Calexico West Border Station

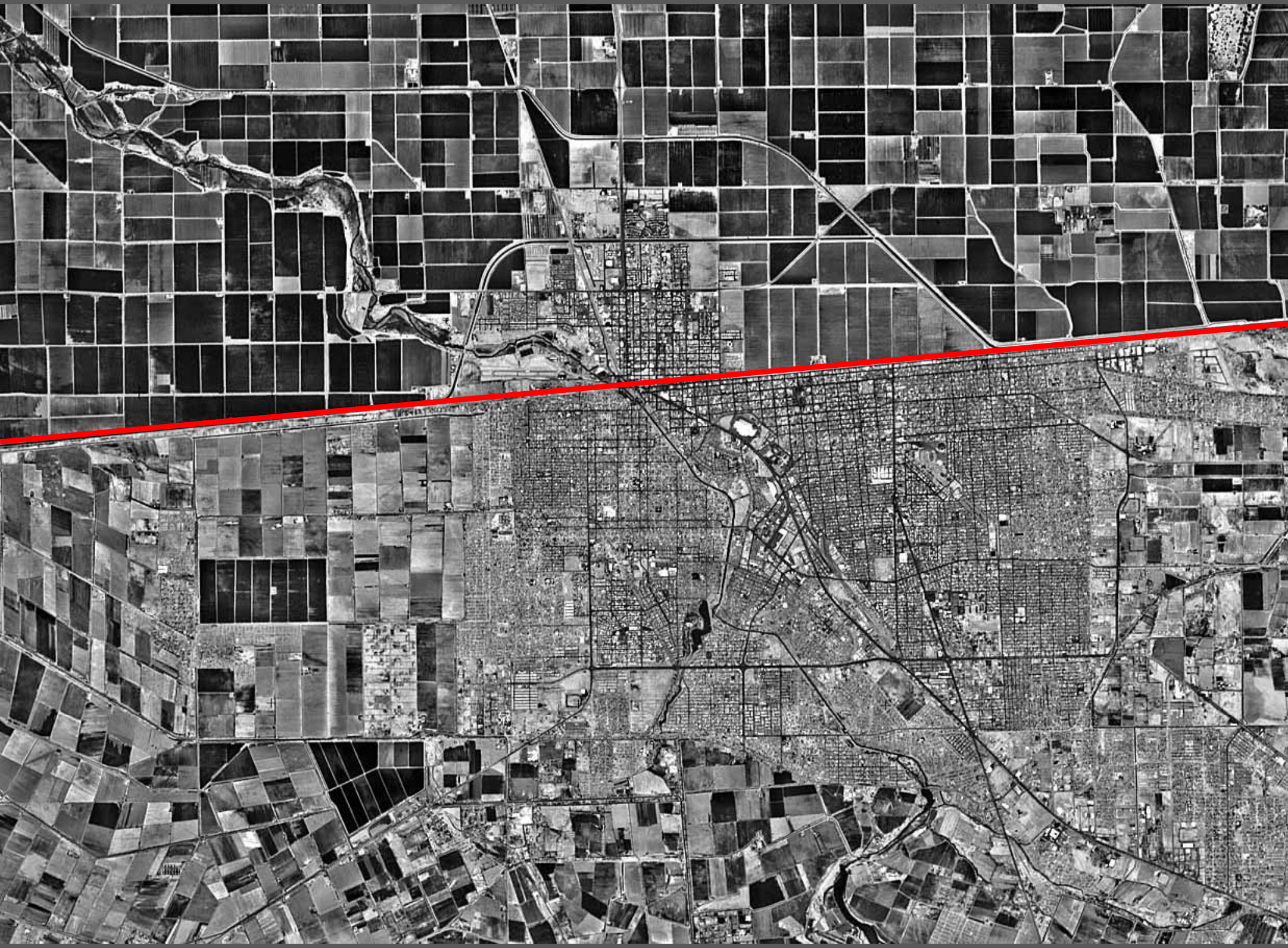
Community Representative Commitee Meeting

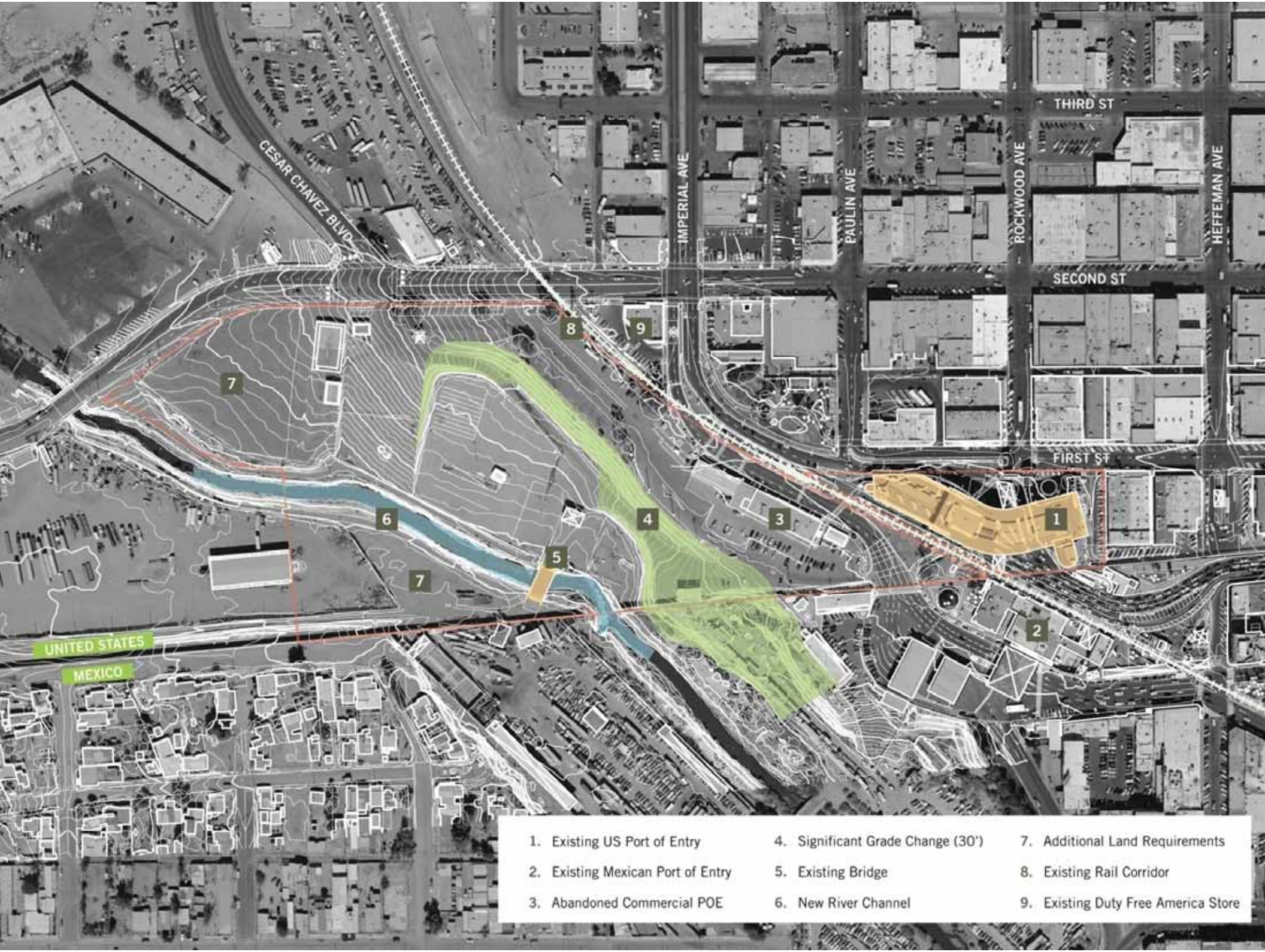
February 2,2010

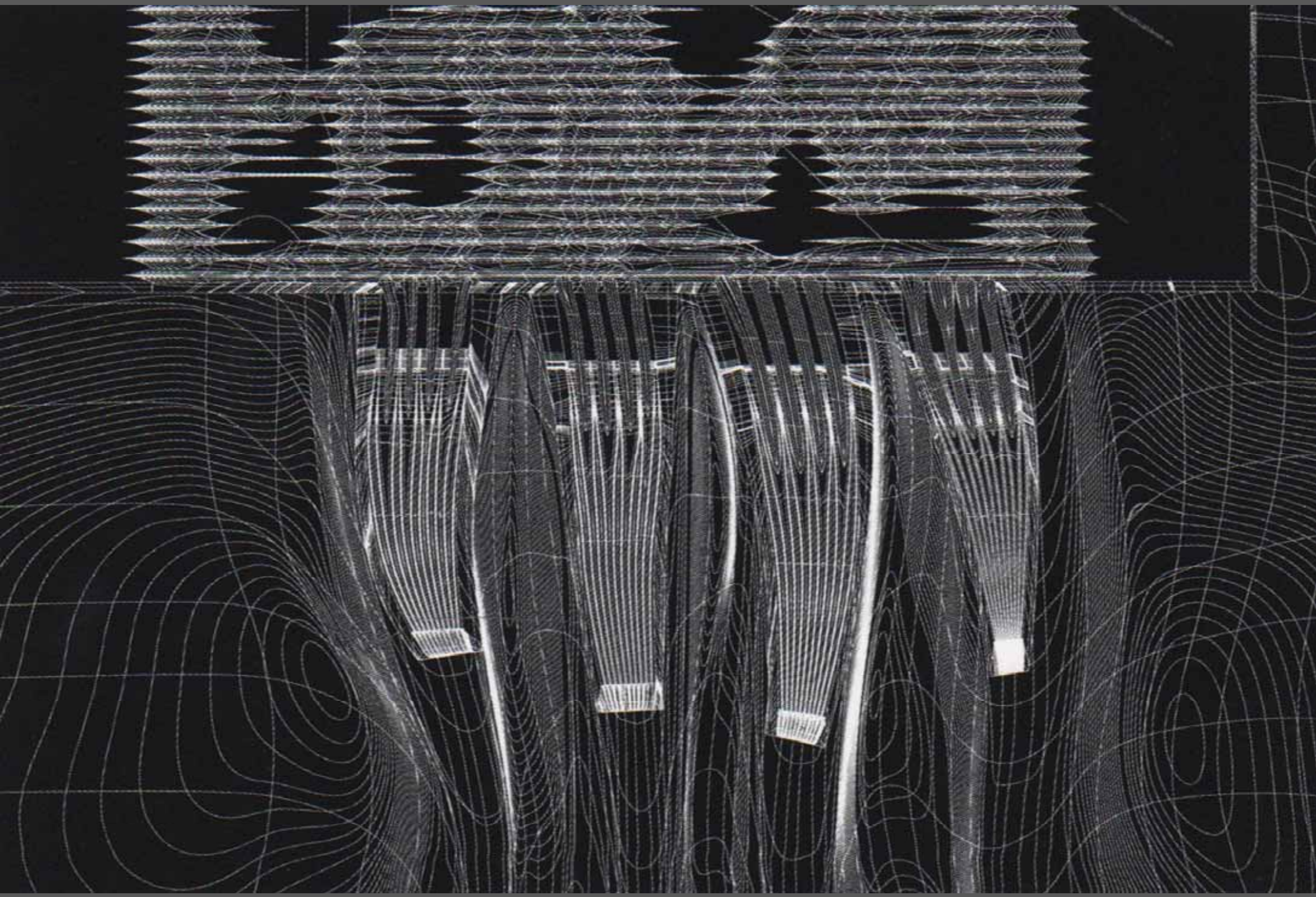
Ross Drulis Cusenbery ARCHITECTURE

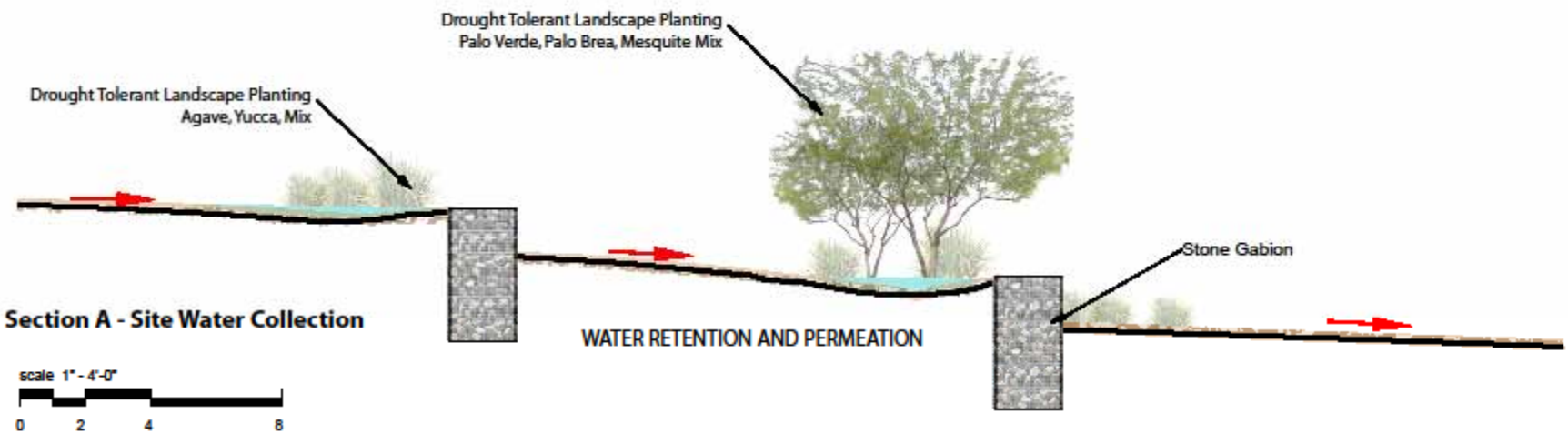
GSA

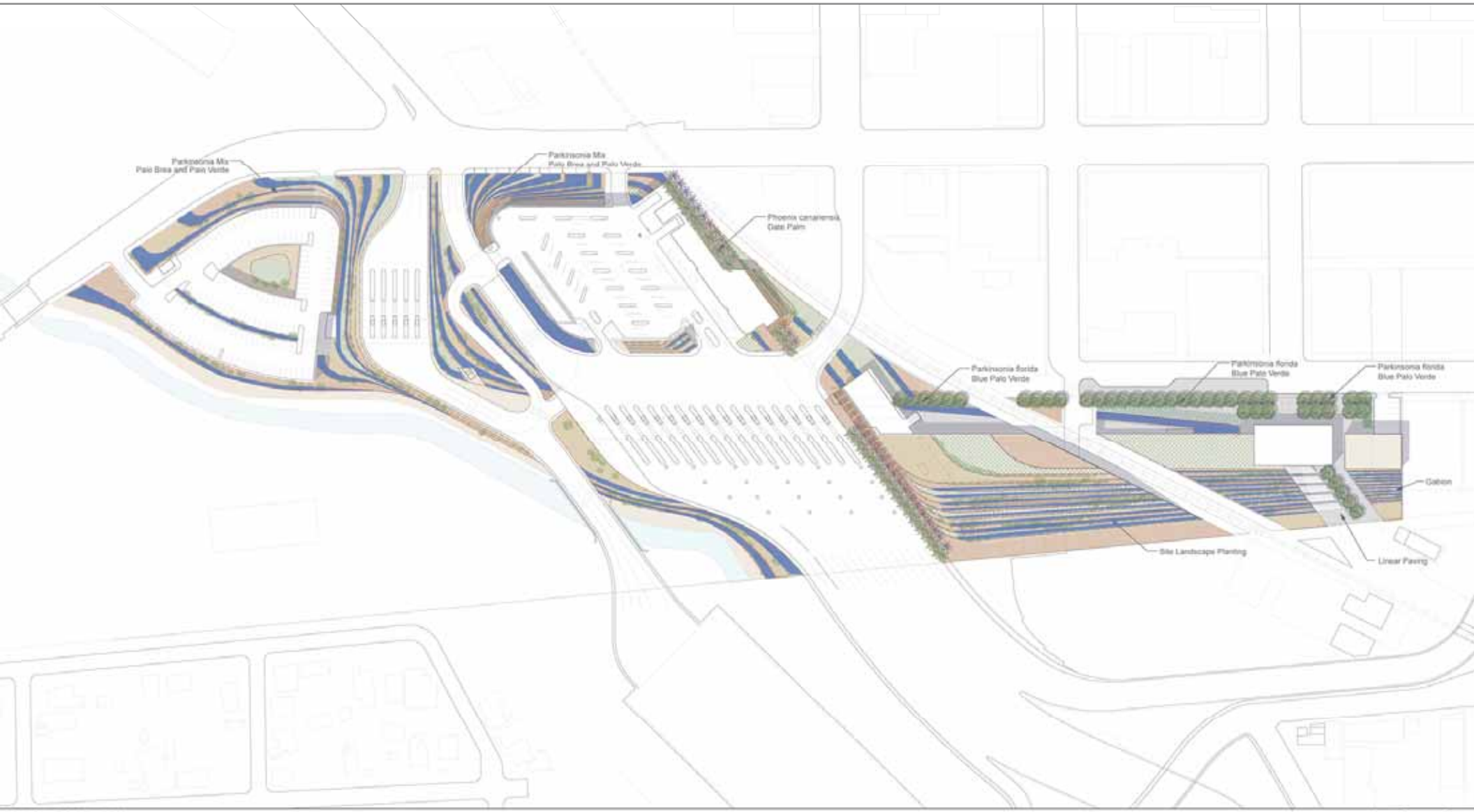
PERKINS + WILL




THIRD ST
SECOND ST
FIRST ST
CESAR CHAVEZ BLVD
IMPERIAL AVE
PAULIN AVE
ROCKWOOD AVE
HEFFEMAN AVE
UNITED STATES
MEXICO
1
2
3
4
5
6
7
7
8
9
1. Existing US Port of Entry
2. Existing Mexican Port of Entry
3. Abandoned Commercial POE
4. Significant Grade Change (30')
5. Existing Bridge
6. New River Channel
7. Additional Land Requirements
8. Existing Rail Corridor
9. Existing Duty Free America Store




Drought Tolerant Landscape Planting
Palo Verde, Palo Brea, Mesquite Mix
Drought Tolerant Landscape Planting
Agave, Yucca, Mix
Stone Gabion
Section A - Site Water Collection
WATER RETENTION AND PERMEATION
scale 1" - 4'-0"
0
2
4
8



ICO POINT OF ENTRY
CAPE PLAN - Water Collection Areas
ER STUDIO

1"=80'-0"
0 80' 160'

ICO POINT OF ENTRY
SCAPE PLAN
IER STUDIO

1"=80'-0"
0' 80' 160'

PERKINS + WILL

GSA

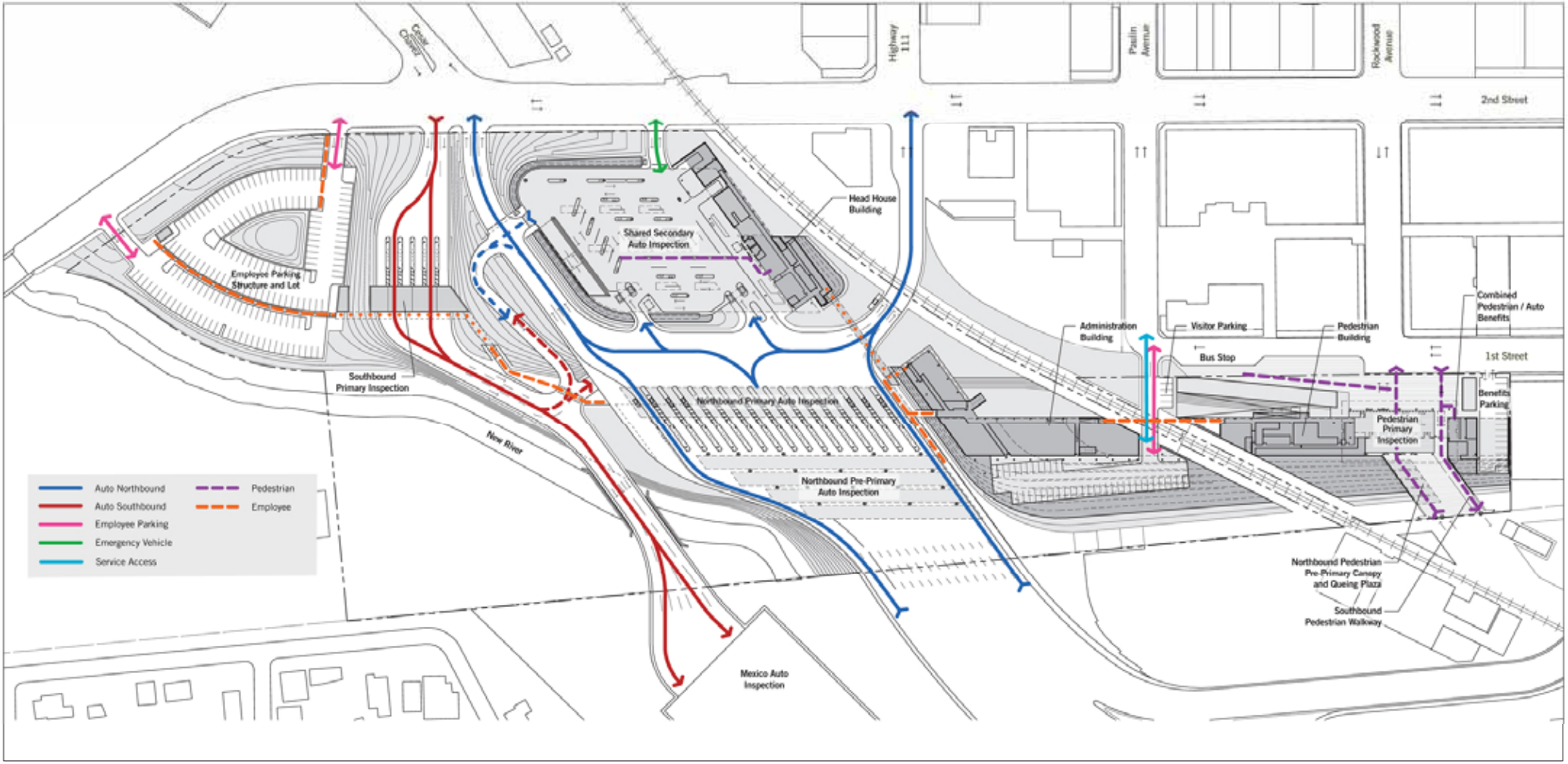
RossDrulisCusenbery

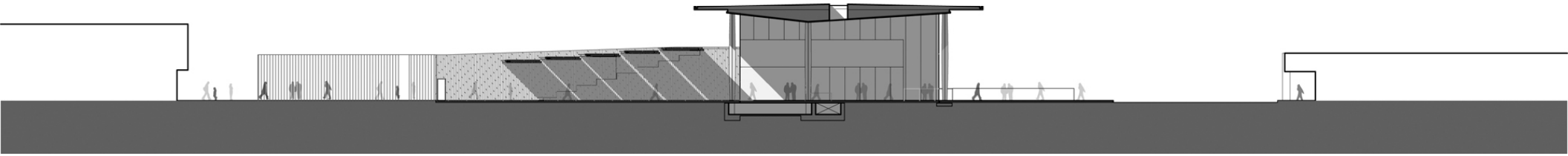
Calexico west border station

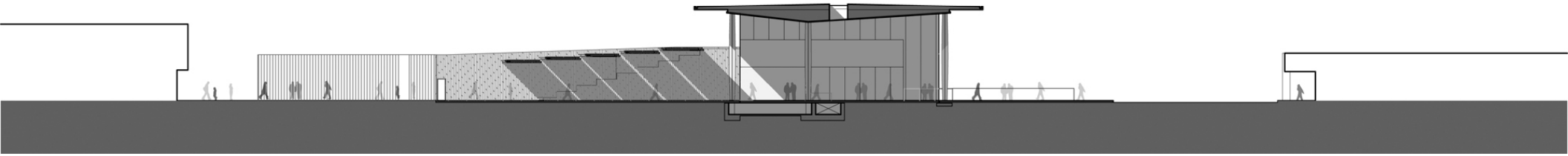
February 2, 2010 **SITE PLAN** **CRC Presentation**

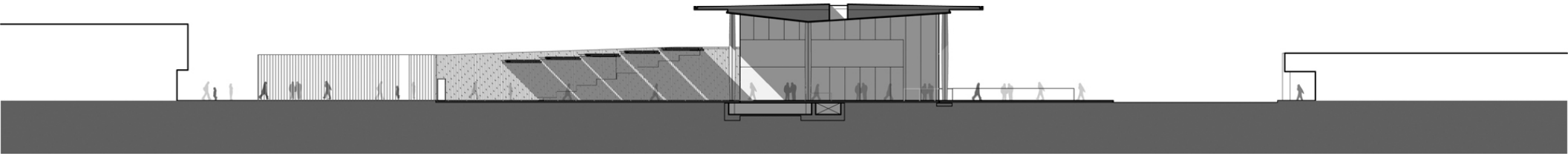
N

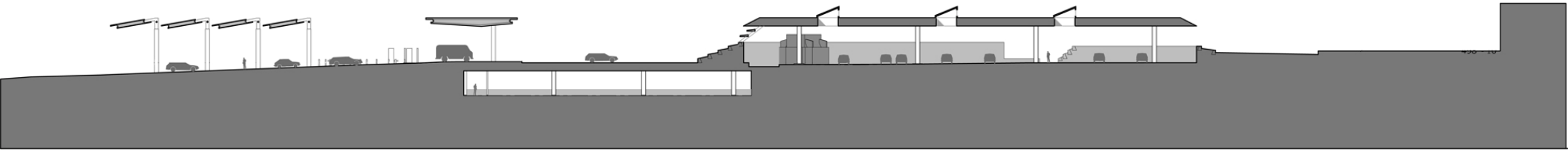
0 20 50 100 200

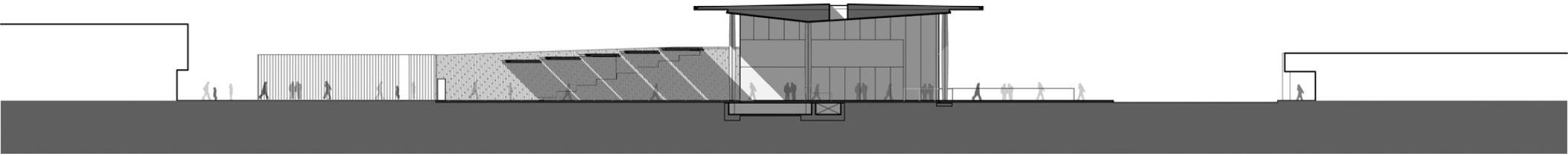

Highway 111
Paulin Avenue
Rockwood Avenue
2nd Street
1st Street
Head House Building
Shared Secondary Auto Inspection
Employee Parking Structure and Lot
Southbound Primary Inspection
Northbound Primary Auto Inspection
Northbound Pre-Primary Auto Inspection
New River
Administration Building
Visitor Parking
Bus Stop
Pedestrian Building
Pedestrian Primary Inspection
Combined Pedestrian / Auto Benefits
Benefits Parking
Northbound Pedestrian Pre-Primary Canopy and Queing Plaza
Southbound Pedestrian Walkway
Mexico Auto Inspection
Auto Northbound
Auto Southbound
Employee Parking
Emergency Vehicle
Service Access
Pedestrian
Employee

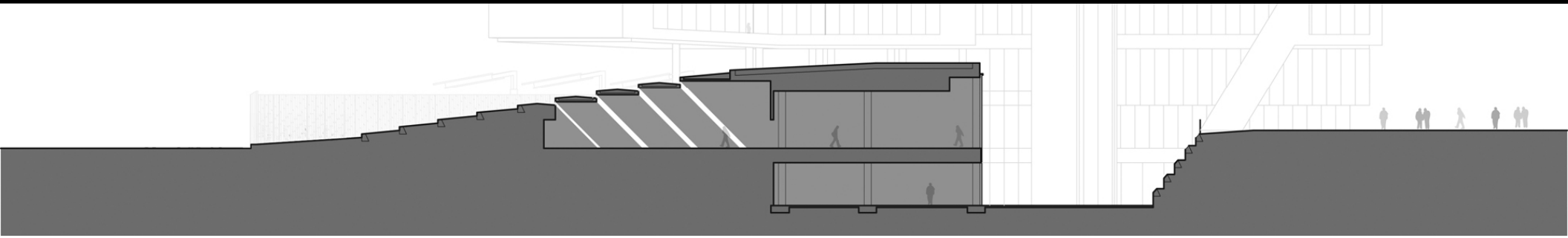


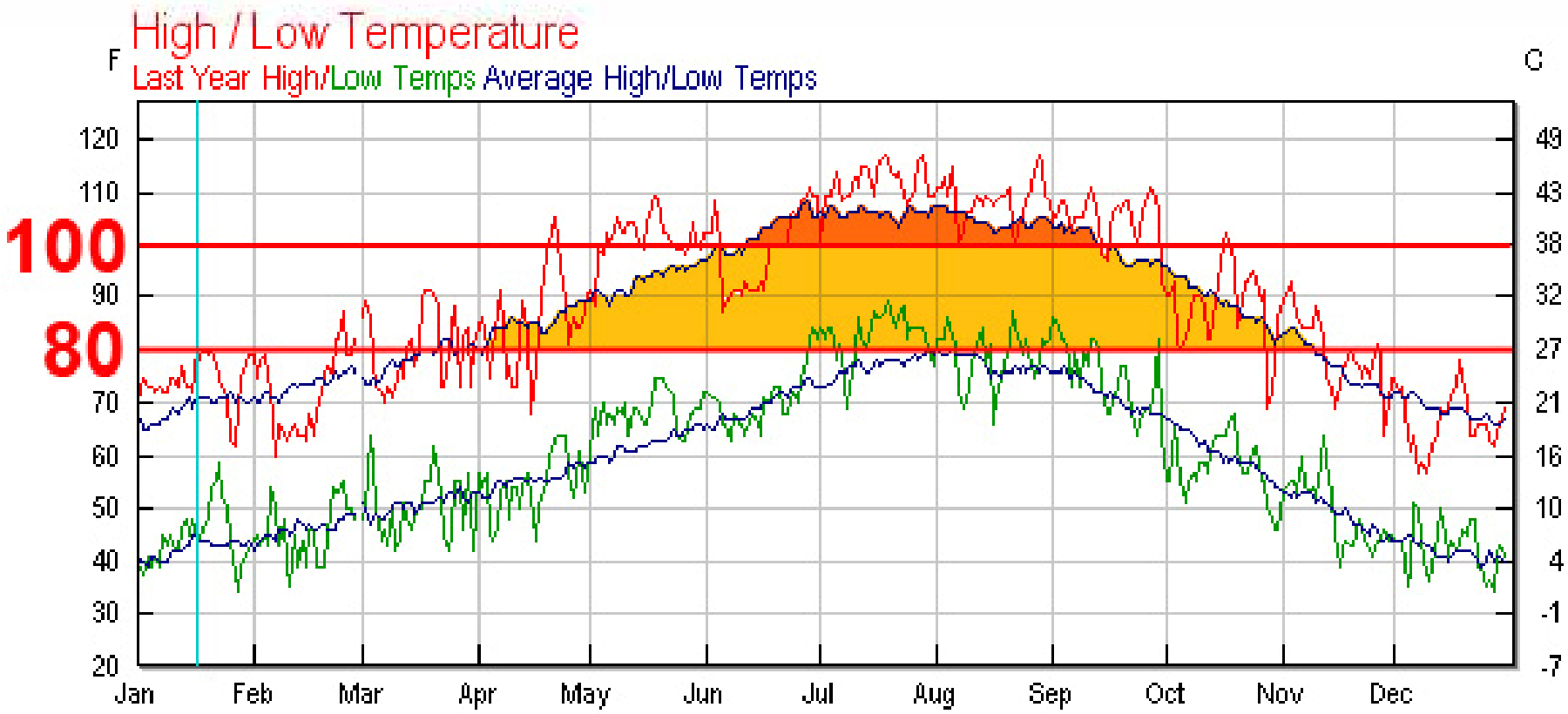




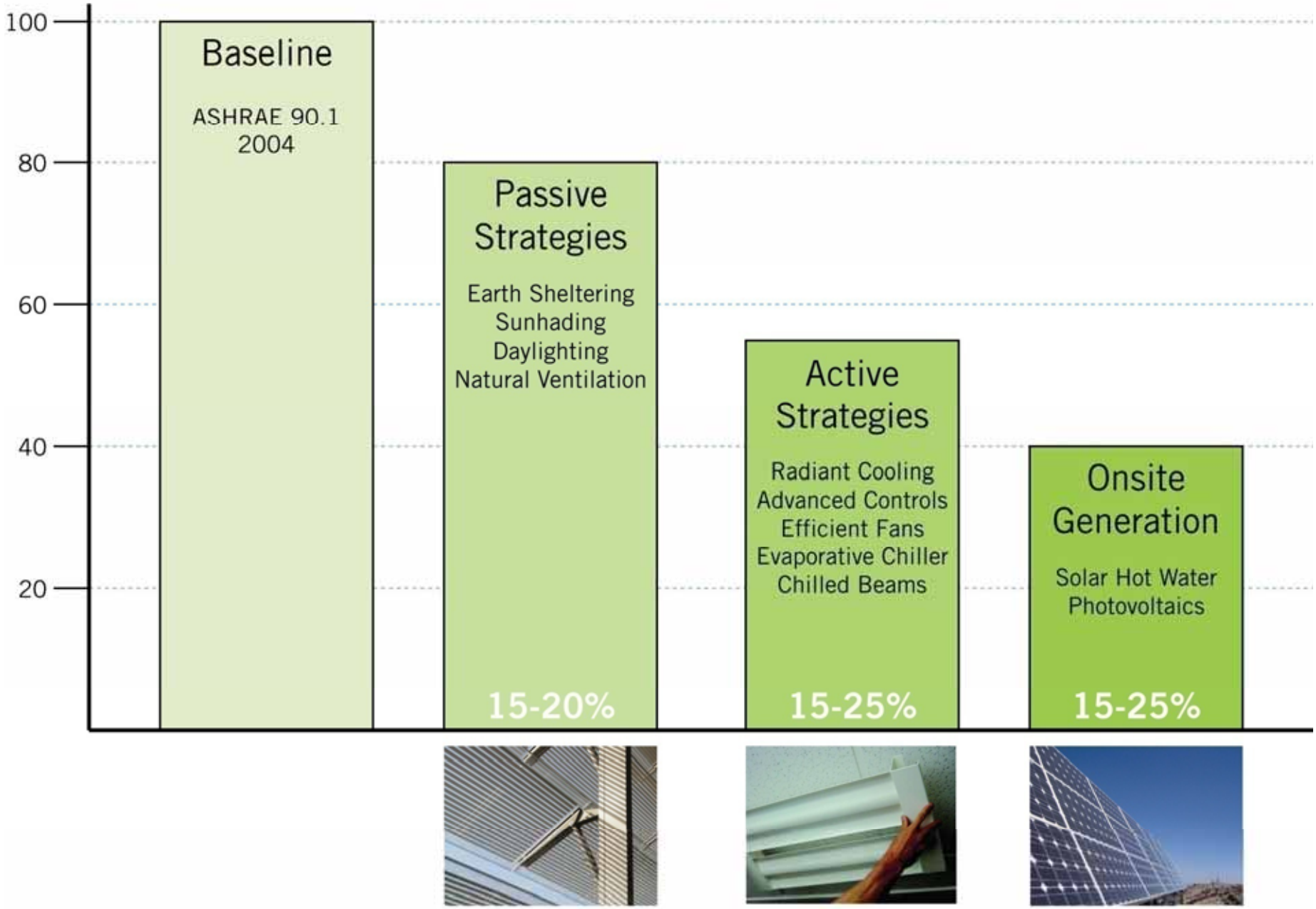


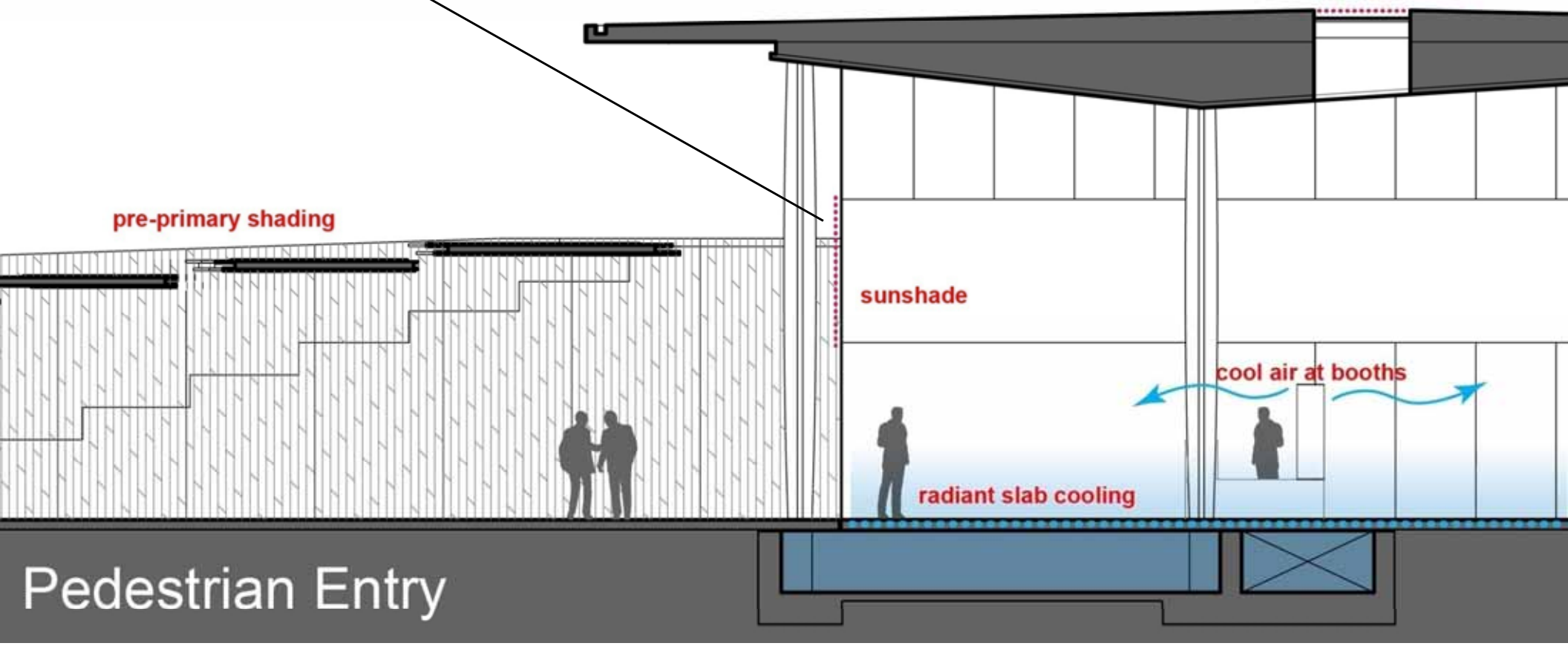




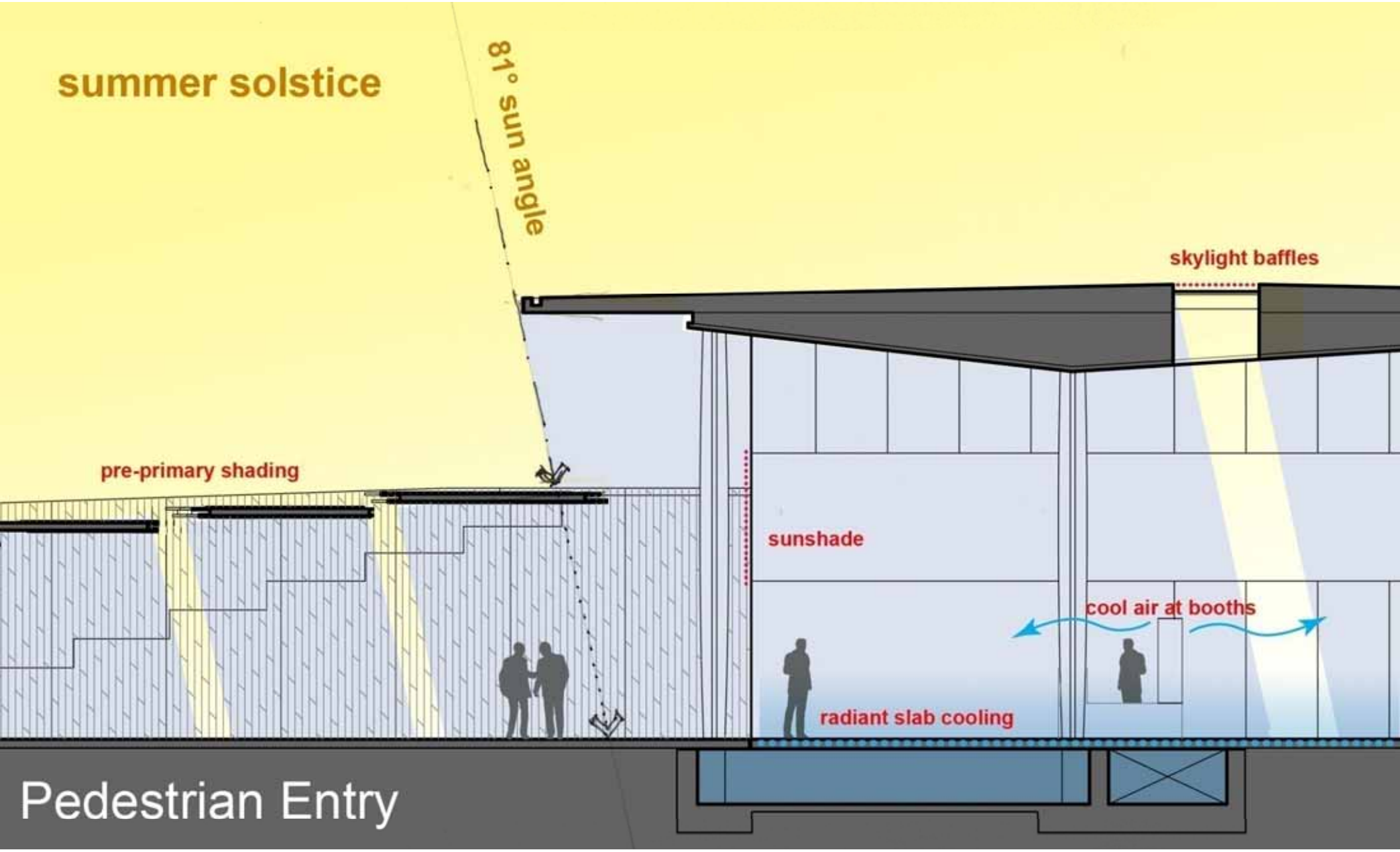

High / Low Temperature
Last Year High/Low Temps Average High/Low Temps
F
C
120
110
100
90
80
70
60
50
40
30
20
49
43
38
32
27
21
16
10
4
-1
-7
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

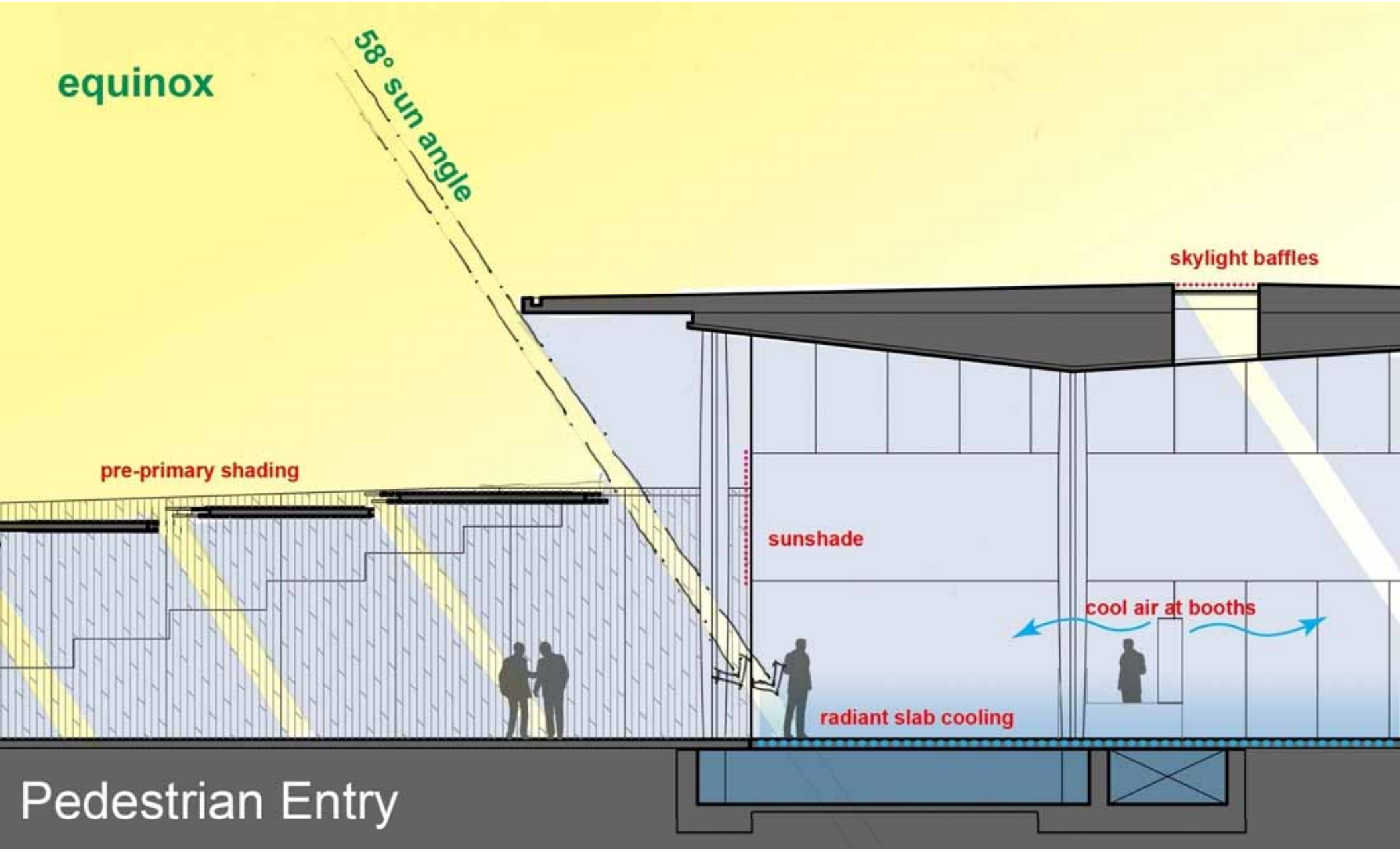
Energy Savings



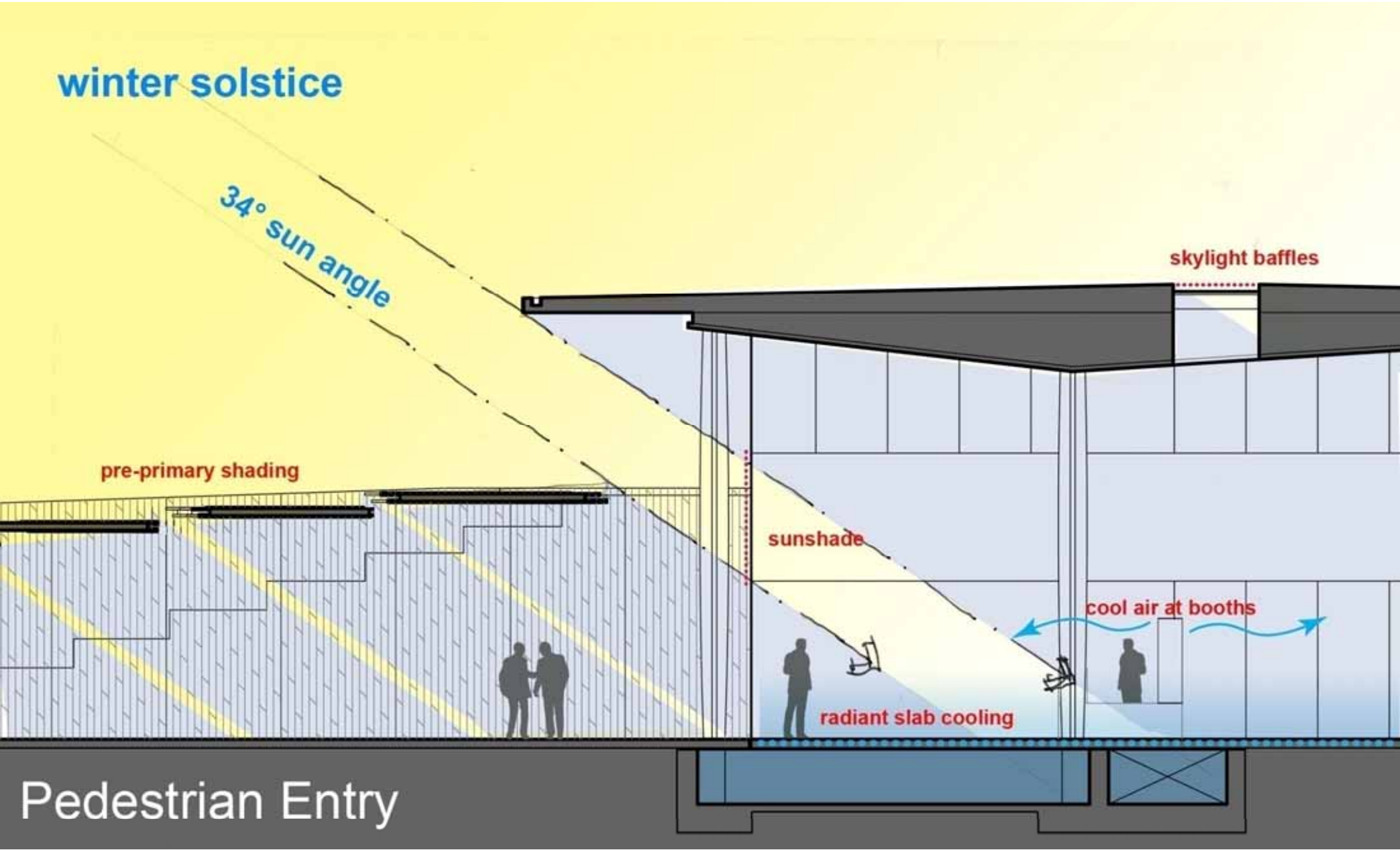


Pedestrian Entry

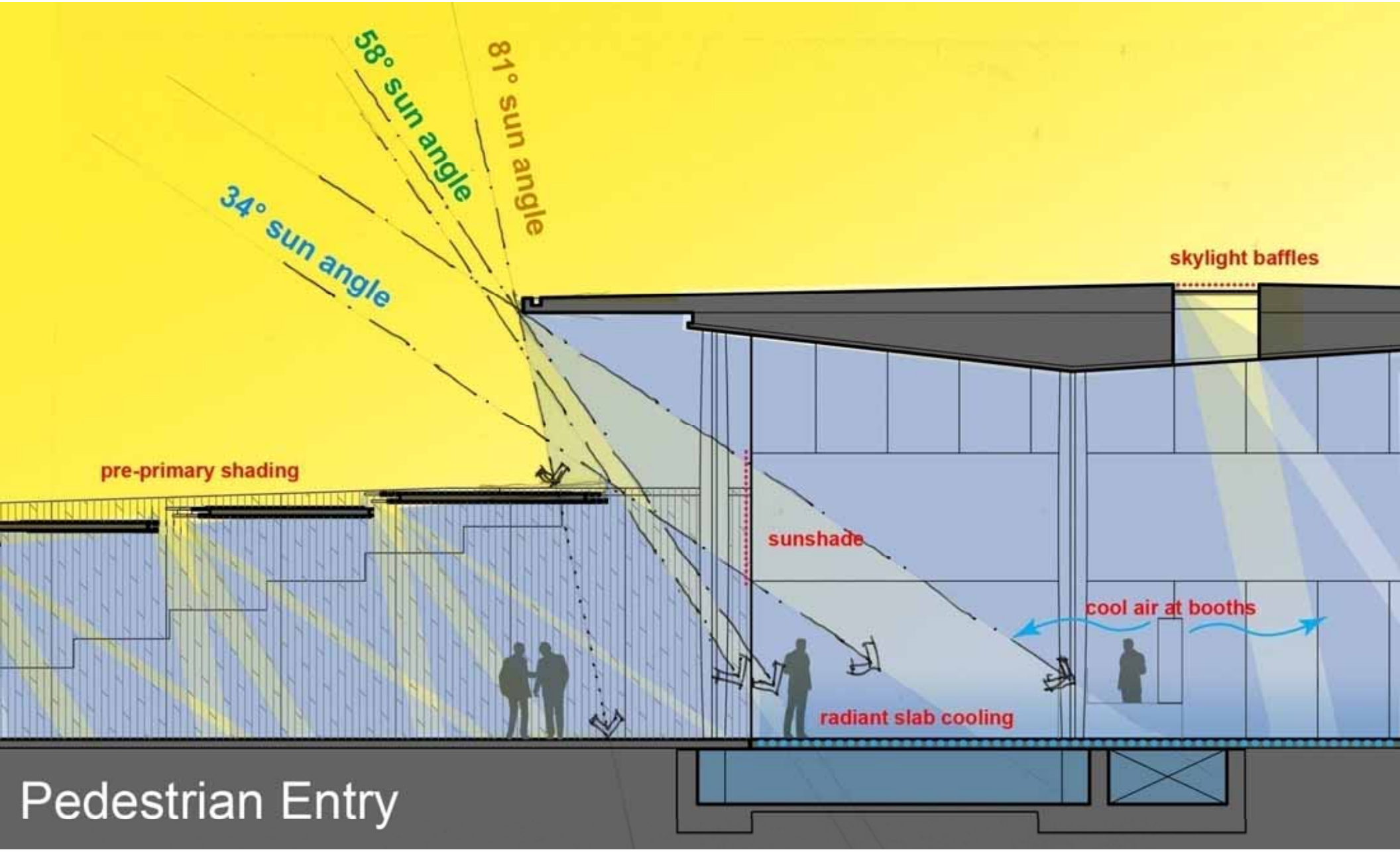

summer solstice
81° sun angle
skylight baffles
pre-primary shading
sunshade
cool air at booths
radiant slab cooling
Pedestrian Entry



Pedestrian Entry

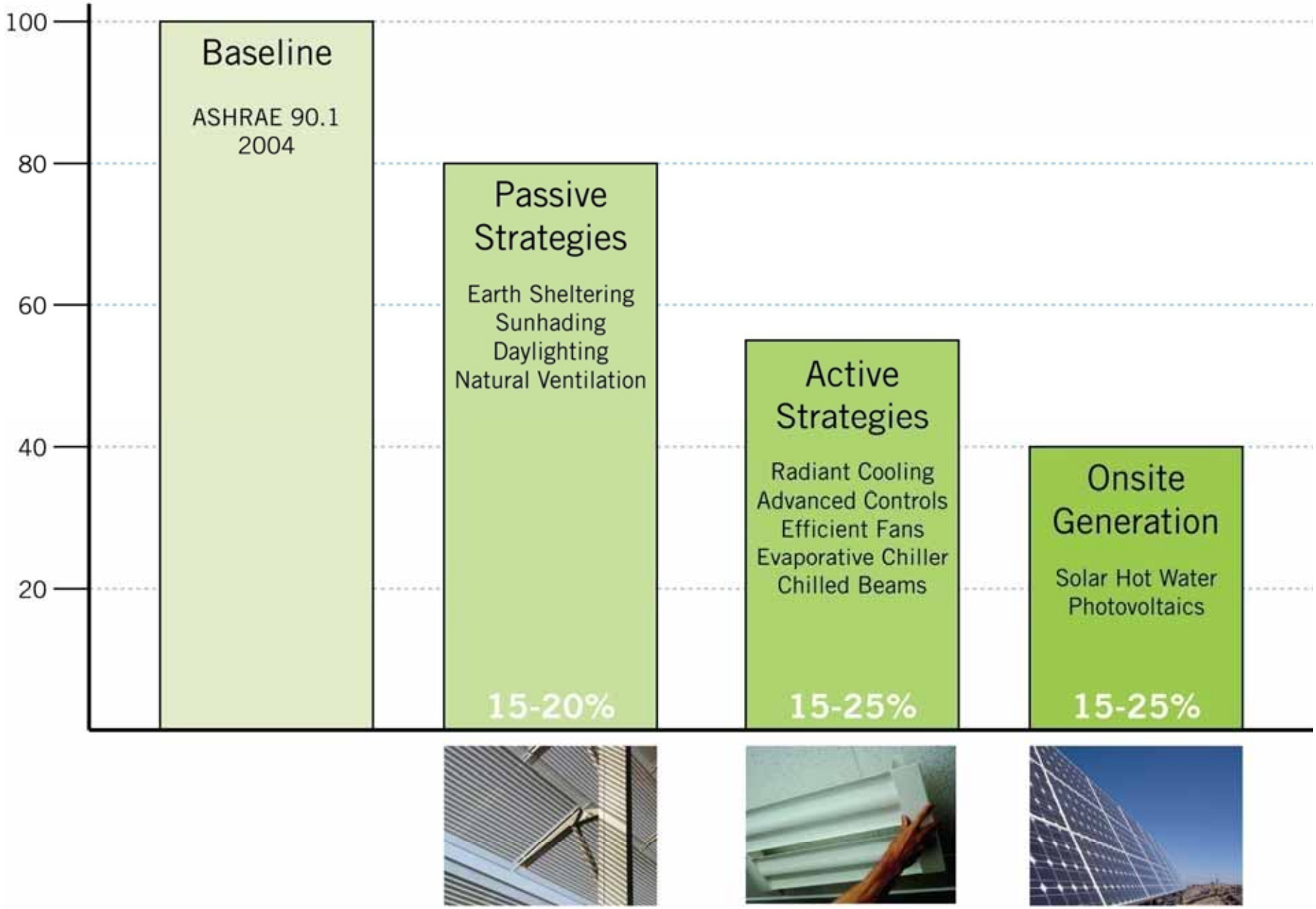


Pedestrian Entry

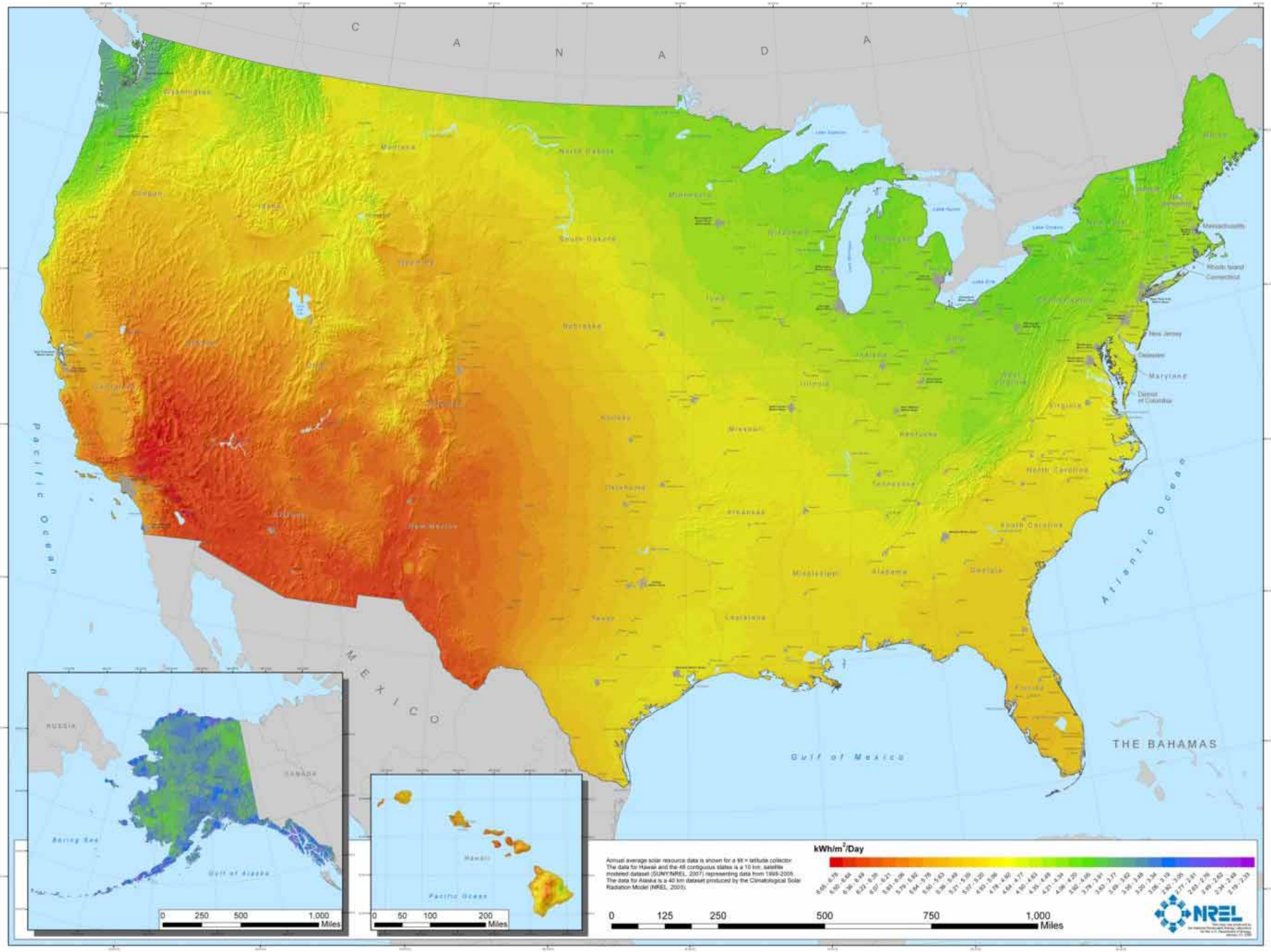


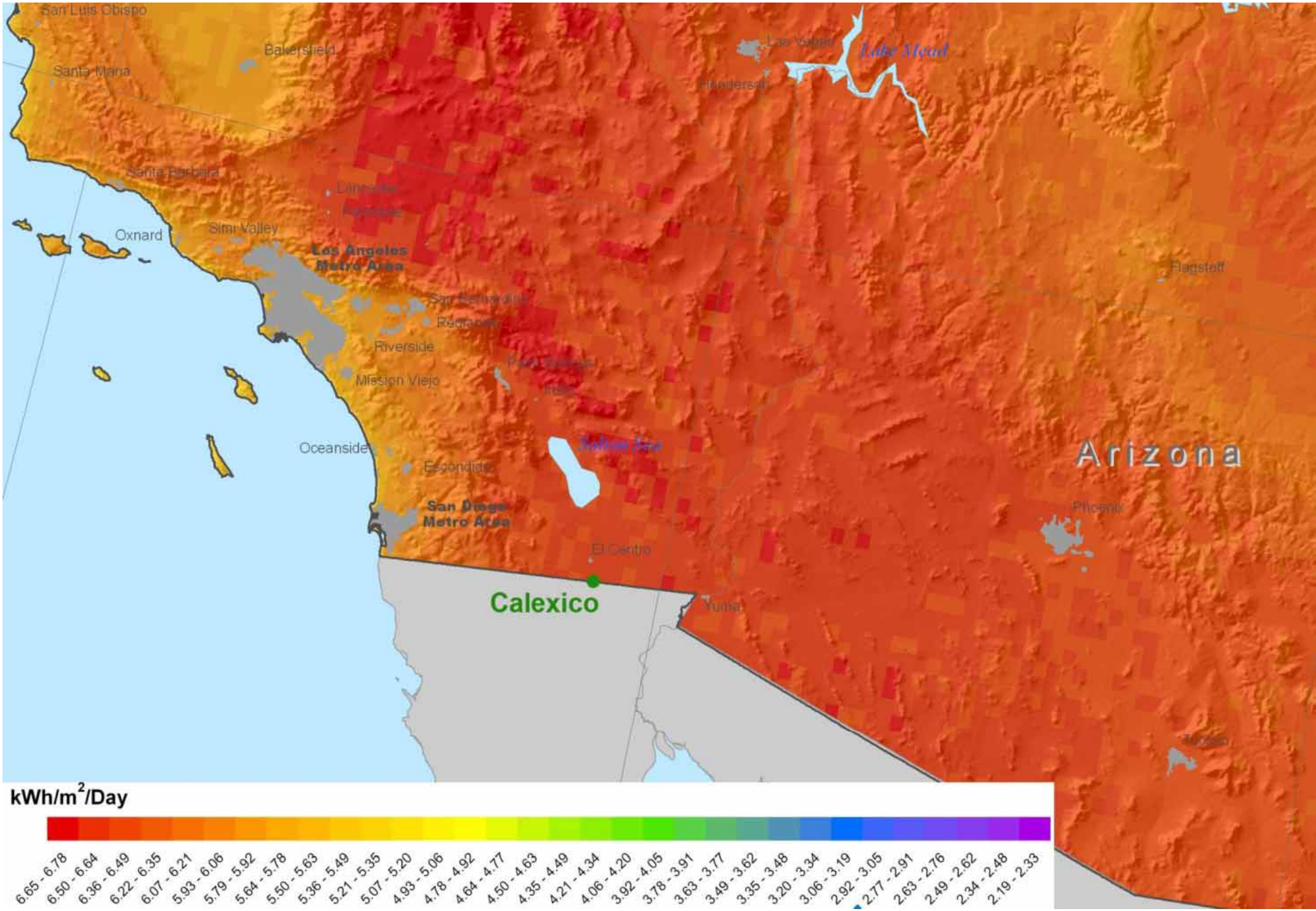
Pedestrian Entry

Energy Savings

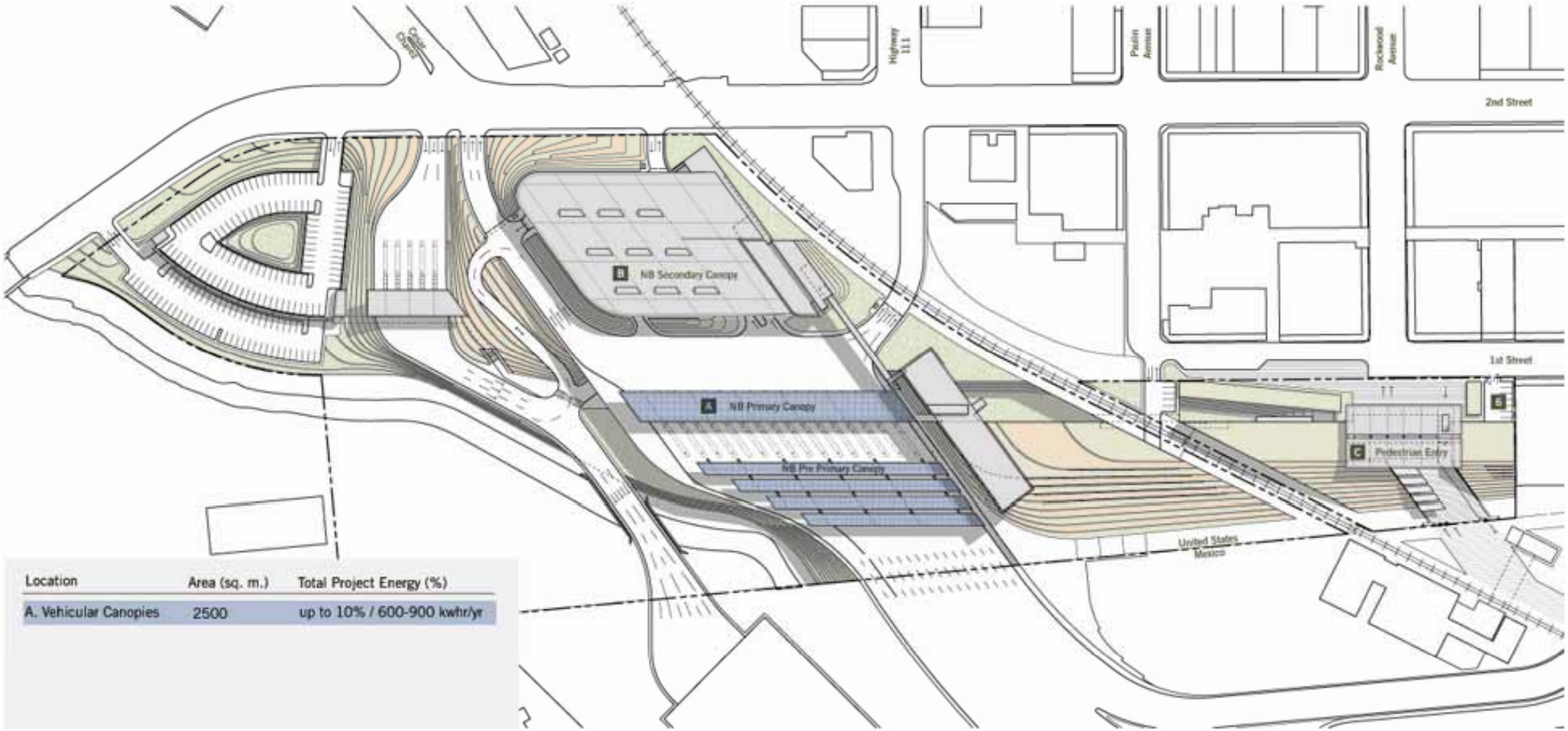


United States Photovoltaic Solar Resource : Flat Plate Tilted at Latitude

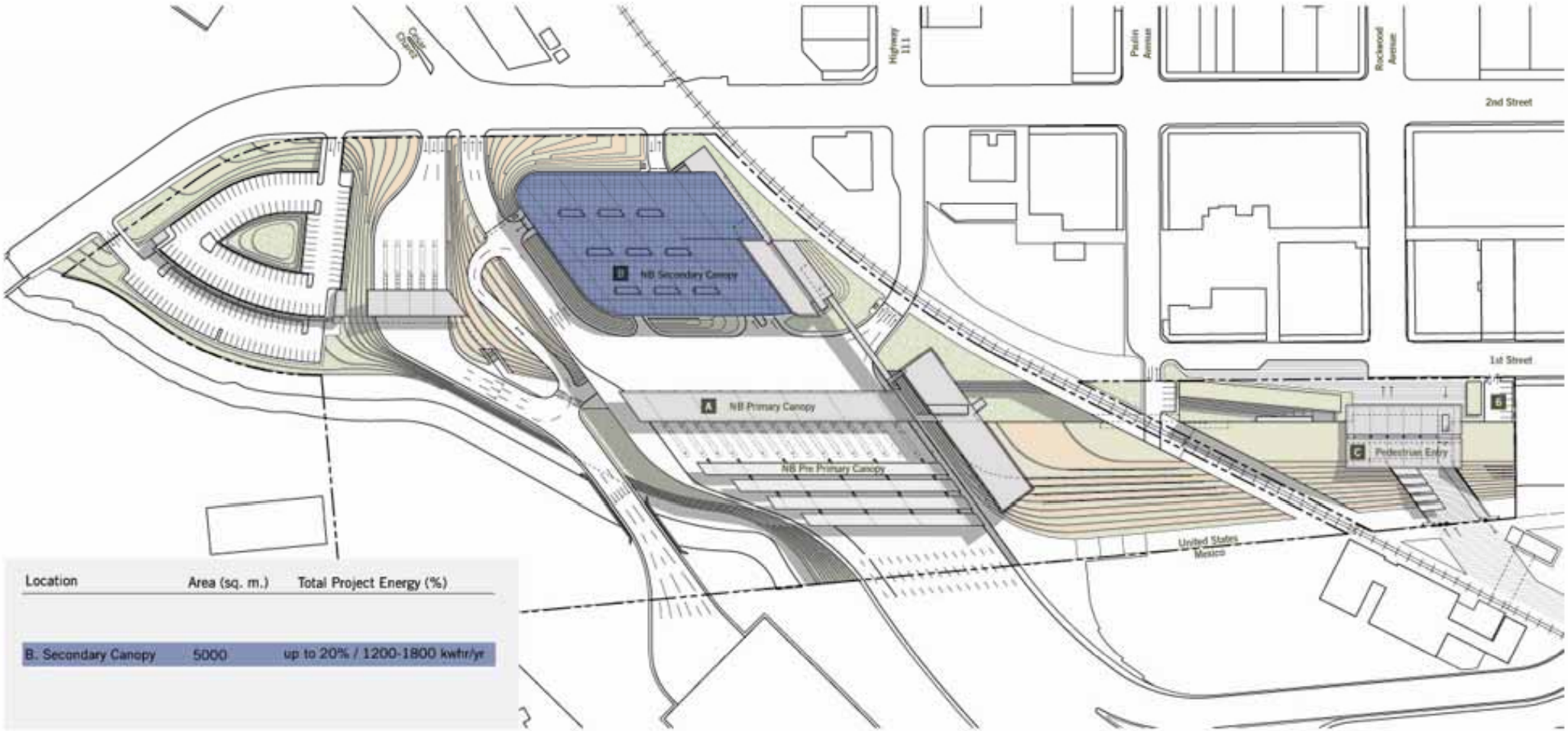



San Luis Obispo
Bakersfield
Santa Maria
Las Vegas
Lake Mead
Henderson
Santa Barbara
Lancaster
Palmdale
Oxnard
Simi Valley
Los Angeles Metro Area
Flagstaff
San Bernardino
Riverside
Mission Viejo
Oceanside
Escondido
Salton Sea
Arizona
San Diego Metro Area
Phoenix
El Centro
Calexico
Yuma
kWh/m2/Day
6.65 - 6.78
6.50 - 6.64
6.36 - 6.49
6.22 - 6.35
6.07 - 6.21
5.93 - 6.06
5.79 - 5.92
5.64 - 5.78
5.50 - 5.63
5.36 - 5.49
5.21 - 5.35
5.07 - 5.20
4.93 - 5.06
4.78 - 4.92
4.64 - 4.77
4.50 - 4.63
4.35 - 4.49
4.21 - 4.34
4.06 - 4.20
3.92 - 4.05
3.78 - 3.91
3.63 - 3.77
3.49 - 3.62
3.35 - 3.48
3.20 - 3.34
3.06 - 3.19
2.92 - 3.05
2.77 - 2.91
2.63 - 2.76
2.49 - 2.62
2.34 - 2.48
2.19 - 2.33

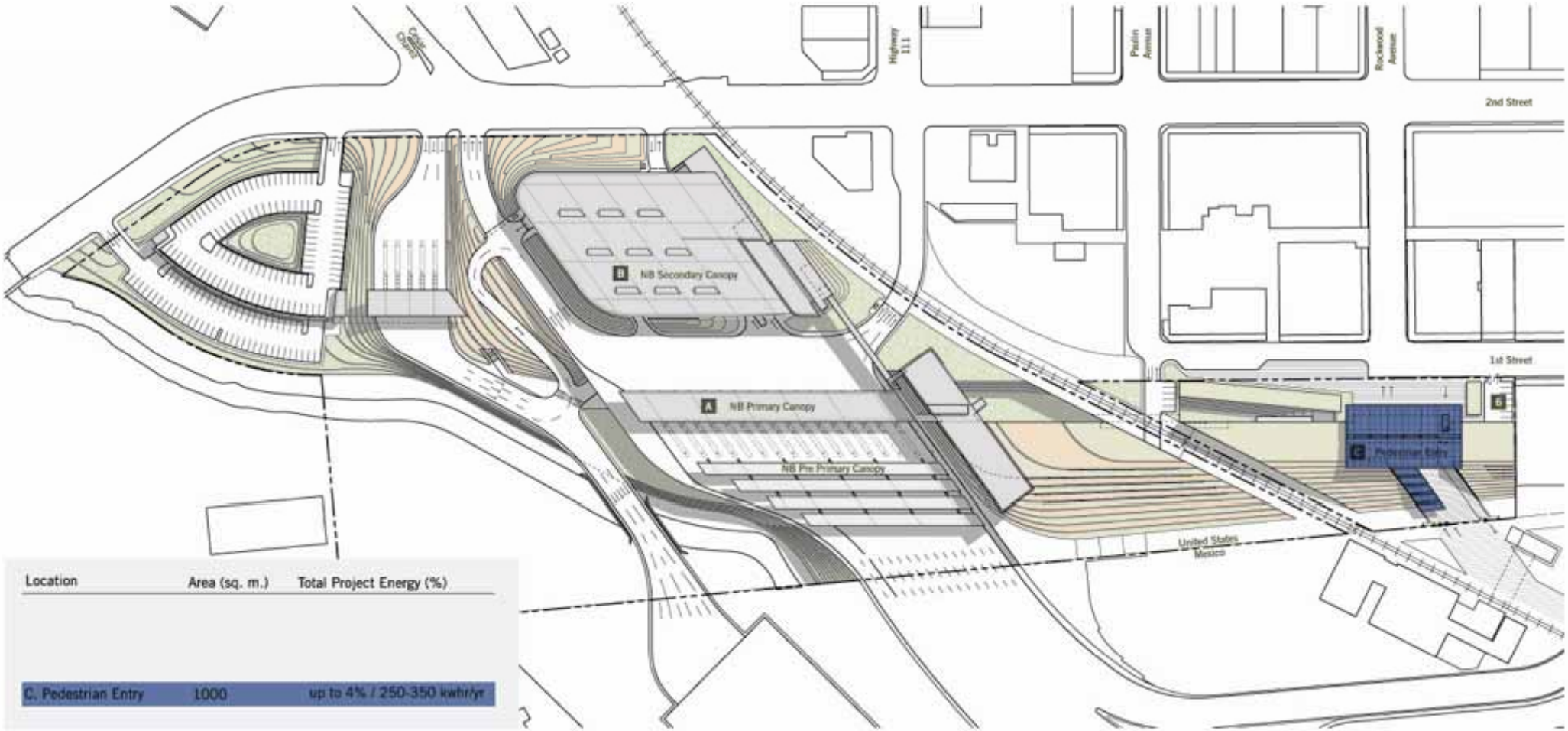
VIBURSOLAR



Location	Area (sq. m.)	Total Project Energy (%)
A. Vehicular Canopies	2500	up to 10% / 600-900 kwhr/yr

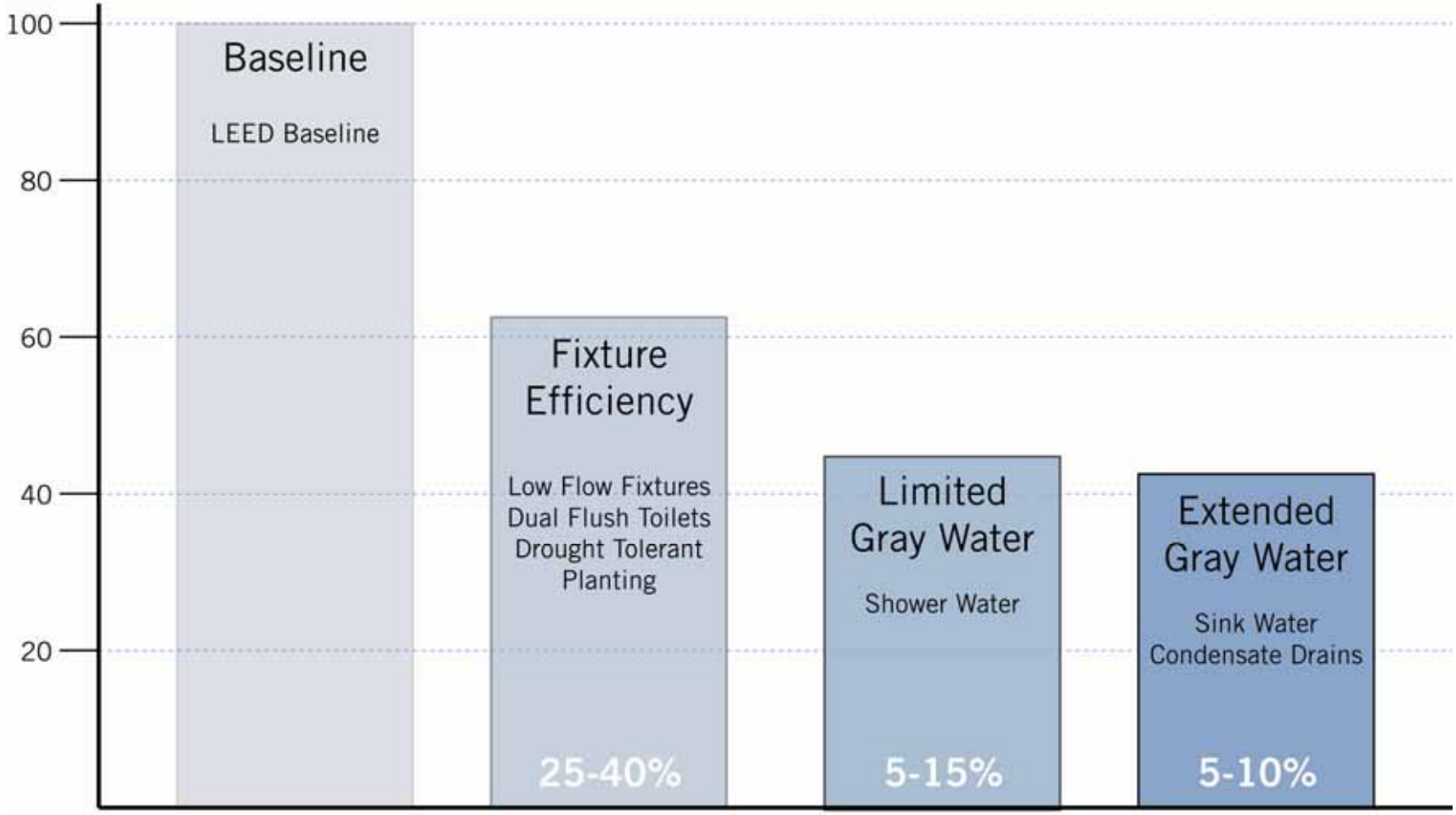


Location	Area (sq. m.)	Total Project Energy (%)
B. Secondary Canopy	5000	up to 20% / 1200-1800 kwhr/yr

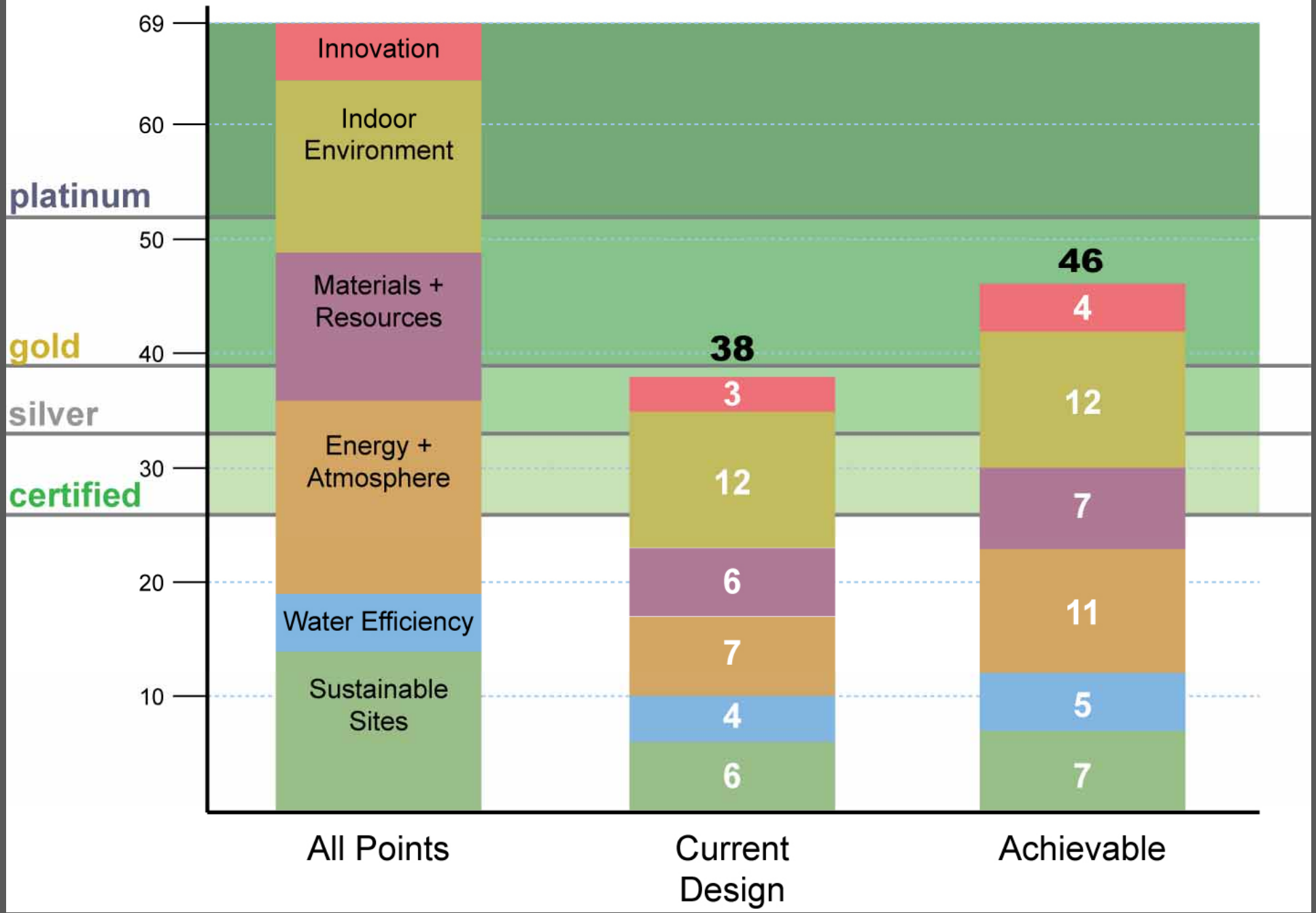


Location	Area (sq. m.)	Total Project Energy (%)
C. Pedestrian Entry	1000	up to 4% / 250-350 kwhr/yr

Water Savings



LEED Target


69
60
50
40
30
20
10
platinum
gold
silver
certified
Innovation
Indoor Environment
Materials + Resources
Energy + Atmosphere
Water Efficiency
Sustainable Sites
38
3
12
6
7
4
6
46
4
12
7
11
5
7
All Points
Current Design
Achievable