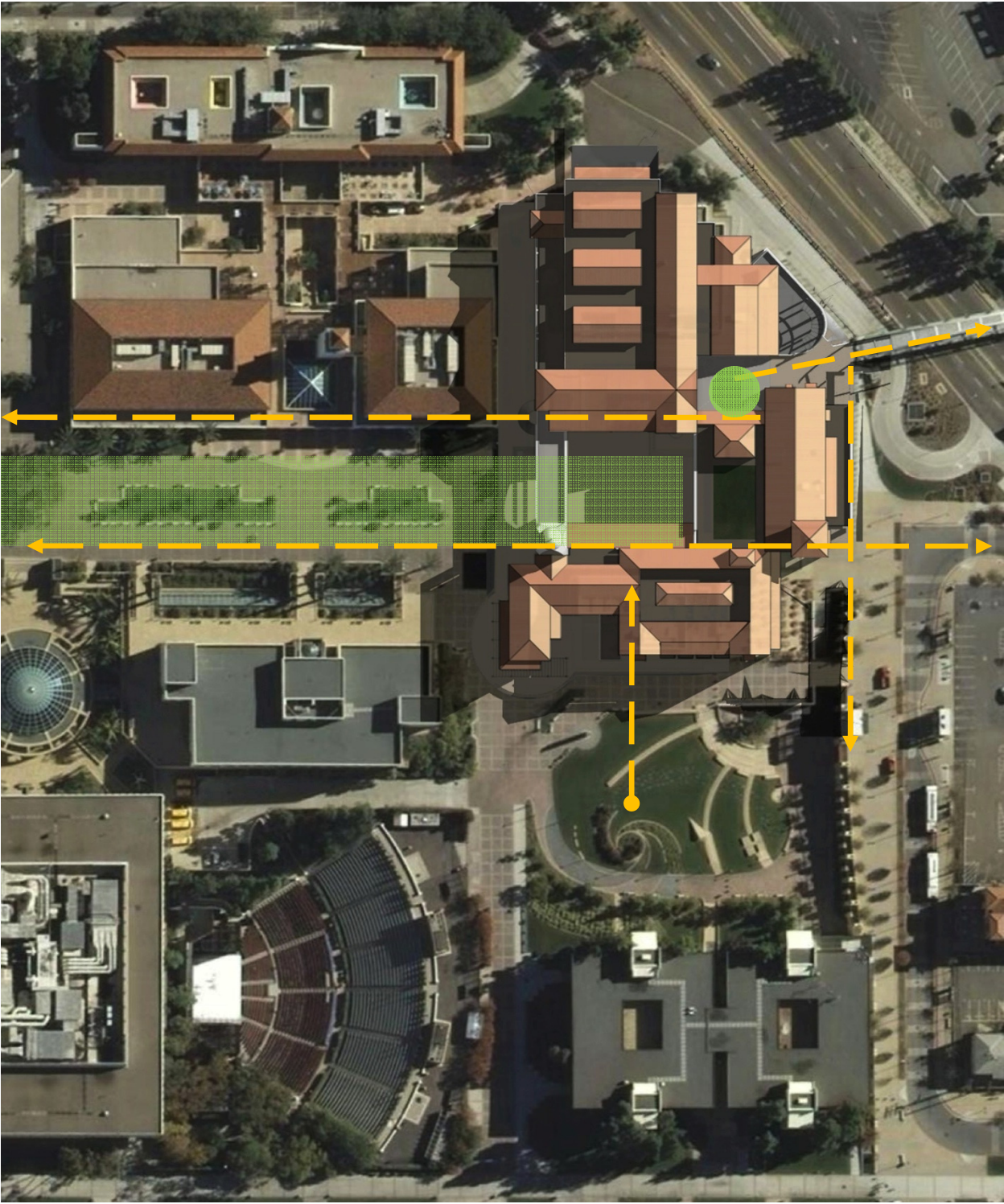
The campus vernacular



Campus Connections



Campus Connections

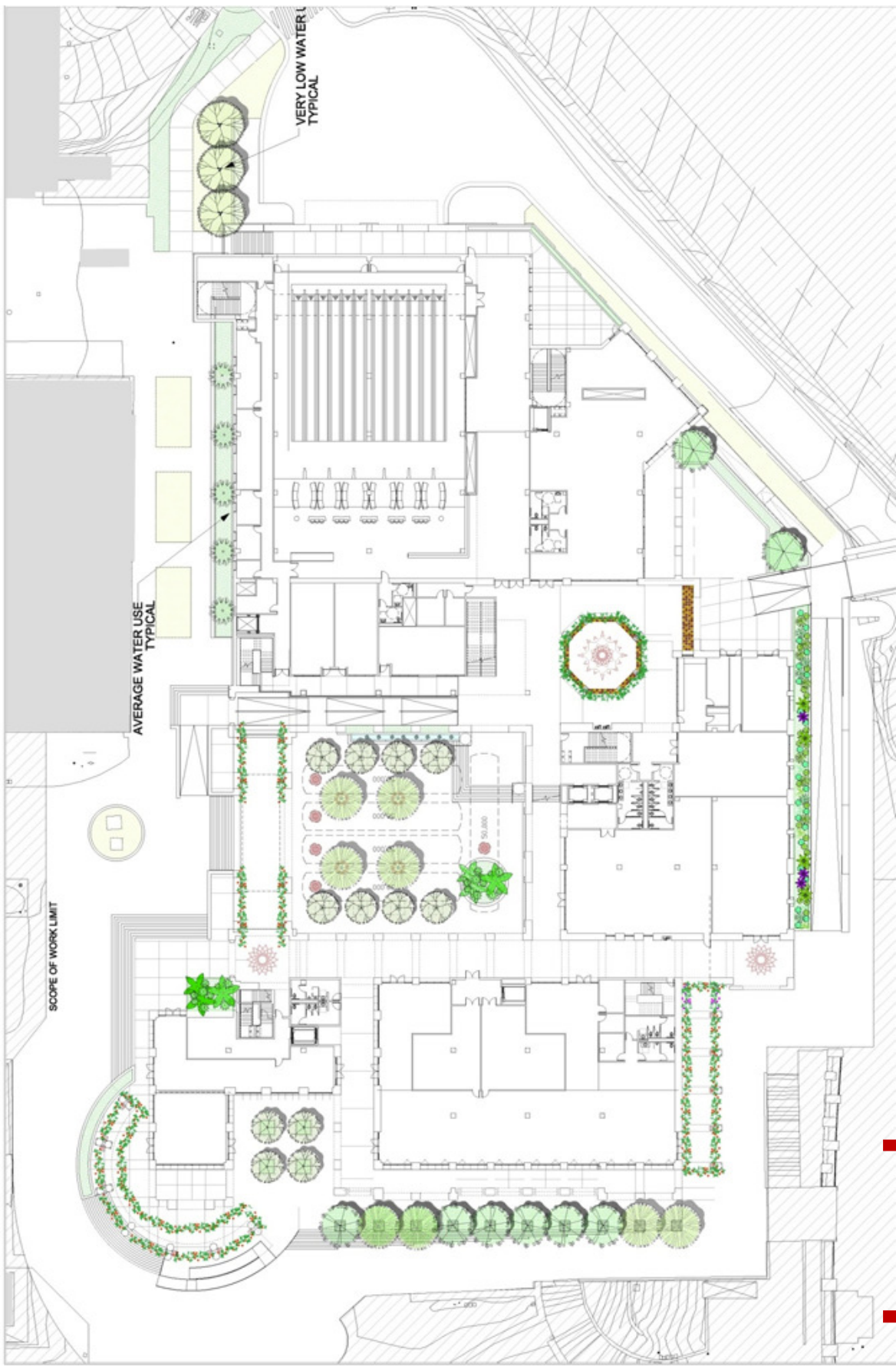


Campus Connections

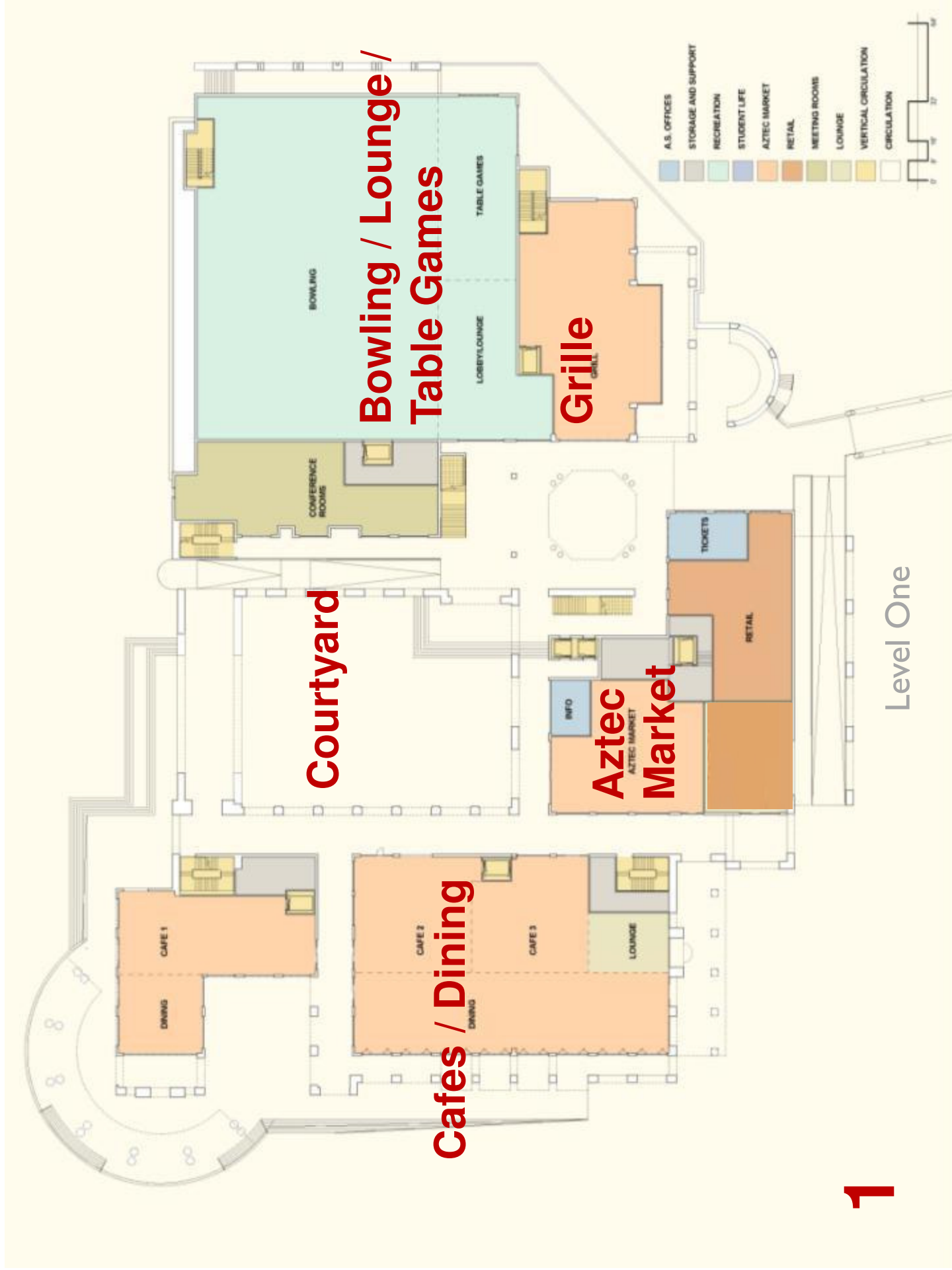
Program Comparison
December 2, 2009

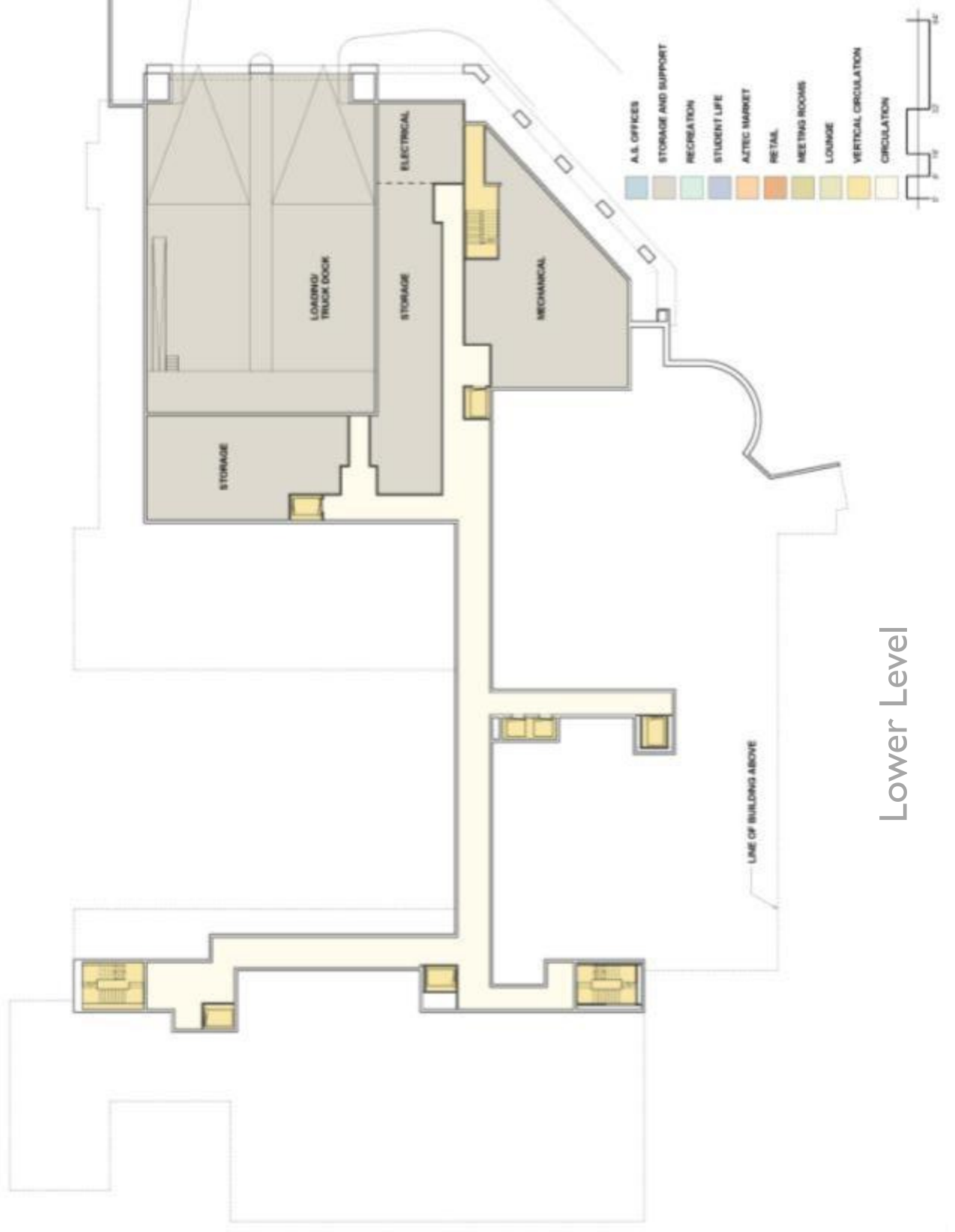
San Diego State University
Modern Space • Aztec Center Student Union

Program Space	Existing Net Square Footage	Proposed New Net Square Footage	Difference in Net Square Footage
Government Affairs, Bus. Office, Aztec Center	8,600	9,390	790
Storage	1,796	4,030	2,234
Satellite Fitness Center, Bowling & Games Center	9,652	19,425	9,773
Student Organizations & Resource Centers	4,336	8,630	4,294
Student Leadership Center & Cross-Cultural Center	1,100	2,948	1,848
Food Service (Aztec Shops)	13,500	20,000	6,500
Retail	4,331	3,000	-1,331
Meeting Rooms	10,136	18,900	8,764
Montezuma Hall Theater	0	5,250	5,250
Conference Rooms	13,160	14,885	1,725
Lounges & Study Areas	3,757	4,240	483
Enclosed Truck Dock and Loading	0	9,773	9,773
Existing Total Net Square Footage	70,368		
New Total Net Square Footage		120,471	
Added Net Square Footage with New Building			50,103

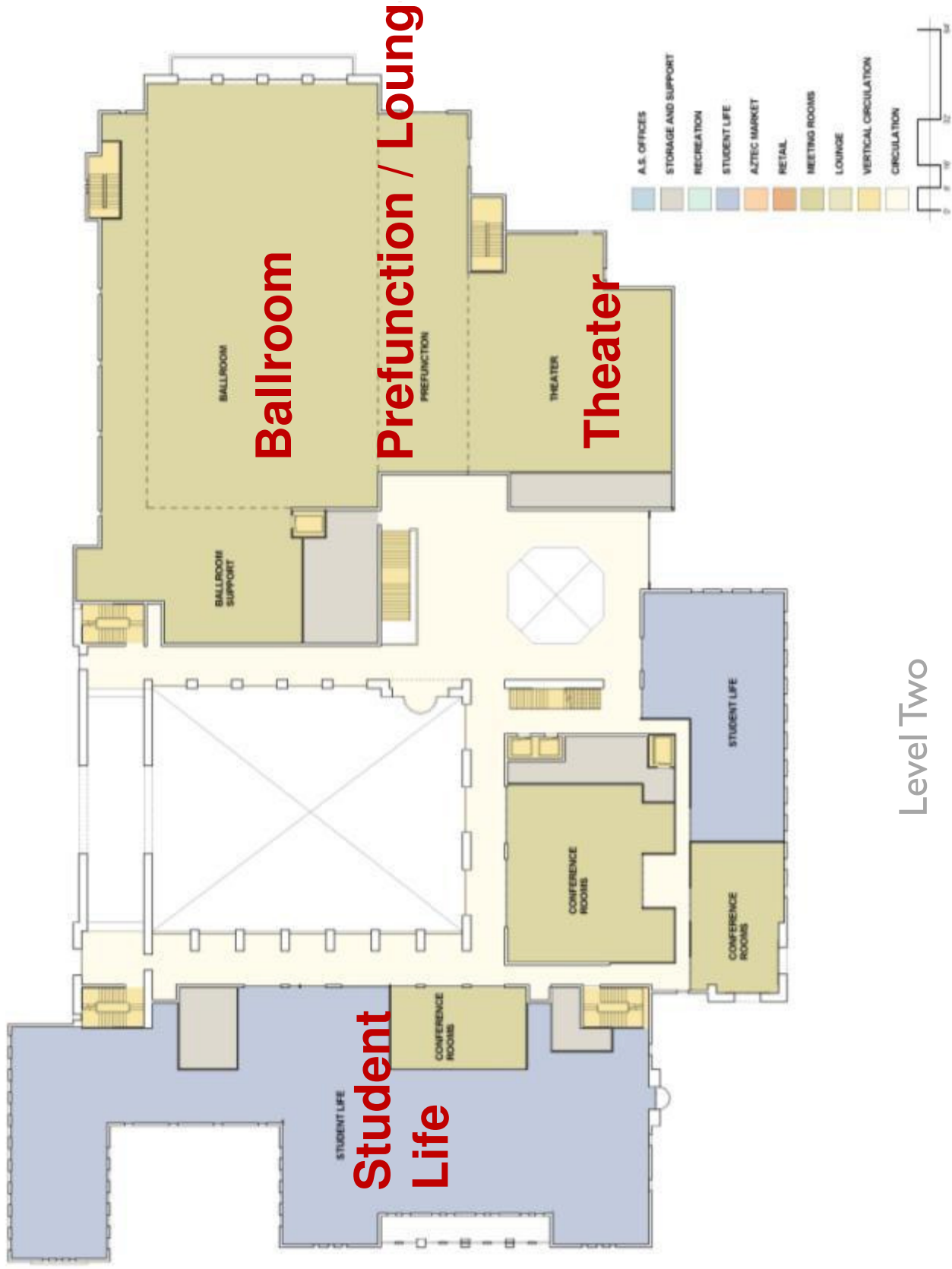


Landscape





Lower Level



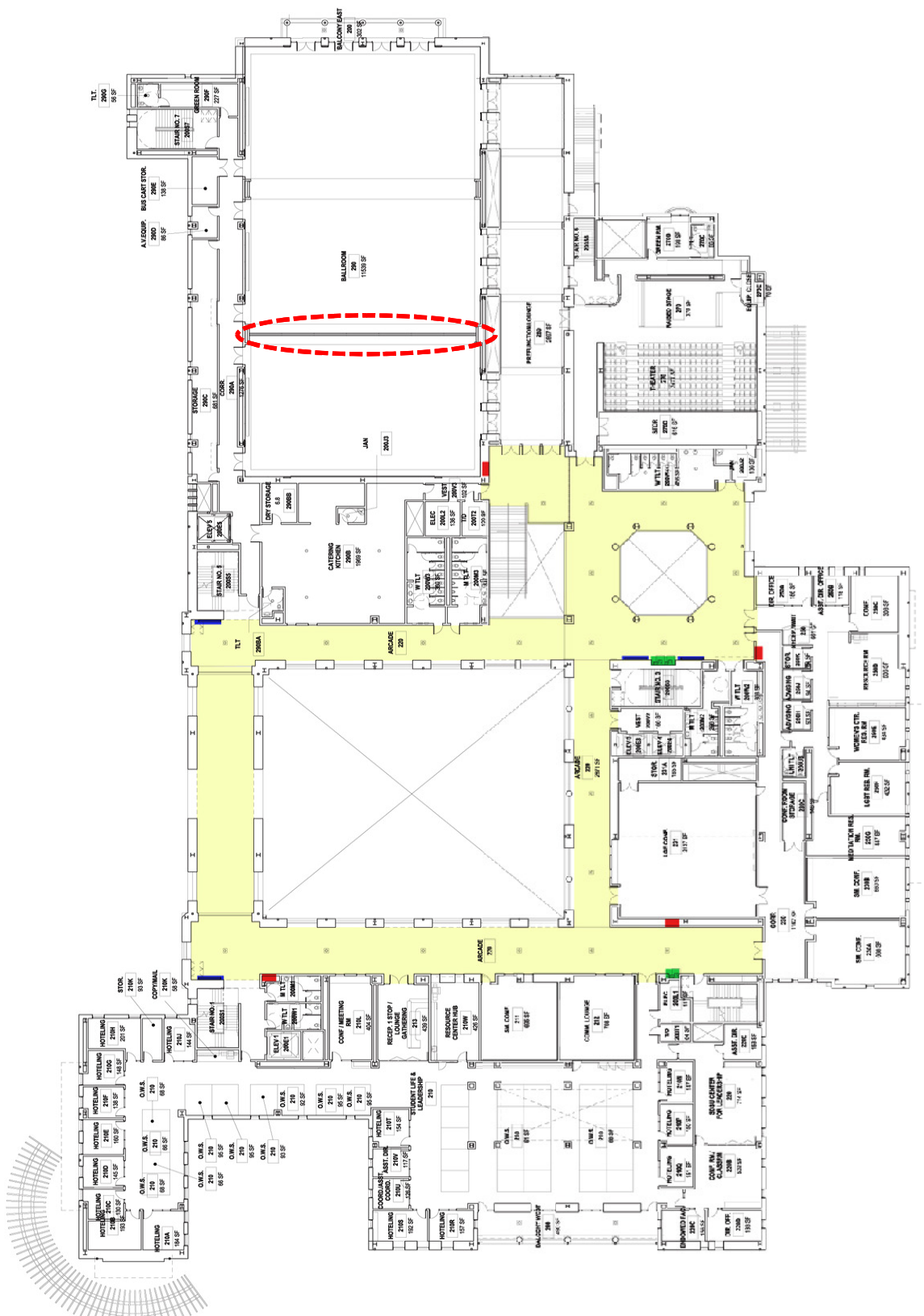
Level Two

Prefunction / Lounge

Ballroom

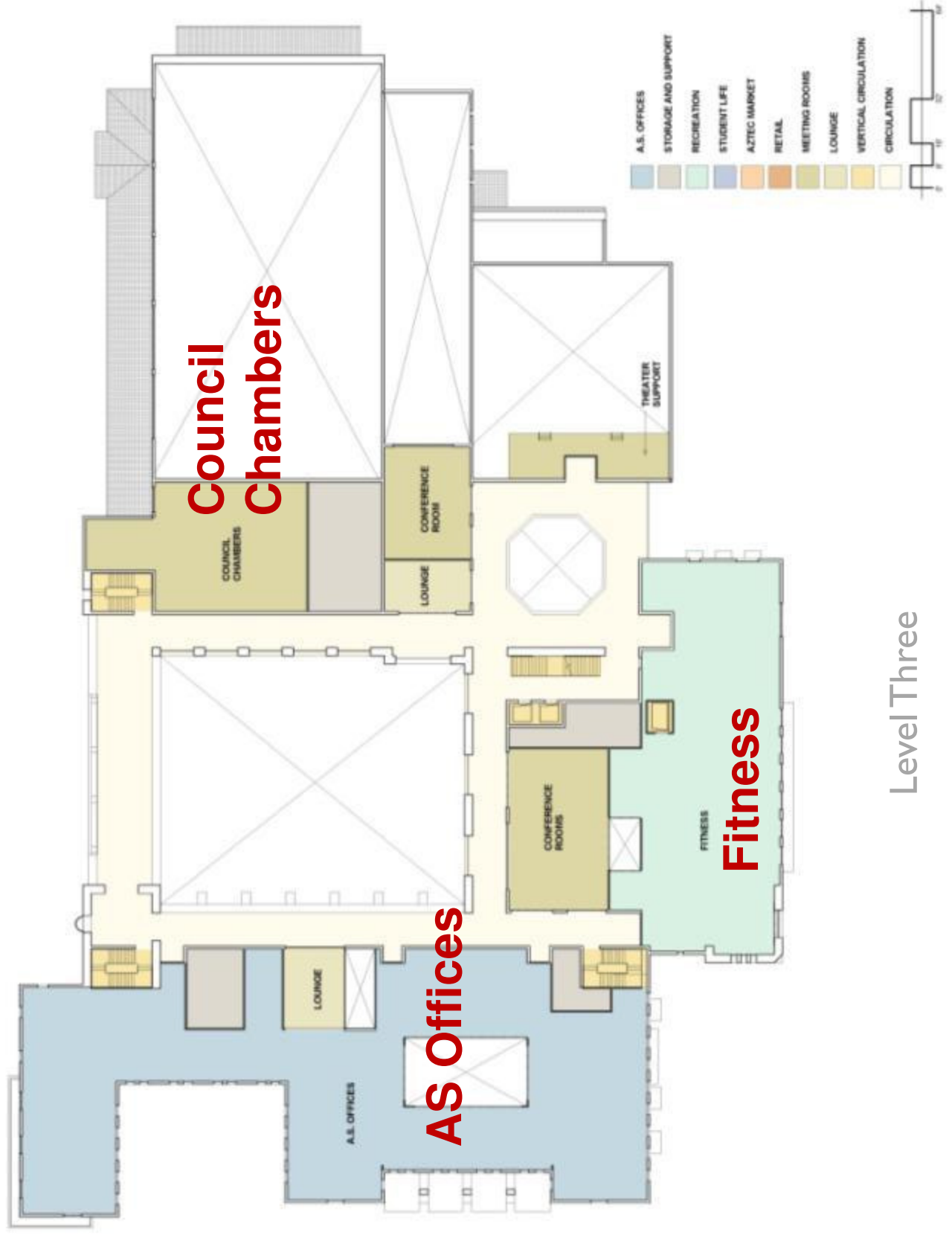
Theater

Student Life

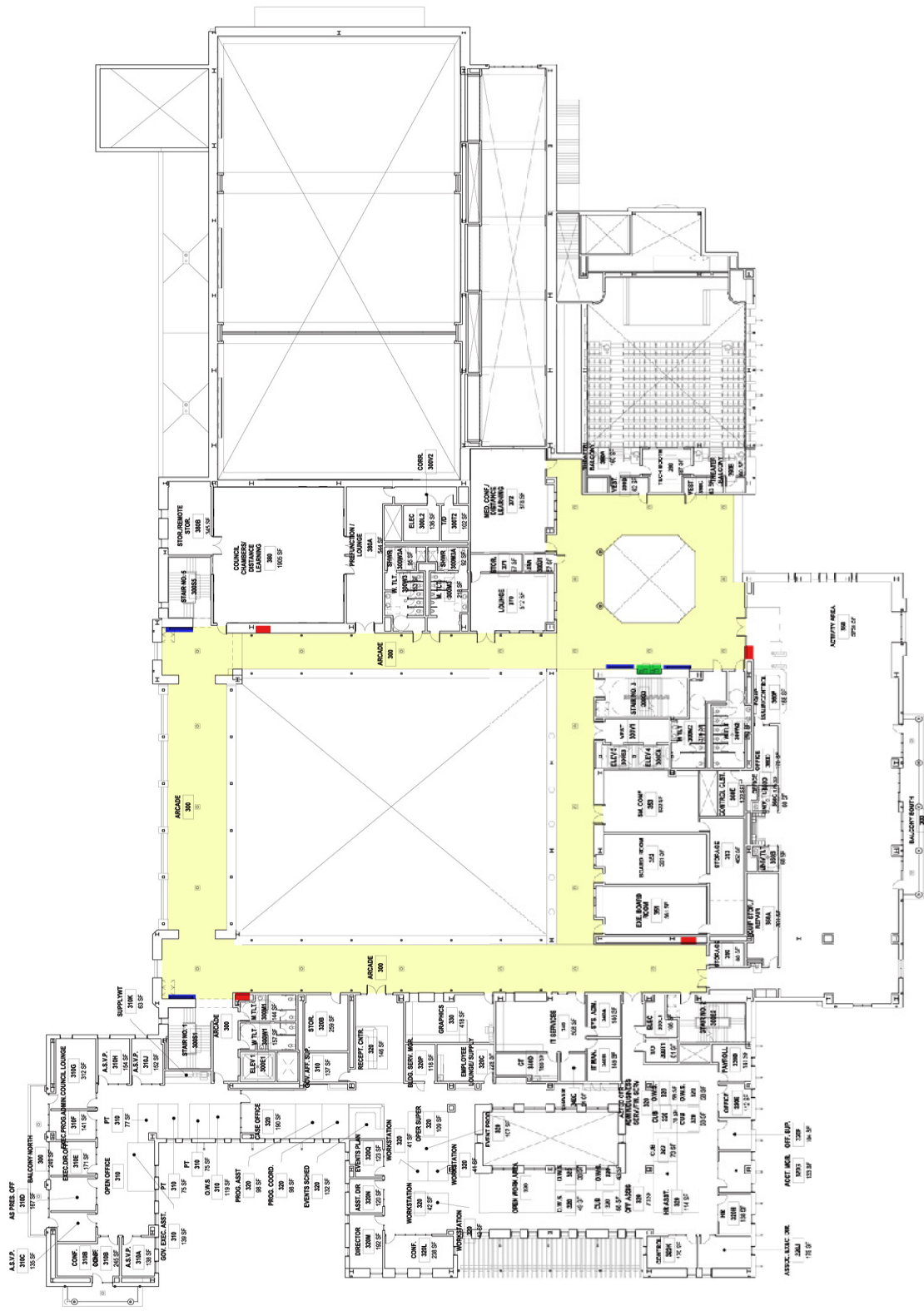


SECOND FLOOR PLAN

- TRASH RECEPTACLE NICHE
- DISPLAY CASE
- WATER FOUNTAIN & BOTTLE FILLING STATION

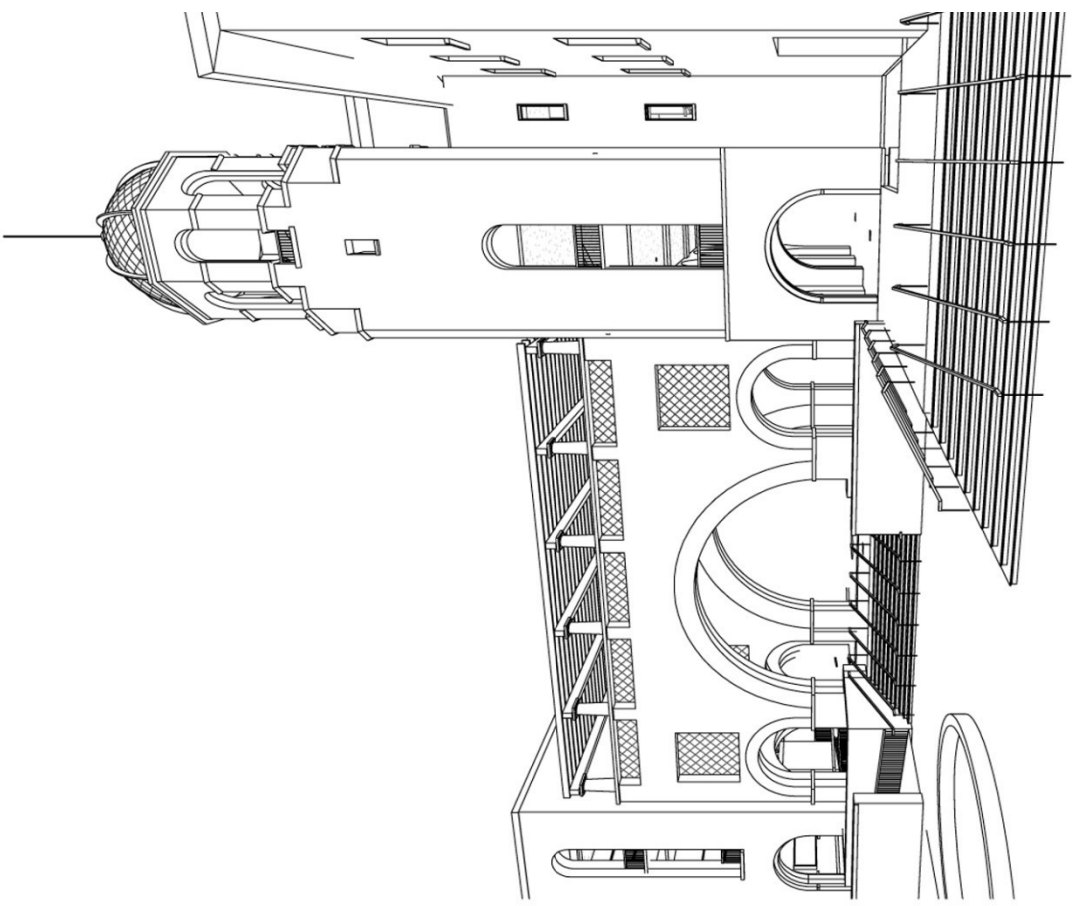
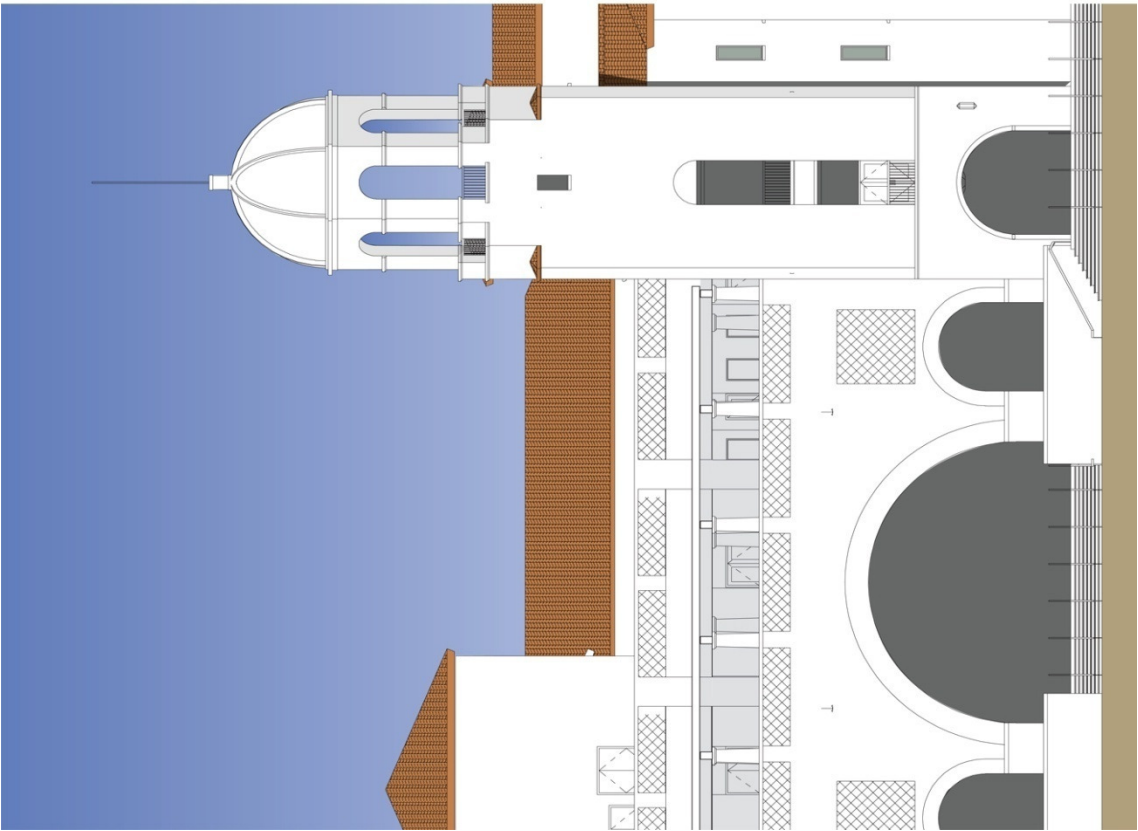


Level Three



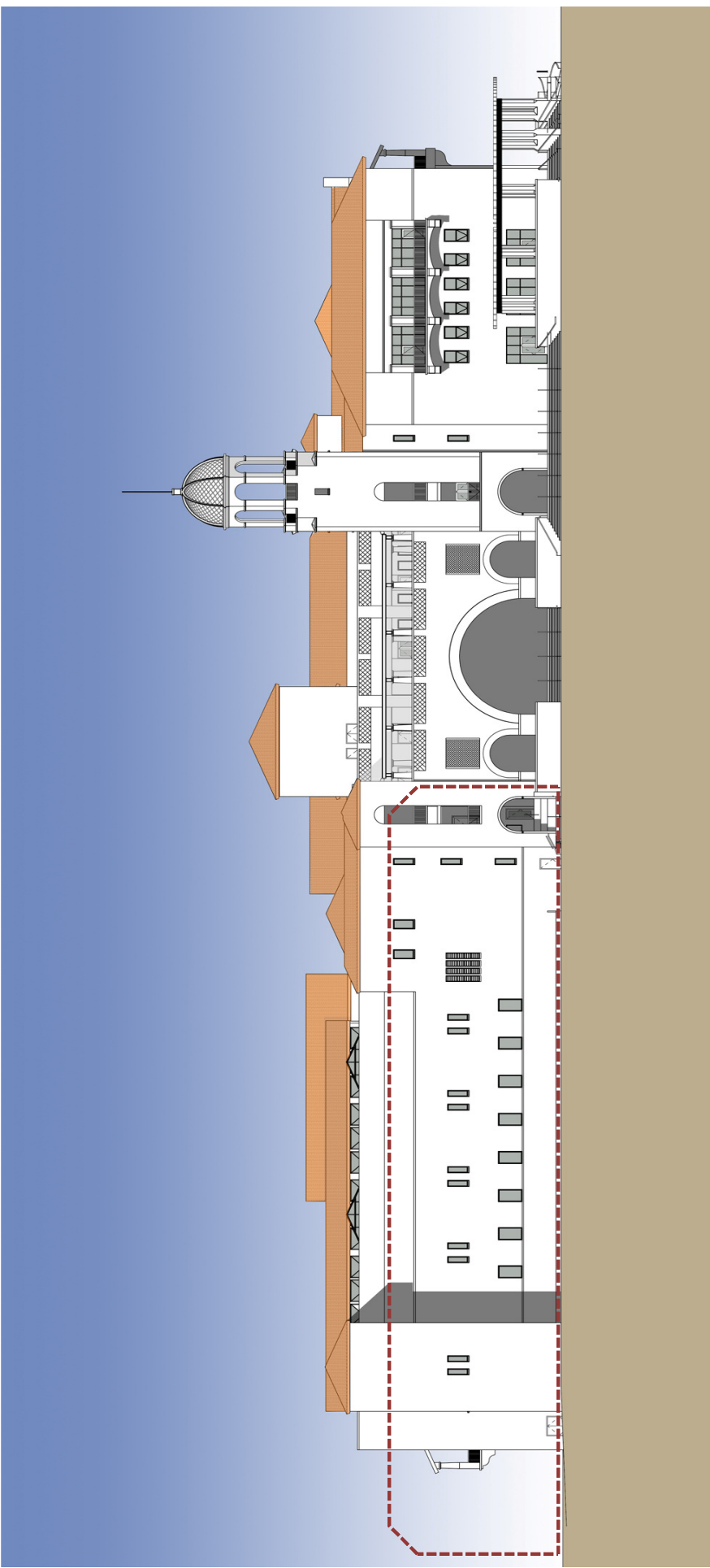
- TRASH RECEPTACLE NICHE
- DISPLAY CASE
- WATER FOUNTAIN & BOTTLE FILLING STATION

THIRD FLOOR PLAN

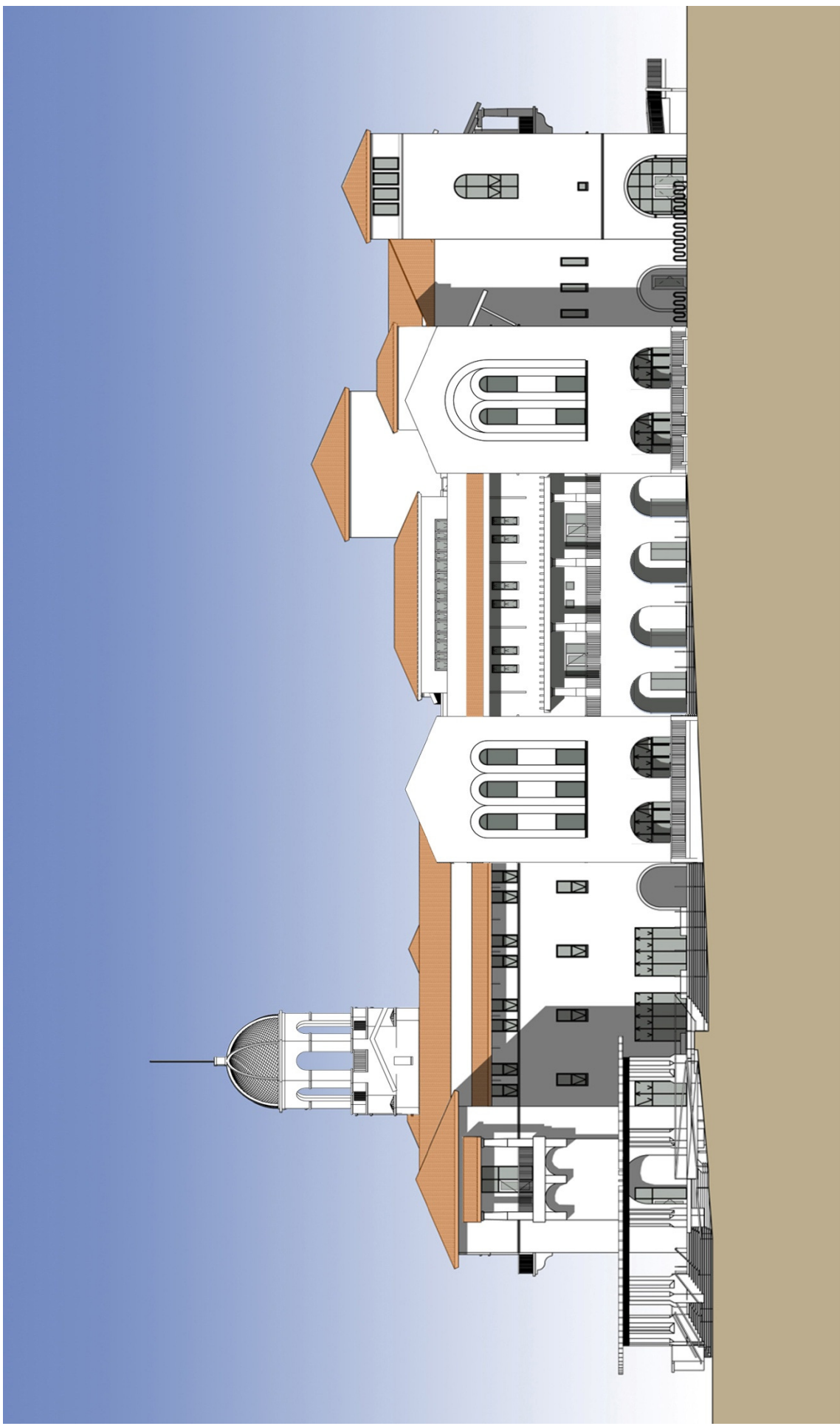


Tower

CANNONDESIGN



North Elevation



West Elevation

CANNONDESIGN



Skin Design

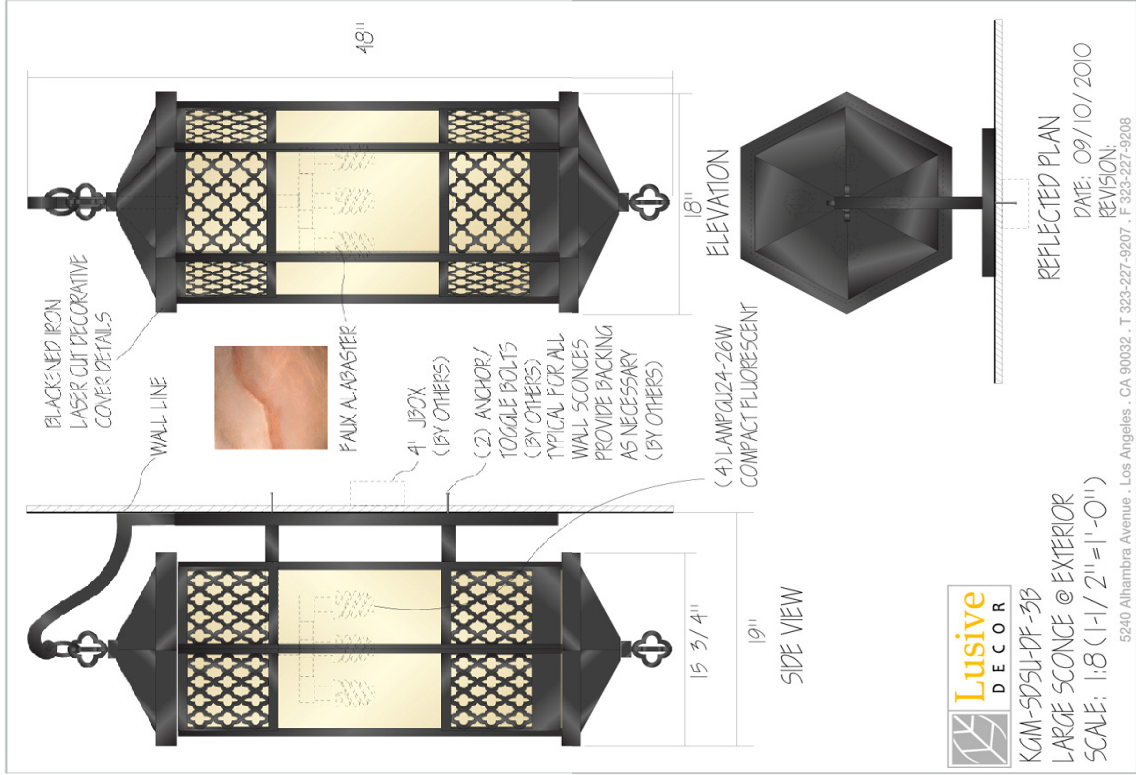


Skin Design

CANNONDESIGN



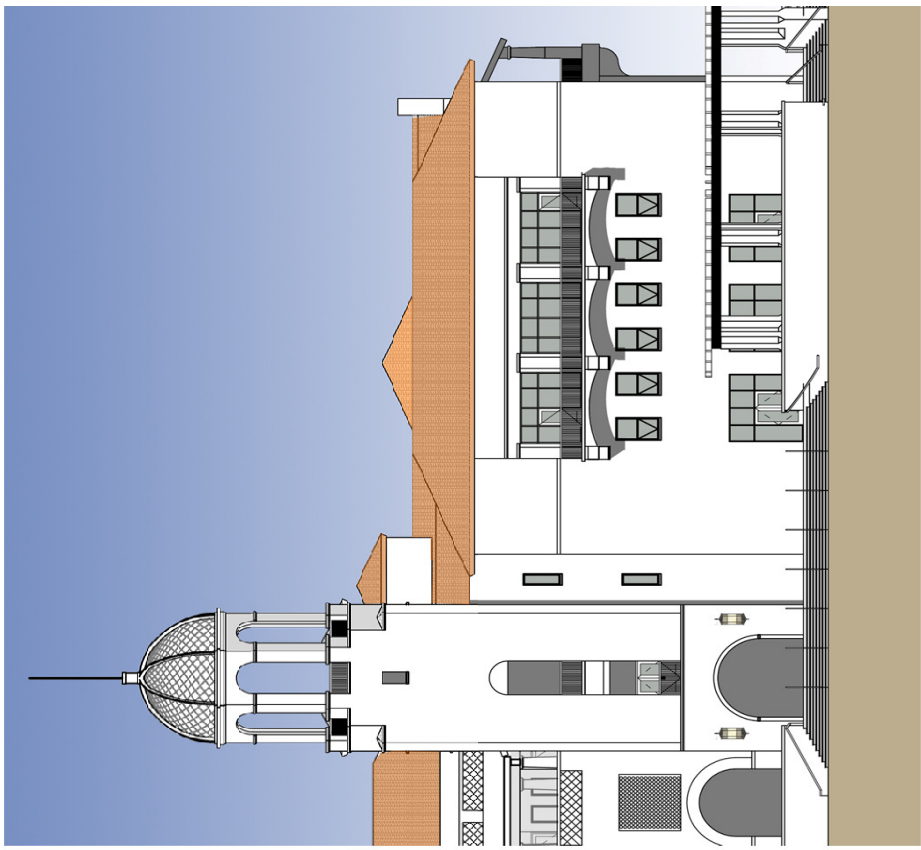
Arcade

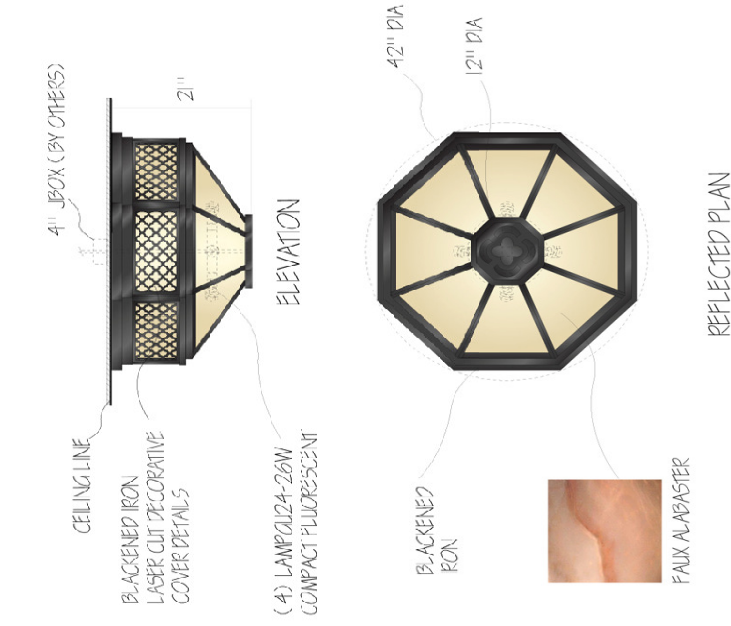


KGM-SD5U-DF-3B
 LARGE SCONCE @ EXTERIOR
 SCALE: 1/8" (1-1/2" = 1'-0")

5240 Alhambra Avenue, Los Angeles, CA 90032, T 323-227-9207, F 323-227-9208

REFLECTED PLAN
 DATE: 09/10/2010
 REVISION:





KGM-SDSU-PF-1

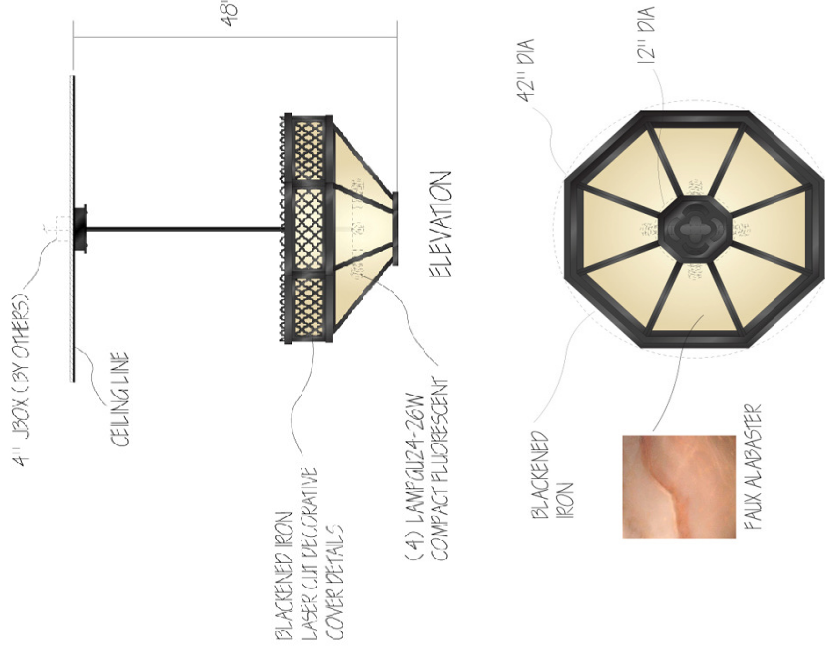
DECORATIVE FIXTURE @ EXTERIOR

SCALE: 1:6 (3/4" = 1'-0")

DATE: 06/01/2010

REVISION 2:09/09/2010

5240 Alhambra Avenue, Los Angeles, CA 90032, T 323-227-9207, F 323-227-9208



KGM-SDSU-PF-2 & 4

PENDANT @ EXTERIOR I

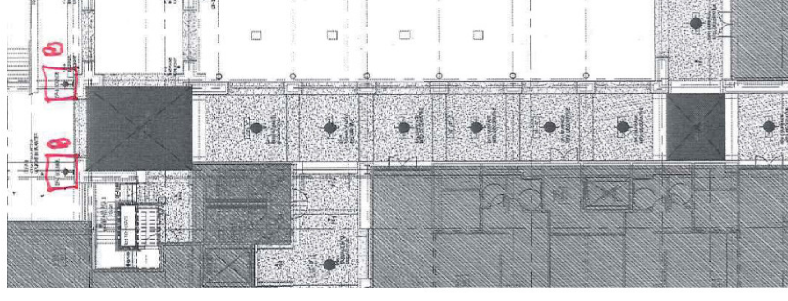
SCALE: 1:6 (3/4" = 1'-0")

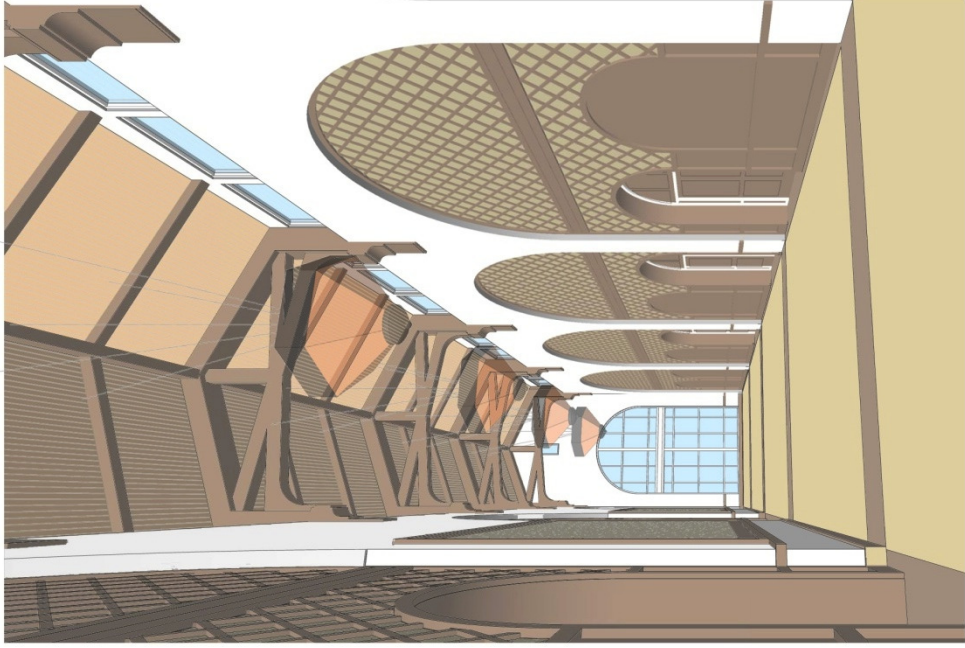
REFLECTED PLAN

DATE: 06/02/2010

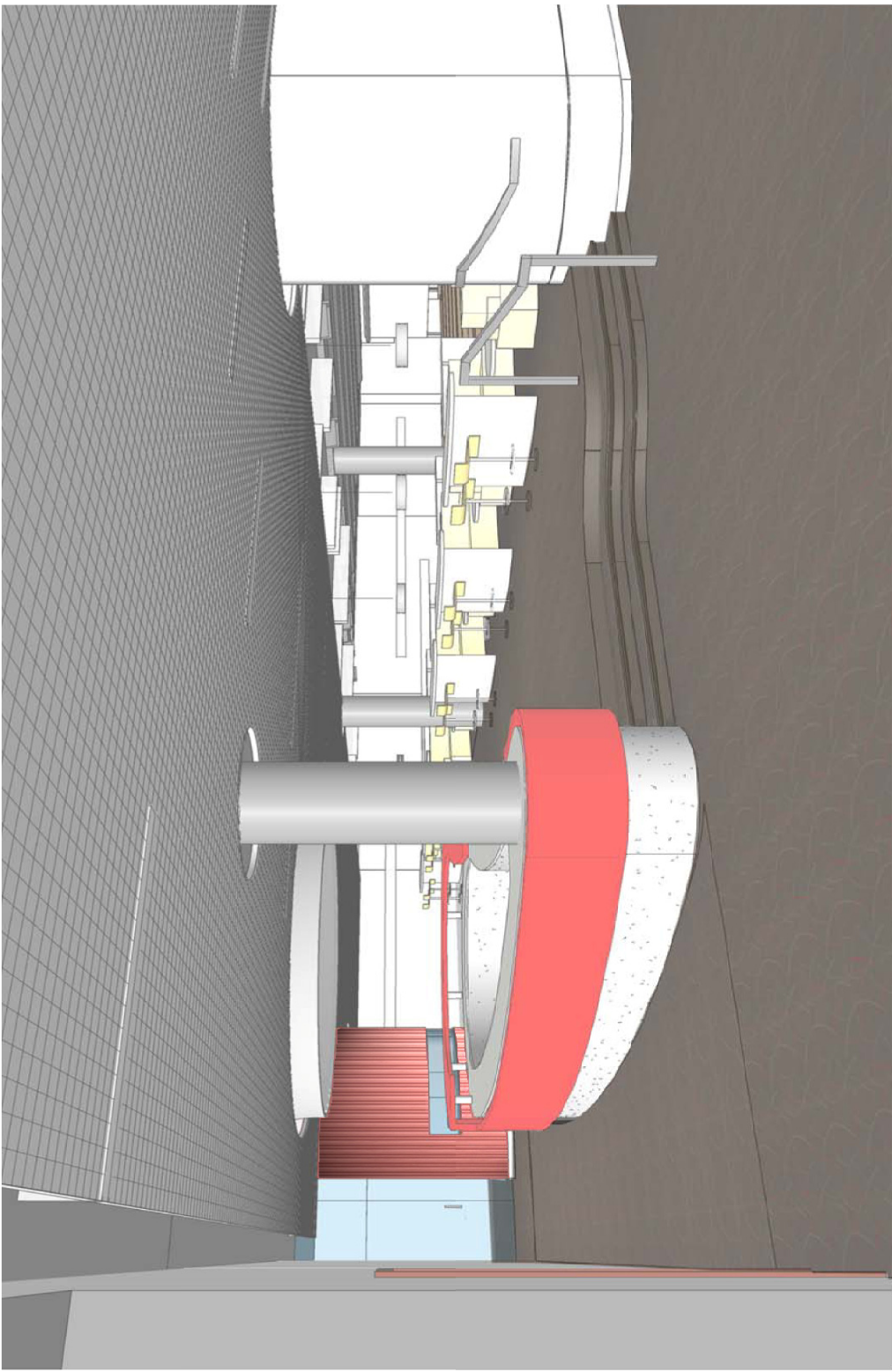
REVISION 1:08/31/2010

5240 Alhambra Avenue, Los Angeles, CA 90032, T 323-227-9207, F 323-227-9208



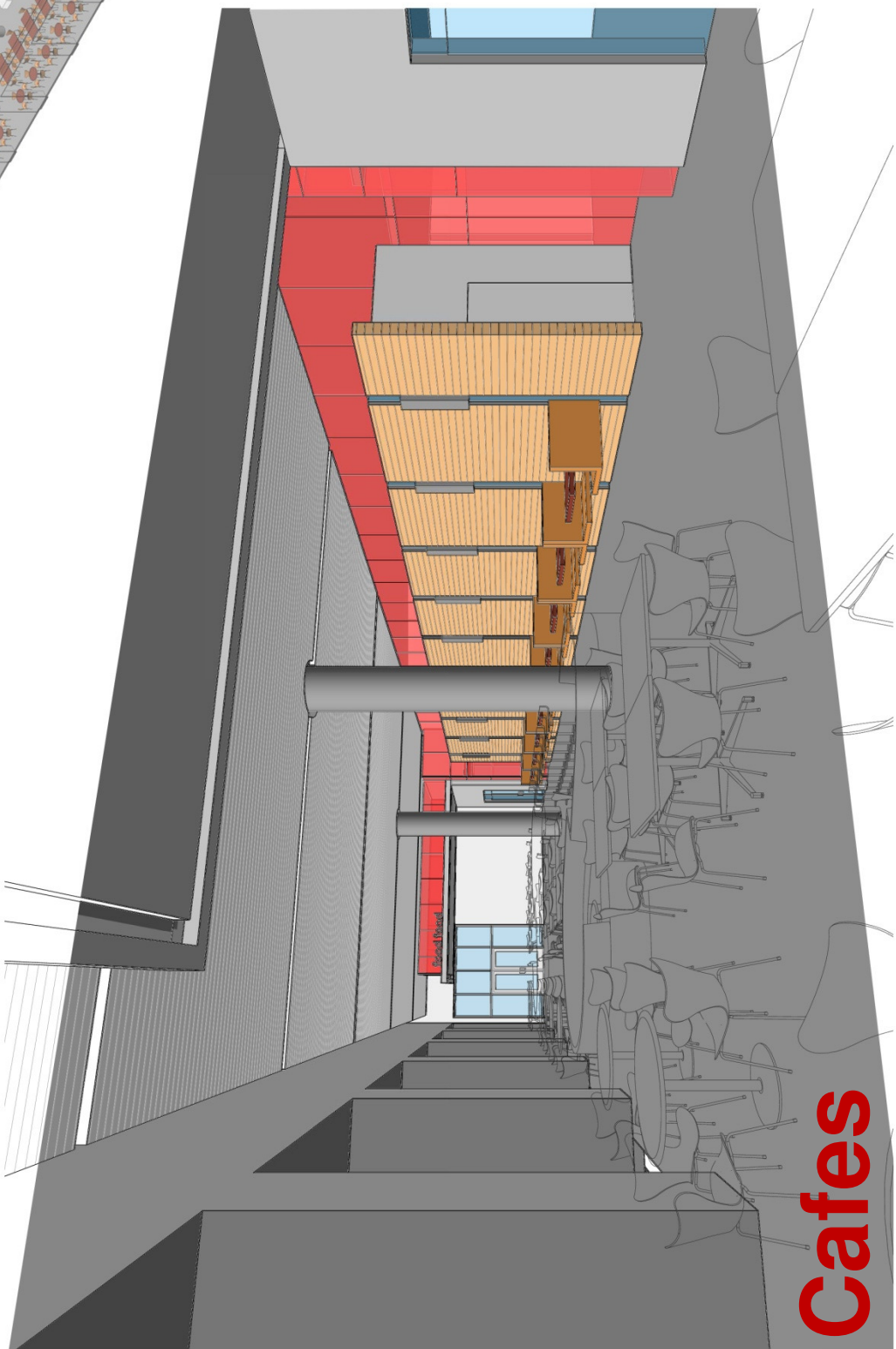
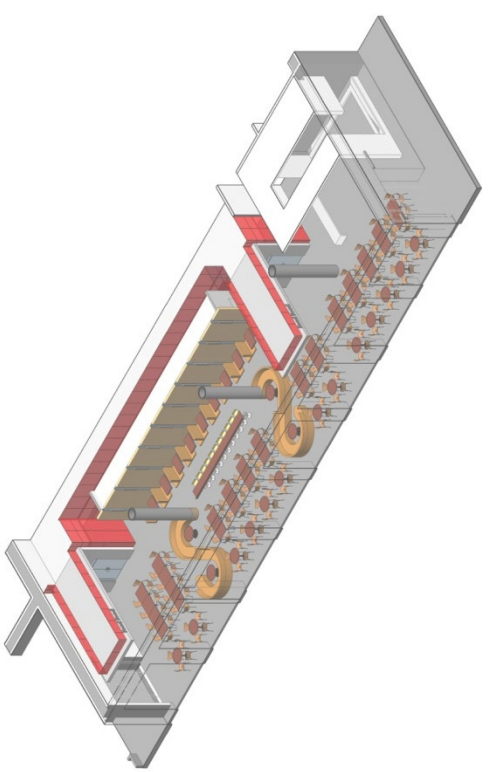


Ballroom & Prefunction Lounge



Bowling

Bowling
CANNONDESIGN



Cafes



Student Life Area

LEED Platinum = 80 Points

Current Target = 87 Points

HEAT REFLECTING ROOF:
ROOFING MATERIALS REFLECT THE SUN'S HEAT AND REDUCE COOLING LOADS.

NATURAL DAYLIGHTING:
IMPROVES THE INDOOR ENVIRONMENT AND REDUCES DEPENDENCE ON ARTIFICIAL LIGHTING.

PHOTOVOLTAIC SOLAR COLLECTION:
UTILIZES ON-SITE RENEWABLE ENERGY WHILE REDUCING CONSUMPTION OF FOSSIL FUELS.

GREEN ROOF:
PROMOTES NATURAL HABITAT.

UNDERGROUND STORAGE TANKS:
100% LANDSCAPE IRRIGATION AND WATER FOUNTAIN DEMAND ARE MET WITH COLLECTED RAINWATER. REDUCES DISCHARGE INTO MUNICIPAL STORM SEWER SYSTEM.

LIGHT REFLECTIVE PAVING:
REDUCES HEAT ISLAND EFFECT.

OPERABLE WINDOWS:
PROVIDES NATURAL VENTILATION AND OCCUPANT CONTROL IN OFFICE AREAS.

GEO THERMAL HEAT EXCHANGER:
USES THE EARTH AS A HEAT SINK TO REDUCE OPERATIONAL COSTS OF HVAC SYSTEMS.

SUNSHADE DEVICE:
REDUCES HEAT ISLAND EFFECT.

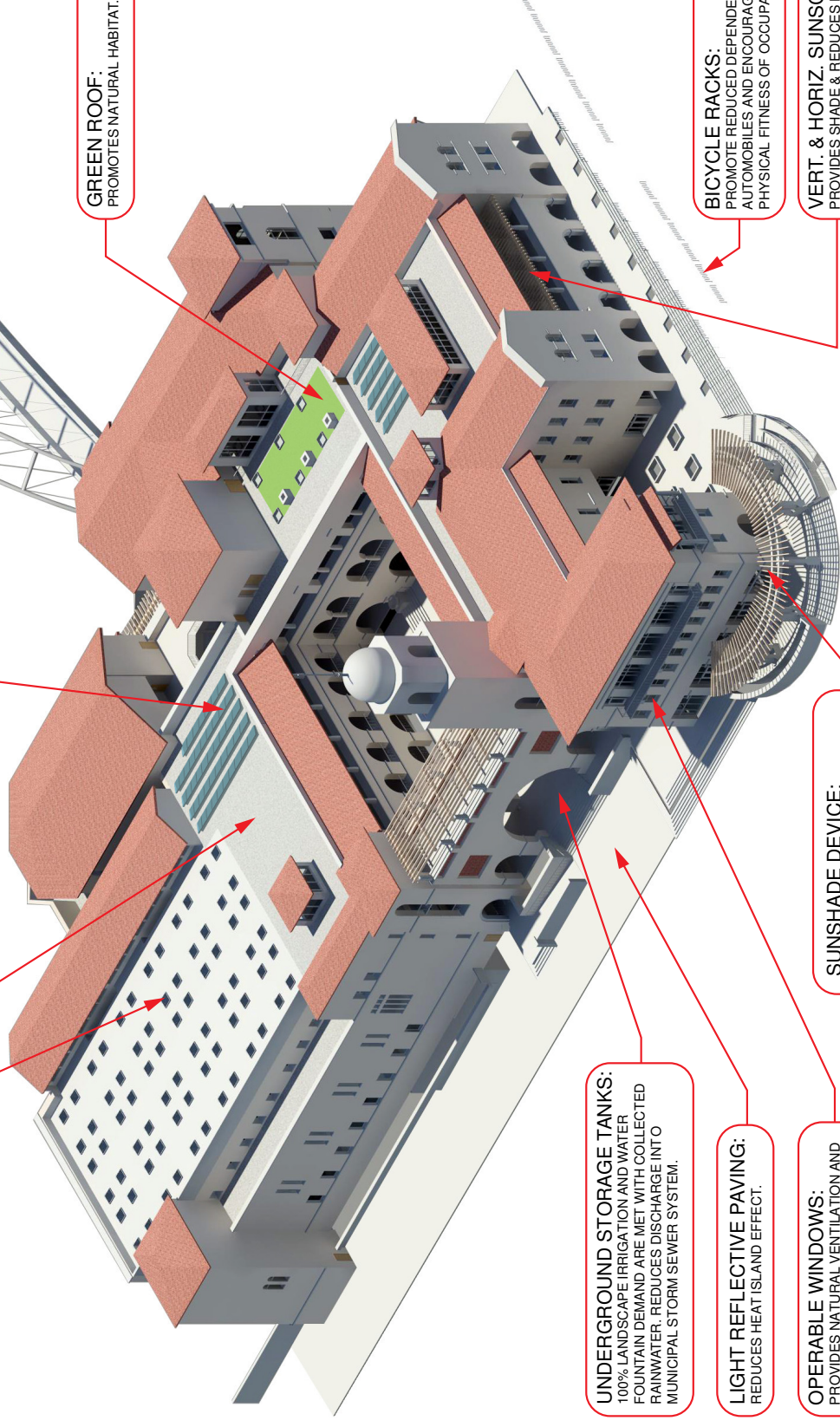
RADIANT FLOOR SYSTEM:
CONCRETE STRUCTURAL SLAB PROVIDES THERMAL MASS FOR EFFICIENT HEATING AND COOLING.

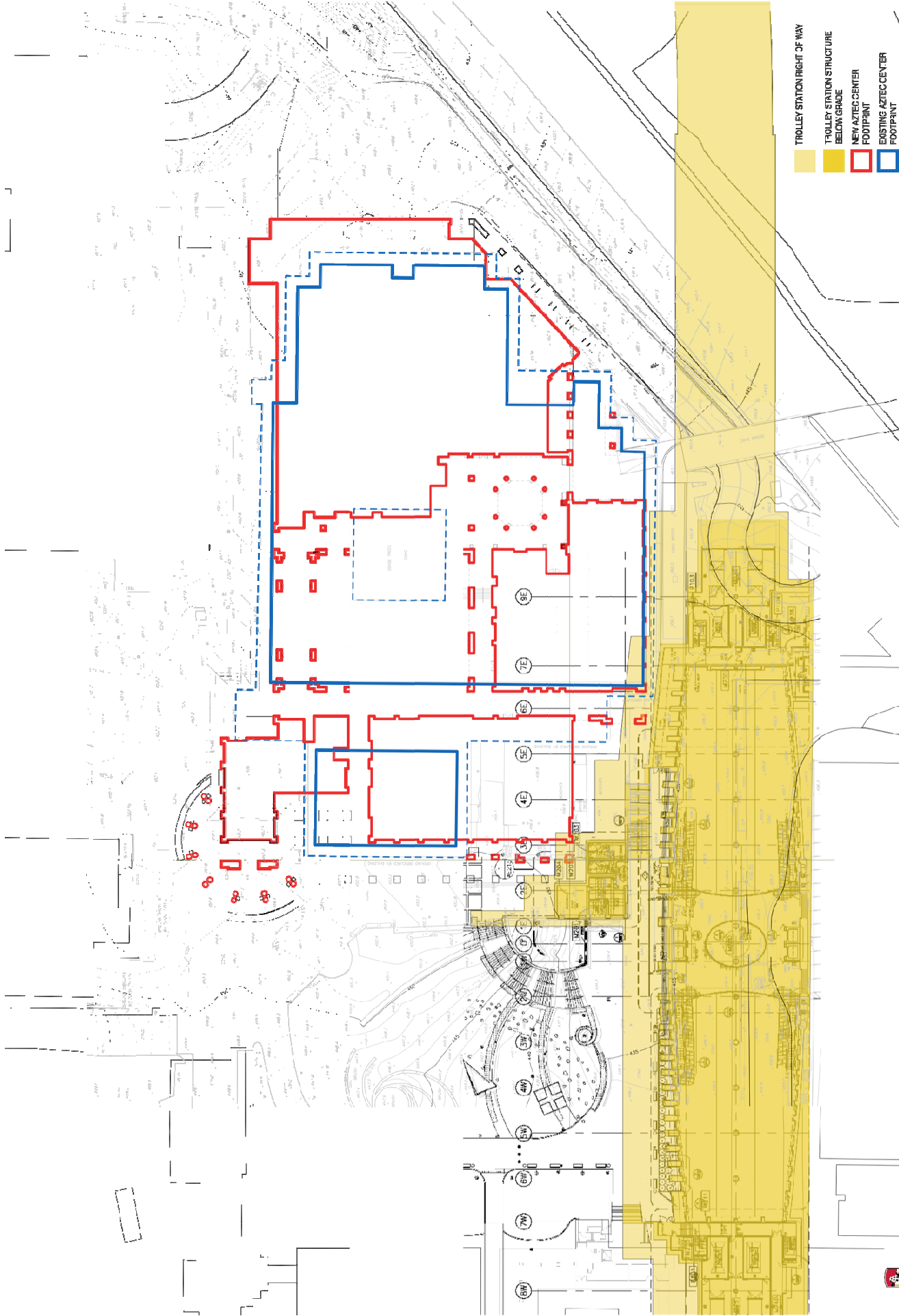
40% WATER REDUCTION:
EFFICIENT PLUMBING FIXTURES REDUCE DEMAND ON LOCAL WATER SOURCES.

BICYCLE RACKS:
PROMOTE REDUCED DEPENDENCE ON AUTOMOBILES AND ENCOURAGES PHYSICAL FITNESS OF OCCUPANTS.

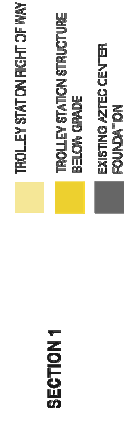
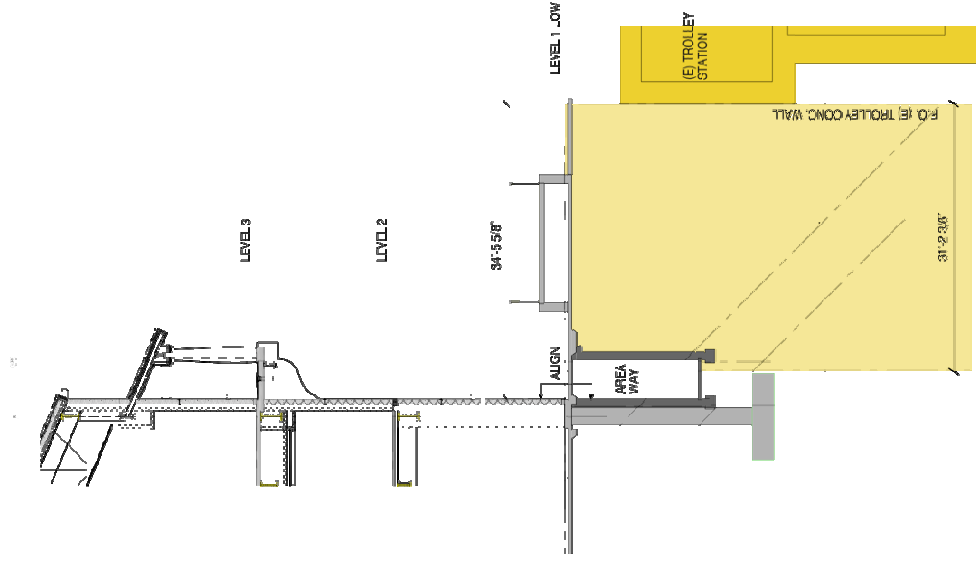
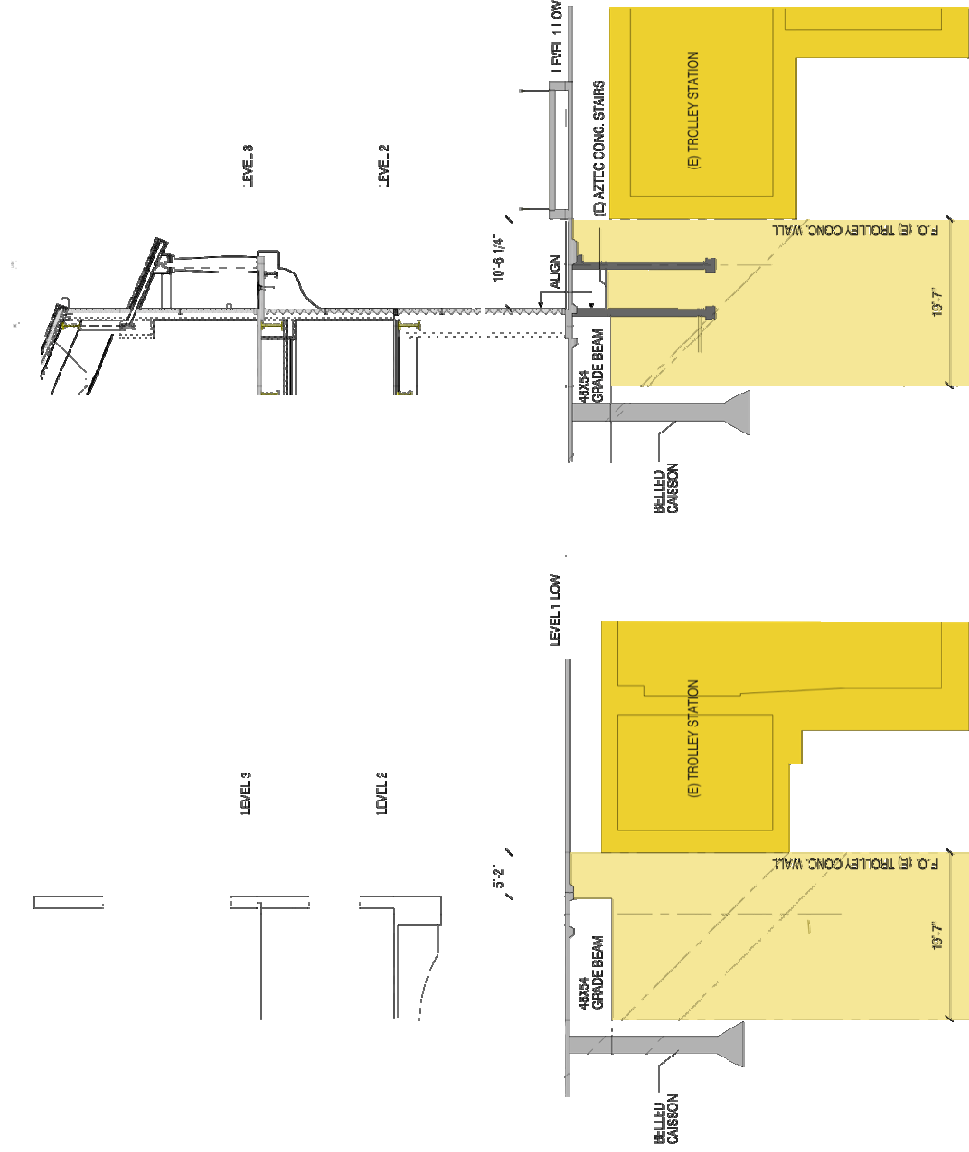
VERT. & HORIZ. SUNSCREEN:
PROVIDES SHADE & REDUCES HEAT GAIN.

40% ENERGY REDUCTION:
EFFICIENT BUILDING SYSTEMS REDUCE ENVIRONMENTAL AND ECONOMIC IMPACTS ASSOCIATED WITH ENERGY USE





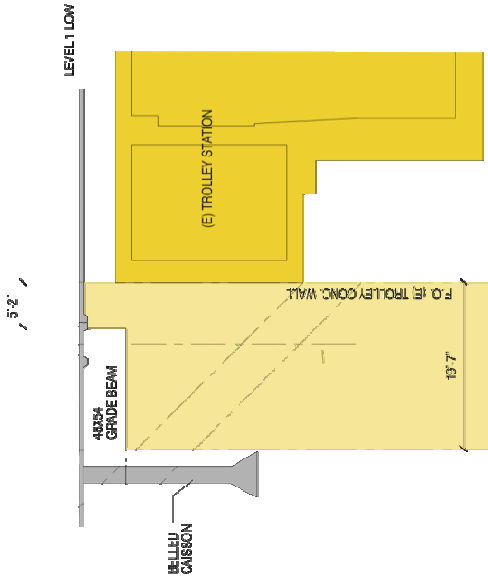
Who's Property is it?



1"=8'-0"
19 May, 2010

Who's Property is it?

SECTION 3



Construction Start Timeline

December 2010: Submit for Plan Check

March 2011: Release Bid Documents

April 25: Final GMAX

May 10th: BOT Approval

May 15th: Contract Signature & NTP

June 1st: Construction Start

Who's Property is it,
Round 2

Revised Construction Start Timeline

April 15th, Finance Item Deferred

April 25, Final GMAX \$71 Million

~~May 10th, Financing Approval~~

~~May 15th Contract Signature & NTP~~

May 20th Agree on 2 Contracts for GMAX

June 1st, Contract 1 Signature & NTP (\$3 Million)

Site Utilities, Haz Mat Abatement, Demolition,

Long Lead Item Shop Drawings

June 1st, Contract Construction Start

June 10th, State PWB approves lease amendment

July 10th, Financing Approval

July 15th Contract 2 Signature & NTP (\$68 Million)

2 Days Impact to Scheduled Completion





The Failures Helped

Nobody Mourns the P & W Design

More is Better

Students were willing to pay more to get everything, but no to compromise

Green Sells

LEED Platinum was key to marketing the fee

Our Program wasn't as refined as we thought.

We should have asked harder questions earlier.

The Design was more complicated than we thought

The architectural solution made all systems far more complex than 1 or 3 Bldgs

Platinum is expensive, but not entirely foolish

LEED Renewable Energy Points (340 kWh) paid for in less than 10 Years

We did just buy points.

Renewable Energy Credits, Storm Water Retention

CM @ Risk Helped a lot

Fine tuning the design, Managing unforeseens

