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Operating Room Redesign - Zanmi Lasante Hospital | Cange, Haiti

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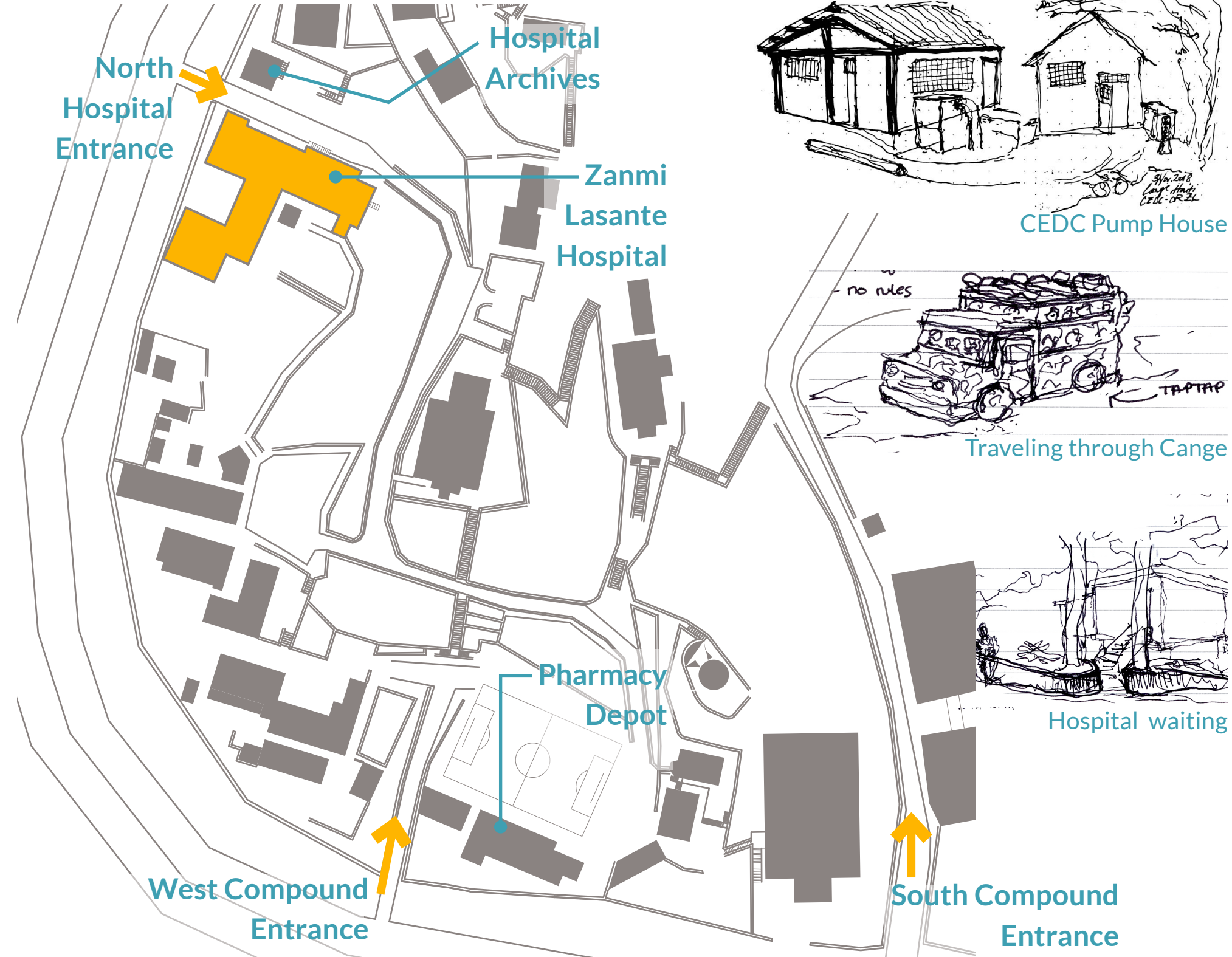
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CONTEXT

INTRODUCTION



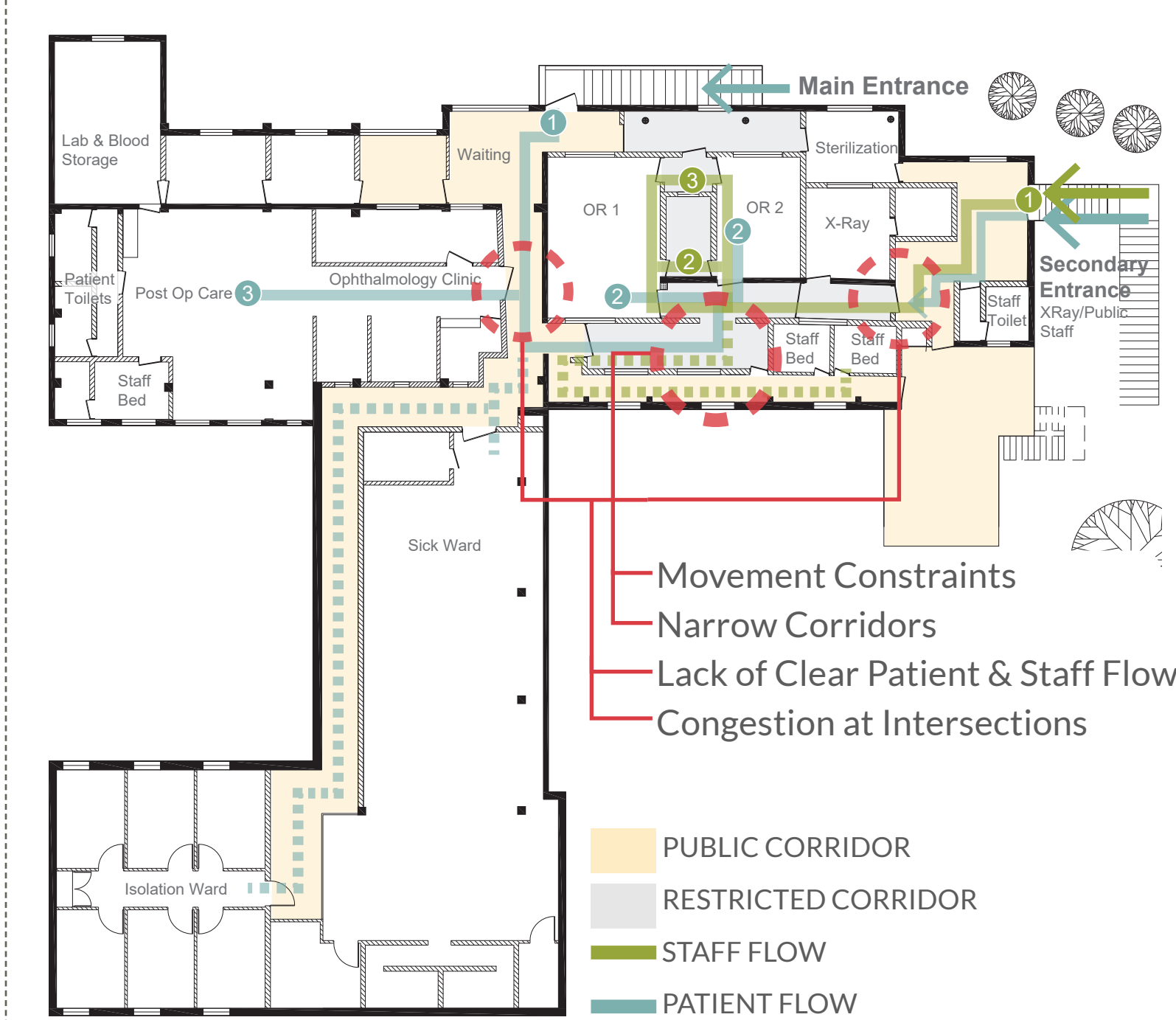
Located in Cange, Haiti the Zanmi Lasante Hospital is a local hospital that was established in 1985 by the Partners in Health healthcare system. It served as the primary hospital for over 25 years in the Central Plateau.

In 2013 Partners in Health opened a large state-of-the-art teaching hospital, Hôpital Universitaire de Mirebalais (HUM), in the neighboring town of Mirebalais located 30 minutes from Cange. As a result, many medical services and resources were moved out of Cange, and the increased number of patients traveling to HUM for care has resulted in overcrowding. To minimize this burden Zanmi Lasante hopes to renovate and upgrade its two existing operating rooms.

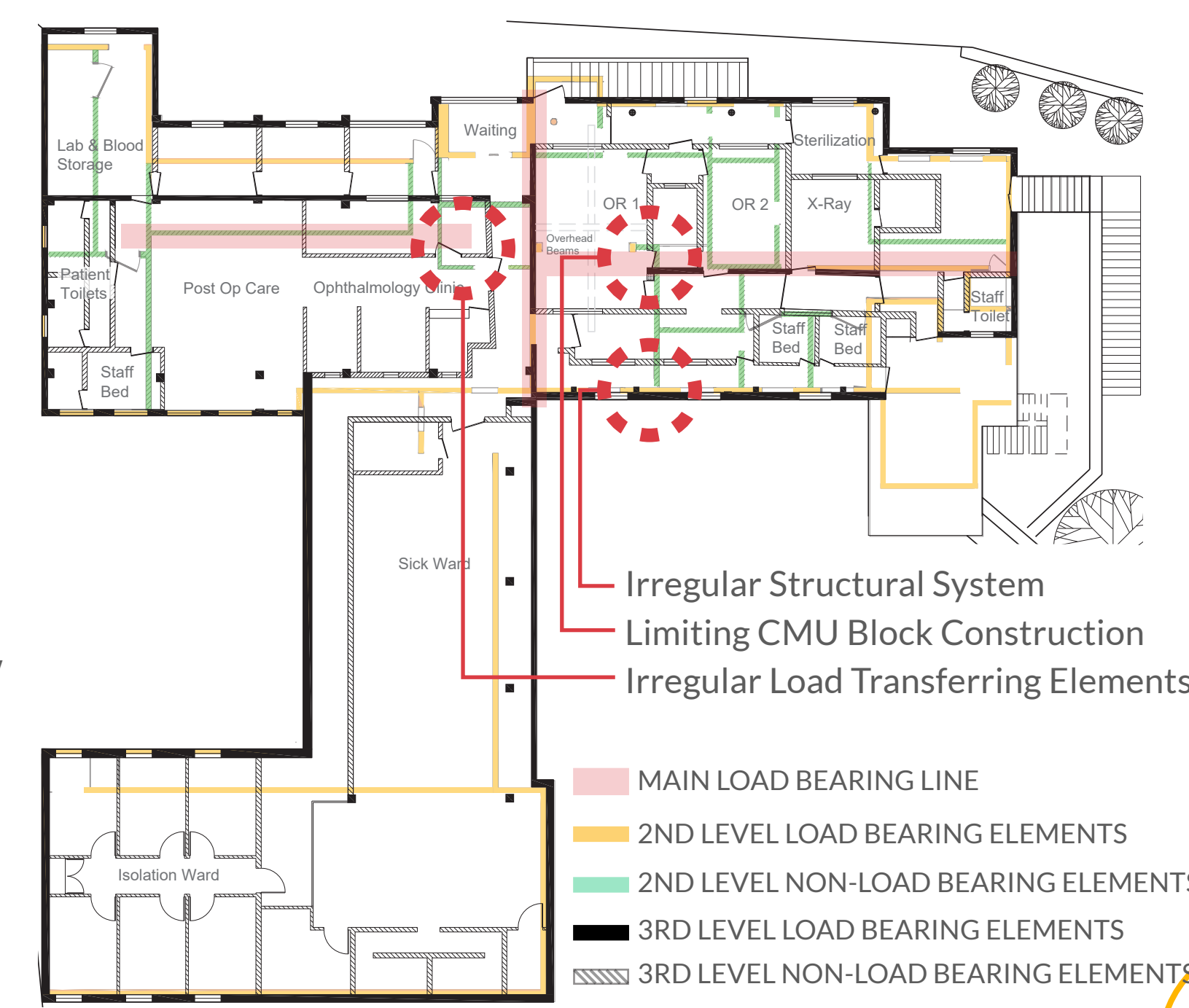
The A+H and CEDC team were tasked to come up with a solution to update and manage this process as the existing Operating Rooms are currently out of service due to inadequate conditions and for failing to meet minimal standards of safety. The work conducted this semester could lead to a viable solution for an operating room and surgical suite. In doing so, the project has the potential to greatly increase the quality of life of locals living in the Central Plateau through the design of safe surgical facilities.

CURRENT CONDITIONS

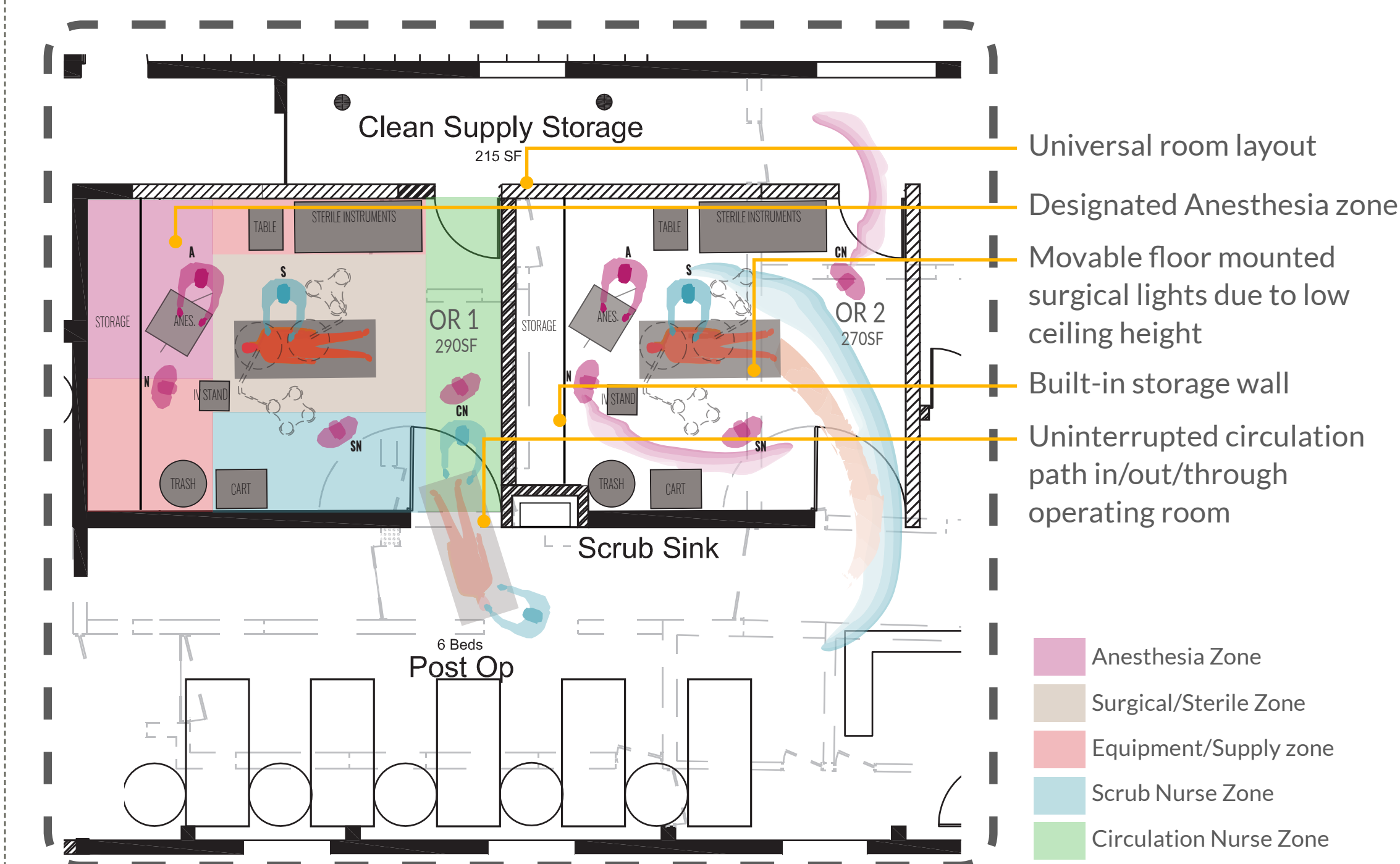
FLWS & CIRCULATION



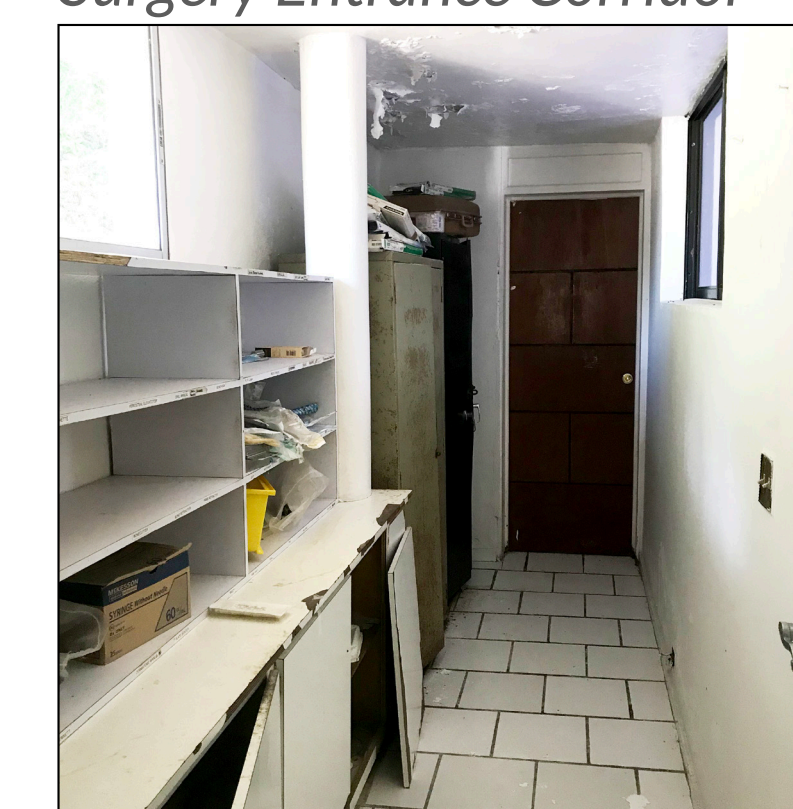
STRUCTURAL



SUGGESTED OPERATING ROOM ZONING



EXISTING CONDITIONS



DESIGN SCOPE

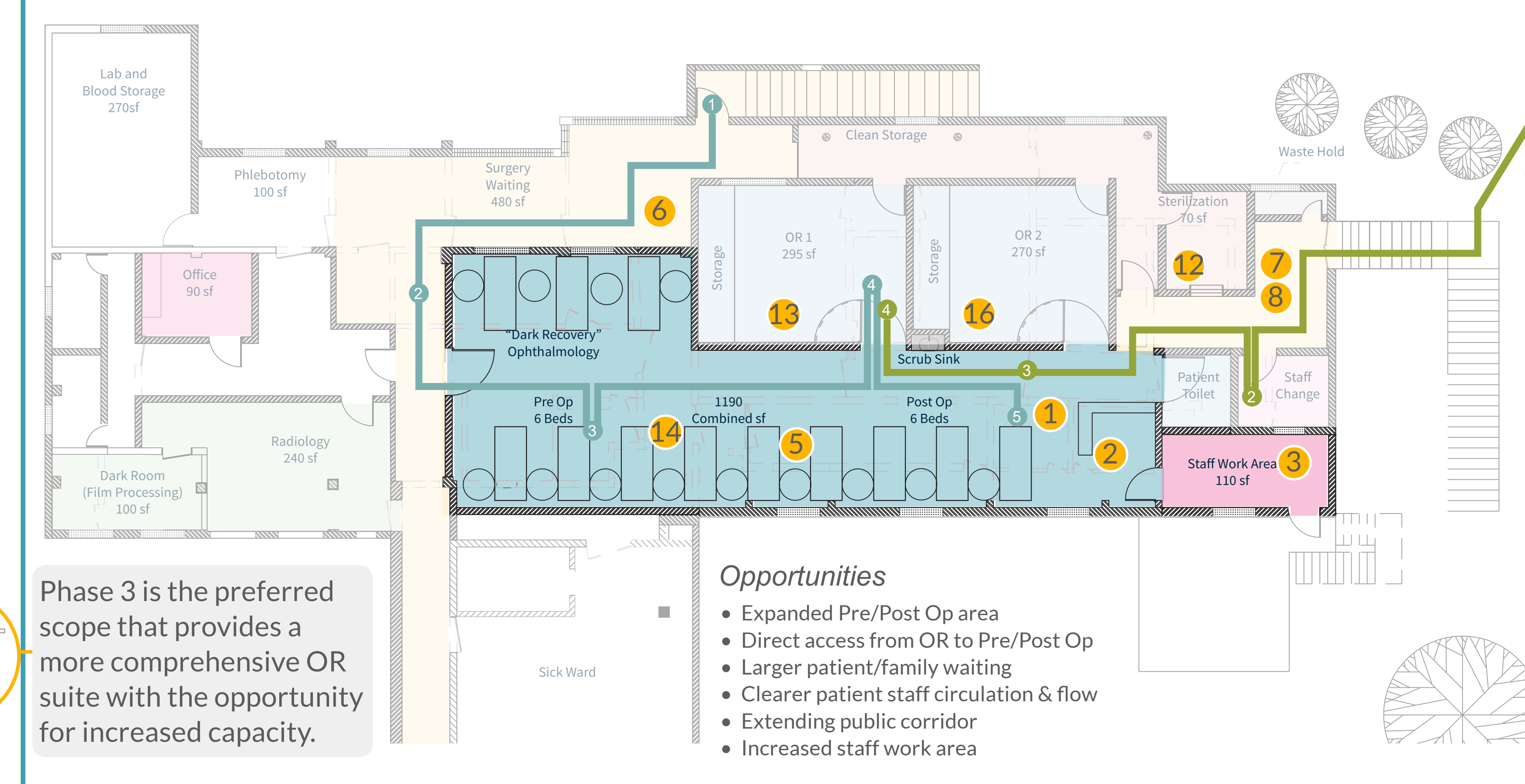
MINIMAL SCOPE OF WORK



INTERMEDIATE SCOPE OF WORK



PREFERRED SCOPE OF WORK | FINAL BUILD OUT



PROBLEM

THE EXISTING CONDITIONS DO NOT MEET MINIMAL STANDARDS OF SAFETY

MISSION

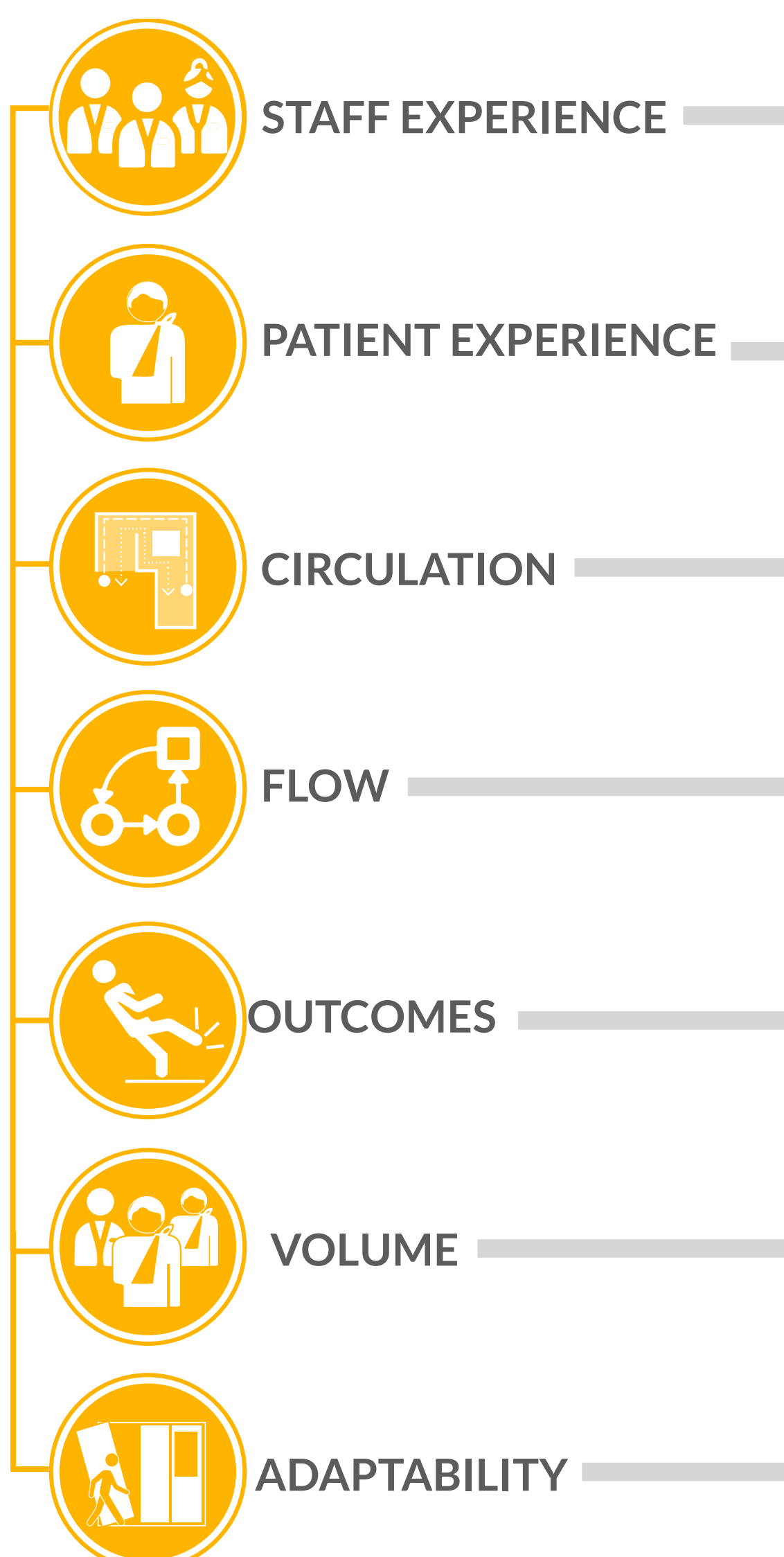
DEVELOP DESIGN RECOMMENDATIONS FOR AN ENVIRONMENT THAT SUPPORTS SAFE, QUALITY CARE AND INCREASES THE CONDITIONS OF THE OPERATING ROOM AND SUITE TO NEAR A FIRST-WORLD STANDARD OF CARE

OBJECTIVES

- IDENTIFICATION OF BEST PRACTICE AND INDUSTRY STANDARD EXAMPLES
- ON-SITE FACILITY ASSESSMENT AND ENVIRONMENT SURVEY OF THE EXISTING SURGICAL SUITE AND SITE CONDITIONS
- ANALYSIS OF EXISTING OPERATIONAL FACILITATORS AND BARRIERS
- FEASIBILITY OF EXISTING CONDITIONS WITHIN ZANMI LASANTE

DESIGN GOALS

IMPROVE



DESIGN RESPONSE

INTERVENTIONS

- Decrease Travel Distance
- Increase Visibility
- Provide Support Space
- Provide Privacy
- Enhance Treatment Care Areas
- Differentiate Public vs. Private
- Designate Staff Entry
- Manage Material Flow
- Separate Clean & Dirty
- Utilize Sterilization
- Minimize Patient Movement
- Increase Infection Control
- Prevent Hazards (Falling)
- Increase Capacity
- Manage Variety and Complexity of Caseload
- Provide Flexible Operations
- Evolve to Changing Needs