

Rutherford County Judicial Center

DRC Meeting 03.04.2015

AGENDA

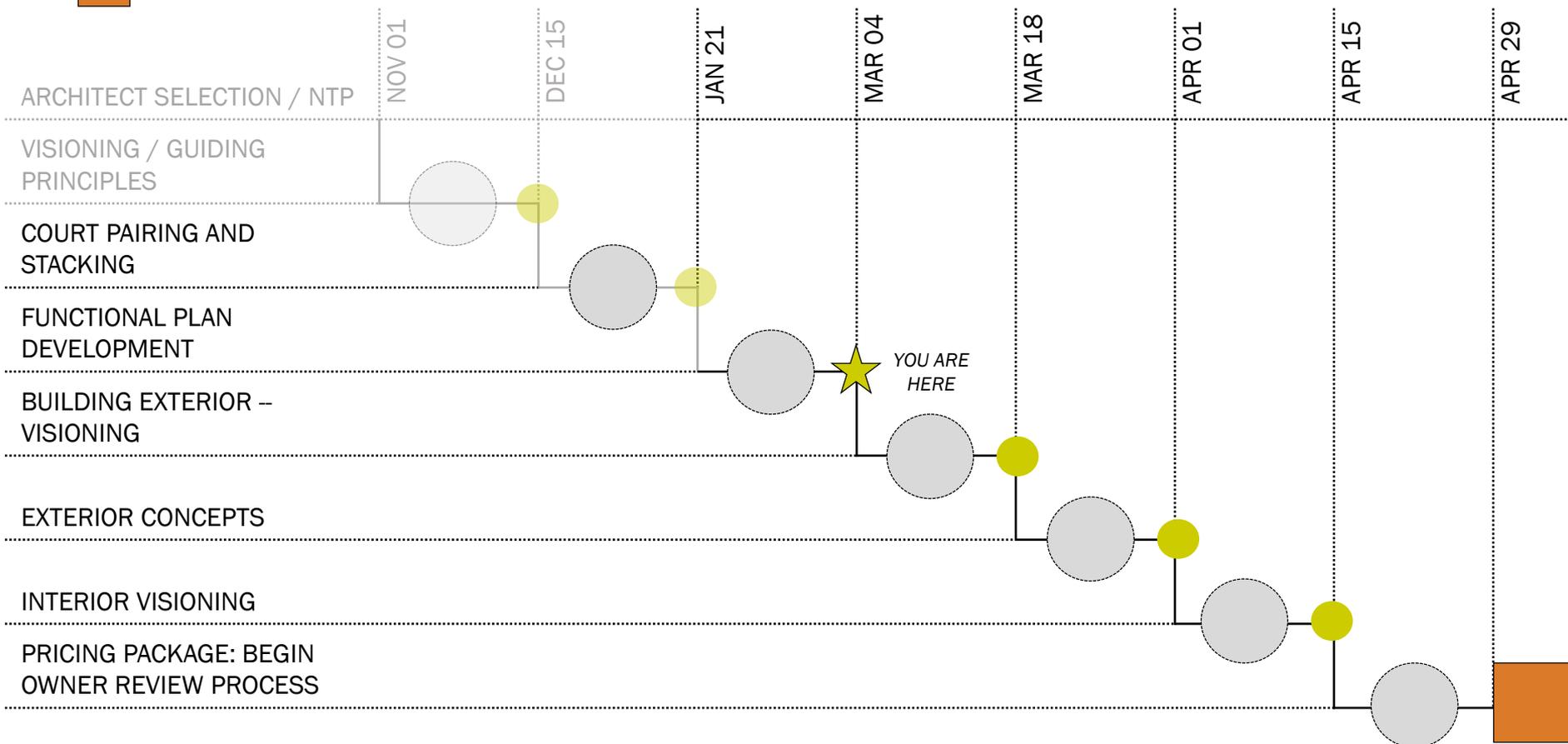
1. Overview of SD schedule and milestone decisions
2. Review (4) Functional Plan Layouts
 - Sally Port configuration
 - Entry Lobby sequence and core location
 - Site Orientation
3. Review Parking Garage Layouts
4. Review Bridge connection and potential budget impact
5. Questions and Discussion
6. Overview of “Next Steps”

OBJECTIVES

1. *Gain consensus on functional plan option to be developed further*

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** ...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

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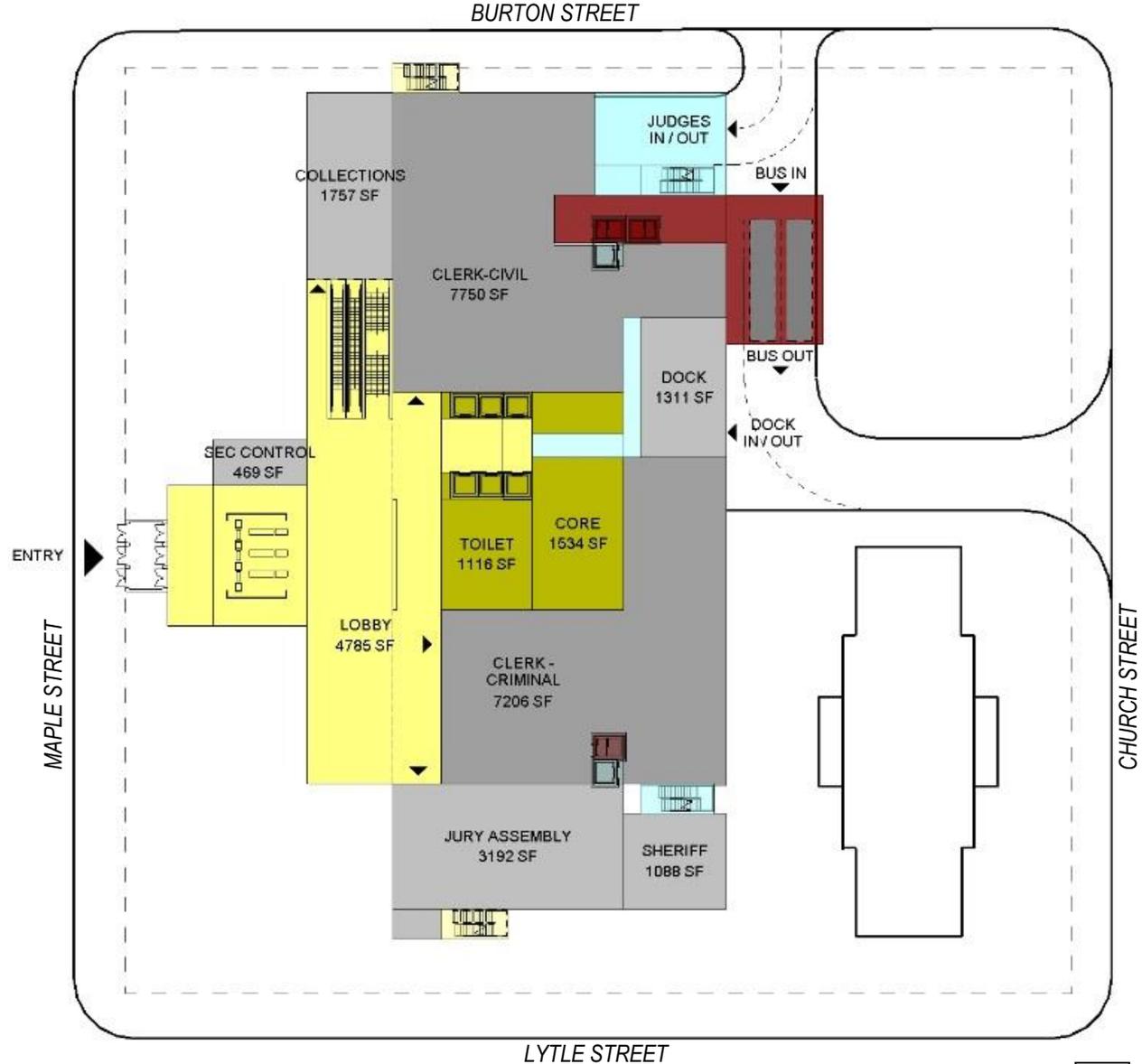
1. *Gain consensus on functional plan option to be developed further*

PLAN DIAGRAMS

A-1

SITE ORIENTATION
ELEVATOR LOCATION
SALLY PORT

NORTH / SOUTH
INTERNAL
ON GRADE -
DRIVE THROUGH

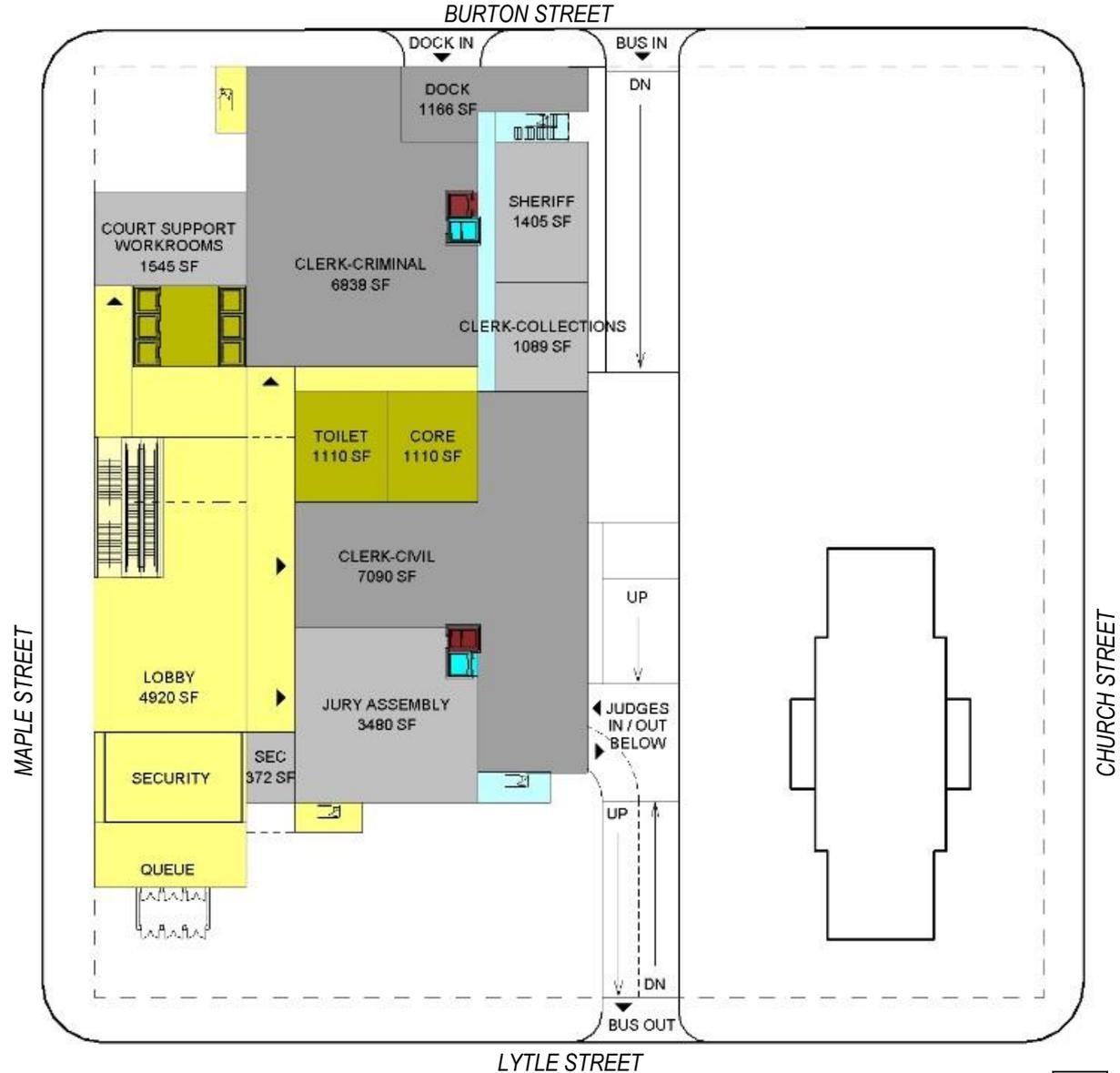


PLAN DIAGRAMS

A-2

SITE ORIENTATION
ELEVATOR LOCATION
SALLY PORT

NORTH / SOUTH
EXTERNAL
BELOW GRADE -
DRIVE THROUGH

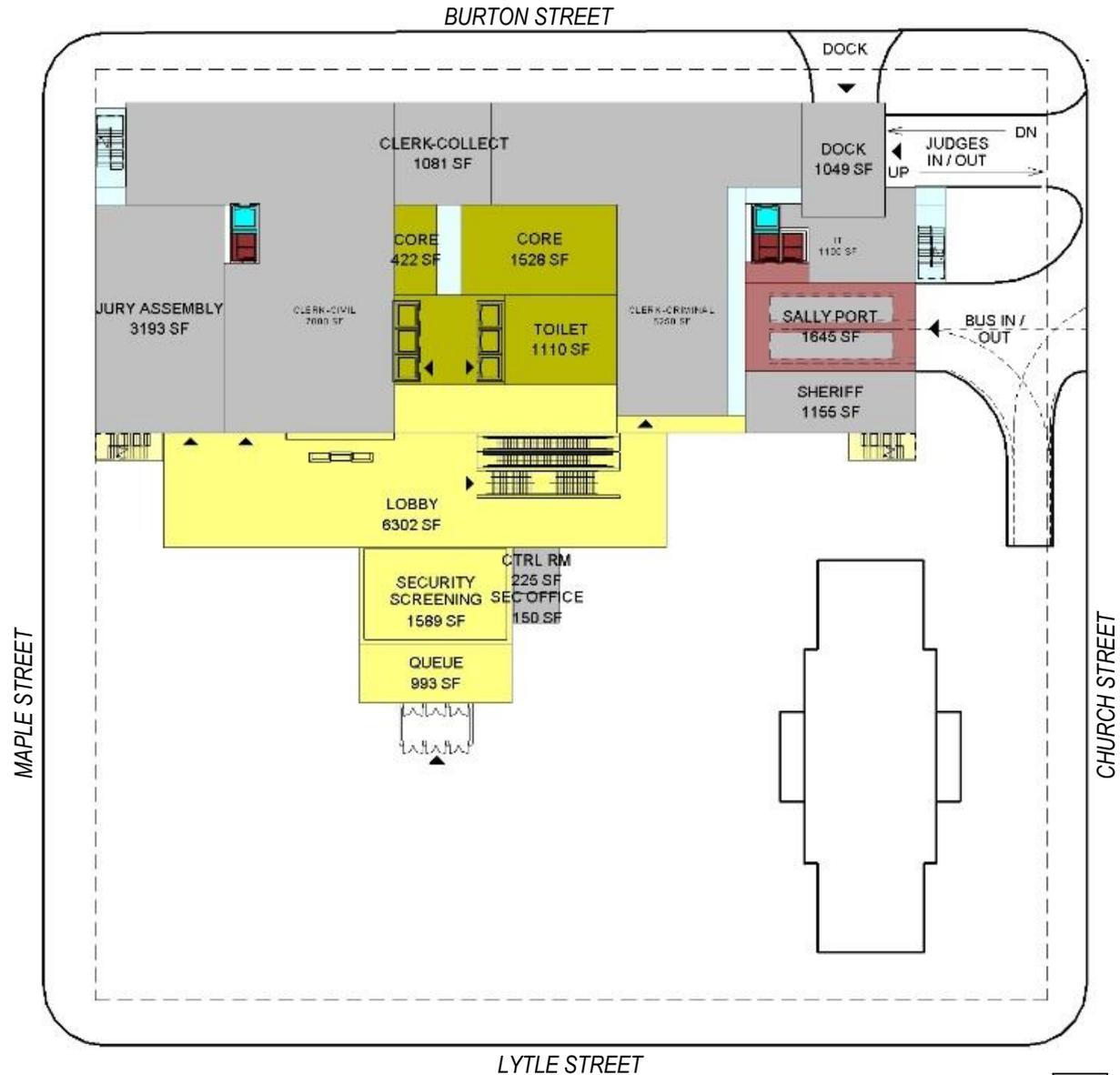


PLAN DIAGRAMS

B-1

SITE ORIENTATION
ELEVATOR LOCATION
SALLY PORT

EAST/WEST
INTERNAL
ON GRADE-
DRIVE IN / DRIVE OUT

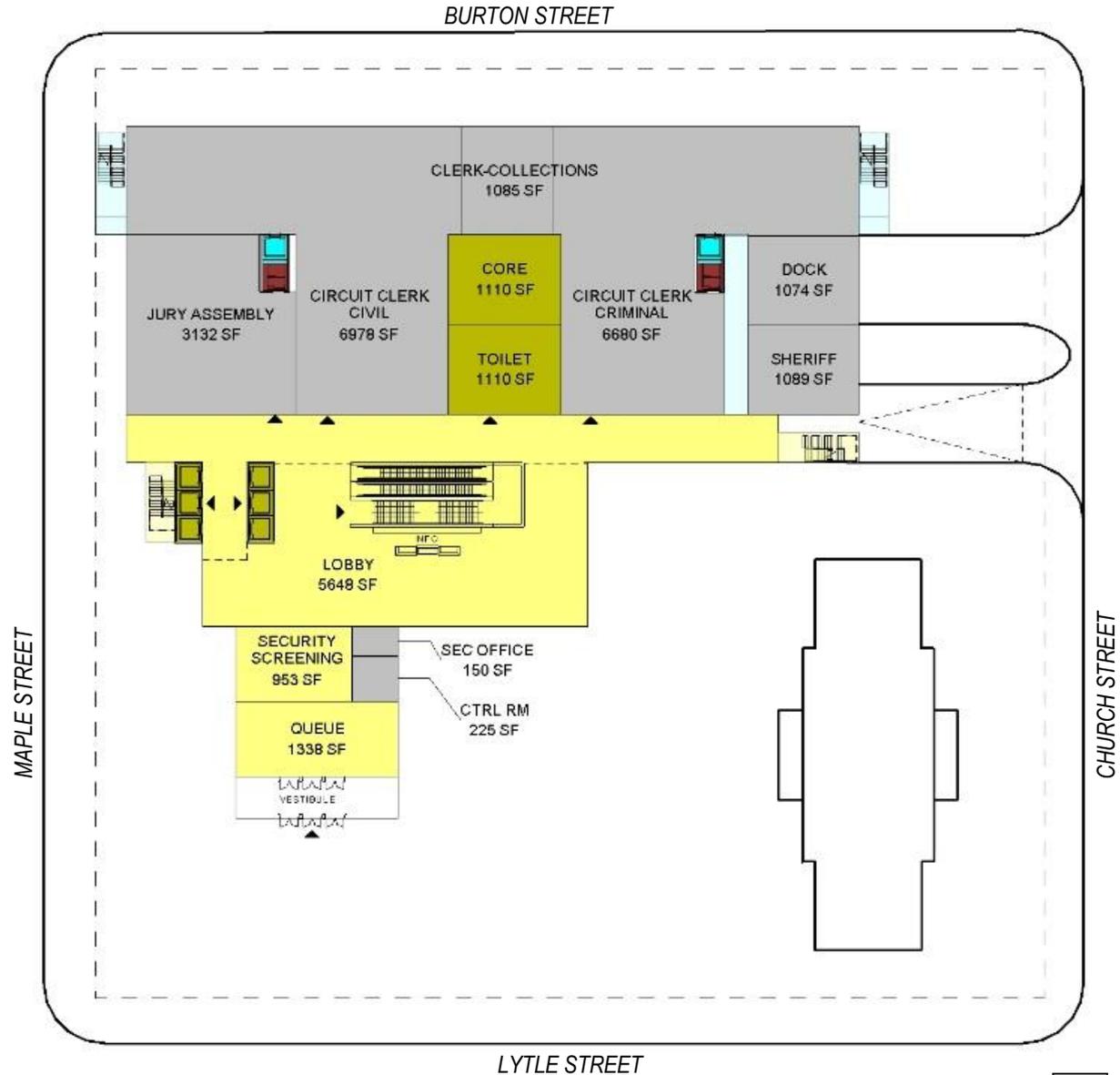


PLAN DIAGRAMS

B-2

SITE ORIENTATION
ELEVATOR LOCATION
SALLY PORT

EAST/WEST
EXTERNAL
BELOW GRADE-
DRIVE IN / DRIVE OUT

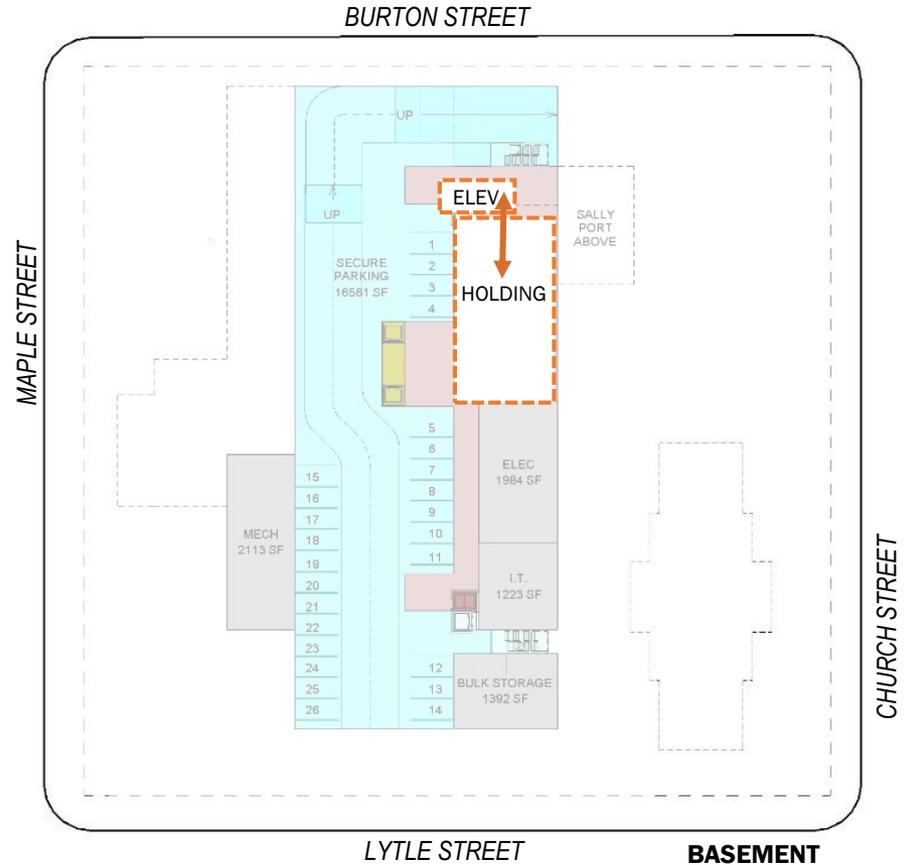
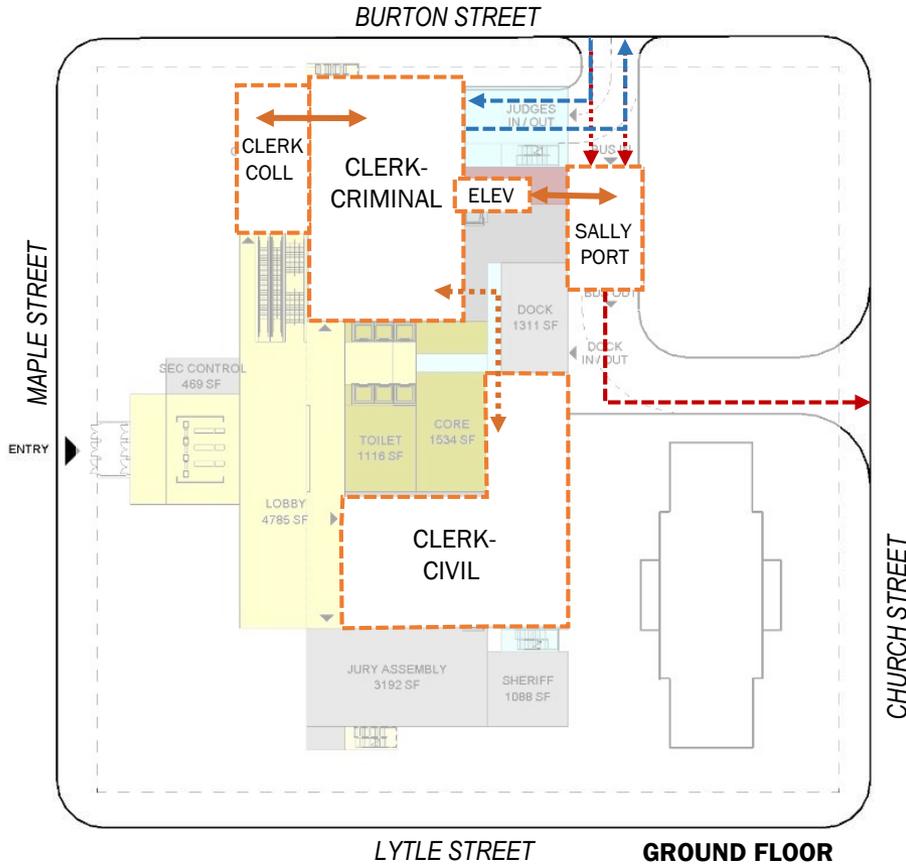


EVALUATION CRITERIA

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FUNCTIONAL EFFICIENCY

FUNCTIONAL COURT OPERATIONS

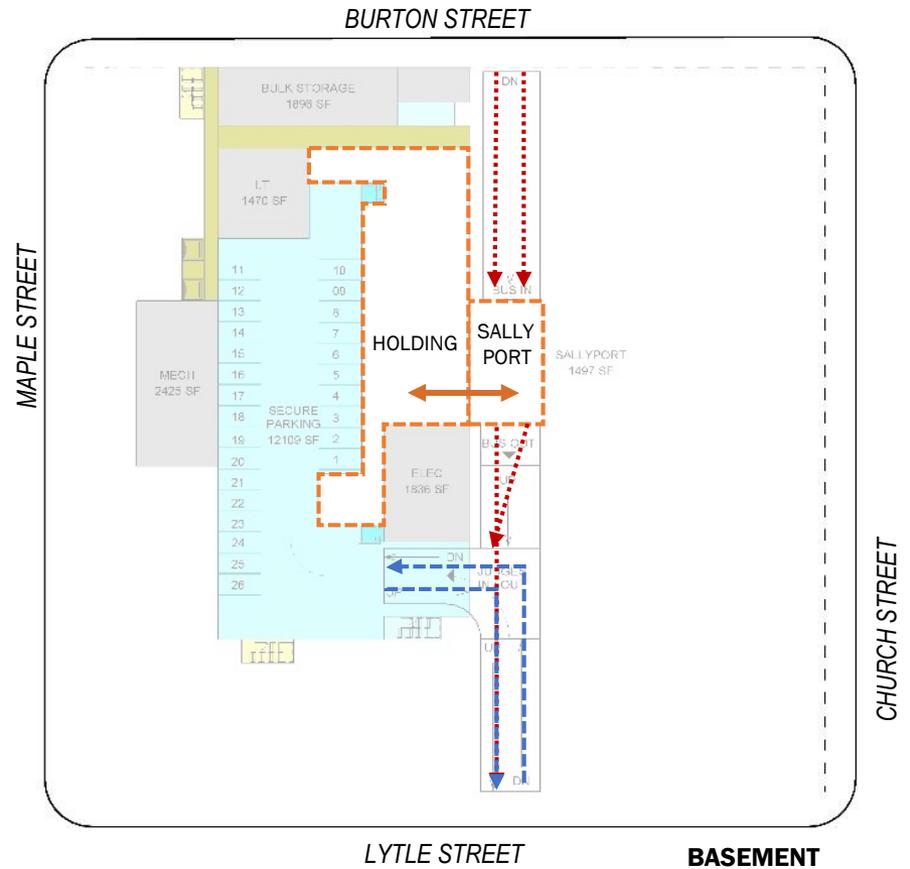
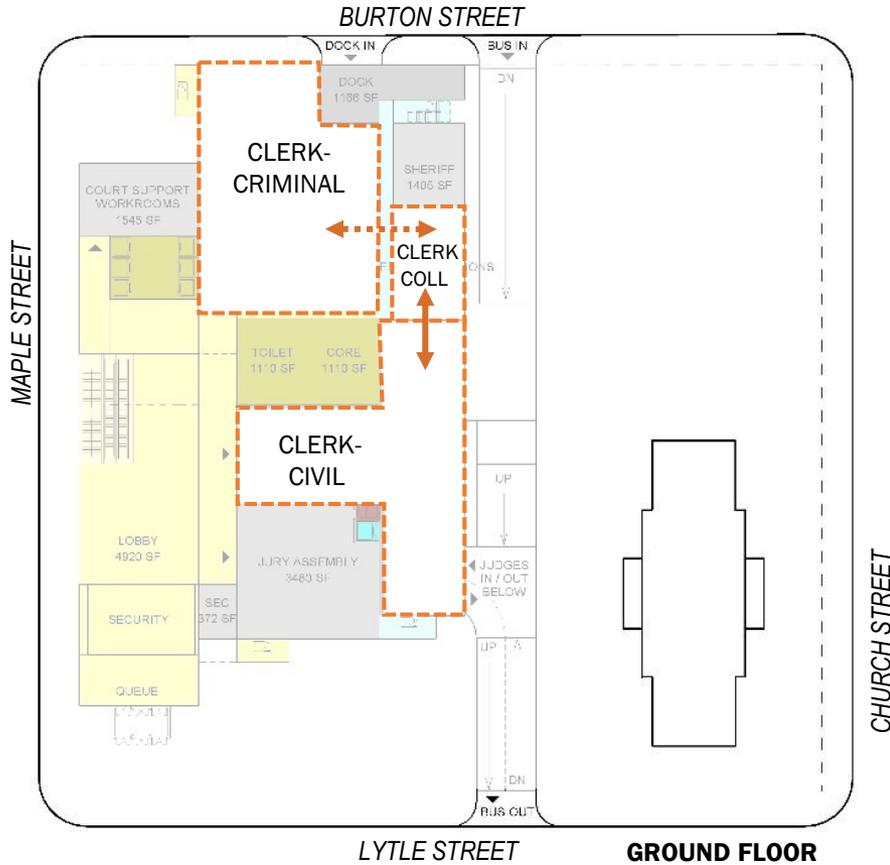


A-1

CONSOLIDATION OF CLERK OF COURT OPERATIONS	●
SECURE AND EFFICIENT MOVEMENT OF DETAINEES	●

FUNCTIONAL EFFICIENCY

FUNCTIONAL COURT OPERATIONS

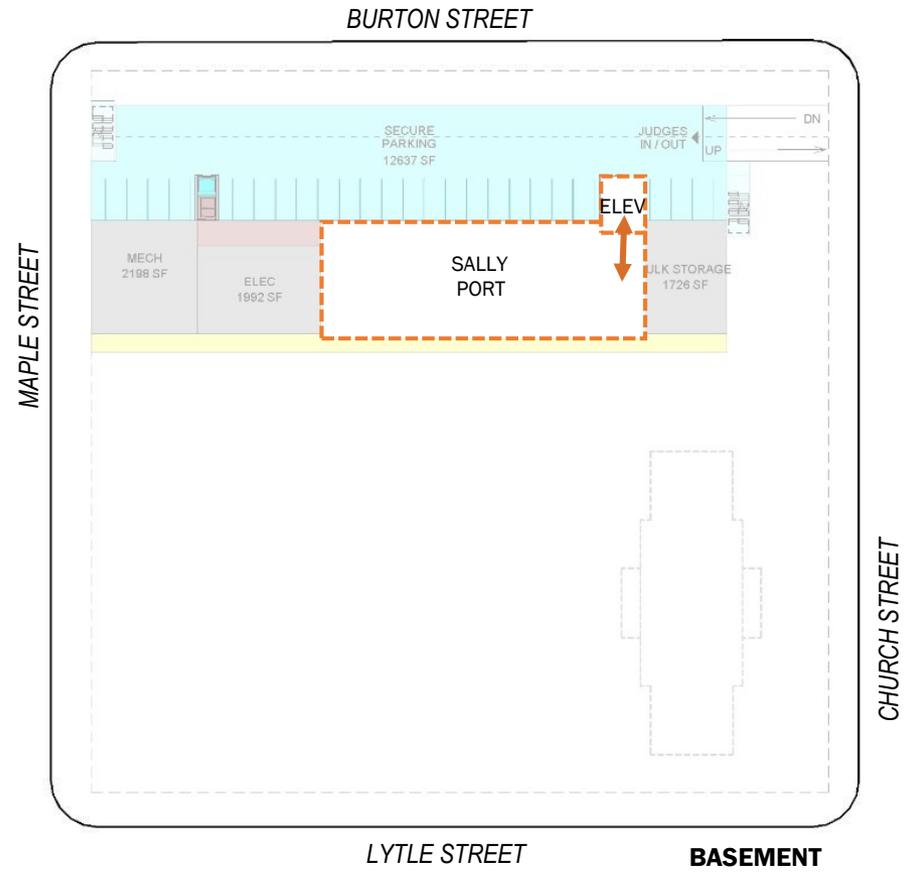
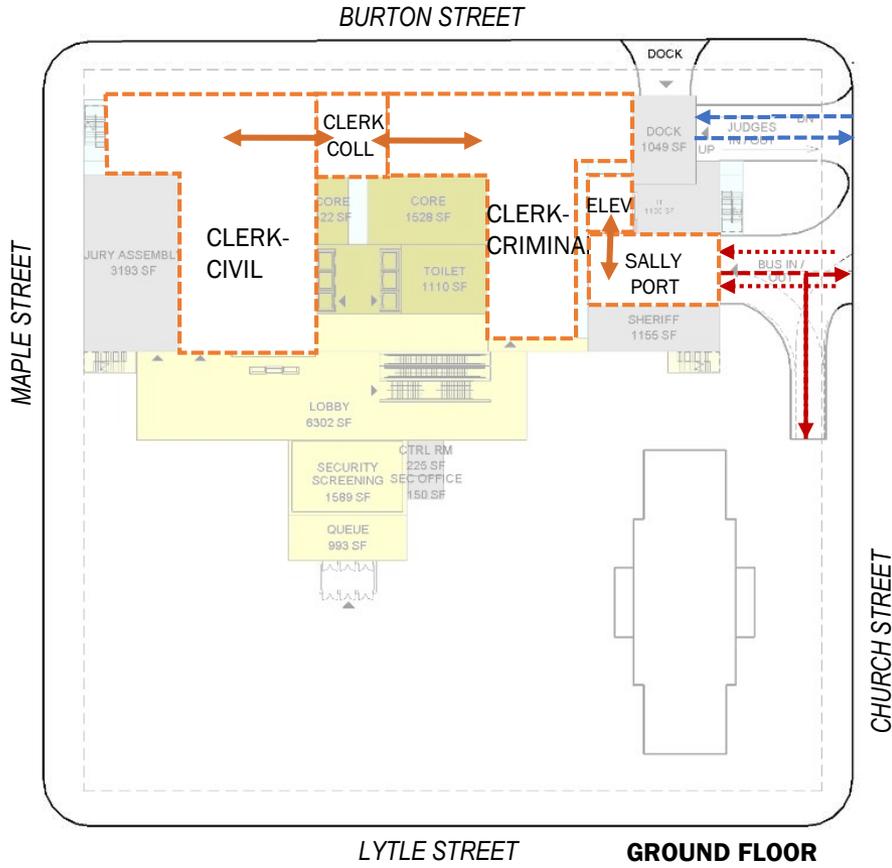


A-2

CONSOLIDATION OF CLERK OF COURT OPERATIONS	●
SECURE AND EFFICIENT MOVEMENT OF DETAINEES	●

FUNCTIONAL EFFICIENCY

FUNCTIONAL COURT OPERATIONS



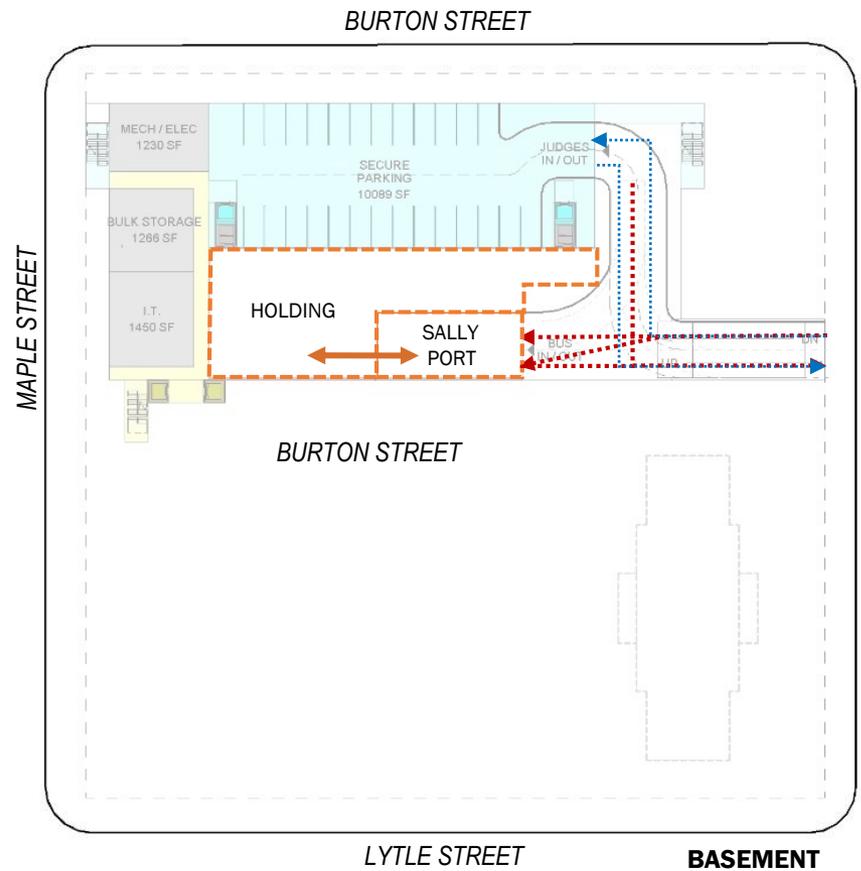
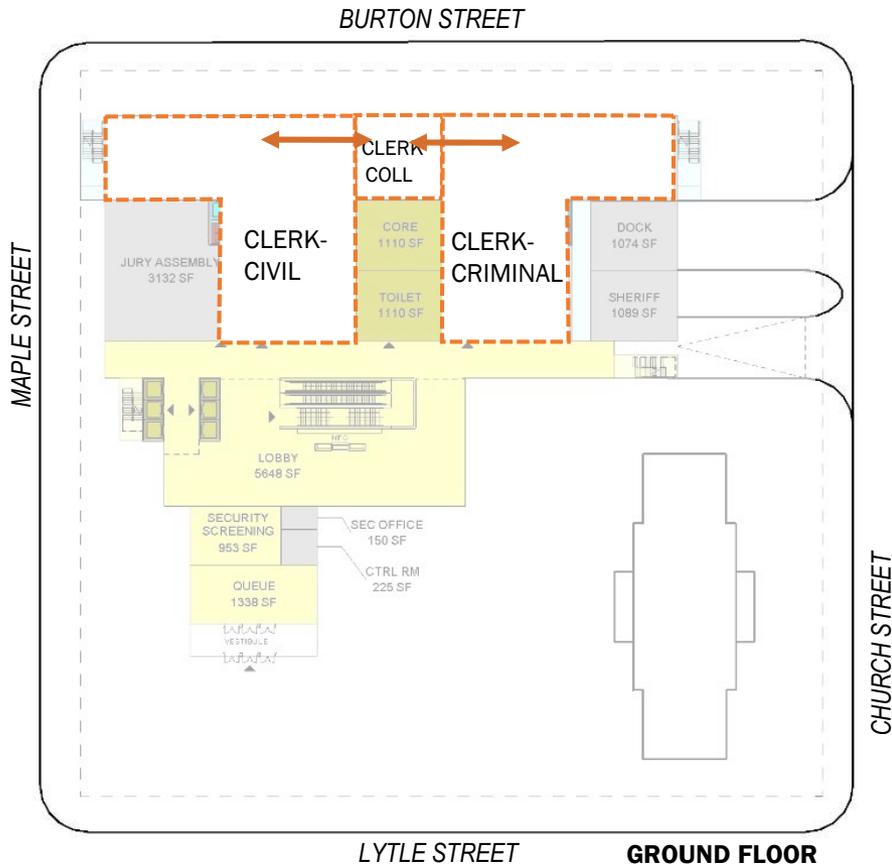
B-1

CONSOLIDATION OF CLERK OF COURT OPERATIONS	●
SECURE AND EFFICIENT MOVEMENT OF DETAINEES	●

01

FUNCTIONAL EFFICIENCY

FUNCTIONAL COURT OPERATIONS

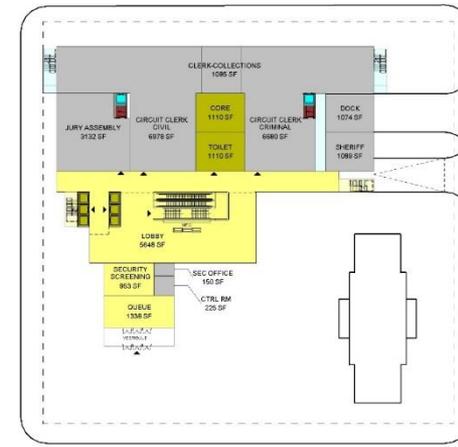
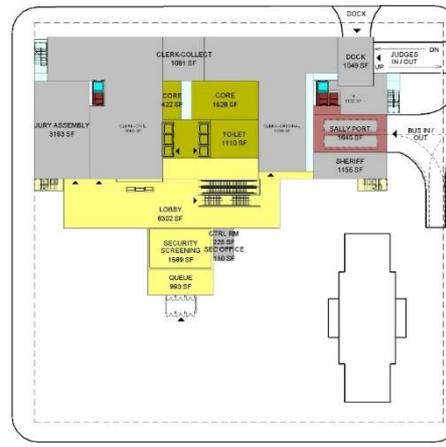
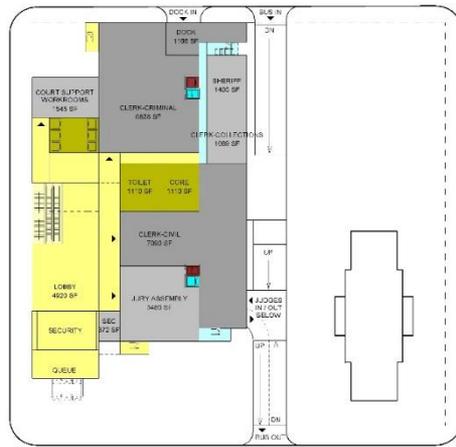
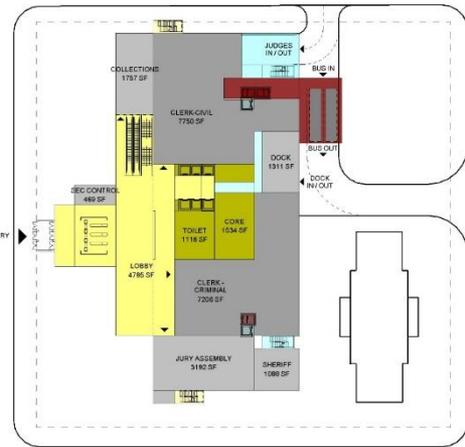


B-2

CONSOLIDATION OF CLERK OF COURT OPERATIONS	●
SECURE AND EFFICIENT MOVEMENT OF DETAINEES	●

FUNCTIONAL EFFICIENCY

FUNCTIONAL COURT OPERATIONS: SUMMARY



A-1

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●

A-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●

B-1

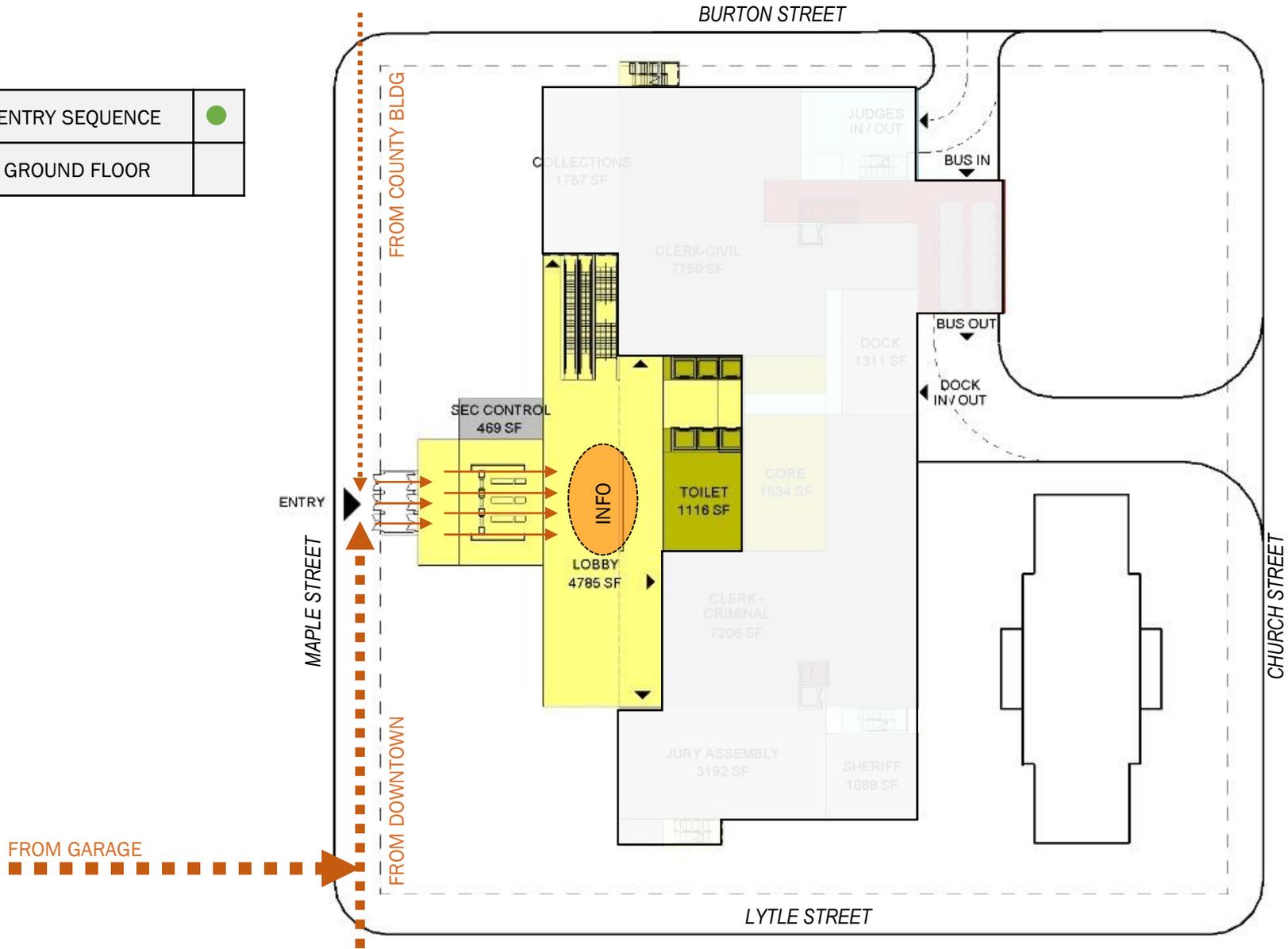
CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●

B-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●

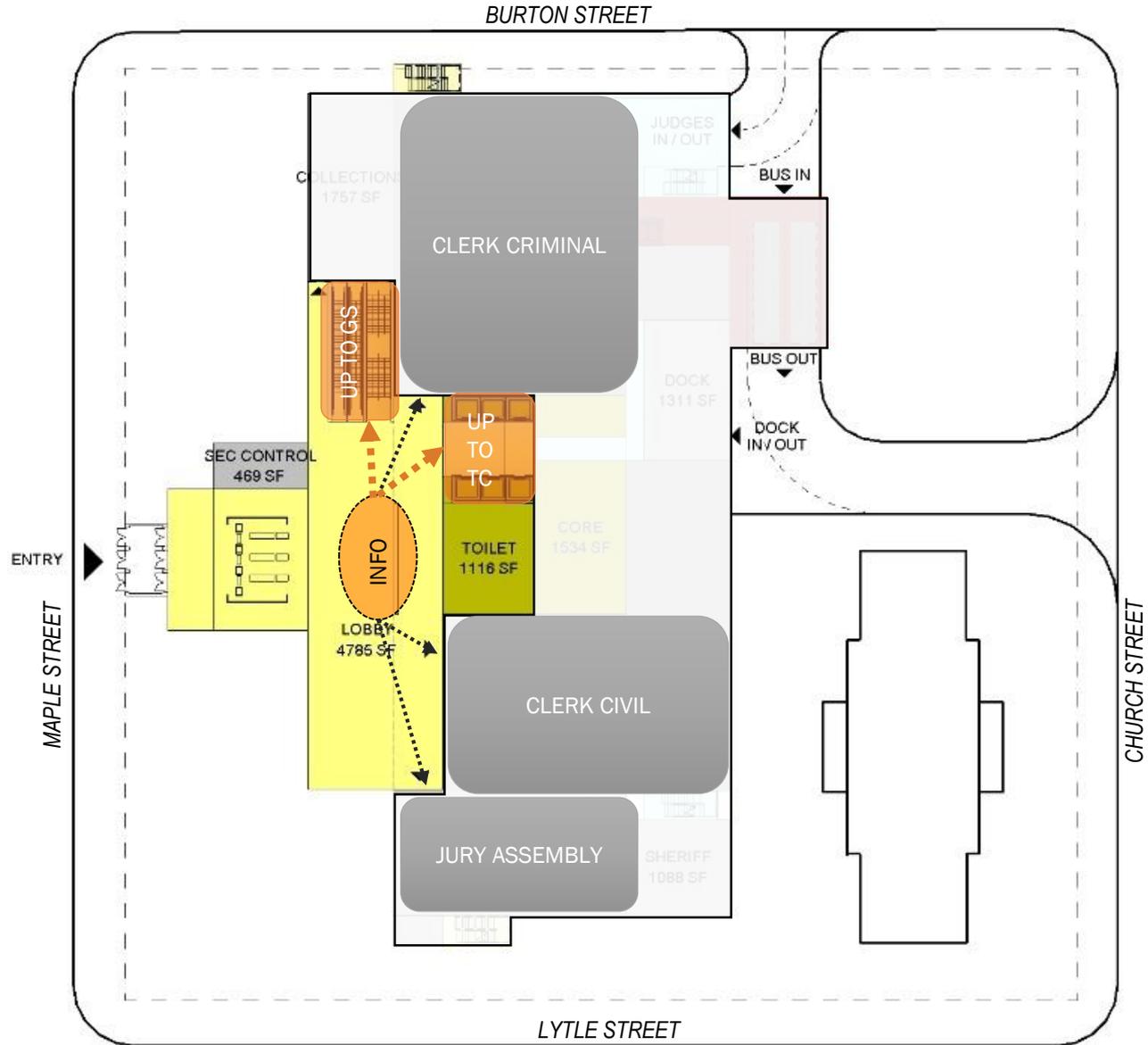
A-1

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	



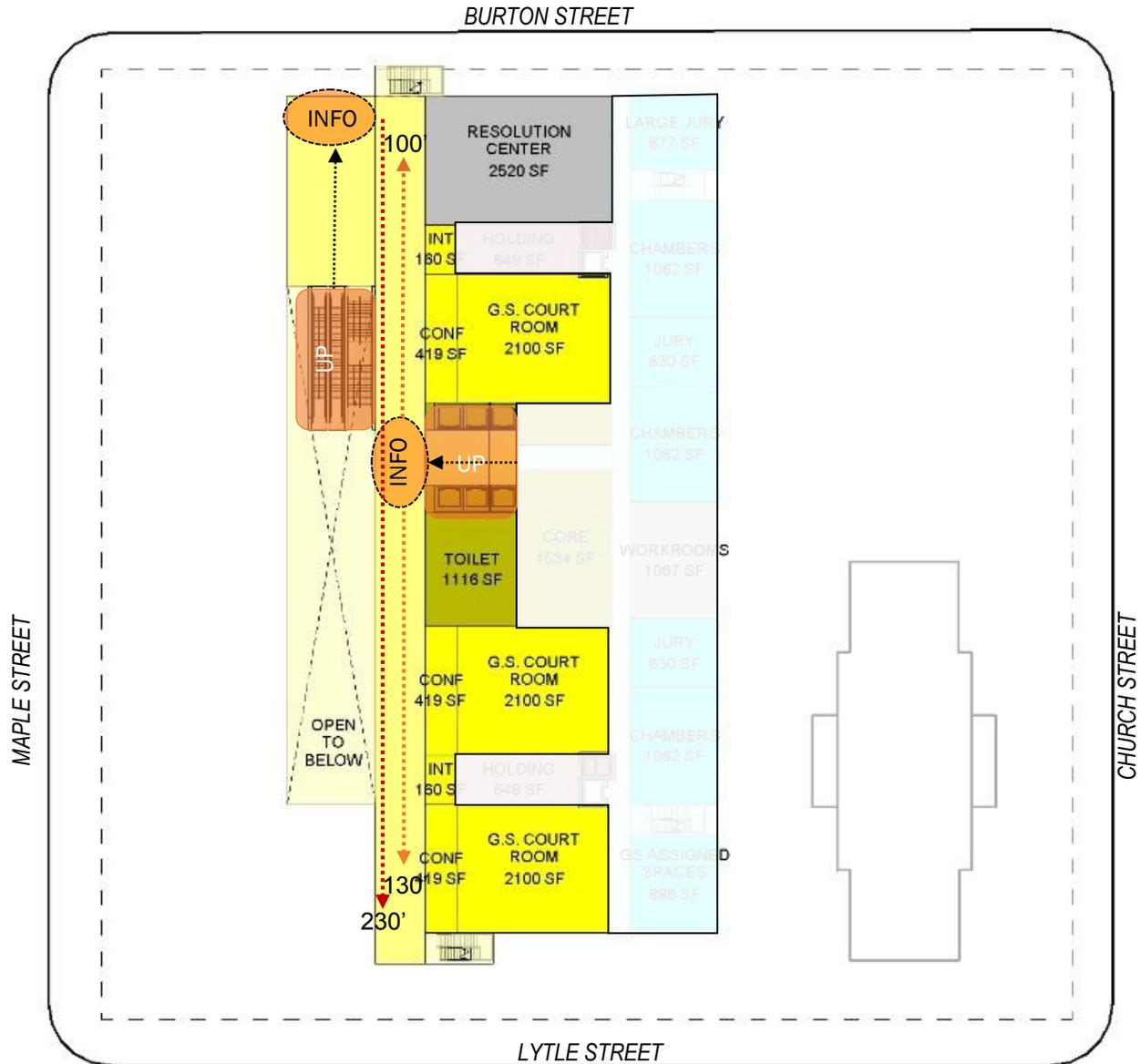
A-1

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●



A-1

WAY-FINDING : 2ND FLOOR



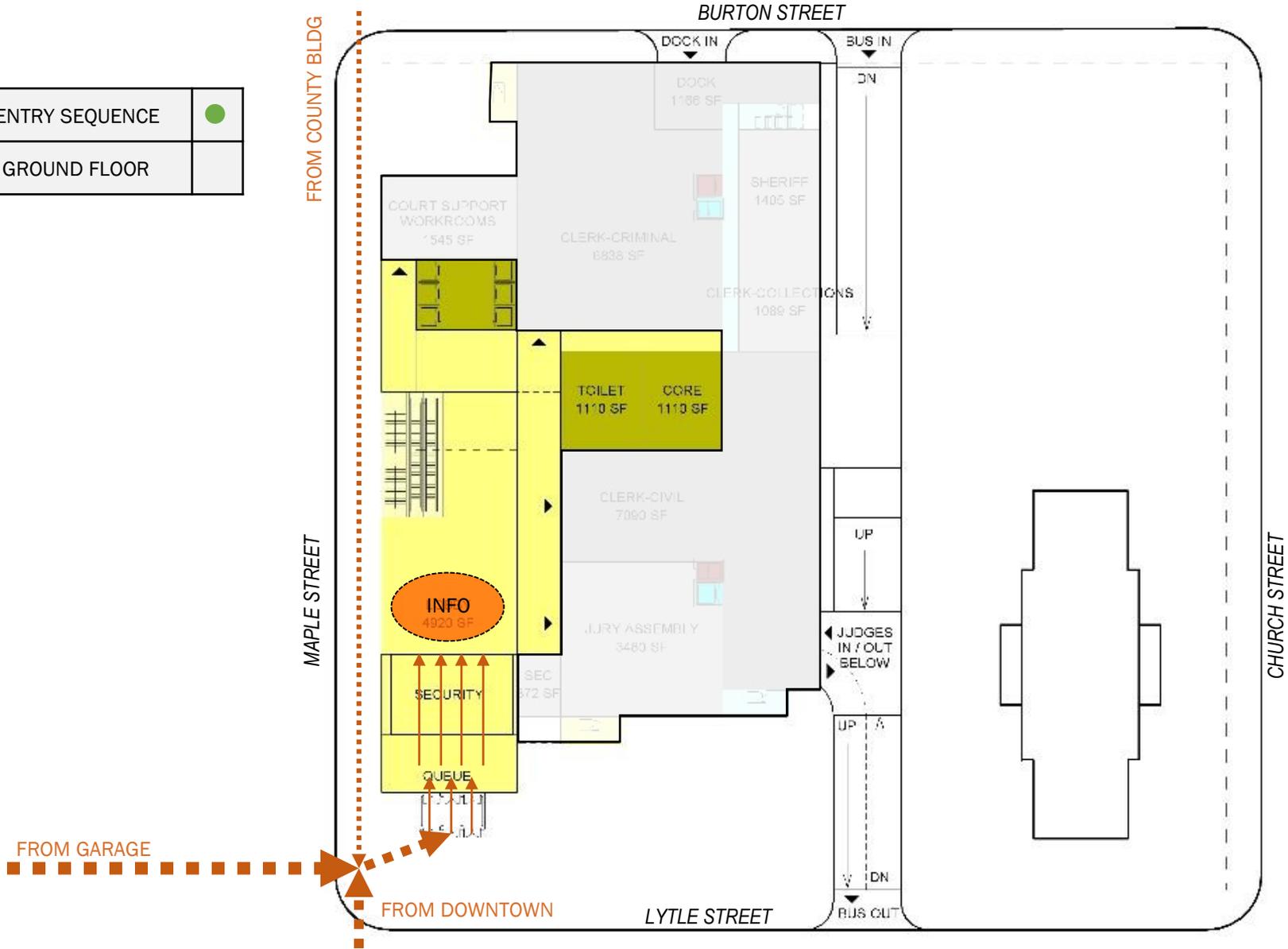
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VISITOR EXPERIENCE

WAYFINDING – GROUND FLOOR

A-2

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	



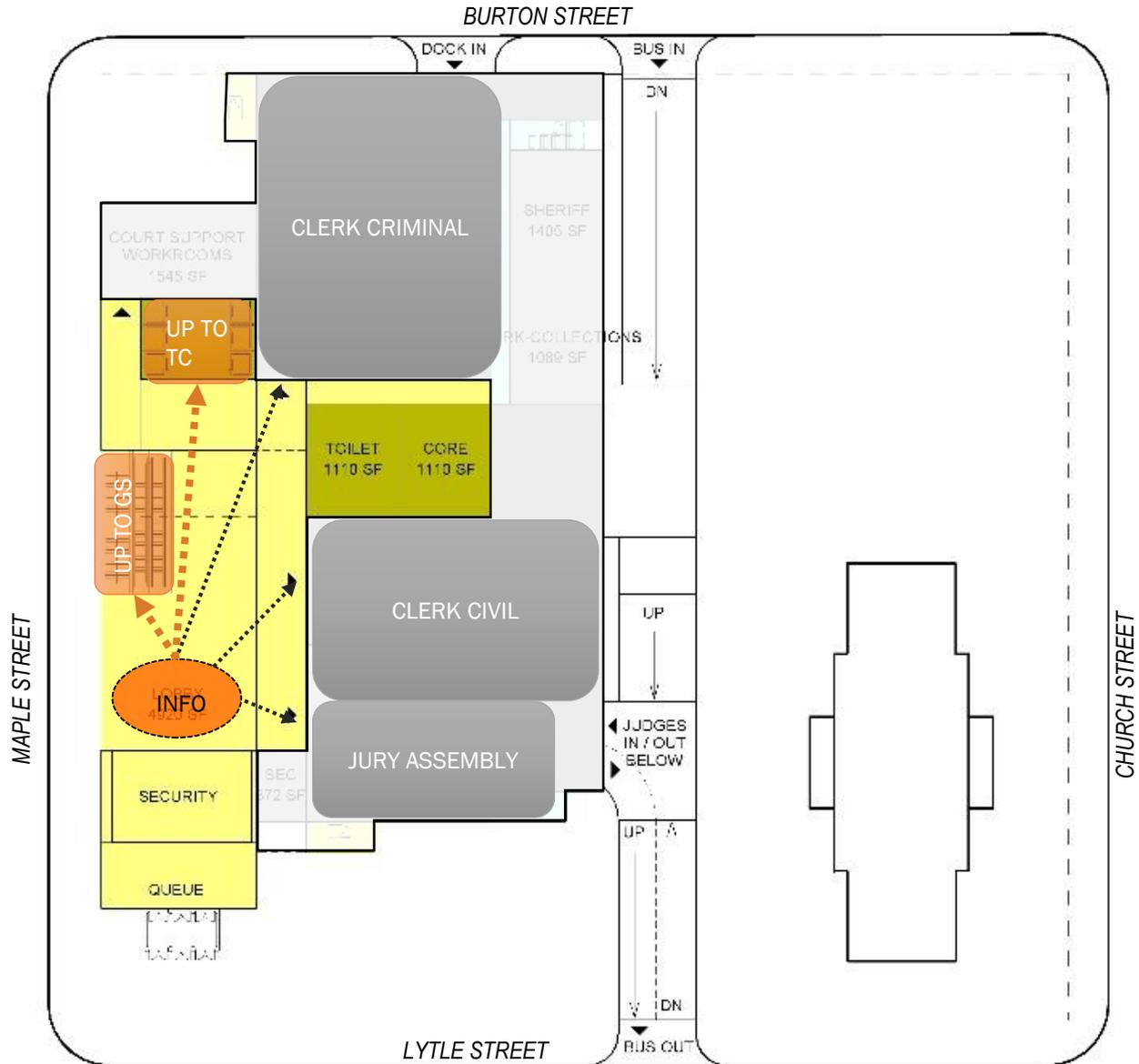
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VISITOR EXPERIENCE

WAYFINDING – GROUND FLOOR

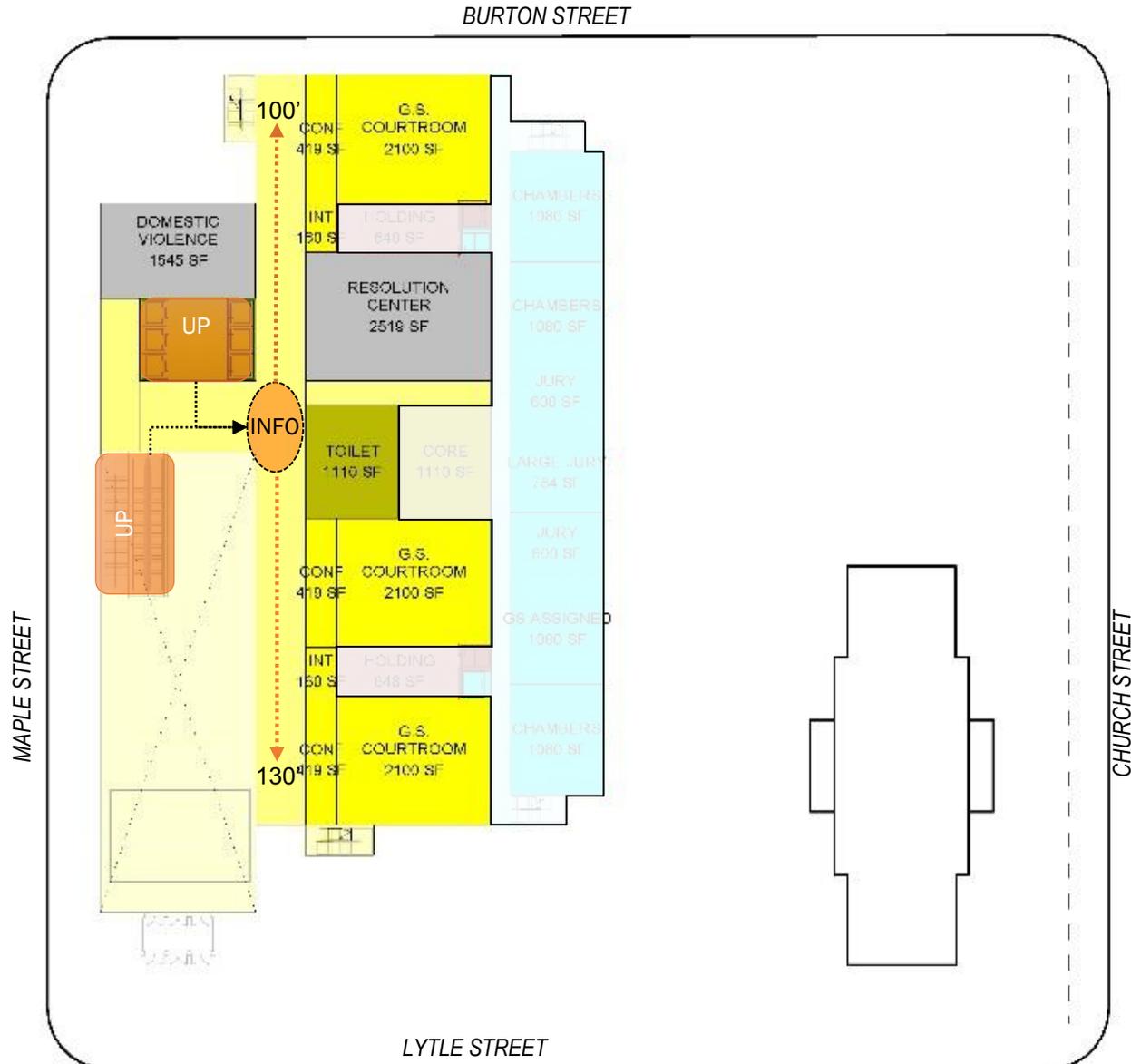
A-2

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●



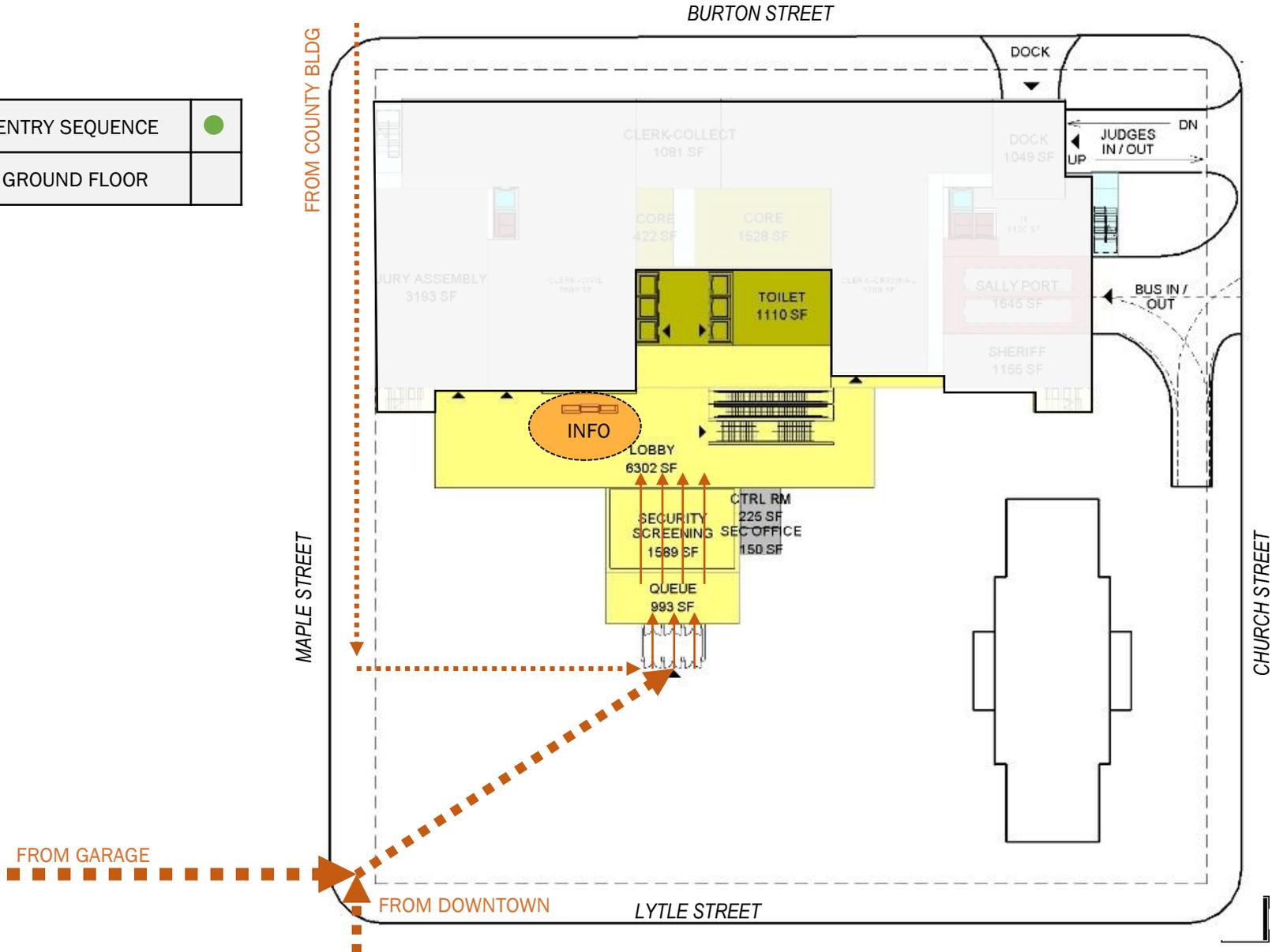
A-2

WAY-FINDING : 2ND FLOOR



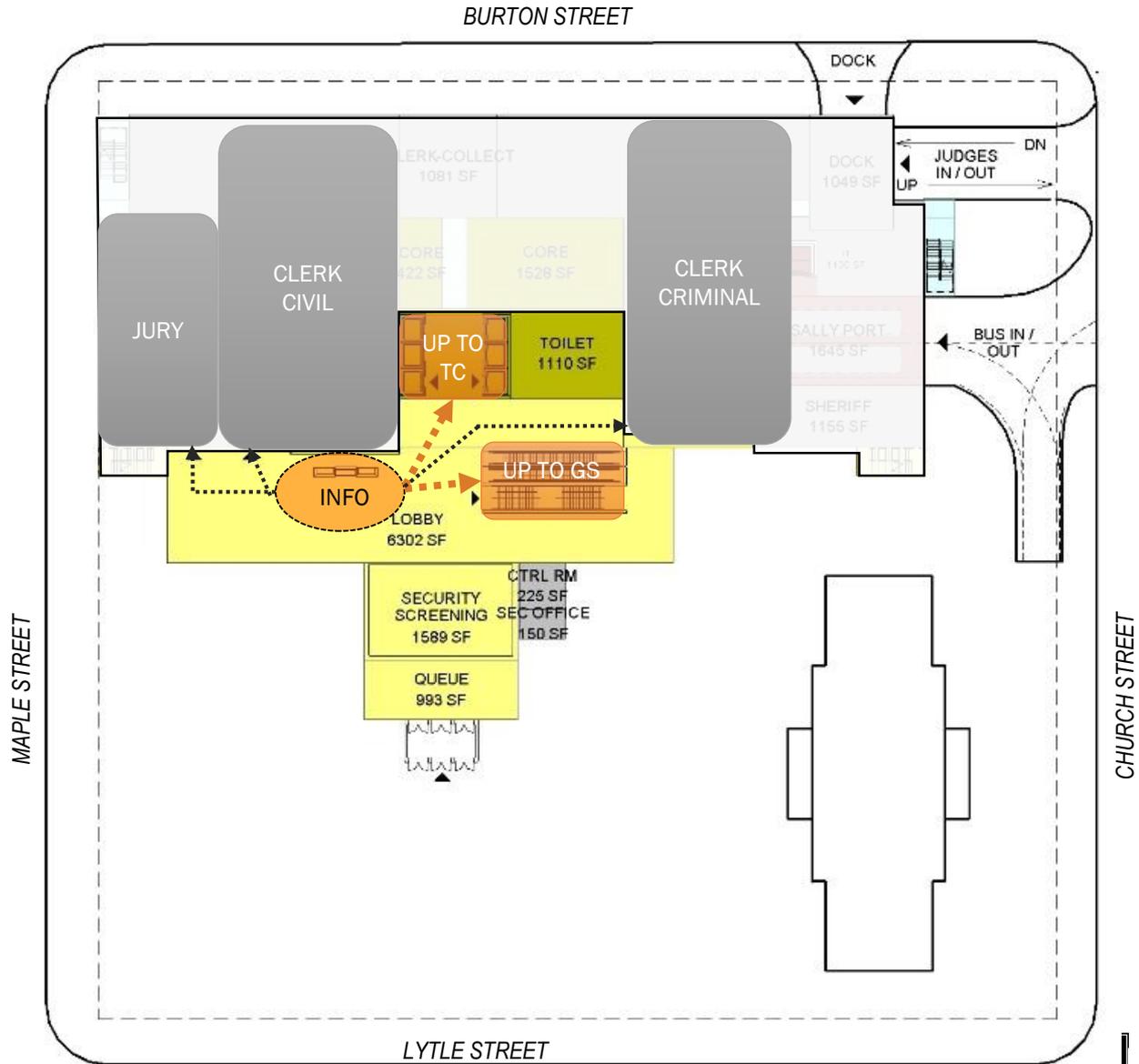
B-1

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	



B-1

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●



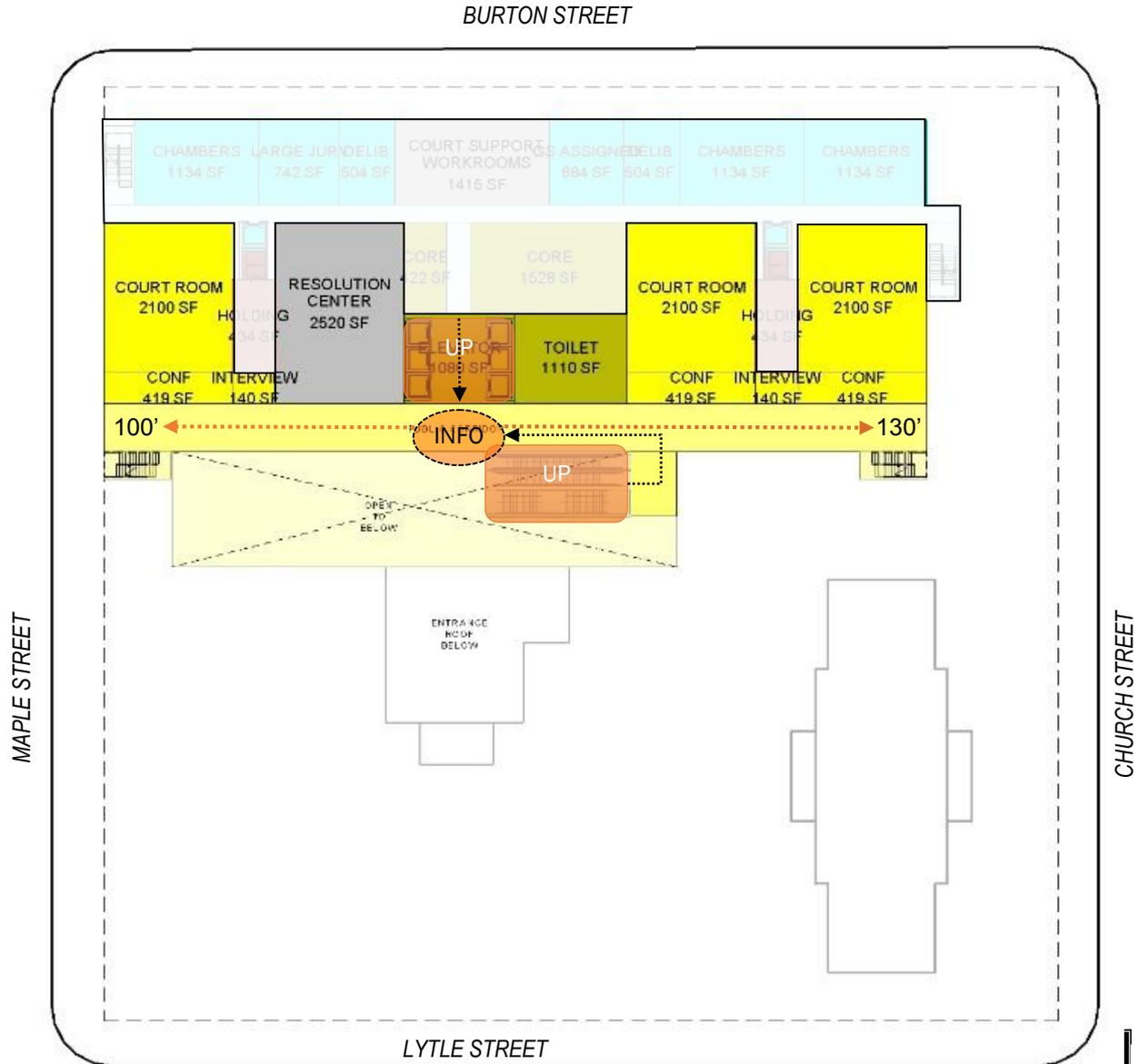
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VISITOR EXPERIENCE

WAYFINDING - 2ND FLOOR

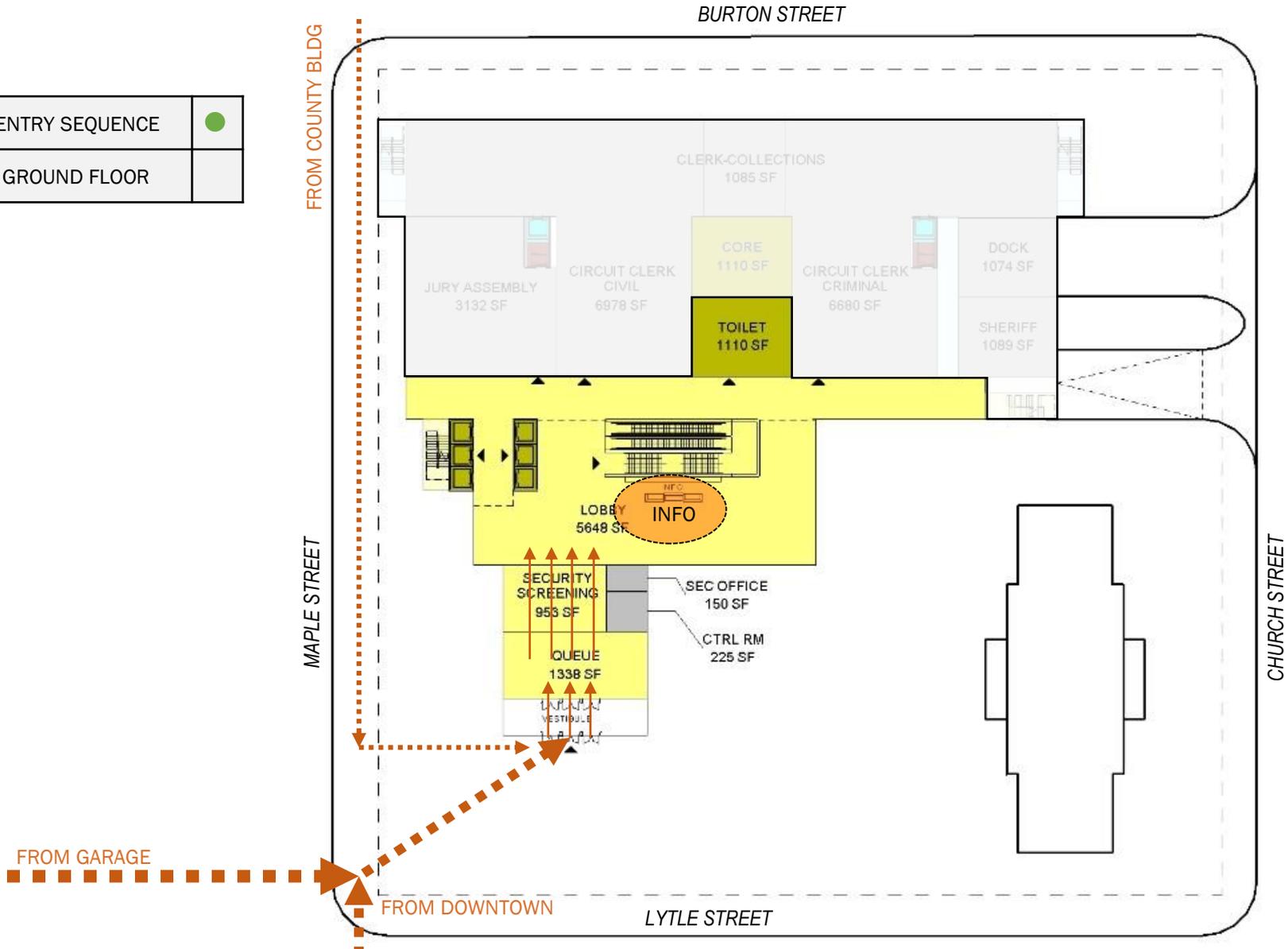
B-1

WAY-FINDING : 2ND FLOOR



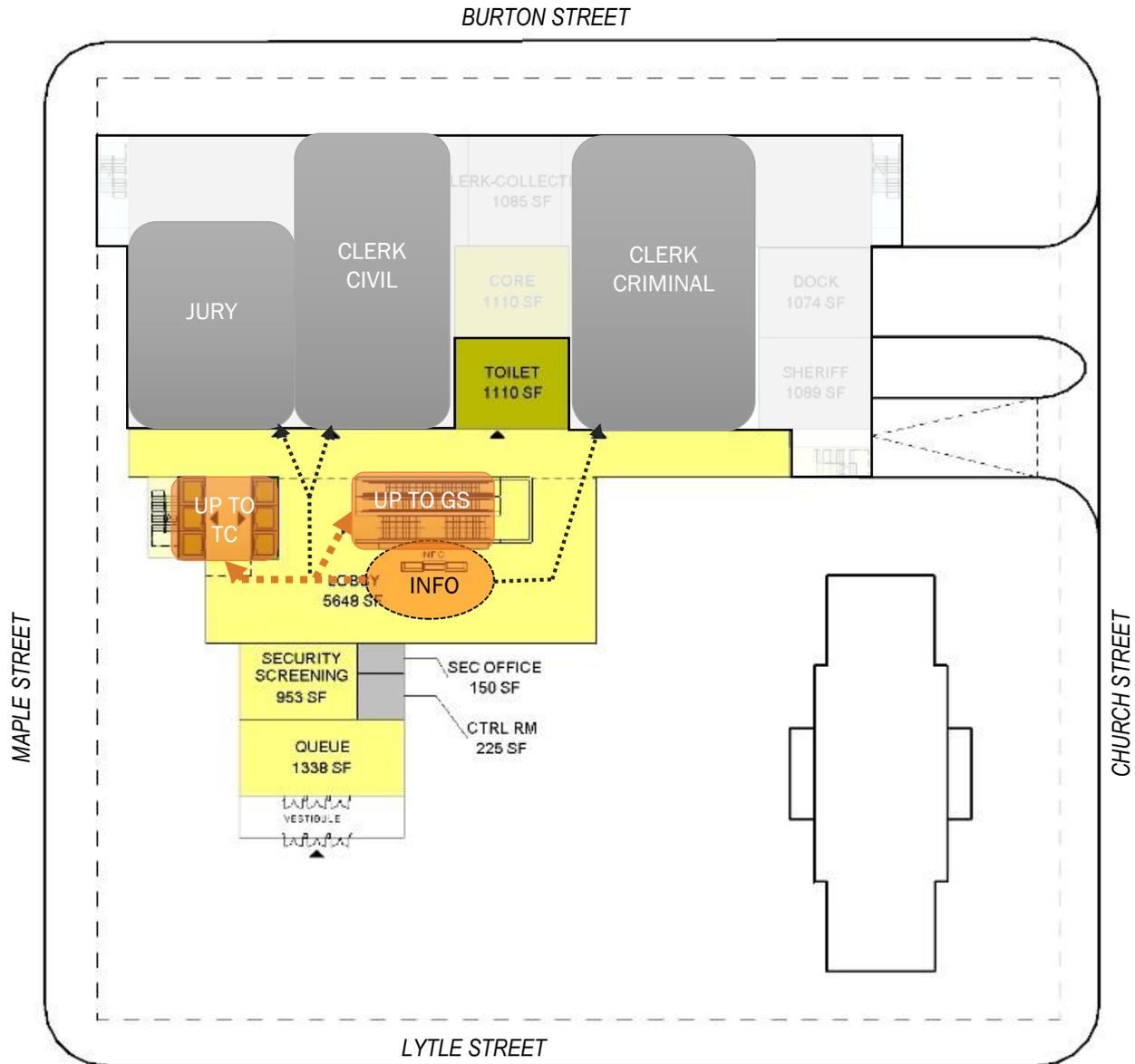
B-2

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	



B-2

APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●



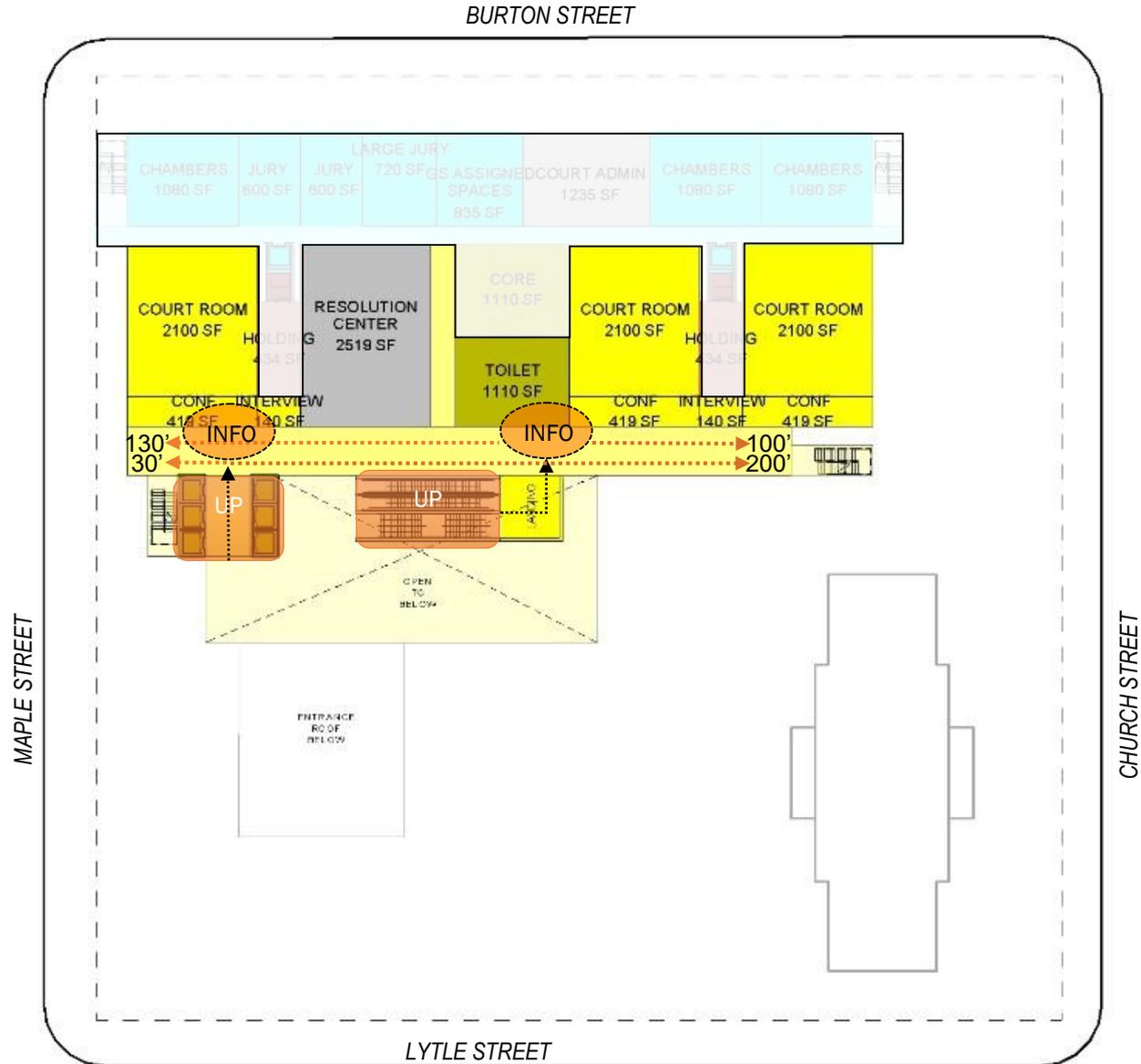
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VISITOR EXPERIENCE

WAYFINDING - 2ND FLOOR

B-2

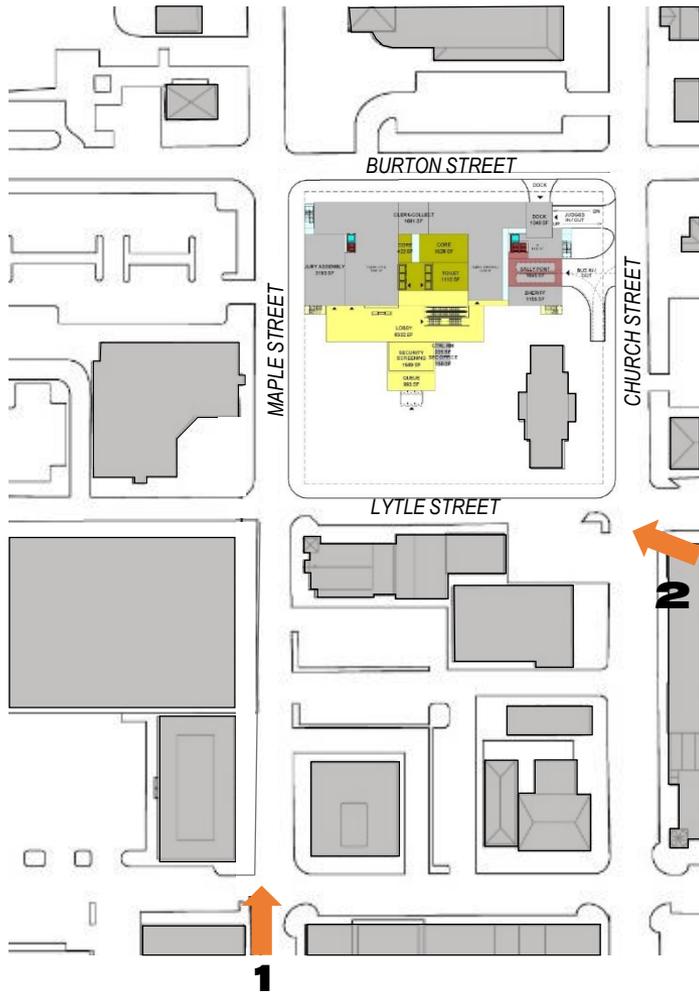
WAY-FINDING : 2ND FLOOR



RELATIONSHIP TO CONTEXT SCALE AND MASSING

B-1

Relationship to urban plan
Relationship to adjacent sites
Urban Presence



1: VIEW FROM MAPLE ST LOOKING NORTH

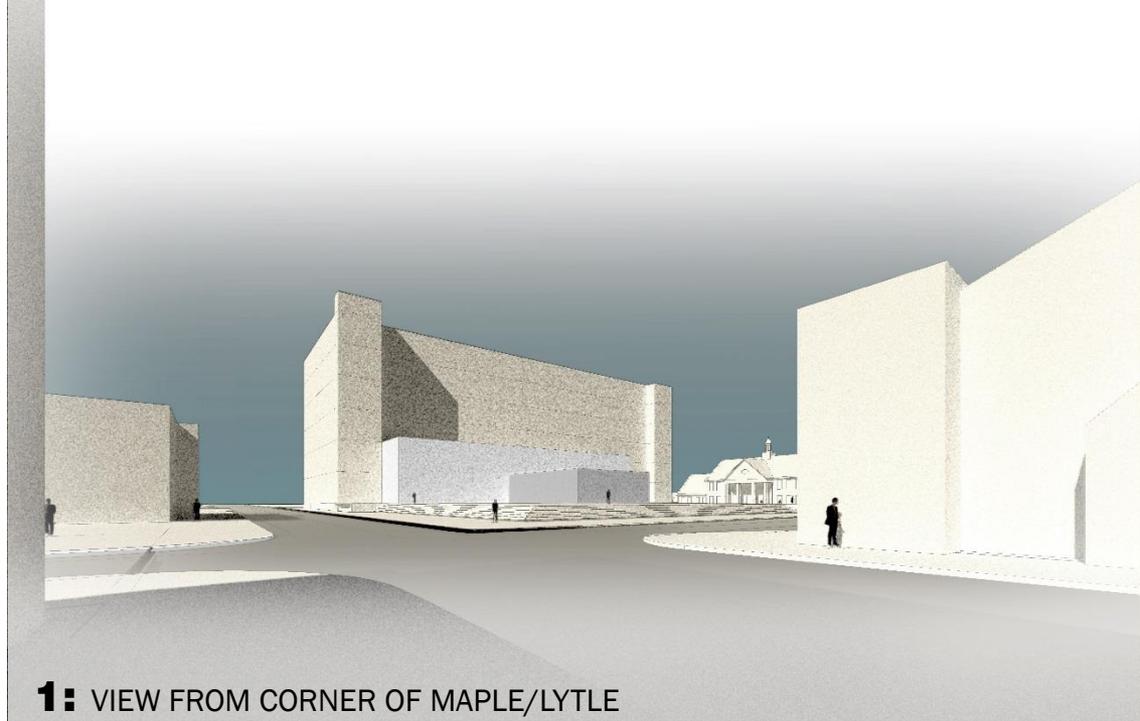
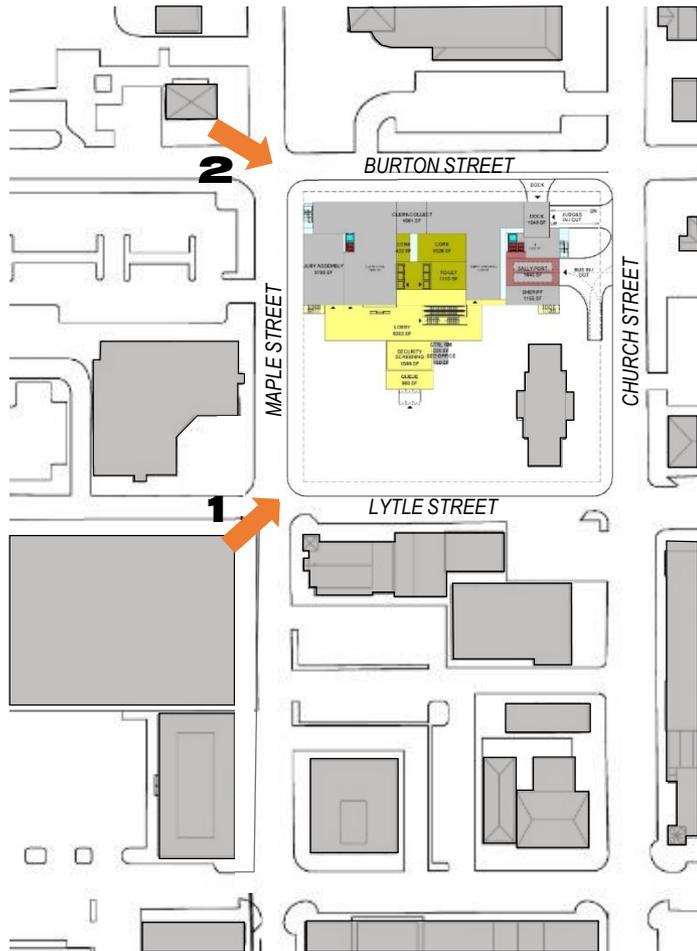


2: VIEW FROM CORNER OF CHURCH/LYTLE

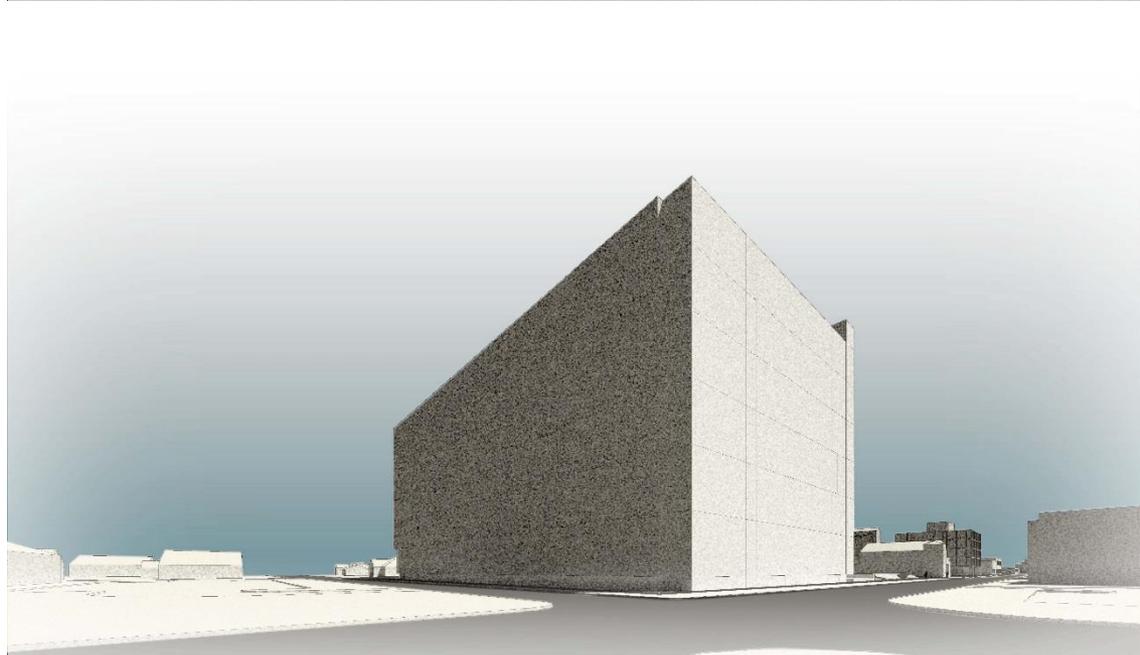
RELATIONSHIP TO CONTEXT SCALE AND MASSING

B-1

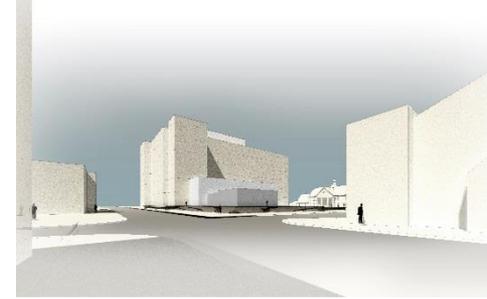
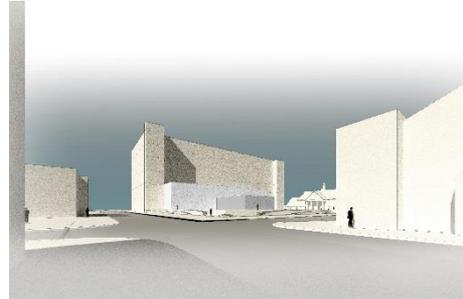
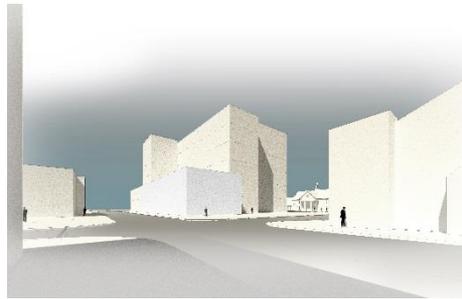
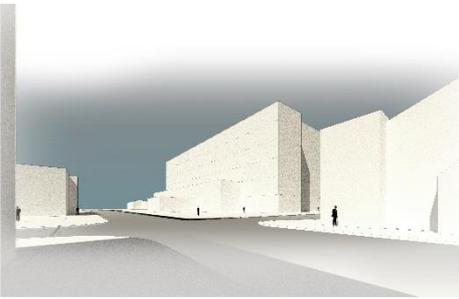
Relationship to urban plan
Relationship to adjacent sites
Urban Presence



1: VIEW FROM CORNER OF MAPLE/LYTL



2: VIEW FROM CORNER OF MAPLE/BURTON



A-1

URBAN PLANNING	●
SITE CONTEXT	●
URBAN PRESENCE (MASSING)	●

A-2

URBAN PLANNING	●
SITE CONTEXT	●
URBAN PRESENCE (MASSING)	●

B-1

URBAN PLANNING	●
SITE CONTEXT	●
URBAN PRESENCE (MASSING)	●

B-2

URBAN PLANNING	●
SITE CONTEXT	●
URBAN PRESENCE (MASSING)	●

07

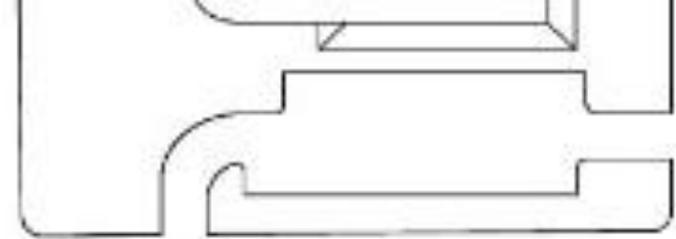
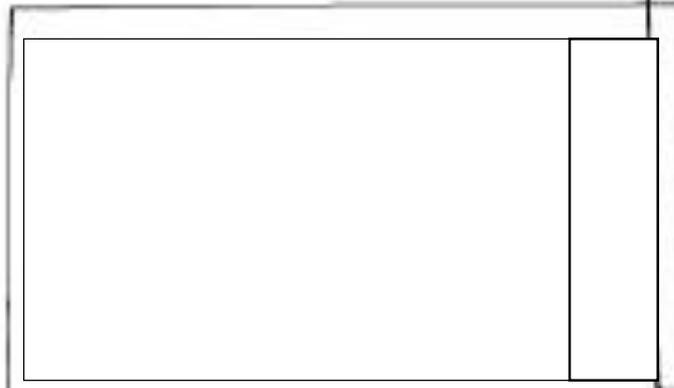
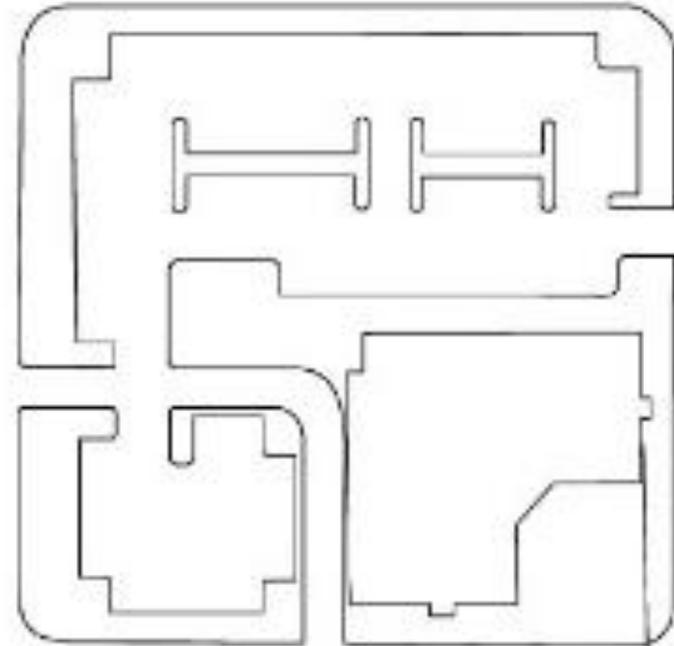
NEIGHBORHOOD IMPACT

PUBLIC SPACE: Orientation of the building creates left over space in each scheme—we have evaluated this space based on the following criteria:

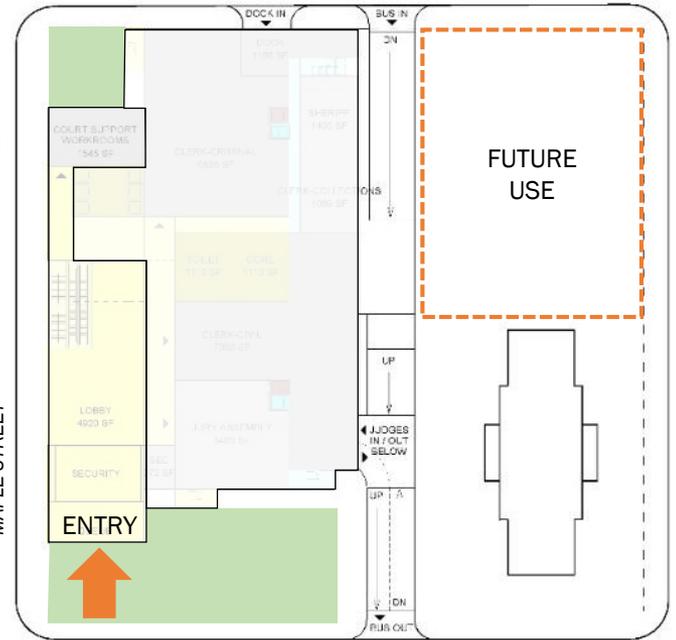
A-2

PUBLIC SPACE	●
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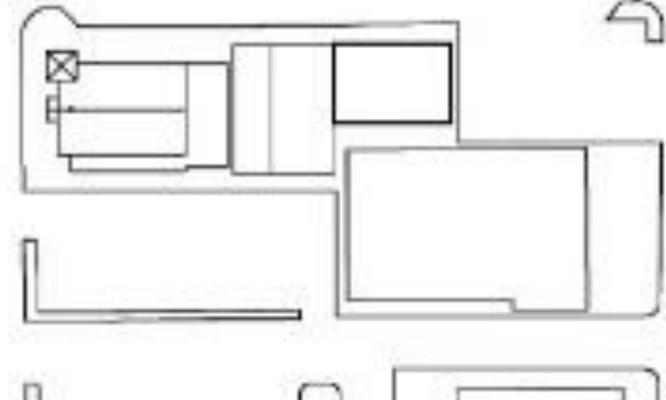
- Relationship to urban space
- Relationship to building entry
- Scale



BURTON STREET



LYTLE STREET



07

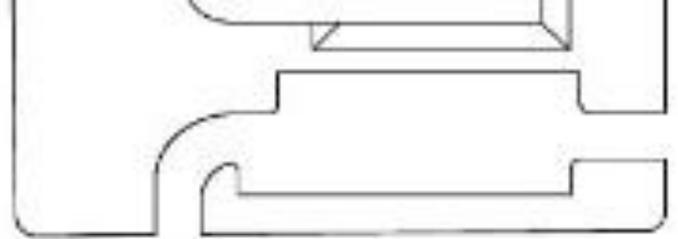
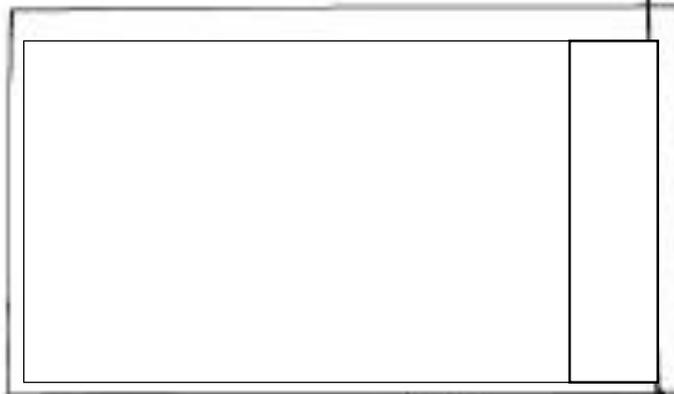
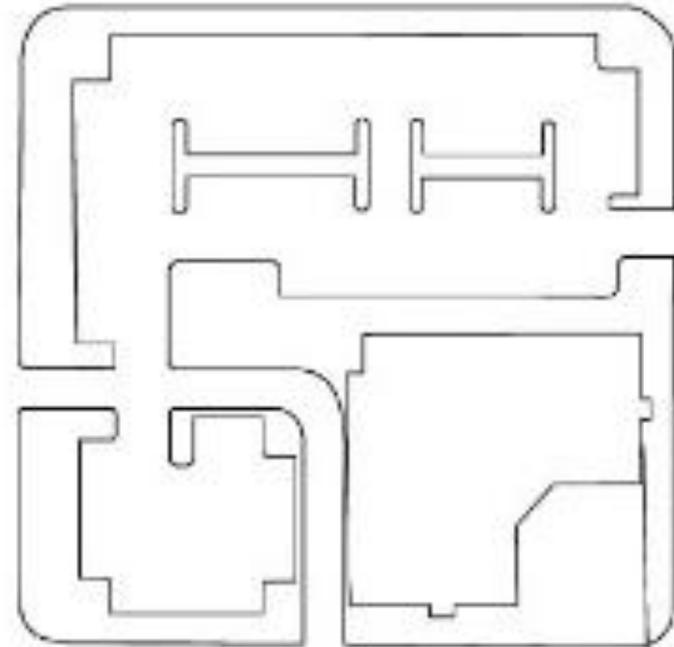
NEIGHBORHOOD IMPACT

PUBLIC SPACE: Orientation of the building creates left over space in each scheme—we have evaluated the public space based on the following criteria:

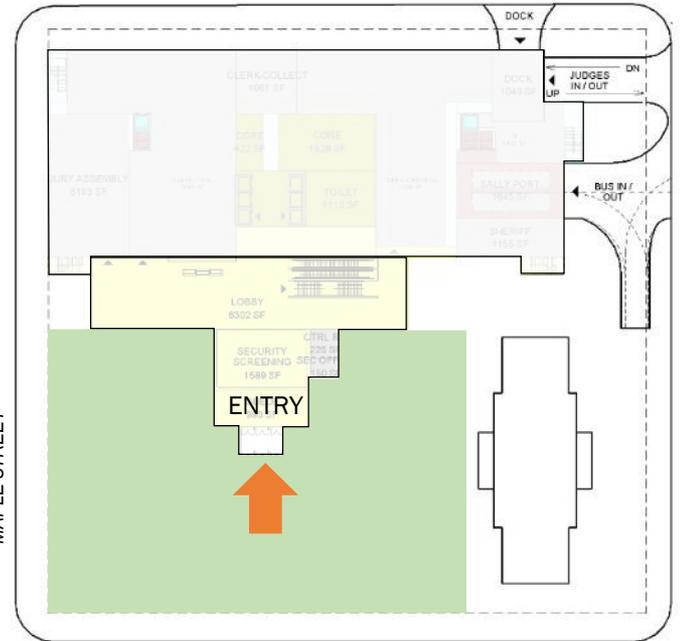
B-1

PUBLIC SPACE	●
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- Relationship to urban space
- Relationship to building entry
- Scale



BURTON STREET



LYTLE STREET



07

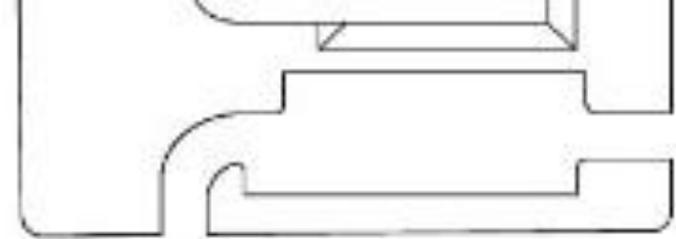
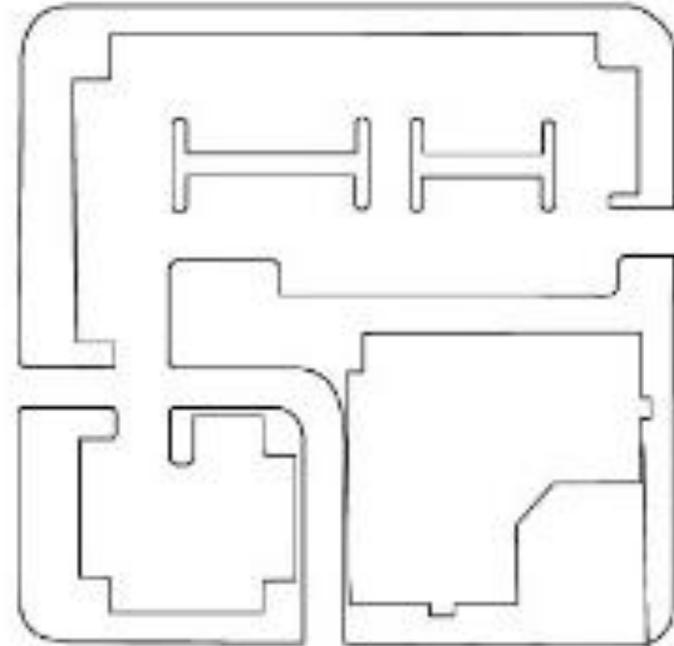
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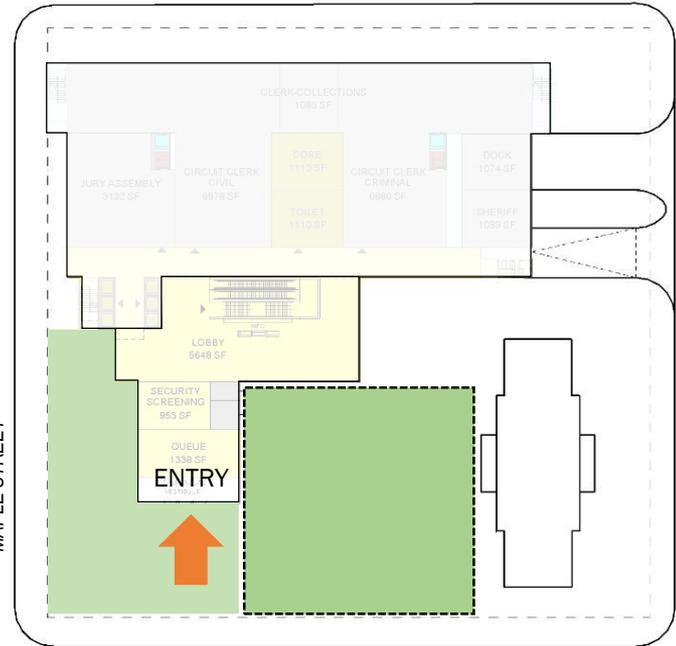
B-2

PUBLIC SPACE	●
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- Relationship to urban space
- Relationship to building entry
- Scale



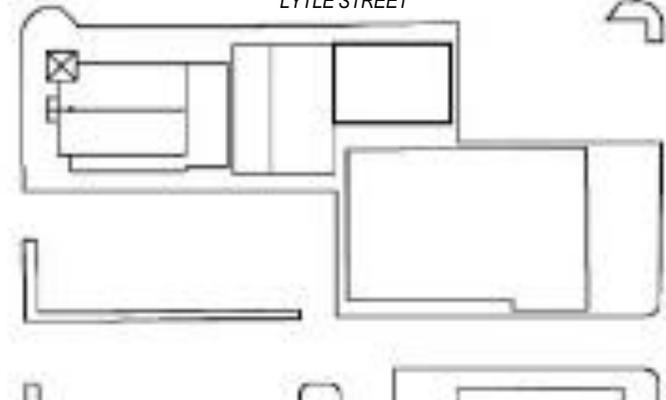
BURTON STREET

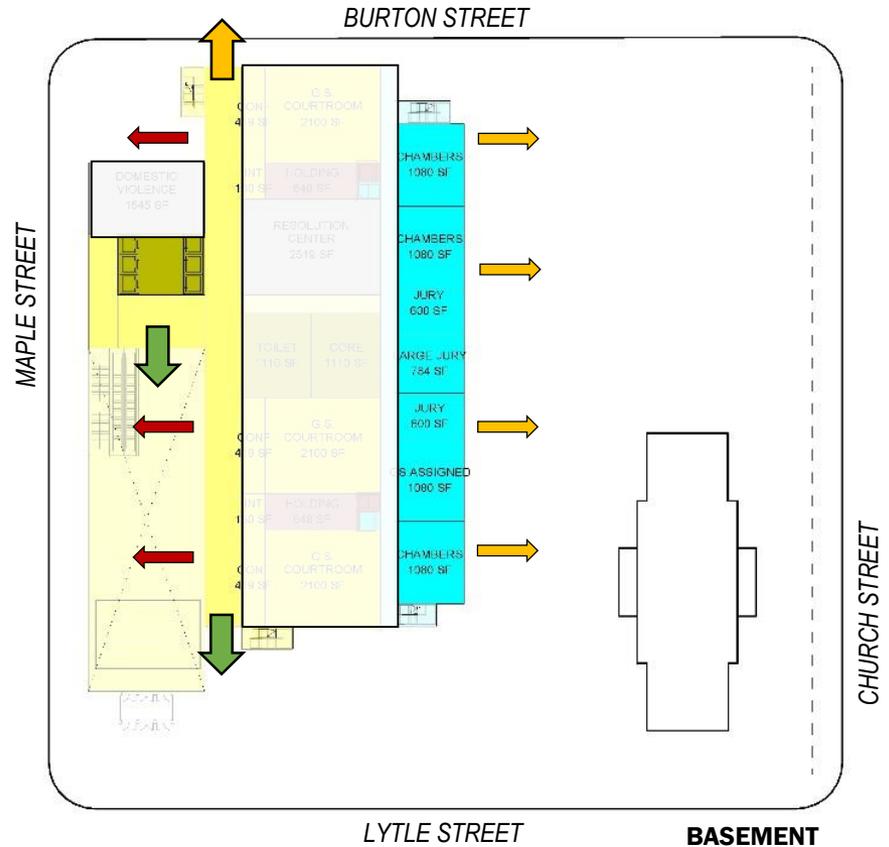
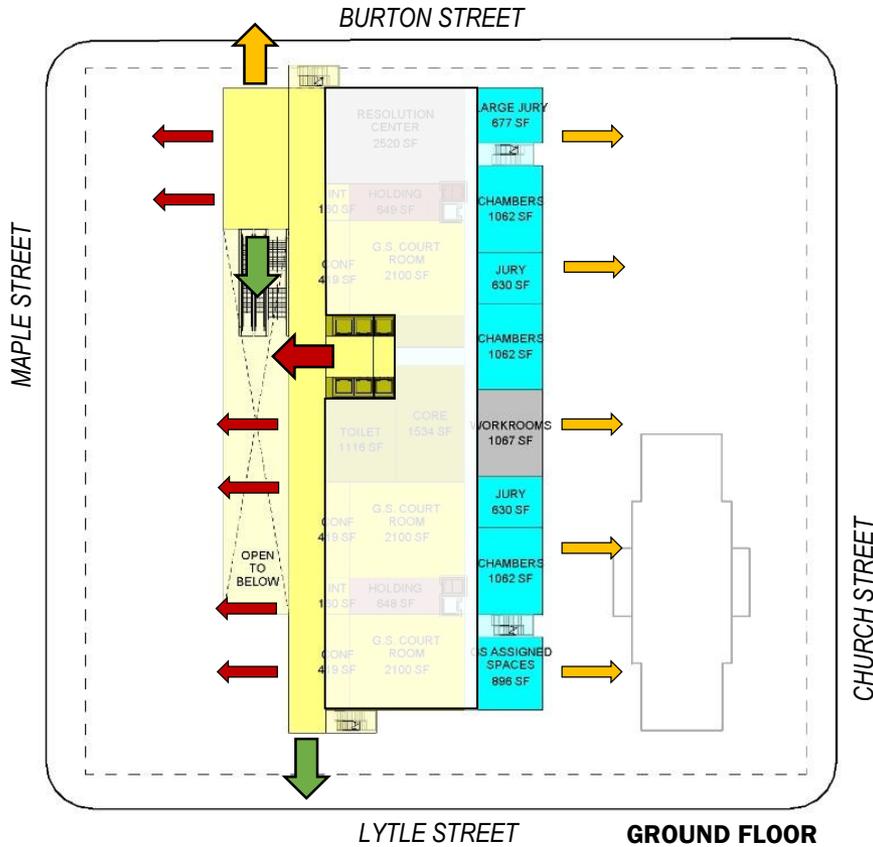


MAPLE STREET

CHURCH STREET

LYTLE STREET



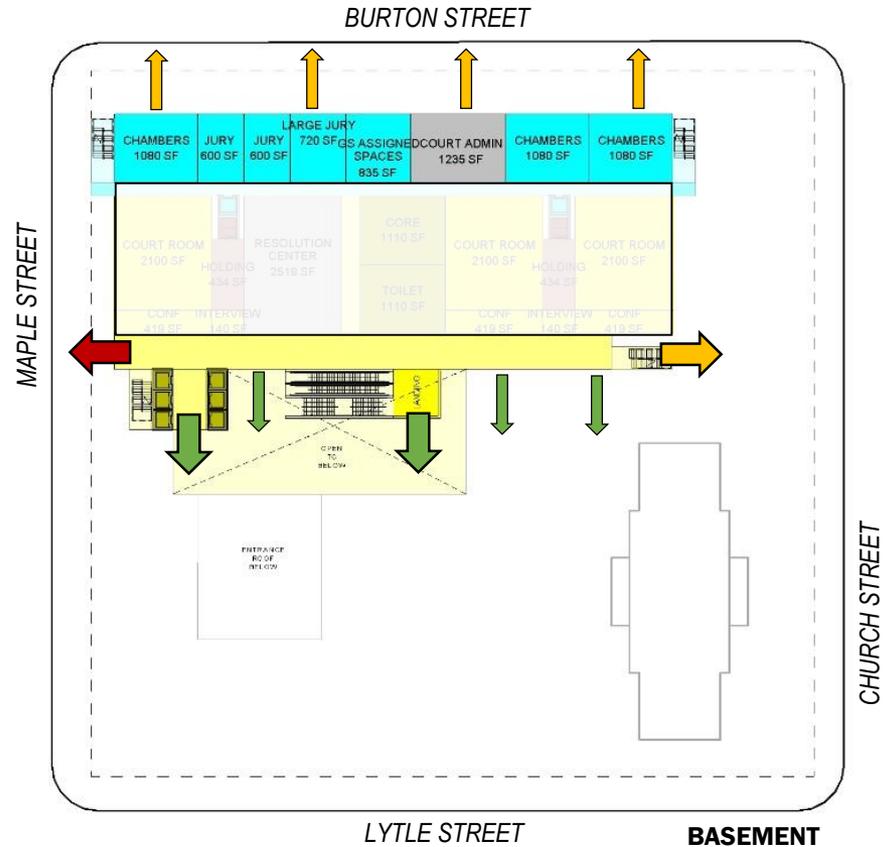
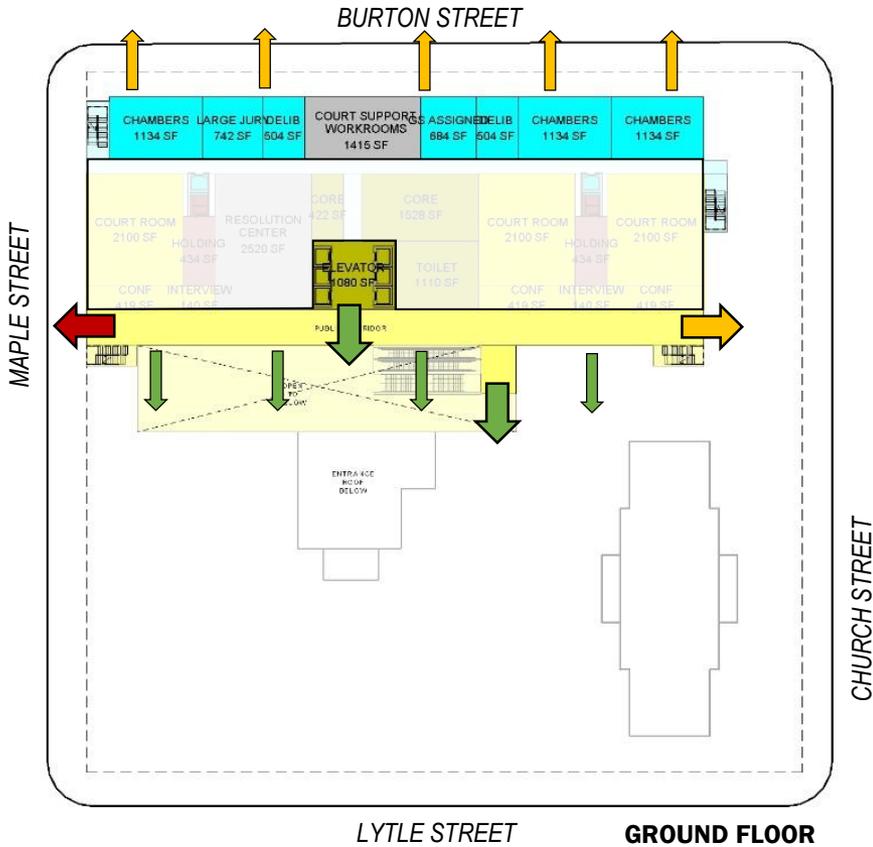


A-1

VIEWS - PUBLIC AREAS	●
VIEWS - RESTRICTED AREAS	●

A-2

VIEWS - PUBLIC AREAS	●
VIEWS - RESTRICTED AREAS	●



B-1

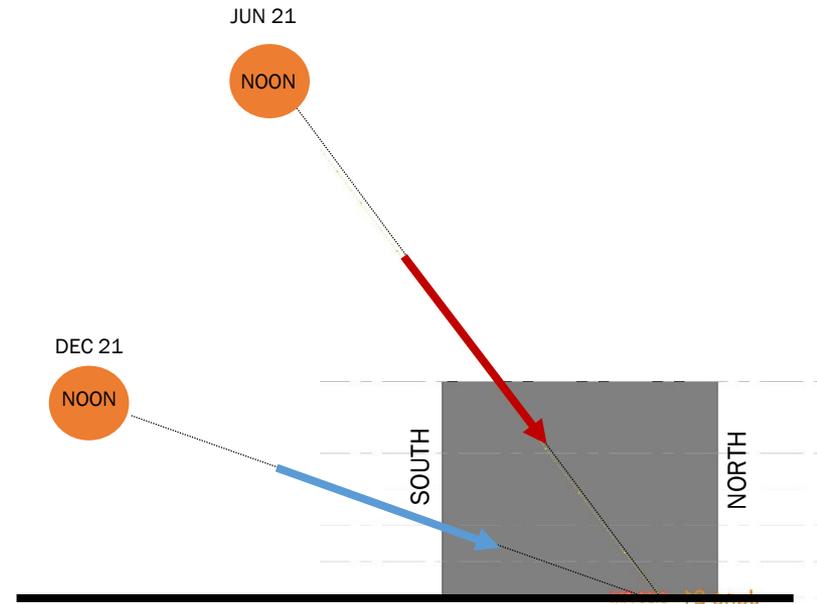
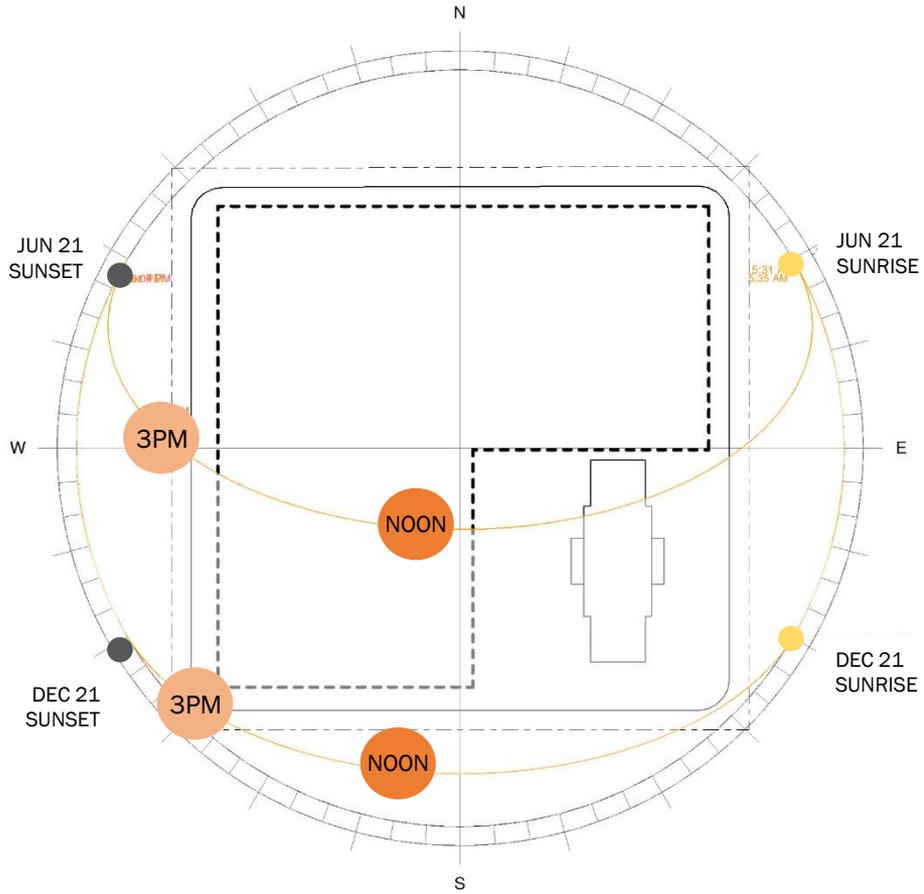
VIEWS - PUBLIC AREAS	●
VIEWS - RESTRICTED AREAS	●

B-2

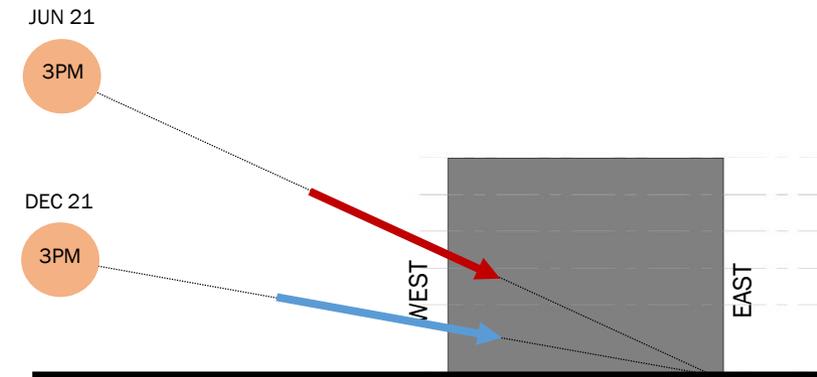
VIEWS - PUBLIC AREAS	●
VIEWS - RESTRICTED AREAS	●

WORK ENVIRONMENT

DAYLIGHTING AND SOLAR RADIATION-SUN PATH



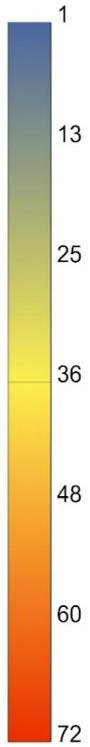
SOLAR ANGLE AT SOUTH ELEVATION



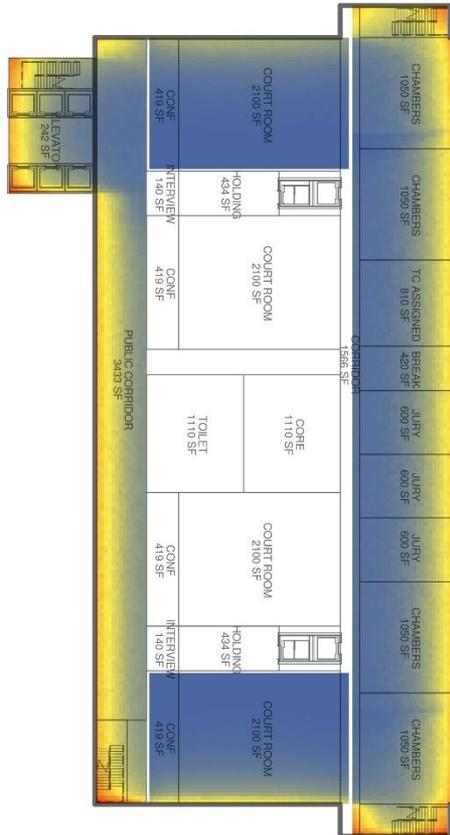
SOLAR ANGLE AT WEST ELEVATION

WORK ENVIRONMENT

DAYLIGHTING AND SOLAR IRRADIANCE--1kwh/m2 is equal to 1 hour of direct sunlight. The more direct sunlight an area receives, the more heat gain accumulated in that space. It is important to achieve a balance between daylight and heat gain. The graphic below looks at solar irradiance in each zone during the summer months when it is most critical to control.



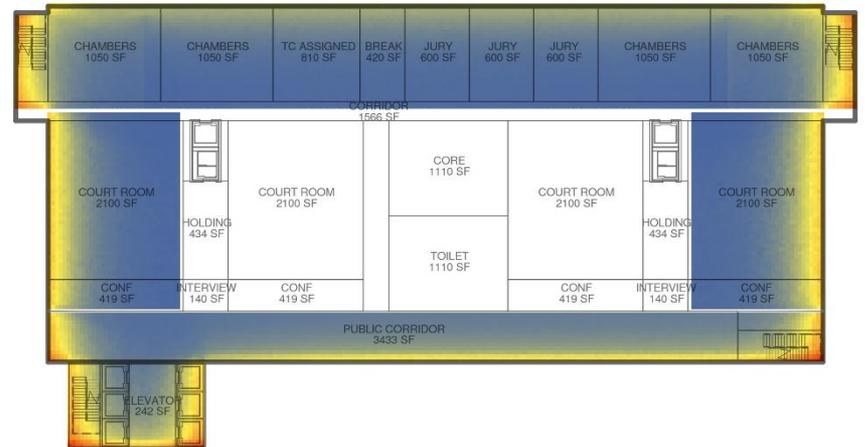
Kwh/m2
Jun 07 – Jul 07



A-1/A-2

SOLAR RADIATION	●
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MEAN kwh/m2 PER ZONE:	A1/A2	B1/B2	DELTA
• RESTRICTED (CORNERS)	●	●	19%
• RESTRICTED (CHAMBERS)	●	●	55%
• COURT ROOMS	●	●	55%
• PUBLIC CORRIDOR	●	●	26%

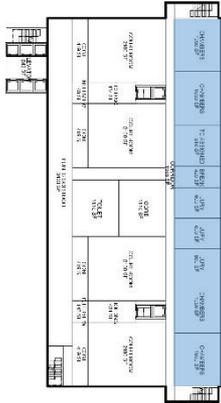


B-1/B-2

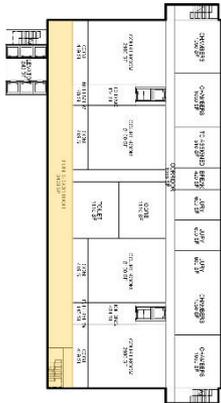
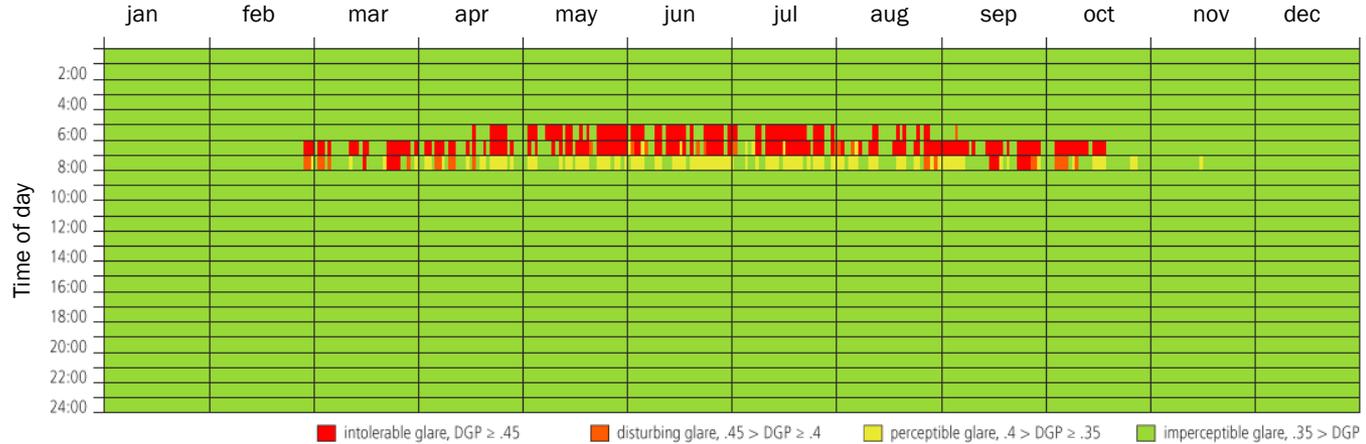
SOLAR RADIATION	●
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WORK ENVIRONMENT

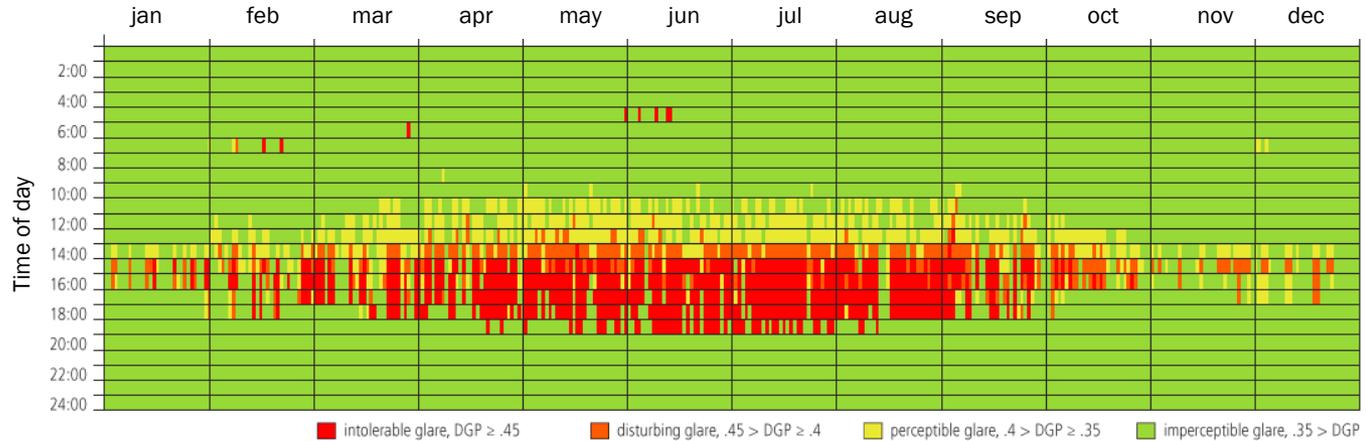
DAYLIGHTING AND GLARE-Glare is evaluated by measuring the contrast of light levels within a space. While direct light can increase actual light levels, direct sunlight, which creates high contrast, needs to be controlled.



- For most of the year, there is glare in the early morning hours (6-8 am)

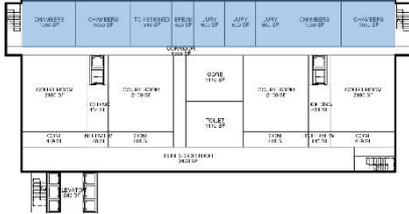


- For most of the year, there is some level of "disturbing glare" starting around 1pm and continuing through the end of the work day
- Western light is very hard to manage

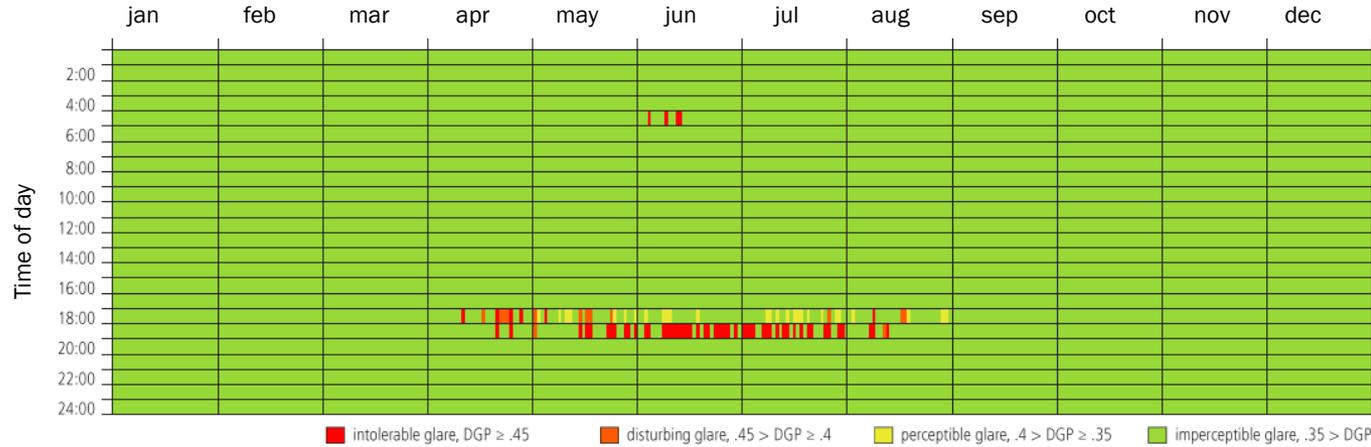


WORK ENVIRONMENT

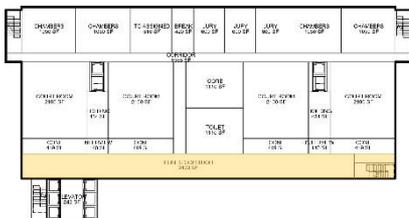
DAYLIGHTING AND GLARE-Glare is evaluated by measuring the contrast of light levels within a space. While direct light can increase actual light levels, direct sunlight, which creates high contrast, needs to be controlled.



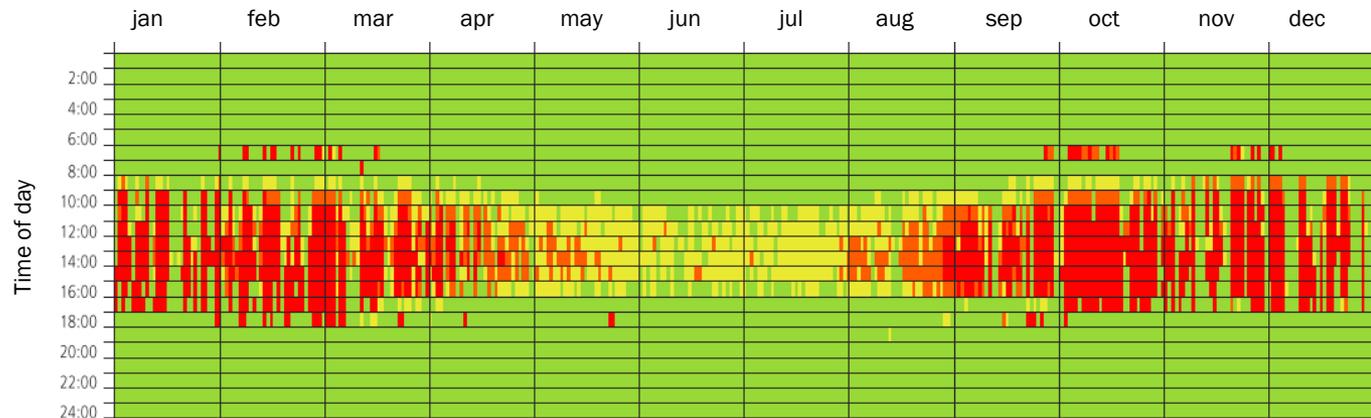
- No perceptible glare until after 6 PM



■ intolerable glare, $DGP \geq .45$ ■ disturbing glare, $.45 > DGP \geq .4$ ■ perceptible glare, $.4 > DGP \geq .35$ ■ imperceptible glare, $.35 > DGP$

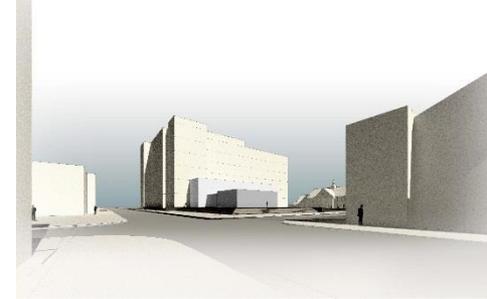
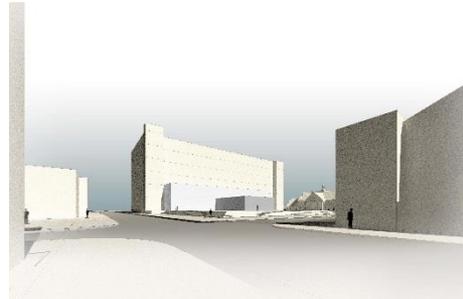
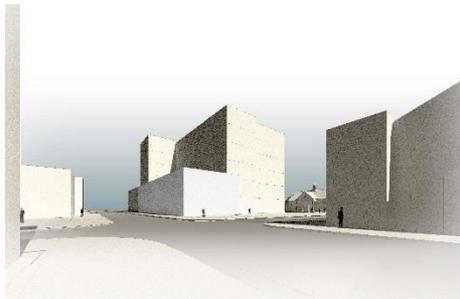
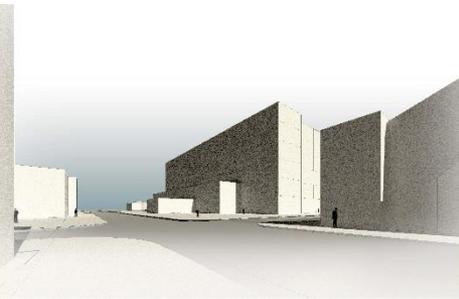


- Glare during the winter months
- Southern light easier to manage with horizontal shading that does not interfere with views



■ intolerable glare, $DGP \geq .45$ ■ disturbing glare, $.45 > DGP \geq .4$ ■ perceptible glare, $.4 > DGP \geq .35$ ■ imperceptible glare, $.35 > DGP$

EVALUATION SUMMARY



A-1

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

A-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

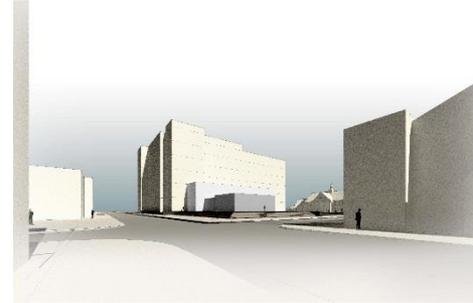
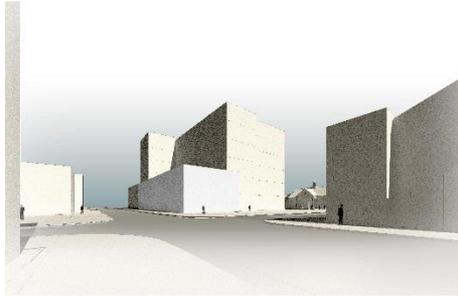
B-1

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

B-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

EVALUATION SUMMARY



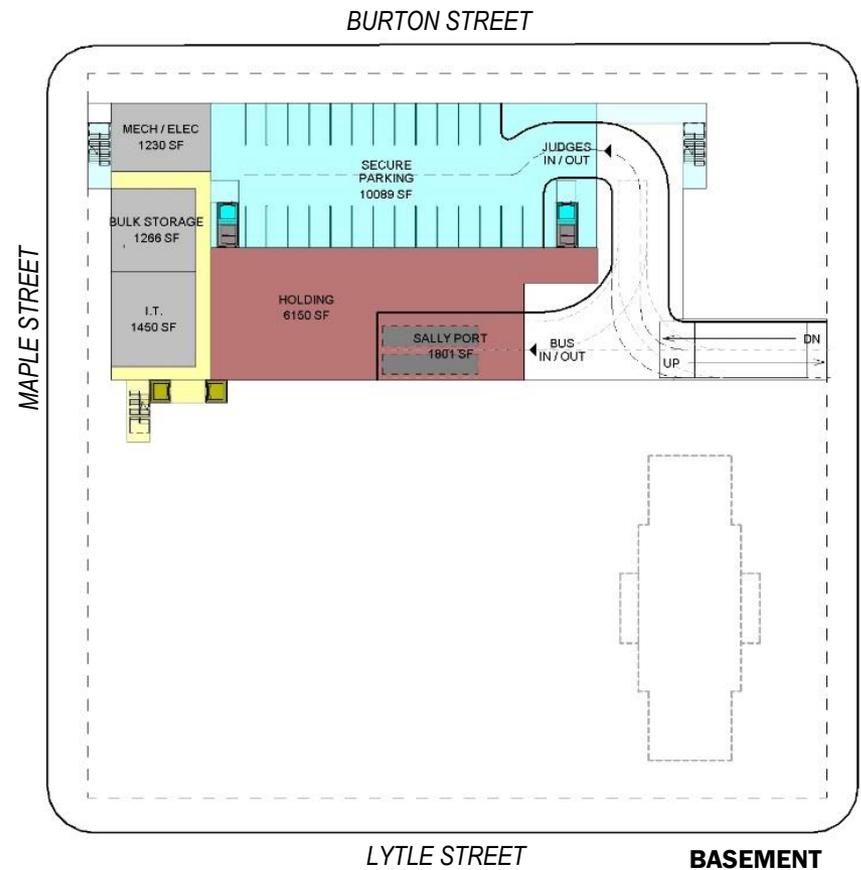
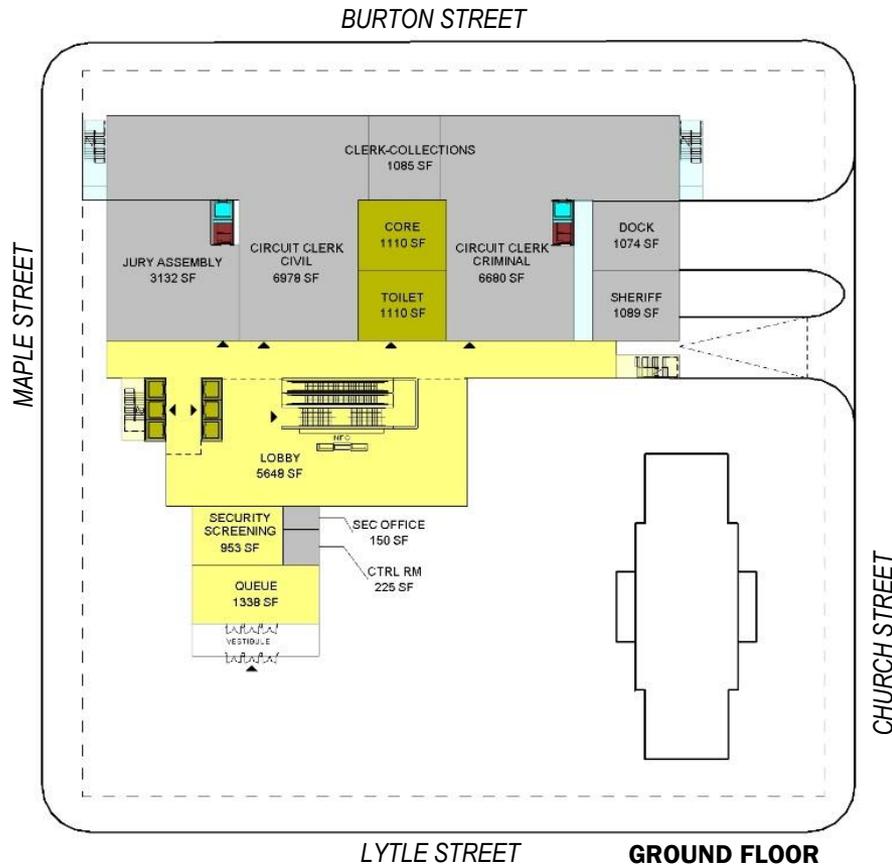
A-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

B-2

CLERK OF COURT OPERATIONS	●
MOVEMENT OF DETAINEES	●
APPROPRIATE ENTRY SEQUENCE	●
WAY-FINDING : GROUND FLOOR	●
WAY-FINDING: 2 ND FLOOR	●
VIEWS	●
DAYLIGHTING	●
SCALE AND MASSING	●
PUBLIC SPACE	●

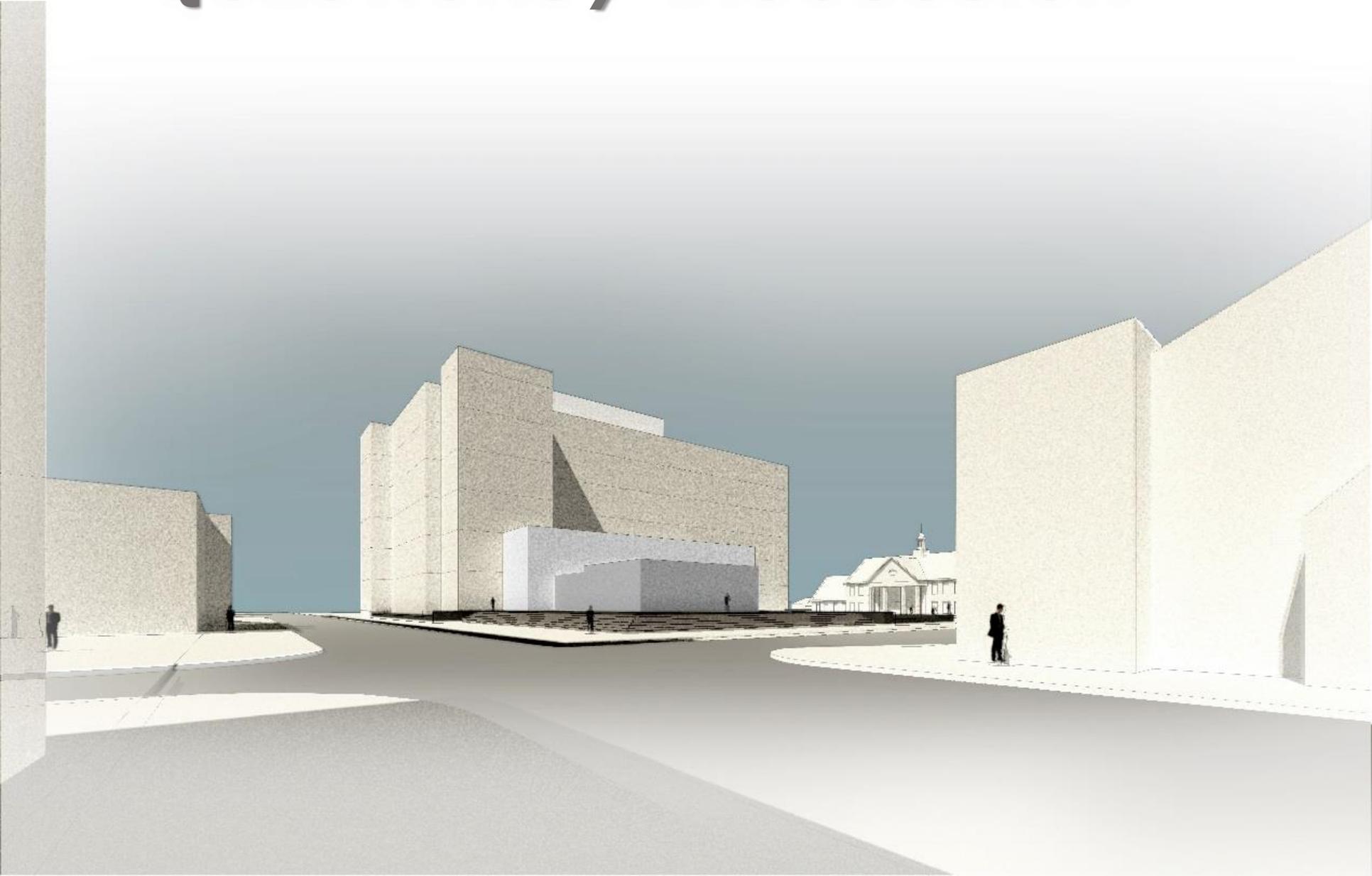
EVALUATION SUMMARY



B-2 is the recommended scheme because of the following:

- Lobby / Entry sequence is functional
- Orientation for views and daylighting provide better opportunity
- Public plaza creates an entry plaza as well as provides opportunity for urban green space
- Underground sally port configuration is efficient and secure

QUESTIONS / DISCUSSION



Rutherford County Judicial Center

DRC Meeting 03.18.2015

AGENDA

1. Overview of SD schedule and milestone decisions
2. Review (5) Functional Plan Layouts
 - Sally Port configuration
 - Entry Lobby sequence and core location
 - Site Orientation
3. Review Parking Garage Layout
4. Review Bridge connection and potential budget impact
5. Questions and Discussion
6. Overview of “Next Steps”

OBJECTIVES

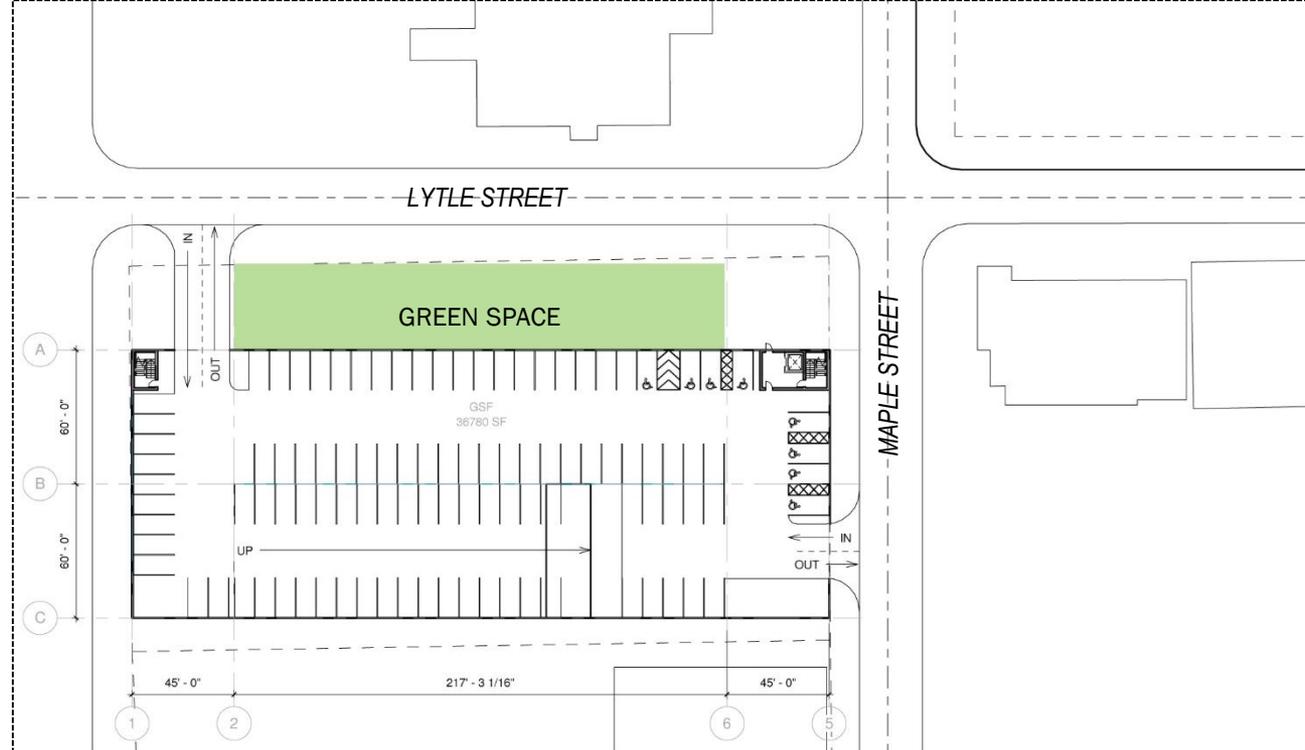
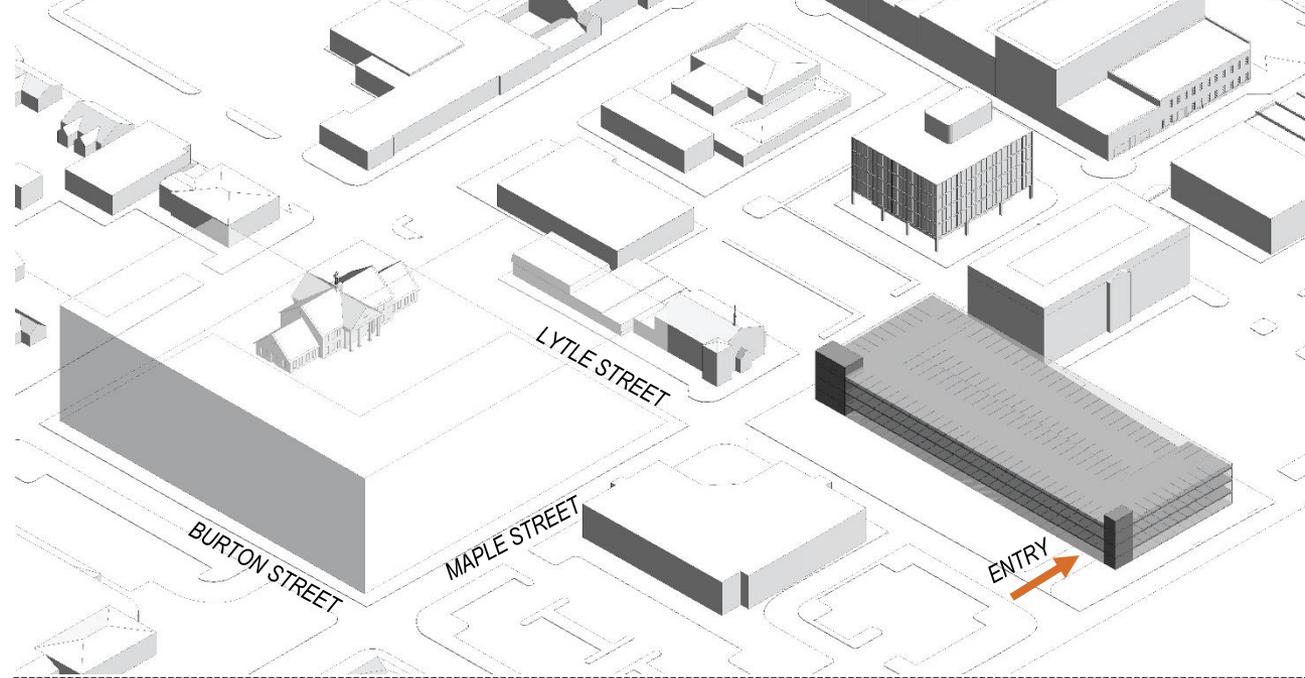
1. *Gain consensus on functional plan option to be developed further*

PARKING GARAGE

OPTION 1

Level	GSF	Spaces
1	36,780	120
2	36,780	122
3	36,780	122
4	23,896	74
	134,336	438

GSF/space: 307



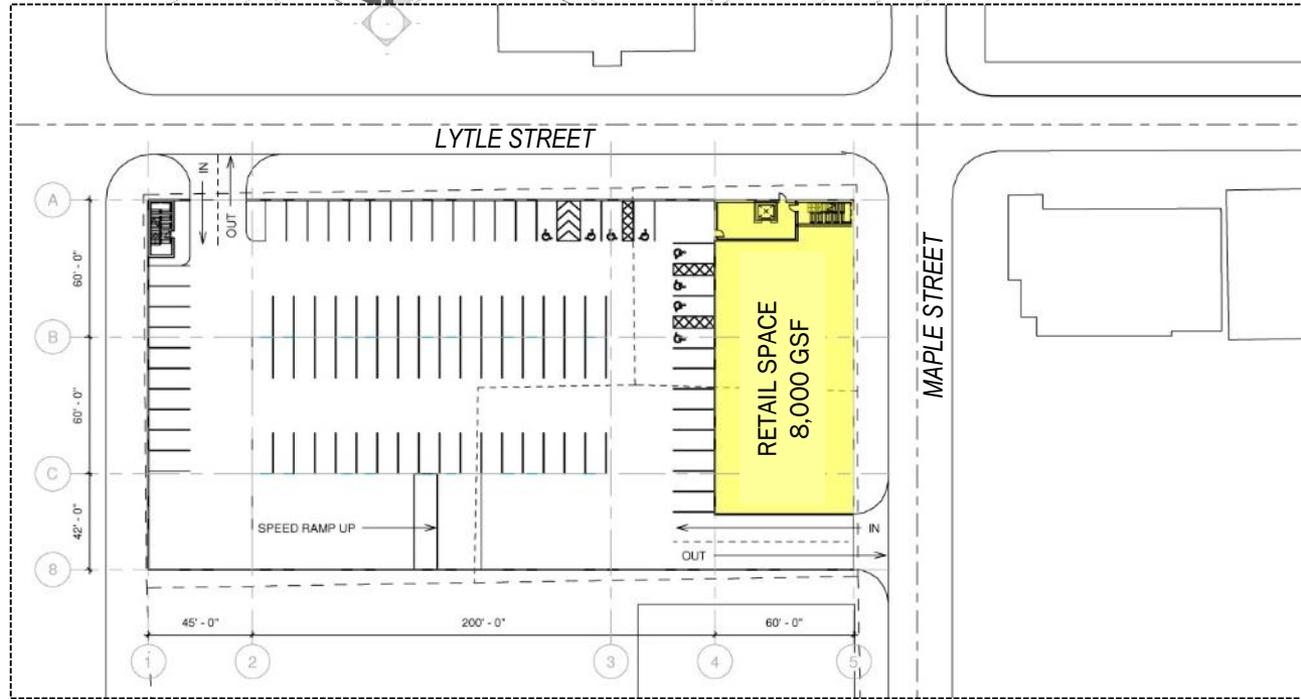
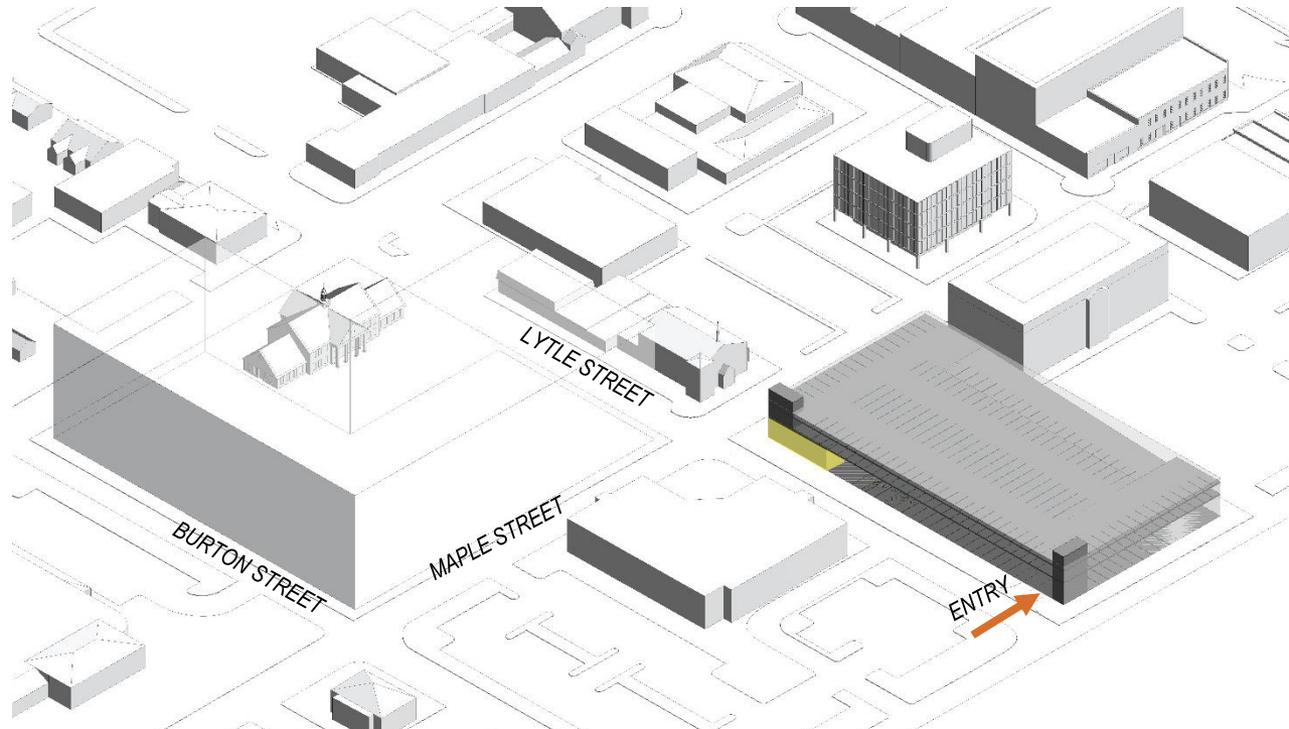
PARKING GARAGE

OPTION 2

Level	GSF	Spaces
1	38,490	132
2	49,410	154
3	40,998	89
<hr/>		
	128,898	375

GSF/space: 344

Level 1: 8,000 GSF RETAIL SPACE



QUESTIONS / DISCUSSION

Rutherford County Judicial Center

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AGENDA

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OBJECTIVES

1. *Gain consensus on functional plan option to be developed further*

BRIDGE CONNECTOR

VIEW FROM MAPLE ST LOOKING NORTH



VIEW FROM LYTLE ST LOOKING EAST



QUESTIONS / DISCUSSION

NEXT STEPS

DRC Meeting 03.18.2015

AGENDA

1. Developed floor plans for each level of preferred scheme
2. Visioning Session on exterior building aesthetics– “What does it look like?”
3. Revised parking garage layouts
4. Developed site plan

DISCUSSION ITEMS

1. Comments or questions about program items and functional relationships
for next stage of development