

Designing for All

Building toward a just and resilient future

Ed Roberts Campus: Berkeley, CA

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LEDDY MAYTUM STACY Architects



2 core ideas...



Design profoundly influences us and our sense of **confidence**, **comfort**, and **control**.

Variation in ability is **ordinary**, not special, and it affects most of us for at least part of our lives.

UNIVERSAL DESIGN

Celebrating the rich diversity of the human condition

“SUSTAINABLE DESIGN”: A BROADER DEFINITION

- ENVIRONMENTALLY SUSTAINABLE
- SOCIALLY SUSTAINABLE
- FINANCIALLY SUSTAINABLE

PERSONS WITH DISABILITIES

- Equitable use, intuitive, flexible and adaptable spaces

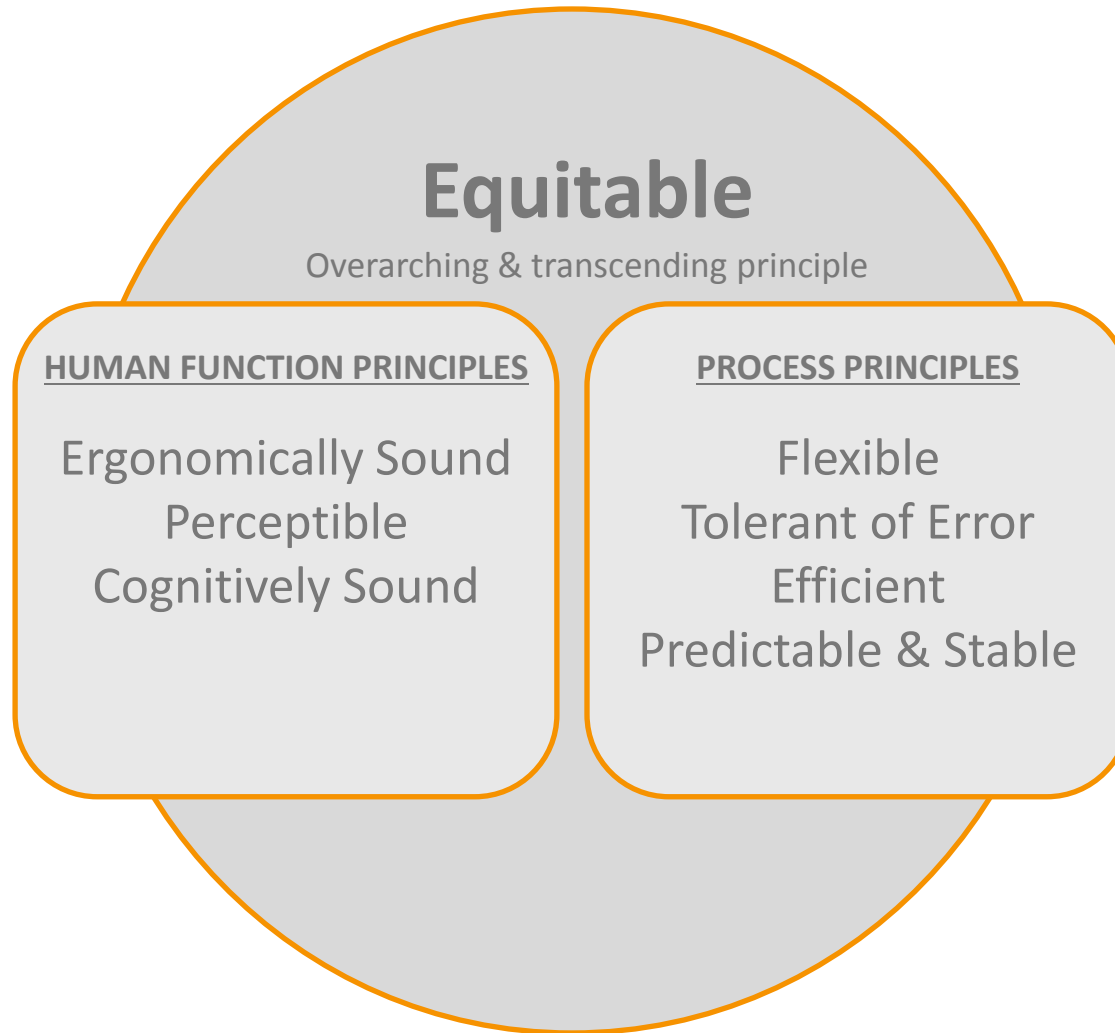
CHANGING NEEDS THROUGHOUT LIFE

- Evolving needs in the different phases of life
- Temporary / permanent injuries, health, pregnancies

DIFFERENT PEOPLE WITH DIFFERENT NEEDS

- Height, weight, energy level, disability type / level, age
- Health, environmental sensitivities, allergies

Universal Design Principles



UNIVERSAL DESIGN

STRATEGY	BENEFIT	COST IMPACT	“SELLING” STRATEGY
SPACE REQUIREMENTS: APPROACH, REACH, CLEARANCES	EASE OF USE AND MANEUVERING WITHIN SPACES	ADDED FLOOR AREA = \$\$	<ul style="list-style-type: none"> ▪ LARGER, FRIENDLIER SPACES. ▪ ENHANCED FLEXIBILITY
CLEAR ORGANIZATION	IDENTIFIABLE PATH / SPACES MAKE ROOM FOR ERROR	NO COST	<ul style="list-style-type: none"> ▪ INTEGRATE WITH DESIGN ▪ REDUCES REQ'D SIGNAGE
AUTOMATIC DOORS	HANDS-FREE OPERATION	\$	<ul style="list-style-type: none"> ▪ INTEGRATE WITH DESIGN ▪ ENHANCED ACCESS
TACTILE, RECOGNIZABLE FINISHES & MATERIALS	INTUITIVE AND PERCEPTIBLE SPACES AND PATHWAYS	NO COST	<ul style="list-style-type: none"> ▪ INTEGRATE WITH DESIGN ▪ RICHNESS OF TEXTURES
BALANCED DAYLIGHTING	GOOD VISIBILITY FOR VISION- IMPAIRED	\$ LONG-TERM SAVINGS	<ul style="list-style-type: none"> ▪ ENERGY SAVINGS ▪ ENHANCED INTERIORS
INDIRECT LIGHTING WITH DIMMERS & OCC SENSORS	NO-GLARE ADJUSTABLE LIGHT LEVELS FOR LIGHT SENSITIVITY HANDS-FREE OPERATION	\$ LONG-TERM SAVINGS	<ul style="list-style-type: none"> ▪ ENERGY SAVINGS ▪ DIFFERENT LIGHT LEVELS FOR DIFFERENT TASKS
TEMPERATURE CONTROLS	ADJUSTABLE, COMFORT LEVEL FOR TEMPERATURE SENSITIVITY	\$	<ul style="list-style-type: none"> ▪ THERMAL COMFORT FOR ALL ▪ ENERGY-SAVING STRATEGY
LEVER HANDLES, WIDER DOORS AND OPENINGS THROUGHOUT	EASE OF USE AND MANEUVERING WITHOUT ASSISTANCE	\$	<ul style="list-style-type: none"> ▪ EASE OF USE FOR EVERYONE
ADDITIONAL GRAB BARS / DURABLE FINISHES	EASE OF USE AND MANEUVERING WITHOUT ASSISTANCE	\$	<ul style="list-style-type: none"> ▪ INTEGRATE WITH DESIGN ▪ REDUCES MAINTENANCE

SUSTAINABLE DESIGN

SYNERGIES WITH UNIVERSAL DESIGN

- Healthy indoor environments
- Thermal Comfort
- Transit-oriented Development (TOD)
- Carbon reduction

ECONOMICS

- Energy efficiency / Reduced operating costs
- Lowered maintenance
- Reduced Tenant Turnover



ED ROBERTS CAMPUS
BERKELEY, CALIFORNIA
COMPLETED NOVEMBER 2011

The Ed Roberts Campus



**Seven non-profit organizations that share a mission:
Helping people with disabilities lead independent lives**

Ed Roberts Campus

*Good design is fundamentally a social justice issue.
Everyone has the right to dignified, inspiring places to live and work.*

Design Objectives:

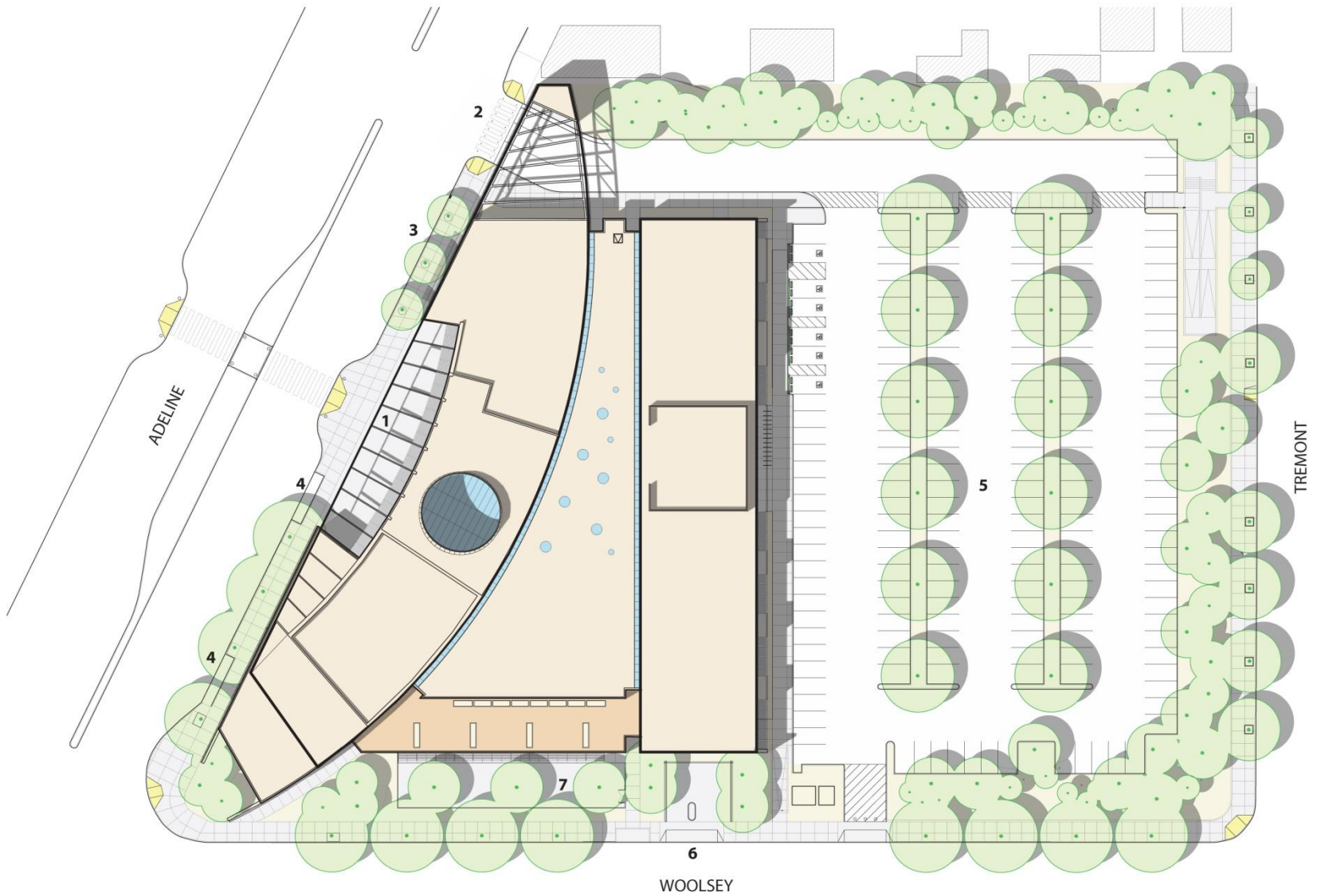
- 1. Create an international center serving and celebrating the Independent Living/ Disability Rights Movement**
- 2. Build a community center that revitalizes its neighborhood, improves transit links and celebrates diversity**
- 3. Integrate advanced Universal Design and Sustainable Design strategies within Transit Oriented Development**



Universal Design Objectives

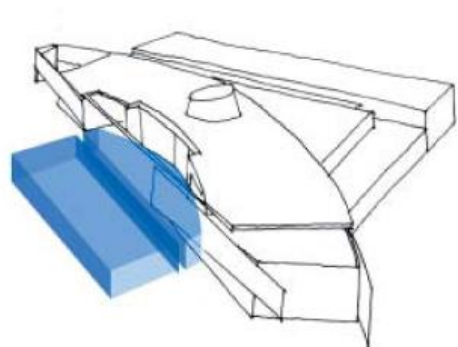
- Physical Environment
- Visual Environment
- Acoustical Environment
- Thermal Environment
- Chemical Environment
- Electronic Environment



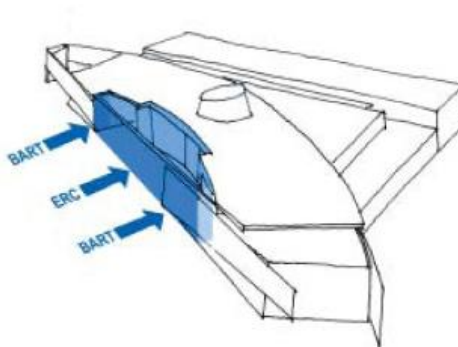


SITE PLAN

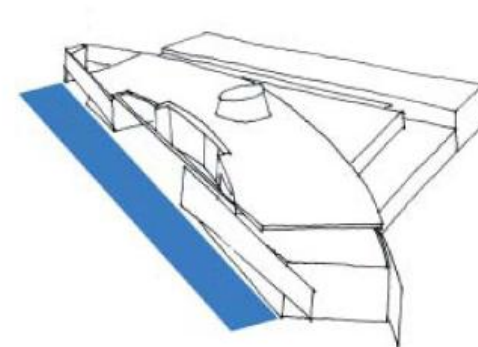
1 PUBLIC PLAZA 2 BART PARKING ENTRANCE 3 BUS ZONE 4 PARATRANSIT/LOADING ZONE 5 BART PARKING 6 ERC PARKING ENTRANCE 7 CHILDCARE PLAYGROUND



BART station interface



plaza as transit threshold



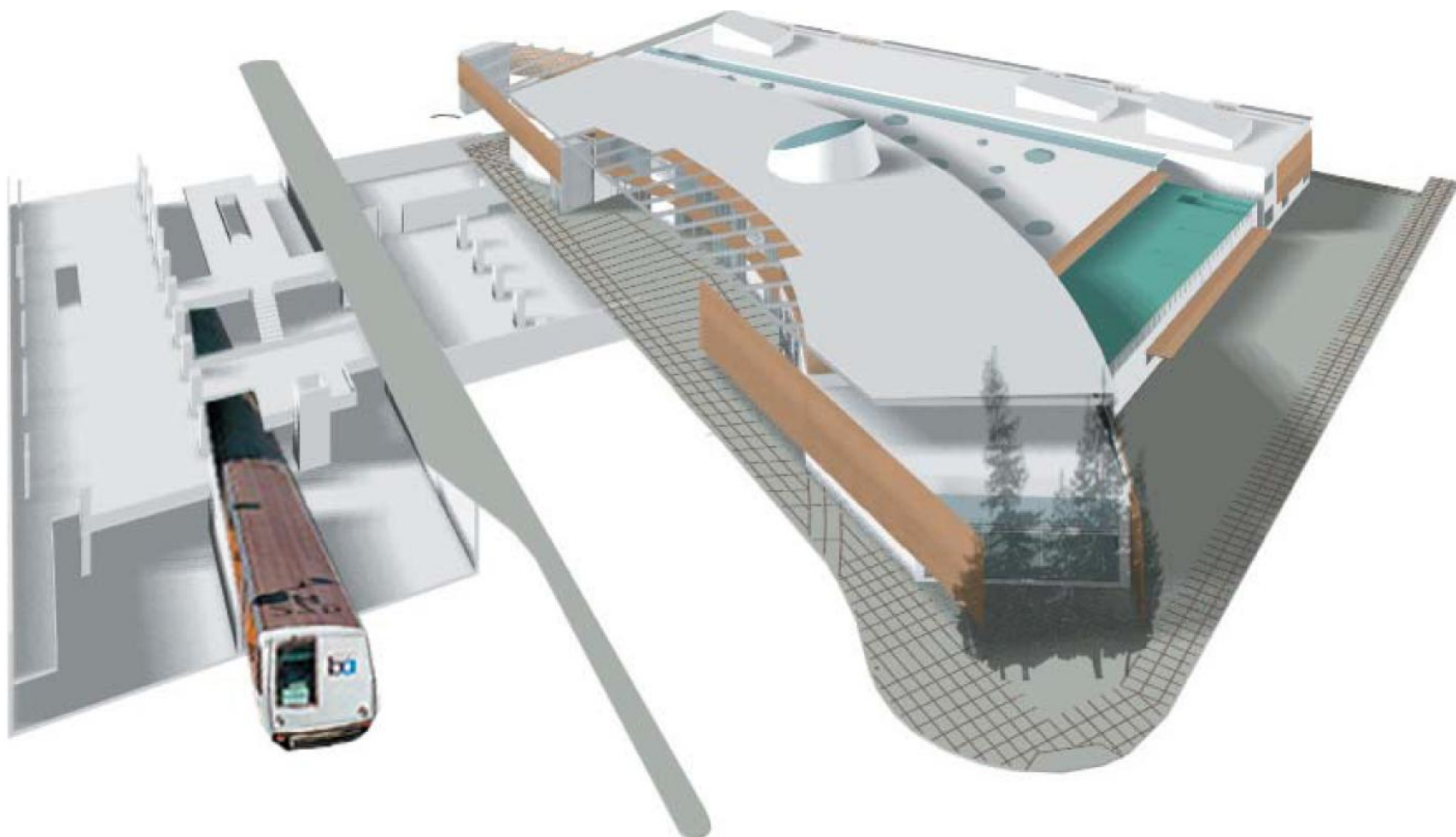
bus, paratransit & taxi zones

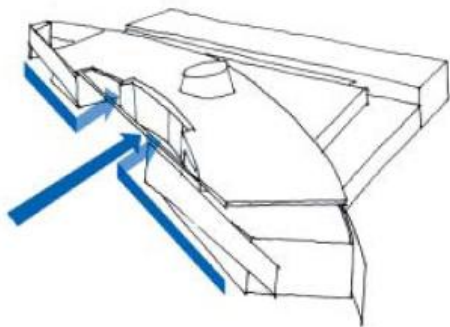
providing convenient mass transit access for all

Public transportation access...

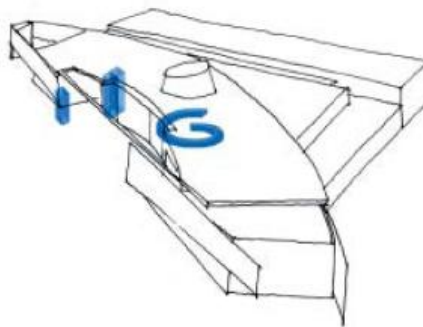


The ERC is located at a regional transit hub

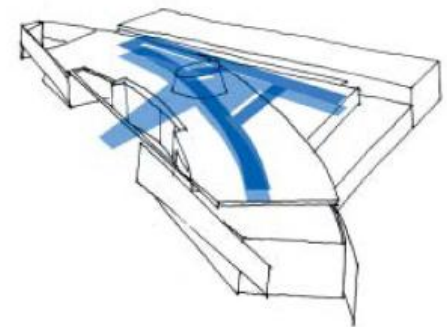




legible approach & entry



vertical circulation for everyone



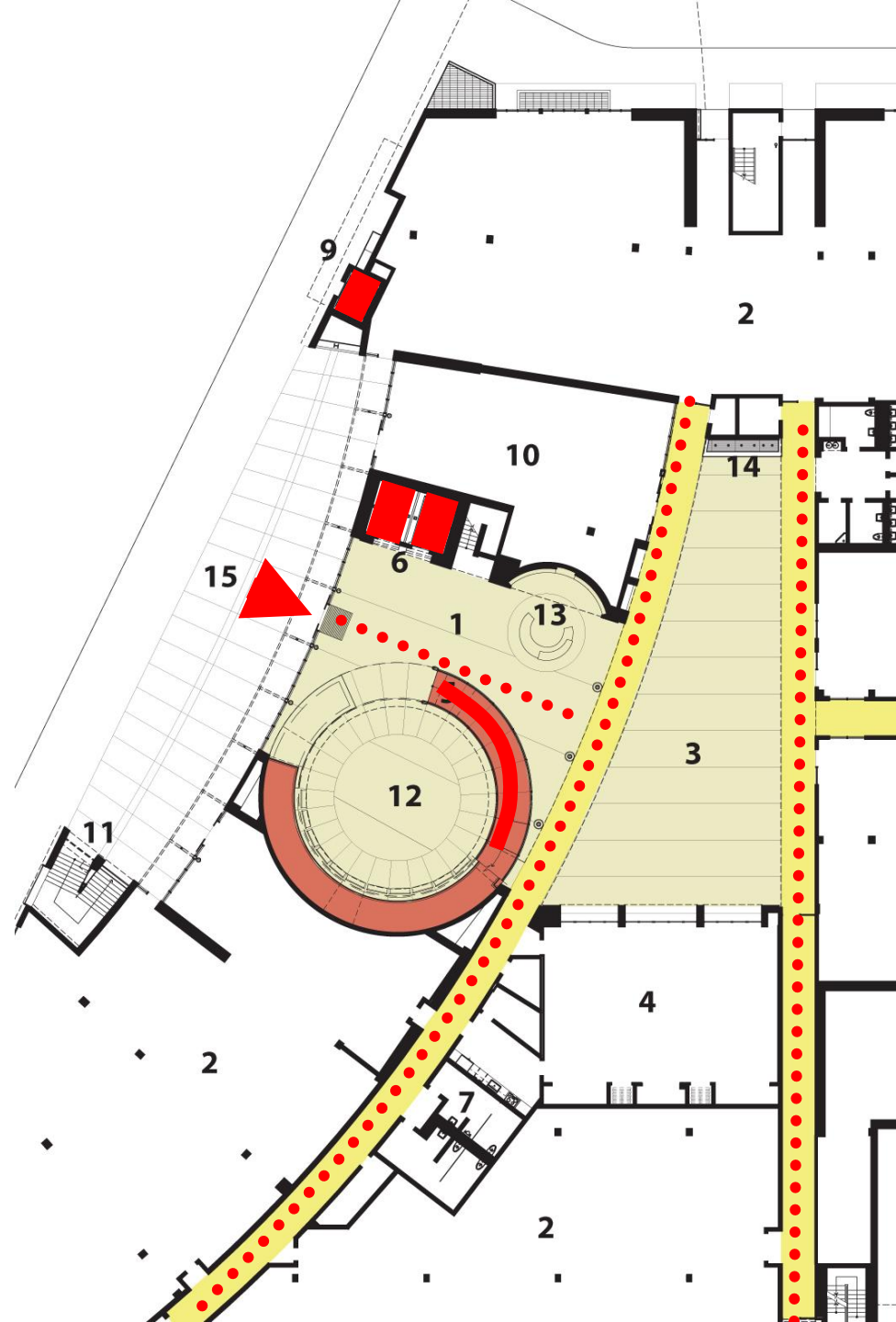
wide corridors | clear routes

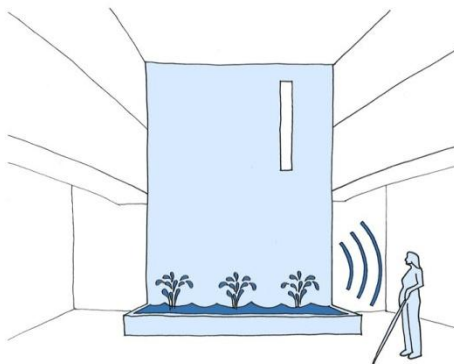
welcoming people with diverse abilities

Universal Design

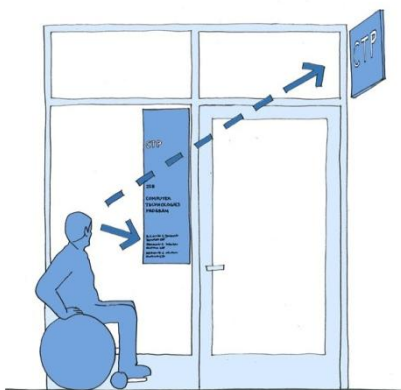
Physical Environment

- Generous Lobby
- Large two-sided elevators
- Helical ramp used by all
- Simple loop circulation
- Accessible safety features
- Flexible space / flexible pace
- 7 ft. wide corridors

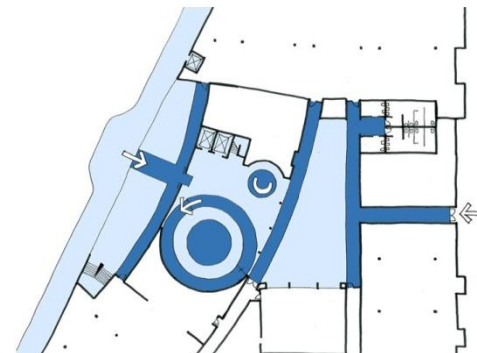




Acoustic Landmarks



Visible Signage

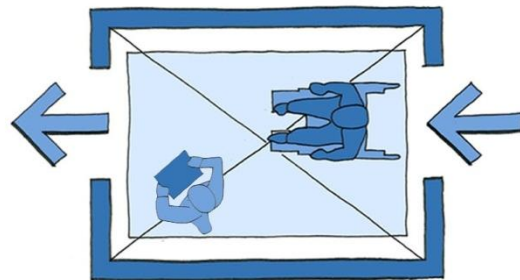


Textured Pavement Way Finding

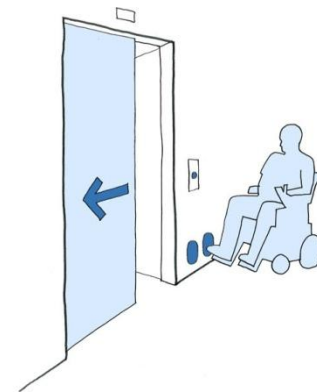
ED ROBERTS CAMPUS



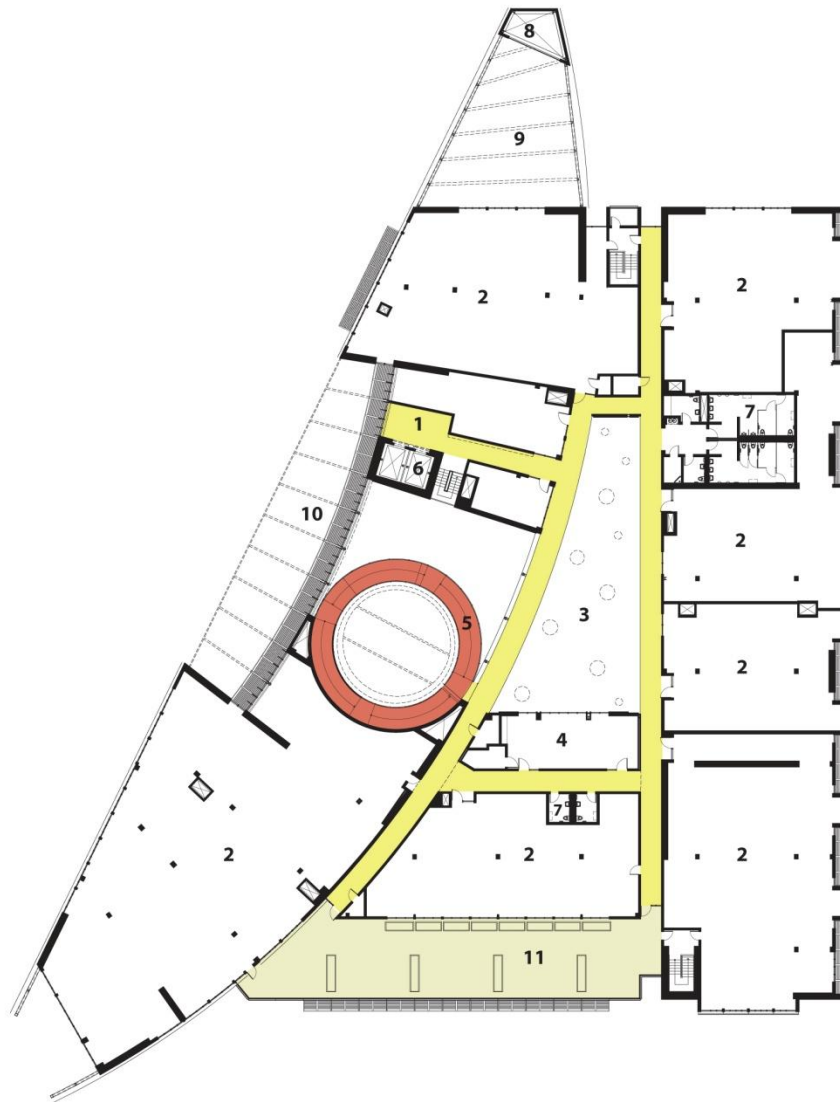
7ft. wide corridors



Large Double Sided Elevator

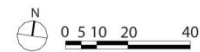


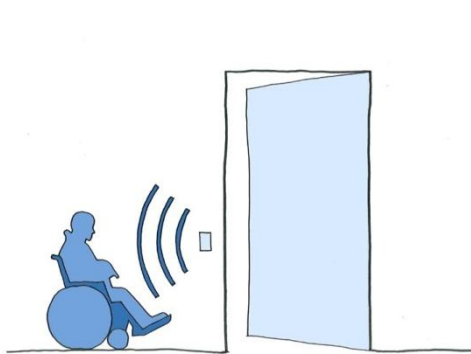
Specialized Elevator Controls



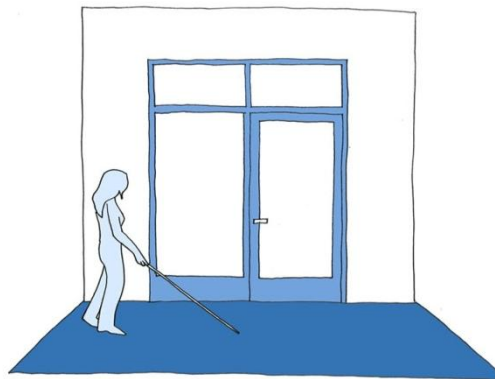
SECOND FLOOR PLAN

1 LOBBY 2 LEASE SPACE 3 CENTRAL COURT 4 CONFERENCE ROOM 5 RAMP 6 ELEVATOR 7 RESTROOM
8 BART VENTILATION 9 CANOPY ABOVE DRIVEWAY 10 TRELLIS WITH SUNSCREEN 11 ROOF DECK

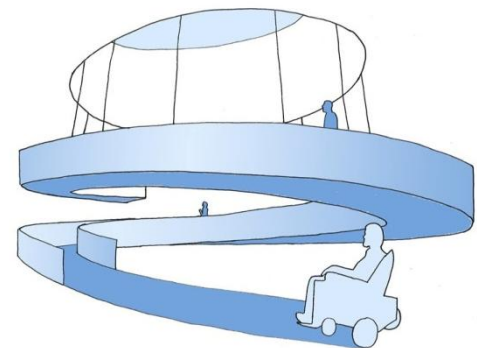




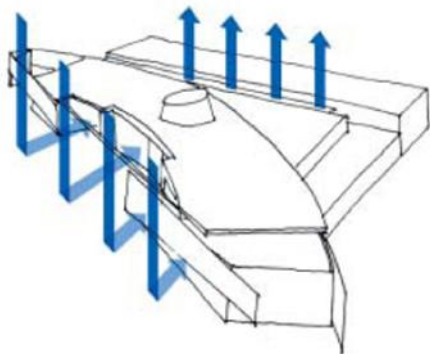
Automatic Doors



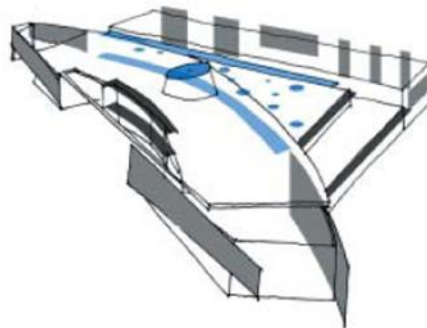
Visual Contrast



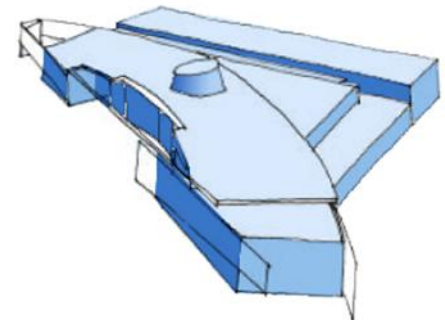
Vertical Circulation



natural ventilation



daylighting | sun control



clean air | high indoor air quality

creating healthy, inviting, resource-efficient spaces

Universal Design

Chemical Environment

- Non-toxic materials / IAQ program
- Filtered fresh air
- Green cleaning program
- Smoke & fragrance free environment
- Tenants can upgrade indoor air filtering levels
- *Air quality tests: 50-100% better than LEED IAQ standards*

