

# Rutherford County Judicial Center

***DRC Meeting 01.21.2015***

## **AGENDA**

1. Overview of SD schedule and milestone decisions
2. Review Guiding Principles
3. Review Court Pairing and Stacking Schemes
4. Questions and Discussion
5. Overview of “Next Steps”

## **OBJECTIVES**

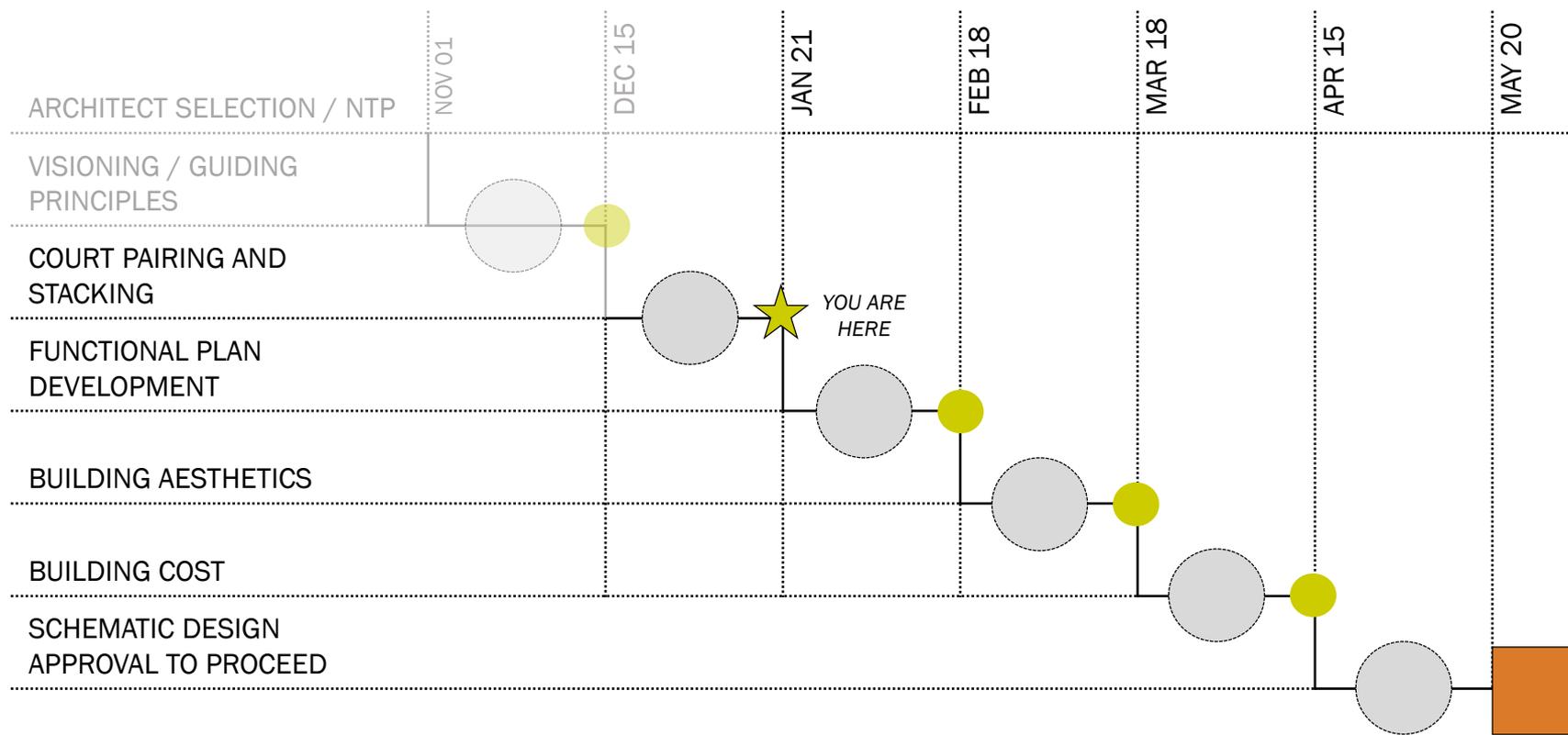
1. Approval of “*Guiding Principles*”
2. Gain consensus on preferred court pairing and stacking scheme

# Schematic Design Schedule

○ Work/Research Periods

● Monthly DRC Meetings

■ End of Phase Review



# GUIDING PRINCIPLES

## The Rutherford County Judicial Center will...

- 01** ...follow approved planning strategies outlined in the programming document to achieve functional, efficient building design.
- 02** ...provide a safe facility for visitors and employees.
- 03** ...be completed on time and constructed within the budget.
- 04** ...be designed for sustainability in respect to resource management, building performance (energy efficiency), life cycle cost, maintenance and longevity.

**05**

**06**

**07**

**08**

**09**

**10**

# VISIONING SESSION

DECEMBER 2014



# GUIDING PRINCIPLES

<h2>Functional Programming</h2> <ul style="list-style-type: none"> <li>• Staff Areas for ATT</li> <li>• Width of Hallways</li> <li>• Courtroom Size / Layout</li> <li>• Storage</li> <li>• No Facilities for Sheriff Department</li> <li>• Drain Quantity and Location (Holding Cells)</li> <li>• Storage for Long Term Trials</li> <li>• "War Room" Secured Storage for Lawyers (Evidence)</li> <li>• Proximity of Booking to Jury</li> </ul>	<h2>Security / Safety</h2> <ul style="list-style-type: none"> <li>• Security / Transport</li> <li>• Security of Clerk / Cash</li> <li>• Sallyport Door</li> <li>• Larger Vehicle</li> <li>• Drive Thru Sallyport (Vehicle Sallyport)</li> <li>• Safe</li> <li>• Safe</li> <li>• Safe</li> <li>• Safe</li> </ul>	<h2>Pedestrian Experience</h2> <ul style="list-style-type: none"> <li>• Central Square</li> <li>• Layout of Downtown</li> <li>• Vibrant Day and Night</li> <li>• Alive and Busy</li> <li>• Active</li> <li>• Service / support of People Involved</li> <li>• Expand Business Diversity</li> <li>• Increase Retail on Square</li> <li>• Recycling</li> <li>• Walkability</li> <li>• Biking</li> <li>• Increased Green Space</li> <li>• Planned Growth (increase)</li> <li>• Link to / North / South Corridor</li> <li>• Reduction of Traffic</li> <li>• Relation to Street and Need for Plaza</li> <li>• Lytle Street Role</li> </ul>
<h2>Technology</h2> <ul style="list-style-type: none"> <li>• Acoustics (speakers)</li> <li>• Location of Audio/Video Screens</li> <li>• Sound Activated Microphone operations</li> <li>• Telephone Standards</li> <li>• Screens in Lieu of Glass at Attorney/Inmate Room</li> <li>• General Design</li> <li>• Scrutinize Material Durability</li> <li>• Progressive</li> <li>• Progressive</li> <li>• Up-To-Date</li> <li>• Modern / State of the Art</li> </ul>	<h2>Wayfinding</h2> <ul style="list-style-type: none"> <li>• Desk / Info Prior to Security</li> <li>• Electronic Docket</li> <li>• Make Wayfinding More Clear "Disney" – Where are Elevators?</li> <li>• Well Planned</li> <li>• Functional and Easy Navigation</li> <li>• Functional</li> <li>• Flow at Entrance</li> <li>• Stair / Escalator Needed for Public</li> <li>• Covered Area at Entrance (consider smoking / stacking)</li> <li>• Increase Distance Between Security and Entrance</li> </ul>	<h2>Interior Environment</h2> <ul style="list-style-type: none"> <li>• Day Lighting</li> <li>• Increase Natural Light</li> <li>• Natural Light</li> <li>• Organized Light</li> <li>• Plumbing Related Sounds</li> <li>• Great Working Environment</li> </ul>
<h2>Scale/Context</h2> <ul style="list-style-type: none"> <li>• Quaint</li> <li>• Flat / topo – Low Rise</li> <li>• Small / Human Scale</li> <li>• Consistent</li> <li>• Blends</li> <li>• Comfortable</li> <li>• Historic</li> <li>• Historic</li> </ul>	<h2>Civic Presence</h2> <ul style="list-style-type: none"> <li>• Proud</li> <li>• Proud</li> <li>• Honorable</li> <li>• Independent</li> <li>• Impressive, But Not Imposing</li> <li>• Civic Pride</li> </ul>	<h2>Open and Approachable</h2> <ul style="list-style-type: none"> <li>• Friendly</li> <li>• Friendly</li> <li>• Maintain Sense of Community and Identity</li> <li>• Welcoming</li> <li>• Hometown</li> <li>• Home</li> <li>• Society Matters</li> <li>• Let's Go In</li> </ul>

# GUIDING PRINCIPLES

## The Rutherford County Judicial Center will...

- 01** ...follow approved planning strategies outlined in the programming document to achieve functional, efficient building design.
- 02** ...provide a safe facility for visitors and employees
- 03** ...be completed on time and constructed within the budget
- 04** ...be designed for sustainability in respect to resource management, building performance (energy efficiency), life cycle cost, maintenance and longevity
- 05** ...provide a positive experience for visitors
- 06** ...respect the historic context and existing character of downtown Murfreesboro
- 07** ...have a positive impact on the streetscape and adjacent neighborhood, contributing to the growth and vibrancy of downtown Murfreesboro
- 08** ...provide a positive work environment for employees
- 09** ...incorporate state of the art technology and be designed to accommodate future advancements
- 10** ...have a strong civic presence and convey a sense of justice and confidence in government

# EVALUATION CRITERIA

- 01** FUNCTIONAL EFFICIENCY
- 02** SAFETY
- 03** COST EFFICIENCY
- 04** OPERATIONAL EFFICIENCY
- 05** VISITOR EXPERIENCE
- 06** RELATIONSHIP TO CONTEXT
- 07** NEIGHBORHOOD IMPACT
- 08** WORK ENVIRONMENT
- 09** TECHNOLOGY
- 10** CIVIC PRESENCE

# QUESTIONS / DISCUSSION

# Rutherford County Judicial Center

***DRC Meeting 01.21.2015***

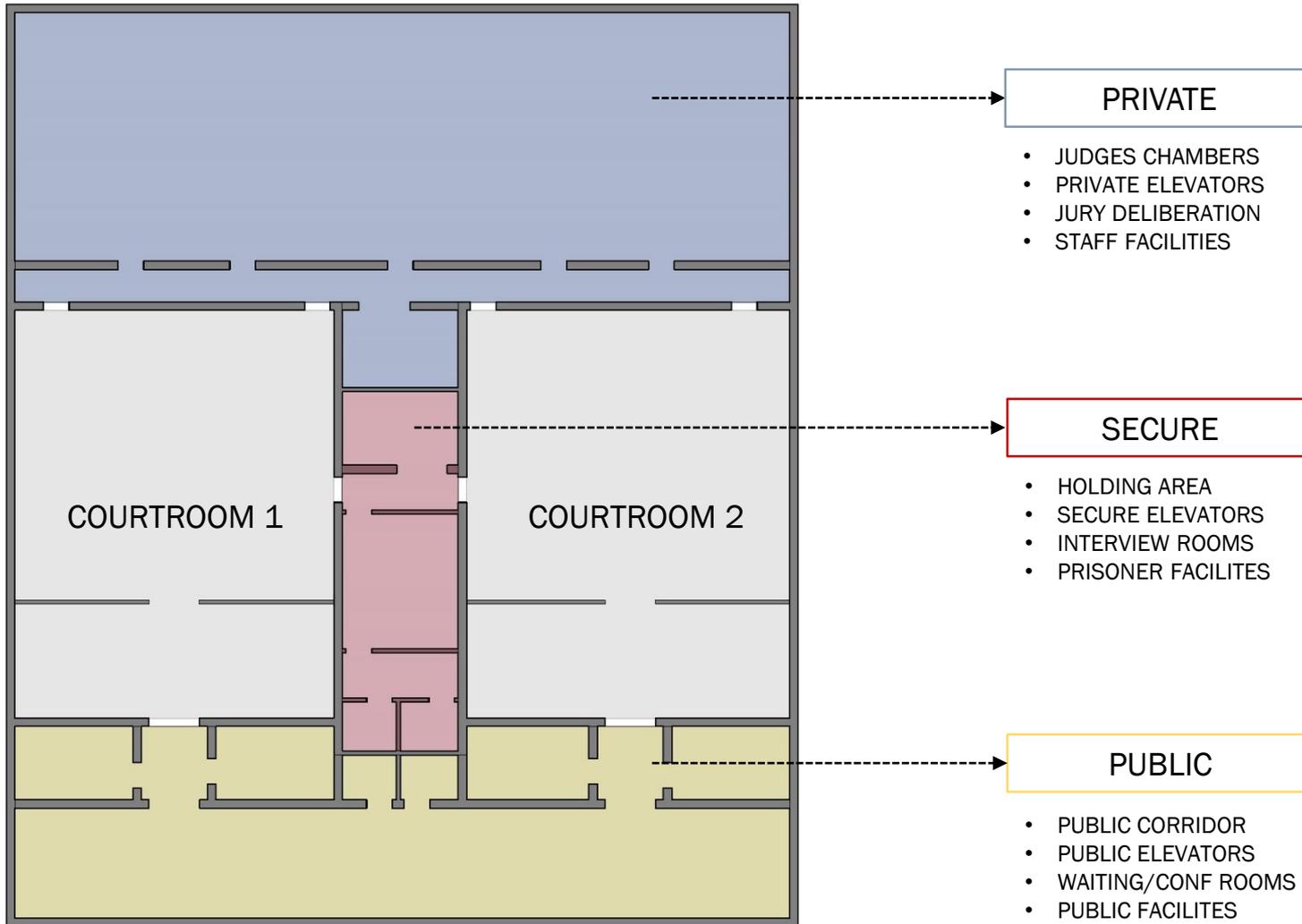
## **AGENDA**

1. Review Guiding Principles
2. Review Court Pairing and Stacking Schemes
3. Questions and Discussion
4. Overview of “Next Steps”

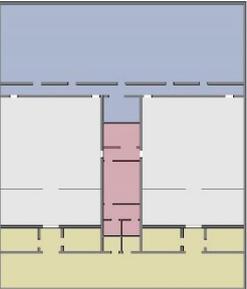
## **OBJECTIVES**

1. Approval of “*Guiding Principles*”
2. Gain consensus on preferred court pairing and stacking scheme

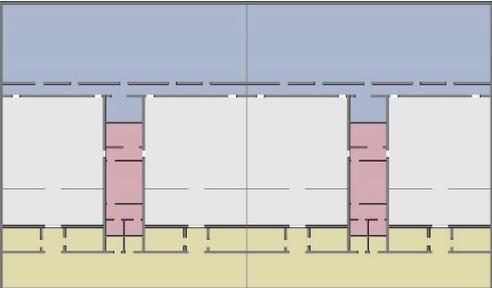
# THE PLANNING MODULE



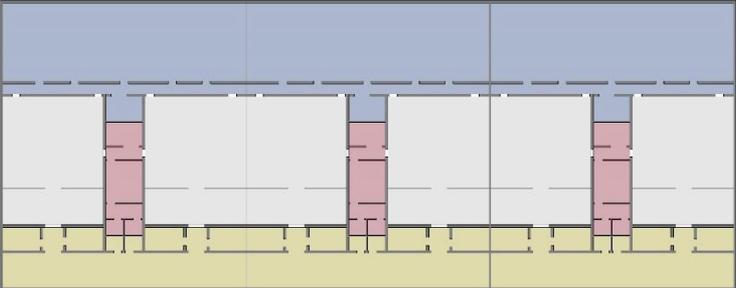
# COURT PAIRING OPTIONS



**2**

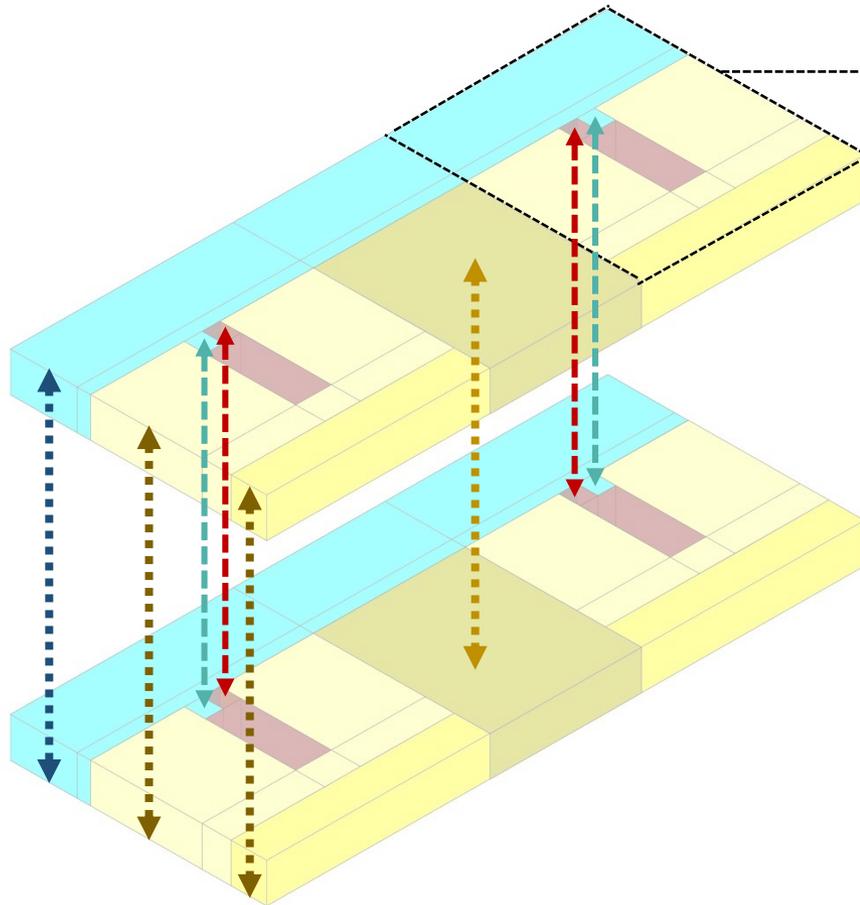


**4**



**6**

# STACKING OPTIONS



## PLANNING MODULE

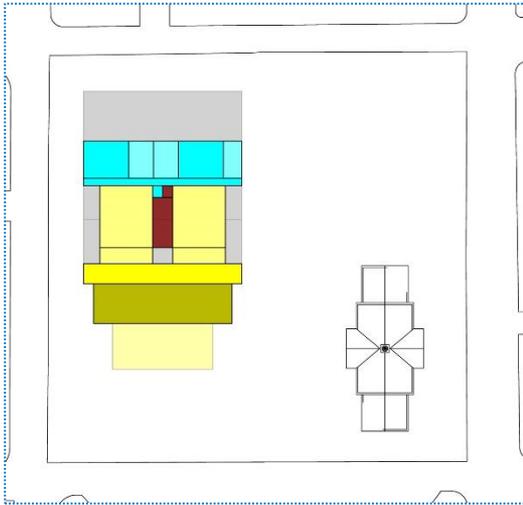
- 2 COURT SETS
- HOLDING AREA
- JURY DELIBERATION
- JUDGES CHAMBERS

## COURT STACKING

- COURTS SHOULD STACK AS MUCH AS POSSIBLE
- SECURE AND PRIVATE ELEVATORS NEED TO EXTEND FROM TOP LEVEL TO BASEMENT

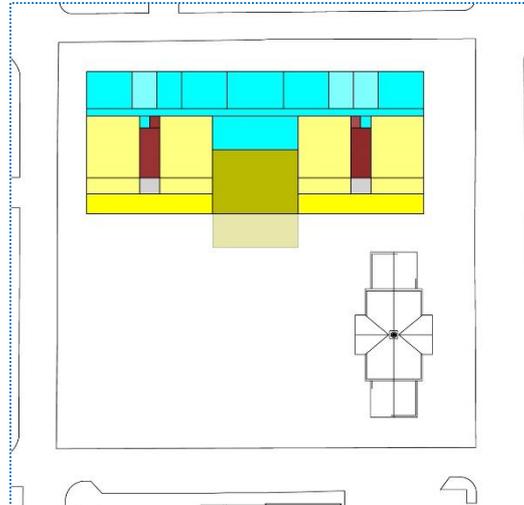
## COURT PAIRING

- MOST EFFICIENT WHEN ORGANIZED IN PAIRS
- 2 - 4 - 6 COURT PER FLOOR



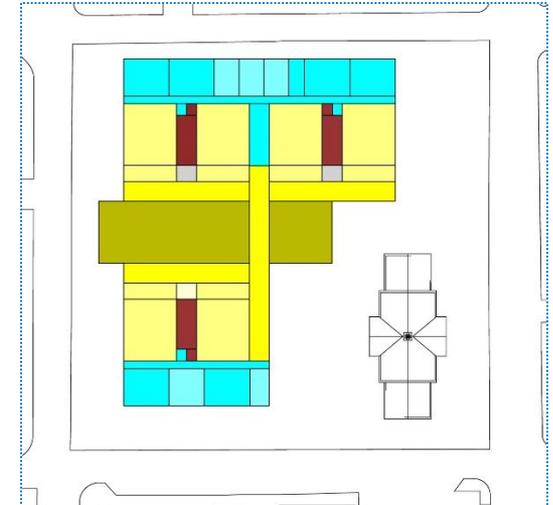
# 2

**Stories** **11**  
**Building Height** **198'**  
**SF/Level (1)** **26,000**  
**(2-3)** **23,000**  
**(4-11)** **16,000**  
**(B)** **15,000**  
**Total GSF** **215,000**



# 4

**Stories** **6**  
**Building Height** **108'**  
**SF/Level (1)** **36,000**  
**(2-6)** **30,000**  
**(B)** **15,000**  
**Total GSF** **201,000**



# 6

**Stories** **4**  
**Building Height** **72'**  
**SF/Level (1,3,4)** **47,500**  
**(2)** **43,500**  
**(B)** **15,000**  
**Total GSF** **201,000**

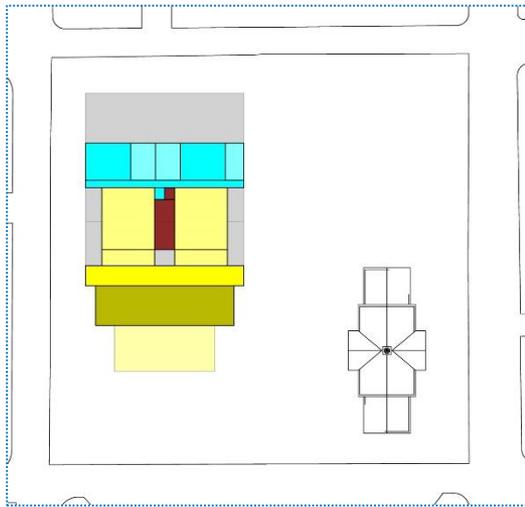
# EVALUATION CRITERIA

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# 01

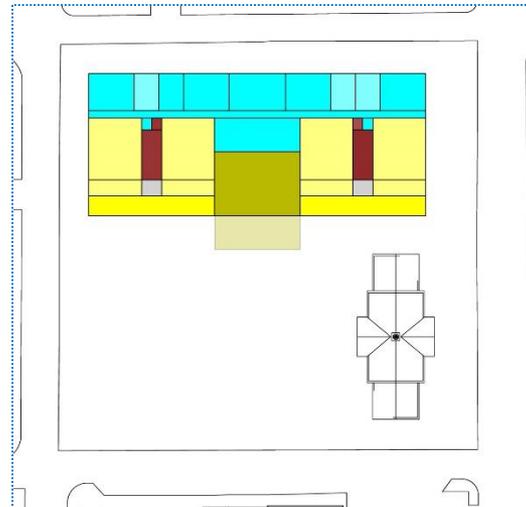
## FUNCTIONAL EFFICIENCY

### FUNCTIONAL COURT OPERATIONS



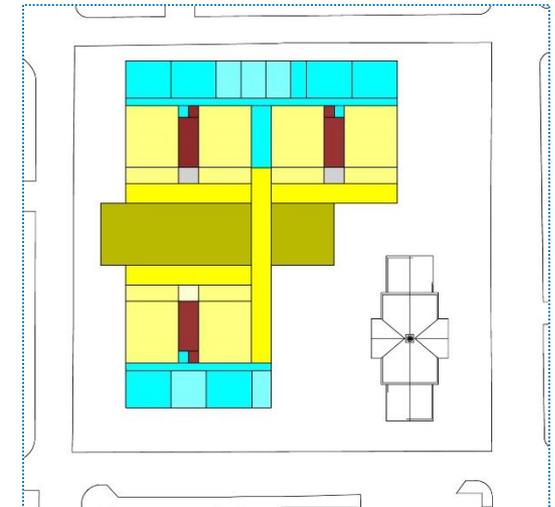
**2** COURT SCHEME

FUNCTIONAL COURT OPERATIONS



**4** COURT SCHEME

FUNCTIONAL COURT OPERATIONS



**6** COURT SCHEME

FUNCTIONAL COURT OPERATIONS

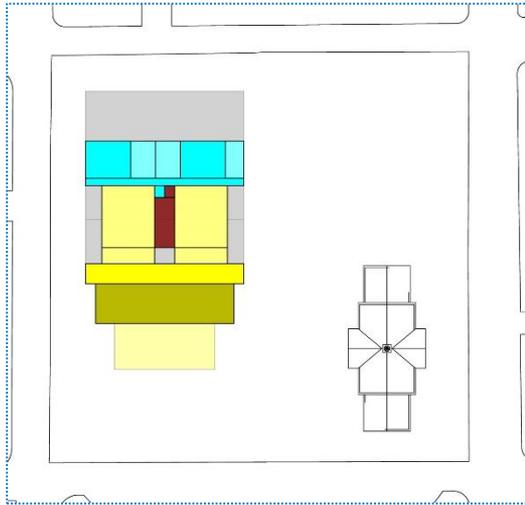


	2 COURT SCHEME		4 COURT SCHEME		6 COURT SCHEME	
RATIO OF COURTROOMS PER FLOOR	Better ratio for lower volume courts	●	Appropriate for 16 courtrooms	●	Better ratio for more than 20 courtrooms	●
PUBLIC WAYFINDING	8 floors of courts increases reliance on elevators	●	Good balance of courts per floor, maintains simple geometry	●	Only 2.5 floors of courts, but "L" configuration and large floors can be confusing	●
RATIO OF JURY ROOMS TO COURTS	Requires additional jury rooms or movement of jurors between floors	●	3:4 ratio of jury rooms to courtrooms is consistent with program	●	Potentially compromised ration because of proximity of court rooms	●
FUTURE FLEXIBILITY OF COURTS	Any court room can be adapted	●	Any court room can be adapted	●	Would be better in a linear scheme rather than L	●

# 01

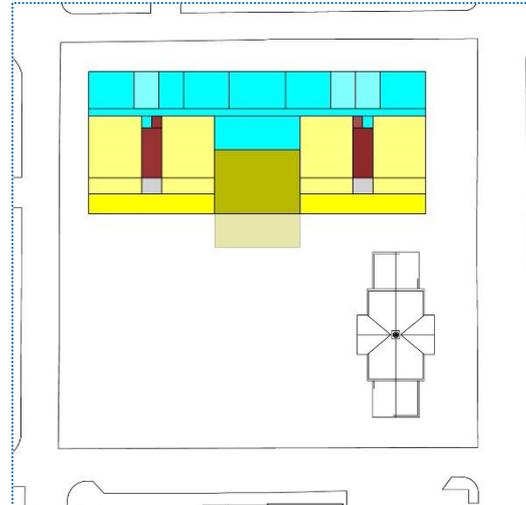
## FUNCTIONAL EFFICIENCY

### CONNECTIVITY OF SHARED SPACES



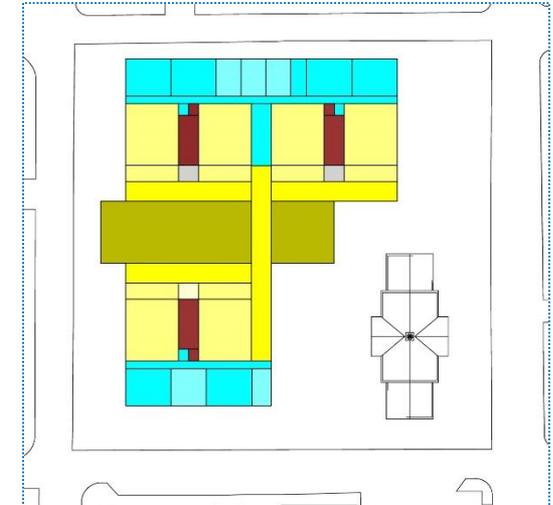
**2** COURT SCHEME

CONNECTIVITY OF SHARED SPACES



**4** COURT SCHEME

CONNECTIVITY OF SHARED SPACES



**6** COURT SCHEME

CONNECTIVITY OF SHARED SPACES



ABILITY TO SHARE PUBLIC SPACES  
(LOBBIES, WAITING, TOILET, CONF.)

Limited sharing per floor



Good ability to share



Good ability to share



ABILITY TO LINK RESTRICTED AREAS  
(CHAMBERS AND JURY ROOMS)

Primarily vertical movement



Appropriate balance of  
horizontal and vertical  
movement



Difficult in L-shape schemes



ABILITY TO LINK SECURE  
CIRCULATION

One secure elevator core;  
would still provide two  
elevators for flexibility



Two secure elevator cores in  
bar scheme are consistent  
with industry standards



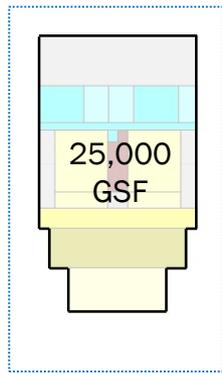
Three cores; long basement  
connections restrict parking  
and sallyport options



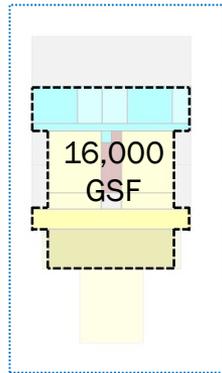
# 03

## COST EFFICIENCY

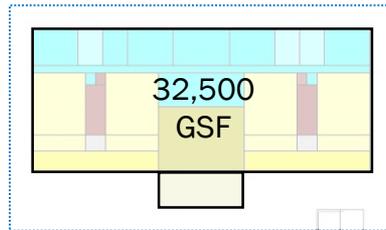
**SIZE OF FLOOR PLATE:** In general, the larger the floor plate, the more efficient the construction. Therefore, larger floor plates are rated higher. Due to the requirements of the courthouse program, a larger floor plate requires more elevators, stairs, and additional circulation to service each set of courts. A balance between size of floor plate and resulting court pairing is considered.



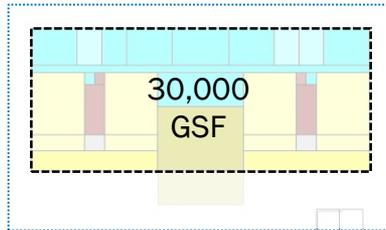
TYPICAL  
BASE FLOOR



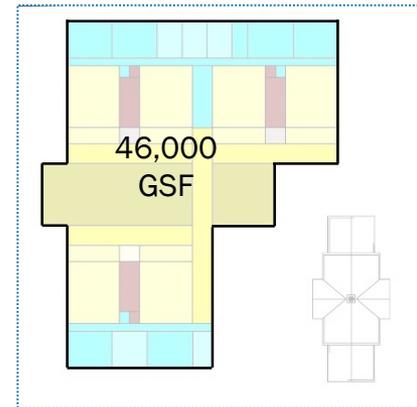
TYPICAL  
COURT FLOOR



TYPICAL BASE FLOOR



TYPICAL COURT FLOOR

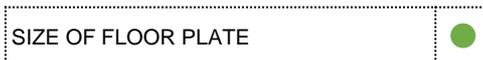


TYPICAL ALL FLOORS

### 2 COURT SCHEME



### 4 COURT SCHEME



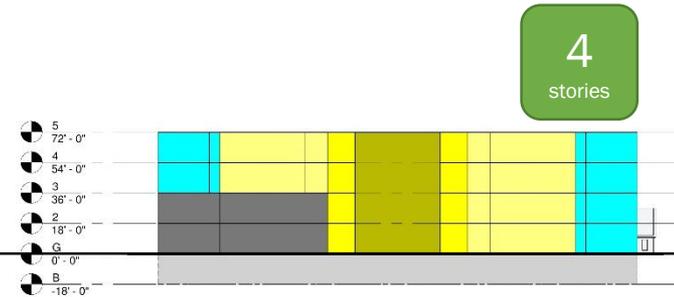
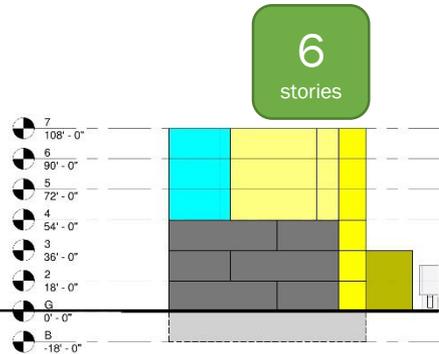
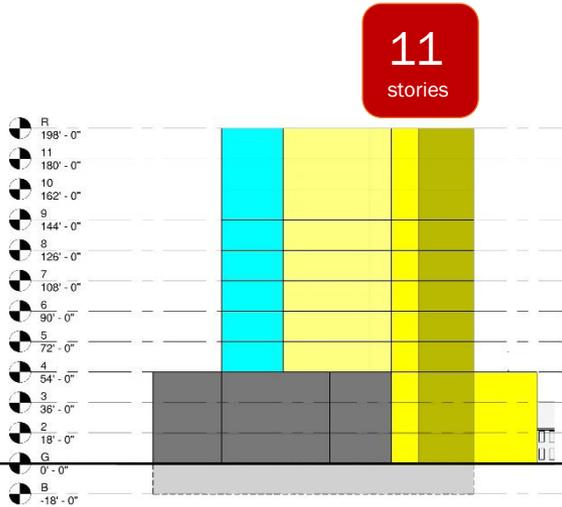
### 6 COURT SCHEME



# 03

## COST EFFICIENCY

BUILDING HEIGHT RELATIVE TO COST: In general, the lower the building height, the more efficient the construction cost.



### 2 COURT SCHEME

BUILDING HEIGHT RELATIVE TO COST ●

### 4 COURT SCHEME

BUILDING HEIGHT RELATIVE TO COST ●

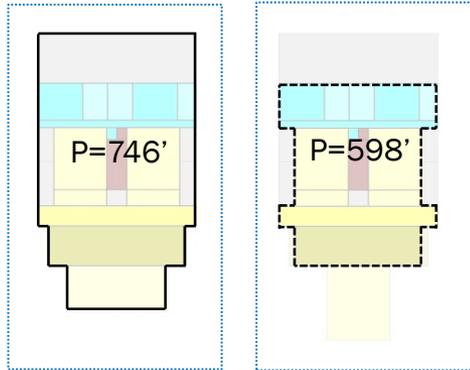
### 6 COURT SCHEME

BUILDING HEIGHT RELATIVE TO COST ●

# 03

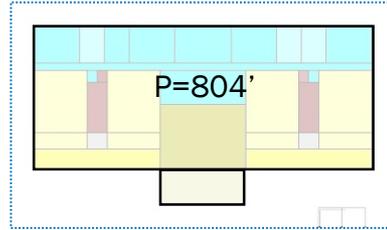
## COST EFFICIENCY

COMPLEXITY OF GEOMETRY: The more complicated the building geometry, the more exterior wall surface required to enclose the building envelope, which can dramatically increase cost.

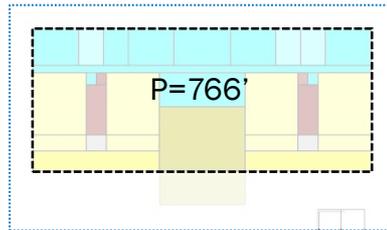


TYPICAL  
BASE FLOOR

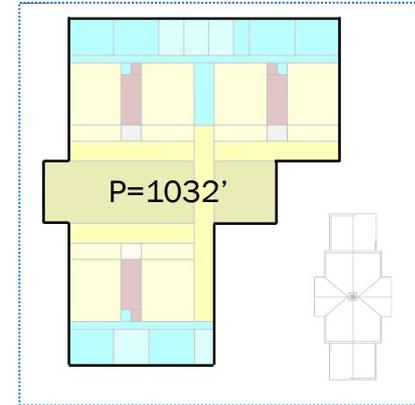
TYPICAL  
COURT FLOOR



TYPICAL BASE FLOOR



TYPICAL COURT FLOOR



TYPICAL ALL FLOORS

### 2 COURT SCHEME

BASE	746' x 18'	= 13,428 SF	
STORIES	x 3		= 40,284 SF
COURT	598' x 18'	= 10,764 SF	
STORIES	x 8		= 86,112 SF
ROOF			= 25,000 SF
TOTAL			= 151,396 SF

### 4 COURT SCHEME

BASE	804' x 18'	= 14,472 SF	
STORIES	x 2		= 28,994
COURT	766' x 18'	= 13,788	
STORIES	x 5		= 68,940
ROOF			= 32,000
TOTAL			= 129,934 SF

### 6 COURT SCHEME

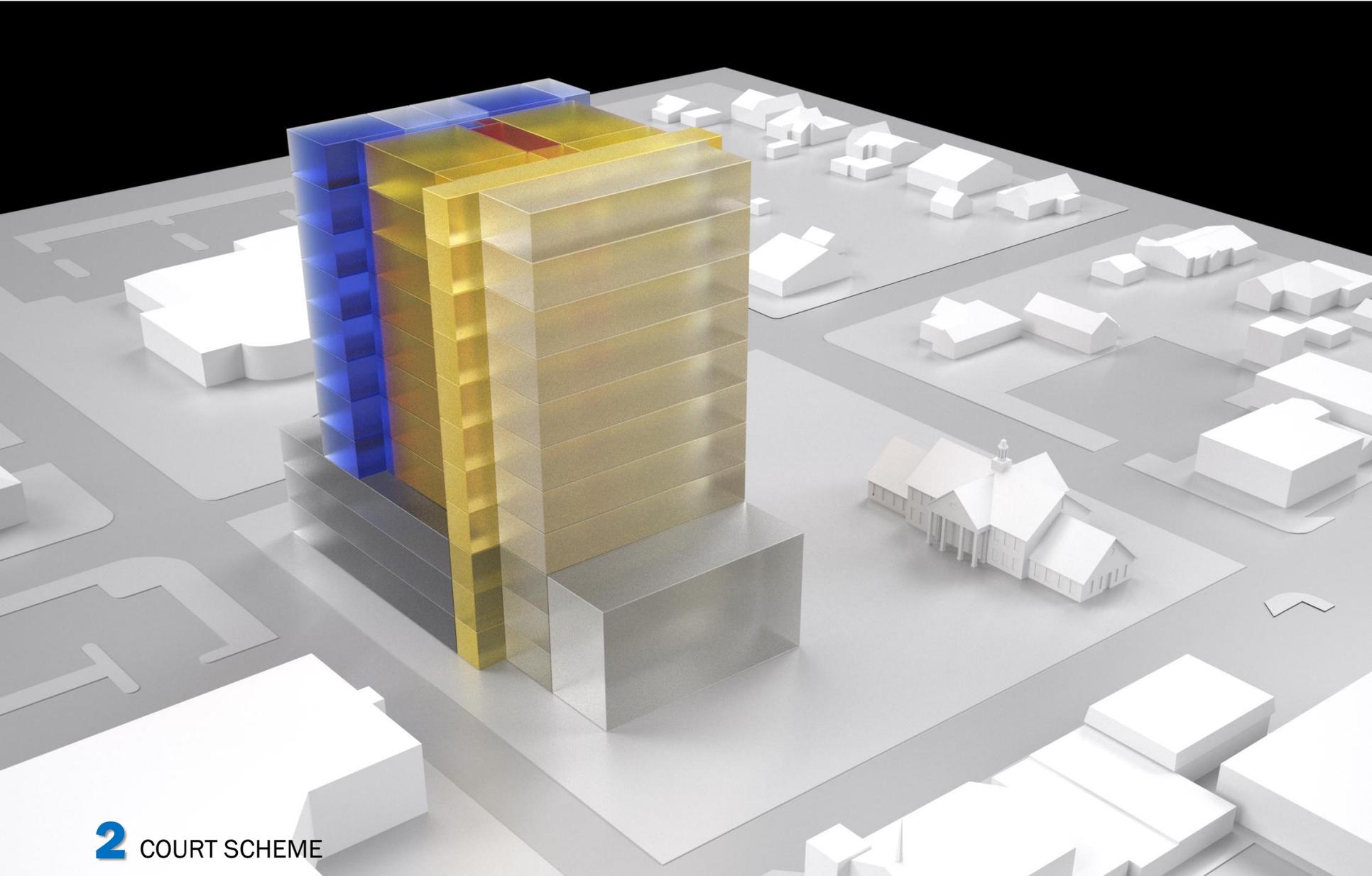
BASE	1,032' x 18'	= 18,567 SF	
STORIES	x 4		= 74,303 SF
COURT			
STORIES			
ROOF			= 46,000 SF
TOTAL			= 120,303 SF

COMPLEXITY OF GEOMETRY ●

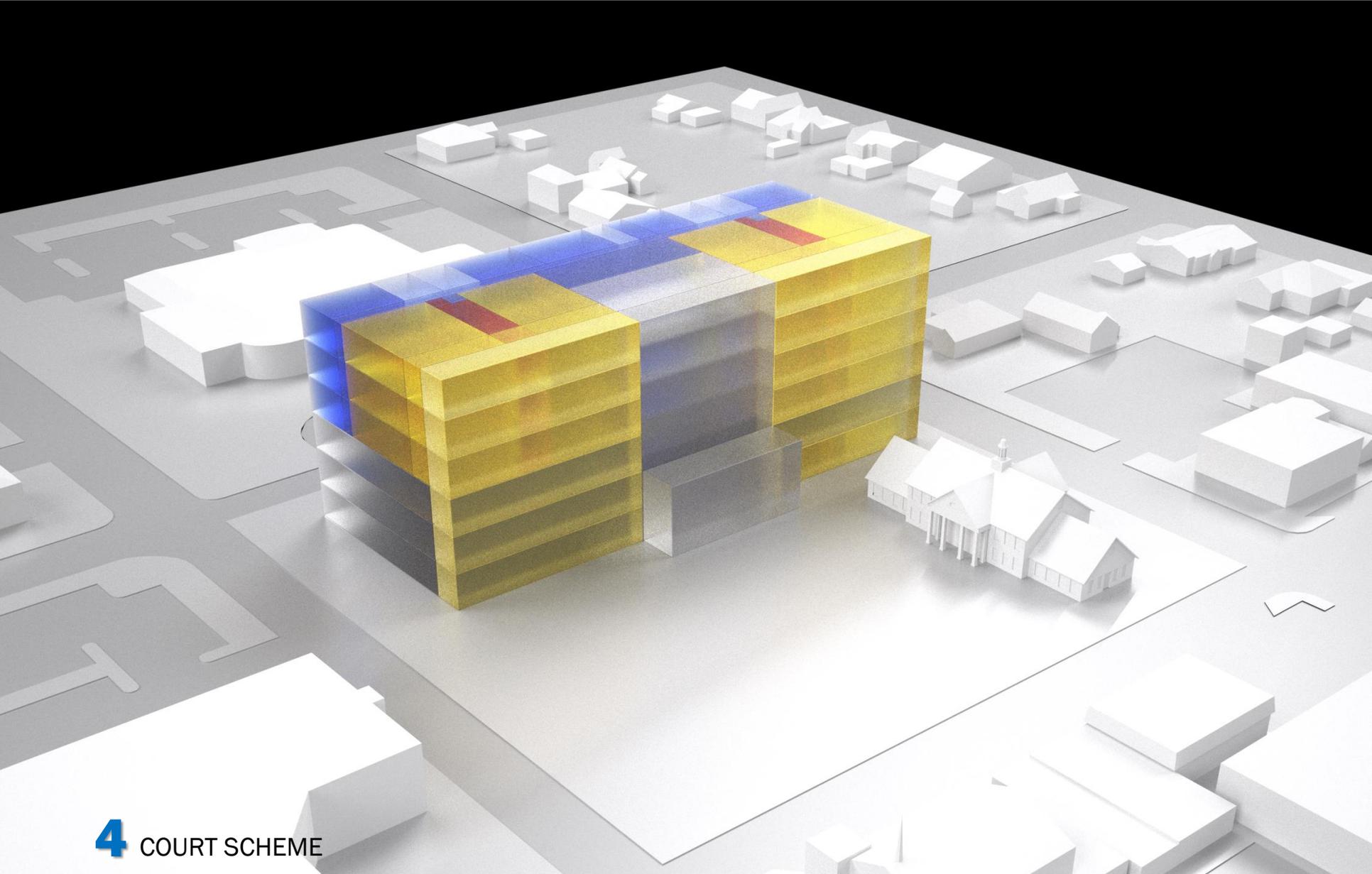
COMPLEXITY OF GEOMETRY ●

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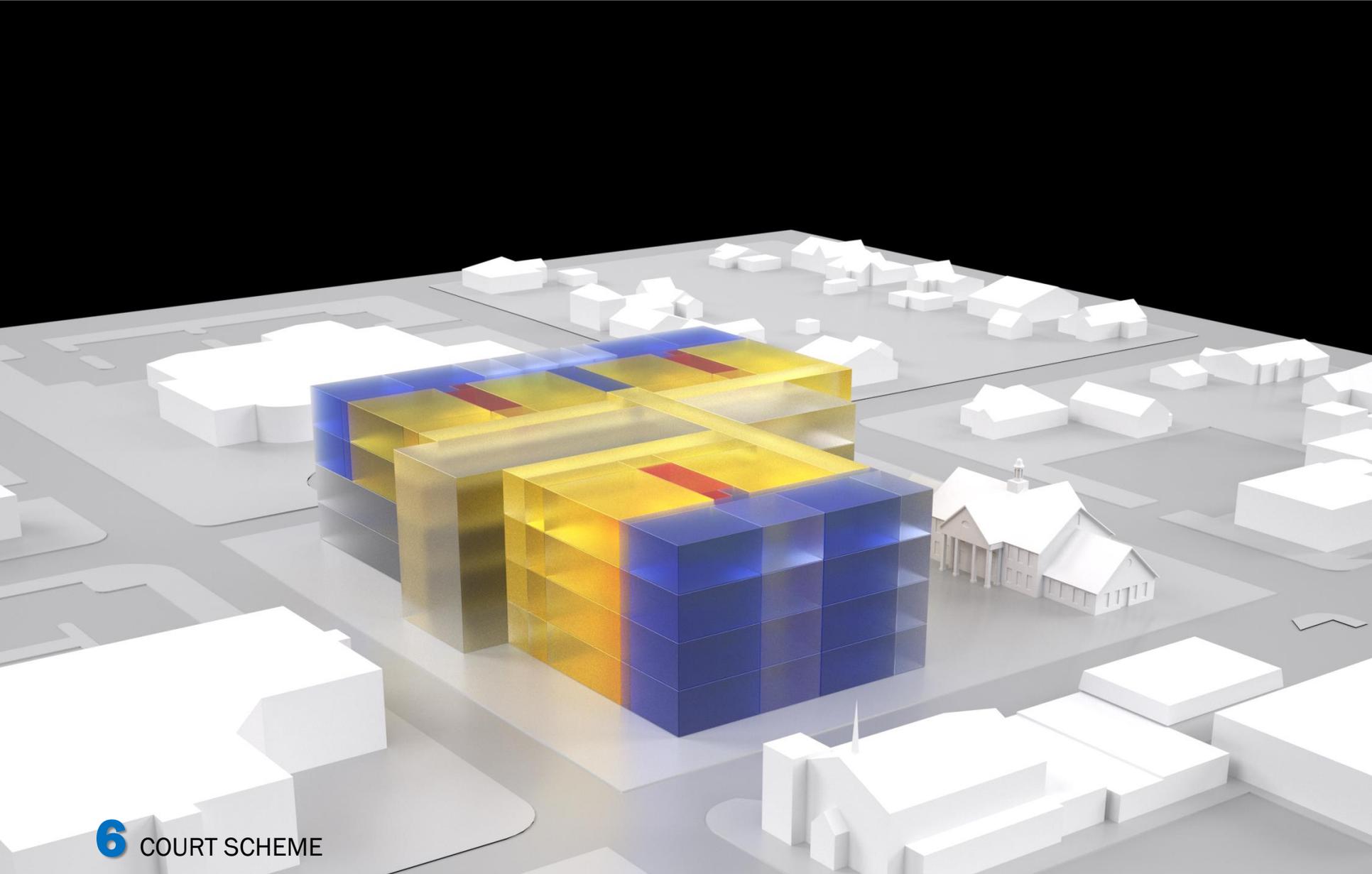
BUILDING HEIGHT RELATIVE TO CONTEXT:



BUILDING HEIGHT RELATIVE TO CONTEXT:



BUILDING HEIGHT RELATIVE TO CONTEXT:



# RELATIONSHIP TO CONTEXT

BUILDING HEIGHT RELATIVE TO CONTEXT:

198'

2 COURT SCHEME

HEIGHT RELATIVE TO CONTEXT



98'

4 COURT SCHEME

HEIGHT RELATIVE TO CONTEXT



72'

6 COURT SCHEME

HEIGHT RELATIVE TO CONTEXT



COUNTY HEALTH

DRUG COURT

PINNACLE

JUDICIAL BLDG

HISTORIC COURTHOUSE

REGIONS BANK

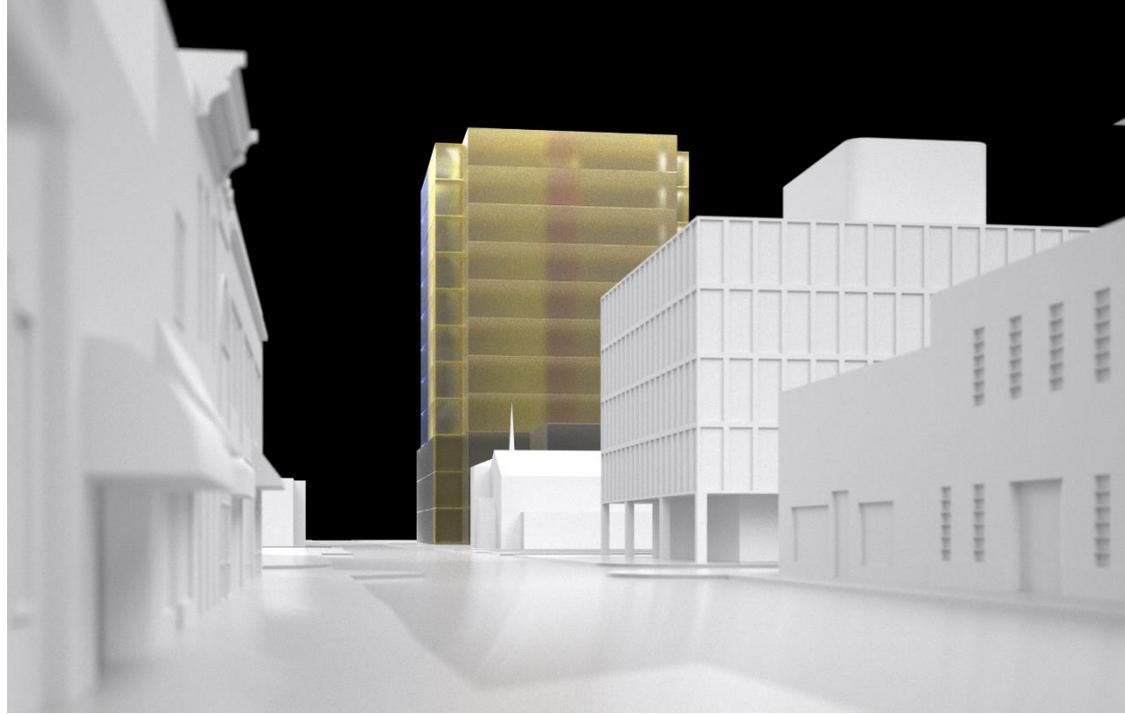
06

# RELATIONSHIP TO CONTEXT

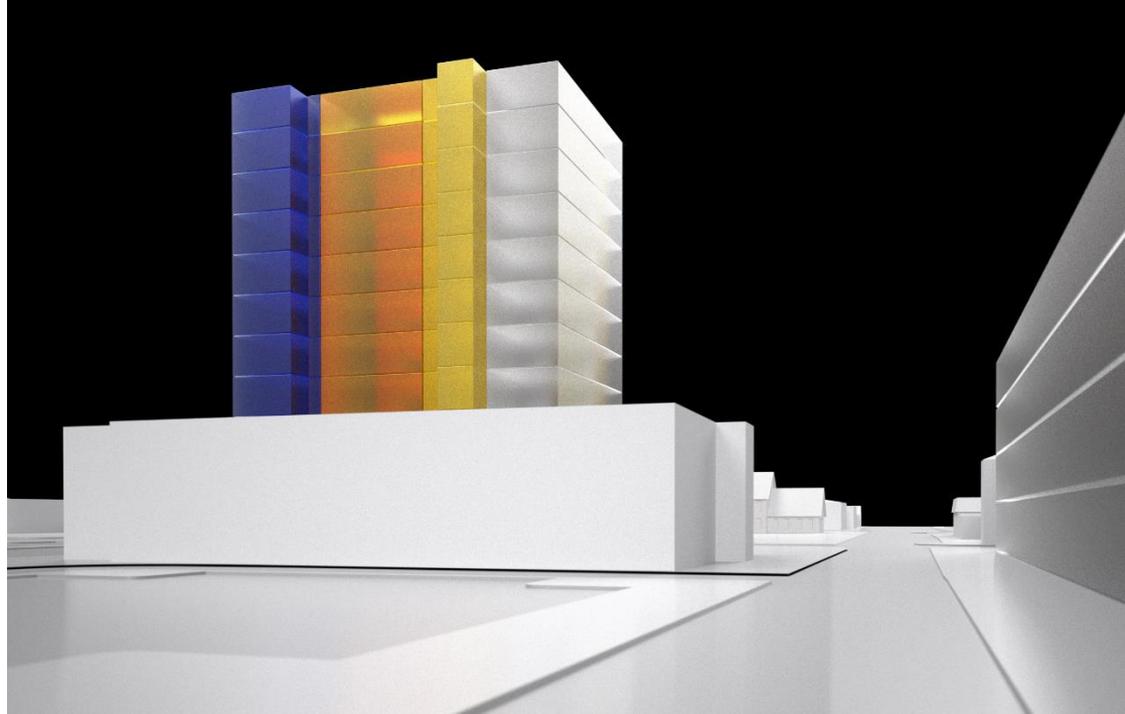
SCALE AT STREET LEVEL:

**2** COURT SCHEME

VIEW FROM MAPLE ST LOOKING NORTH



VIEW FROM LYTLE ST LOOKING EAST



06

# RELATIONSHIP TO CONTEXT

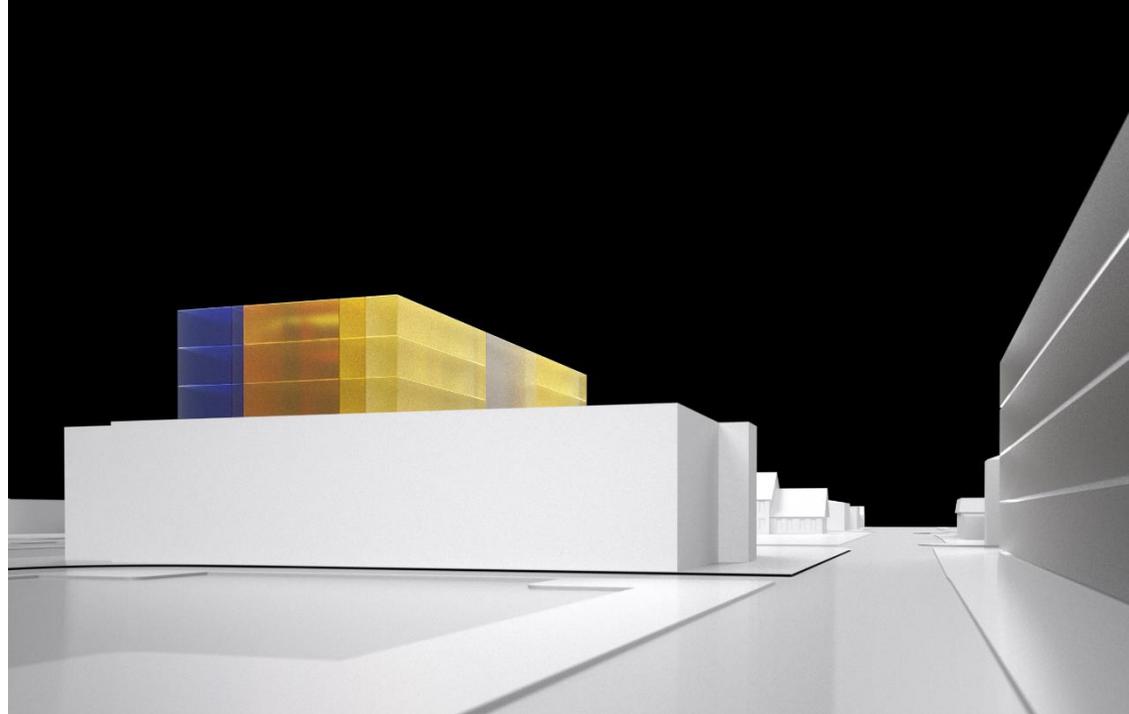
SCALE AT STREET LEVEL:

**4** COURT SCHEME

VIEW FROM MAPLE ST LOOKING NORTH



VIEW FROM LYTLE ST LOOKING EAST



06

# RELATIONSHIP TO CONTEXT

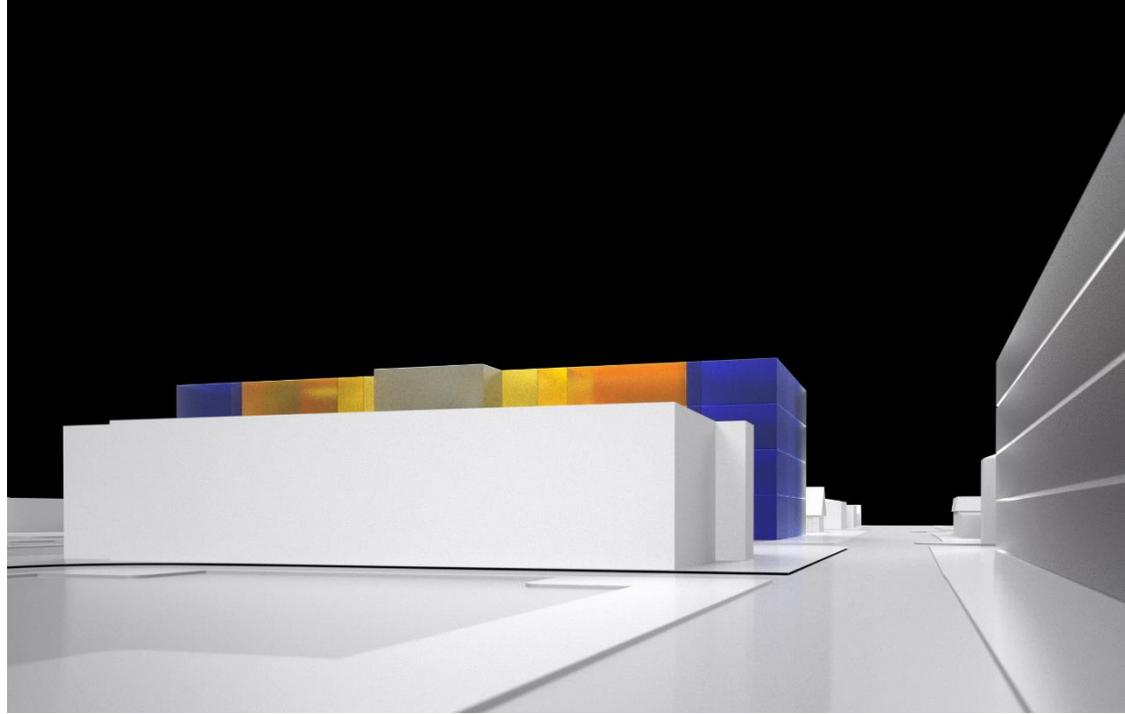
SCALE AT STREET LEVEL:

**6** COURT SCHEME

VIEW FROM MAPLE ST LOOKING NORTH



VIEW FROM LYTLE ST LOOKING EAST



SCALE AT STREET LEVEL:



**2** COURT SCHEME

SCALE AT STREET LEVEL ●



**4** COURT SCHEME

SCALE AT STREET LEVEL ●



**6** COURT SCHEME

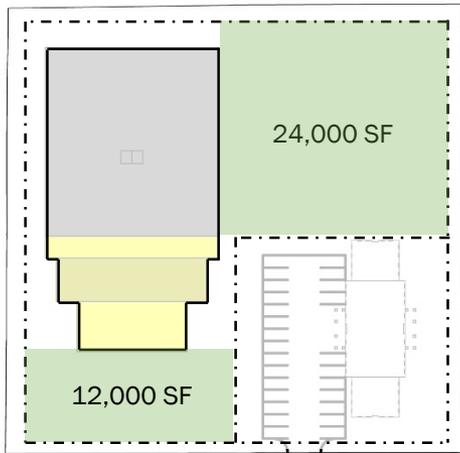
SCALE AT STREET LEVEL ●

# 07

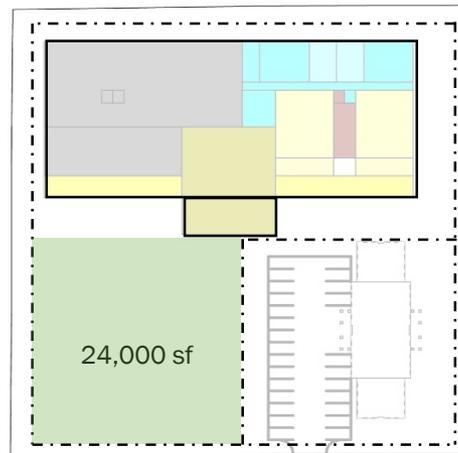
## NEIGHBORHOOD IMPACT

SITE CONSUMPTION: The smaller the building footprint, the more open space on site to accommodate potential public plazas or green spaces. A smaller building footprint also increases flexibility for:

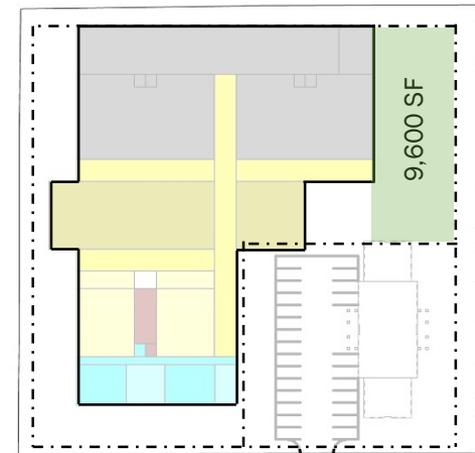
- Site orientation and entry location
- Service access and site circulation
- Future expansion
- Lay-down area during construction



**2** COURT SCHEME



**4** COURT SCHEME



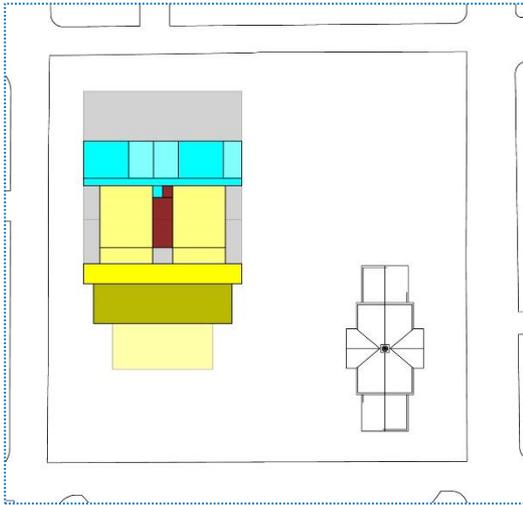
**6** COURT SCHEME

SITE CONSUMPTION ●

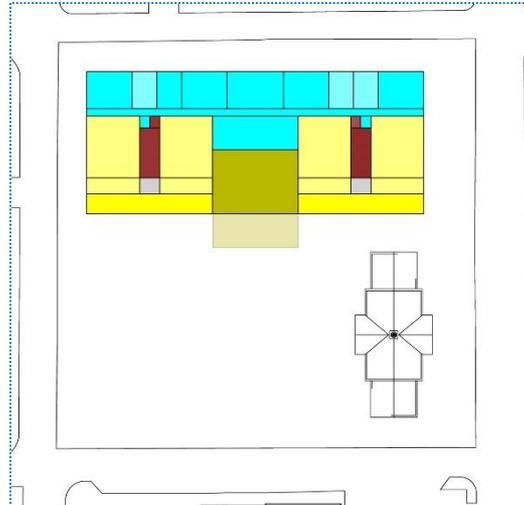
SITE CONSUMPTION ●

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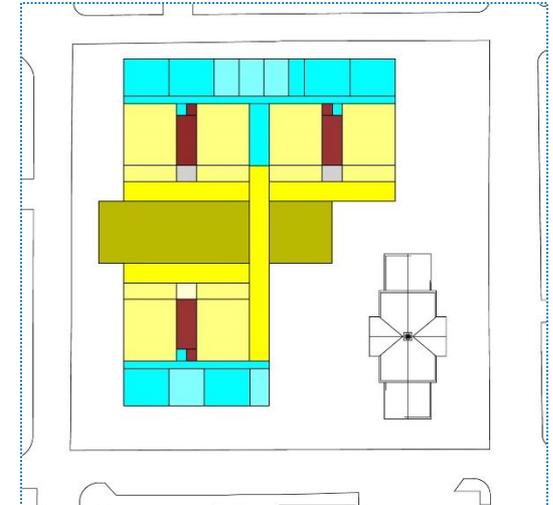
# EVALUATION SUMMARY



**2** COURT SCHEME



**4** COURT SCHEME



**6** COURT SCHEME

FUNCTIONAL COURT OPERATIONS	●
CONNECTIVITY OF SHARED SPACES	●
SIZE OF FLOOR PLATE	●
BUILDING HEIGHT RELATIVE TO COST	●
COMPLEXITY OF GEOMETRY	●
HEIGHT RELATIVE TO CONTEXT	●
SCALE STREET LEVEL	●
SITE CONSUMPTION	●

FUNCTIONAL COURT OPERATIONS	●
CONNECTIVITY OF SHARED SPACES	●
SIZE OF FLOOR PLATE	●
BUILDING HEIGHT RELATIVE TO COST	●
COMPLEXITY OF GEOMETRY	●
HEIGHT RELATIVE TO CONTEXT	●
SCALE STREET LEVEL	●
SITE CONSUMPTION	●

FUNCTIONAL COURT OPERATIONS	●
CONNECTIVITY OF SHARED SPACES	●
SIZE OF FLOOR PLATE	●
BUILDING HEIGHT RELATIVE TO COST	●
COMPLEXITY OF GEOMETRY	●
HEIGHT RELATIVE TO CONTEXT	●
SCALE STREET LEVEL	●
SITE CONSUMPTION	●

# QUESTIONS / DISCUSSION

# NEXT STEPS

***DRC Meeting 02.18.2015***

## **AGENDA**

1. Functional arrangement of program
2. Private parking and sally port configuration
3. Parking garage layouts
4. Site Plan / Entry Location

## **DISCUSSION ITEMS**

1. Comments or questions about program items
2. Concerns regarding functional relationships in the building