



The American
Institute
of Architects

Academy of
Architecture for Health
an **AIA** Knowledge Community

The Big 5

Healthcare Planning + Design
Strategies for an Adaptable Future

April 14, 2020

Moderated by Gregg D. Ostrow, AIA



LOUIS MELINK, JR.
FAIA, FACHA, ACHE
Senior Principal, Ballinger
@LmeilinkA



ERIN NUNES COOPER
AIA, ACHA, LEED AP
Principal, Ballinger
@cgdgreen



During today's presentation, we will pose questions to the audience.

To participate in the poll:

TEXT BALLINGER TO 22333



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Healthcare Essentials

As part of the Academy's multi-channel, on-line approach, these sessions provide millennial members starting out in healthcare-centric practices exposure to healthcare design fundamentals and as a refresher course for experienced healthcare architects and planners.



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AIA/CES Reporting Details

In order to receive 1 AIA LU/HSW credit, each attendee must complete the webinar survey at the conclusion of the presentation.

A link will be provided in the chat box and included in a follow-up email one (1) hour after the webinar to the individual who registered your site.

SPEAKERS



LOUIS MELINK, JR. FAIA, FACHA, ACHE
Senior Principal, Ballinger
@LmelinkA



ERIN NUNES COOPER AIA, ACHA, LEED AP
Principal, Ballinger
@cgdgreen



The background image shows a bright, modern hospital corridor. On the left, there are large windows with horizontal wooden blinds. The floor is polished and reflects the light. Several people are visible: a woman in a blue jacket walking away from the camera, a man and a woman sitting on a bench, and a group of people further down the hallway. The overall atmosphere is clean and professional.

THE BIG 5

Healthcare Planning +
Design Strategies
for an Adaptable Future

DURING TODAY'S PRESENTATION, WE WILL POSE
QUESTIONS TO THE AUDIENCE
TO PARTICIPATE IN THE POLL:

TEXT TO
22333

TYPE
BALLINGER

THEN TEXT
A, B, C, D, E or F
OR

SINGLE WORD WRITE-IN
TO RESPOND TO QUESTIONS



**Tell us about yourself. What is your background / profession
(e.g. Facilities, Architect, Interior Designer, Product Vendor,
Construction) ?**

Learning **OBJECTIVES**

1. Explore the constant state of change in healthcare facilities and the impact on design.
2. Identify and understand the impact of 5 planning strategies on a healthcare facility's adaptable future:
 - floor to floor heights
 - column spacing,
 - fixed vertical elements
 - targeted zones of flexibility
 - resiliency
3. Apply the concept of targeted zones of flexibility in projects
4. Identify building resiliency measures that conceive of healthcare facilities as part of our national infrastructure.



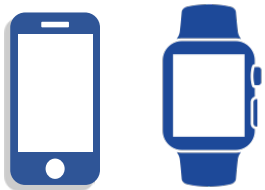
An abstract, low-angle photograph looking up at several large, light-colored concrete blocks that form a star-like or geometric pattern against a clear, bright blue sky. The blocks are positioned at the corners and edges of the frame, creating a sense of depth and architectural scale.

THE EVOLVING HEALTHCARE LANDSCAPE

The Future of HEALTHCARE



The Future of HEALTHCARE



SMARTPHONE +
WEARABLE SENSORS



AI+ MACHINE
LEARNING



INGESTIBLE
SENSORS



VR + AUGMENTED
REALITY

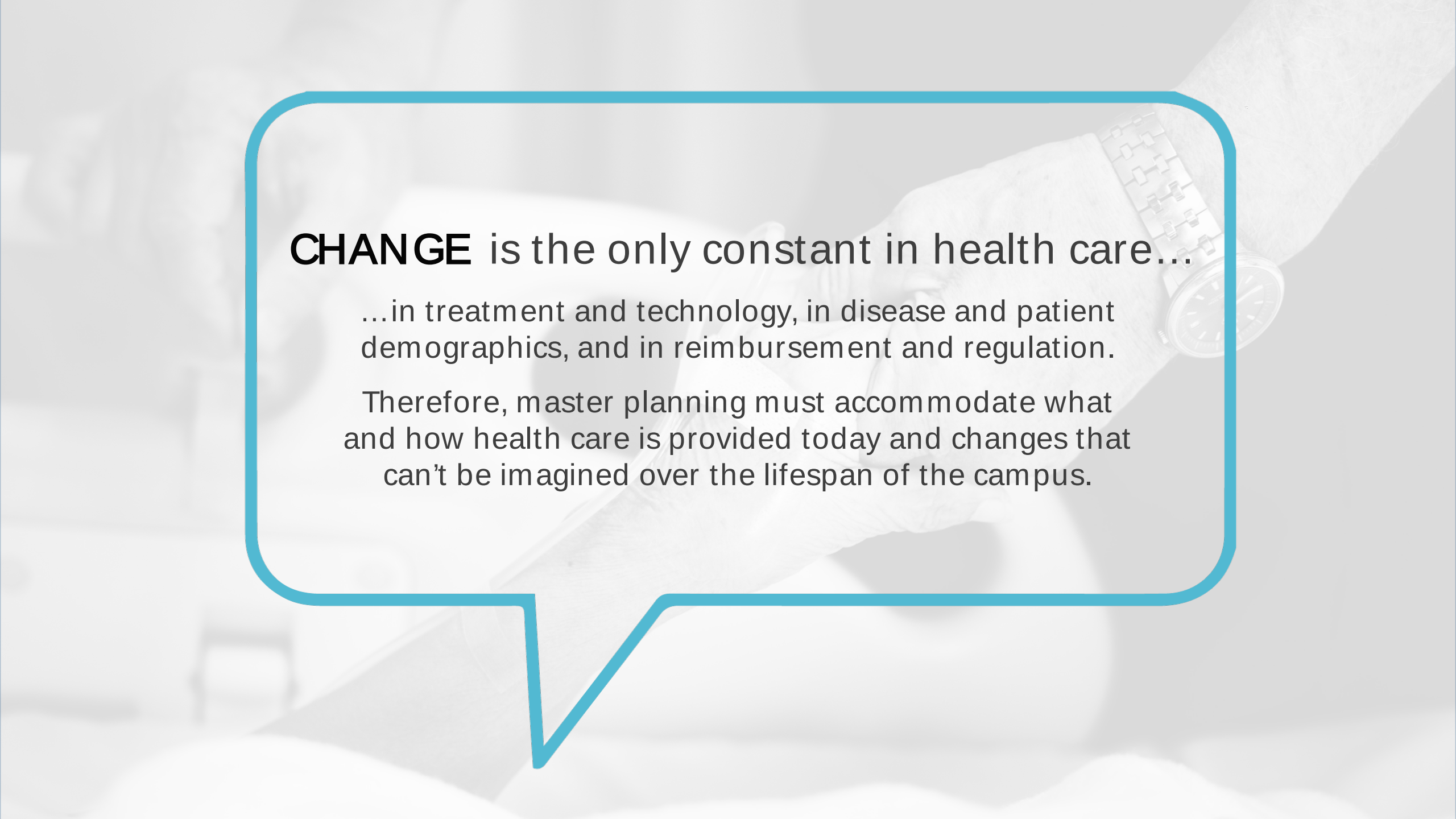
“Ultimately healthcare comes down to **human-to-human interaction**.

So if you are going to go into **artificial intelligence, machine learning**, etc., it’s got to be able to **re-humanize**, as opposed to de-humanize care.”

Dr. Steven J. Corwin
CEO, NewYork-Presbyterian

“It's going to be ***bold, creative and maybe disruptive*** approaches to figuring out the cost, access, patient experience and quality **issues we now face.**”

Stephen Klasko
President and CEO, Thomas Jefferson University

A grayscale background image showing a person's hand holding a pen, poised to write on a document. A wristwatch is visible on the person's wrist. The image is faded and serves as a backdrop for the text.

CHANGE is the only constant in health care...

...in treatment and technology, in disease and patient demographics, and in reimbursement and regulation.

Therefore, master planning must accommodate what and how health care is provided today and changes that can't be imagined over the lifespan of the campus.

A low-angle, upward-looking shot of four concrete building corners meeting at the center, forming a star-like shape against a clear blue sky. The concrete is a light, weathered grey. The text 'THE BIG 5' is centered in the sky area.

THE BIG 5

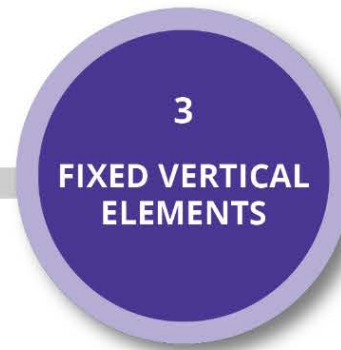
Planning Strategies for **ADAPTABILITY**



Floor to floor heights that support state-of-the-art and state-of-the-future technology



Column spacing and contiguous floor area that allows changes of use over time



Locations + capacities of elevators, stairs, shafts, and other fixed vertical elements using edges versus centers



Targeted zones of flexibility to invest strategically and avoid over pre-investing



Resiliency measures that conceive of healthcare facilities as part of our community infrastructure

5

4

3

2

1

1. FLOOR TO FLOOR HEIGHTS

Floor to floor heights
that support state-of-the-art
and state-of-the-future
technology



5

4

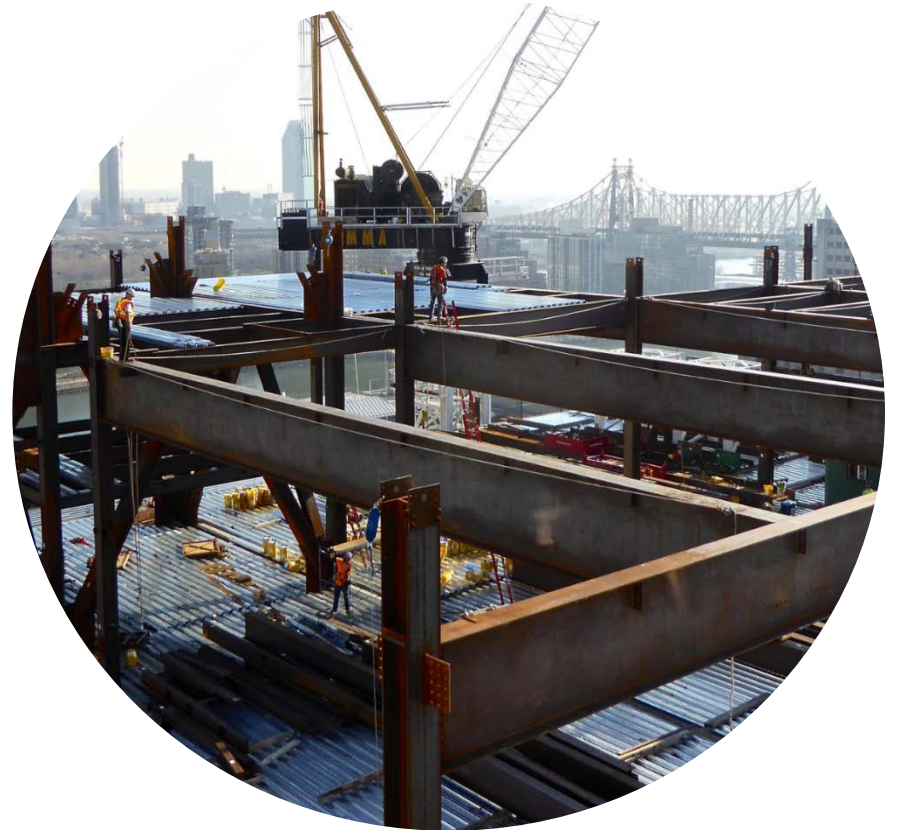
3

2

1

2. COLUMN SPACING

Column spacing + contiguous floor area that allows changes of use over time



5

4

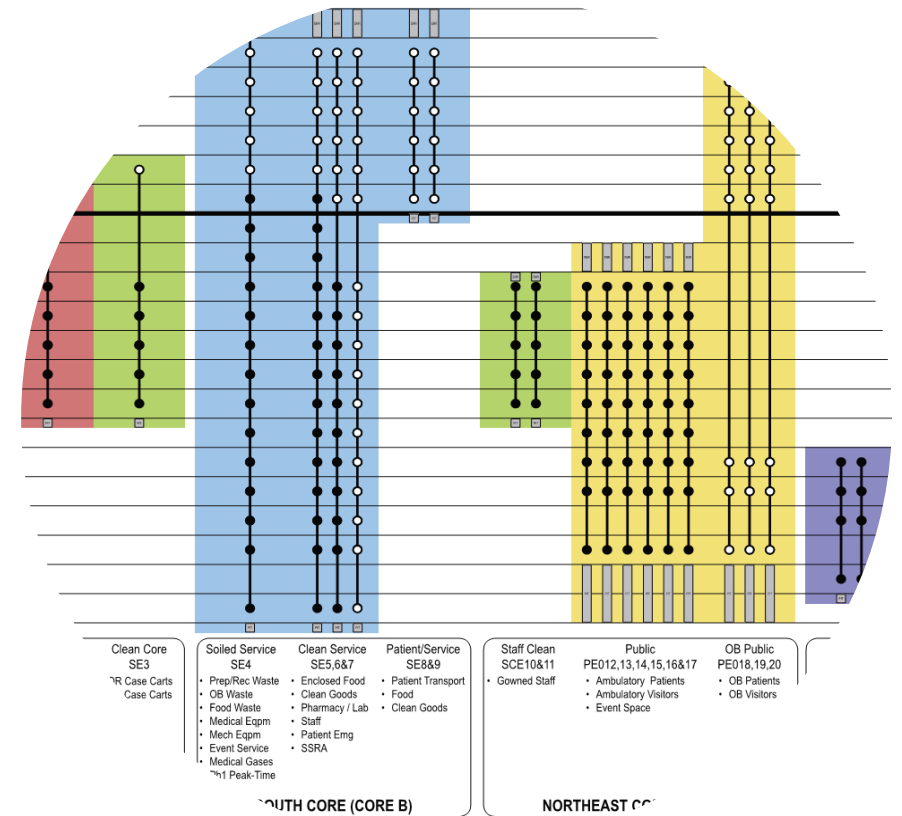
3

2

1

3. FIXED VERTICAL ELEMENTS

Locations + capacities of
elevators, stairs, shafts, and
other fixed vertical elements
using edges versus centers



5

4

3

2

1

4. STRATEGIC ZONES OF FLEXIBILITY

Targeted zones of flexibility
to invest strategically and
avoid over pre-investing



5

4

3

2

1

5. RESILIENCY

Resiliency measures
that conceive of healthcare
facilities as part of our
community infrastructure



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

'THE BIG 5' SCORECARD

?

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



A: EXCELLENT



B: ABOVE AVERAGE



C: AVERAGE



D: BELOW AVERAGE



E: POOR



NYU Langone Health Ambulatory Care Center

TIMELINE
2012-2018

24 Stories
320,000 SF Total
20,000 GSF/Floor

New York, NY



Tower Health System Reading Healthplex

TIMELINE
2012-2017

5 Stories
500,000 SF Total
30,000 GSF/Floor (Beds)

West Reading, PA



Penn Medicine Chester County Hospital

Lasko Tower and Procedural
Platform + Inpatient Beds

TIMELINE
2014-2020

6 Stories
350,000 SF Total
80,000 GSF/Floor (Procedure)

West Chester, PA



New York-Presbyterian David H. Koch Center + Alexandra Cohen Hospital for Women and Newborns

TIMELINE
2011-2020

18 Stories
740,000 SF Total
42,000 GSF/Floor

New York, NY

*Designed through a collaboration between
Ballinger, HOK, and Pei Cobb Freed & Partners*

What is the ideal floor to floor height for a new diagnostics and treatment floor?

$\leq 14' 0''$

15' 0''

16' 0''

17' 0''

$\geq 18' 0''$



NYU LANGONE HEALTH

Ambulatory Care Center



New York, NY

320,000 SF Ambulatory Care | 1 Acre Site



16 of 24 Floors

5 Phase
Implementation

NYU
LANGONE
STATS

Infrastructure
Replacement

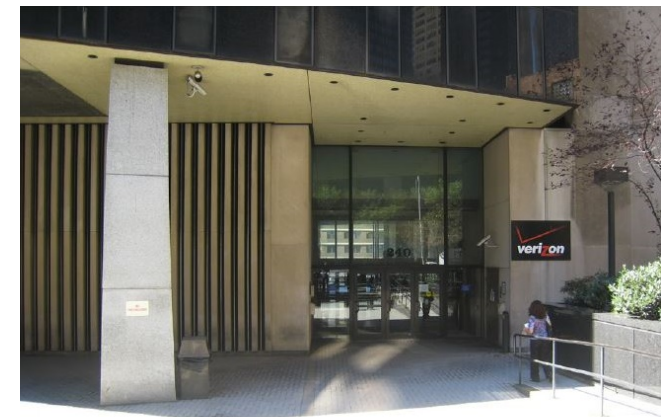
Adaptive Reuse



24	MEP / INFRASTRUCTURE	
23	ENDOSCOPY	Occupied
22	MOLECULAR PATHOLOGY	
21	AMBULATORY SURGERY	Full Renovation
20	NEUROLOGY	Occupied
19	MULTIPLE SCLEROSIS CANCER CENTER	
18	CANCER CENTER INFUSION	
17	RUSK REHABILITATION	
16	RUSK REHABILITATION	
15	RUSK REHABILITATION CONCUSSION	
14	PAIN SERVICES ENT	
13	WOUND CARE OPHTHALMOLOGY	
12	GENERAL DERMATOLOGY SKIN + CANCER	Occupied
11	GENERAL DERMATOLOGY PHOTOMEDICINE	
10	VERIZON TELECOMMUNICATIONS	
9	VERIZON TELECOMMUNICATIONS	
8	VERIZON TELECOMMUNICATIONS	
7	VERIZON TELECOMMUNICATIONS	
6	VERIZON TELECOMMUNICATIONS	
5	VERIZON TELECOMMUNICATIONS	
4	VERIZON TELECOMMUNICATIONS	
3	AMBULATORY SURGERY	Occupied
2	MEP / INFRASTRUCTURE	Occupied
M	PRE-ADMISSION TESTING	
1	ENTRY + PLAZAS	
C	MEP / INFRASTRUCTURE	



RENOVATION: NORTH PLAZA



PRE-RENOVATION CONDITIONS:
NORTH PLAZA



RENOVATION: GROUND FLOOR LOBBY



PRE-RENOVATION CONDITIONS:
GROUND FLOOR LOBBY + RECEPTION

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

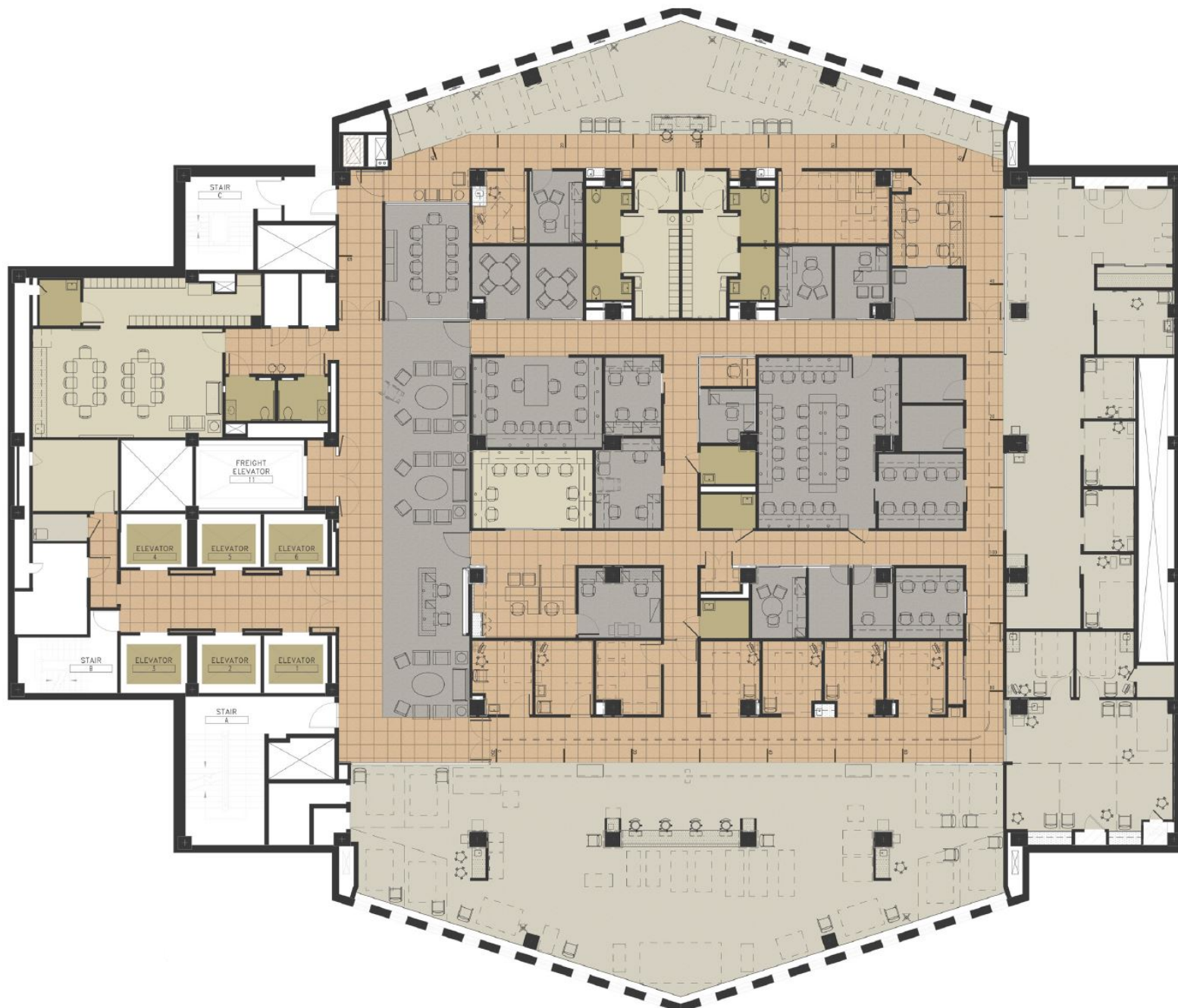
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

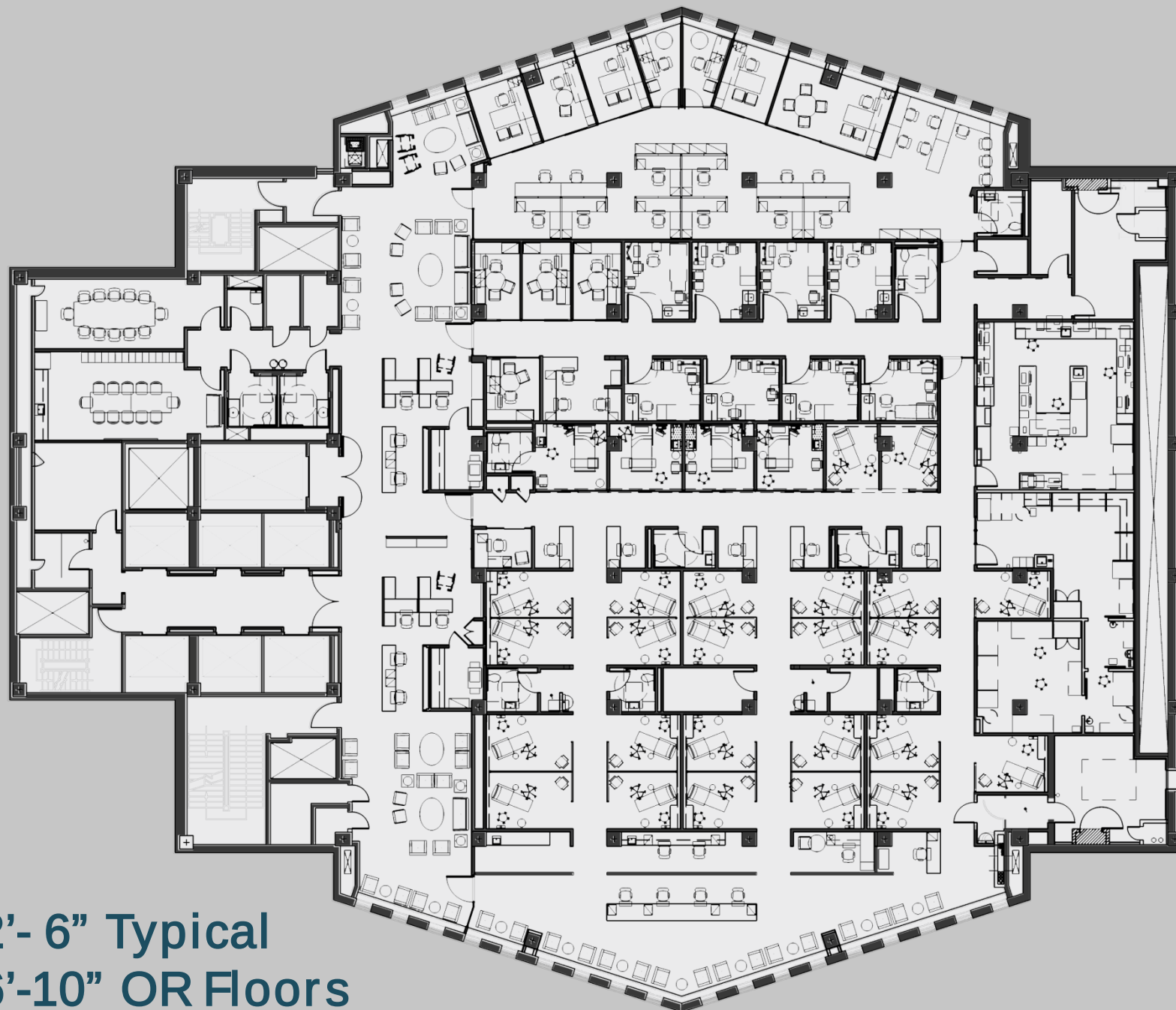
2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

12'- 6" Typical
16'-10" OR Floors



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

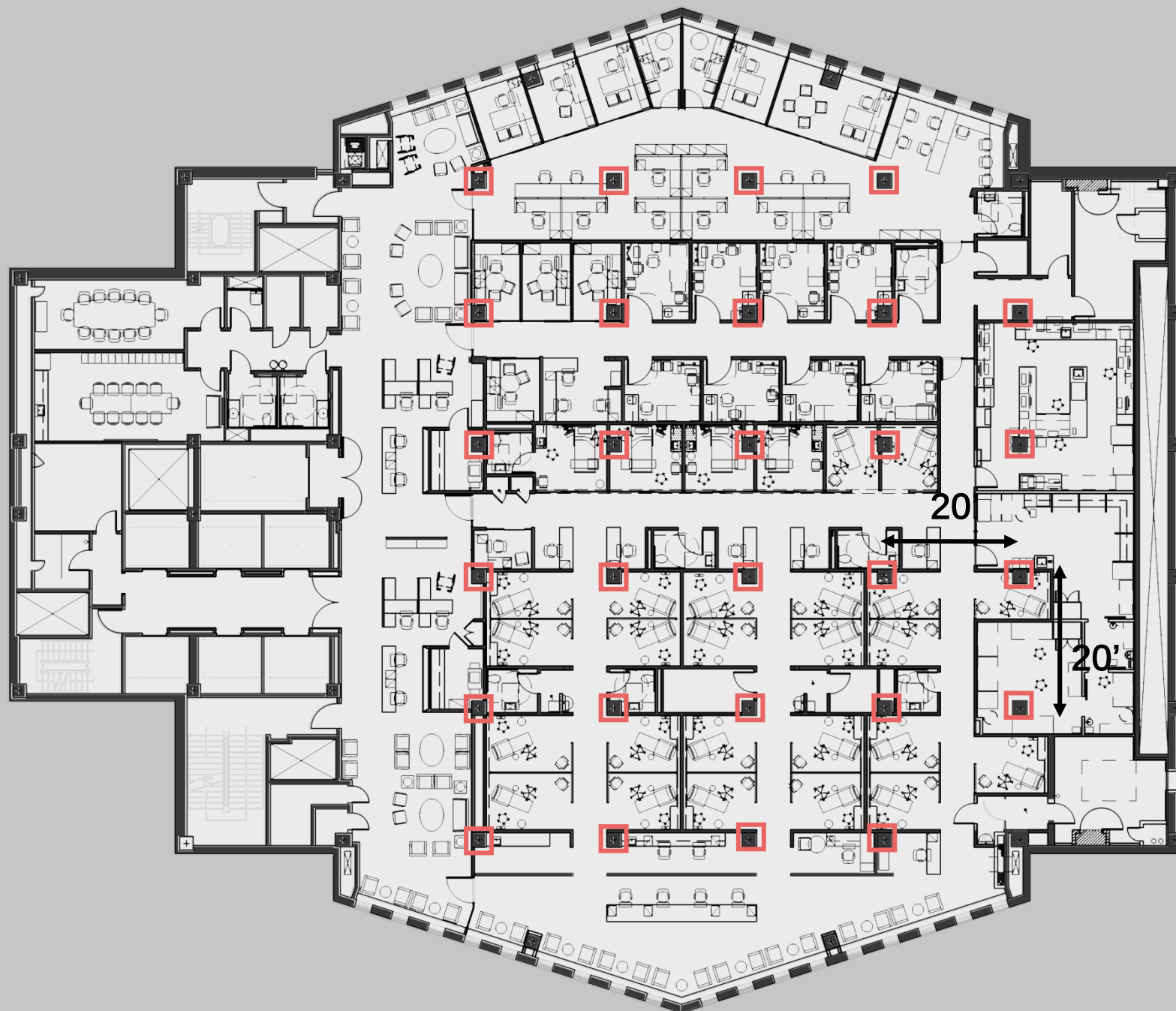
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

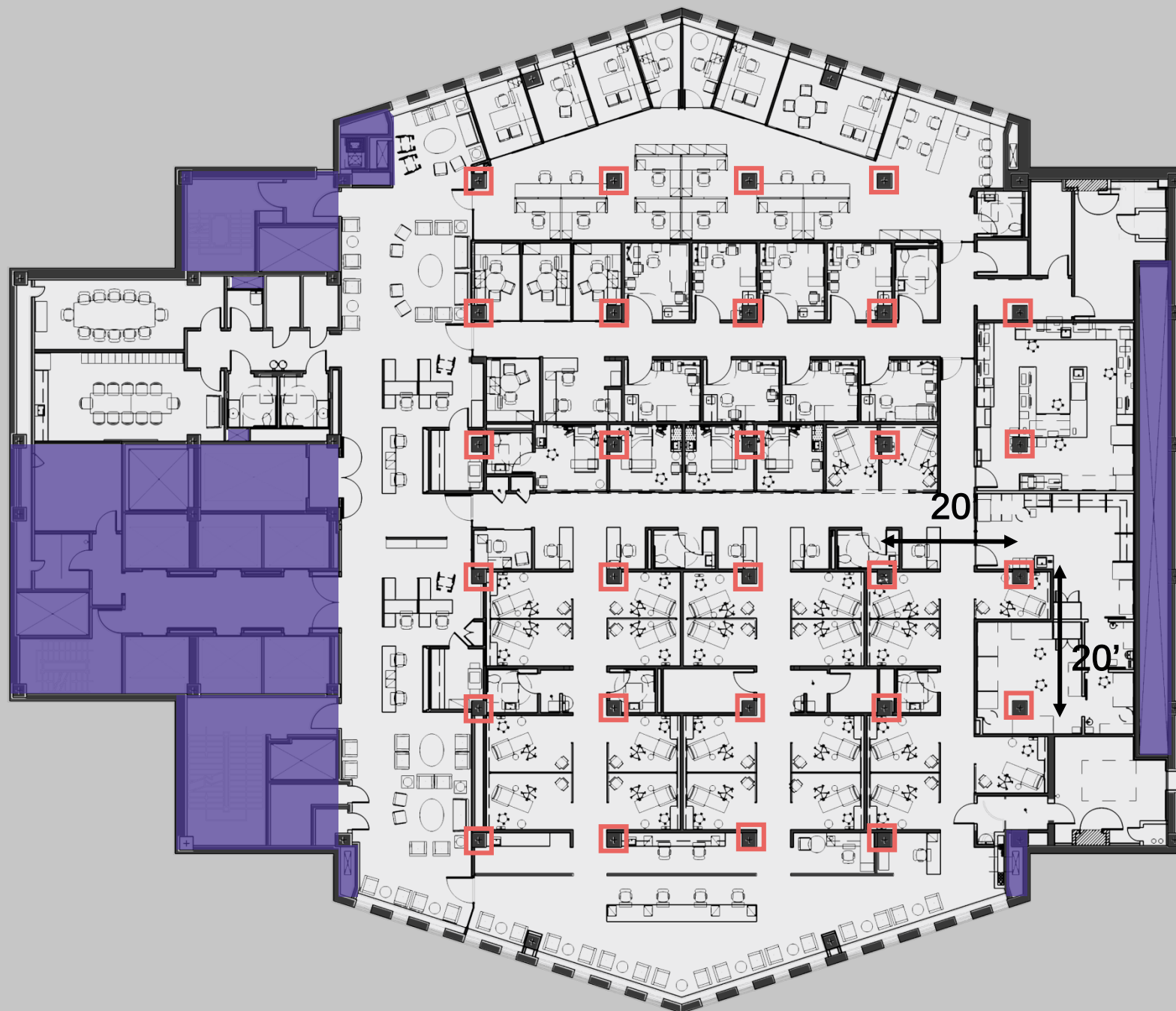
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

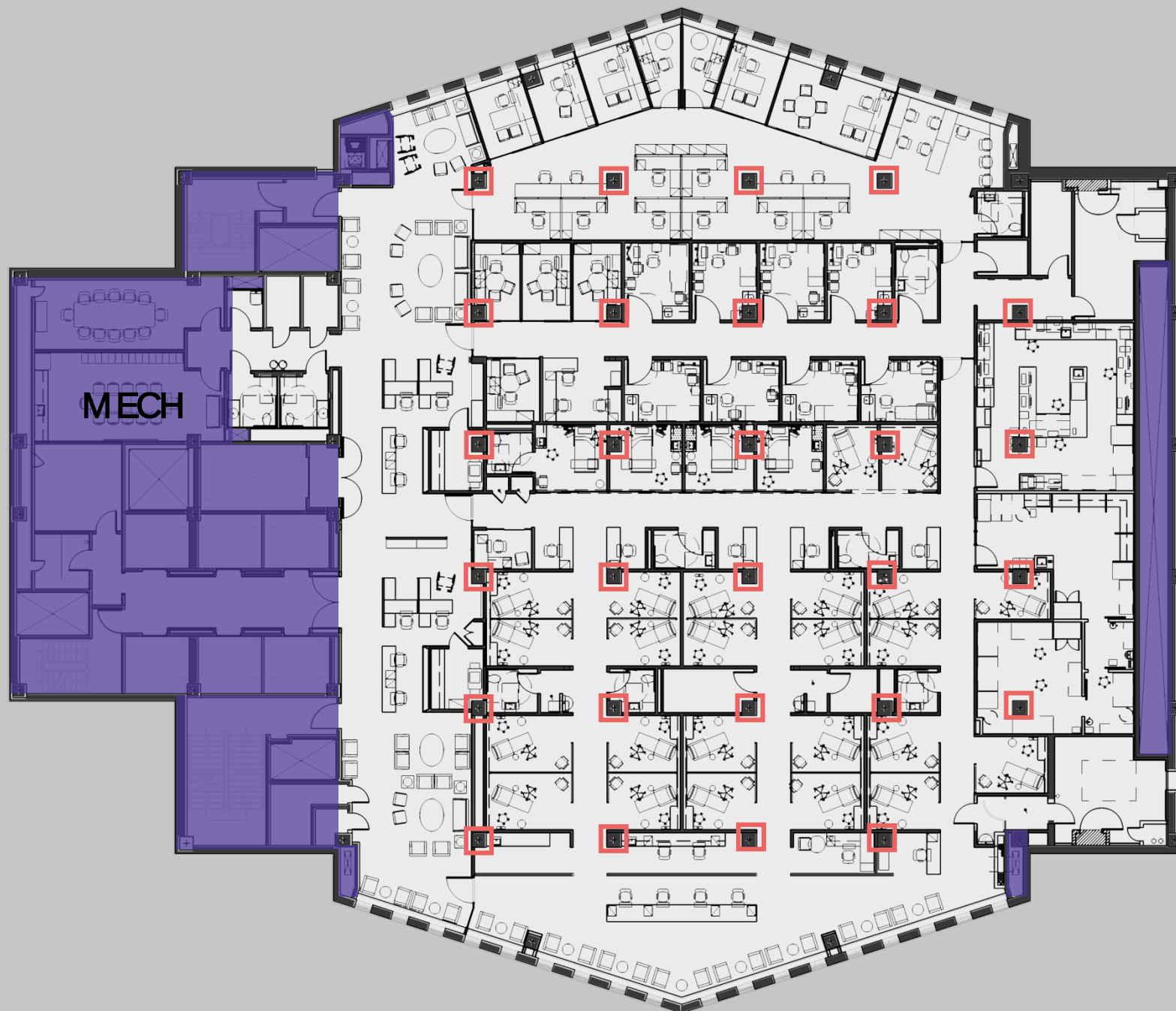
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

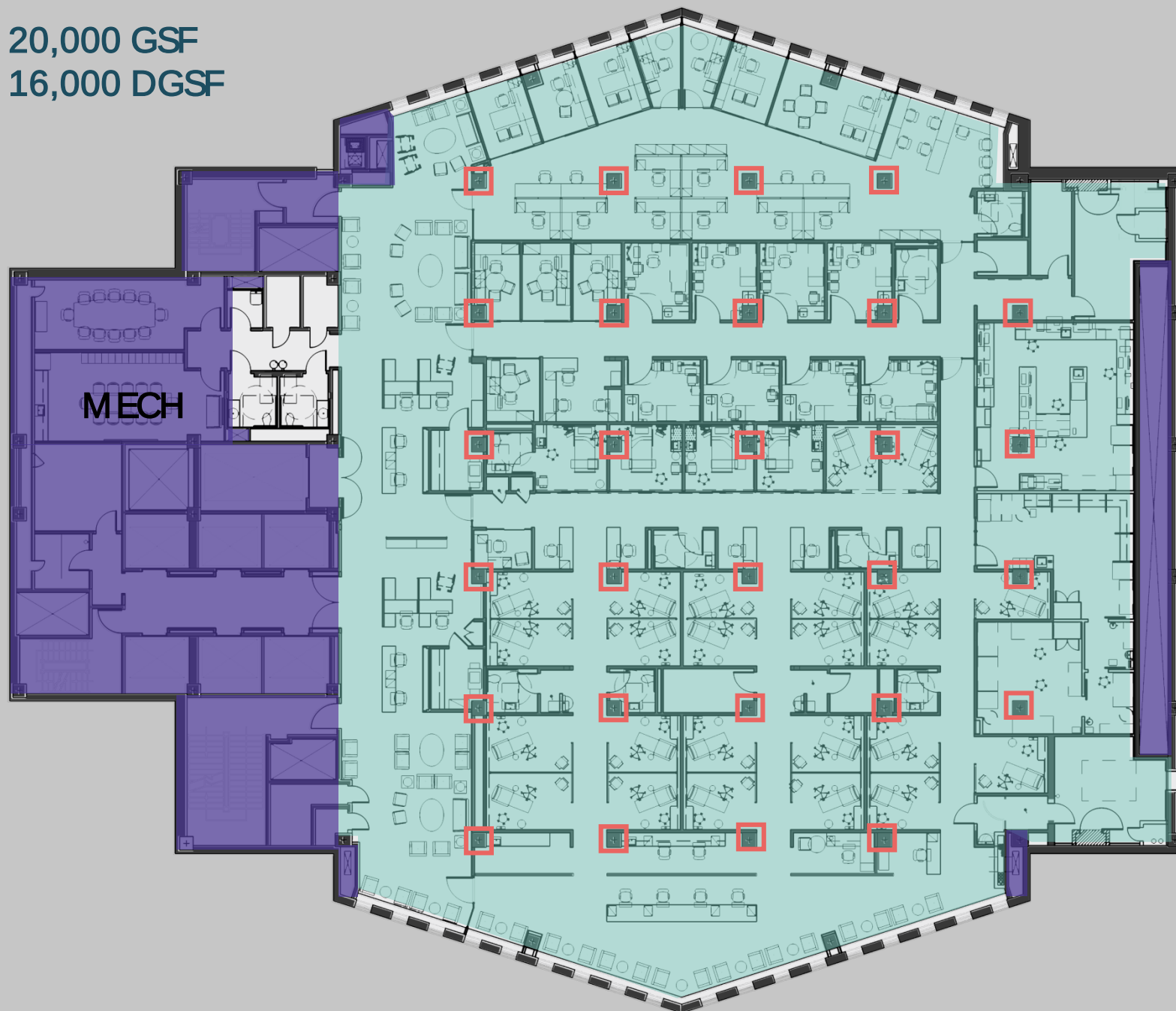
2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

20,000 GSF
16,000 DGSF



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

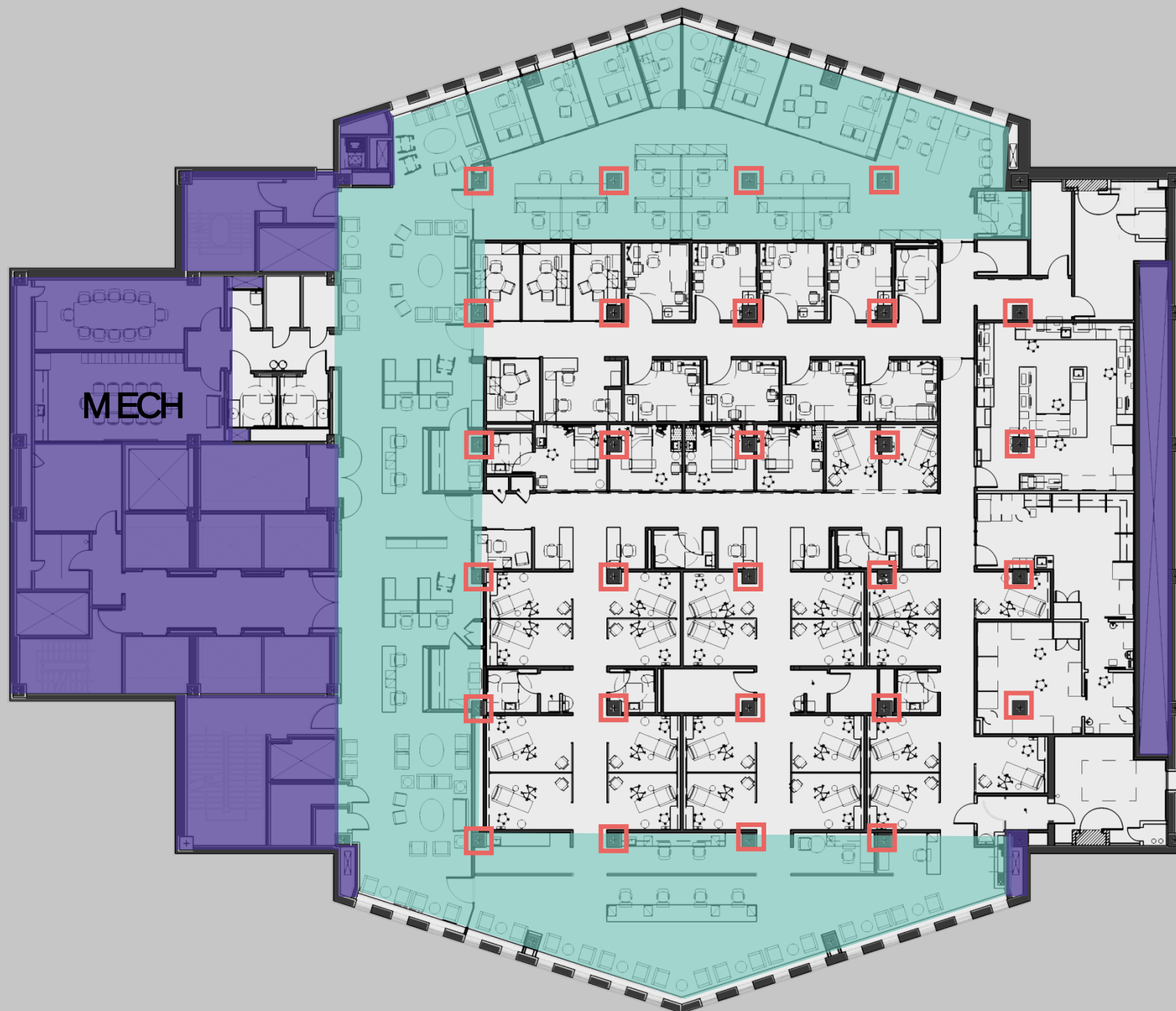
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



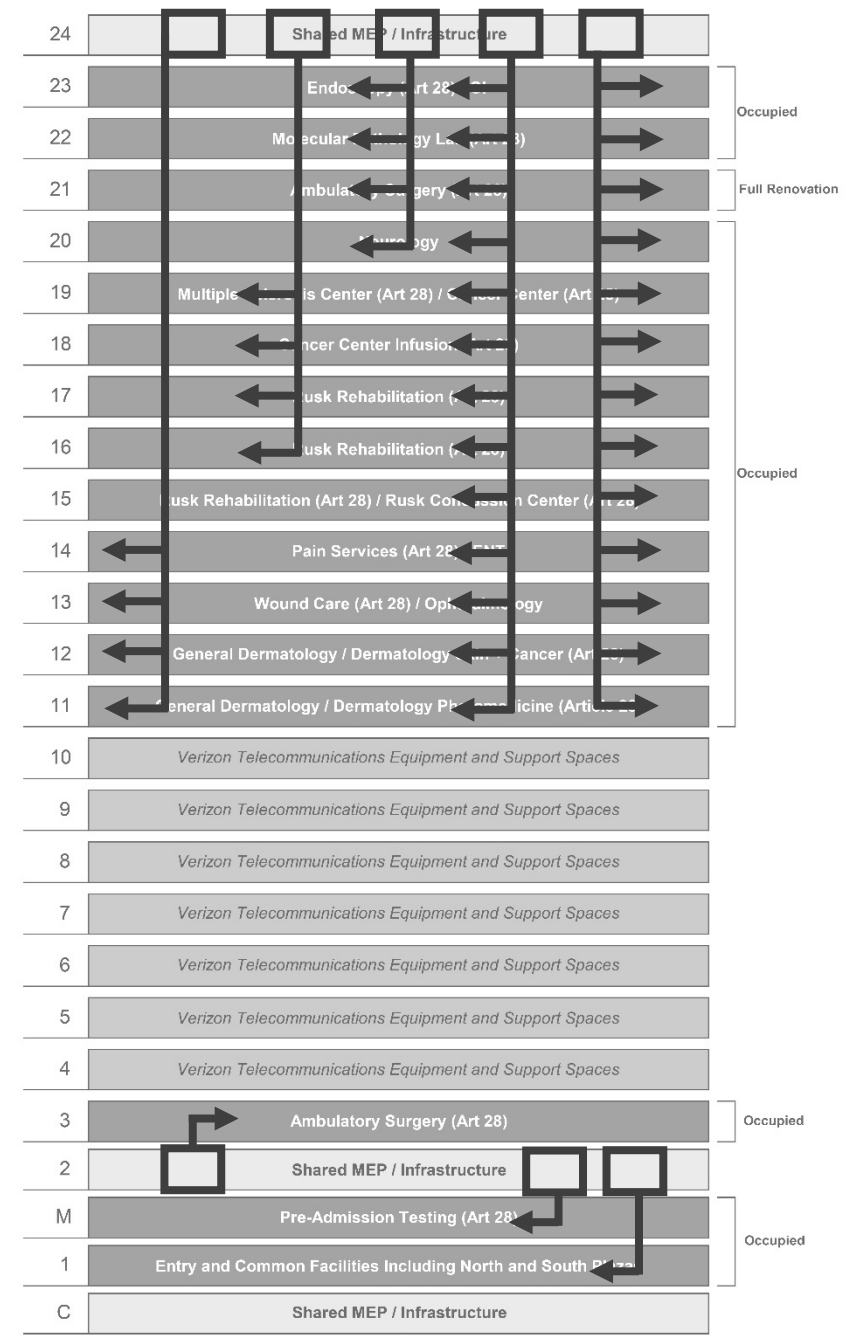
RESILIENCY

STRATEGIC ZONES OF FLEXIBILITY

FIXED VERTICAL ELEMENTS

COLUMN SPACING

FLOOR TO FLOOR HEIGHTS



EXISTING HVAC INFRASTRUCTURE

OWNERSHIP KEY			
NYU Hospitals Center Ownership		Verizon Ownership	Common Ownership

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

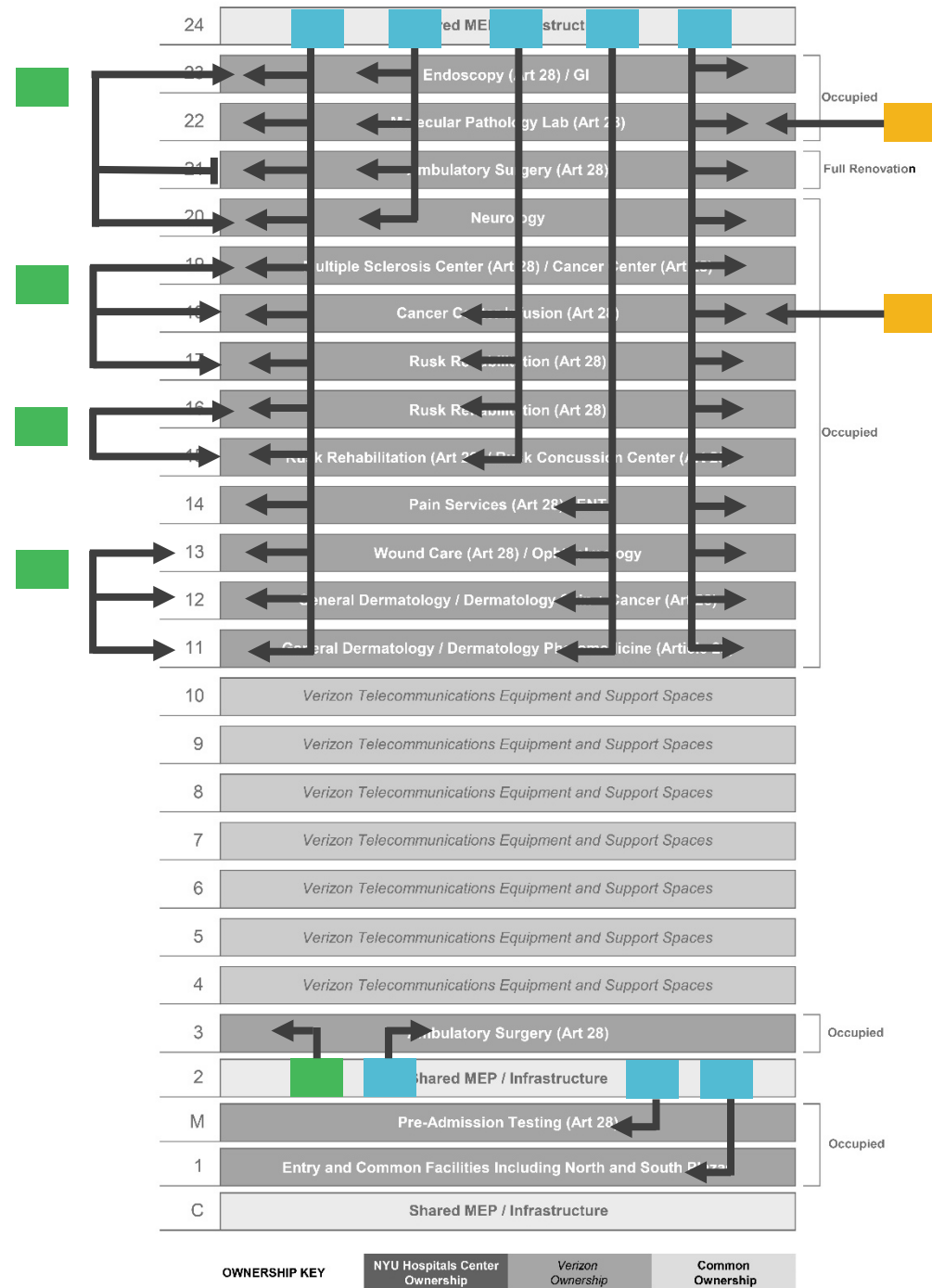
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



NEW HVAC INFRASTRUCTURE

Ambulatory Care Center





12-24

M-11



 **NYU Langone**
MEDICAL CENTER







Gastroenterology
Endoscopy



INFUSION
27
18-41



18-41C









AWARDS

*Adaptive Reuse Award,
Symposium Distinction Awards*
2015



NYU LANGONE HEALTH
Ambulatory Care Center

'THE BIG 5' SCORECARD



Above Average

5

RESILIENCY



4

STRATEGIC ZONES
OF FLEXIBILITY



3

FIXED VERTICAL
ELEMENTS



2

COLUMN SPACING



1

FLOOR TO FLOOR
HEIGHTS



What is the ideal floor to floor height for inpatient beds in a new building?

$\leq 12' 0''$

13' 0''

14' 0''

15' 0''

$\geq 16' 0''$



TOWER HEALTH SYSTEM

Reading Healthplex for Advanced Surgical + Patient Care



West Reading, PA

3.0 M SF CAMPUS | 46+ ACRES | 680 BEDS



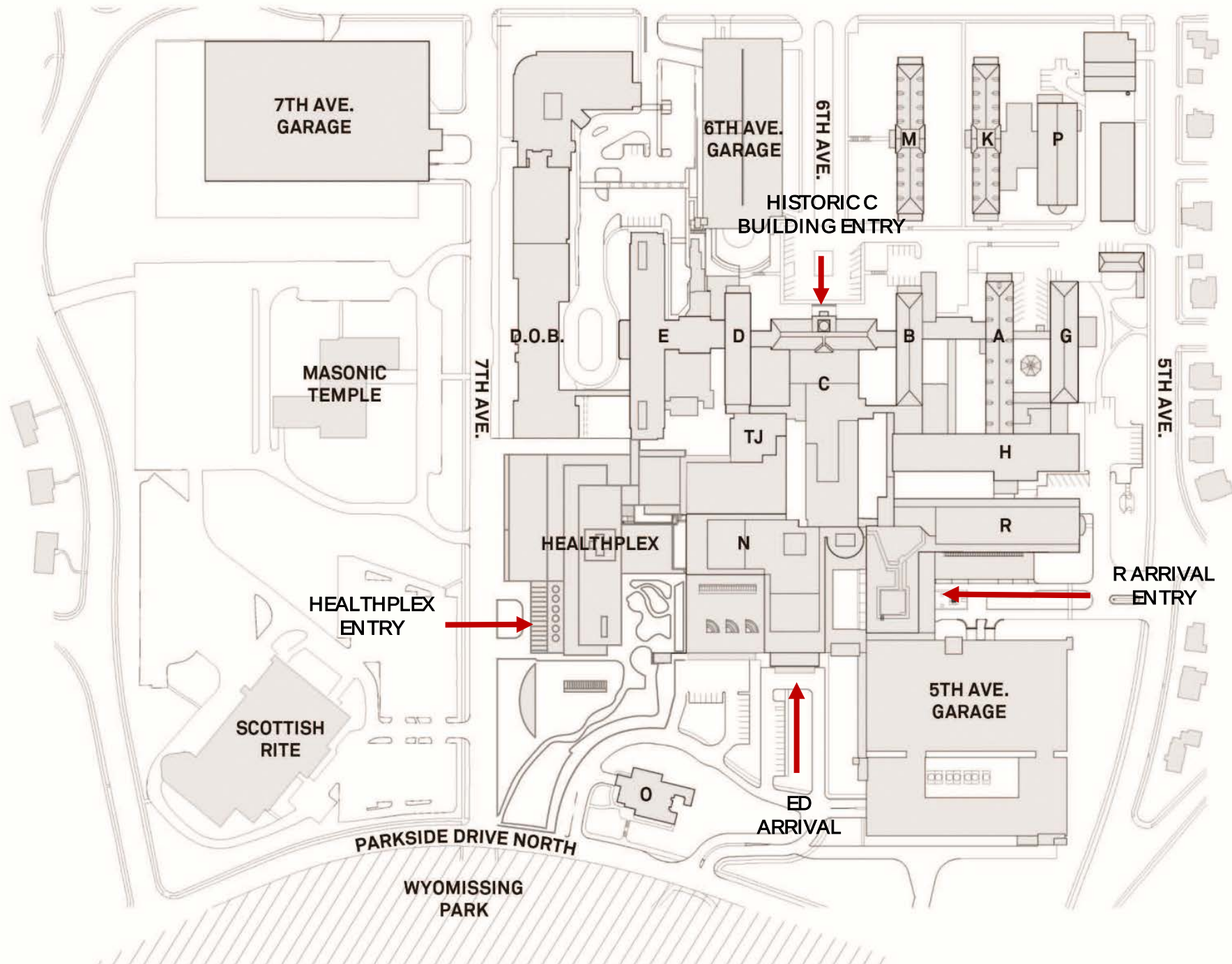
500,000 SF

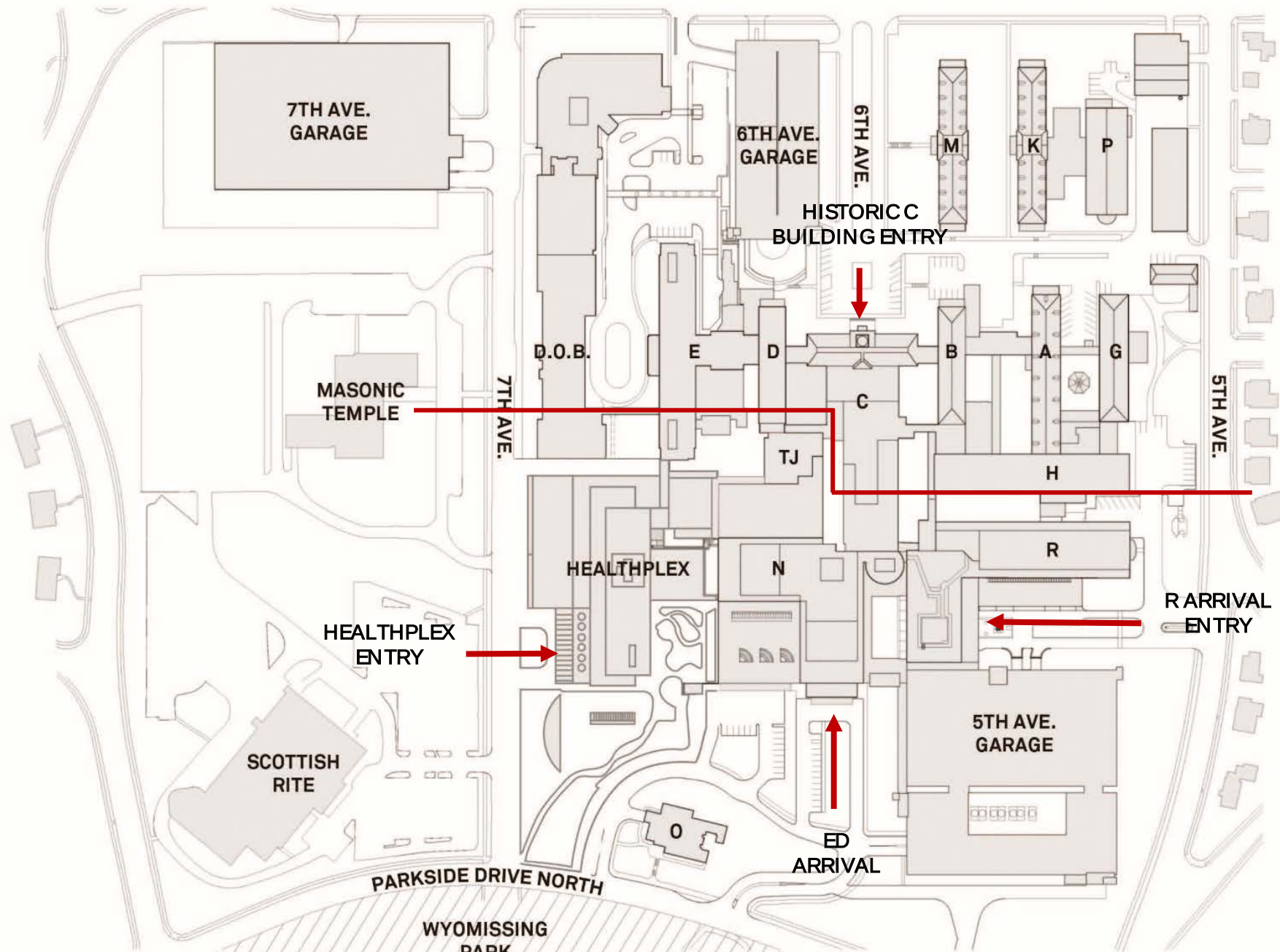
150 Beds

READING
HEALTHPLEX
STATS

72% of footprint
is vegetative roof

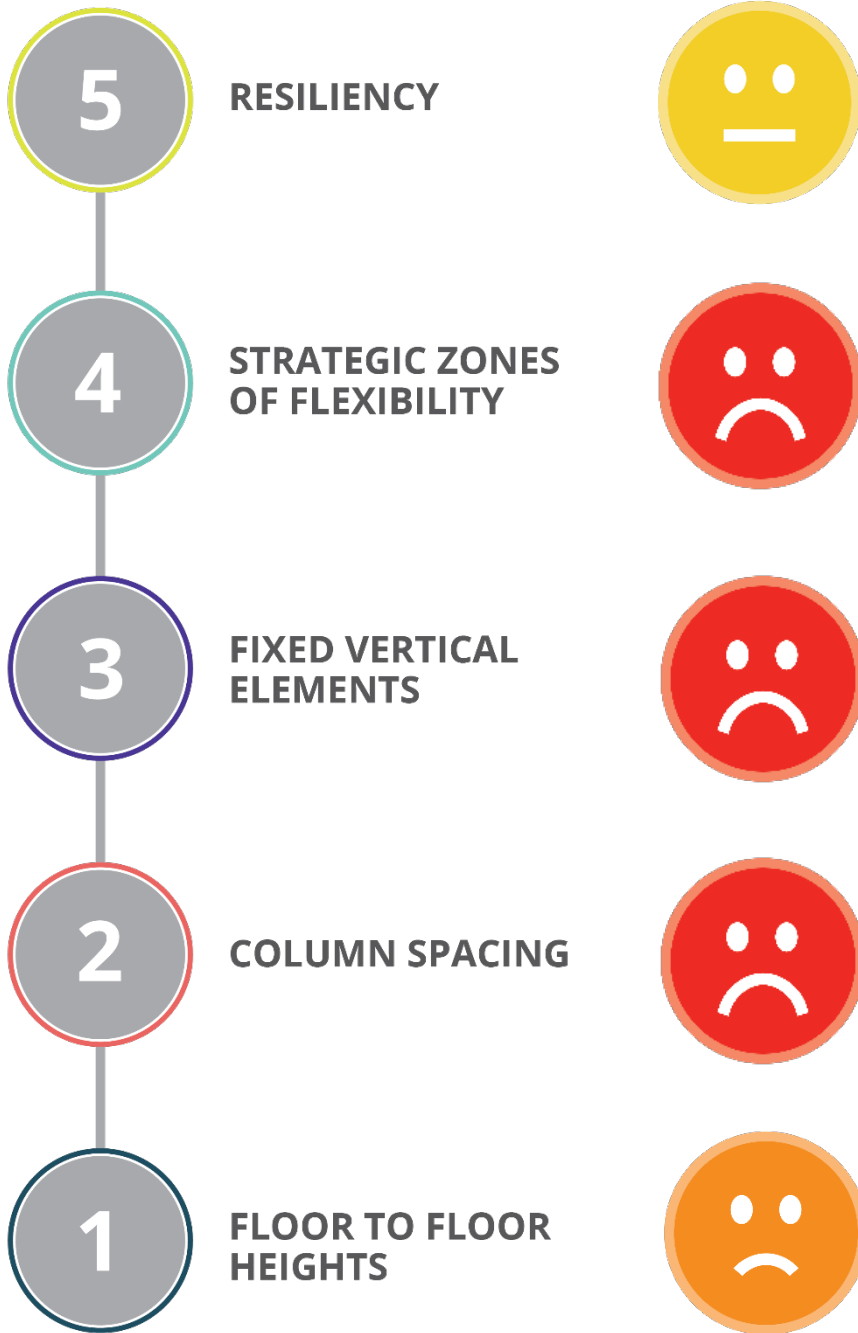
24 ORs +
8 Procedure Rooms





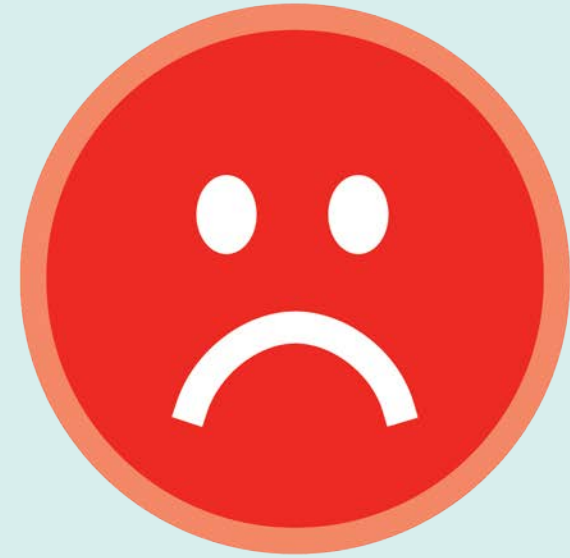
Administrative

Clinical

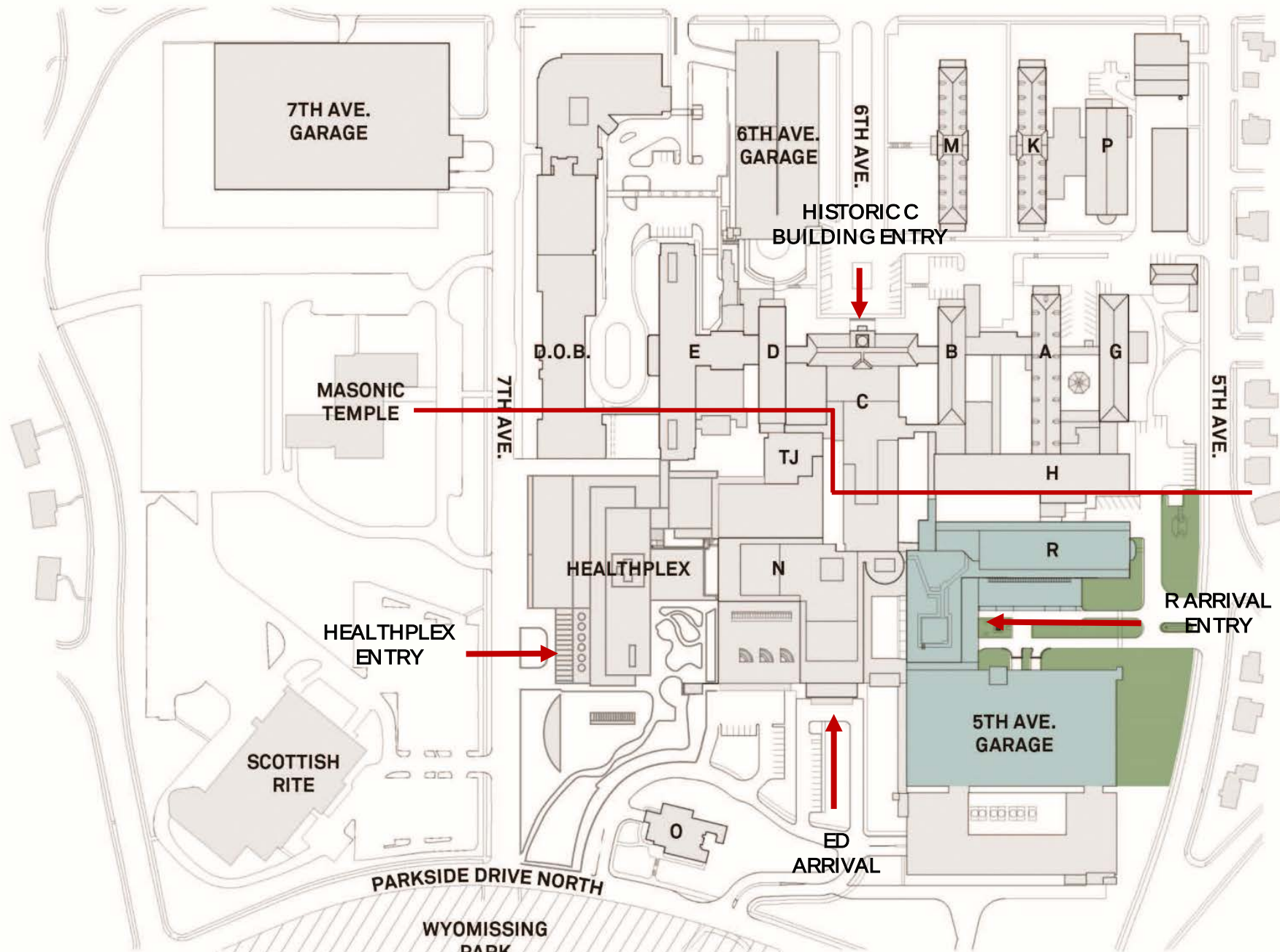


Tower Health System Historic Campus

'THE BIG 5' SCORECARD



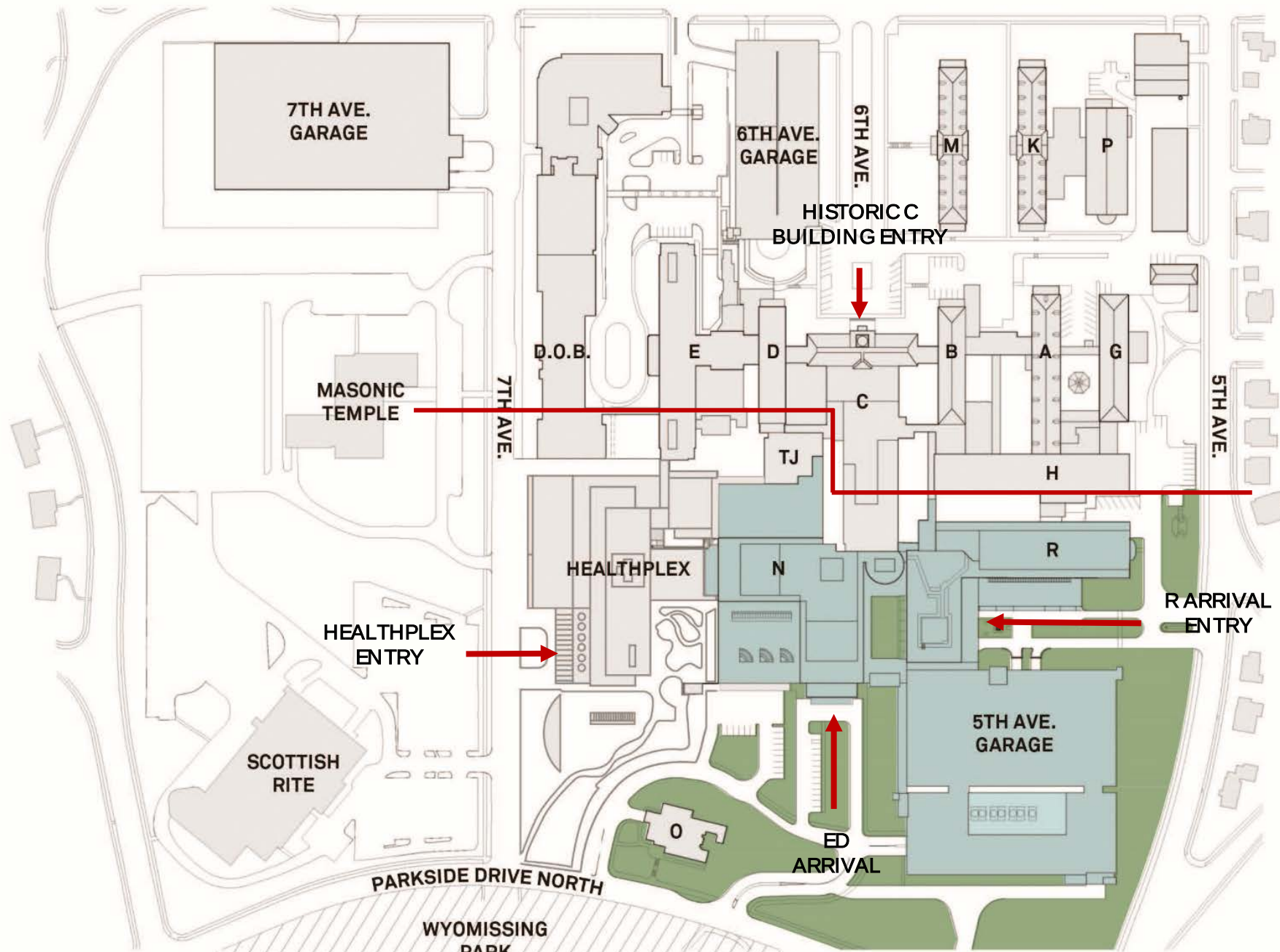
*Below Average
for Inpatient Use*



Administrative

1995

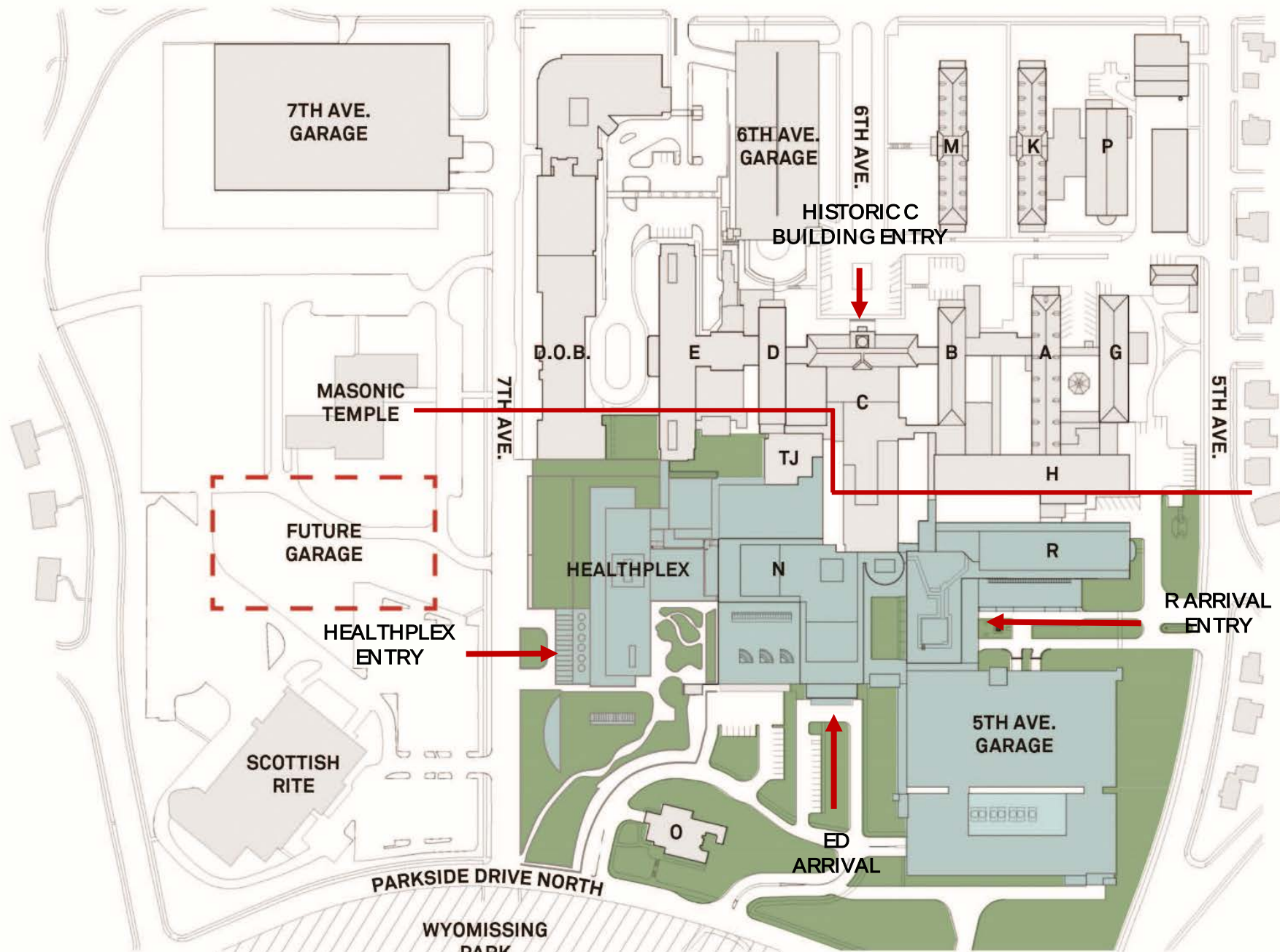
Clinical



Administrative

2005

Clinical



Administrative

2016

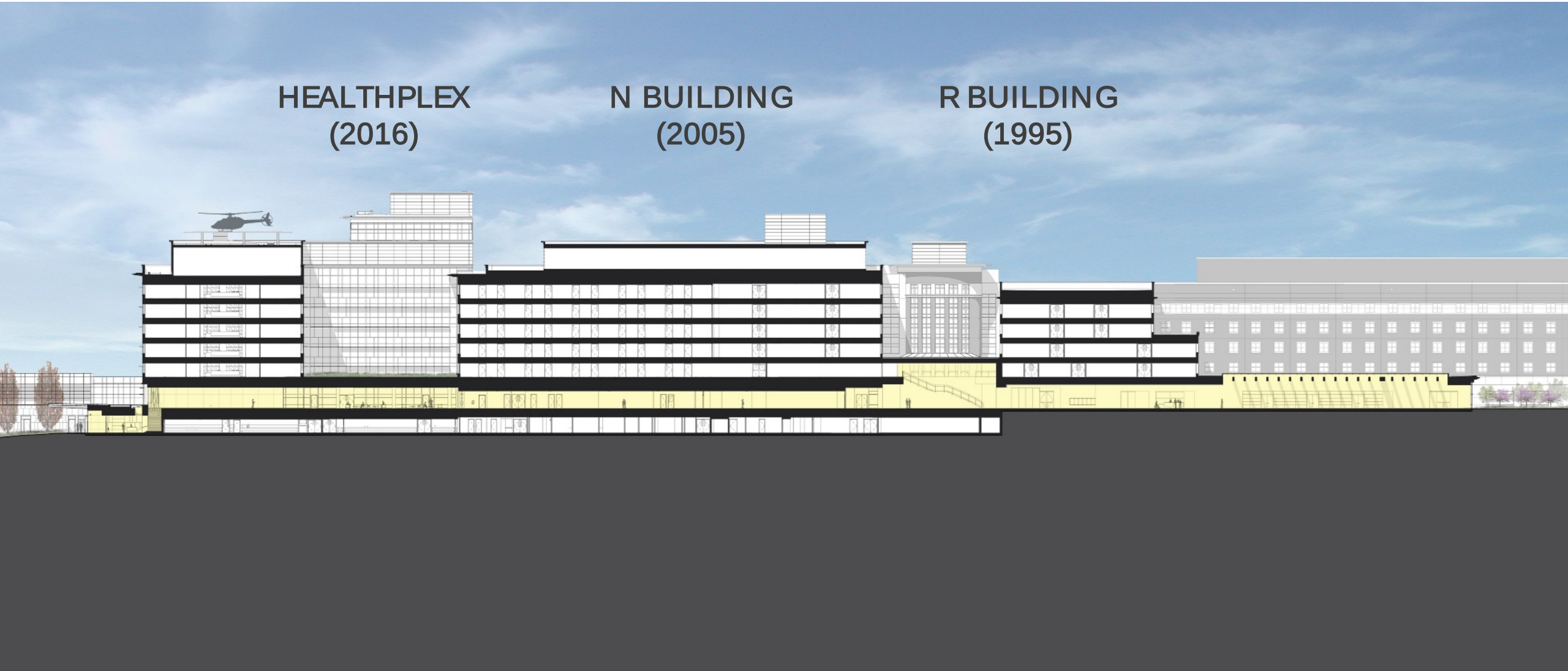
Clinical

CAMPUS SECTION

HEALTHPLEX
(2016)

N BUILDING
(2005)

R BUILDING
(1995)



CAMPUS SECTION

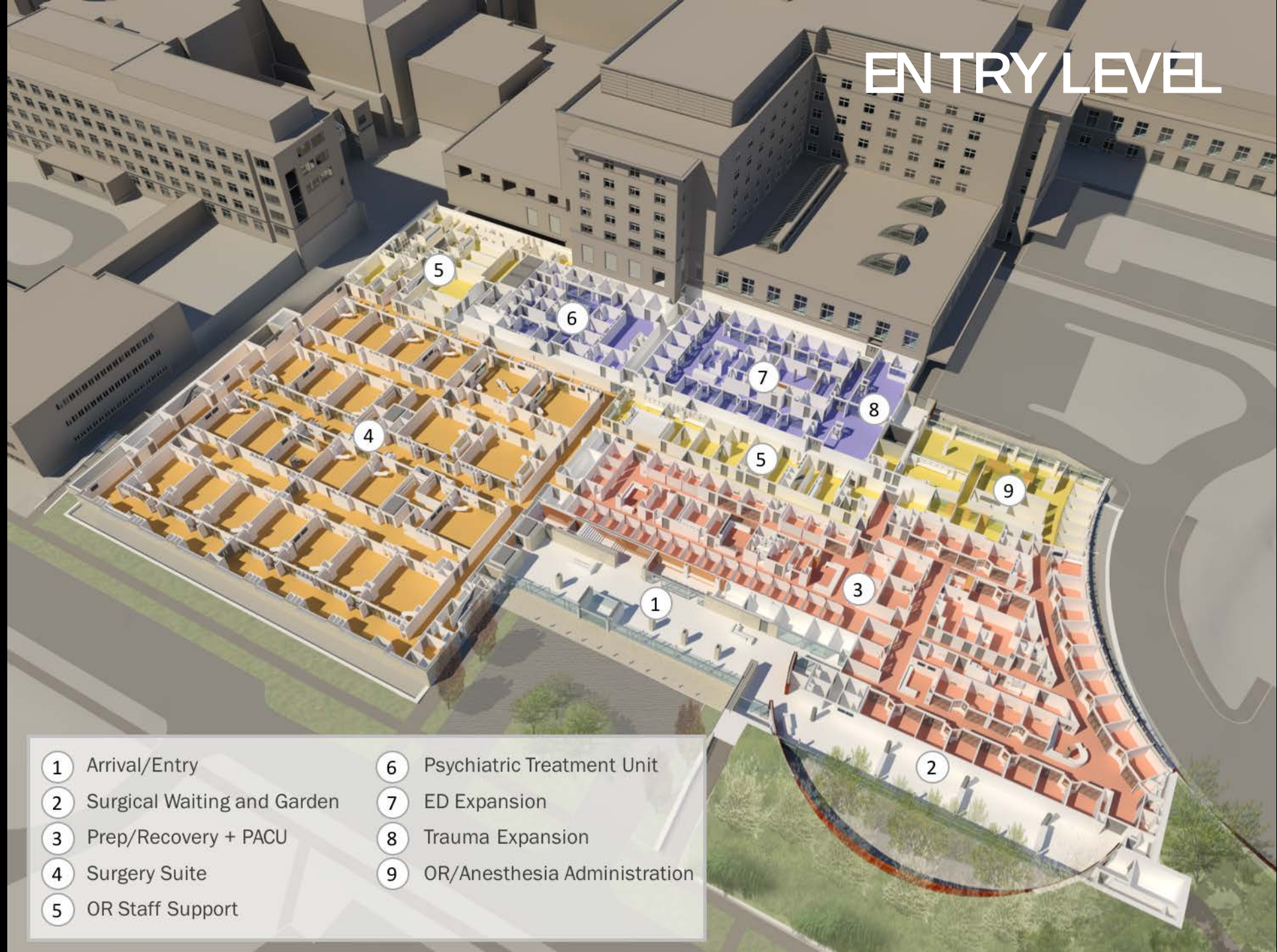
HEALTHPLEX
(2016)

N BUILDING
(2005)

R BUILDING
(1995)



ENTRY LEVEL



- | | |
|-------------------------------|--------------------------------|
| 1 Arrival/Entry | 6 Psychiatric Treatment Unit |
| 2 Surgical Waiting and Garden | 7 ED Expansion |
| 3 Prep/Recovery + PACU | 8 Trauma Expansion |
| 4 Surgery Suite | 9 OR/Anesthesia Administration |
| 5 OR Staff Support | |

GROUND LEVEL



1 Prep/Recovery

2 Short Procedure Suite

3 ED Administration

4 OR Staff Support

5 On Call

6 Protocol Offices

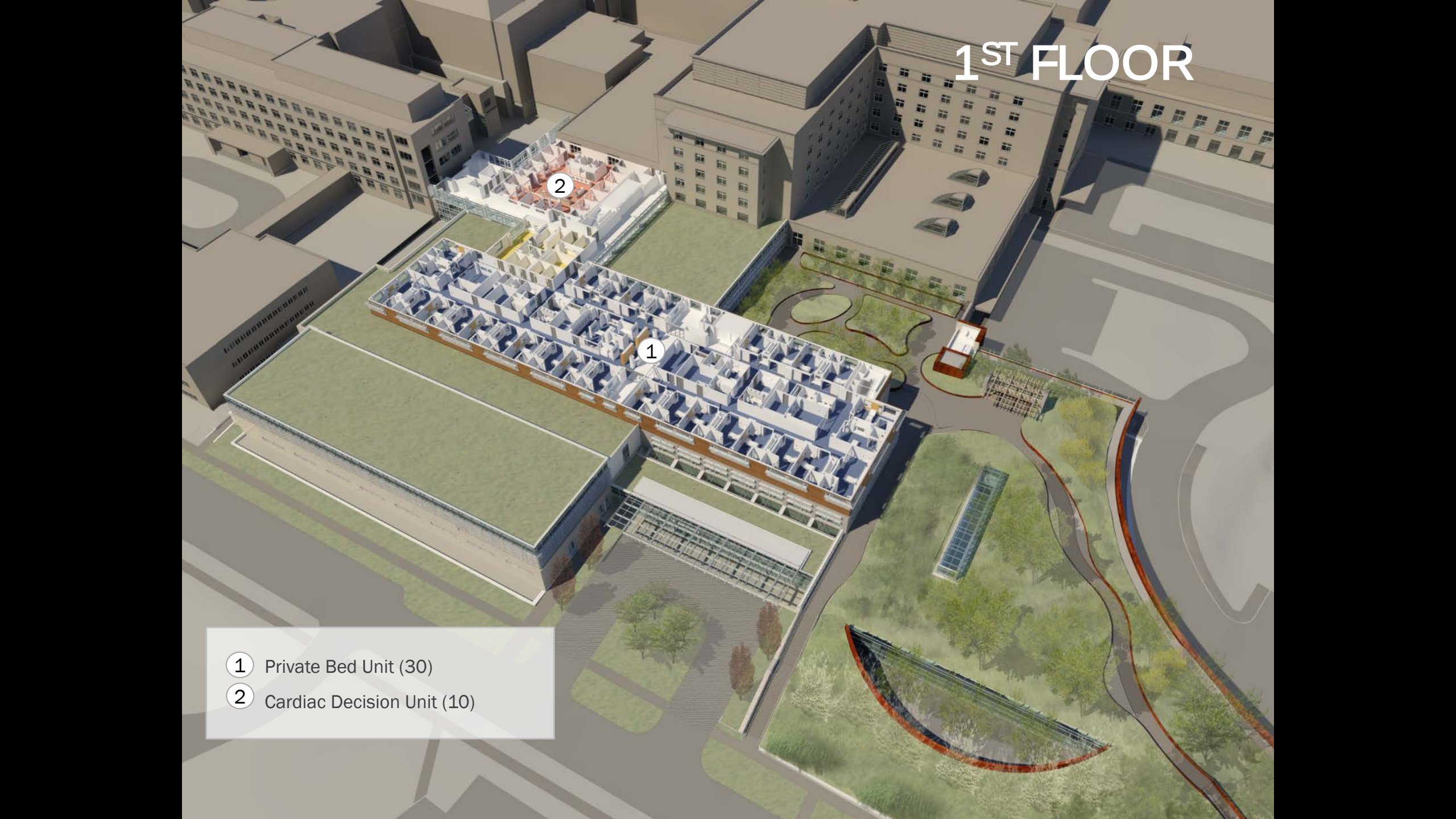
7 Pre-Admissions Testing

8 Public Conference Room

9 Trauma Administration

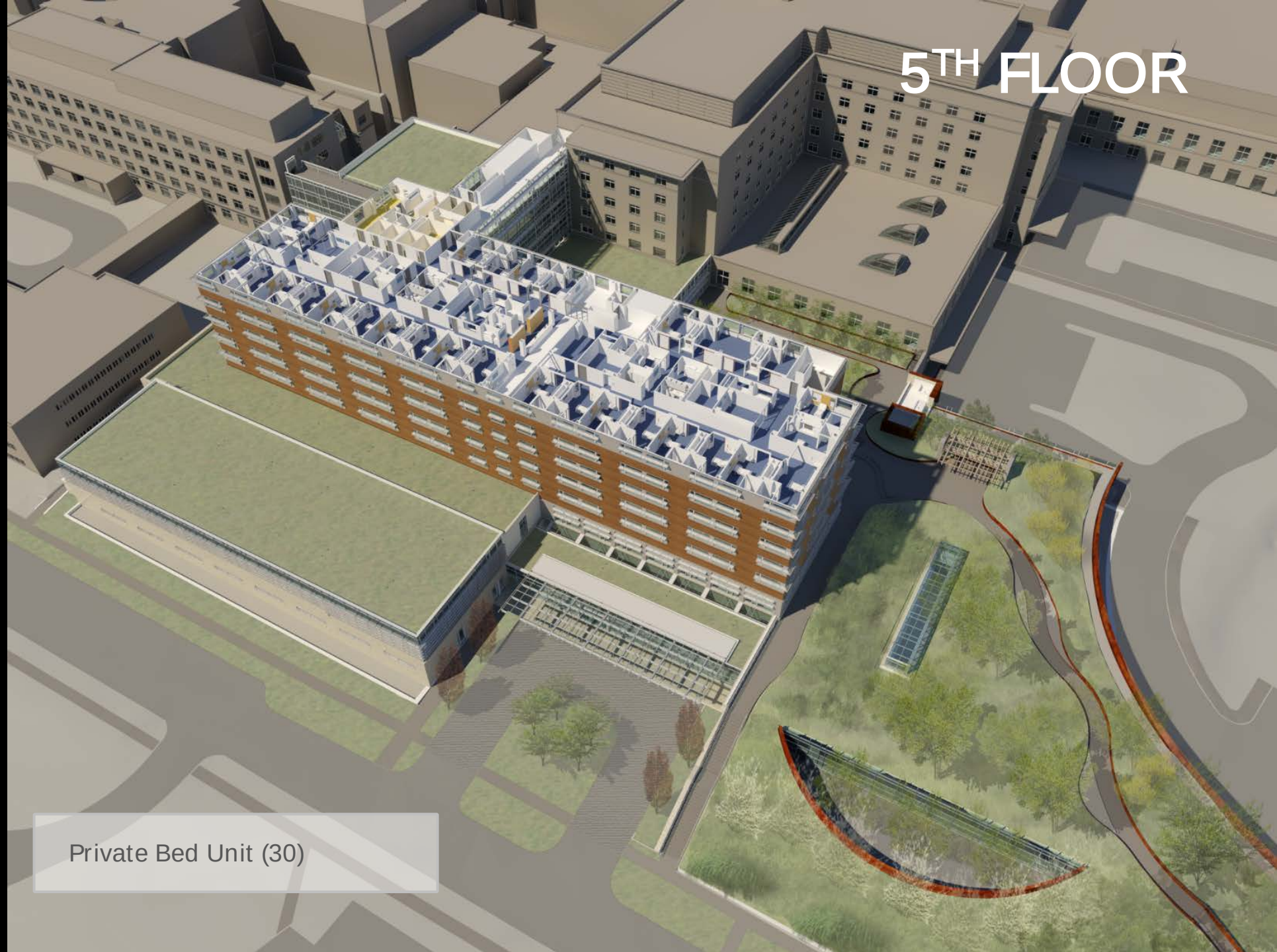
10 Healing Garden/Public Park

1ST FLOOR

- 
- ① Private Bed Unit (30)
 - ② Cardiac Decision Unit (10)

5TH FLOOR

Private Bed Unit (30)



ROOF

Helipad





RESILIENCY

STRATEGIC ZONES OF FLEXIBILITY

FIXED VERTICAL ELEMENTS

COLUMN SPACING

FLOOR TO FLOOR HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

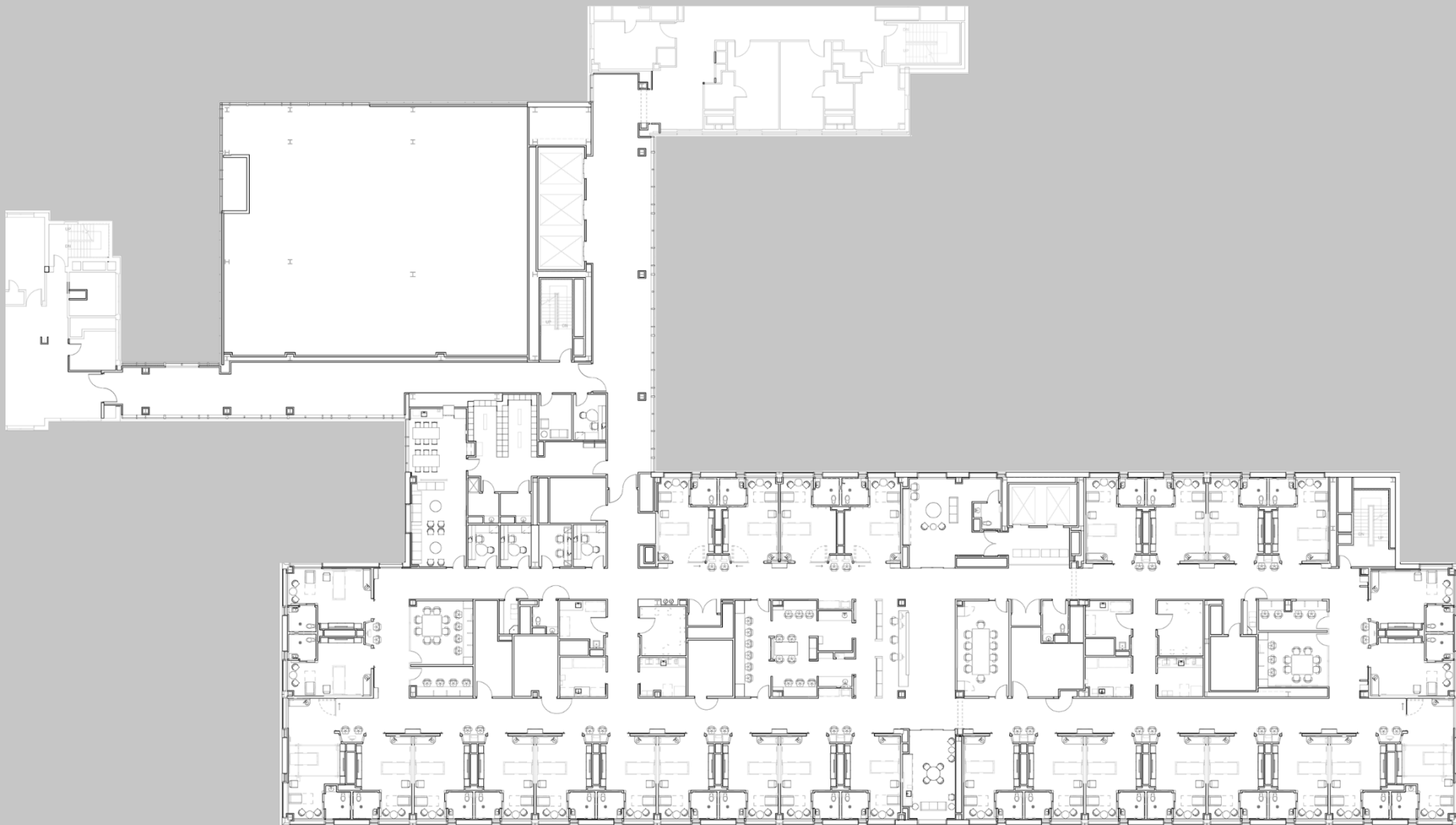
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



11'-6"

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

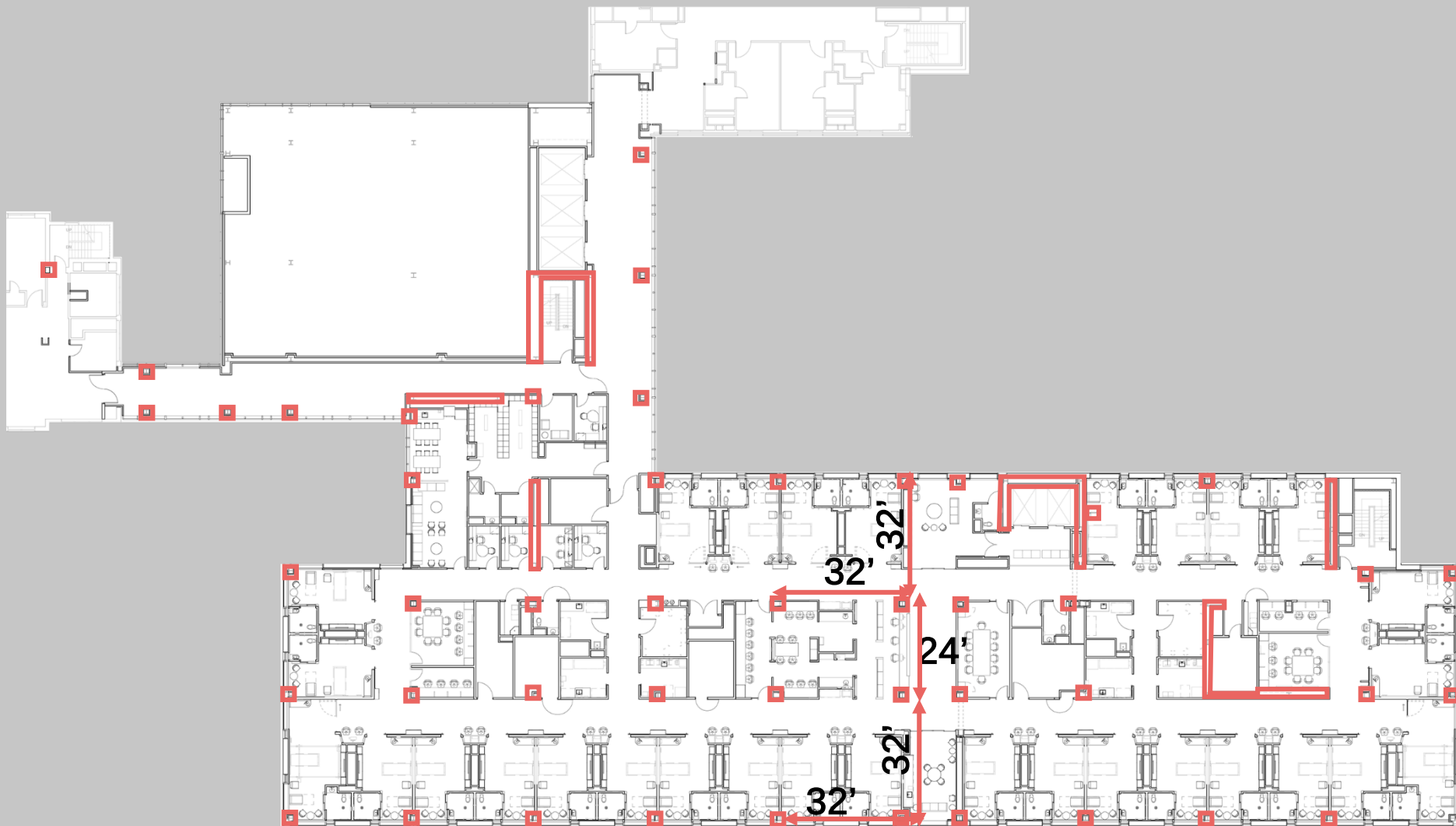
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

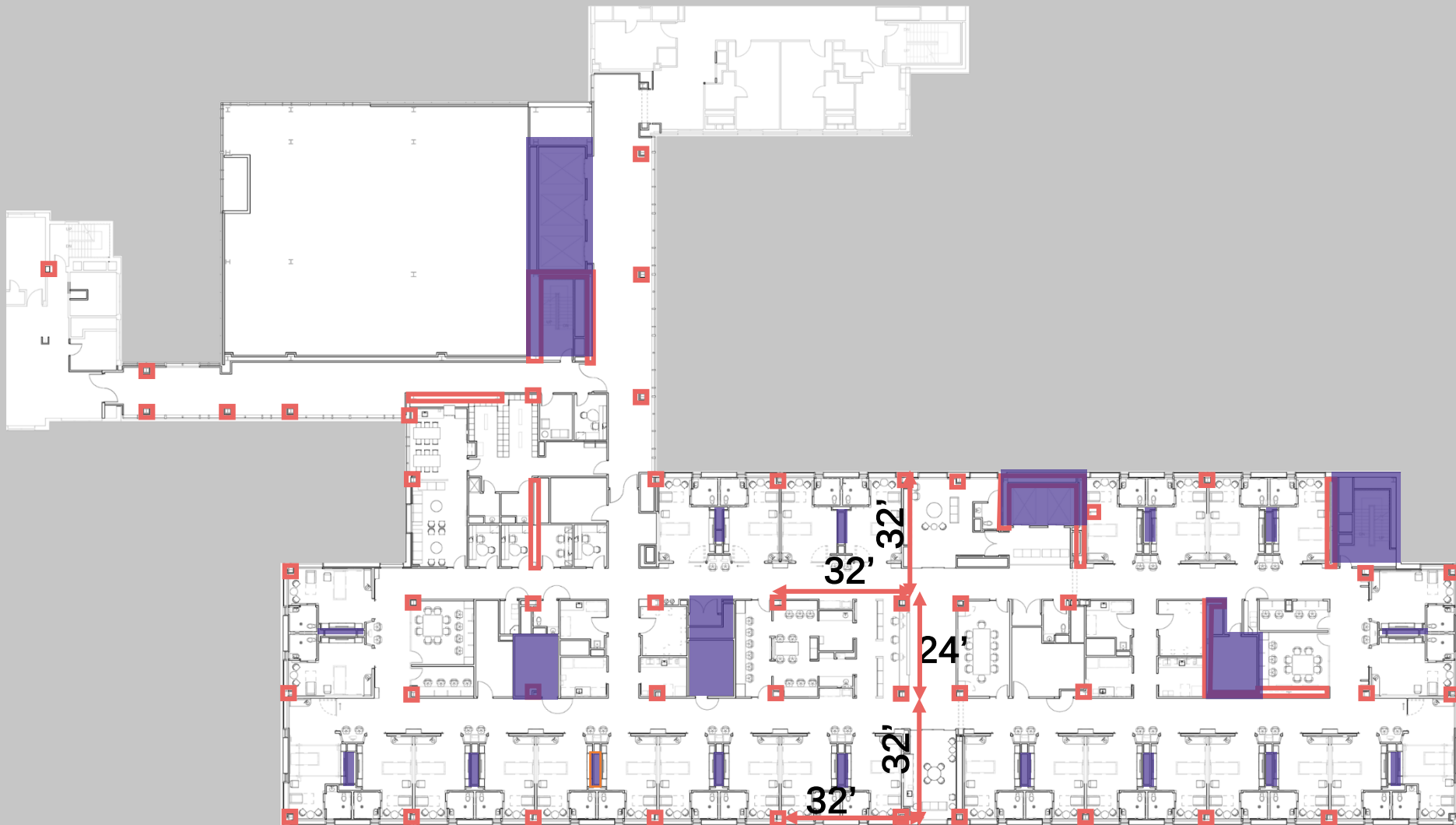
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

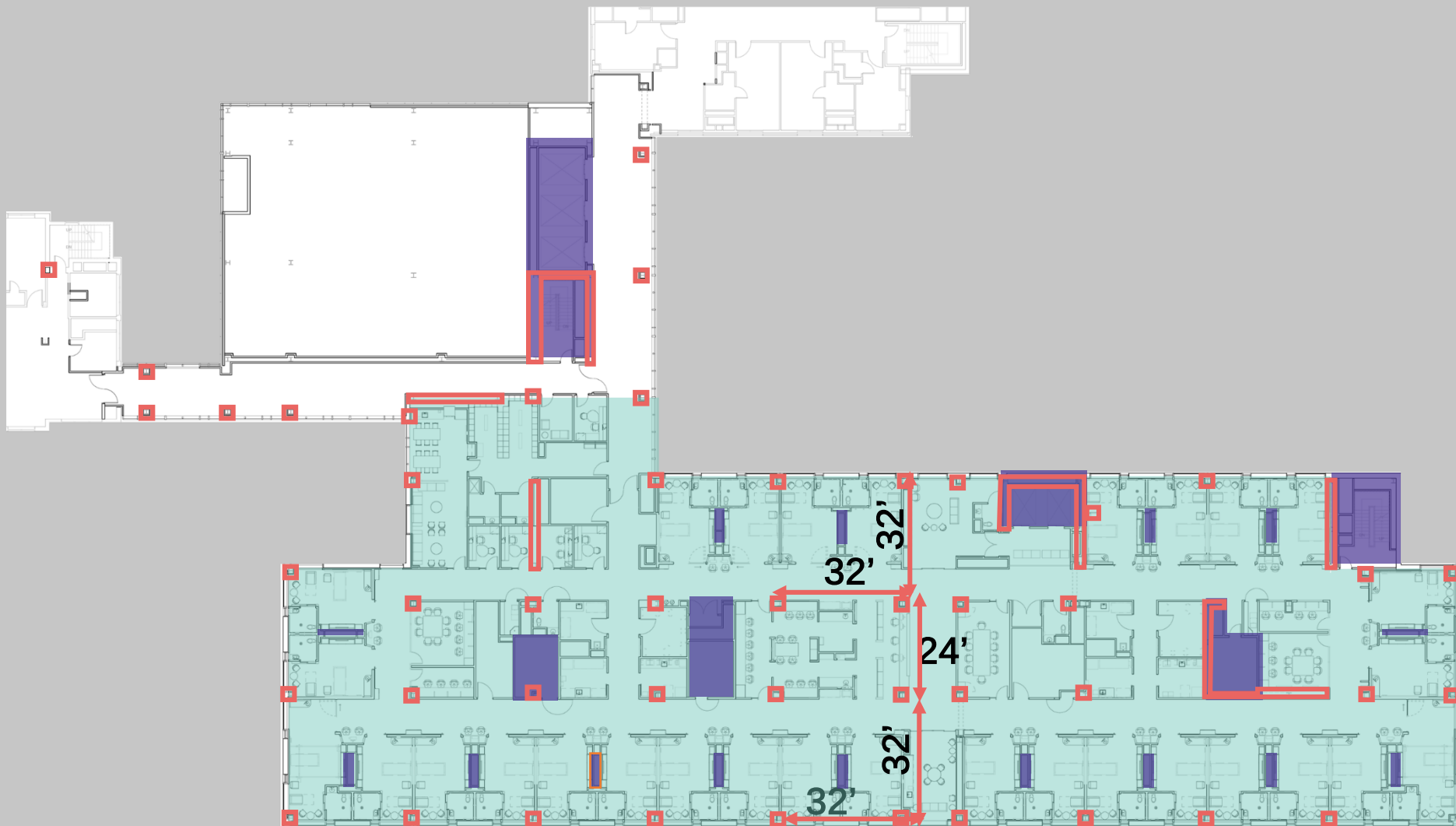
2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

30,000 GSF



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS







TG

- ← Training Information
- Site Administration
- LEAD
- Emergency Administration
- Family History













AWARDS

*International Academy for Design
and Health, Highly Commended,
Sustainable Urban and Built Environment*
2017

*Healthcare Design Architectural
Showcase, Finalist*
2017



- 5 RESILIENCY
- 4 STRATEGIC ZONES OF FLEXIBILITY
- 3 FIXED VERTICAL ELEMENTS
- 2 COLUMN SPACING
- 1 FLOOR TO FLOOR HEIGHTS



TOWER HEALTH SYSTEM

Reading Healthplex

'THE BIG 5' SCORECARD



Above Average - Excellent



PENN MEDICINE: CHESTER COUNTY HOSPITAL

Lasko Tower and Procedural Platform + Inpatient Beds



West Chester, PA

600,000 SF CAMPUS | 36 ACRES | 248 BEDS



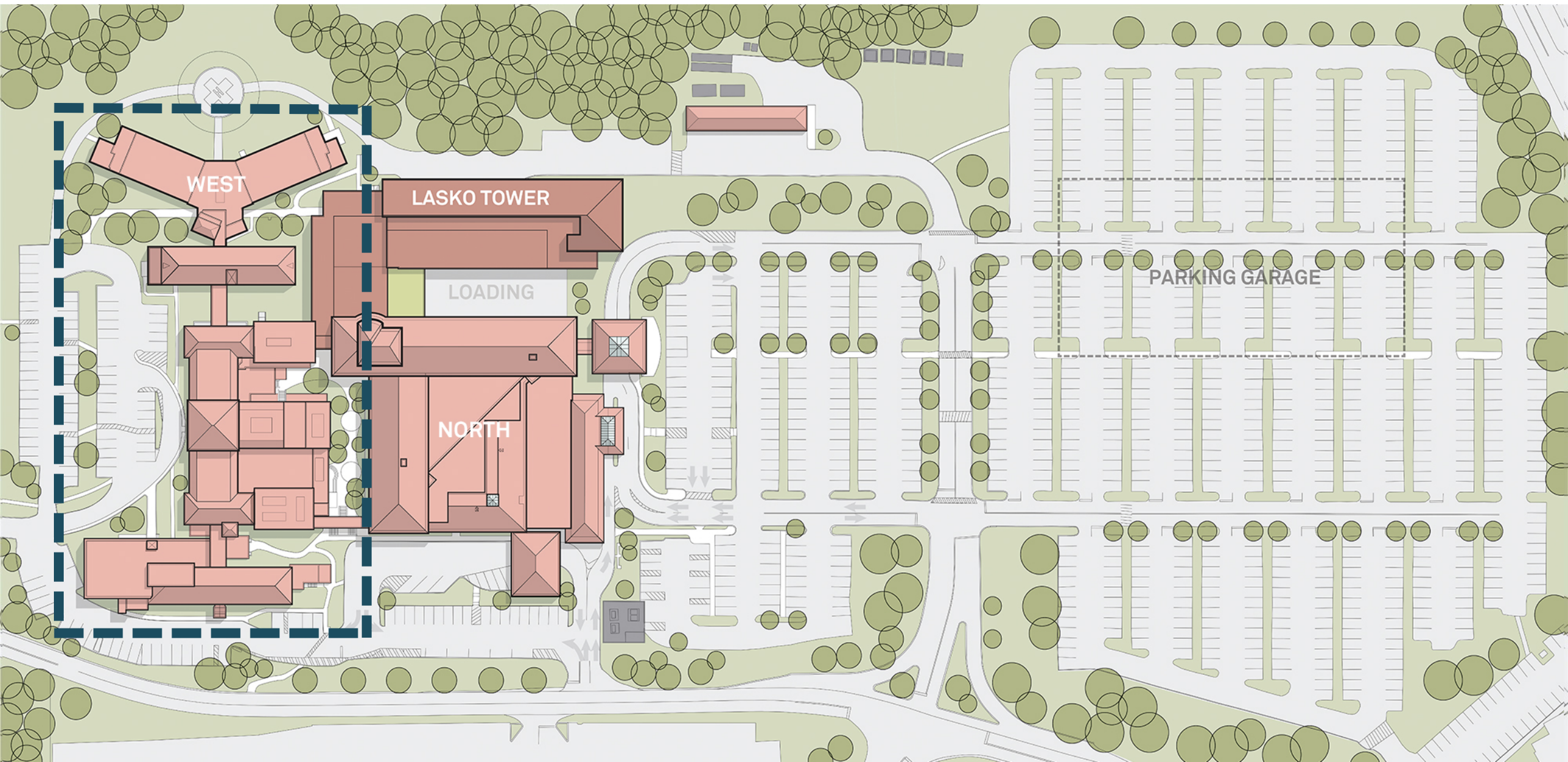
172 Beds

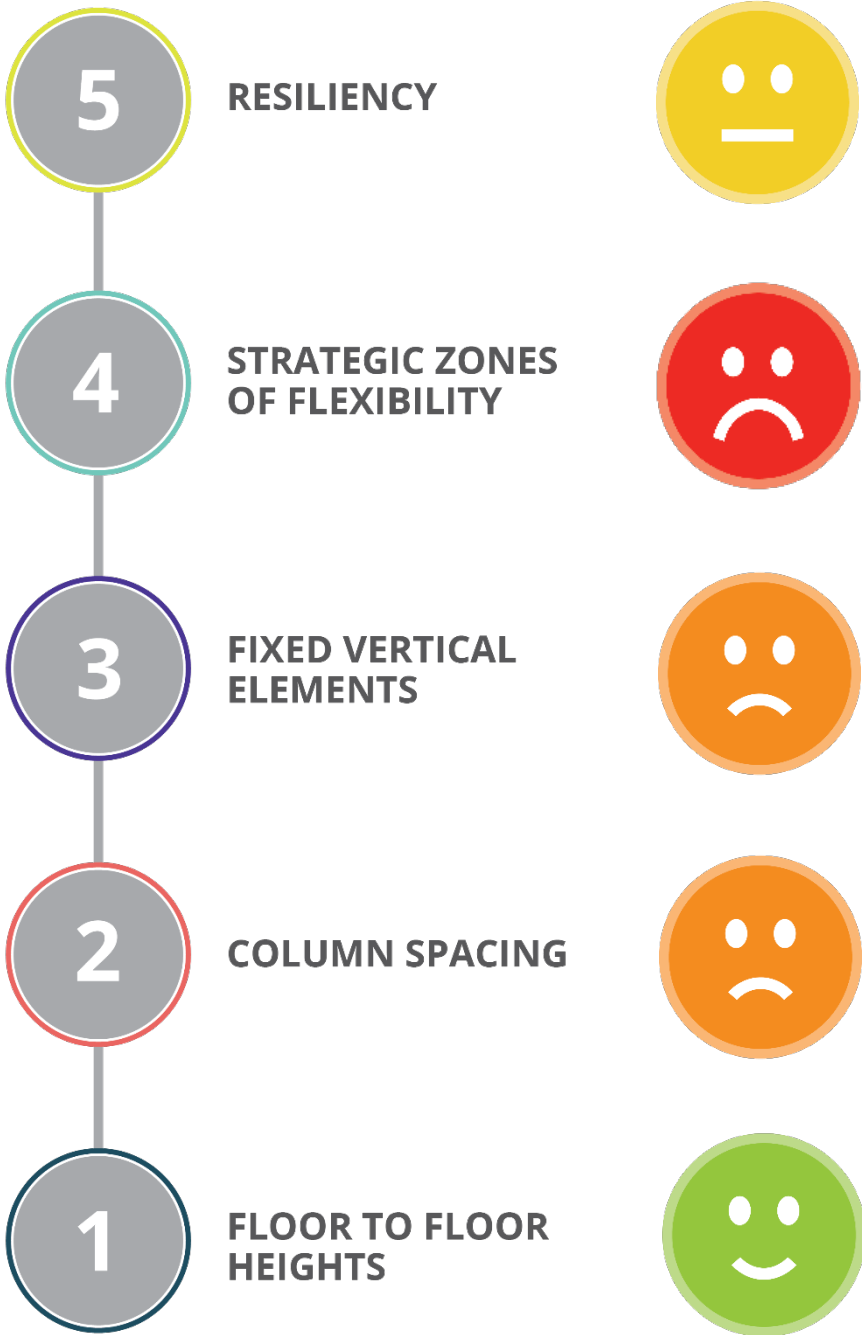
18 Operating /
Interventional Rooms

Penn Medicine
Chester County
STATS

350,000 SF
New Front Door

Emergency Expansion





PENN MEDICINE
Chester County Hospital

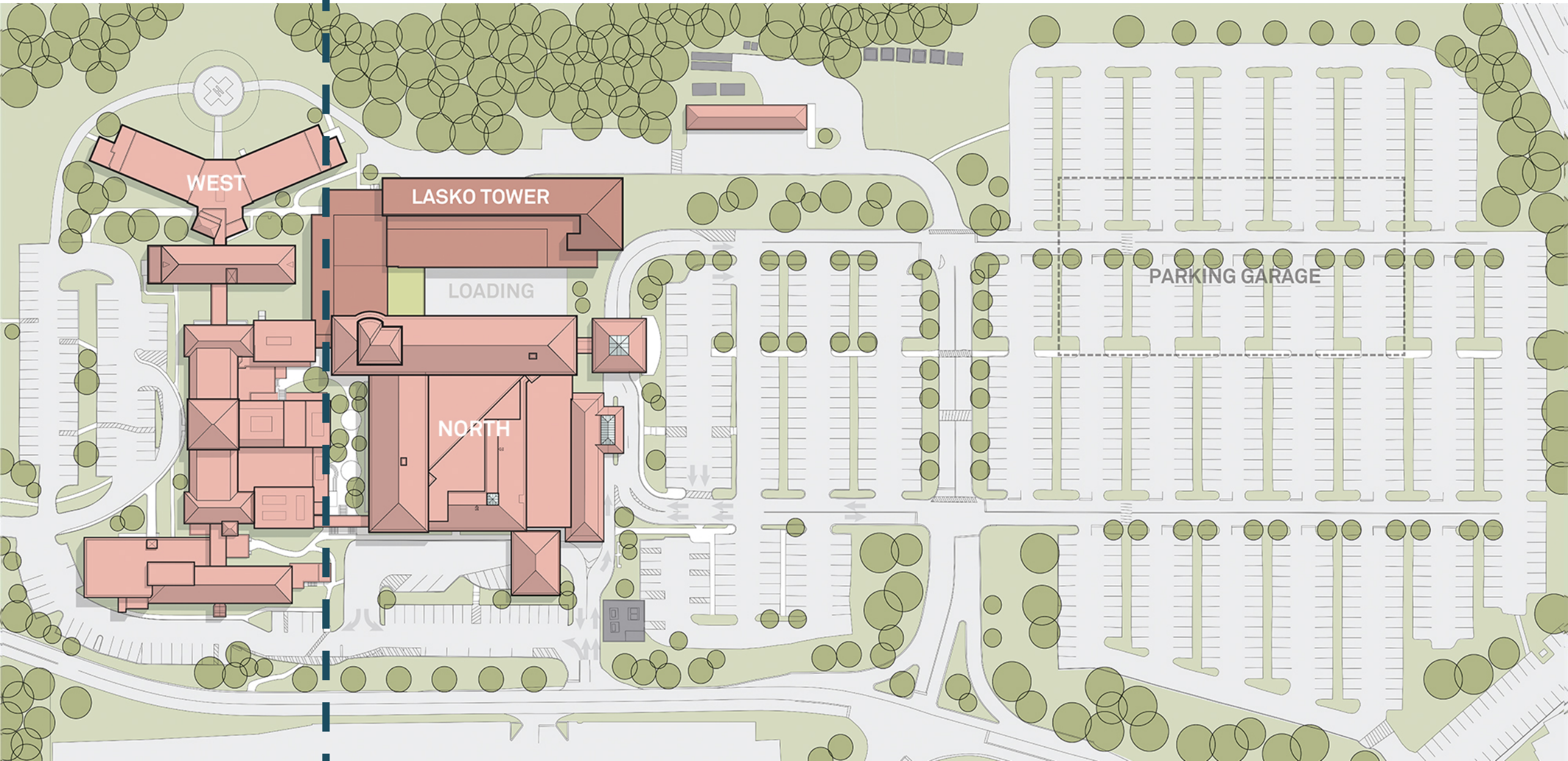
'THE BIG 5' SCORECARD

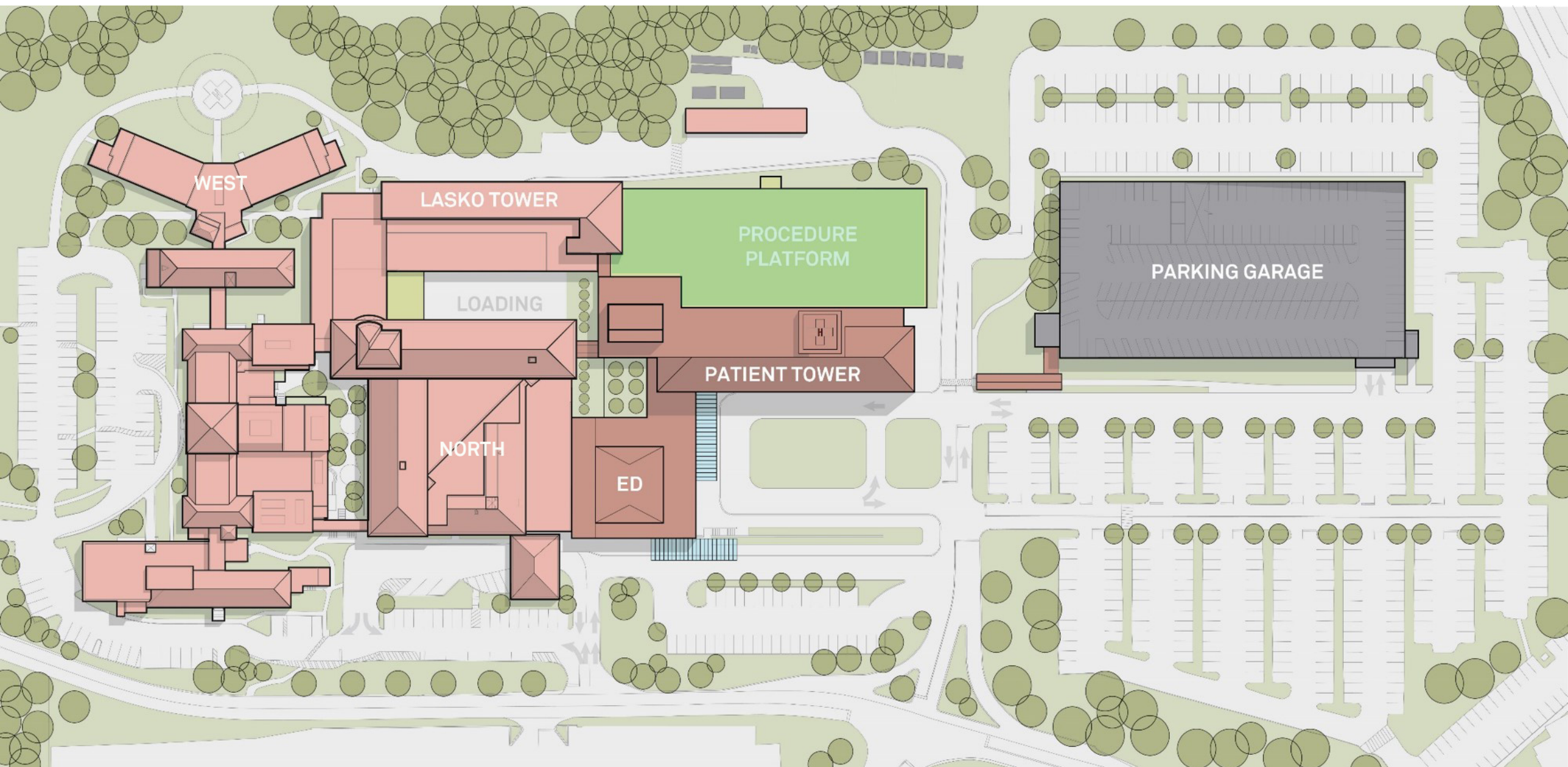


*Below Average
for Inpatient Use*

ADMINISTRATIVE

CLINICAL







5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

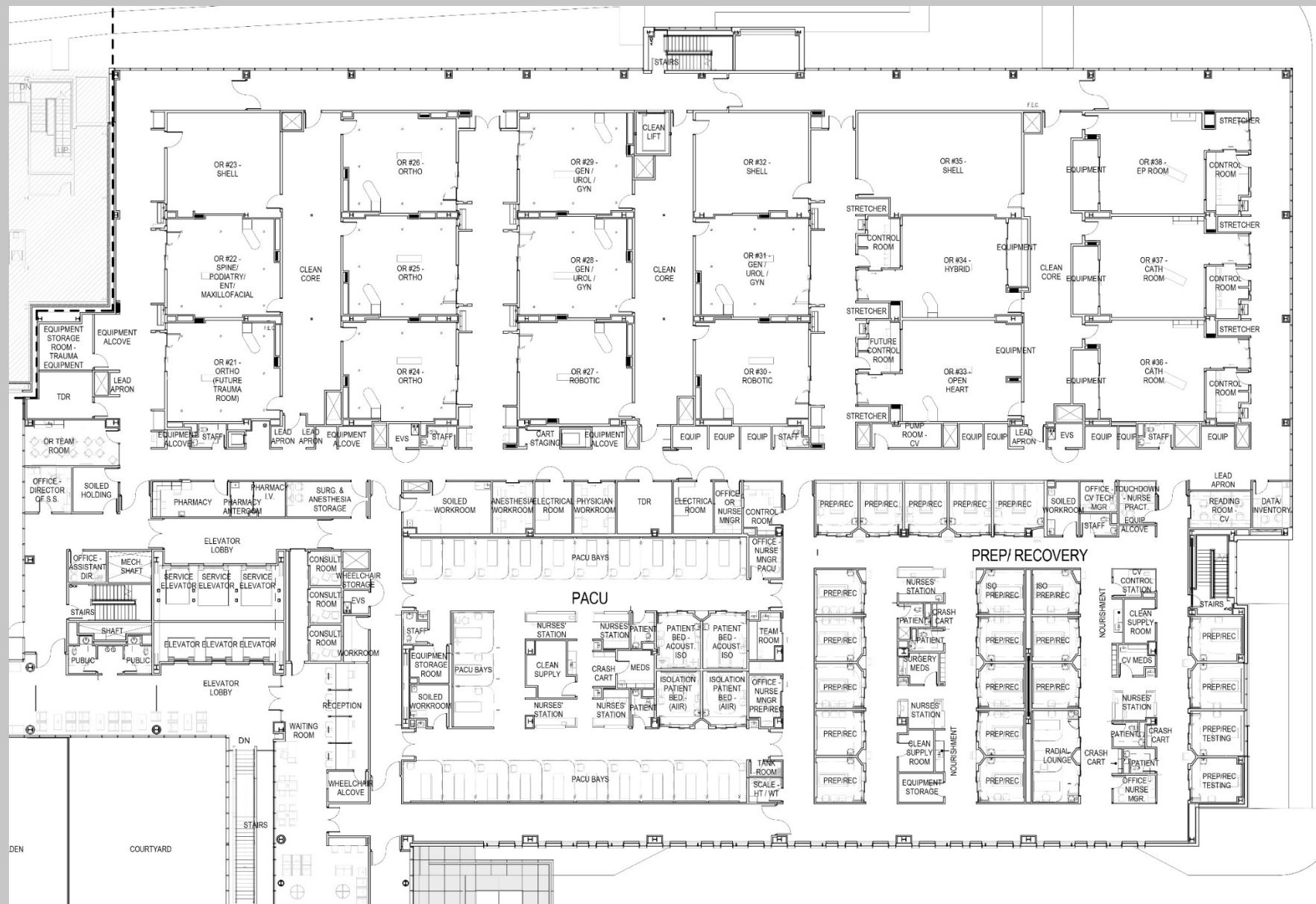
3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

13' Beds 15' Procedure

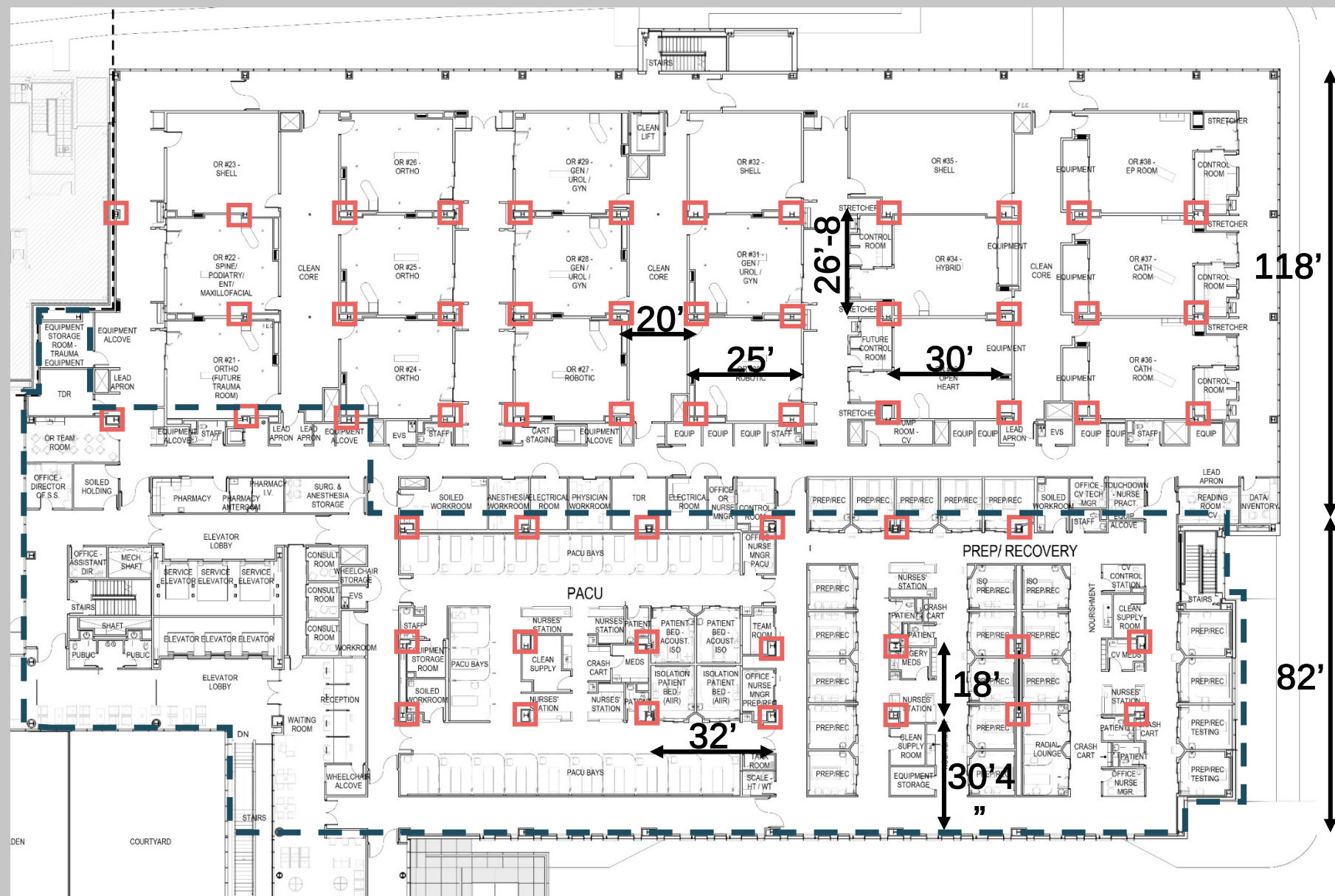
RESILIENCY

STRATEGIC ZONES OF FLEXIBILITY

FIXED VERTICAL ELEMENTS

COLUMN SPACING

FLOOR TO FLOOR HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

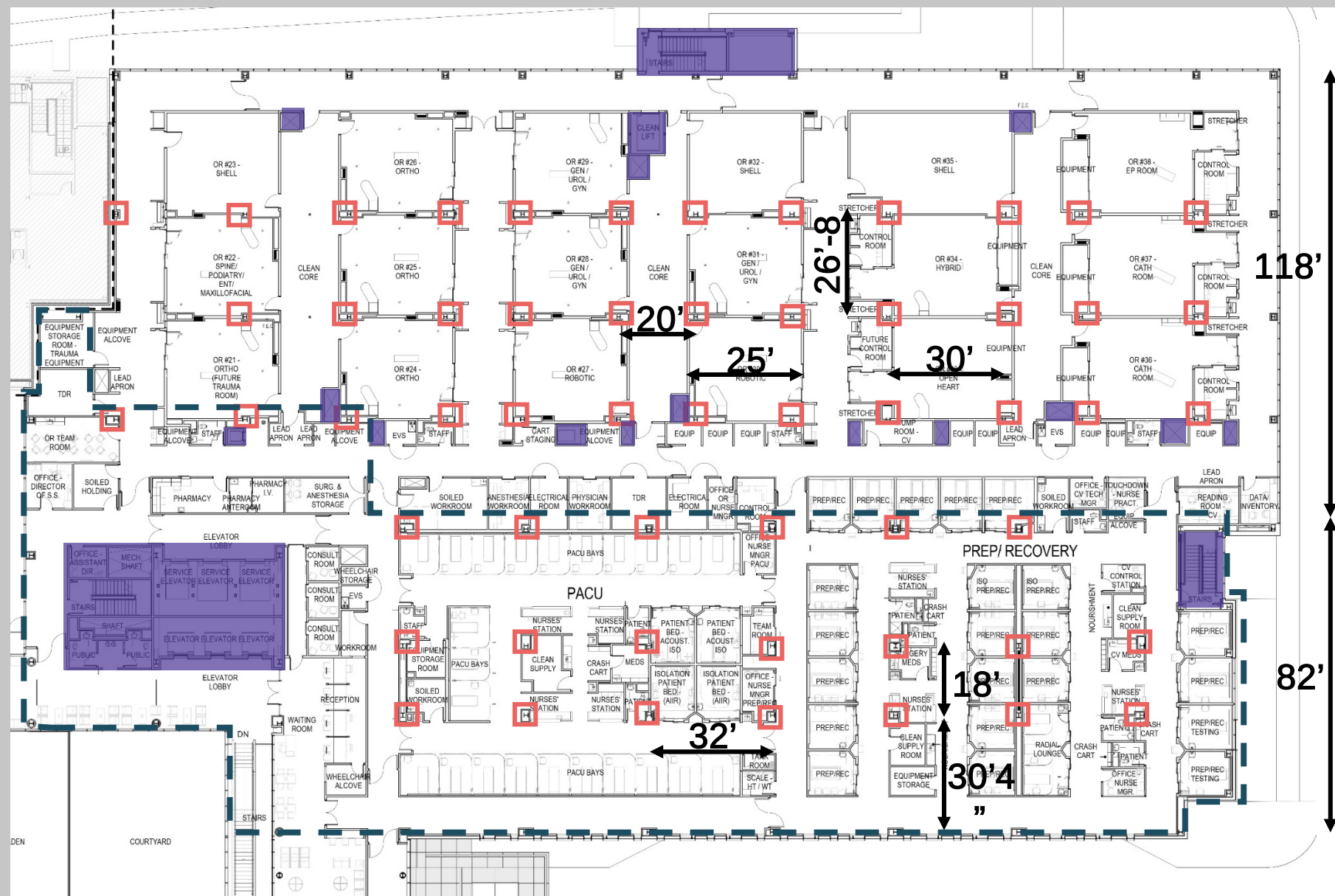
3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

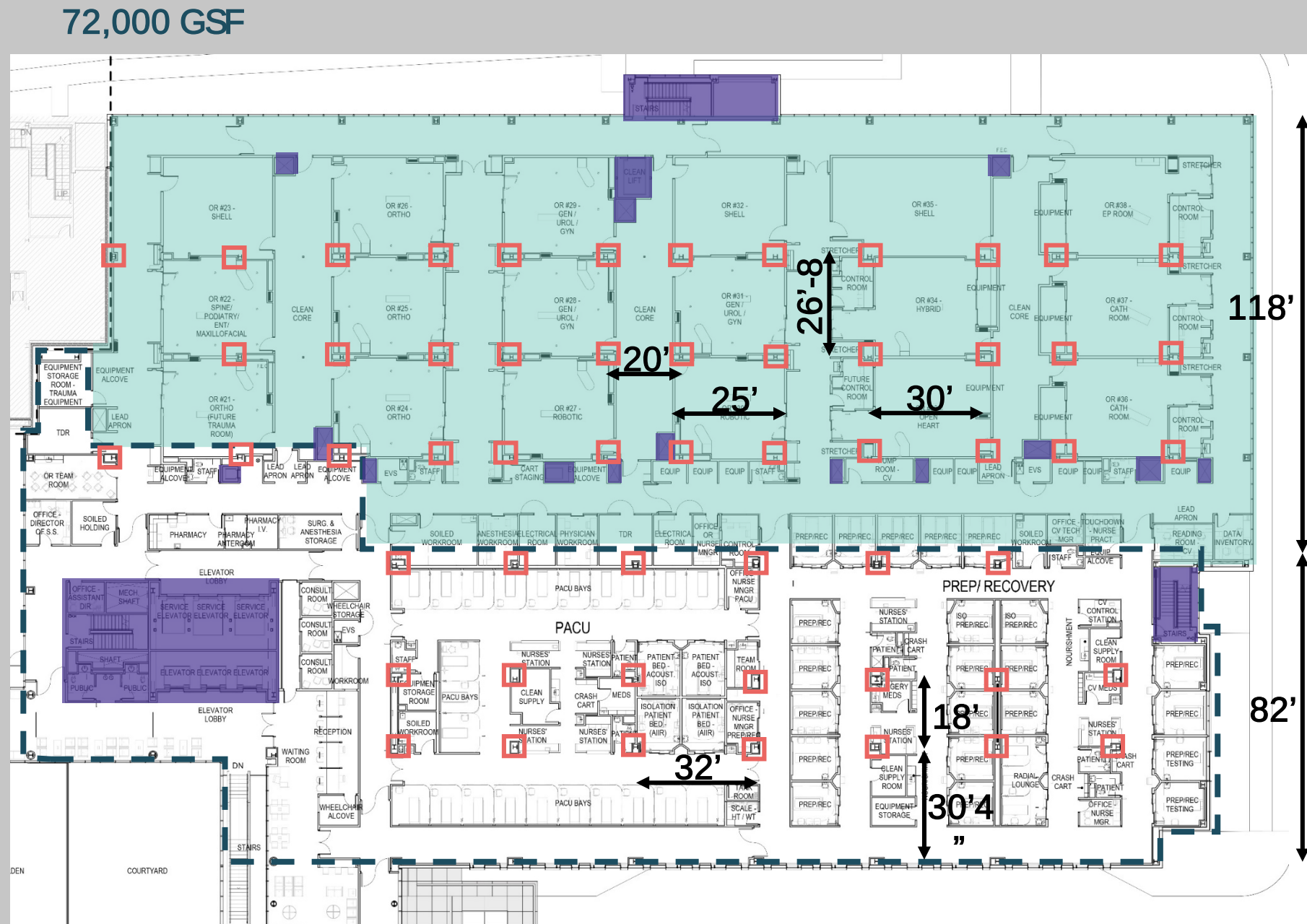
RESILIENCY

STRATEGIC ZONES OF FLEXIBILITY

FIXED VERTICAL ELEMENTS

COLUMN SPACING

FLOOR TO FLOOR HEIGHTS



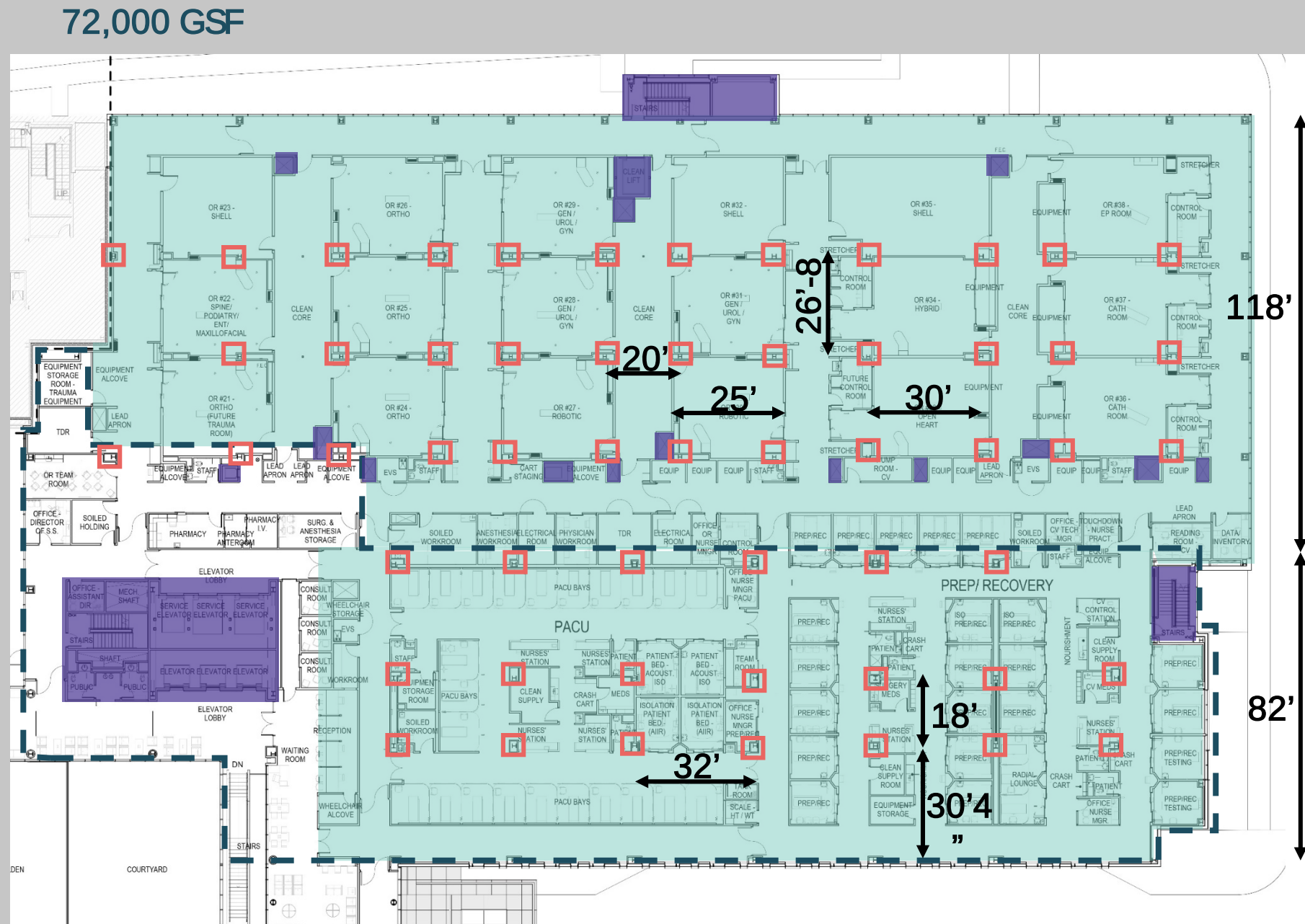
RESILIENCY

STRATEGIC ZONES OF FLEXIBILITY

FIXED VERTICAL ELEMENTS

COLUMN SPACING

FLOOR TO FLOOR HEIGHTS



25,000 GSF

5

RESILIENCY

4

STRATEGIC ZONES OF FLEXIBILITY

3

FIXED VERTICAL ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR HEIGHTS





Penn Medicine
CHESTER COUNTY HOSPITAL













5

RESILIENCY



4

STRATEGIC ZONES
OF FLEXIBILITY



3

FIXED VERTICAL
ELEMENTS



2

COLUMN SPACING



1

FLOOR TO FLOOR
HEIGHTS



PENN MEDICINE
Chester County Hospital

'THE BIG 5' SCORECARD



Above Average - Excellent

When are you likely to implement resiliency or emergency strategies in preparation for adverse weather events?

Already Implemented

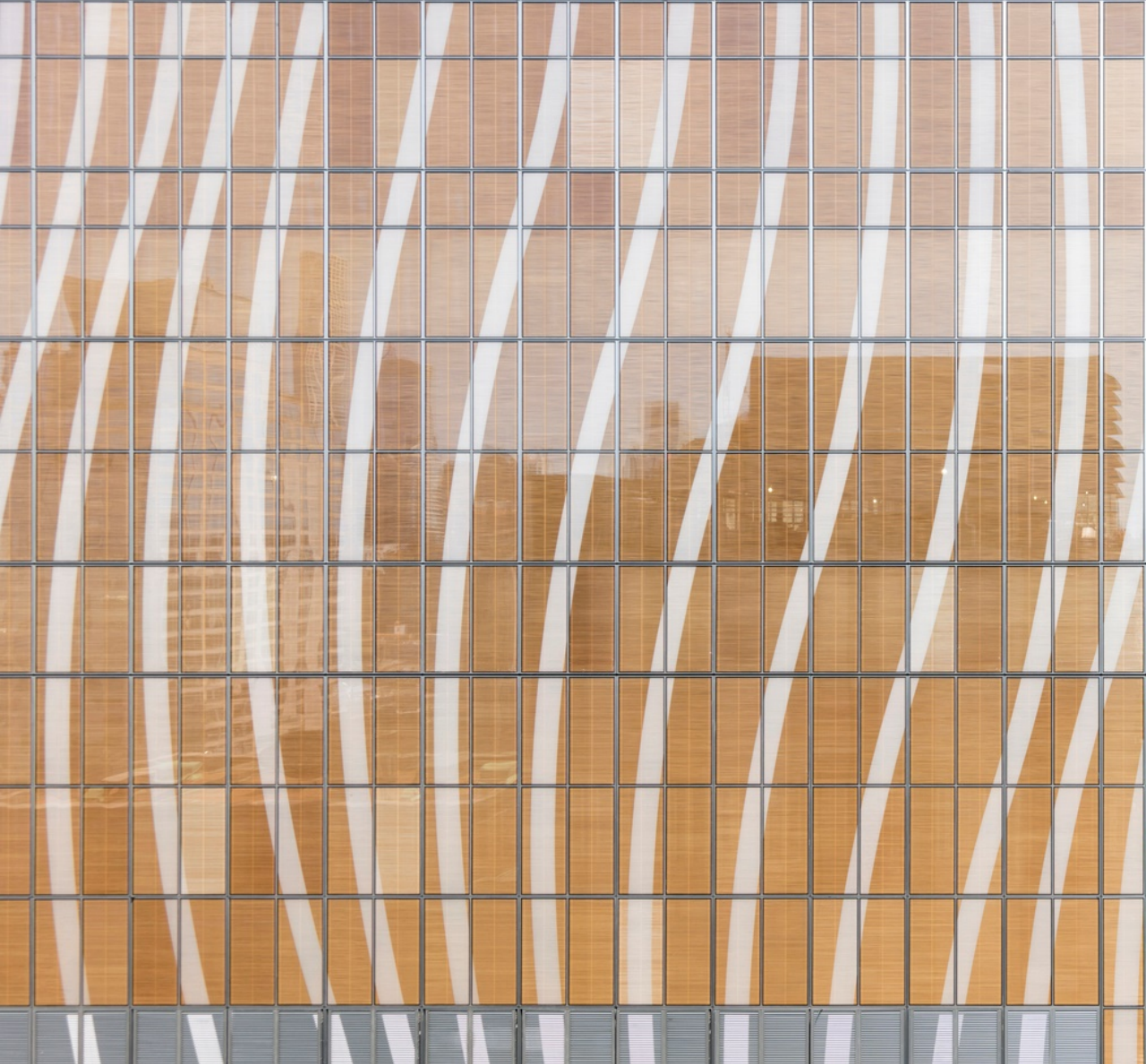
00-02 Years

02-05 Years

05-10 Years

10-20 Years

Never



New York-Presbyterian Hospital

David H. Koch Center

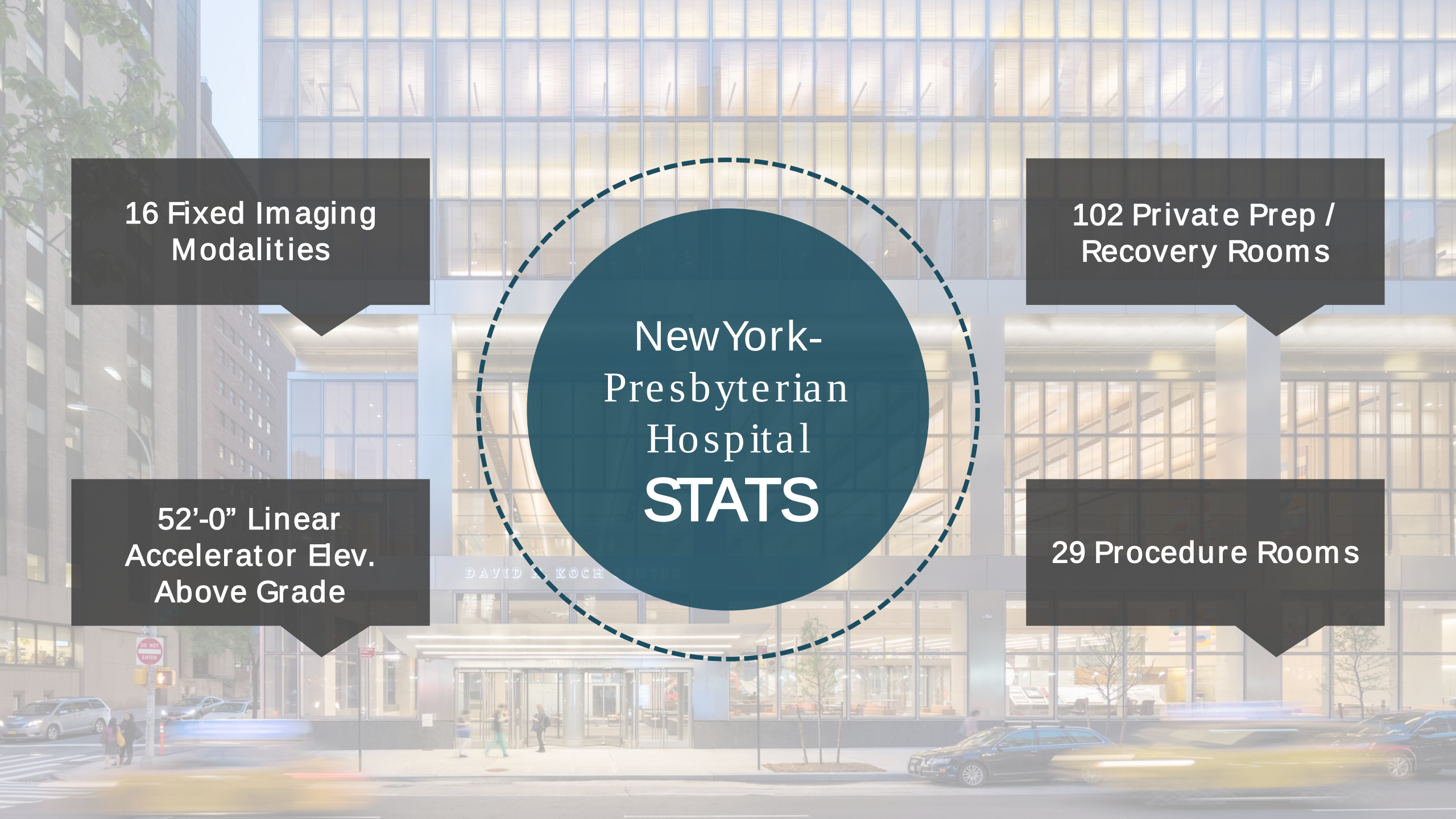


New York, NY

734,000 SF | 42,000 SF Site | 1 Acre







16 Fixed Imaging
Modalities

102 Private Prep /
Recovery Rooms

New York-
Presbyterian
Hospital
STATS

52'-0" Linear
Accelerator Elev.
Above Grade

29 Procedure Rooms

734,000 SF NEW CONSTRUCTION

HOSPITAL FOR WOMEN & NEWBORNS

AMBULATORY CARE

PUBLIC SPACE

- | | |
|----|--|
| 11 | Mechanical |
| 10 | Mechanical |
| 9 | Pre-Admission Testing + Digestive Diseases |
| 8 | Endoscopy |
| 7 | Shared Staff Support + Diagnostic Imaging |
| 6 | Ambulatory Surgery |
| 5 | Interventional Radiology |
| 4 | Radiation Oncology + Infusion |

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

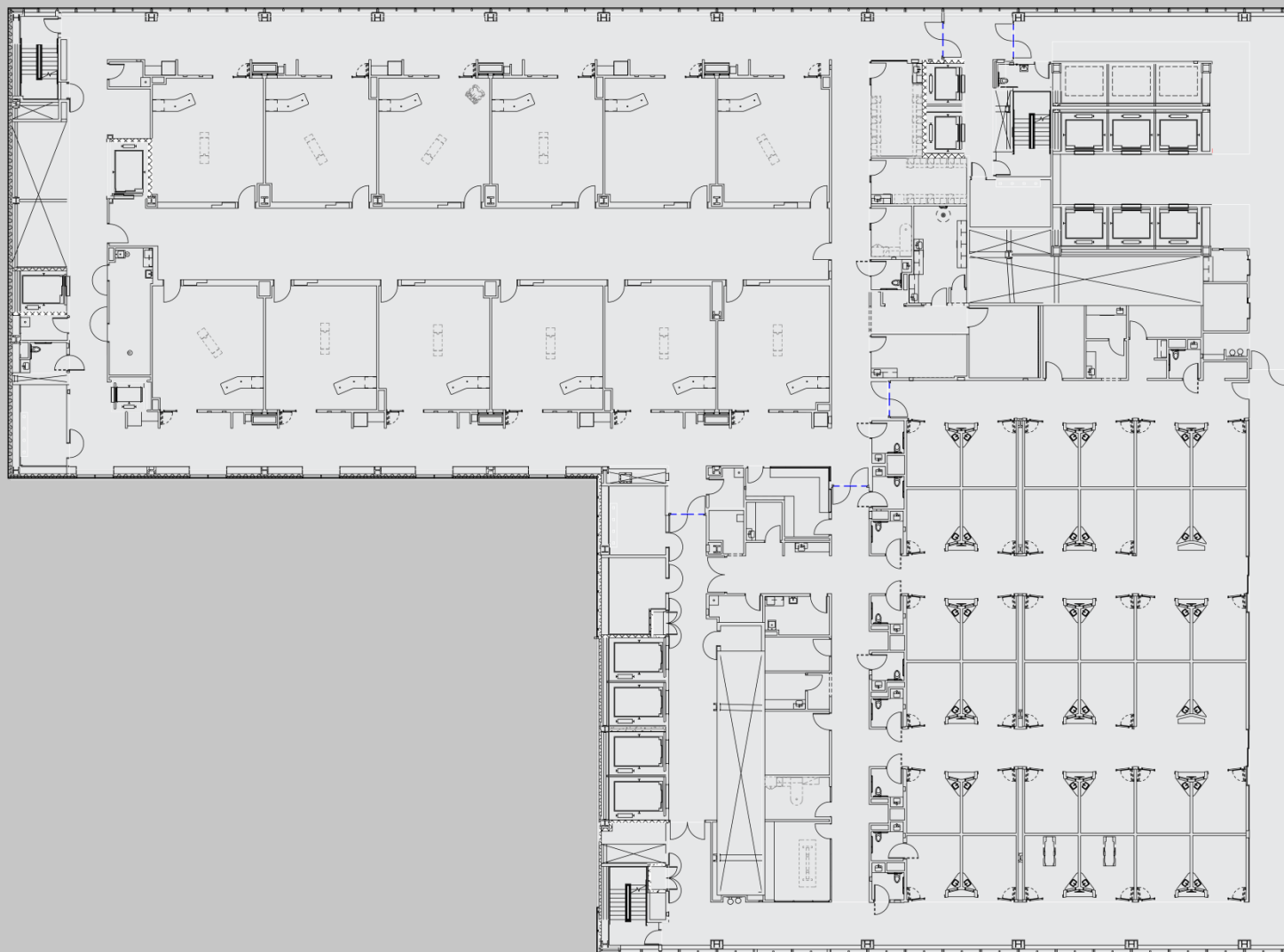
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



18'-6" Diagnostic + Treatment

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

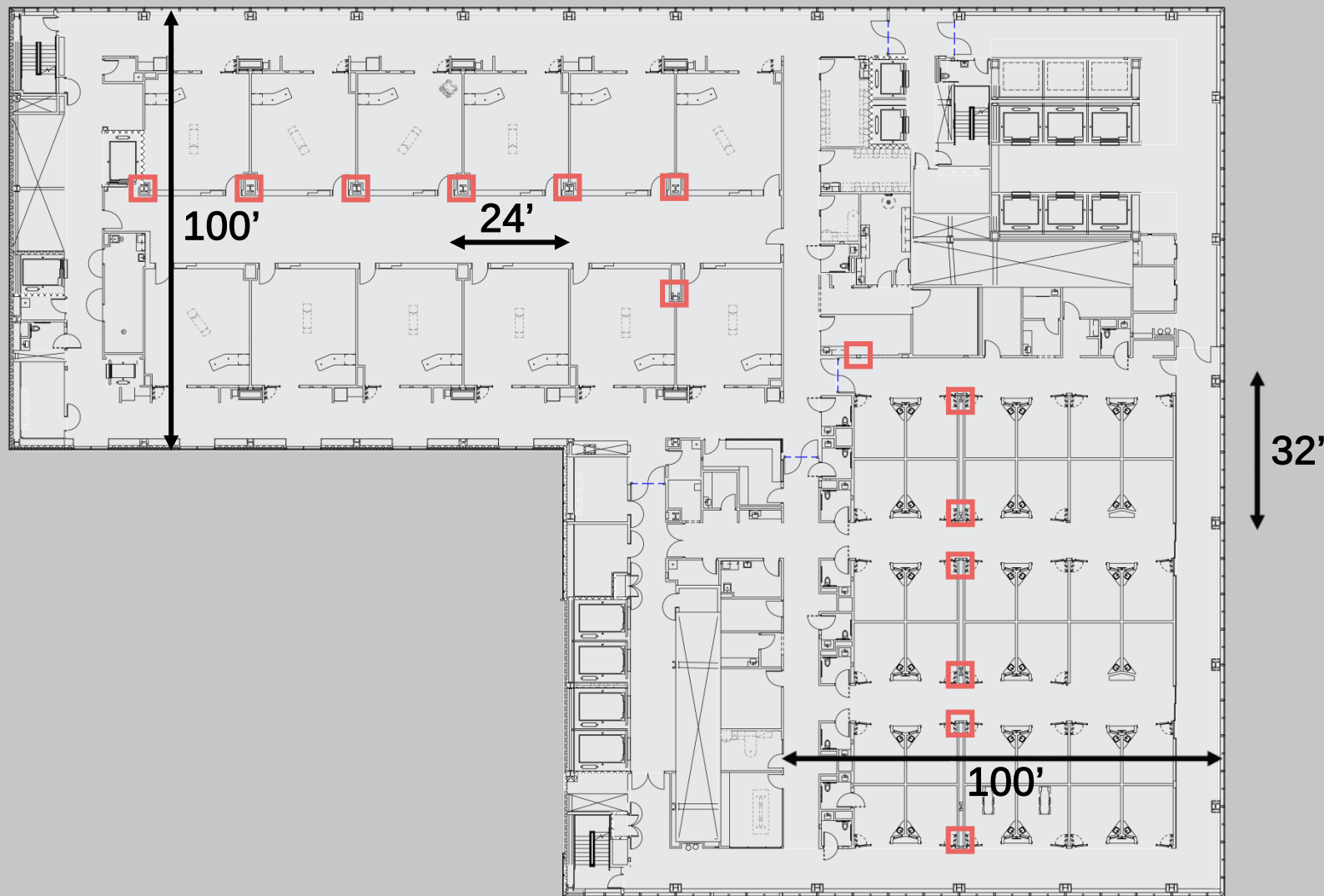
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

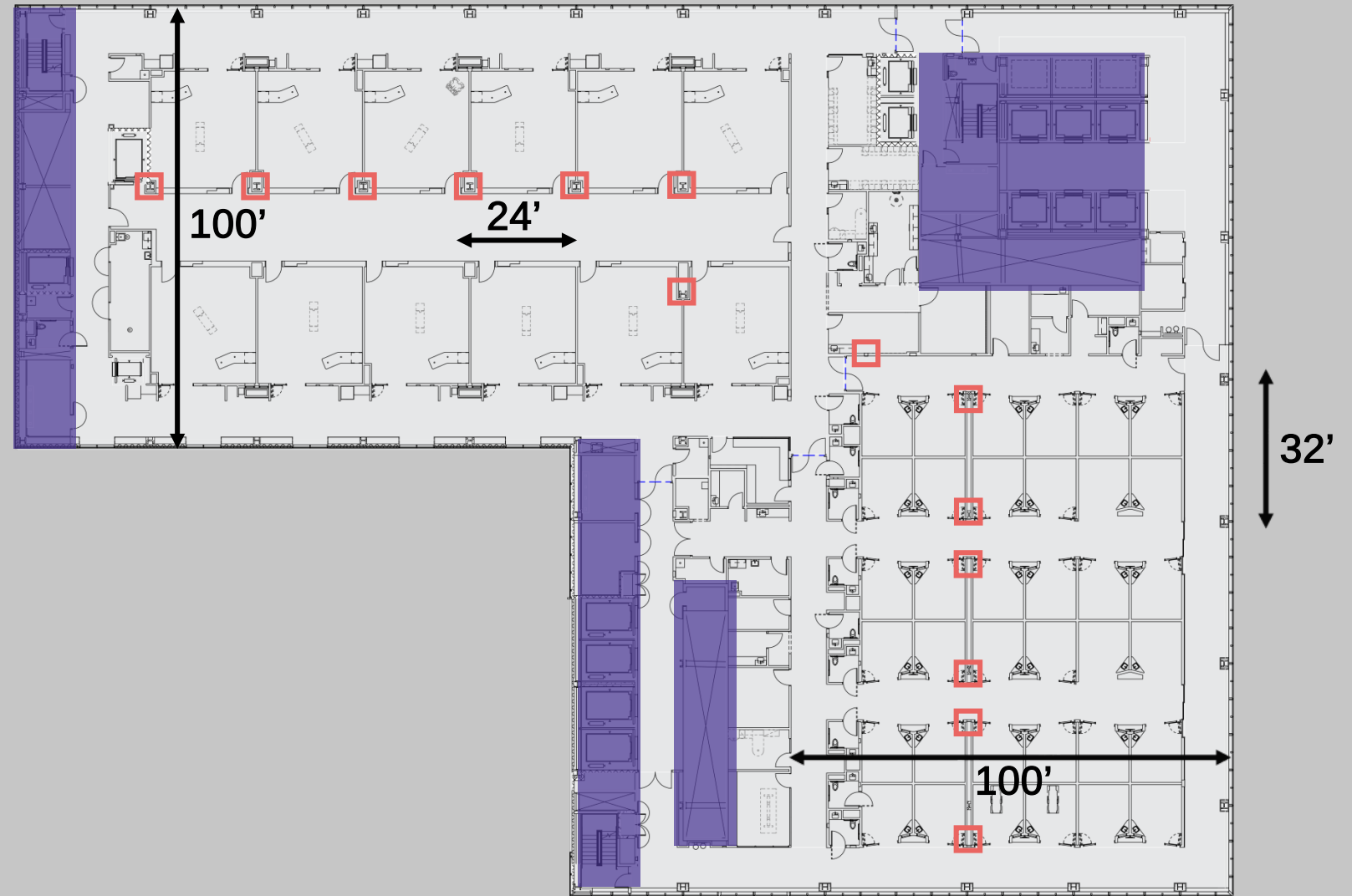
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

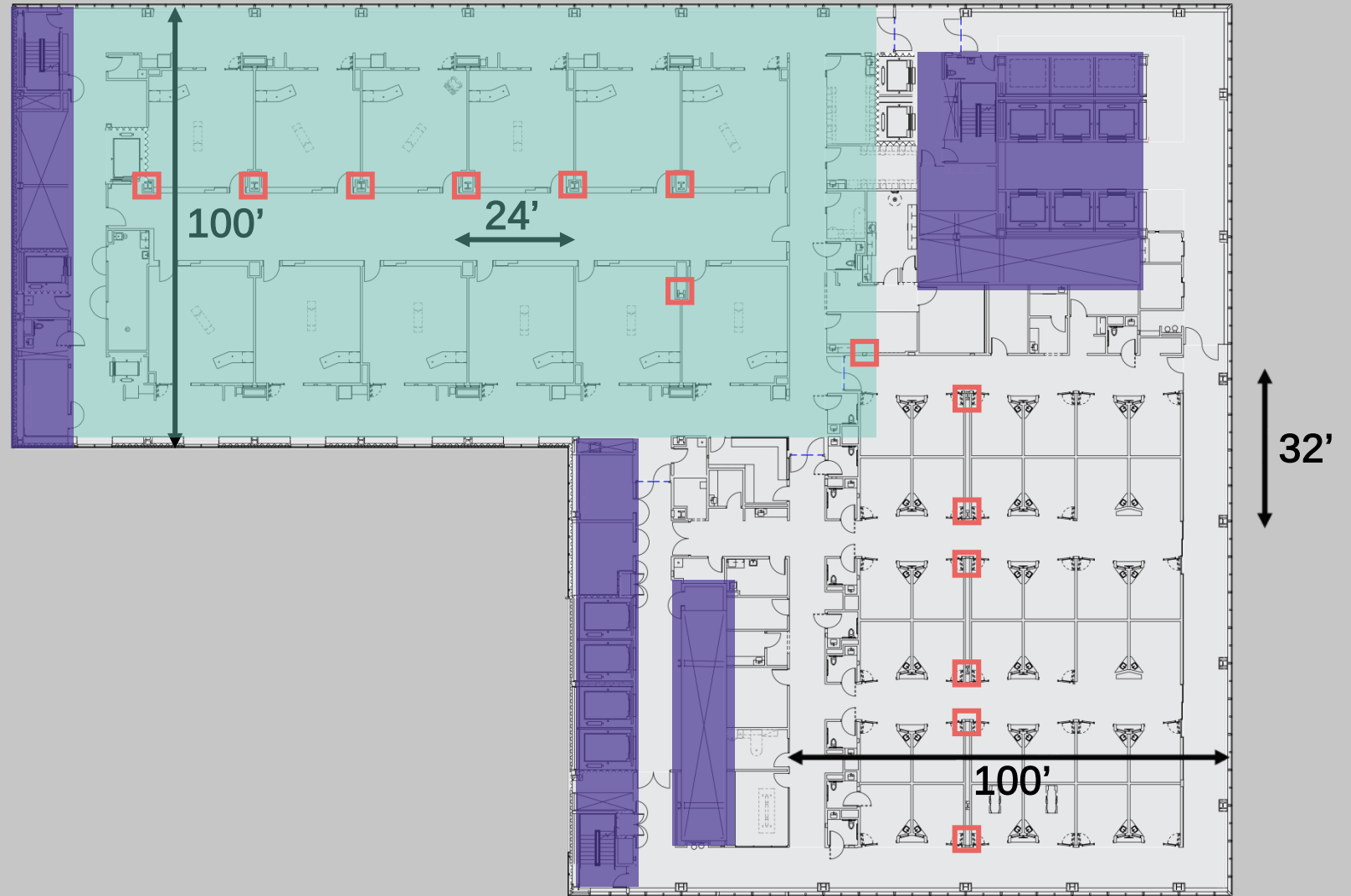
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

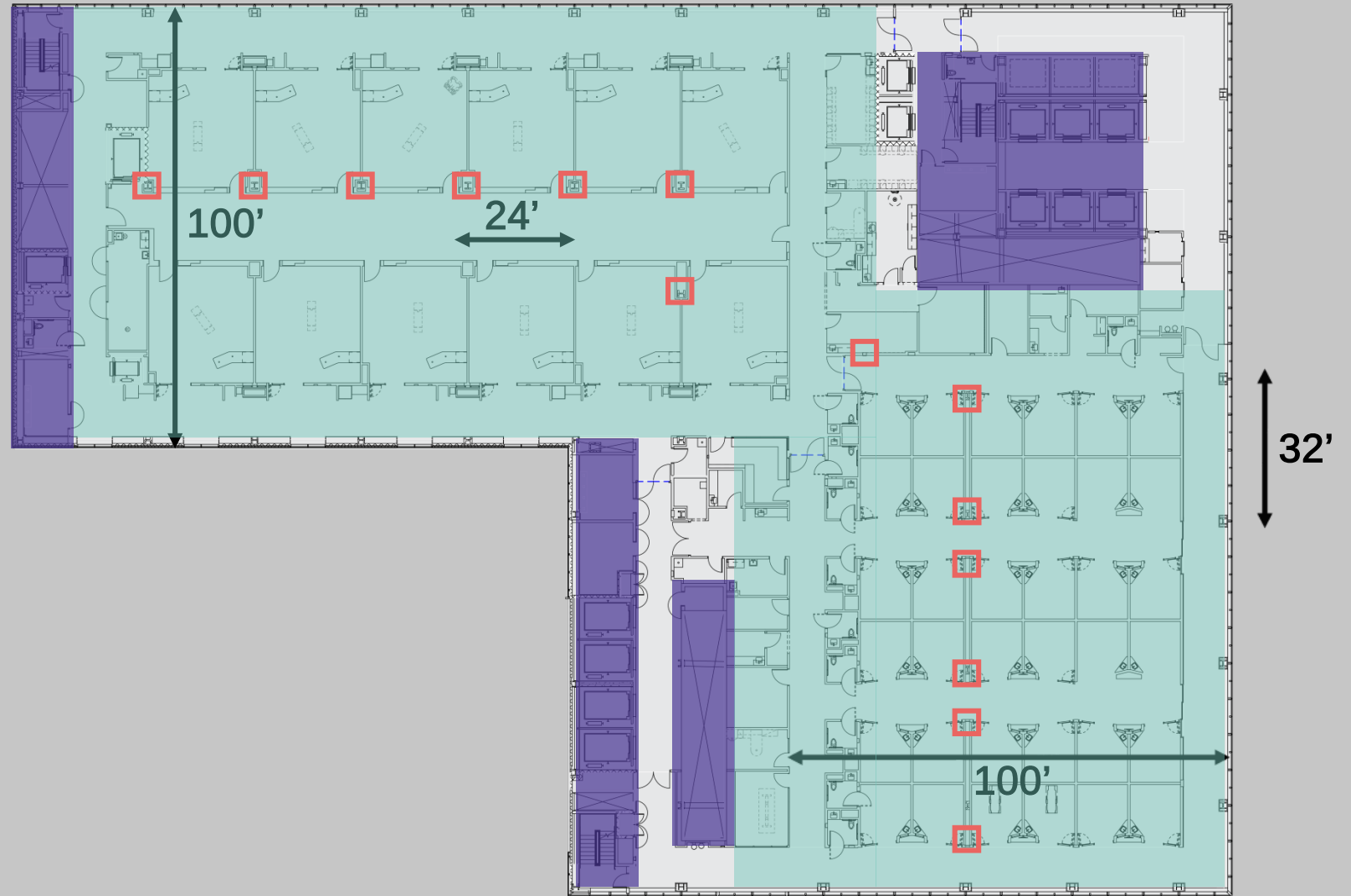
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

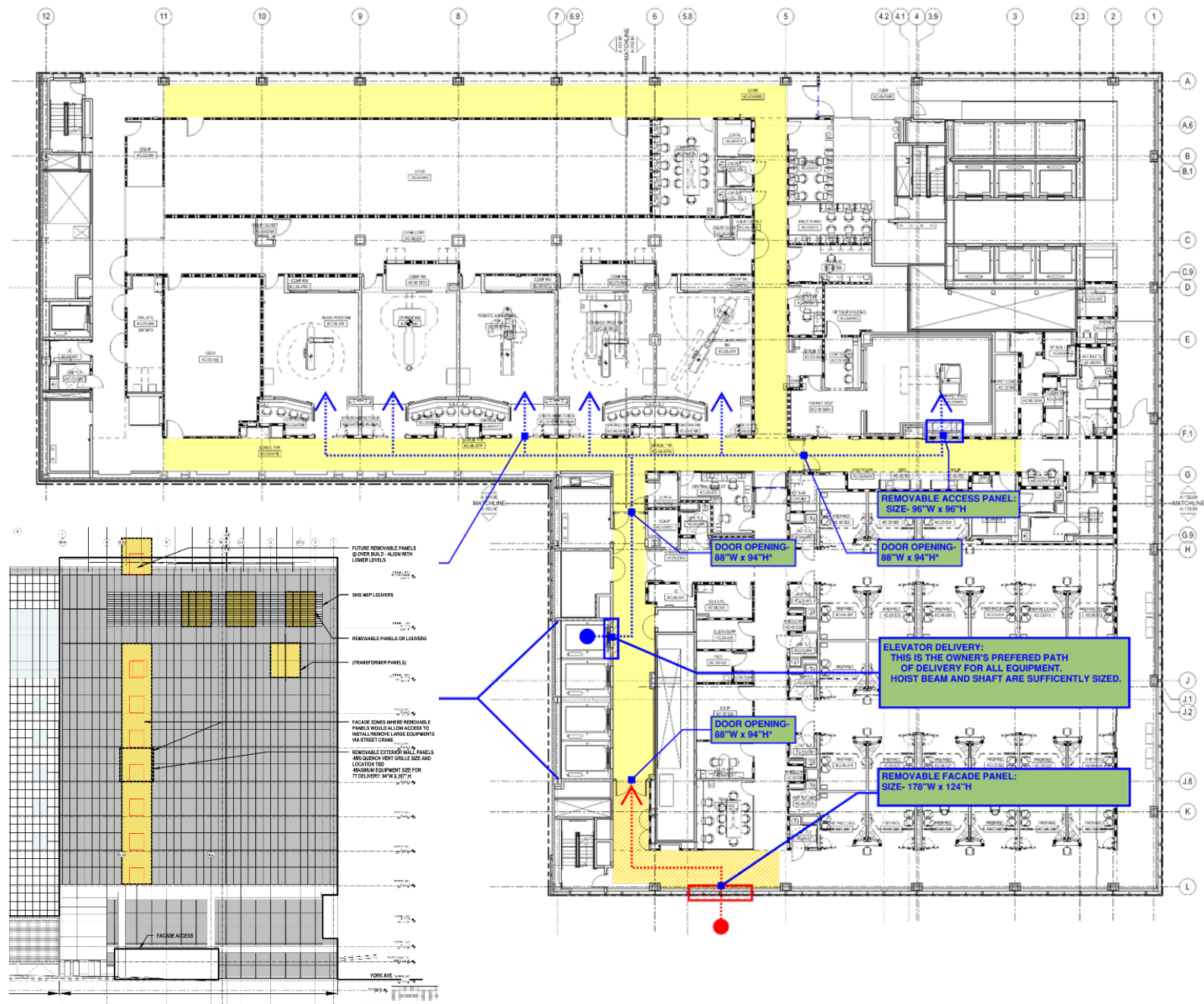
3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

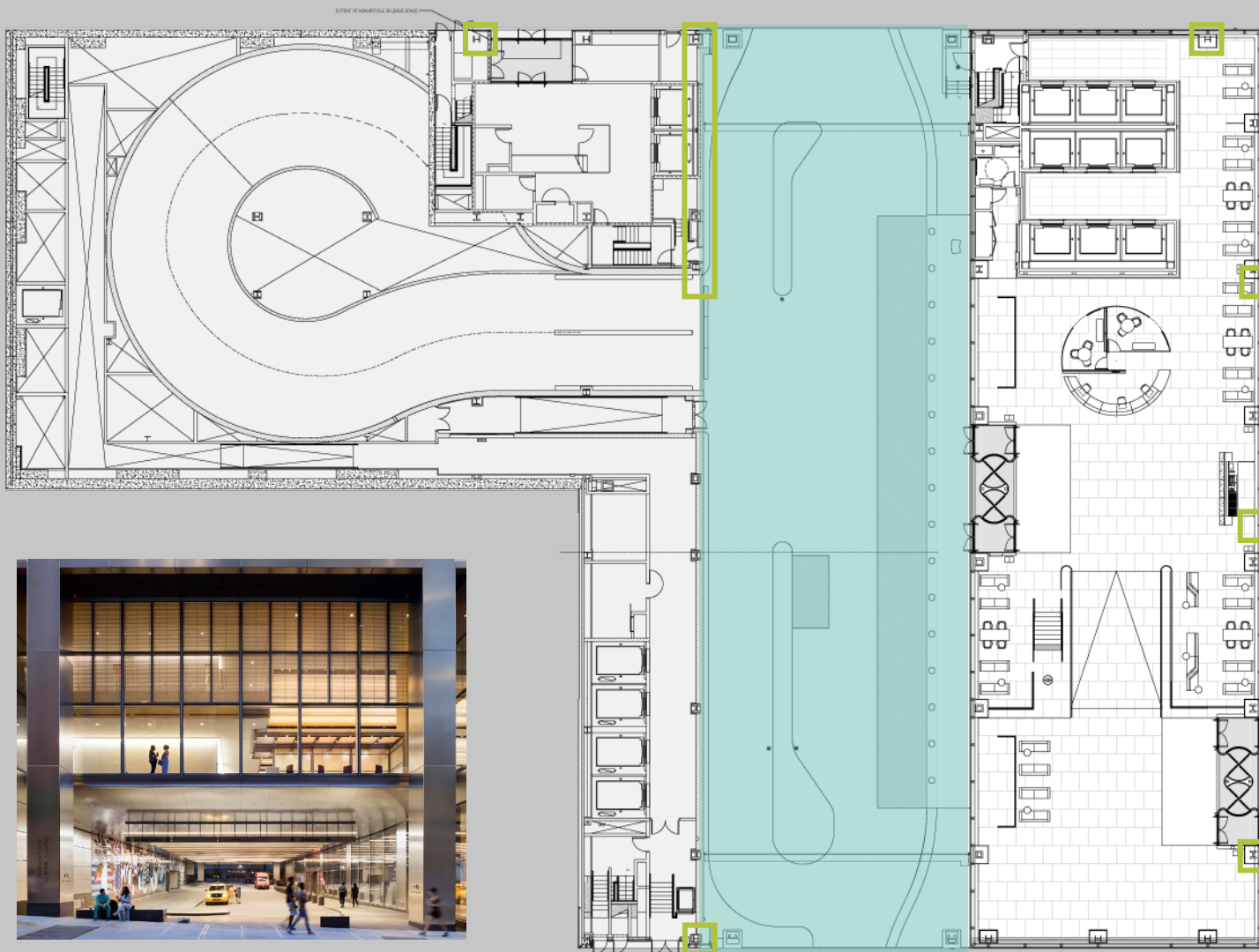
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

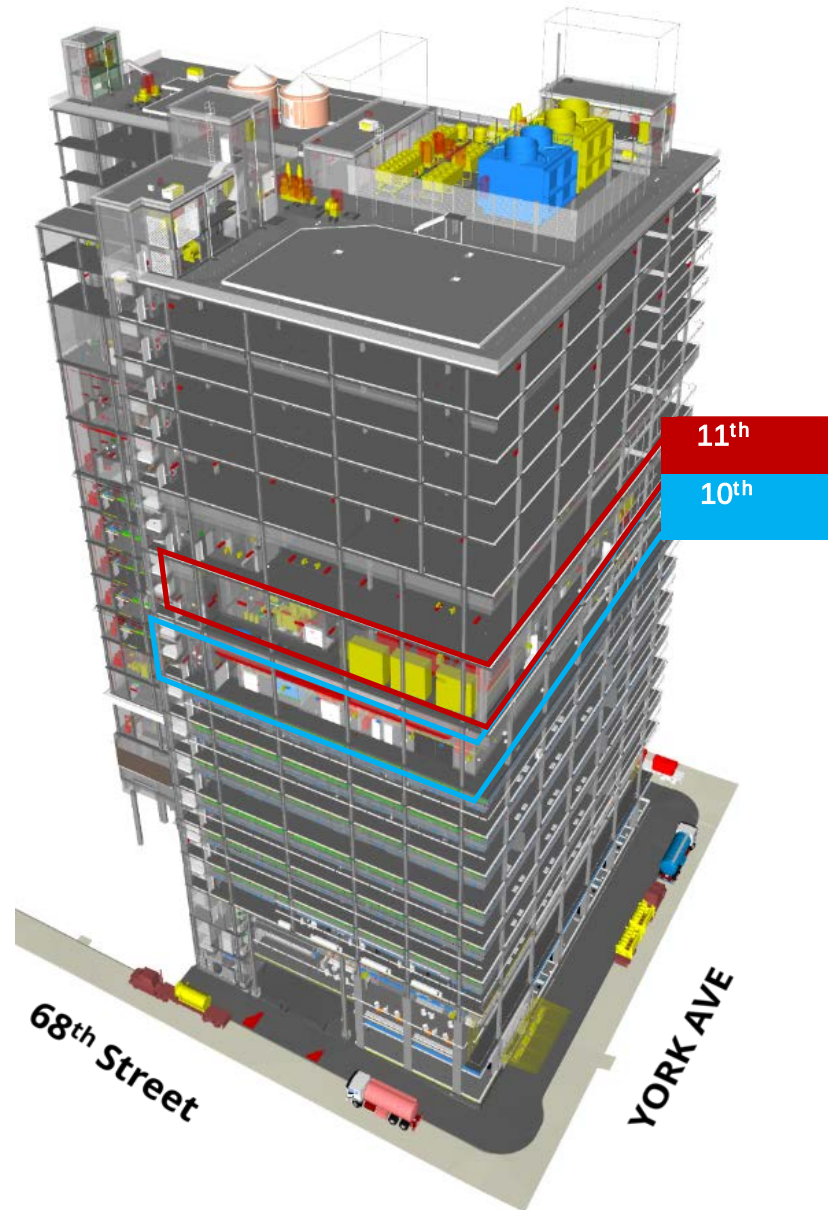
3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

- ConEd HT. Service N+2 on level 10
- Three emergency generator on 11
- 96 hour fuel oil storage
- Utilities street roll-up connections
- Air handling units on emergency power
- All heating equipment on emergency power
- Two chillers, cooling towers and associated pumps on emergency power
- Controllers to below grade equipment located above 1st floor
- Added shaft and medical gas capacity











Endoscopy





OR01











SHARMIN AND BIJAN MOSSAVAR-RAHMANI
Sky Lobby





MONTROSE PARK
DRIVE IN THE KIDZ CENTER



Do Not Enter

CLEARANCE 12'-10"

Entrance



AWARDS

*Healthcare Design Magazine, Healthcare Design Showcase,
Award of Merit*

2019

*SALUS, European Healthcare Design Award, Healthcare Design
over 25,000 SM*

2019

*SALUS, European Healthcare Design Award, Design Innovation
for Quality Improvement*

2019

Interior Design Magazine, Best of Year Honoree

2018

Engineering News-Record New York, Health Care Best Project

2018

*Greater New York Construction User Council, Outstanding
Healthcare Project*

2018



New York-Presbyterian Hospital
David H. Koch Ambulatory Care Center

'THE BIG 5' SCORECARD



Overall Score

5

RESILIENCY



4

STRATEGIC ZONES
OF FLEXIBILITY



3

FIXED VERTICAL
ELEMENTS



2

COLUMN SPACING



1

FLOOR TO FLOOR
HEIGHTS



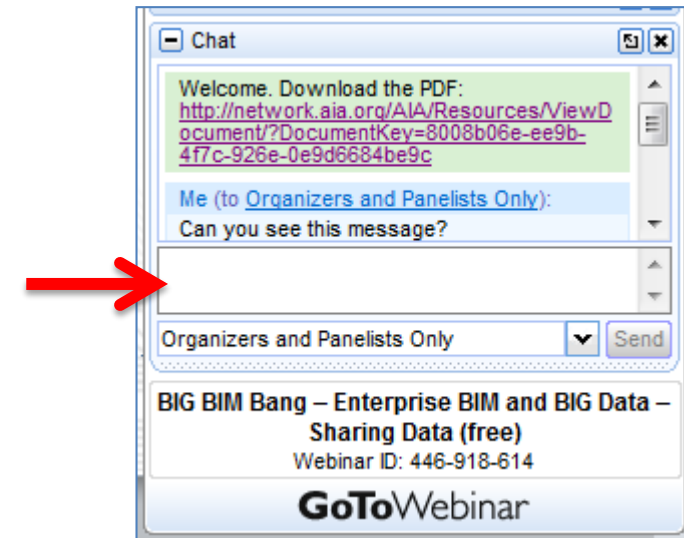


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Question Reminder

Submit your questions and comments via the chat box.



What is the ideal perimeter column grid for an inpatient bed floor?

30' X 30'

30' X 32'

32' X 32'

32' X 34'

32' X 36'

Other



Alexandra Cohen Hospital for Women and Newborns

David H. Koch Ambulatory Care Center



New York, NY

60 NICU Positions
Private Rooms

75 Postpartum /
Antepartum Rooms

Alexandra
Cohen Hospital
for Women
+ Newborns
STATS

Over 7,000 Annual
Births

16 LDRs + 5 C-Section /
Operating rooms

220,000 SF NEW CONSTRUCTION

HOSPITAL FOR WOMEN & NEWBORNS

AMBULATORY CARE

PUBLIC SPACE

- 18 Postpartum + Antepartum
- 17 Postpartum
- 16 Postpartum
- 15 Neonatal Intensive Care Unit
- 14 Labor + Delivery
- 12 Maternal Fetal Medicine / Food Service
- 11 Mechanical
- 10 Mechanical

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

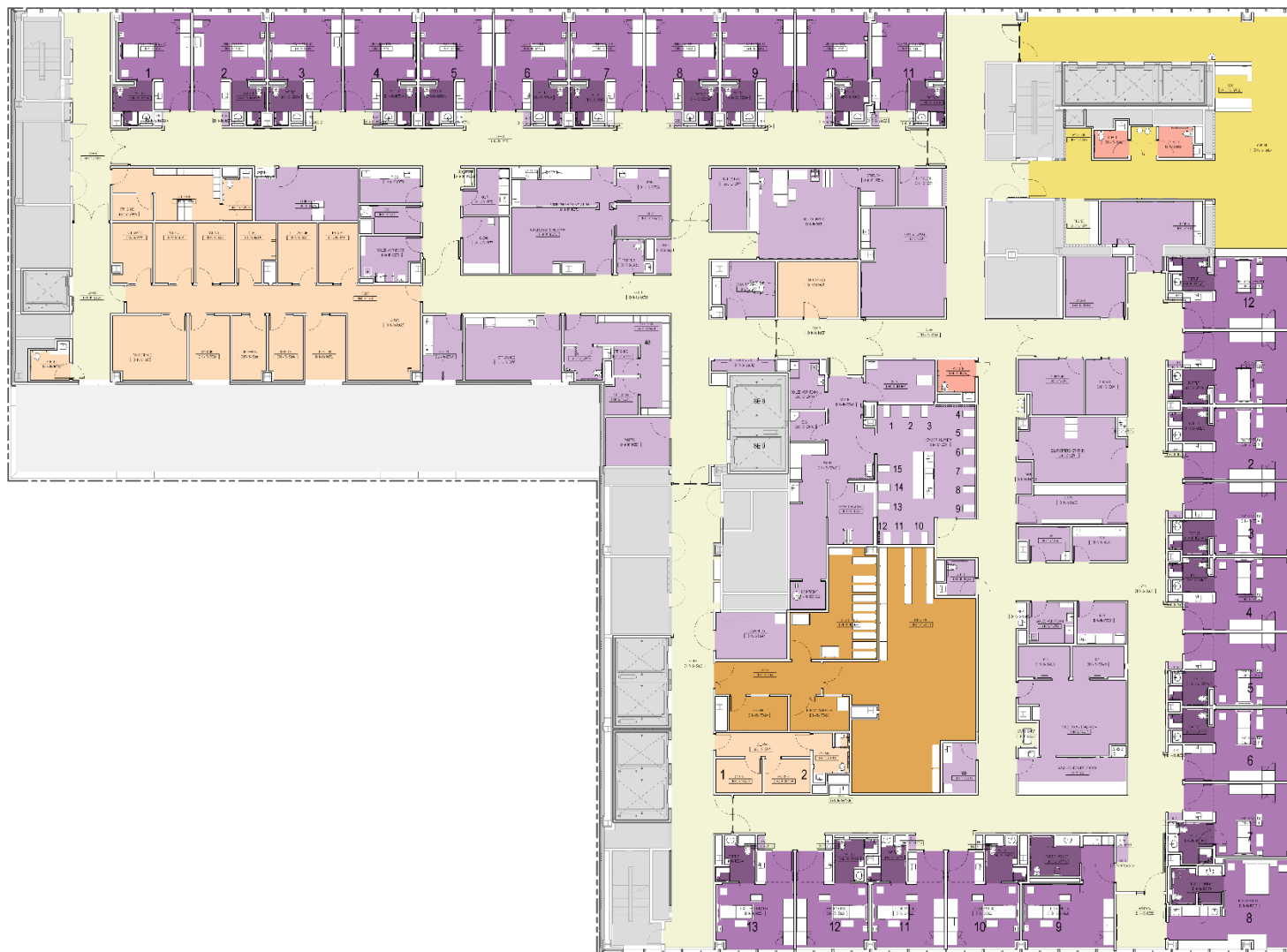
3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

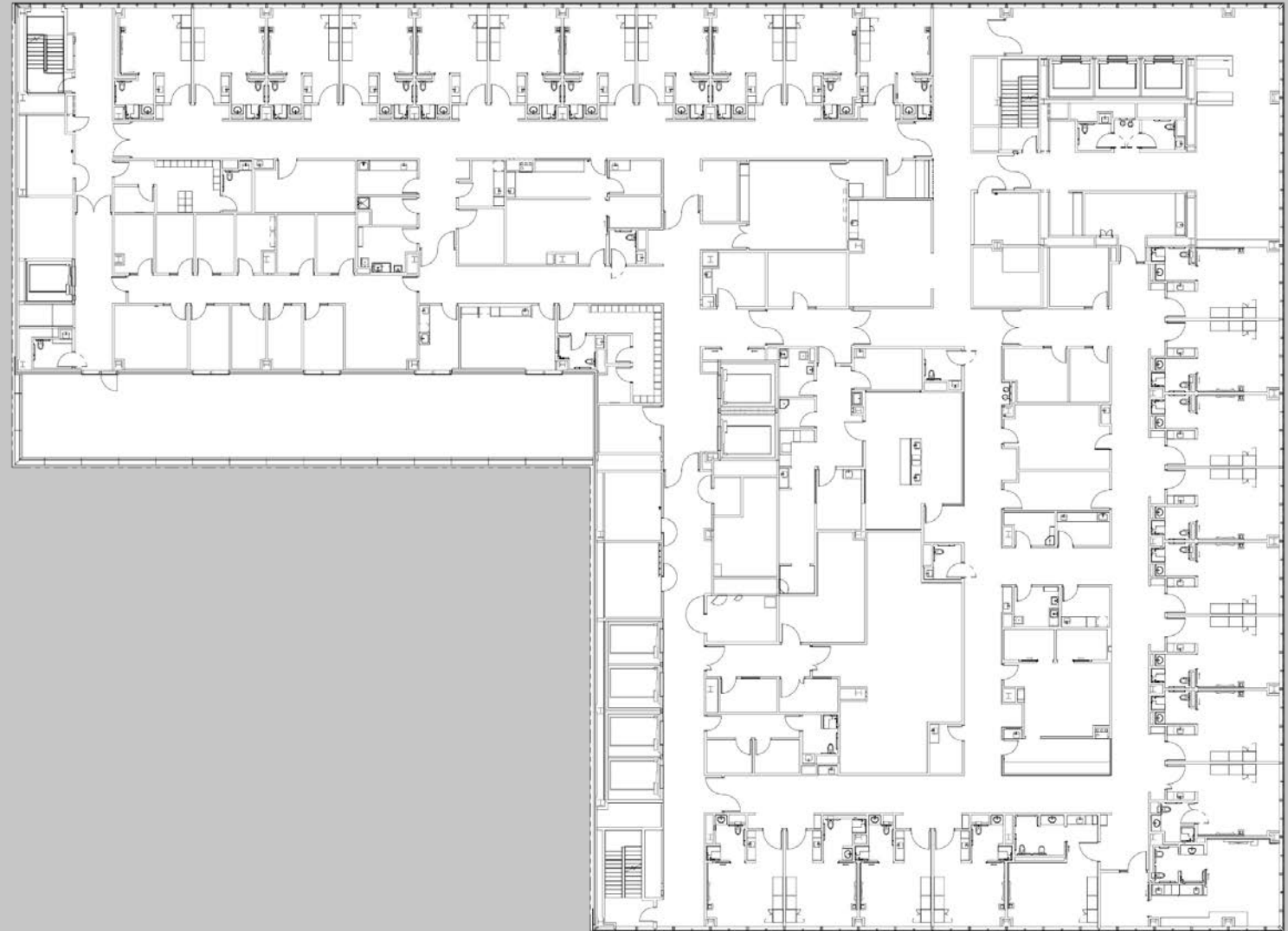
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



14' Postpartum Beds

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

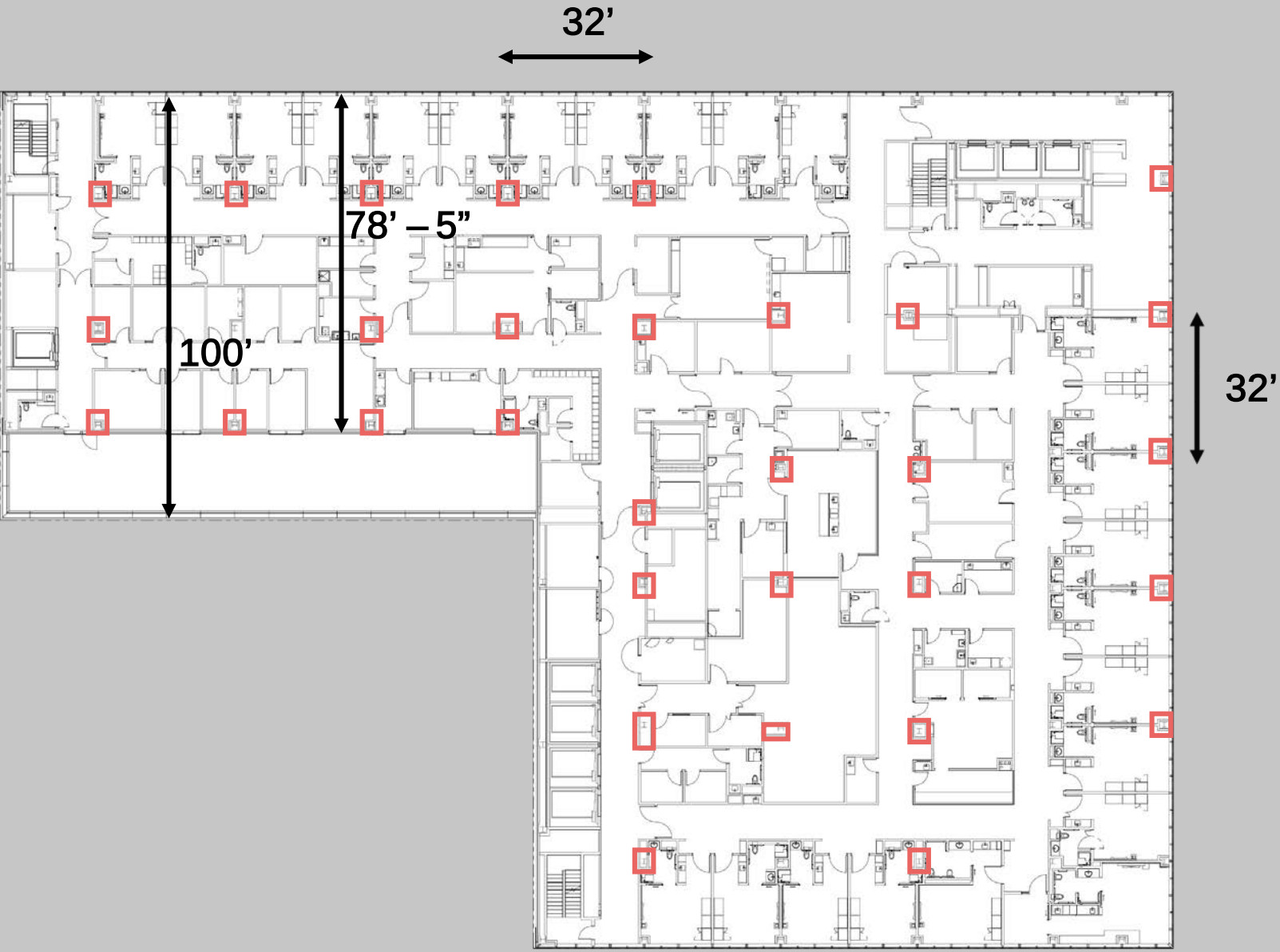
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



14' Postpartum Beds

5

RESILIENCY

4

STRATEGIC ZONES
OF FLEXIBILITY

3

FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS



5

RESILIENCY

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STRATEGIC ZONES
OF FLEXIBILITY

3

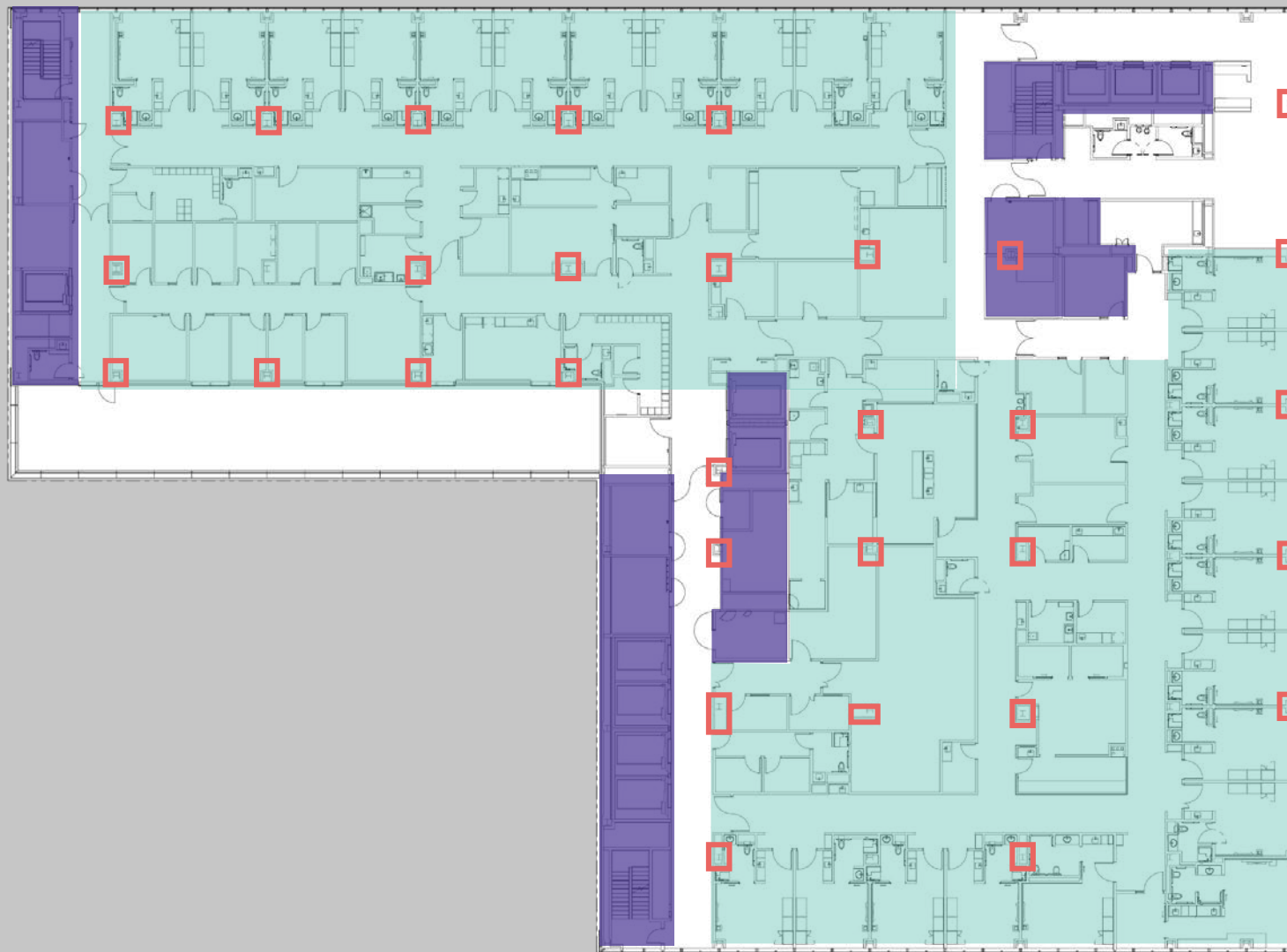
FIXED VERTICAL
ELEMENTS

2

COLUMN SPACING

1

FLOOR TO FLOOR
HEIGHTS







Alexandra Cohen Hospital for Women and Newborns

David H. Koch Center



'THE BIG 5' SCORECARD



Overall Score

How does your facility or project you are working on stack up to The Big 5?

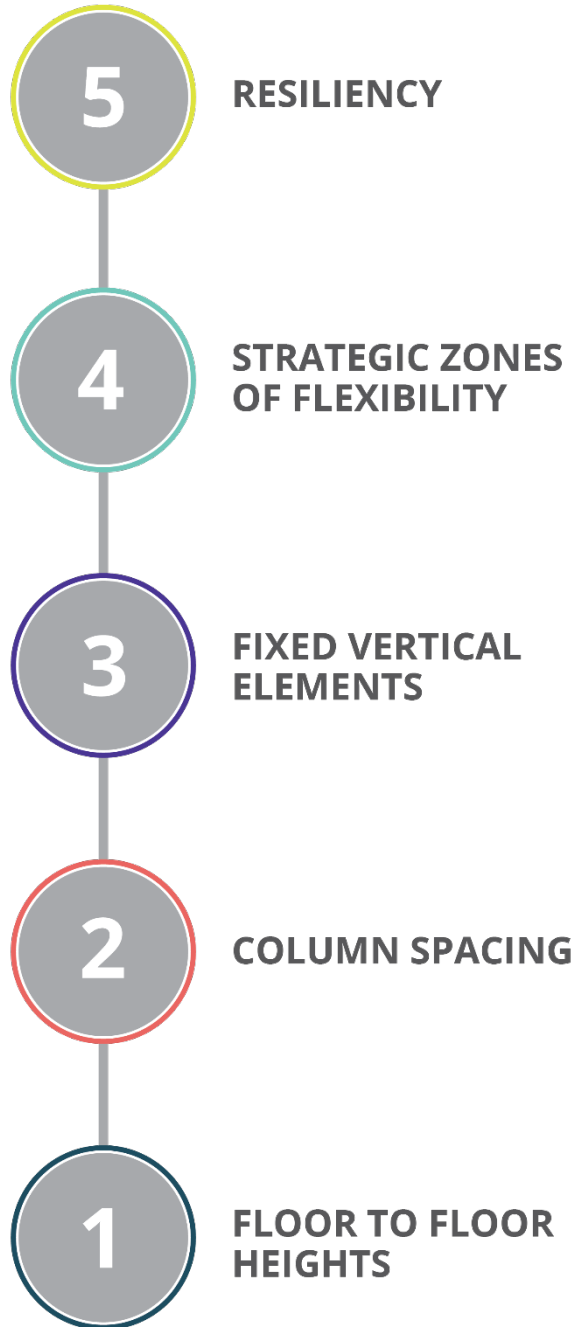
Excellent **A**

Above Average **B**

Average **C**

Below Average **D**

Poor **E**



LESSONS LEARNED

- We do not need to achieve the highest score on all of The Big 5 to have a successful project.
- It is reasonable to overcome 1 - 2 shortcomings with creative design solutions.
- Existing facilities that meet less than 3 may reach a tipping point with functional, design, and cost challenges and may not be appropriate for intense clinical use.

RECOMMENDATIONS

1. FLOOR TO FLOOR	2. COLUMN SPACING	3. FIXED VERTICAL	4. STRATEGIC ZONES OF FLEXIBILITY	5. RESILIENCY
Minimum 14'-0" New Beds 16'-0" New D+T Minimum 12'-0" Existing Beds 14'-0" Existing D+T	32'-0" Perimeter Inpatient Beds Opportunities for ORs out of bed footprint 24'-0" – 25'-0" wide, 27'-0" – 30'-0" long standard ORs 100 – 120' Procedure Platform width	Use edges versus centers Locate outside of clinical blocks	Large swatches of uninterrupted space Minimum footprint 20,000 GSF More flexibility on D+T Beds tend to be more static	Regional and local priorities Redundant feeds Independence from grid Dual fuel sources Surge conditions



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Time for Questions and Comments





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The URL to the webinar survey <https://www.research.net/r/AAH2003> will be emailed to the individual who registered your site.

The survey closes **at Friday, April 17** at 12:30am ET.

For questions, please email knowledgecommunities@aia.org



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Upcoming Webinars

Date	Series	Topic
5/12	Beyond the Basics	Psychiatric Crises Centers and ED's: Trends, Drivers, and Examples
6/9	Master's Studio	Net-Zero Hospitals: A Path Forward
7/14	Master's Studio	Modular Construction and the IPD Delivery Method

Dates & topics are subject to change