

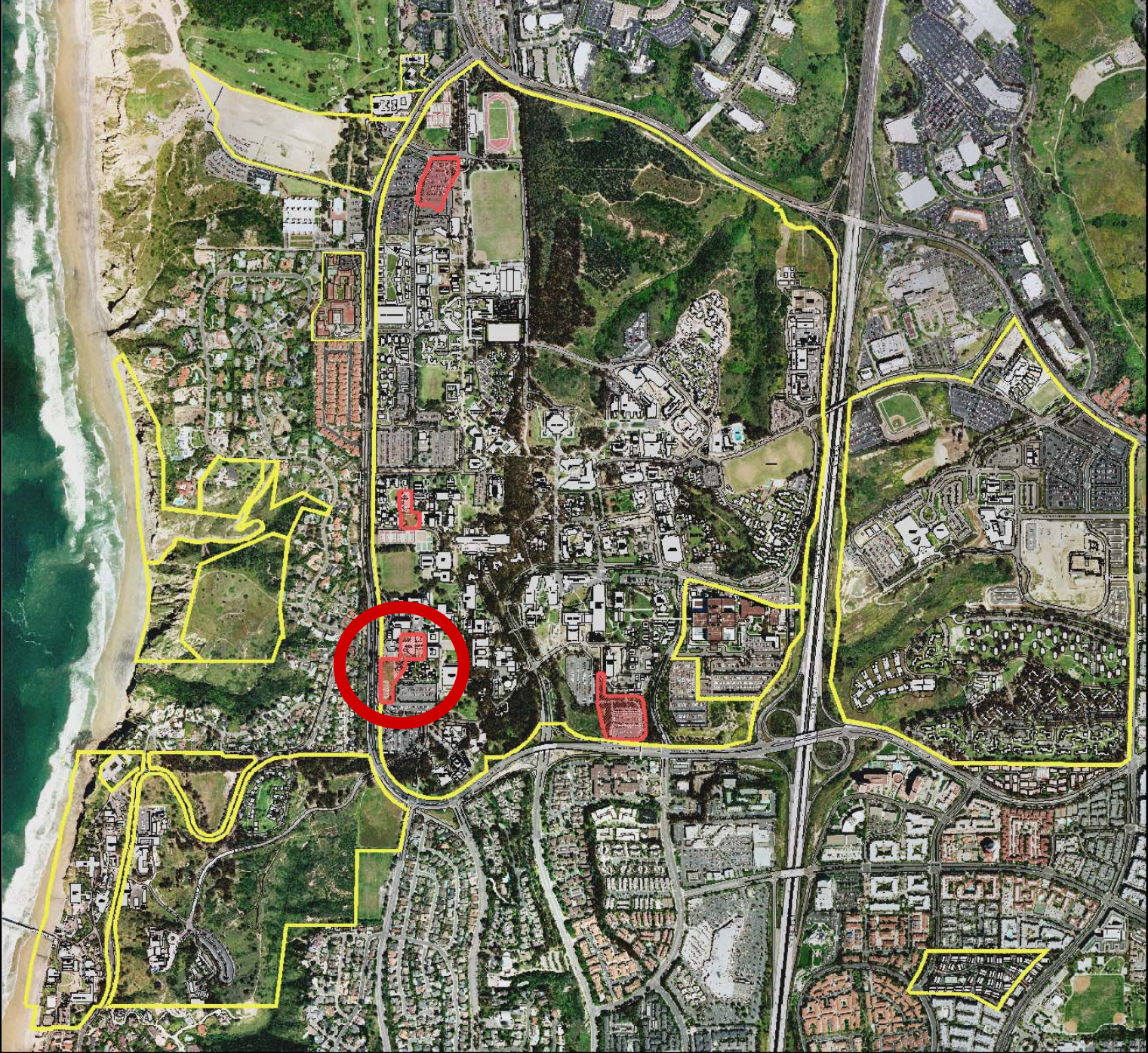
UCSD Revelle College Apartments



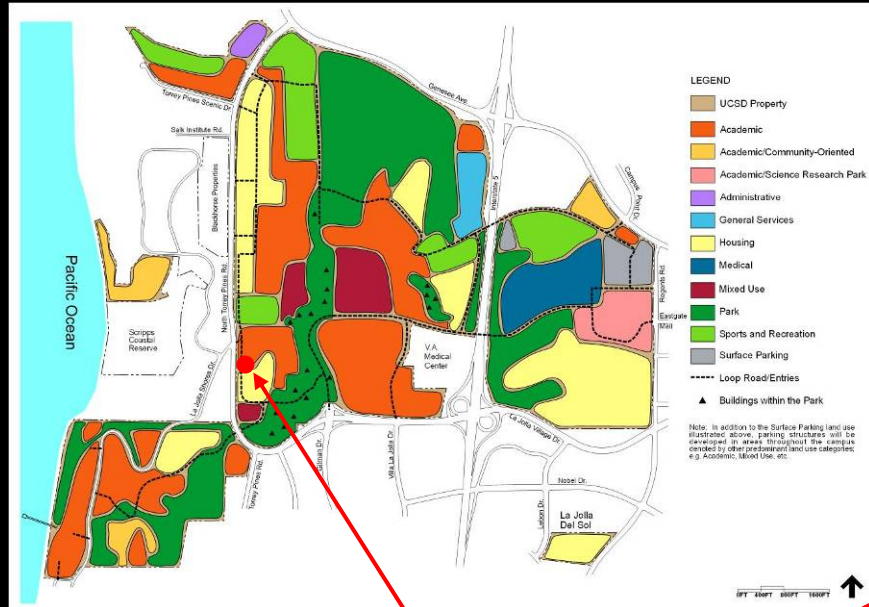
Regents Committee on Grounds and Buildings
Preliminary Review of Design
November 18, 2008

Project Information

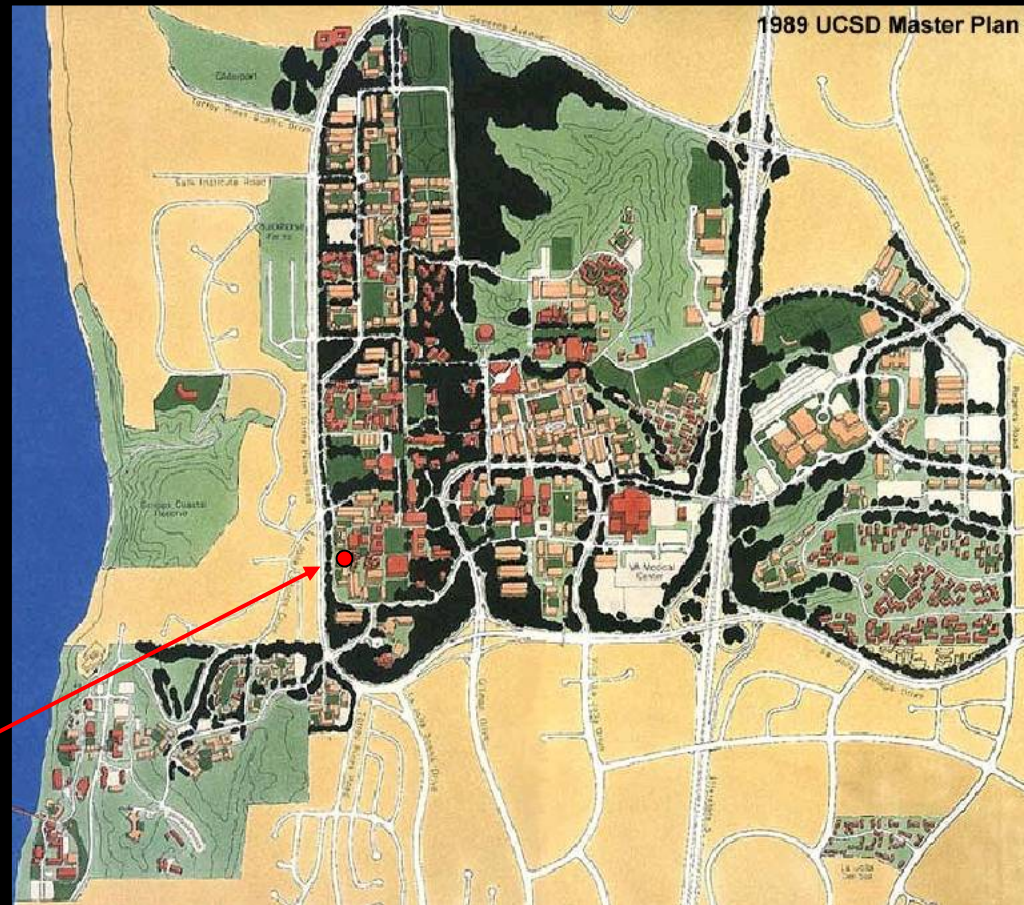
- In-fill project of 510 student beds
 - Six students per apartment suite
 - 2 double bedrooms and 2 single bedrooms per apartment
- Common Areas to include:
 - Conference/meeting space
 - Laundry
 - Mail Services
 - Outdoor program areas
- 153,891 gross square feet/109,658 assignable square feet
- Sustainable design/LEED Silver



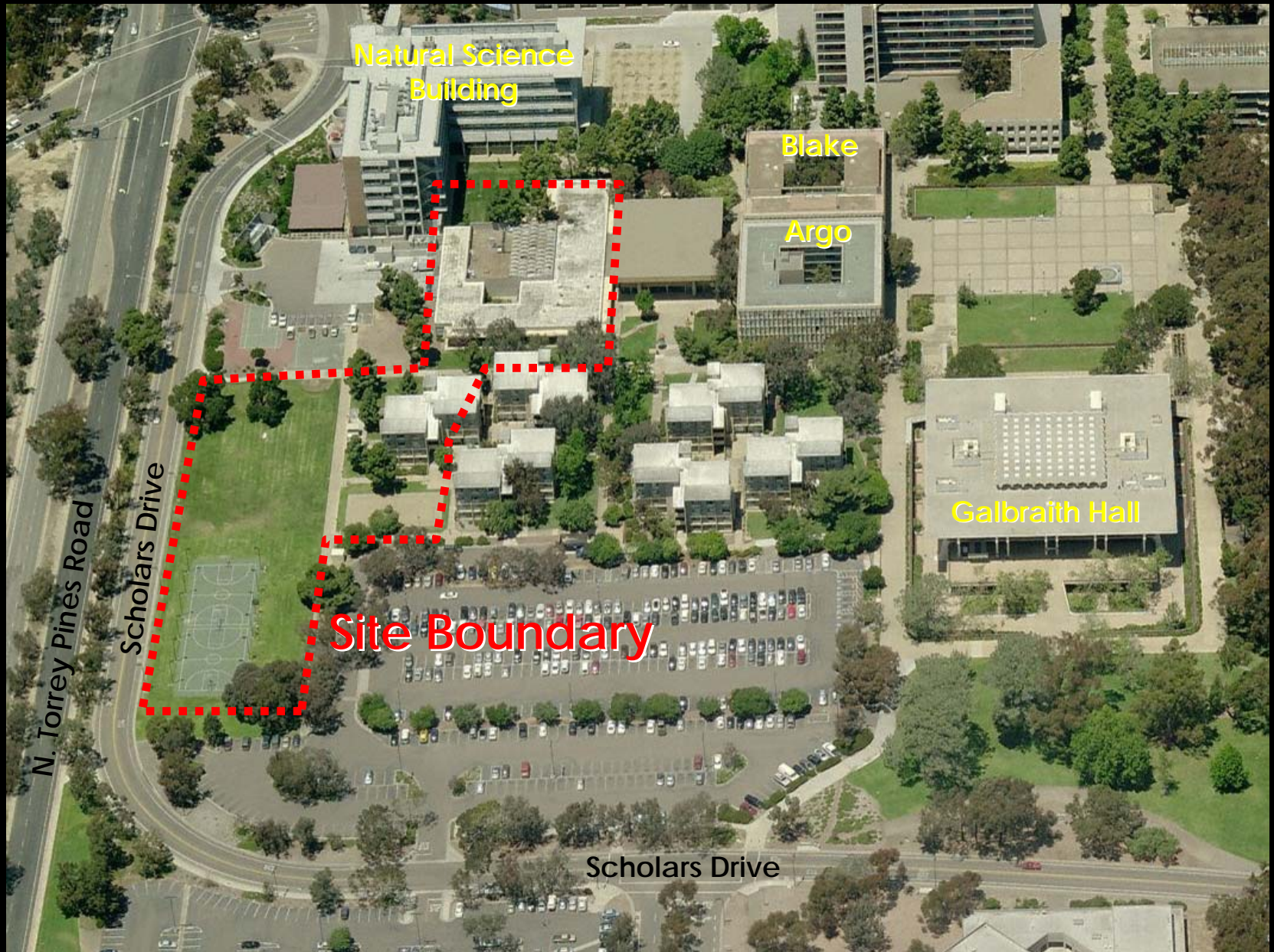
2004 LRDP AND 1989 UCSD MASTER PLAN



Site



Proposed Site Location



Site Photos



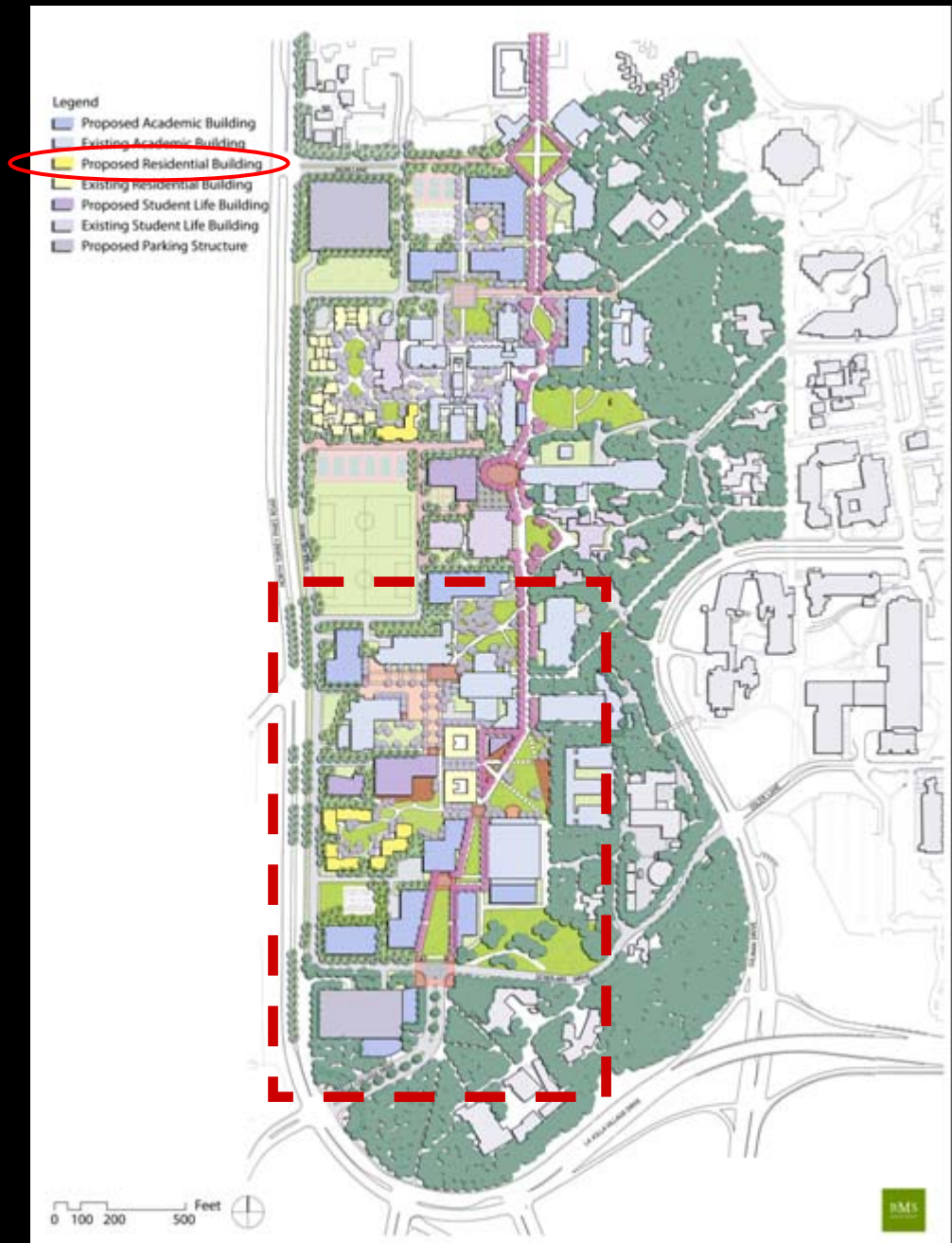
Looking Southeast

Site Photos



Looking South

Revelle/Muir Colleges Neighborhood Planning Study Illustrative Plan

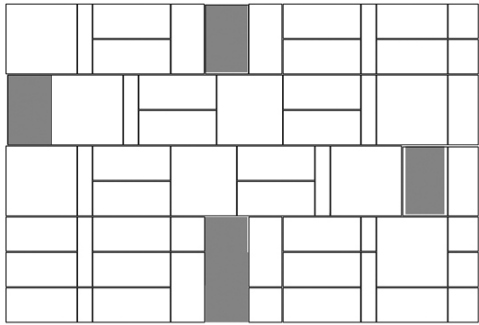




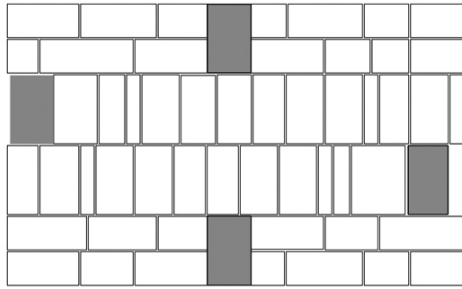
TRANSPARENCY
EXISTING REVELLE COLLEGE BUILDING CONTEXT



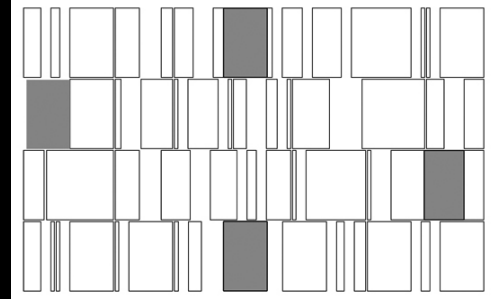
**MODULAR ELEMENTS
EXISTING REVELLE COLLEGE BUILDING CONTEXT**



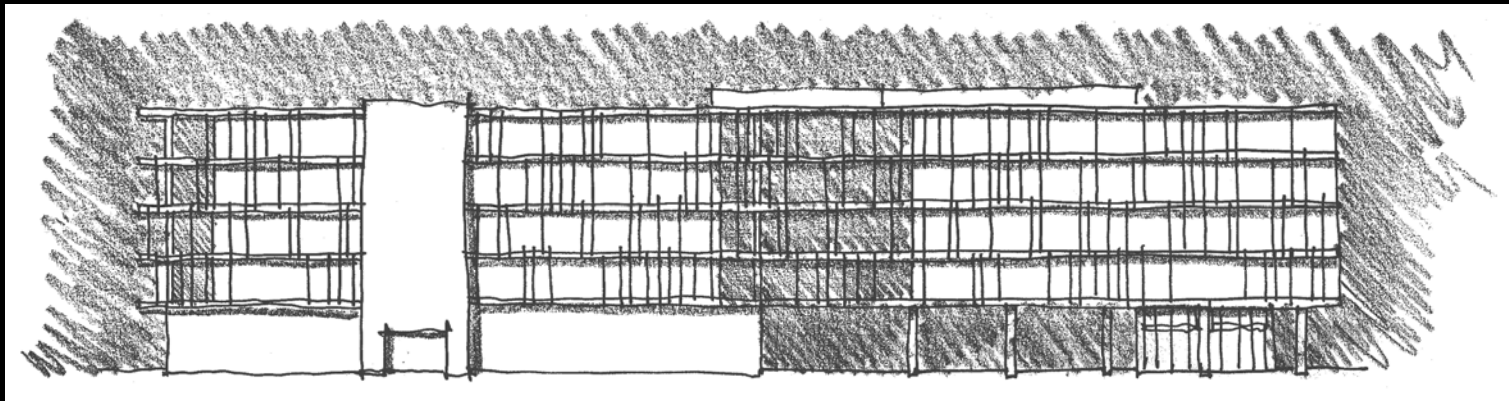
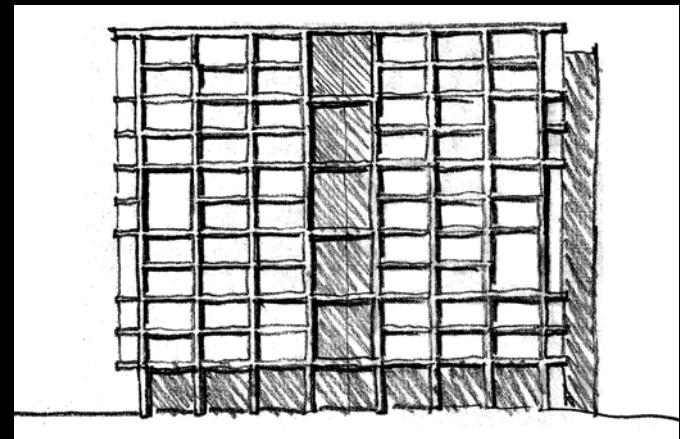
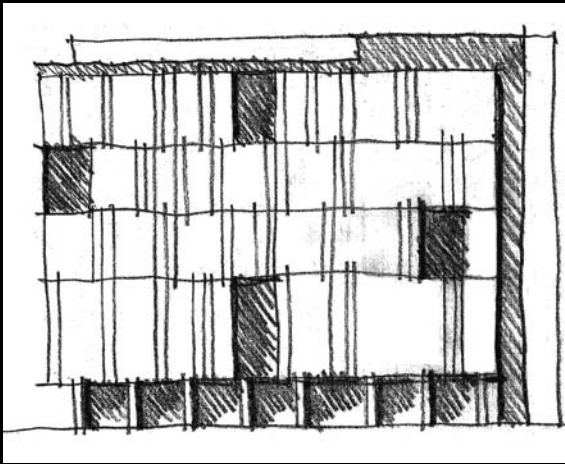
Unit based scheme



Unit based scheme, horiz + vert

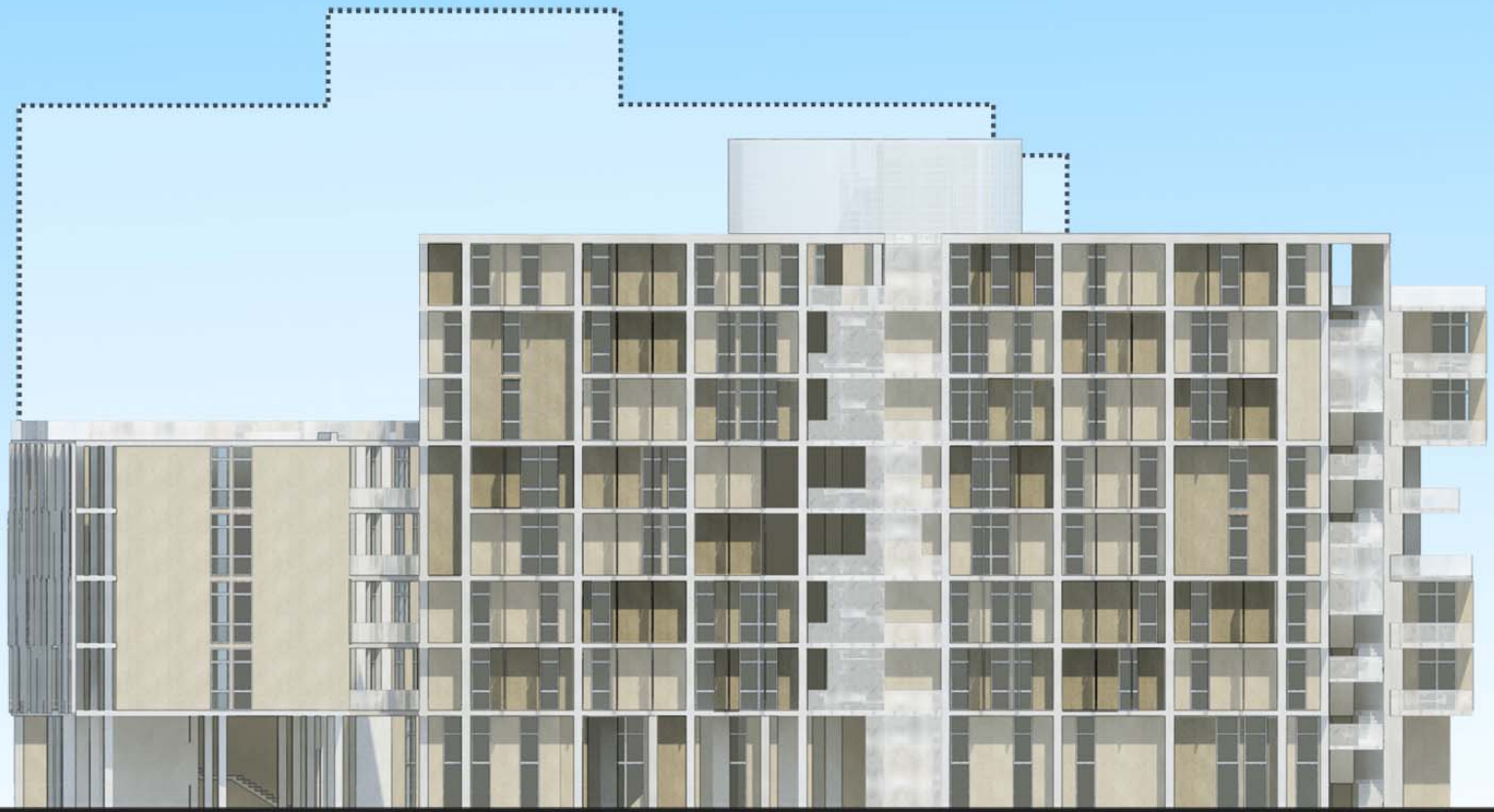


Aperture based scheme





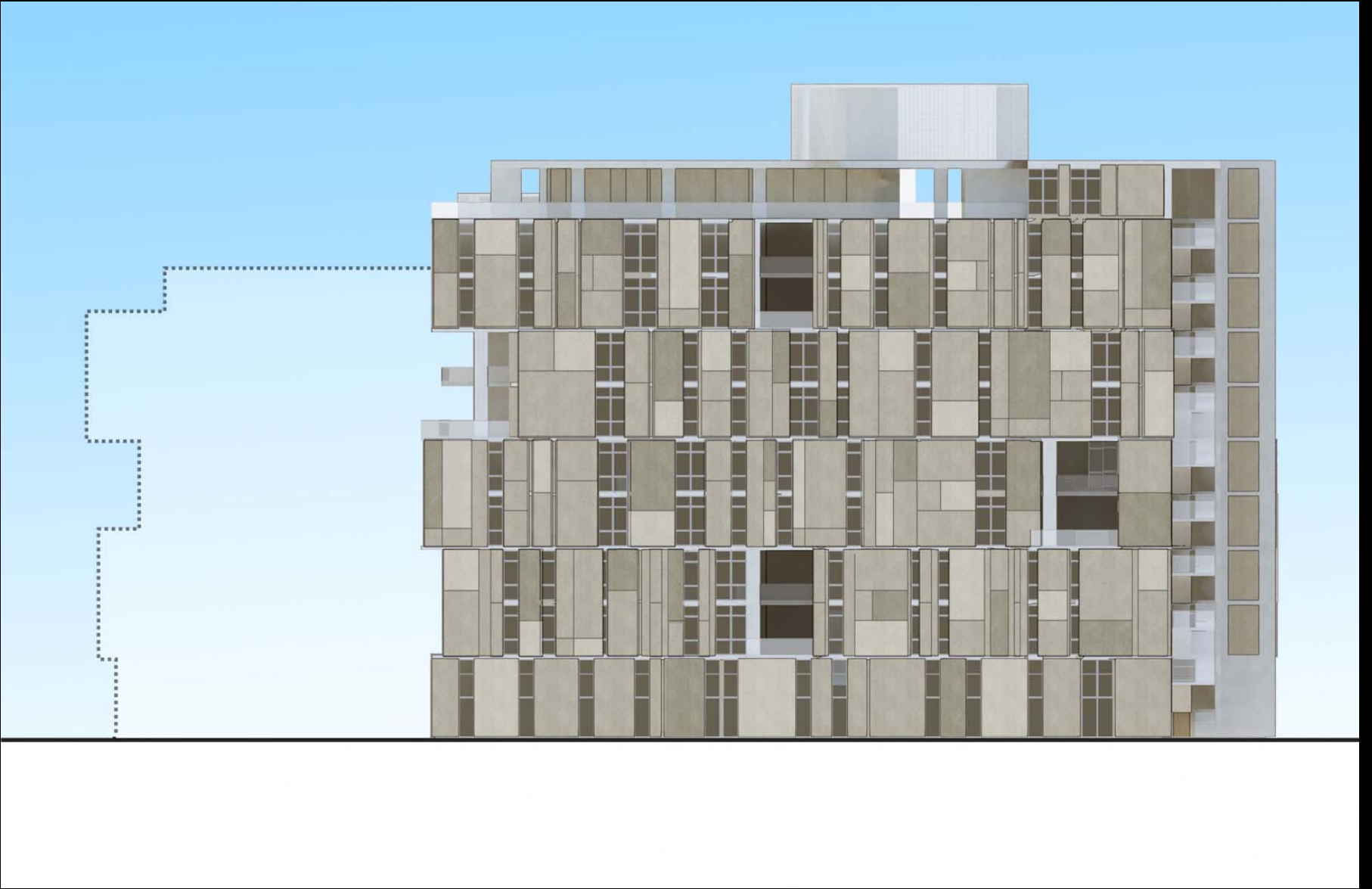
WEST ELEVATION
ELEVATIONS



SOUTH ELEVATION, SOUTH TOWER
ELEVATIONS



EAST ELVATION
ELEVATIONS



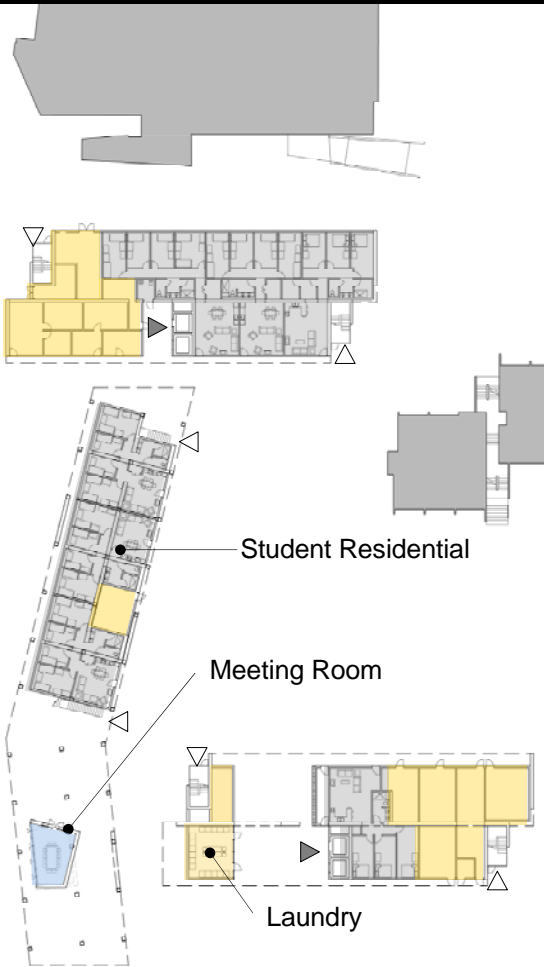
NORTH ELEVATION, NORTH TOWER
ELEVATIONS



Aerial view looking to northwest



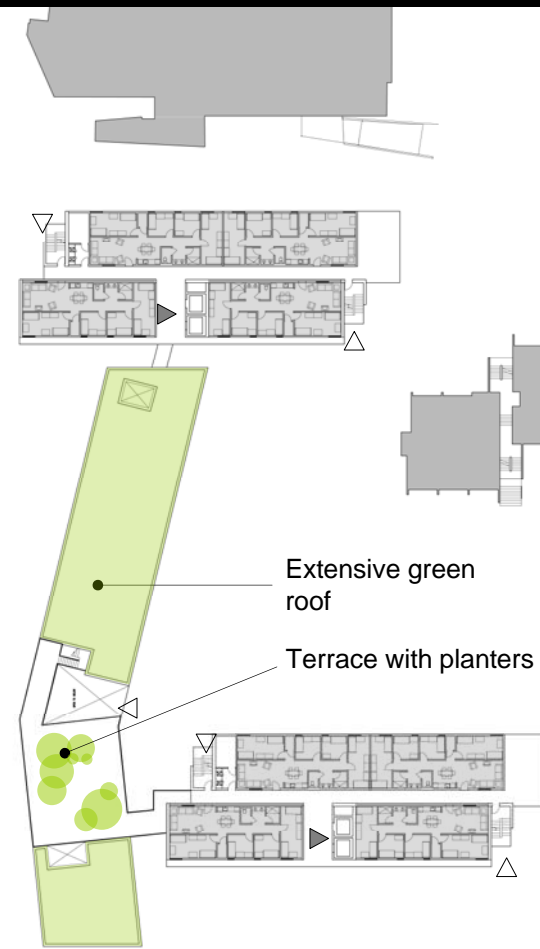
Aerial view looking to the southwest



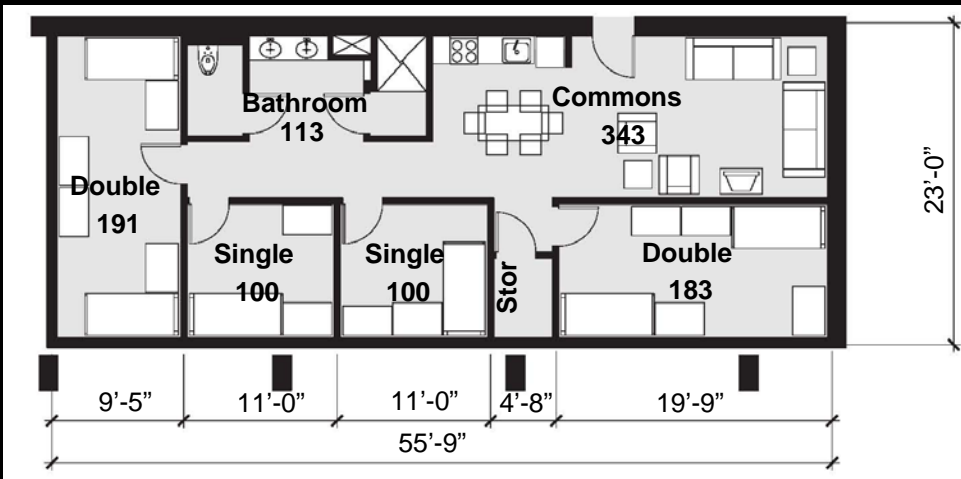
Ground Floor Plan



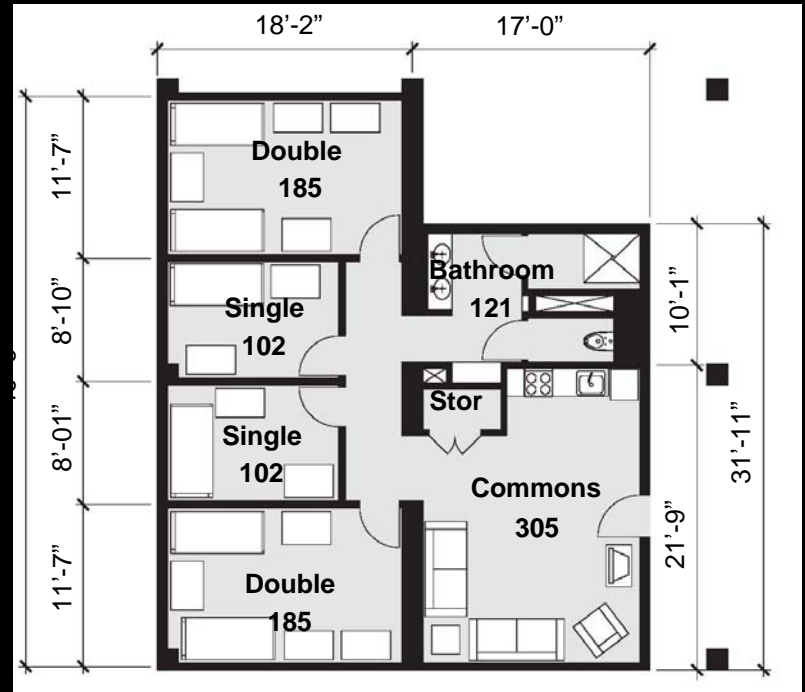
Typical Upper Floor



Roof Plan at West Bar



North / South Tower Unit



West Bar Unit



Looking northeast from Torrey Pines Road



Looking southeast from Torrey Pines Road



View from Revelle Plaza



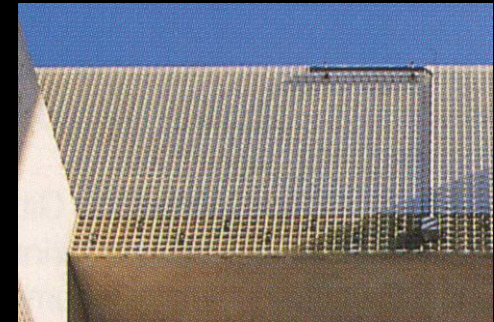
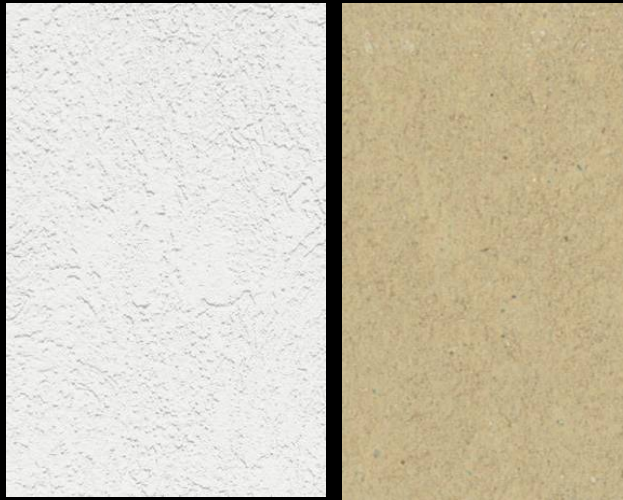
View from Reville Commons to Reville Housing



Looking west from Revelle Commons



Enhanced landscaping and bioswale

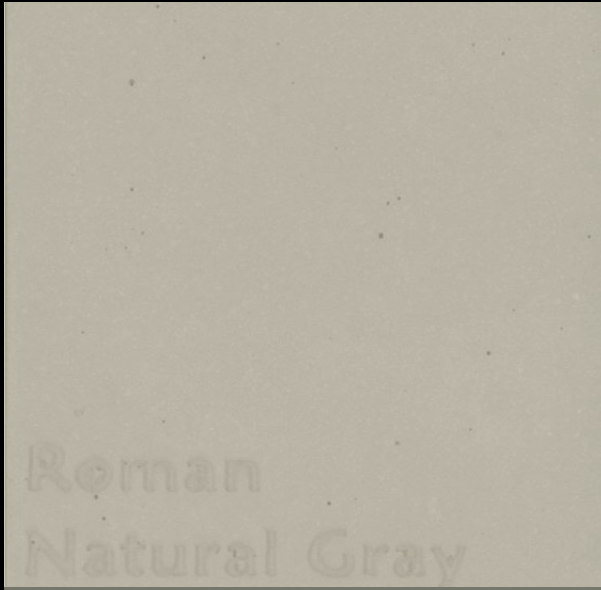


Structure Concrete (Colton type II, type III)

Cladding: -Cement plaster
-Fiber cement board
(Colors in keeping with the Reville palette)

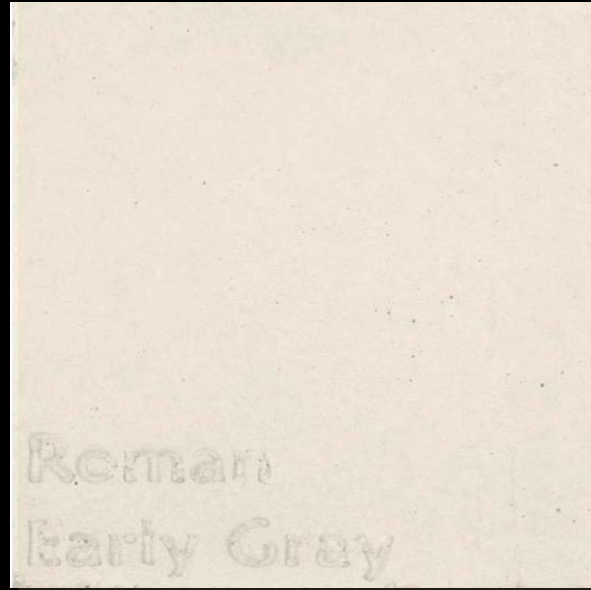
Railings: - Fiberglass grating
-Painted / natural metals

PROPOSED MATERIALS



Roman
Natural Gray

CONCRETE COLTON TYPE II

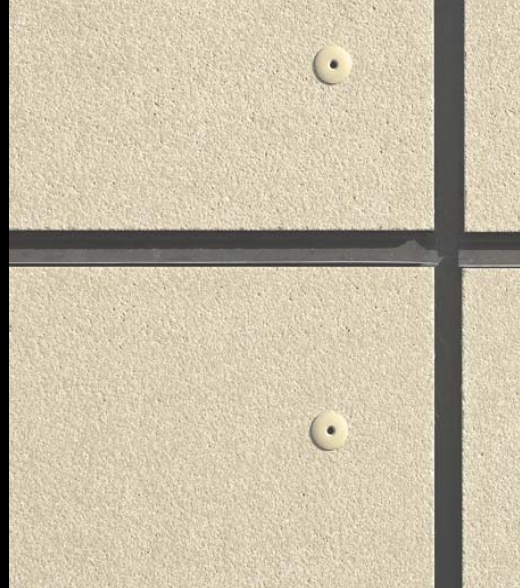


Roman
Early Gray

CONCRETE COLTON TYPE III



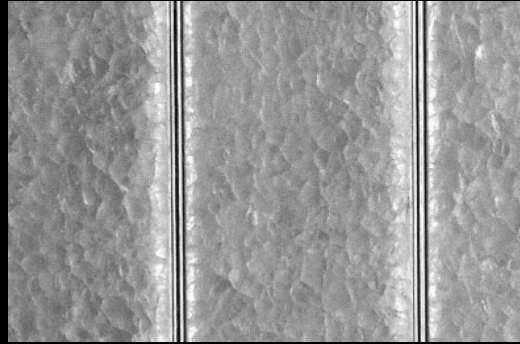
STRUCTURE
MATERIAL PALETTE



CEMENT PLASTER
CEMENT BOARD
FIBER REINFORCED CONCRETE
PRECAST CONCRETE



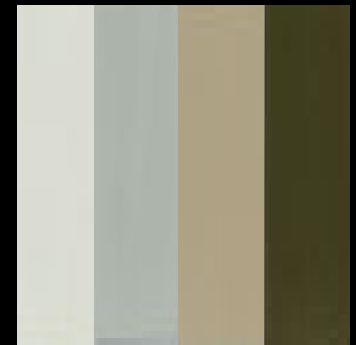
MATERIAL PALETTE



KALWALL
POLYCARBONATE WITH NANOGEL
GLASS BRICK



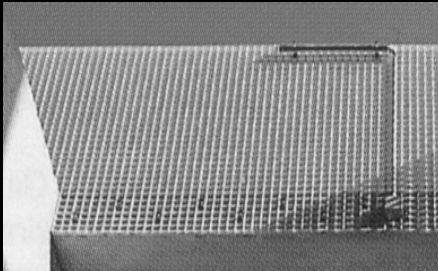
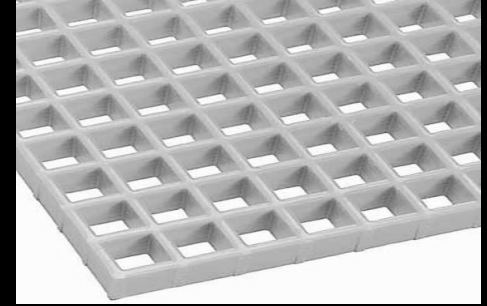
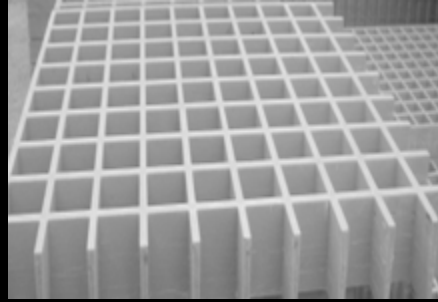
CLADDING
MATERIAL PALETTE



ALUMINUM WITH KYNAR FINISH



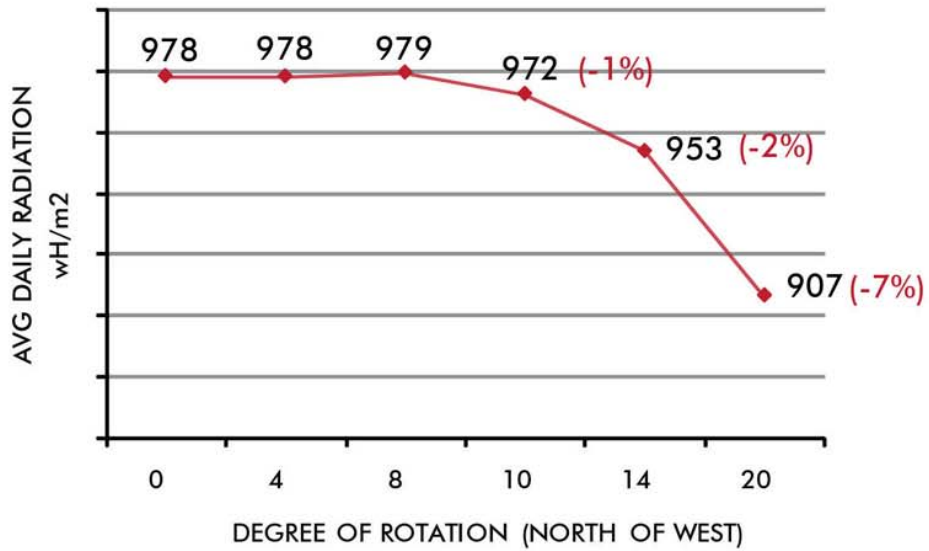
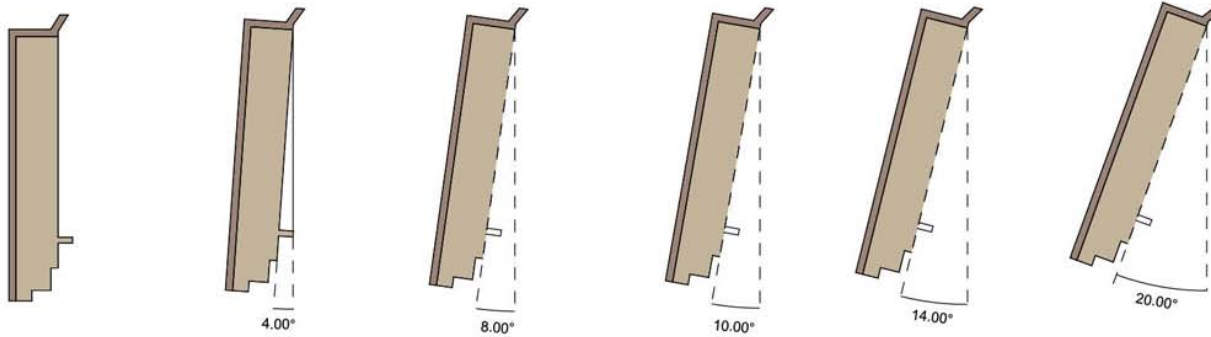
WINDOW FRAMES
MATERIAL PALETTE



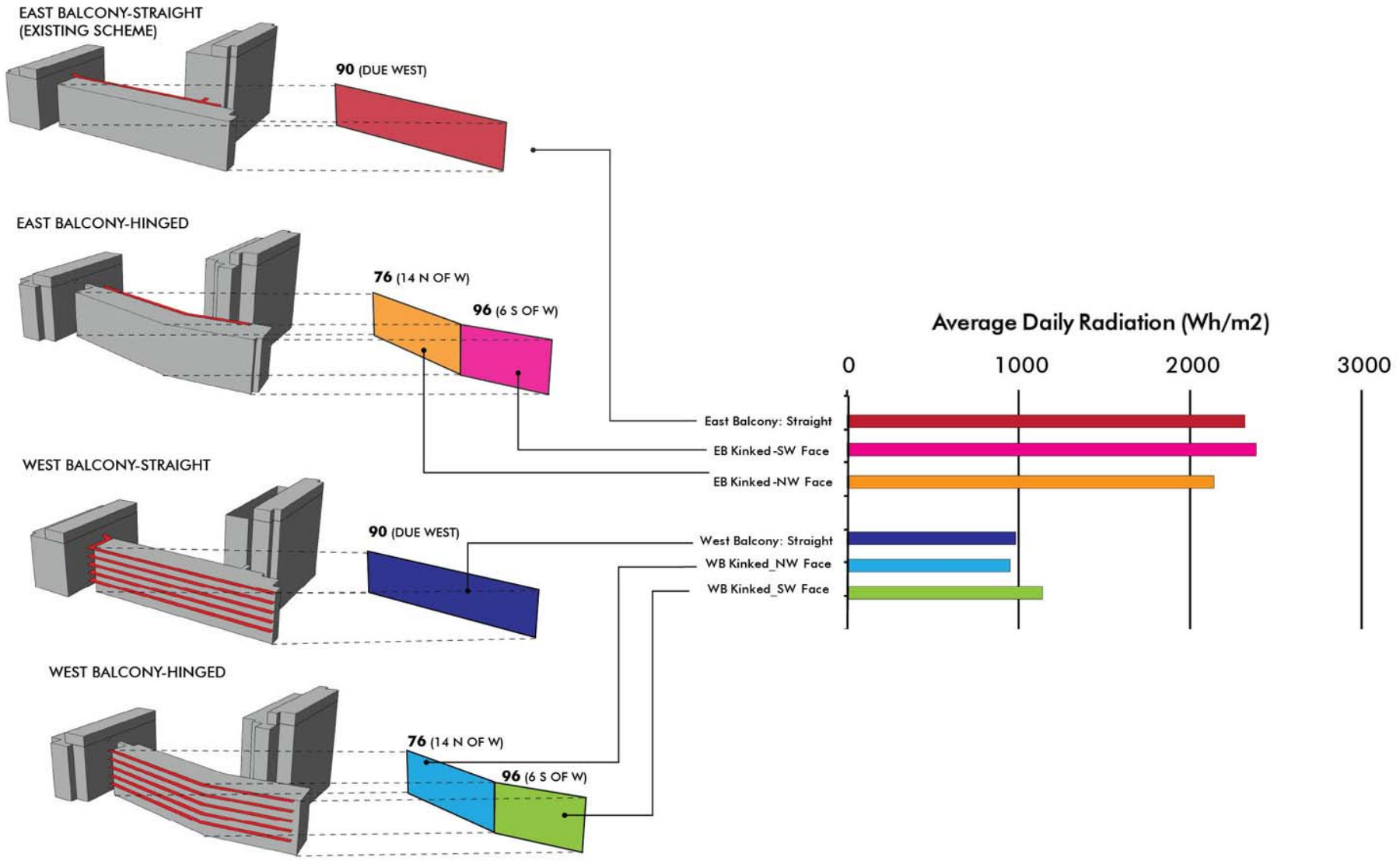
FIBERGLASS GRATING



RAILING
MATERIAL PALETTE

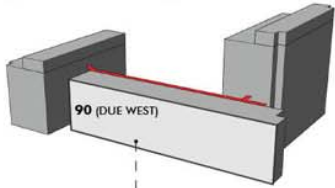


Angle	Degrees North of West	Avg Daily Radiation (Wh/m²)
90	"0"	978
86	"4"	977.9
82	"8"	979.15
80	"10"	972.2
76	"14"	953.6
70	"20"	906.6

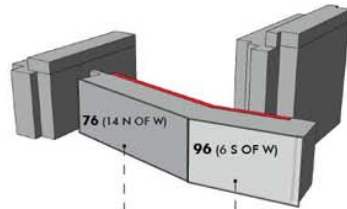


WEST FACING UNITS: INCIDENT SOLAR RADIATION, MARCH- SEPT. ENVIRONMENTAL ANALYSIS

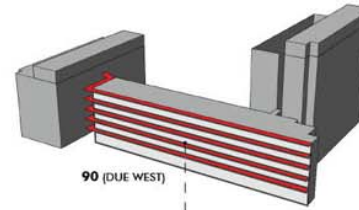
EAST BALCONY-STRAIGHT
(EXISTING SCHEME)



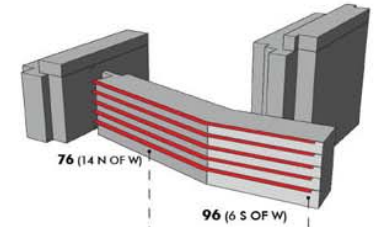
EAST BALCONY-HINGED



WEST BALCONY-STRAIGHT



WEST BALCONY-HINGED

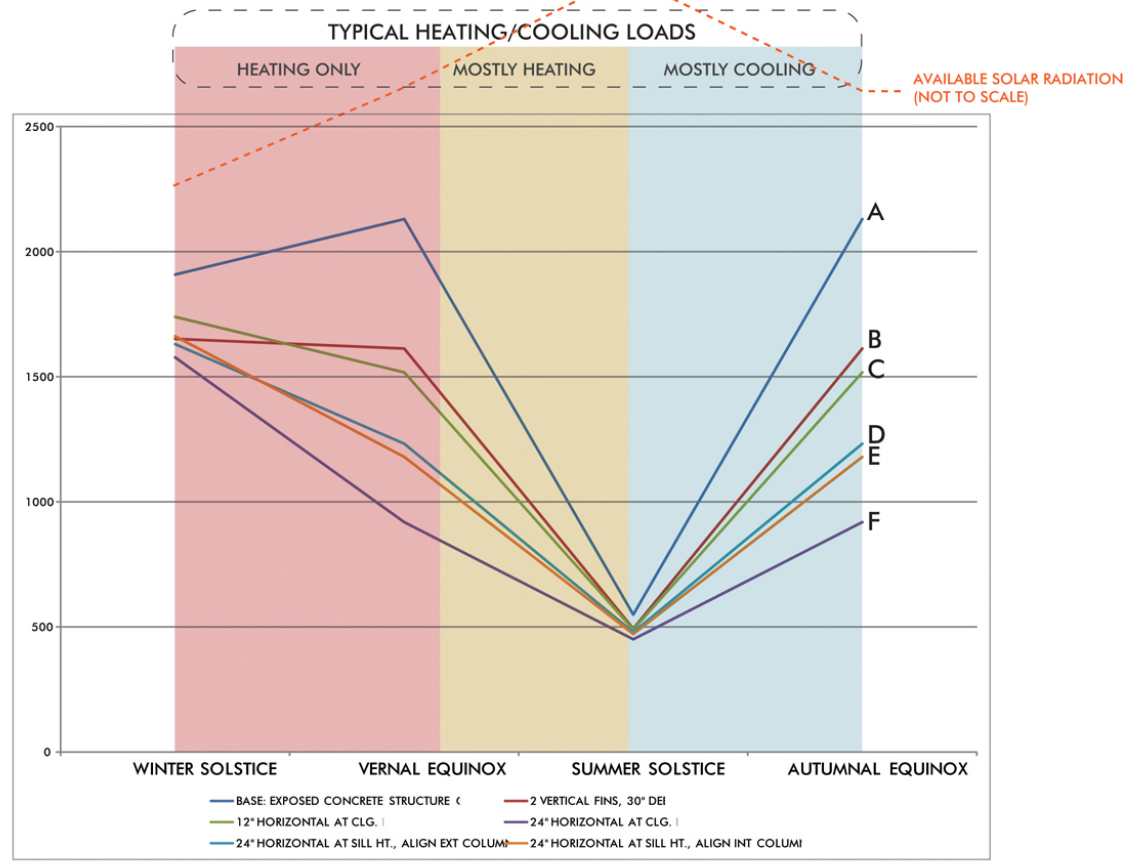


all bedrooms receive direct sun
common rooms in deep shade



no direct sun penetration (all rooms)
common rooms in shade but with more light

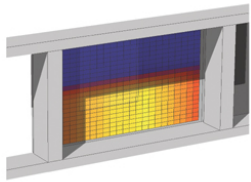
AVG DAILY RADIATION, Wh
PER BAY ON SOUTH FACADE EXT. WALL SURFACE



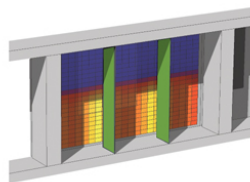
EXPOSED STRUCTURE ONLY

VERTICALS

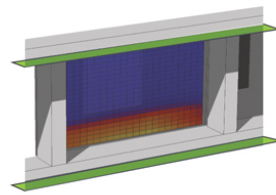
HORIZONTALS



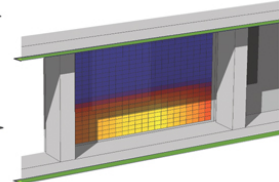
A
BASE: EXPOSED CONCRETE STRUCTURE ONLY



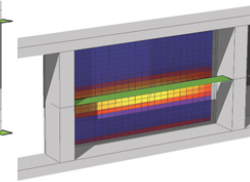
B
2 VERTICAL FINS, 30° DEEP



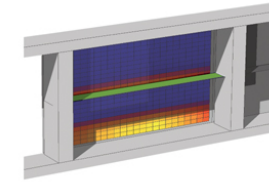
C
24" HORIZONTAL AT CLG. HT.



D
12" HORIZONTAL AT CLG. HT.



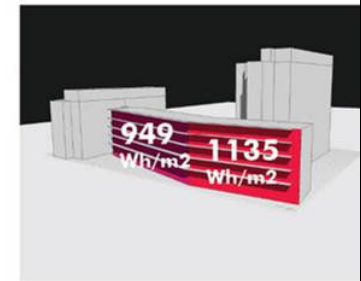
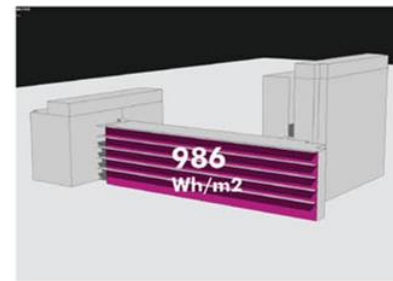
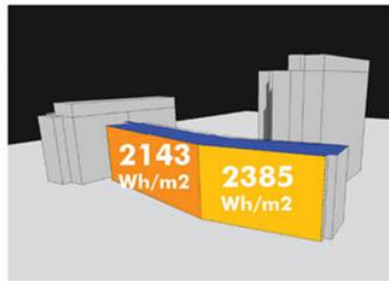
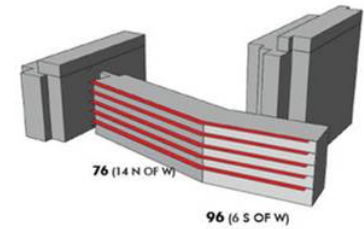
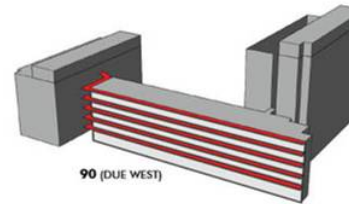
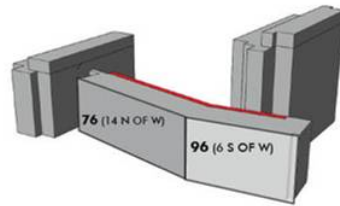
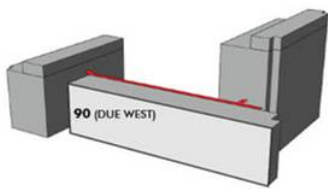
E
24" HORIZONTAL AT SILL HT.
ALIGN W/ EXT. COLUMN FACE



F
24" HORIZONTAL AT SILL HT.
ALIGN W/ INT. COLUMN FACE

SOUTH FACADE: SEASONAL EFFECTIVENESS OF EXTERNAL SHADING DEVICES

ENVIRONMENTAL ANALYSIS



NAME	ORIENTATION	AREA-SF	AREA-m2	AVG DAILY RADIATION	% CHANGE	DIRECT	DIFFUSE	RADIATION OVER SURFACE
East Balcony: Straight	90	9960	925	2323		1516	808	2,148,775.00
East Balcony: Kinked								
Northwest Face	76	6327.8	587.9	2143	-8%	1353	790	1,259,869.70
Southwest Face	96	3428.1	318.5	2385	3%	1565	821	759,622.50
		9755.9	906.4					2,019,492.20
West Balcony: Straight		9960	925	986	-58%	530	445	912,050.00
West Balcony: Kinked								
Northwest Face	76	6327.8	587.9	949	-59%	398	551	557,917.10
Southwest Face	96	3428.1	318.5	1135	-51%	529	610	361,497.50
		9755.9	906.4					919,414.60
West Balcony: Angled	82	9960	925	1009.9	-57%	552	457	934,157.50

Sustainability Features

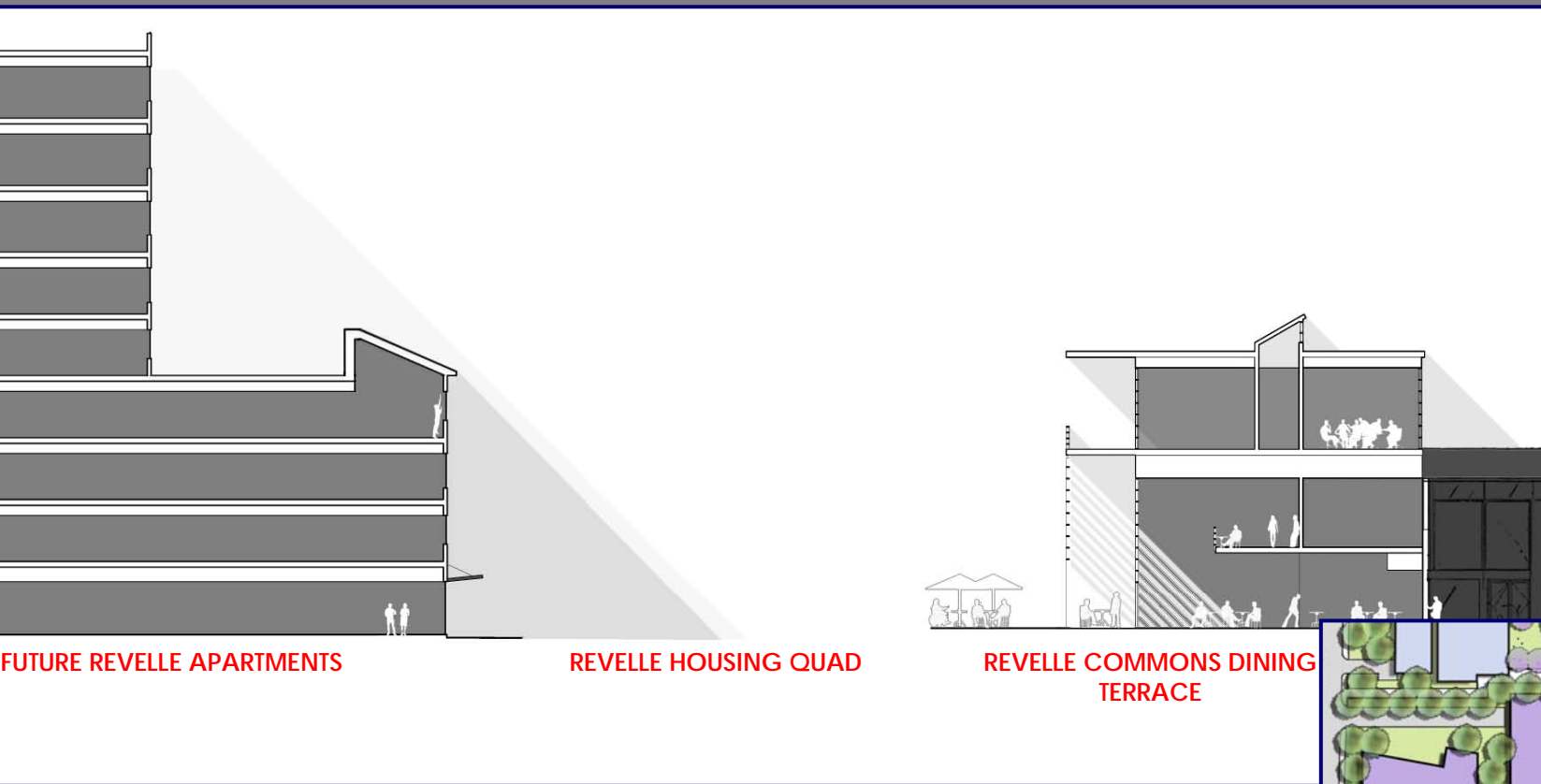
- Passive solar building orientation and shading devices to take advantage of and control solar gain
- Natural ventilation and cross ventilation in each apartment
- High performance exterior envelope
- Daylighting optimization
- Energy efficient building systems
- Water conservation w/low use plumbing fixtures
- High albedo materials/finishes to reduce heat island effect on roofs
- Rooftop photovoltaics infrastructure
- Recycled and sustainable building materials
- Bioswale landscape for storm water drainage and filtration
- Drought tolerant landscape materials

Discussion...

Slides following are not currently in presentation...

UC San Diego Revelle College Apartments			Silver = 33-38 points
Current Target Points - Silver	35		Gold = 39-51 points
Additional Target Points Needed - Gold	4 as a minimum		
Sustainable Strategy Options for Consideration	# of LEED Points	Cost Premium	Payback Period
SS 5.2: Site Development , Maximize Open Space	1	\$0	n/a
SS 6.2: Storm Water Design , Quality Control	1	\$0	n/a
EA 2: On-Site Renewable Energy	1	\$0	n/a
EQ 2: Increased Ventilation	1	\$75,000	n/a
EQ 7.1: Thermal Comfort , Design	1	in EQ 2	n/a
EQ 8.1: Daylight & Views , Daylight 75% of Spaces	1	\$0	n/a
EQ 8.2: Daylight & Views , Views for 90% of Spaces	1	\$0	n/a
Option Totals	7		

NPS Vision

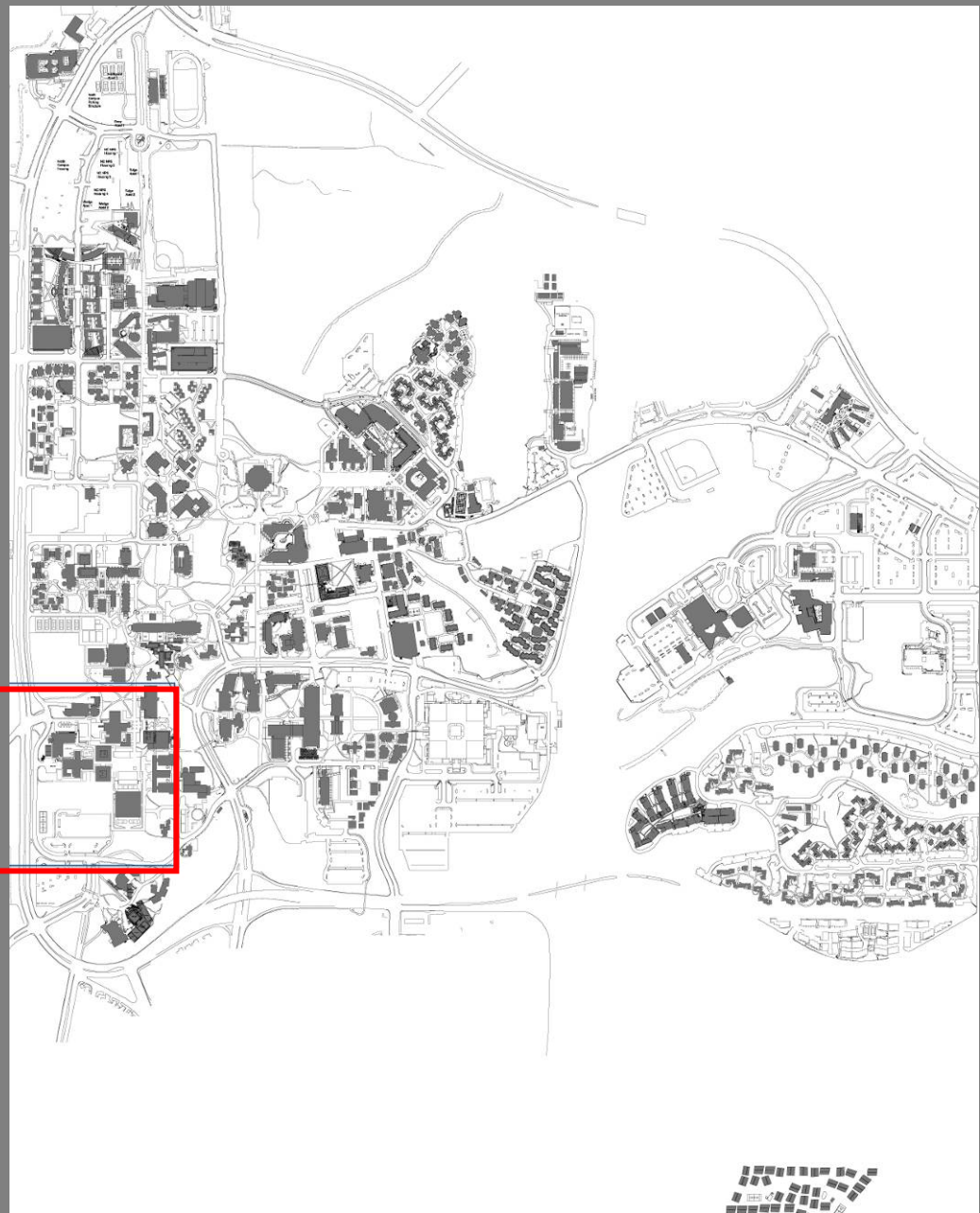


FUTURE REVELLE APARTMENTS

REVELLE HOUSING QUAD

REVELLE COMMONS DINING
TERRACE





PROJECT SITE



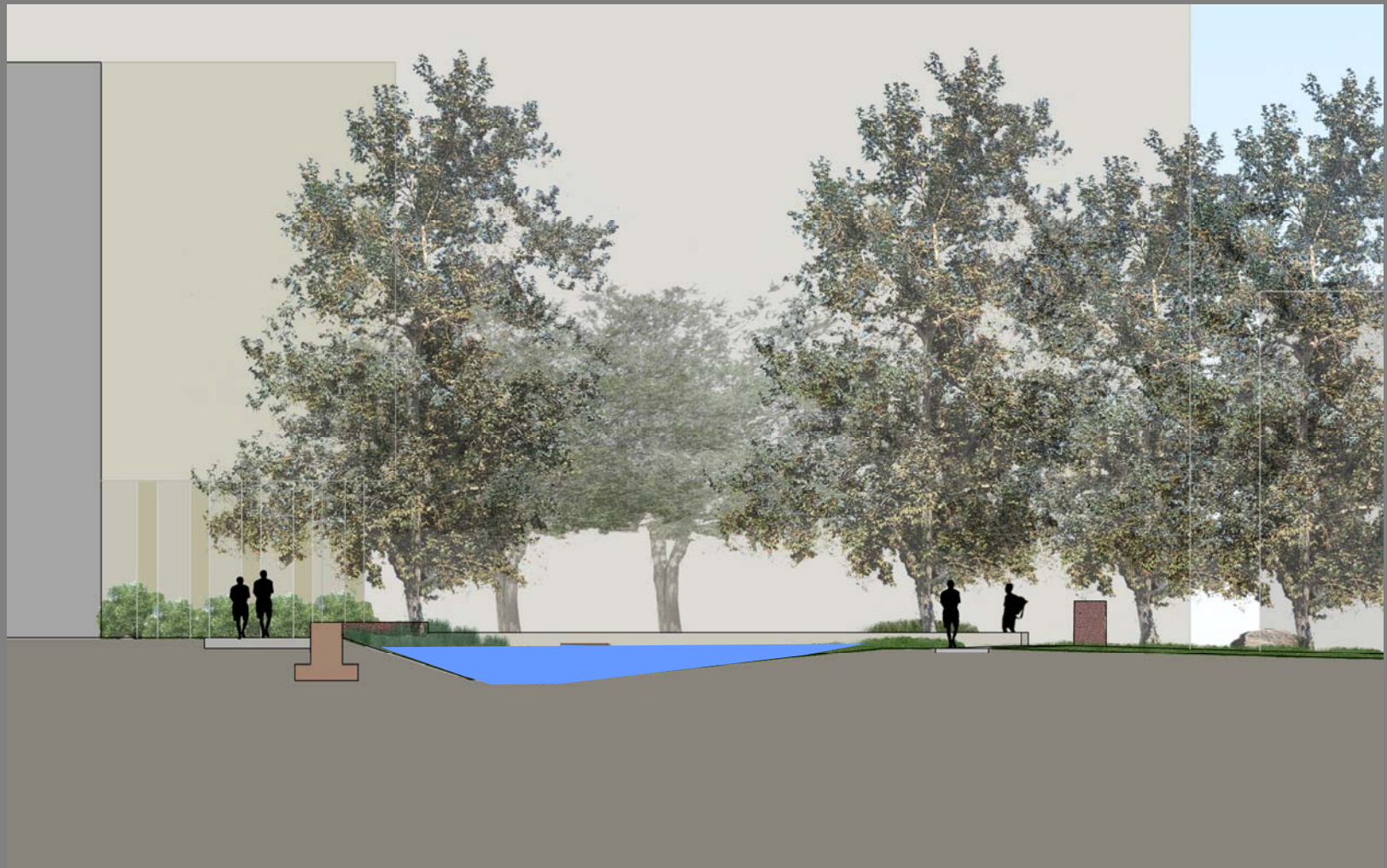
SOUTH ELEVATION, NORTH TOWER
ELEVATIONS



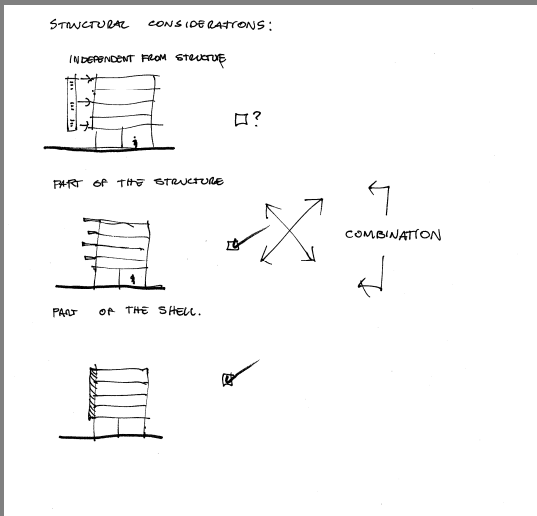
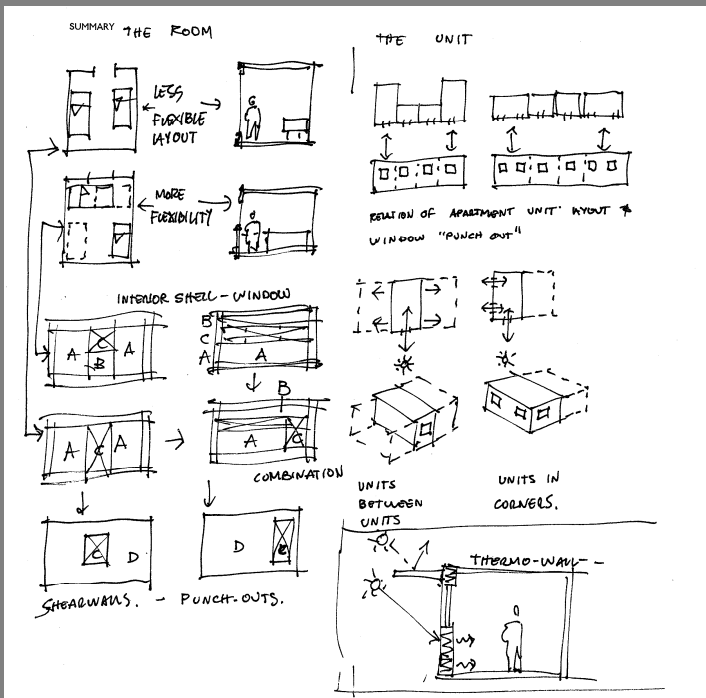
EAST ELEVATION
ELEVATIONS



Section A Enlargement



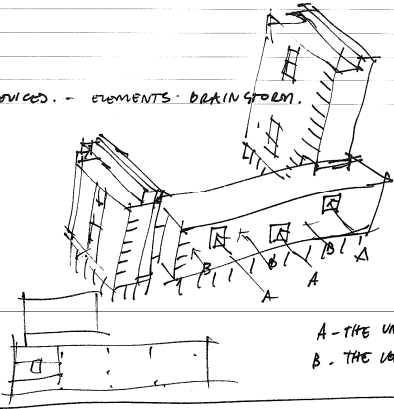
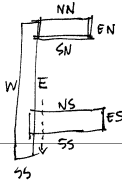
Section B Enlargement



PROJECT 765 UCSD

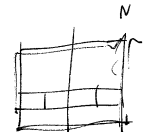
SUBJECT SHADING DEVICES - ELEMENTS: DRAIN FORM.

SUMMARY

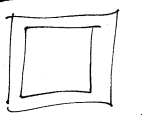


A - THE UNITS/ROOMS/PRIVATE
B - THE LOUNGES/HOUES/PUBLIC.

A MODULE THAT
ADDS UP A PIECE



PUNCH OUTS
DEEP/THICK



A PERSE GRID



COMBINE
RESPONSE
TO
ENVIRONMENT
BY
A
DIALOGUE
WITH
EXISTING
BUILD & NATURAL
ENVIRONMENT





**MATERIALITY
BUILDING CONTEXT**



View with landscaping



View to northeast from Torrey Pines Road

MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS

For the Meeting of November 18, 2008

BACKGROUND INFORMATION FOR **PRELIMINARY REVIEW OF DESIGN** REVELLE COLLEGE APARTMENTS SAN DIEGO CAMPUS

- The Revelle College Apartments infill project will be located on approximately 2.5 acres located within the Revelle College Neighborhood at the south-west portion of the UCSD main campus.
- The project complies with the 1989 UCSD Master Plan and the 2004 Long Range Development Plan. The design of the project is in conformance with the vision guidelines articulated in the 2006 Revelle and Muir Colleges Neighborhood Planning Study.
- The project will provide 85 four-bedroom apartments which will accommodate 510 undergraduate students, and 2 three-bedroom staff units. Resident apartment suites consist of six students accommodated in two single bedrooms and two double bedrooms.
- The project design consists of a single building composed of a “C” shape with a north, west and south wing (10, 5 and 8 stories respectively).
- In addition to the apartments, the project will provide a conference room, laundry area, mail area and maintenance and custodial spaces. Complementary outdoor spaces would be developed to accommodate a variety of activities for the residents.
- The project is scheduled to be completed for fall 2011 occupancy.
- The project will achieve USGBC LEED Silver rating.
- The proposed Revelle College Apartment project would encompass total of approximately 109,658 assignable square feet (asf) and 153,891 gross square feet (ogsf) of building space.
- Total project costs are \$69,461,000 at CCCI 5425
- The construction cost is \$316.17 per ogsf.