

Education Workforce Housing Workshop

Innovative Housing Solutions to Live Near Work



Design Matters

Design Matters

- Good Design
- Massing
- Construction Types
- Parking
- Investment





Good Design

- enables **community** and **privacy**
- brings residents **joy**
- considers **sustainable** futures
- **reflects** positively on your LEA

OUTDOOR LIVING ROOM DIAGRAM



What does it mean to create **good design**?



**Good design
starts with
people.**



**“I need my
students
to have
freedom.”**

**“I didn’t know
fresh air
could inspire
learning.”**

NICOLE DRESCH, 32, PS1
PLURALISTIC SCHOOL TEACHER

What does it mean to create **good design**?

PROGRAM

FORM



What does it mean to create **good design**?

SITE

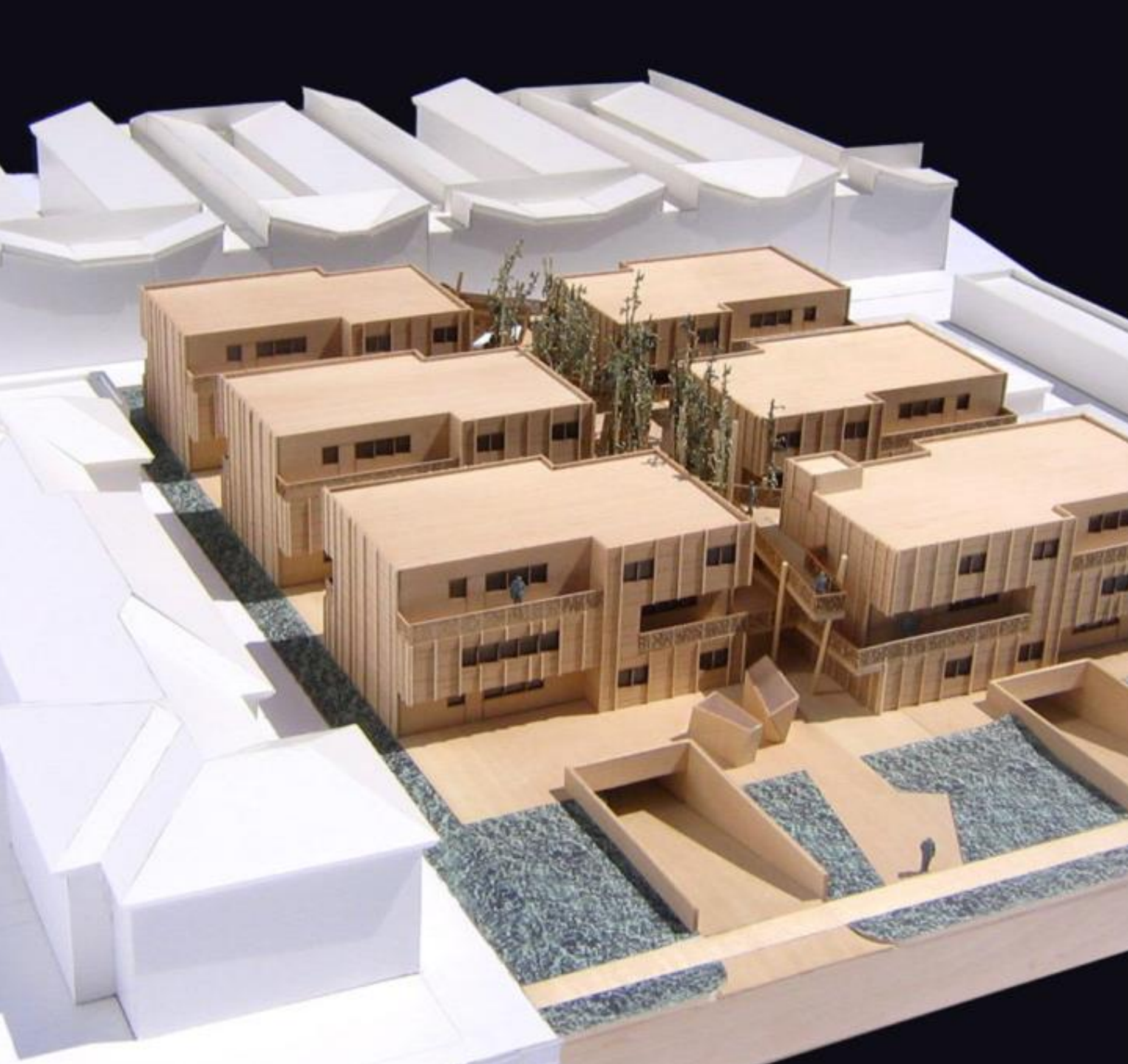
BUILDING



Good design
acknowledges
its **context**

SITE



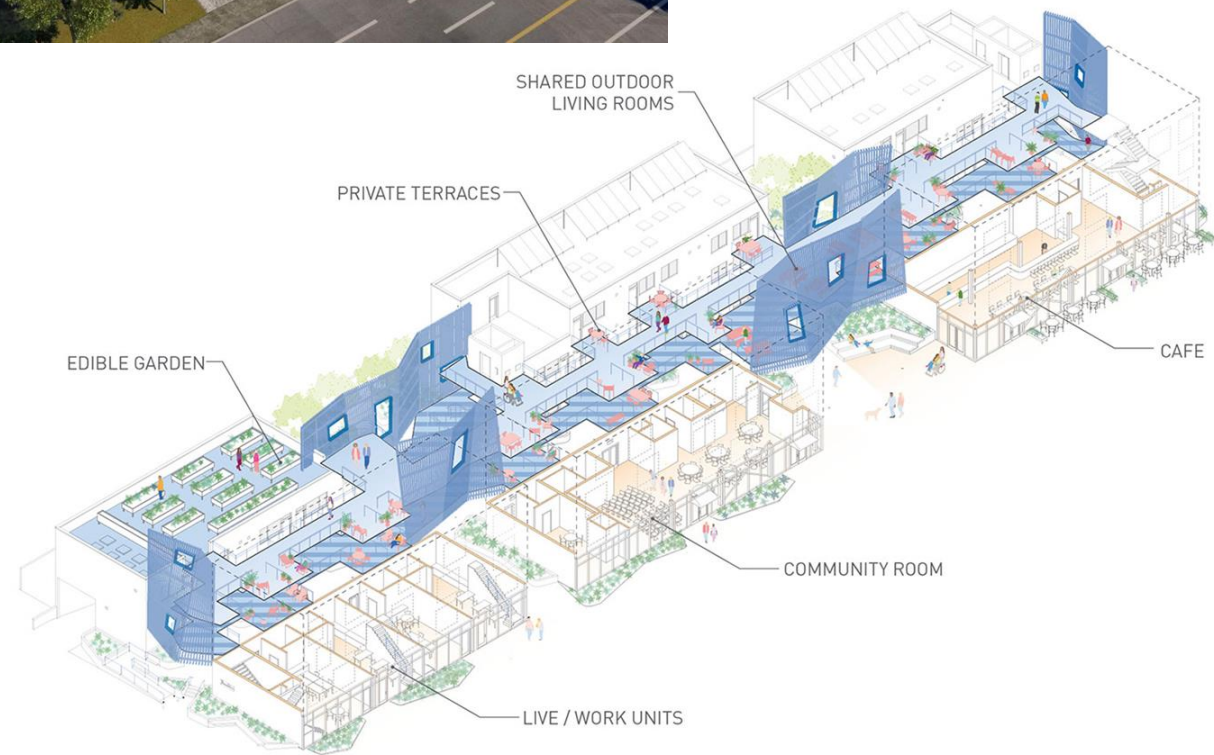


and creates a
dialogue
between new
buildings and
neighbors

BUILDING

Good design prioritizes sustainability

SITE



OUTDOOR LIVING ROOM DIAGRAM



starting with
common sense
choices

BUILDING

Good design
creates **shared
spaces**, indoors
and out

SITE





these **build
community**
between
residents and
neighbors

SITE

Good design
activates the
street

SITE





to draw
awareness and
activity

BUILDING

Good design is
attentive to
**material choice
and detailing**

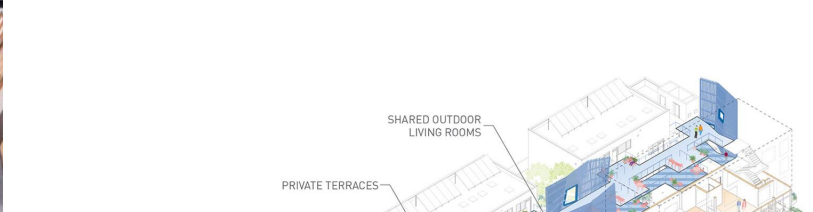
BUILDING





from the **level** of
landscape and
facades to unit
plans and
fixtures

BUILDING



Good design makes **everyday** life better.



The Basics of Good Design

- ▶ Categories:
 - ▶ Program & Form
(what people do, where)
 - ▶ Building & Site
- ▶ Context
- ▶ Sustainability
- ▶ Shared Space
- ▶ Street Life
- ▶ Fully resolved details
 - ▶ Site plan, unit plans, materials
- ▶ **Makes everyday life better.**



Let's get **technical**.

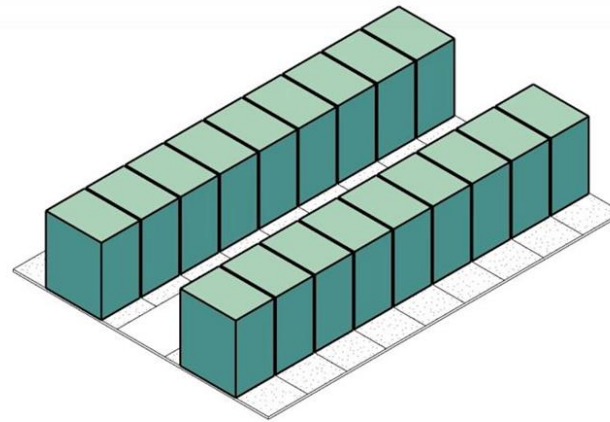


Massing indicates the
size and form of a building.



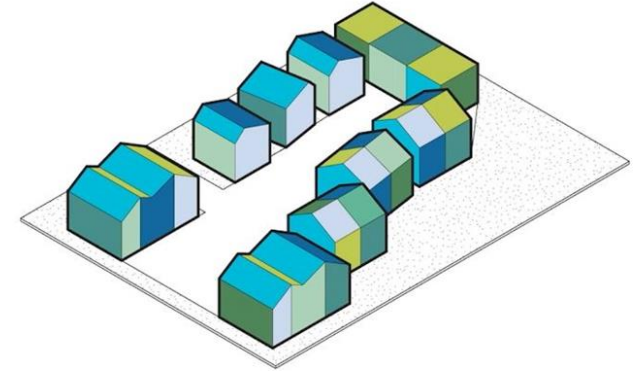
The Basics of Massing

- ▶ The basic form of building(s)
- ▶ Guided by access to light, air, circulation
- ▶ Constrained by height limits, setbacks, FAR, etc.



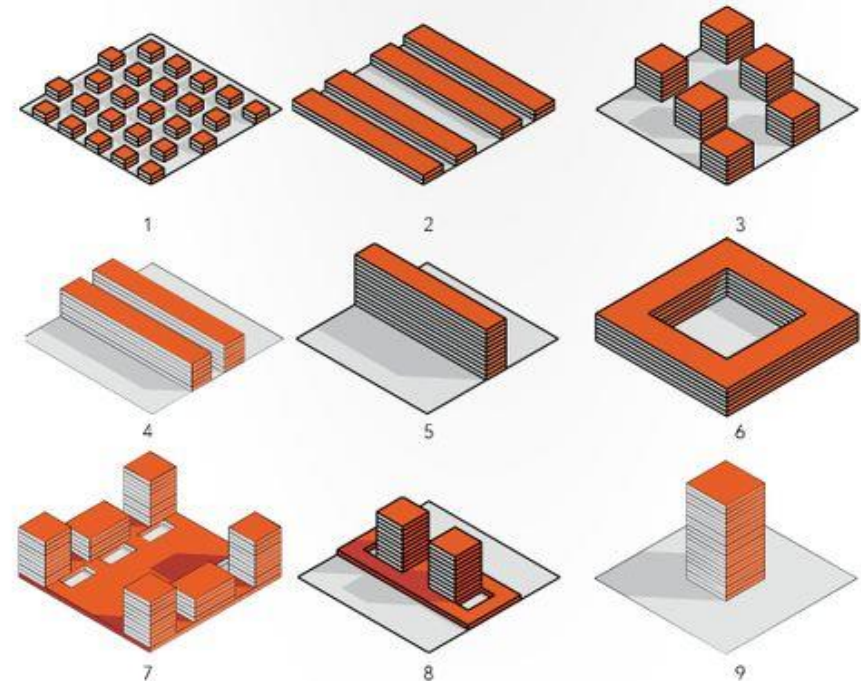
TYPICAL HIGH DENSITY

18 LOTS
18 UNITS



"STEALTH" DENSITY

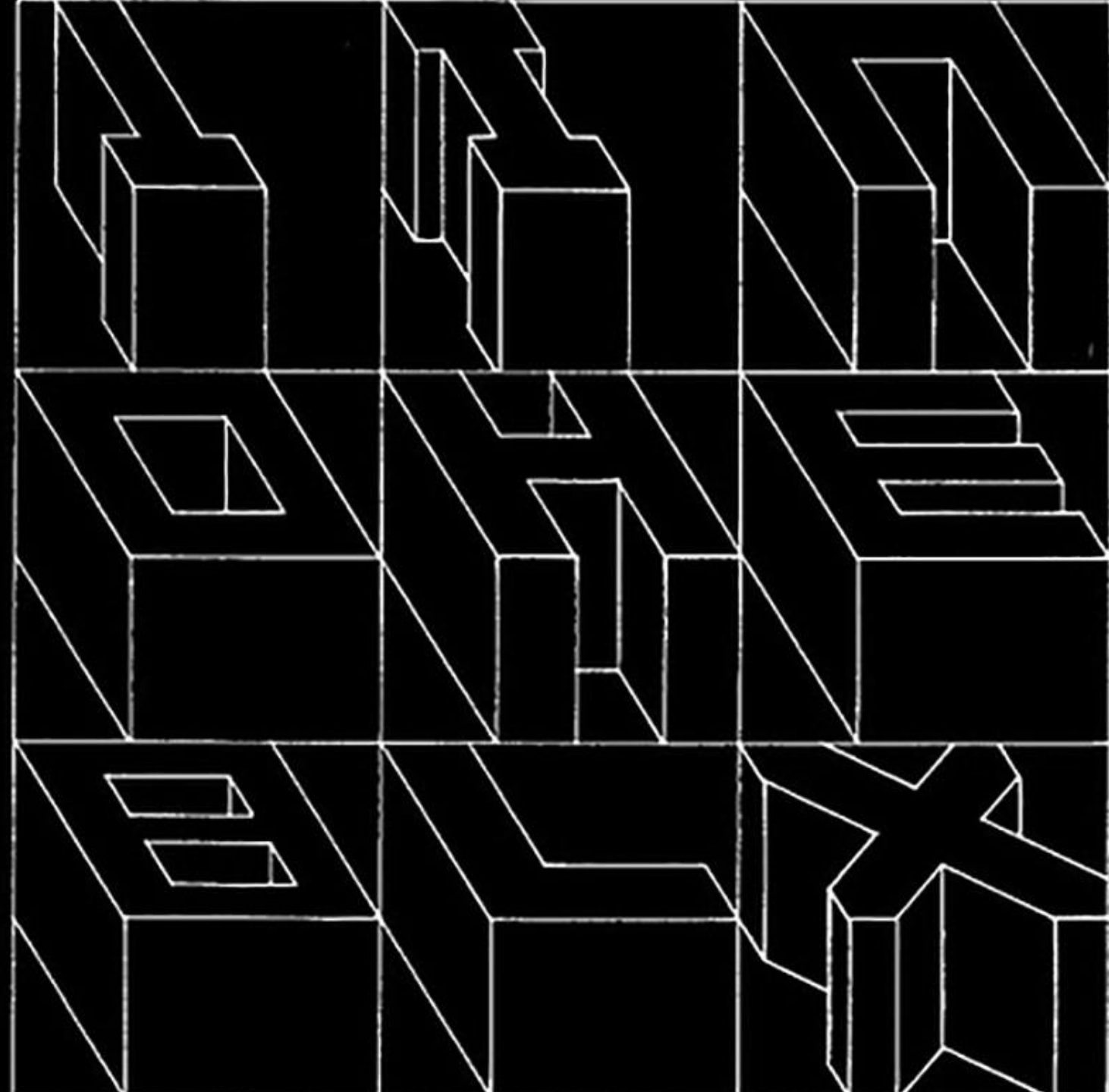
18 LOTS
18 UNITS



Source: Bestor Architecture; a+t research group

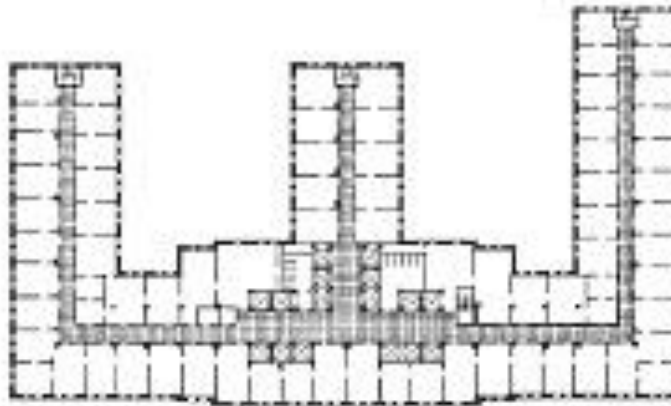
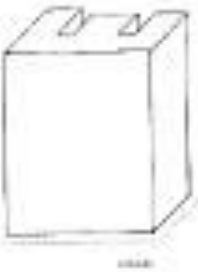
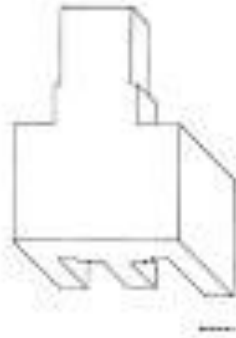
The Basics of Massing

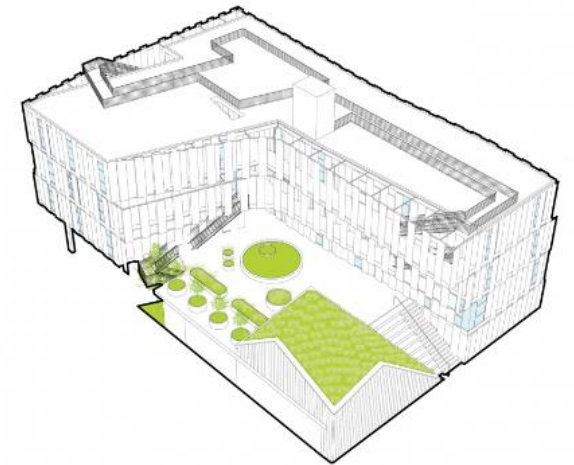
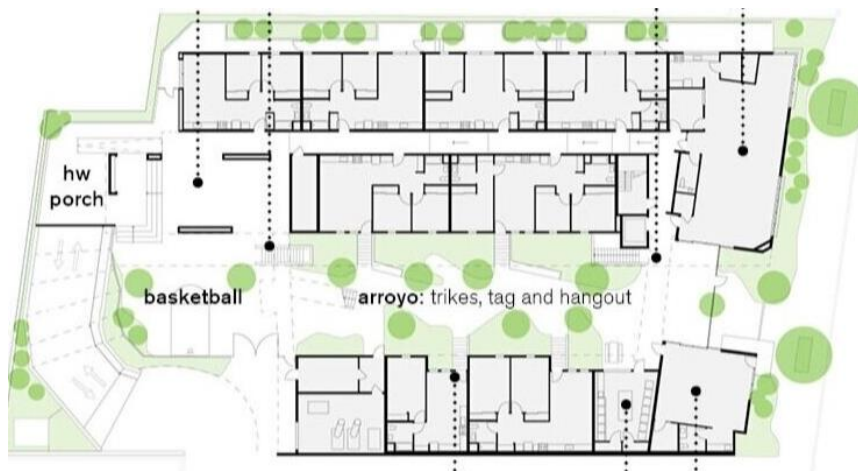
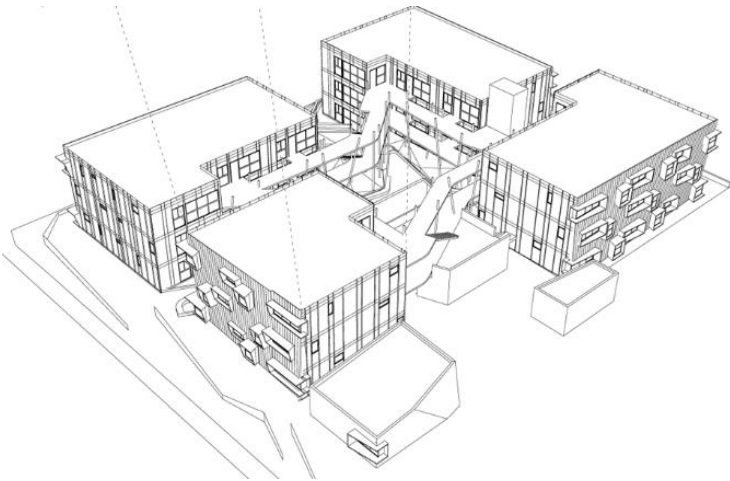
- ▶ Guided by access to light, air, circulation
 - ▶ “Alphabetical City”



The Basics of Massing

- ▶ Guided by access to light, air, circulation
 - ▶ “Alphabetical City”





(cracked) “O”
“L”

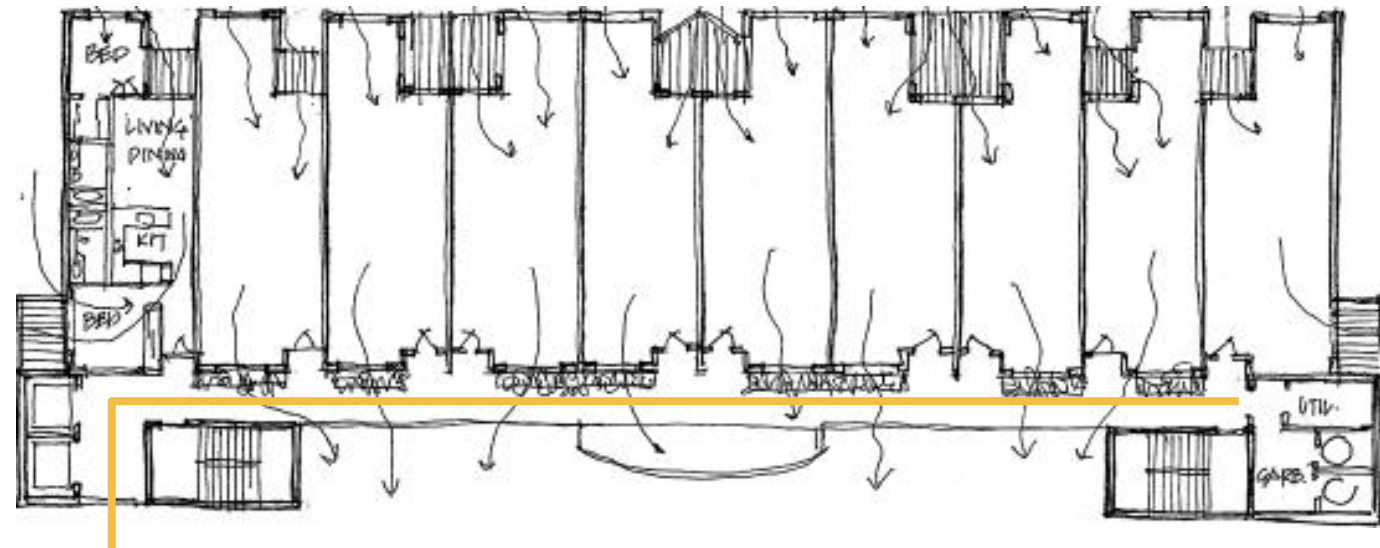
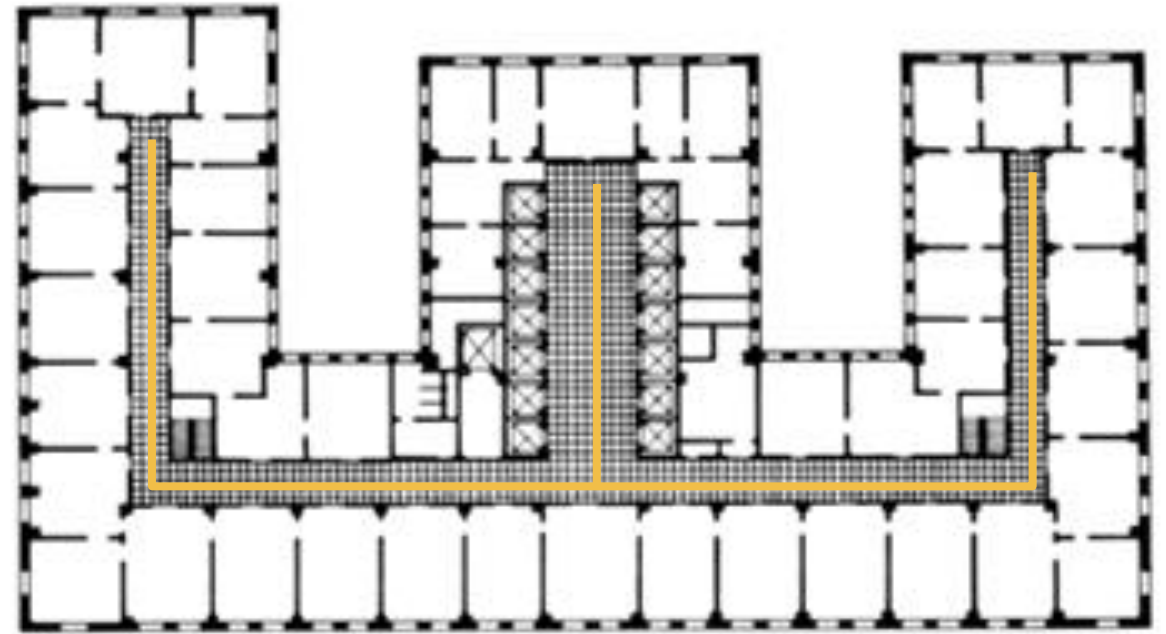
(double) “I”

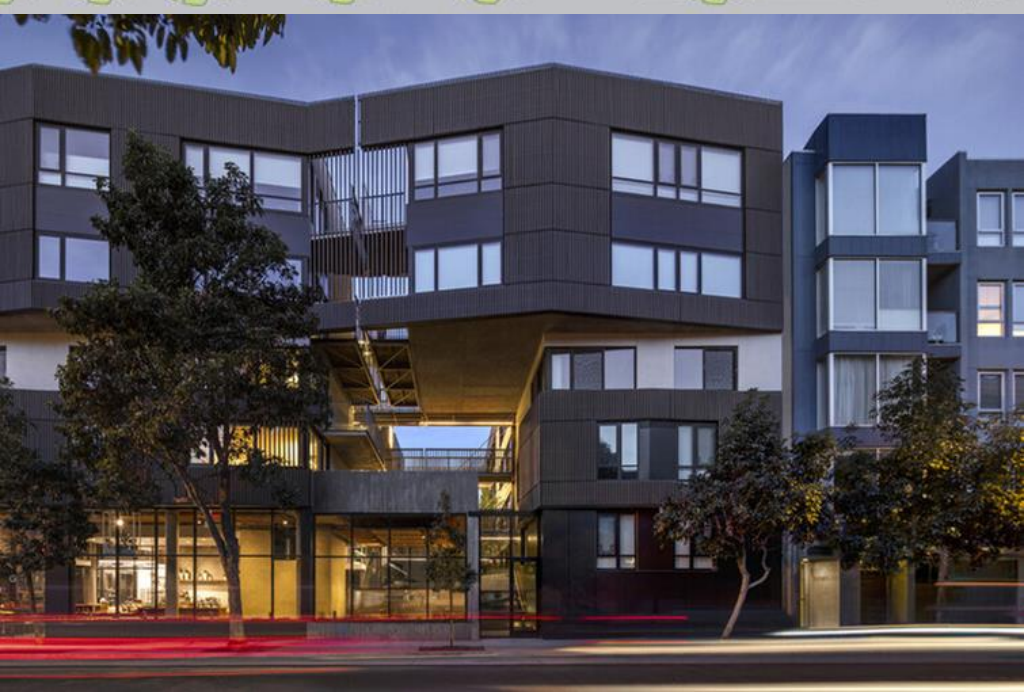
Source: Kevin Daly Architects, Koning Eizenberg Architecture, Lorcan O’Herlihy Architects

The Basics of Massing

Circulation

- Vertical: Core
- Horizontal: Corridor
 - ▶ Double-loaded corridor
 - ▶ Interior circulation
 - ▶ Light and air on one side
 - ▶ More “efficient” (dense)
 - ▶ Single-loaded corridor
 - ▶ Exterior circulation
 - ▶ Light and air on both sides





400 Grove | Fougeron Architecture
“d” courtyard | single-loaded | common space circulation

Construction type
relates to height and cost.



The Basics of Construction Types

5 main types (I - V)

- ▶ designated by fire rating
- ▶ most common / least expensive for multifamily:
 - Type V
 - Type III



Type I

Fire-Resistive

All structural materials are non-combustible. Walls, floors, and roofs are constructed with reinforced concrete and protected steel.



Type II

Non-Combustible

Non-combustible walls, partitions, columns, floors, and roofs.



Type III

Ordinary

Non-combustible exterior, no interior requirements.



Type IV

Heavy Timber

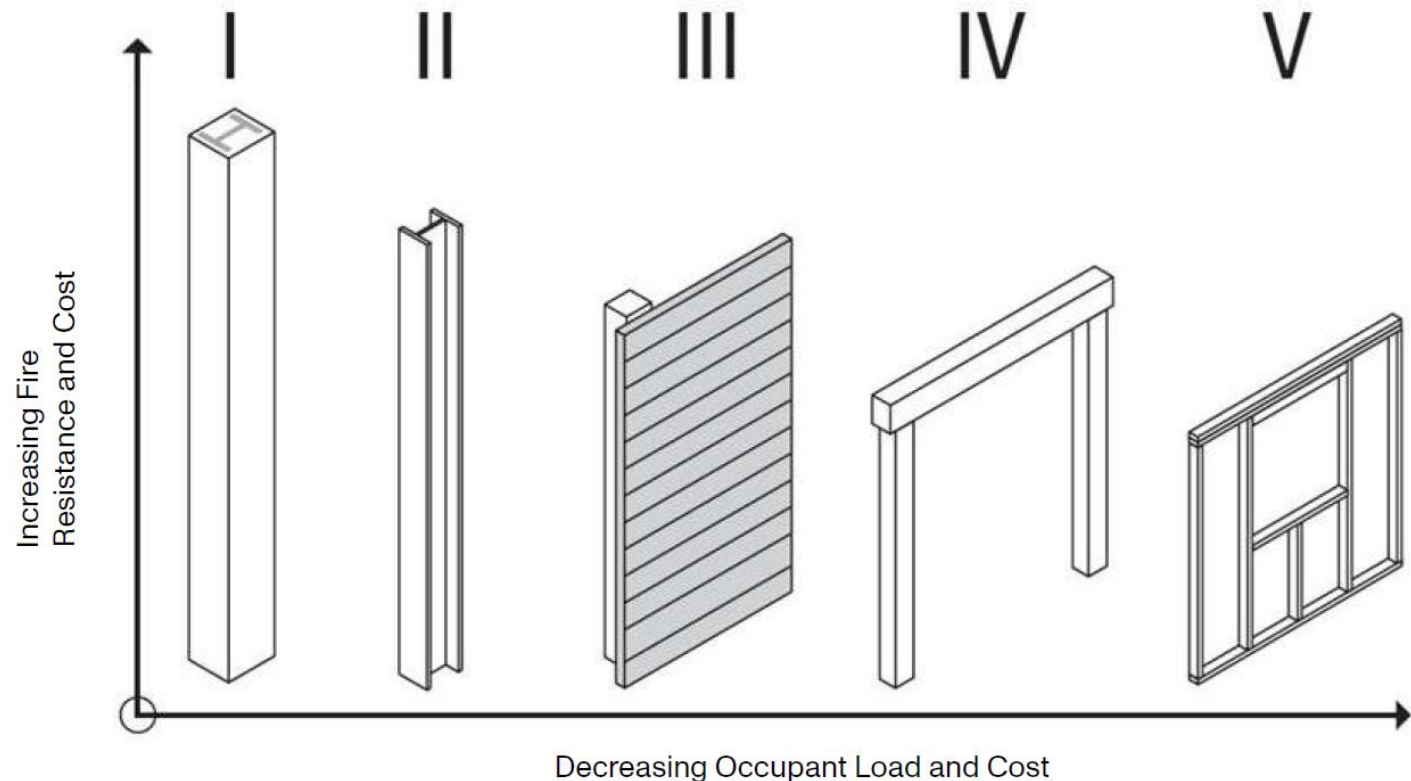
Specific dimensional requirements. Type IV buildings have noncombustible exterior walls and interior elements.



Type V

Wood-Framed

Frames, walls, floors, and roofs are made entirely or partly out of wood.



The Basics of Construction Types

Type V

- ▶ wood framing
- ▶ 3-4 stories
- ▶ Least expensive, most common CA construction type

5 over 1

- ▶ Type I concrete podium
 - often commercial / parking
- ▶ 5-6 stories (60')



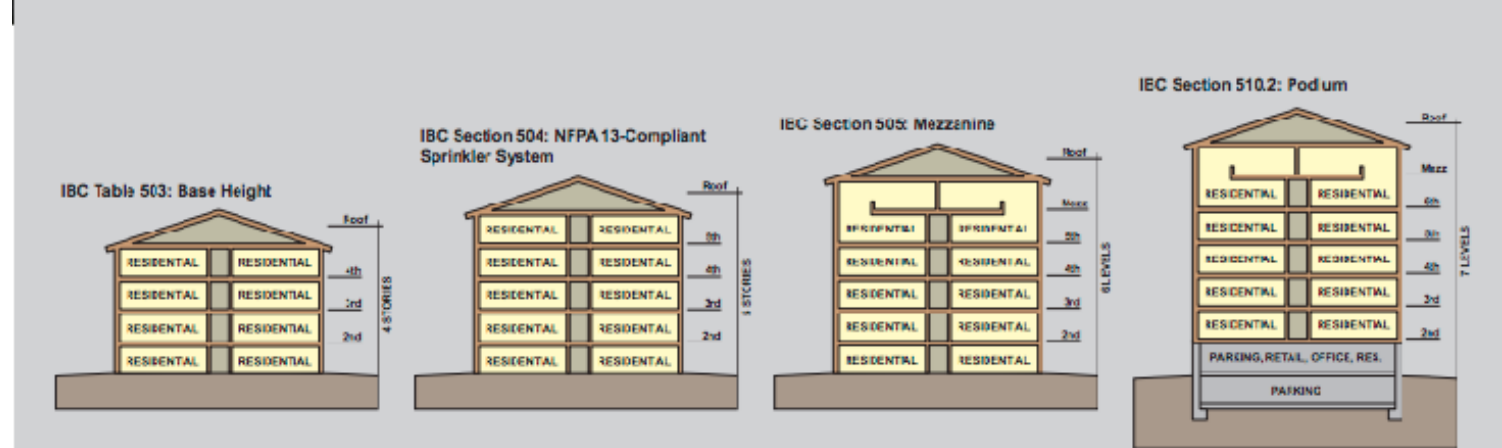
The Basics of Construction Types

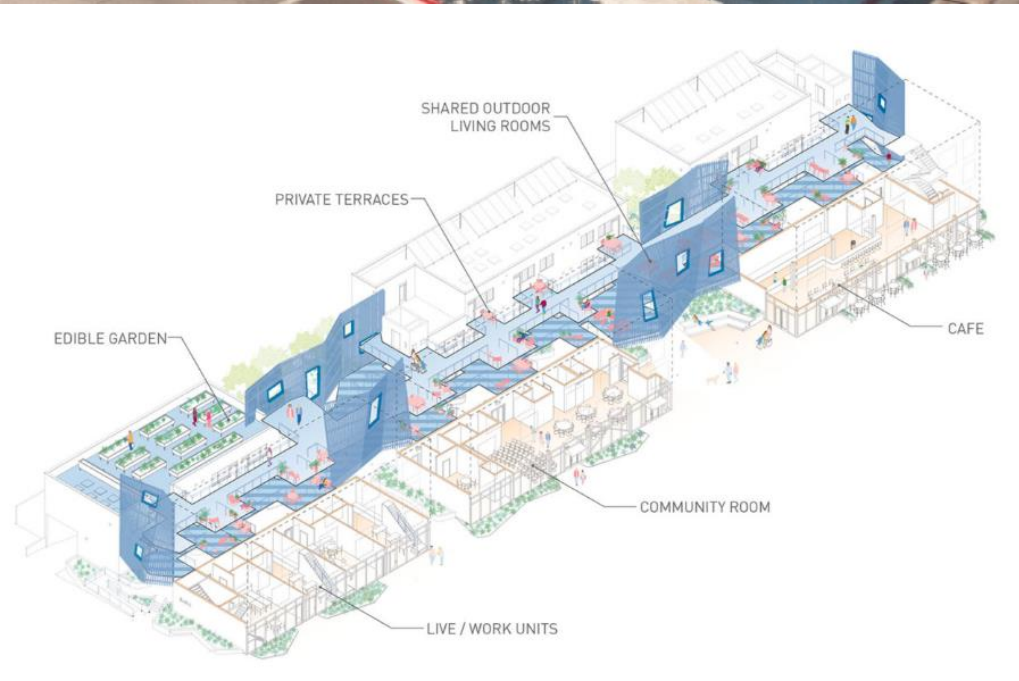
Type III

- ▶ treated wood (+)
- ▶ max 5 stories

Type III with Podium

- ▶ Type I concrete podium
 - often commercial / parking
- ▶ 6-7 stories (85')





Gramercy Apts | Kevin Daly Architects
“double I” | type V | common space circulation

What about **parking**?



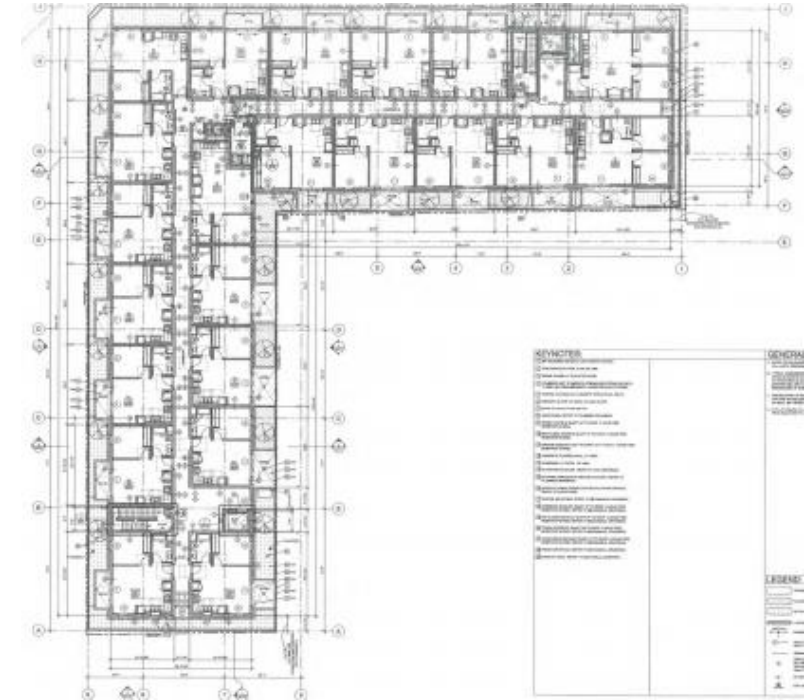
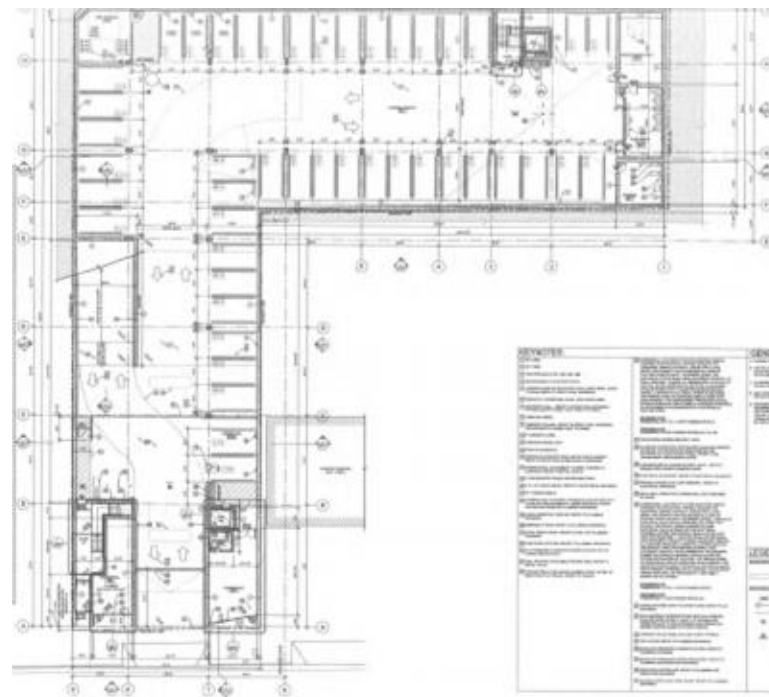
The Basics of Parking

Requirements

- Legislation is changing

Layout Considerations:

- 350-400 SF / stall
- site conditions
- quality of street experience
- other uses on site
- structural grid
- circulation cores
- budget



The Basics of Parking

- ▶ At Grade (covered or open)
 - ▶ \$8-10,000 / stall
- ▶ Automated (50% space saving)
 - ▶ \$20-35,000 / stall
- ▶ Above Grade - Structured
 - ▶ \$20-30,000 / stall
- ▶ Semi-Subterranean
 - ▶ \$25-35,000 / stall
- ▶ Subterranean
 - ▶ \$30-40,000 / stall

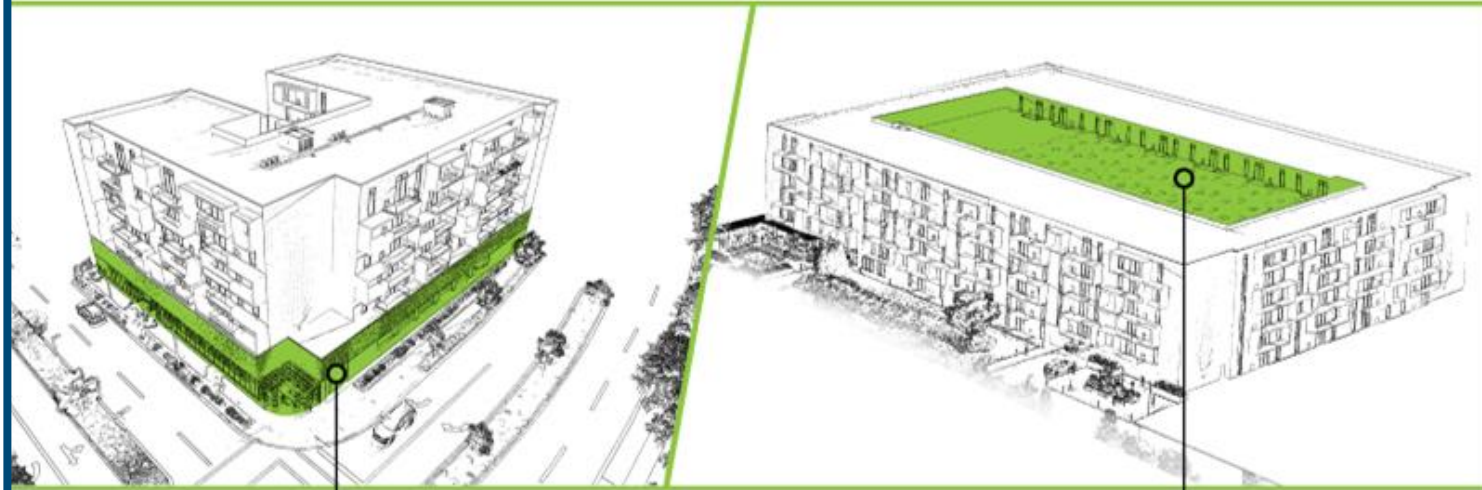
** 2021 estimates*



The Basics of Parking

Strategies (beyond surface):

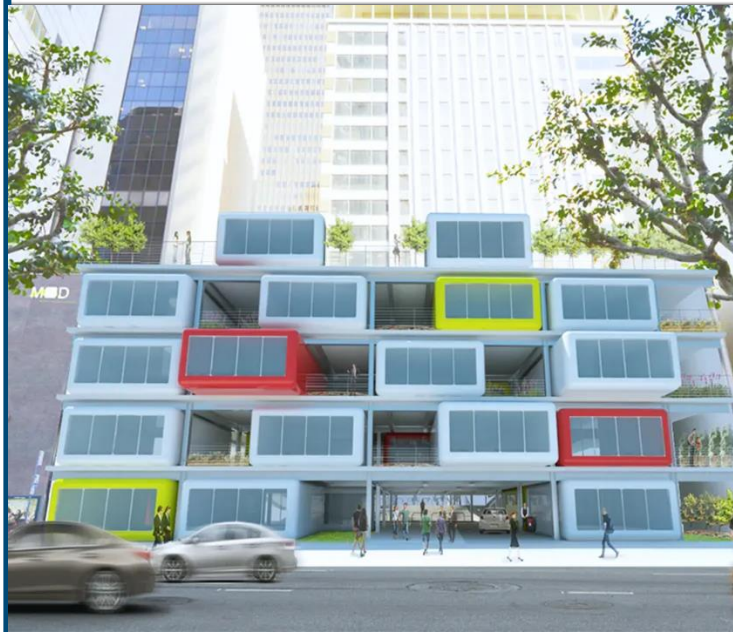
- ▶ “wrapping”
- ▶ podium
- ▶ mixing at and below grade
- ▶ “future proofing”
- ▶ providing alternatives (transit, shuttles, scooters, bikes, car share and carpool programs)
- ▶ putting people first



Podium: Parking is on the lower level with apartment units above.



Wrap: Parking is in the middle, surrounded by apartment units.





Hancock Lofts | Koning Eizenberg Architecture

“L” | commercial ground floor | wrapped parking



Why is good design **worth it?**

*secret: it **doesn't** need to cost more!*





Investing in **good design** means

- investing in your **staff**
- investing in your **community**
- investing in your physical building **assets**

And improving the **quality** of your school district



Thank you



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