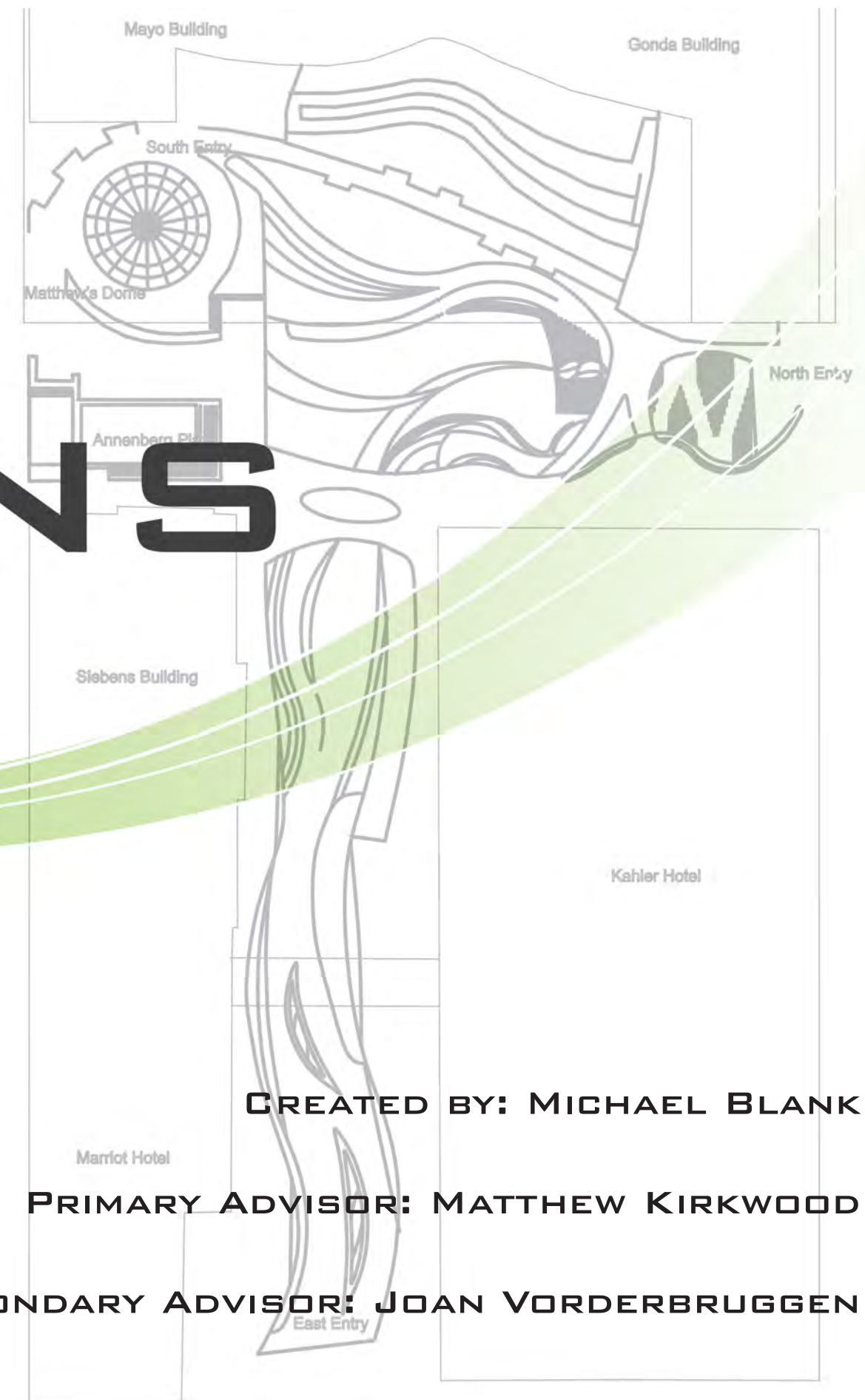
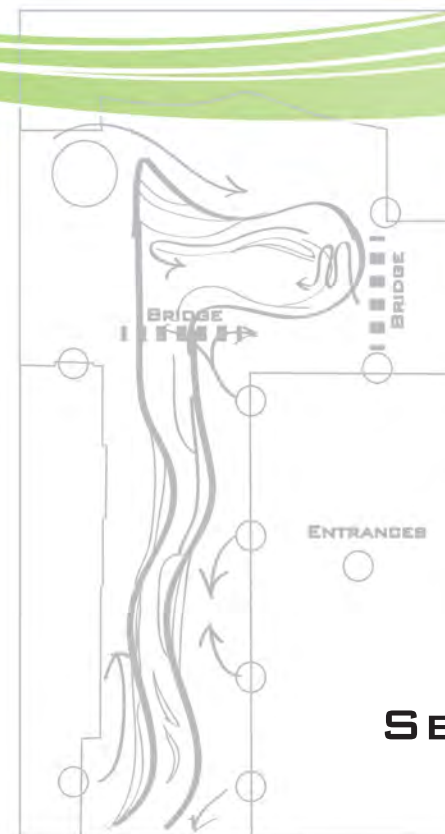
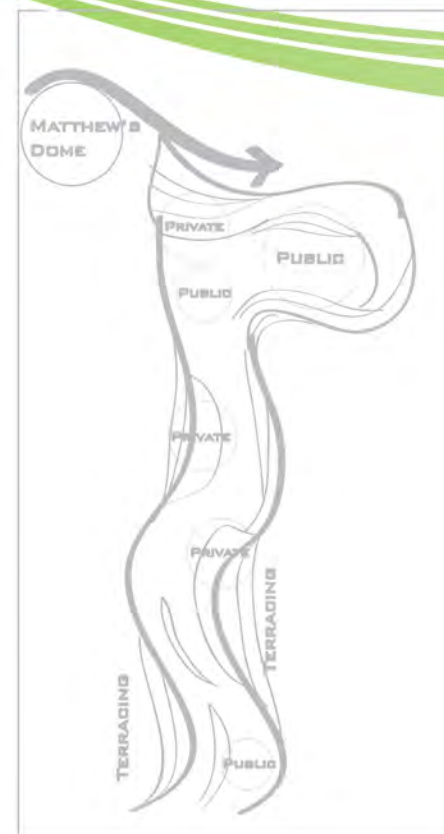
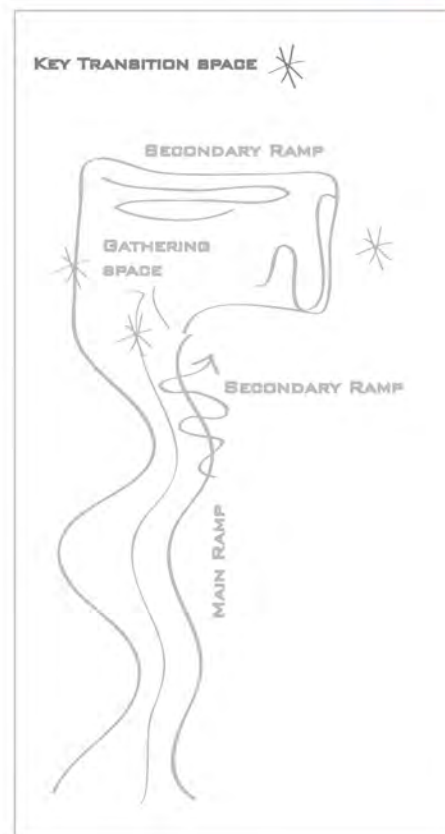
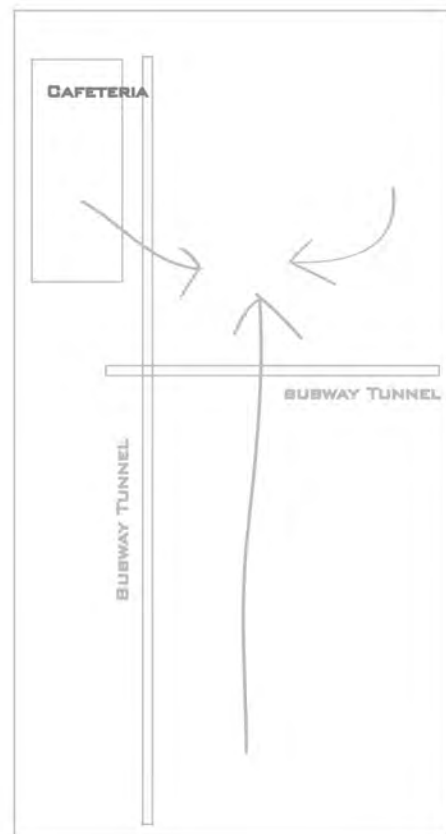


# MAYO GARDENS



**CREATED BY: MICHAEL BLANK**

**PRIMARY ADVISOR: MATTHEW KIRKWOOD**

**SECONDARY ADVISOR: JOAN VORDERBRUGGEN**

## TYPOLGY

*Mayo Gardens* is an urban design project focusing on urban healing in the context of Rochester, MN. Rochester is home to the world renowned Mayo Clinic. The Mayo Clinic has set an unprecedented standard for medical care for the past 150 years. The mission of the Mayo Clinic is, “To inspire hope and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education and research” ([mayoclinic.org](http://mayoclinic.org)).

## RESEARCH

Dr. Ulrich, a professor at Texas A&M of Architecture, has conducted scientific research on how visual surroundings can affect recovery times after surgeries and the psychology of patients. His results indicate that views to green space can improve recovery times and invoke positive psychological effects. Using this research as evidence, allows designers to create environments that would provide the best health care experience.



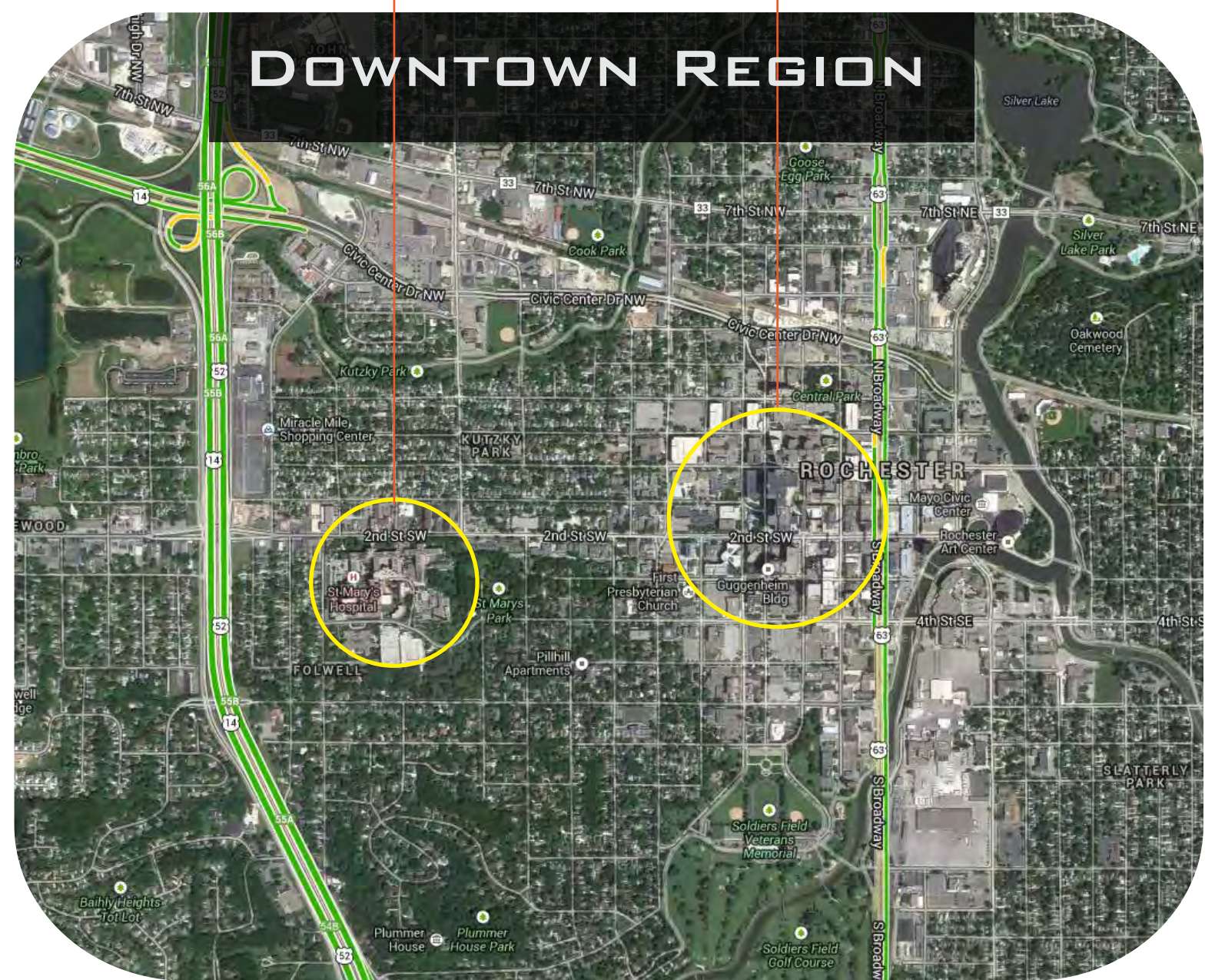
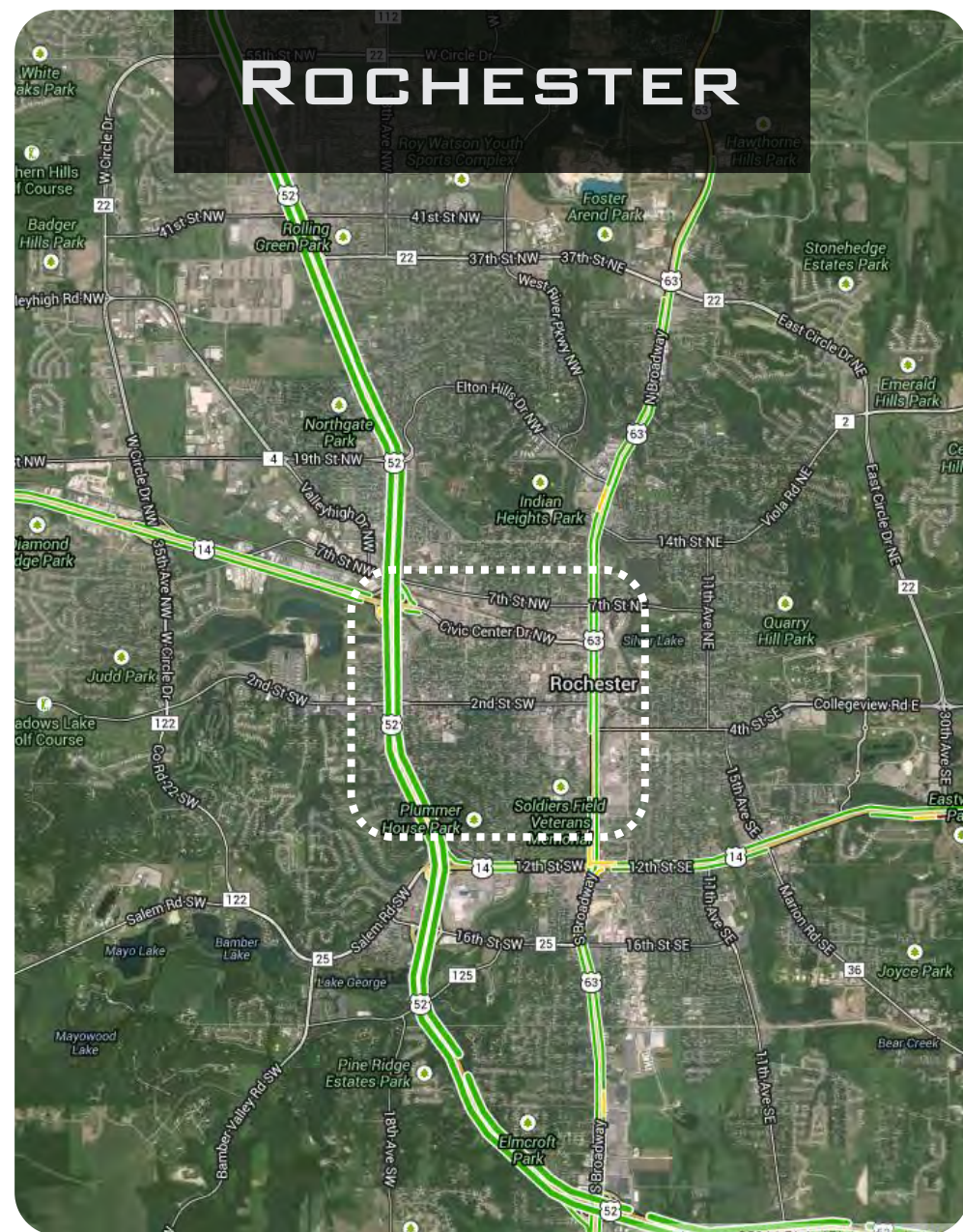
# CONTEXT

LOCATION: ROCHESTER, MINNESOTA

POPULATION: 108,992

SAINT MARY'S CAMPUS

DOWNTOWN CAMPUS







The site is located at the core of downtown Rochester. This urban core has the highest density in the region. This high density area offers a variety of users the vantage point of a tall structure such as the Gonda Building.



Rochester has large green/open spaces surrounding the downtown region; however, lacks green spaces in the immediate downtown. A significant green space in the core of downtown would attract more users and create a more vibrant atmosphere.

The site is located at the core of downtown Rochester. This urban core has the highest density in the region. This high density area offers a variety of users the vantage point of a tall structure such as the Gonda Building.



- Medical Facilities
- Educational
- Hotel
- Commercial
- Residential
- Civic Cultural
- Retail/ Dining

This study separates the downtown into different districts that each have unique qualities. The site selected has a diverse amount of building usages including medical facilities, hotels, commercial, and retail/ dining. This diversity provides the opportunity for a multifunctional space.

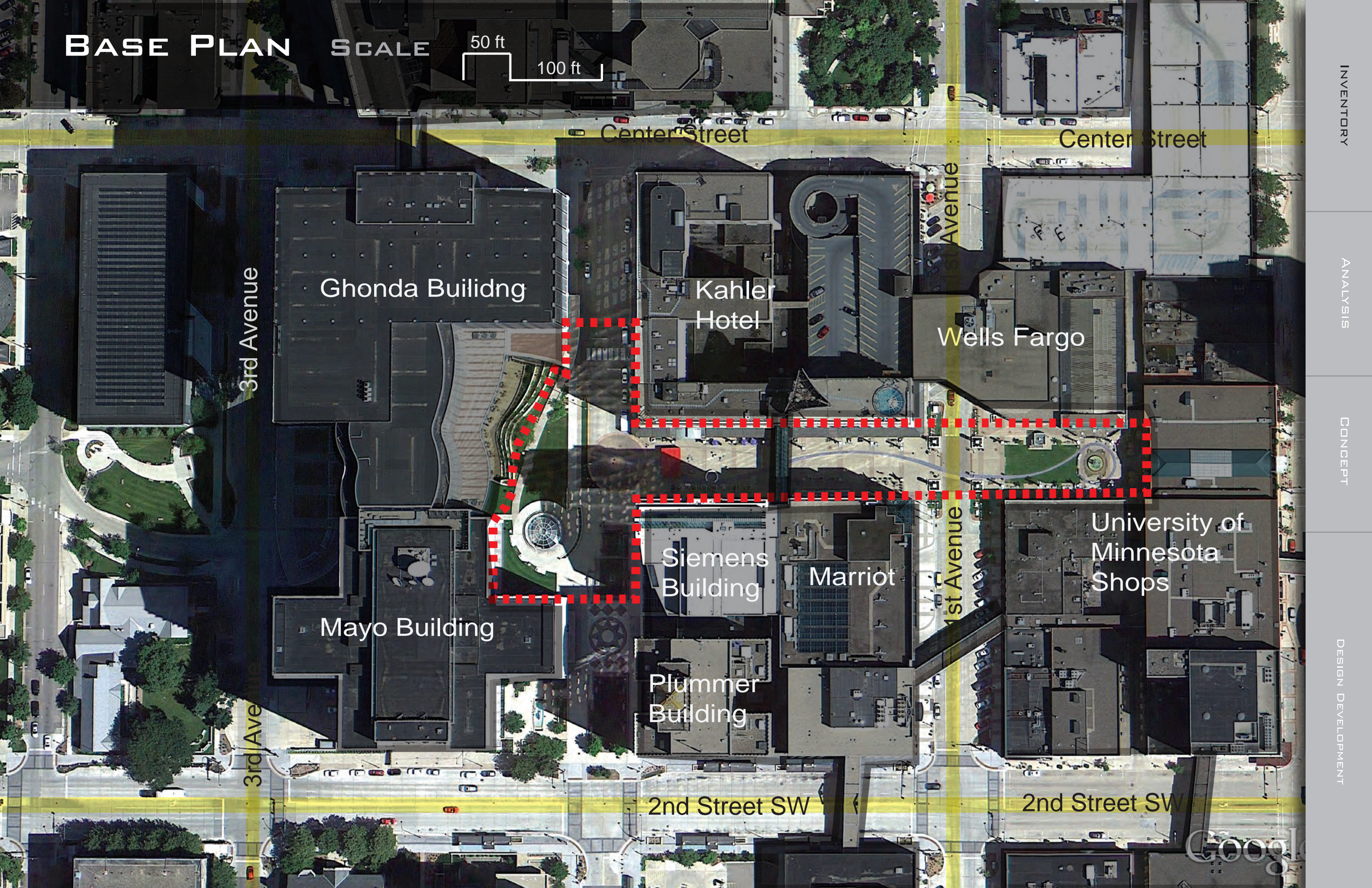
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The site is located at the core of downtown Rochester. This urban core has the highest density in the region. This high density area offers a variety of users the vantage point of a tall structure such as the Gonda Building.



# BASE PLAN

SCALE



Center Street

Center Street

Avenue

3rd Avenue

Ghonda Building

Kahler  
Hotel

Wells Fargo

Siemens  
Building

Marriot

University of  
Minnesota  
Shops

Mayo Building

Plummer  
Building

1st Avenue

2nd Street SW

2nd Street SW

Google

INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT



# SKYWAYS

Skyway

INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT

Google



# SUBWAYS

Skyway  
Subway

SUBLEVEL CAFETERIA



INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT





# ENTRIES



Skyway



Subway



Entrance

KEY GROUND LEVEL  
ENTRANCES

KEY GROUND LEVEL  
ENTRANCES

SUBLEVEL CAFETERIA

OPPORTUNITY TO CONNECT TO  
SUBLEVEL

INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT





# WIND ANALYSIS

My Site

0 mph

2

4

6

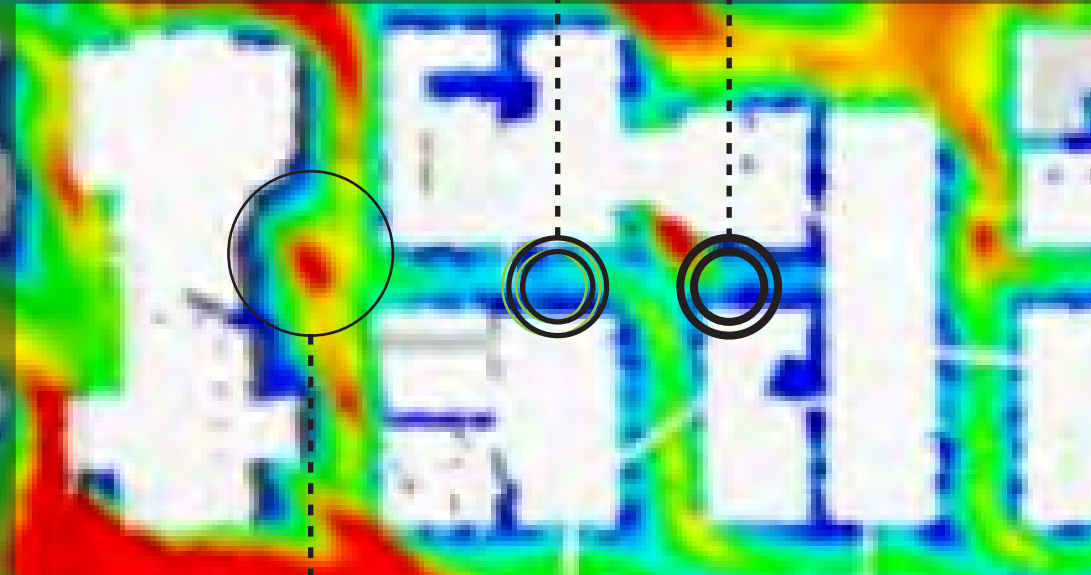
8





# WIND + SOLAR STUDY

Light wind speeds + high sun exposure = desirable conditions



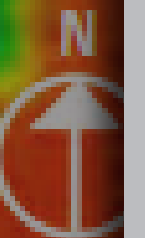
Higher wind speeds + Low sun exposure = non-desirable location

INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT





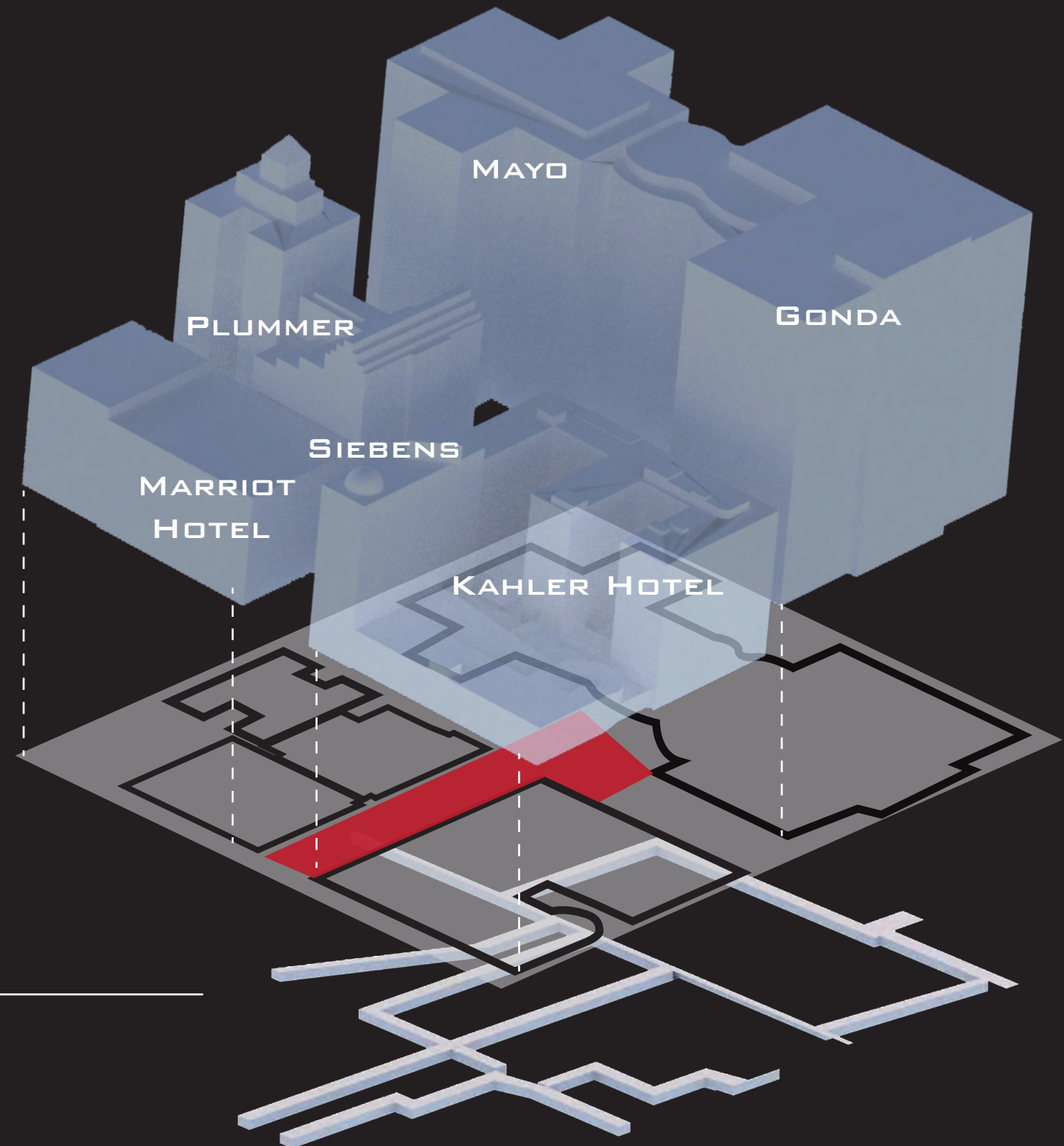
# MULTI-LEVEL OVERLAY

 SITE AREA

 BUILDINGS



 GROUND PLANE

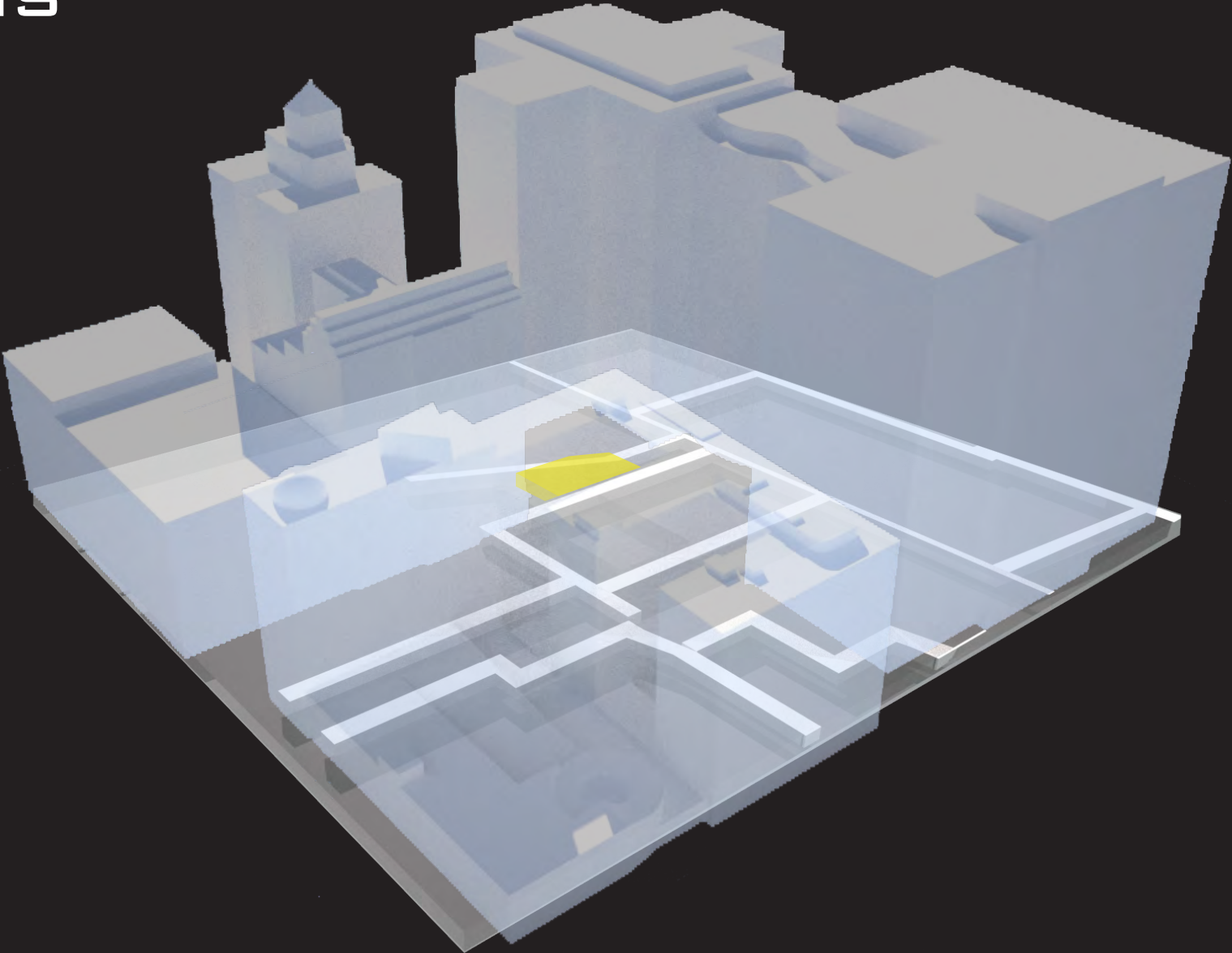
 SUBWAY





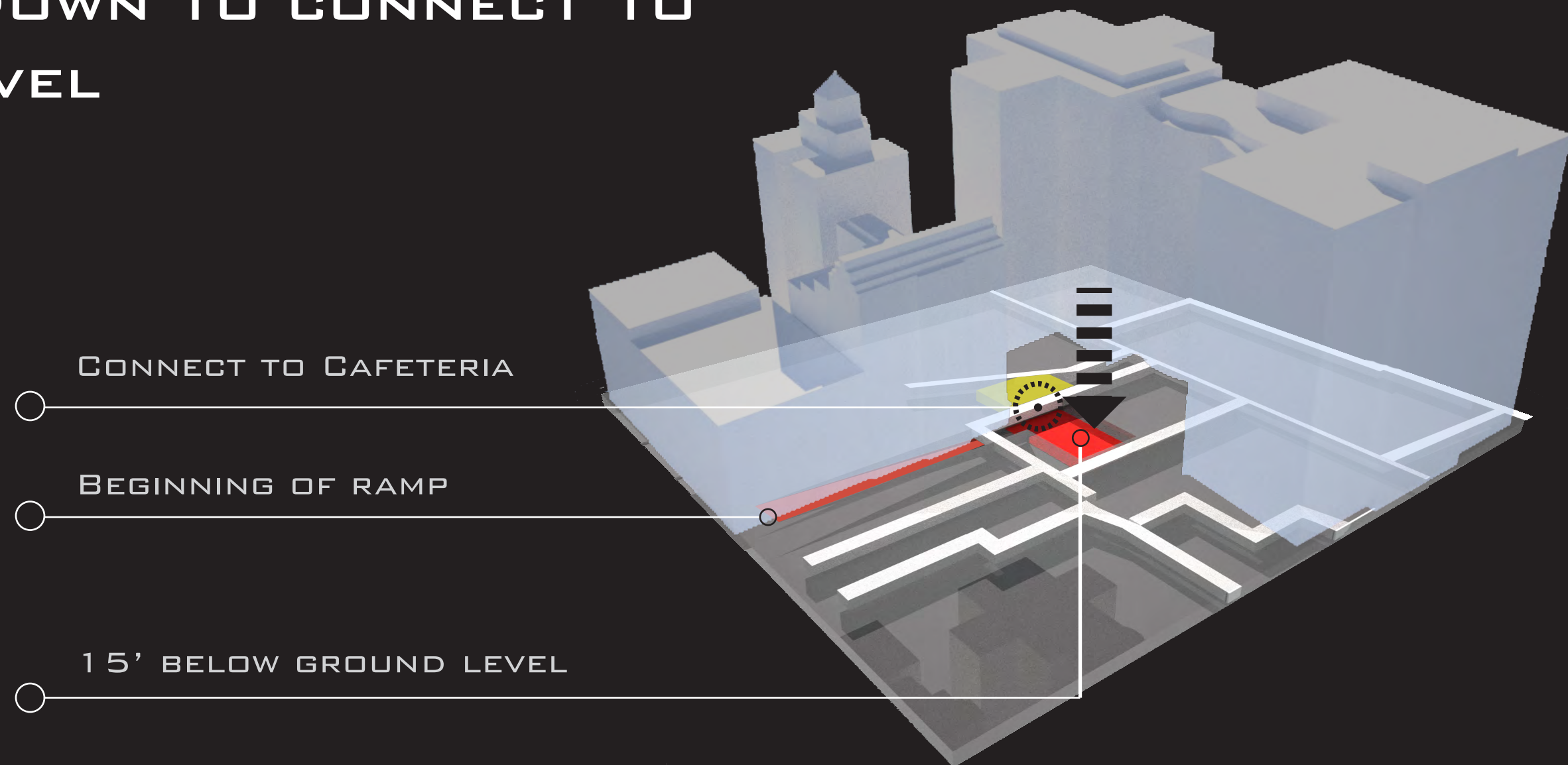
# SUB-LEVEL CONNECTIONS

-  SUBWAY SYSTEM
-  SUB-LEVEL CAFETERIA





# SINK DOWN TO CONNECT TO SUBLEVEL





## WHAT CREATES A HEALING ENVIRONMENT?

- + Greenspace
- + Biophilic Design (an innovative approach that emphasizes the necessity of maintaining, enhancing, and restoring the beneficial experience of nature in the built environment)
  - + Local materials
  - + Natural Patterns and Forms
- + Activity/ Exercise

## OPPORTUNITIES & CHALLENGES

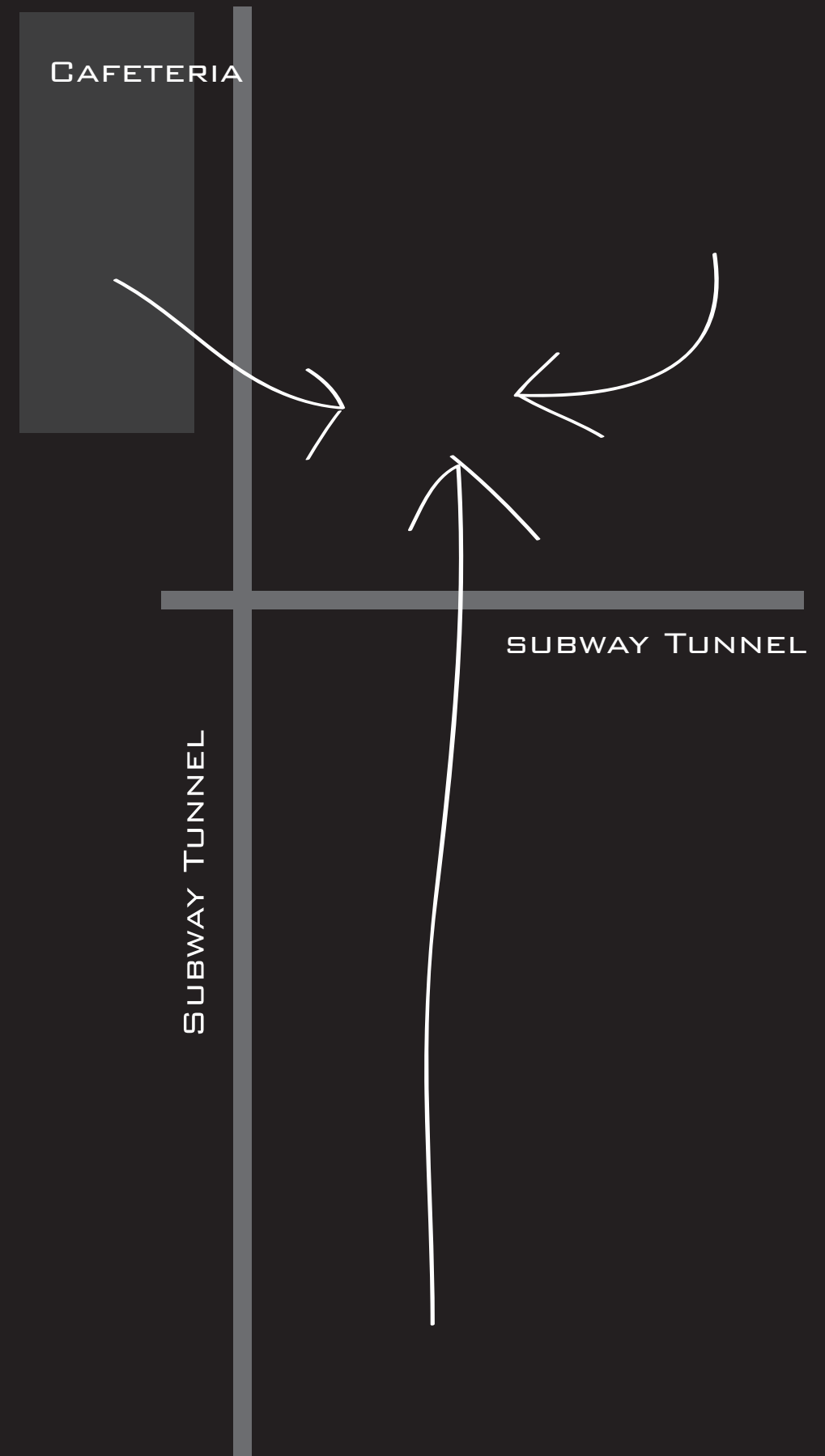
This field of study is commonly referred to as Evidence-based design (EBD). EBD has influenced design decisions in the Mayo Gardens by providing users a connection to nature. The specific site selection in Rochester provides the opportunity and challenge of creating a space for healing in the dense urban environment. The urban environment is based on a grid system that is far from natural. Connecting people to nature in the space is the primary objective of the design.



# DESIGN PROCESS

Goal: Create connections at sublevel

- + Sink down space to create connections to the Gonda Cafeteria and the subway network



INVENTORY

ANALYSIS

CONCEPT

DESIGN DEVELOPMENT



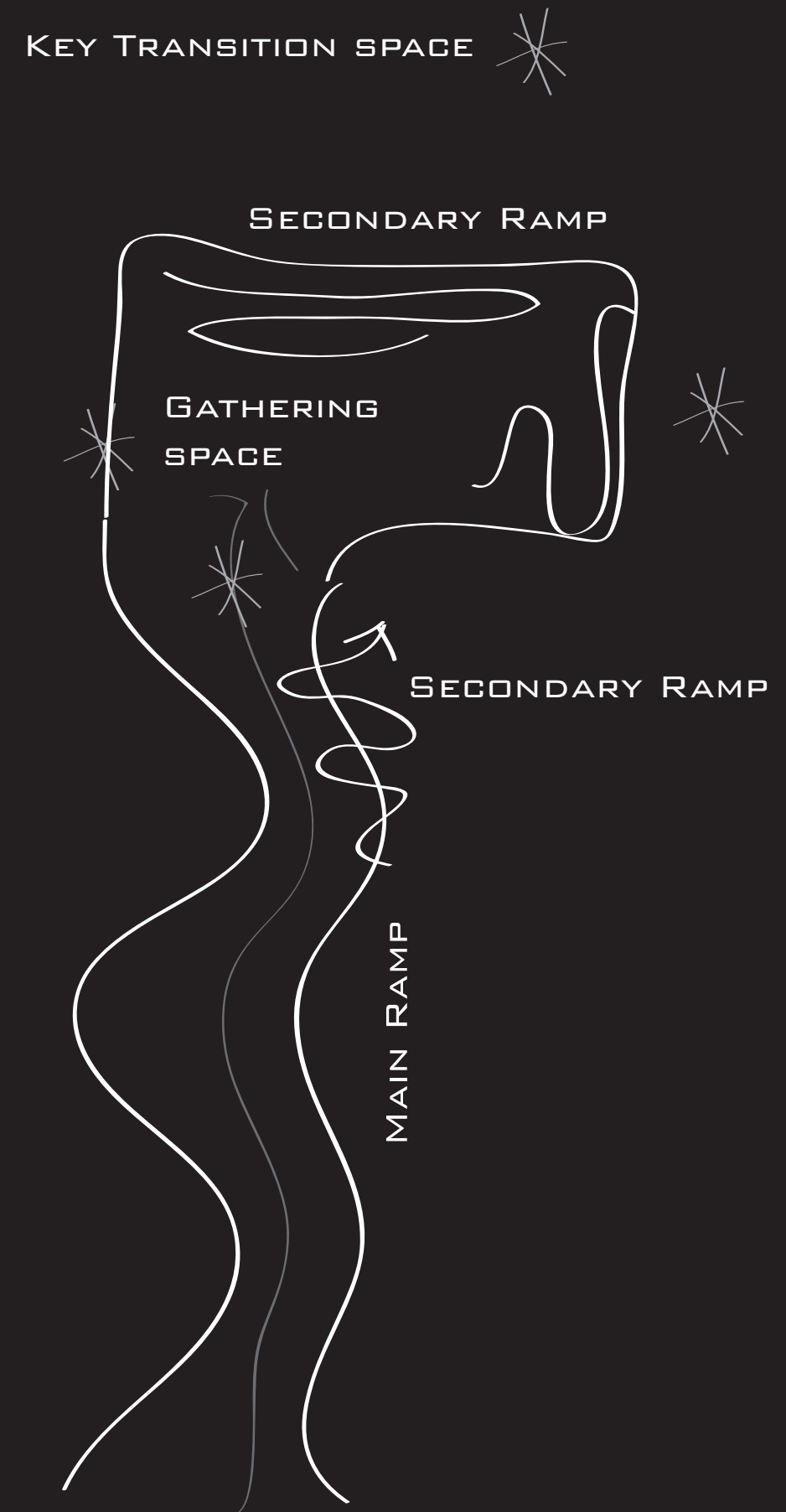
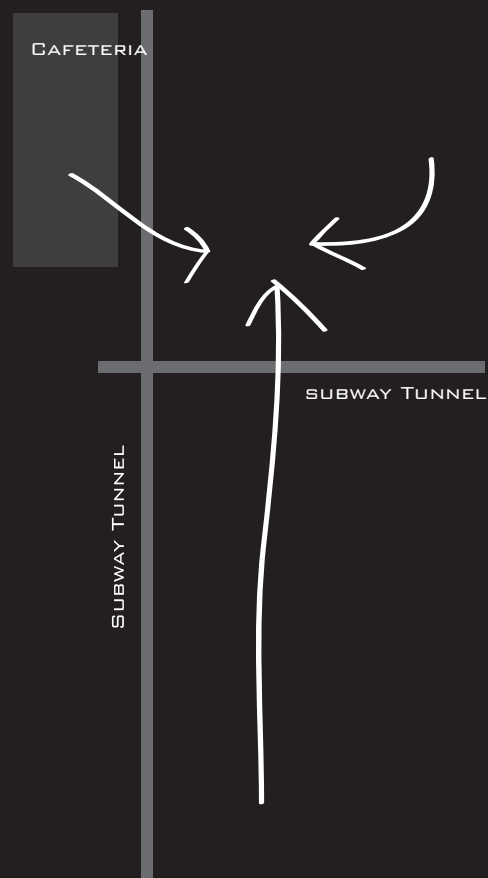
# DESIGN PROCESS

Goal: Make site accessible to everyone

- + Integrate ramps so site can be accessed from three primary directions

Goal: Capture the essence of biophilic design through form

- + The natural form of a river was mimicked to associate the design with biophilia





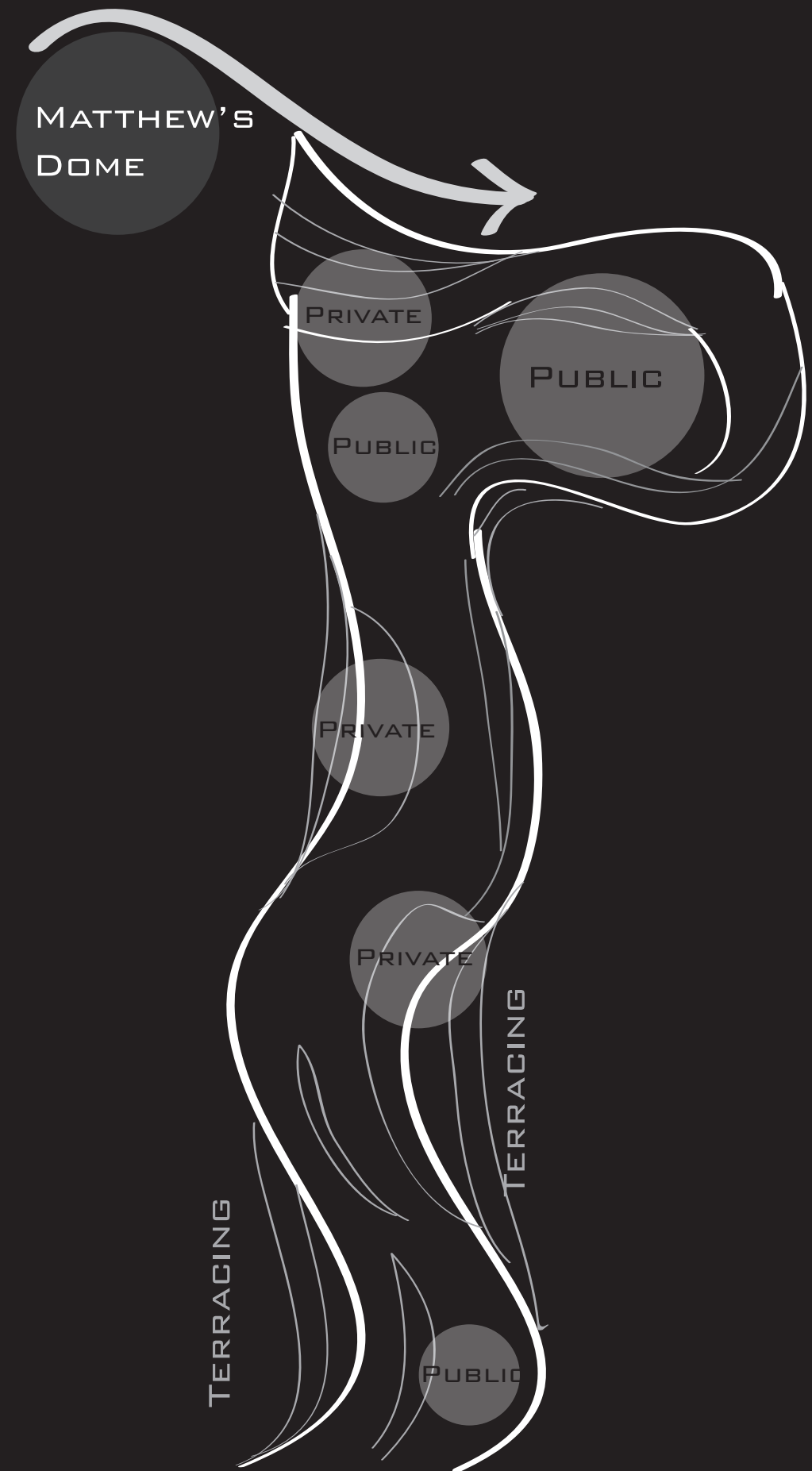
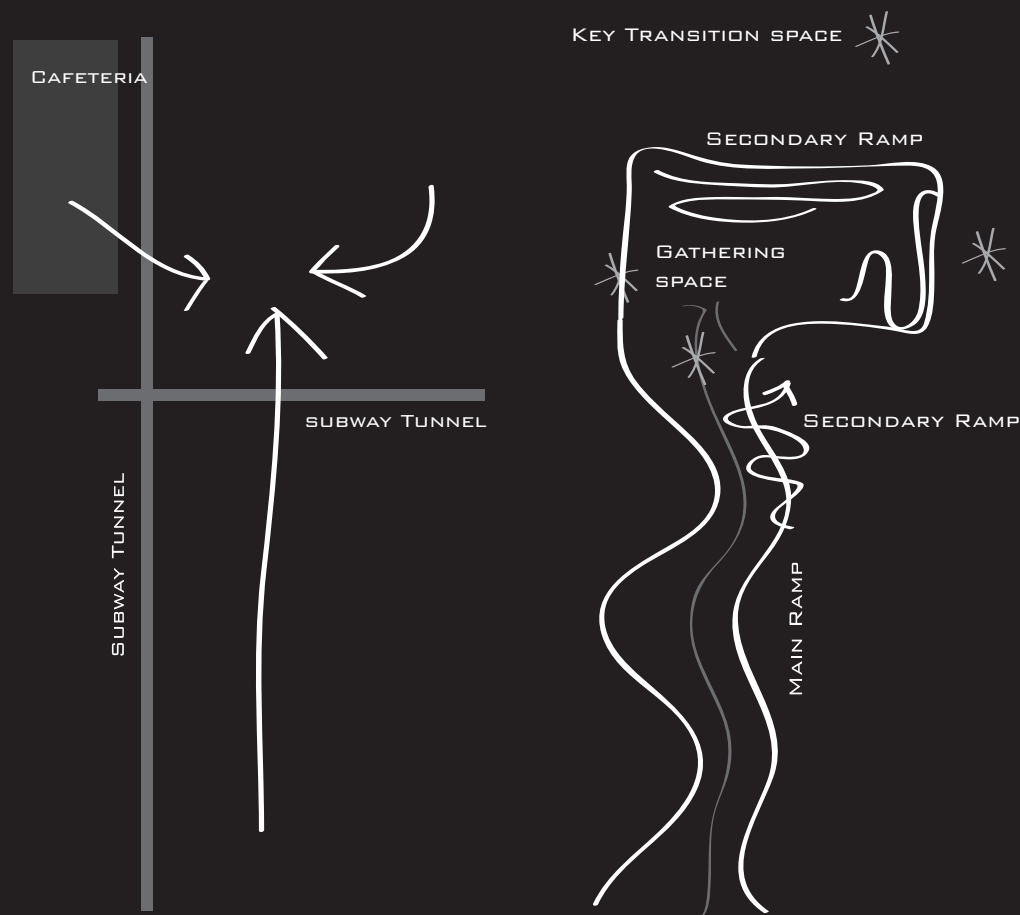
# DESIGN PROCESS

Goal: Create spaces at multiple levels

- + Separated spaces by public and private for varying group sizes at different levels

Goal: Maximize green space

- + Terrace the edges of the design to break up large vertical walls

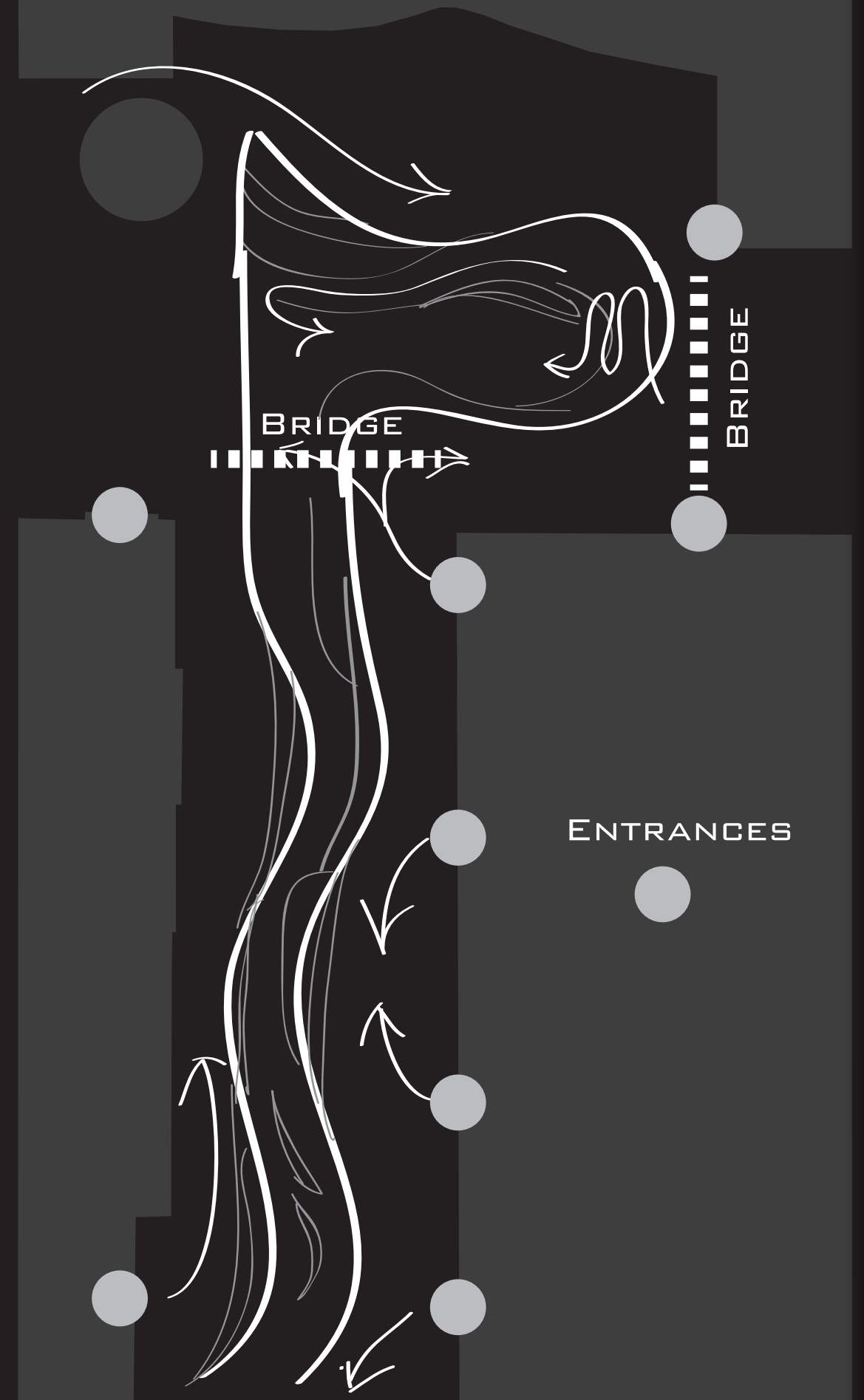
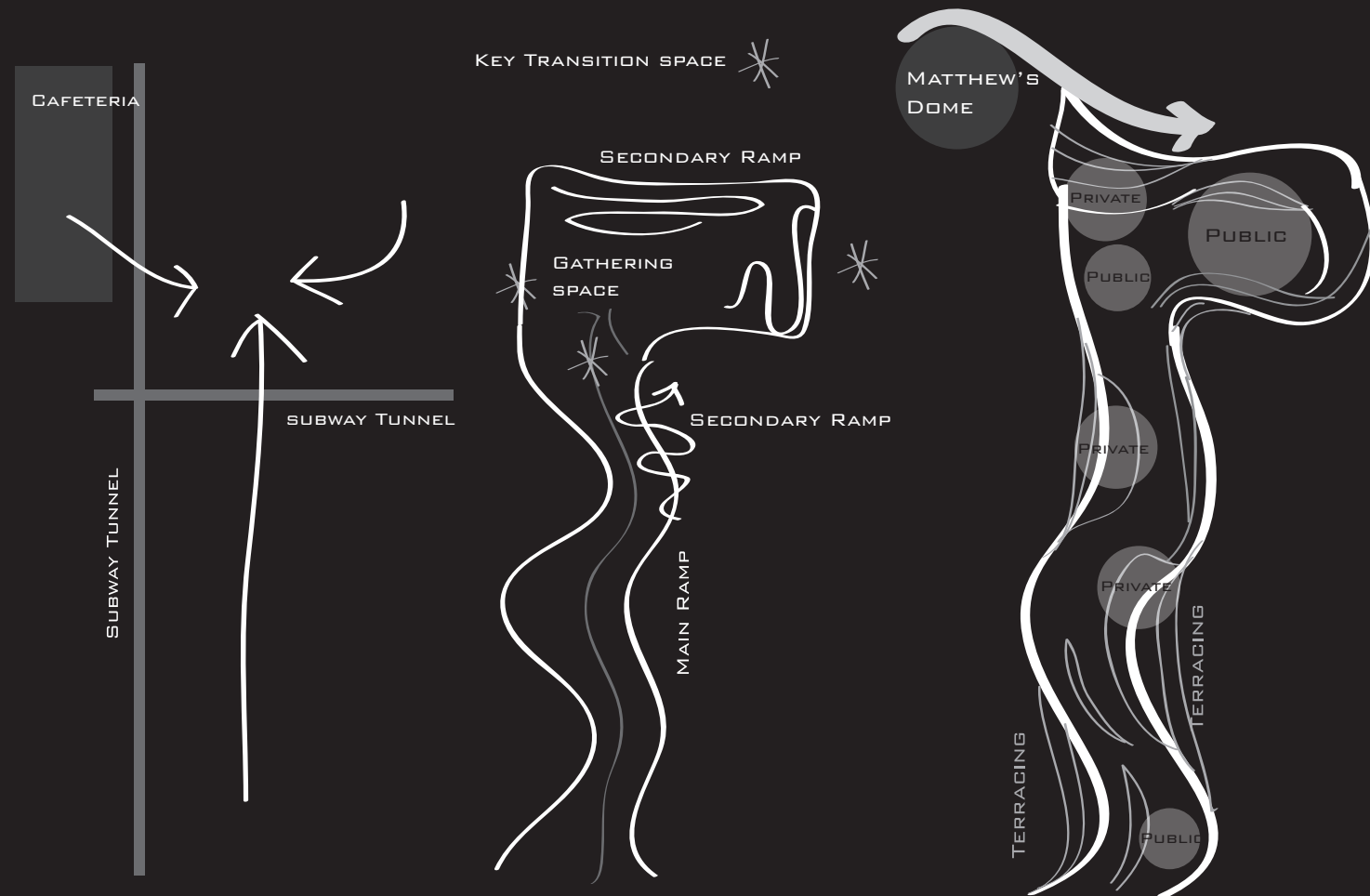




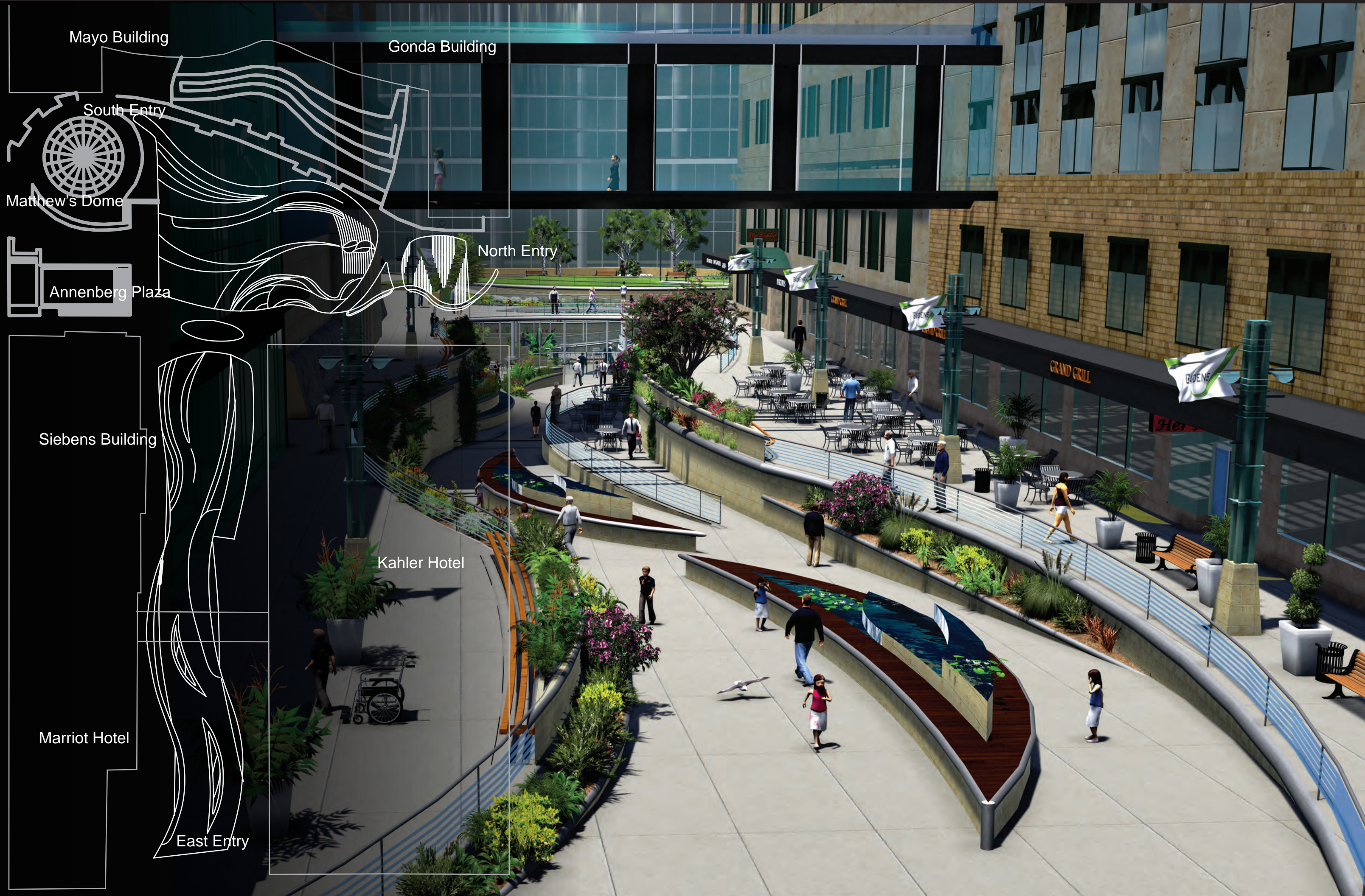
# DESIGN PROCESS

Goal: Allow for options of different routes to experience the site

- + Additions of bridges allow people to bypass the site
- + By studying circulation, the locations of ramps were strategically placed to explore different levels of the design







Mayo Building

Gonda Building

South Entry

Matthew's Dome

Annenberg Plaza

North Entry

Siebens Building

Kahler Hotel

Marriot Hotel

East Entry



# MATERIAL PALETTE

The materials I selected were based on the principles of ‘Biophilic Design’. Biophilic design is defined by Stephen R. Kellert as, “the deliberate attempt to translate an understanding of the inherent human affinity to affiliate with natural systems and processes into the design of the built environment.

## CALM WATER

Calm water has reflective properties that are associated with peace and healing. The contrast from calm water to moving water invokes interaction.

## FALLING WATER

Falling water creates many biophilic attachments to people. The sound of water falling drowns out surrounding city noise while also giving a calming affect to viewers.

## SHADE PLANTS

This site is surrounded by tall buildings and see’s limited sunlight, plants that do well in shady environments would be favorable.

## WATER LILIES

Water lilies have been used for medicinal purposes for centuries. The aroma and aesthetic of this plant is often associated with healing.

## NATIVE LIMESTONE

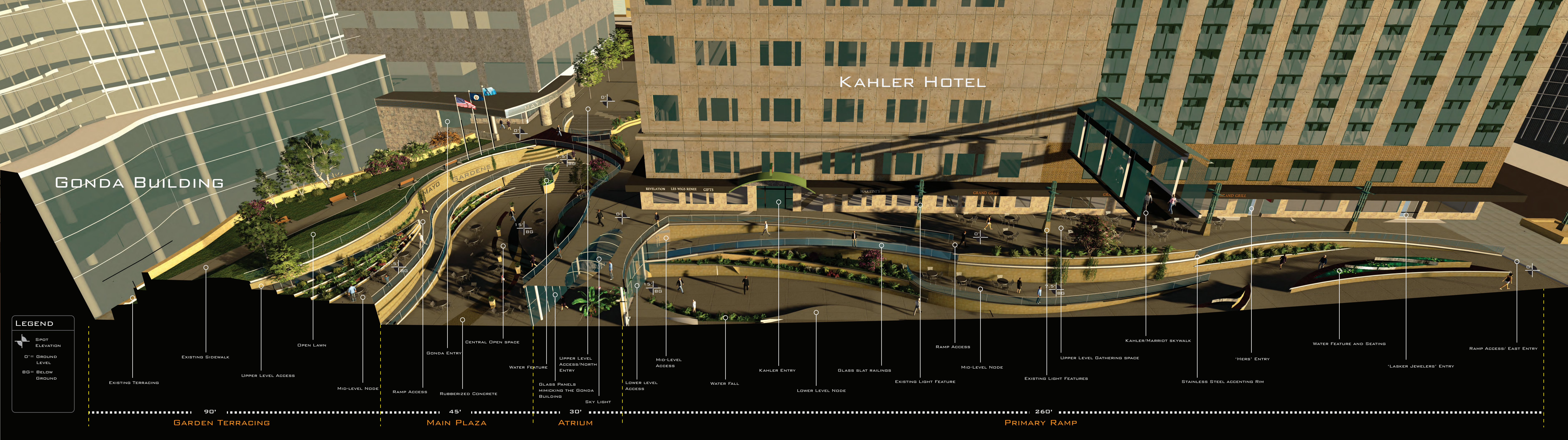
Minnesota Dolomite Limestone (MDL) is quarried in Winona, MN by the Biesanz Stone Co. only 45 miles away from Rochester. This stone has a warm color which is desired

## STAINLESS STEEL

Stainless steel rims provide an accent color while also giving the design a sleek feel. This steel is also used throughout the Mayo Clinic’s architecture.







GONDA BUILDING

KAHLER HOTEL

REVELATION

LES WIGS RENEE

GIFTS

MARTINI'S

GRAND GRILL

GRAND GRILL

GRAND GRILL

GRAND GRILL

GRAND GRILL

LEGEND

- SPOT ELEVATION
- 0' = GROUND LEVEL
- BG = BELOW GROUND

90'

GARDEN TERRACING

45'

MAIN PLAZA

30'

ATRIUM

260'

PRIMARY RAMP

EXISTING TERRACING

EXISTING SIDEWALK

UPPER LEVEL ACCESS

OPEN LAWN

MID-LEVEL NODE

RAMP ACCESS

RUBBERIZED CONCRETE

GONDA ENTRY

CENTRAL OPEN SPACE

WATER FEATURE

GLASS PANELS MIMICKING THE GONDA BUILDING

SKY LIGHT

UPPER LEVEL ACCESS/NORTH ENTRY

LOWER LEVEL ACCESS

MID-LEVEL ACCESS

WATER FALL

KAHLER ENTRY

LOWER LEVEL NODE

GLASS SLAT RAILINGS

EXISTING LIGHT FEATURE

RAMP ACCESS

MID-LEVEL NODE

EXISTING LIGHT FEATURES

UPPER LEVEL GATHERING SPACE

KAHLER/MARRIOTT SKYWALK

STAINLESS STEEL ACCENTING RIM

'HERS' ENTRY

WATER FEATURE AND SEATING

'LASKER JEWELERS' ENTRY

RAMP ACCESS/ EAST ENTRY



<https://www.youtube.com/watch?v=wV4rb4nlllk>

