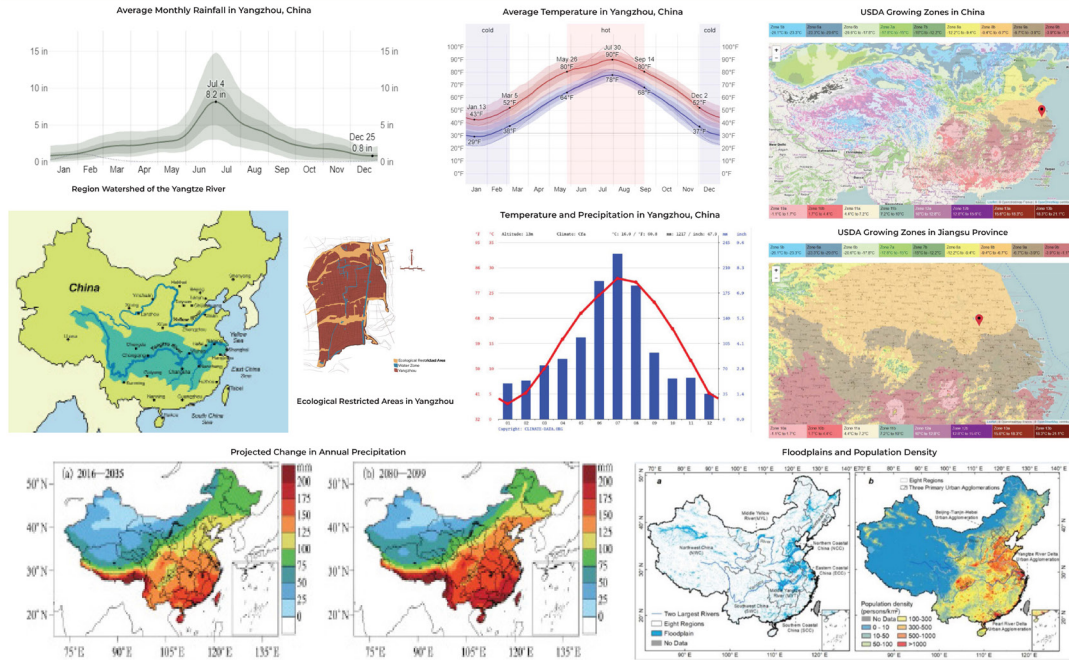
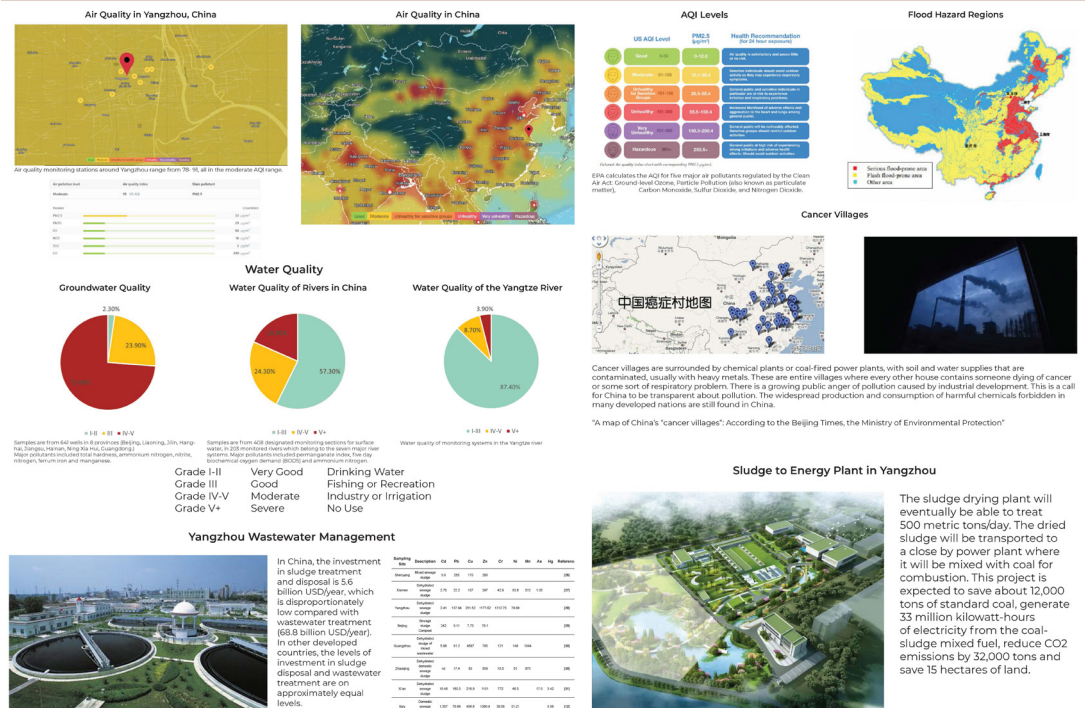




REGIONAL CLIMATE TRENDS



ENVIRONMENTAL ISSUES IN YANGZHOU



MEREDITH BENDL, DEREK BUSSEY, FRANCES SLEDGE
URBAN DESIGN LARC 4540/8520
FEBRUARY, 2023

Urban Analysis of Circulation

Sharm El Sheikh, Egypt

Urban Design Studio 8520 | Prof. Nassar | Hannah Smith

Outline

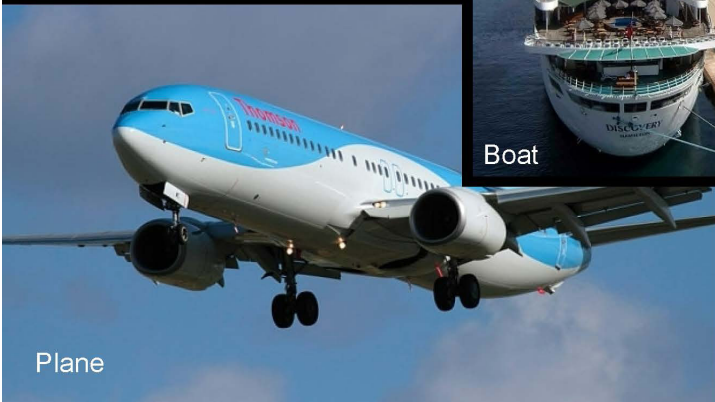
- Public Transportation Routes
 - Modes of Transportation
 - Microbuses and Minibuses
 - Cost
- External Connection
 - Air traffic
 - Waterways
 - Major Highways
- Street types
 - Pedestrian Zones
 - Market Streets
- SWOT



Bike



Public Transportation



Plane



Boat



Walk

Minibus and Microbus Routes through Sharm El Sheikh



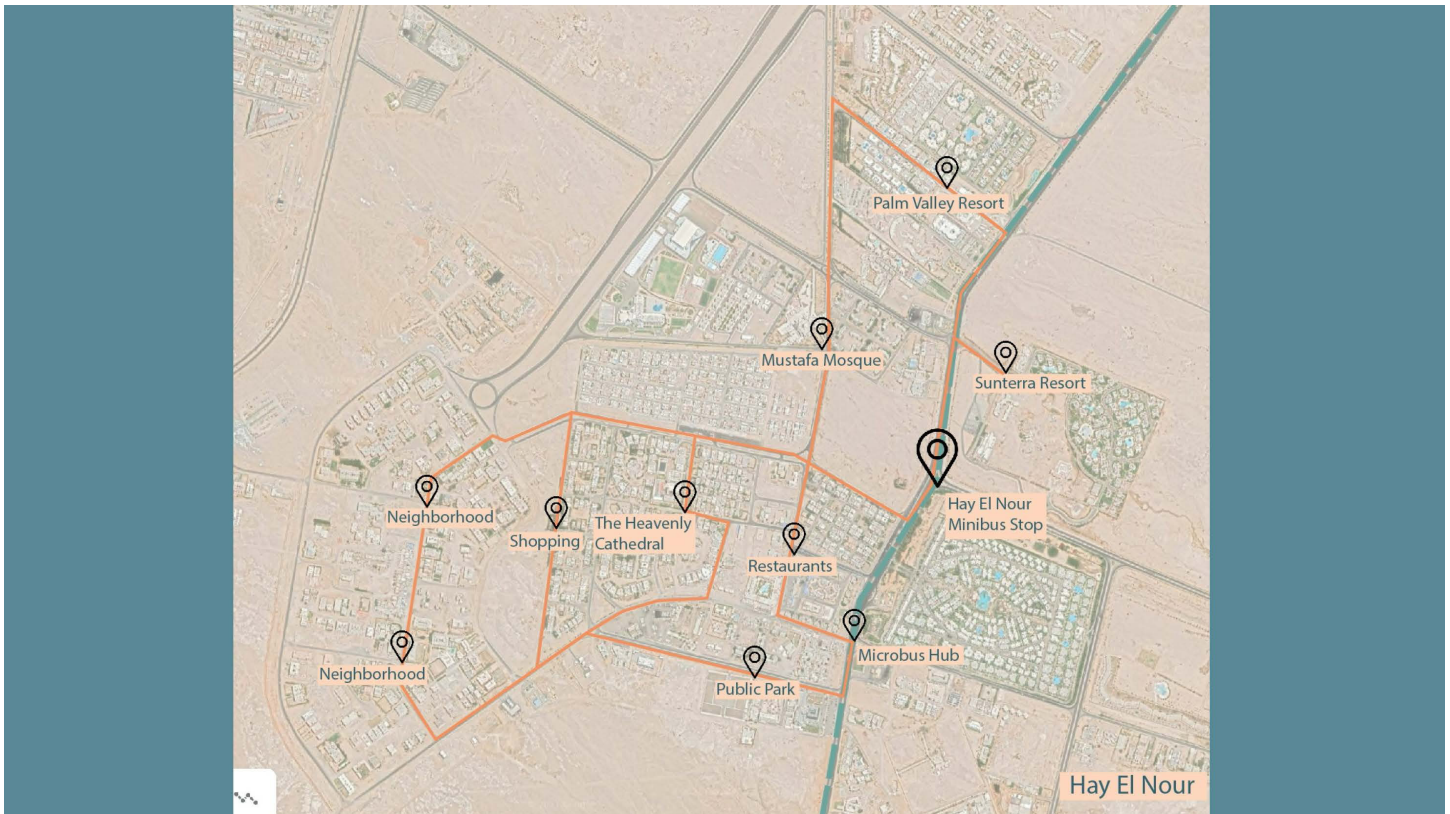
Mini Bus | 2-5 pounds | \$0.32 usd



Micro Bus | 1 pound per station

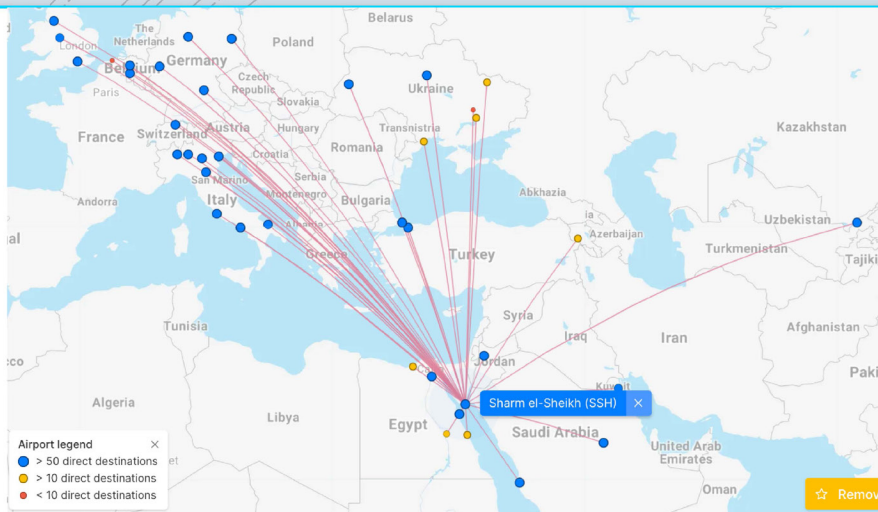
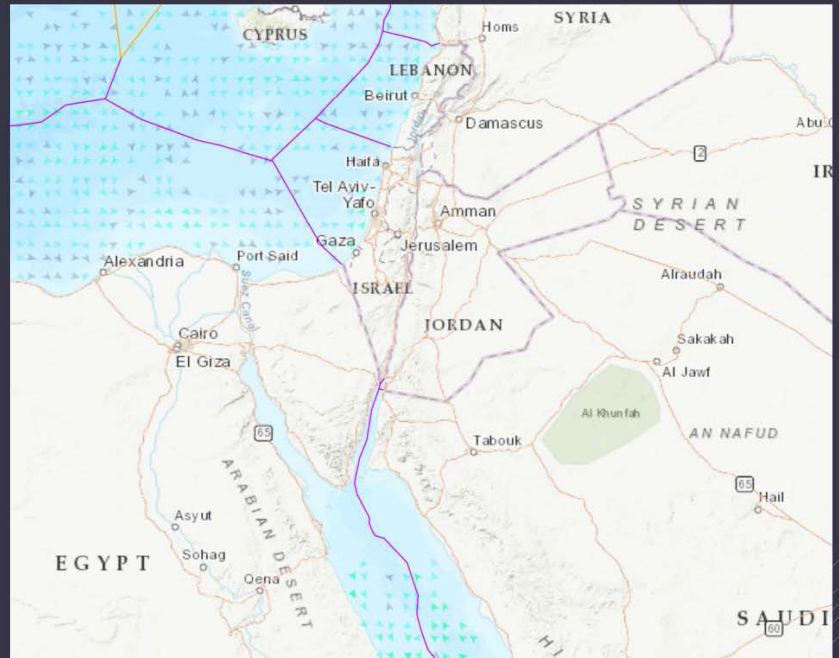


Taxi | 2-5 pounds + 5 pound service fee





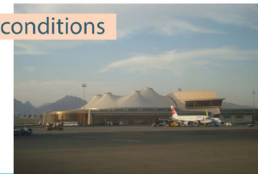
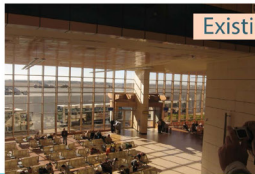
External Connections to Sharm El Sheikh



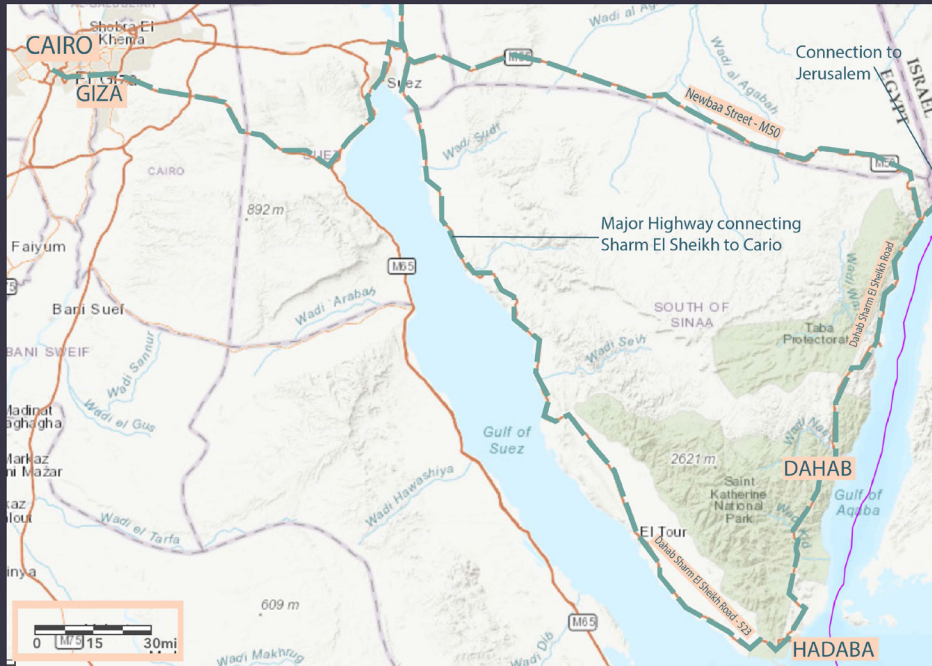
\$140 million Airport Expansion



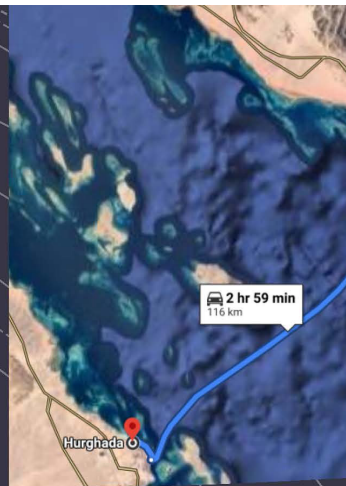
Existing conditions



Air traffic Connection



Roadway Connection/Major Highways



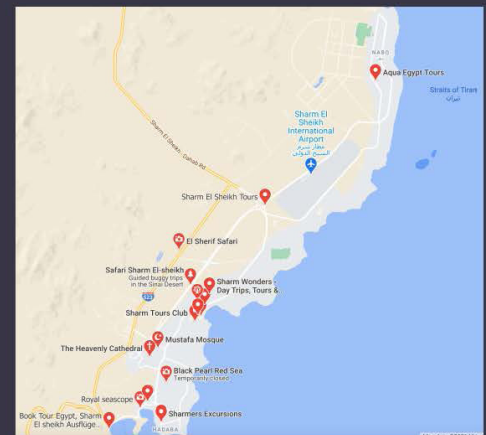
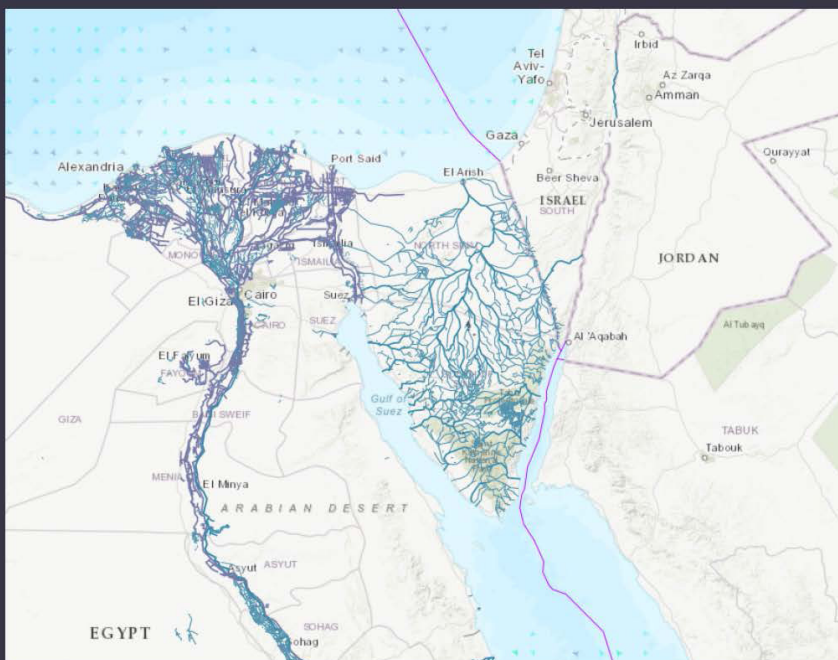
Waterway Connections

Ferry Ride from Hurghada to Sharm El Sheikh
920 Pounds | \$60 USD
3-hour ride



Large Cruise Port Connect to Cities along the Red Sea

Day tours of waterways in through Sharm El Sheikh



Street types



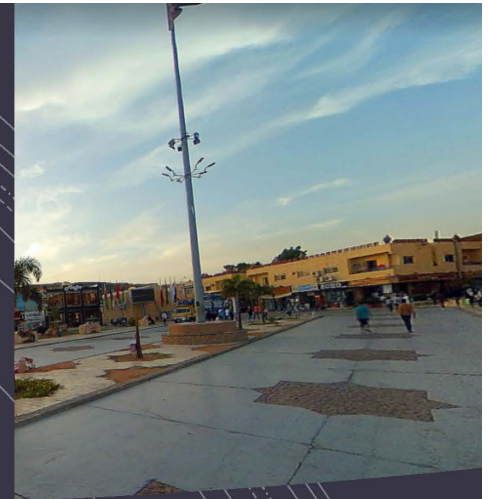
Vehicle Dependent

- Little to no pedestrian access
- Connect to larger highways and smaller walkable streets



Shared Street

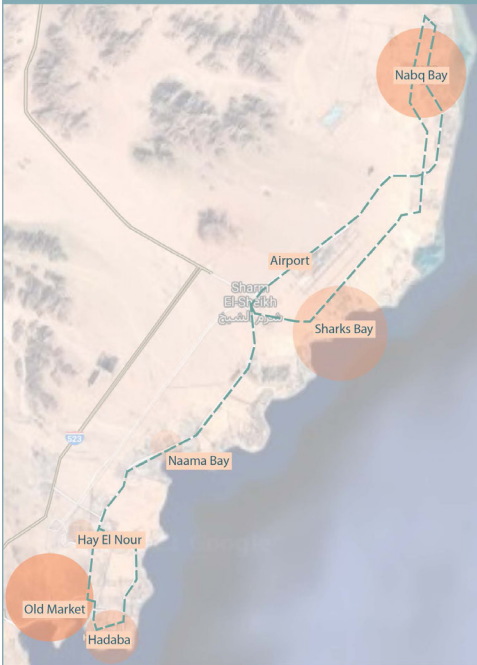
- Pedestrian Friendly
- Vehicular Access



Pedestrian Plaza

- Markets and Shops
- Little to no Vehicular Access

Pedestrian Plaza Areas



Vehicle Dependent Areas



Shared Street Areas



SWOT

Strengths

- Strong connection between the pedestrian and activities/resorts/stores
- Affordable transportation options
- Local Airport and increasing number of businesses
- Build environment to support pedestrian traffic

Weaknesses

- Connection between Sharm El Sheikh and rural areas
- Disconnect for pedestrians between neighborhoods in Sharm El Sheikh
- Transportation (water, road and air) centered mainly around tourism

Opportunities

- Strengthen pedestrian engagement
- Increase the amount of green space in public spaces
- Create more shared streetscapes

Threats

- Tourist centered public transportation, lose the use of the locals
- Growth to the area pushing out non-tourist based industries to rural land
- Vehicular dependent areas cause noise, pollution, etc.

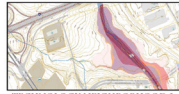
CUICAR

Greenville, SC

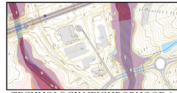


TOPOGRAPHY

Topography refers to the slope and level of the land, whether the land is flat and plain, or is sloping. Topography is a measurement of elevation and slope is the percentage change in that elevation over a certain distance. Topography is measured by connecting points of same elevation. These points are known as the topographic contours.



TECHNOLOGY NEIGHBORHOOD 3



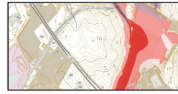
TECHNOLOGY NEIGHBORHOOD 1



TECHNOLOGY NEIGHBORHOOD 4



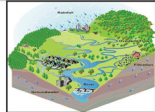
TECHNOLOGY NEIGHBORHOOD 2



TECHNOLOGY NEIGHBORHOOD 5



WATERSHED



A watershed is the area of land where all the water that drains off it goes into the same place—a river, stream or lake. The smallest watersheds are the drainage areas for small streams and lakes.

Different between river basin and watershed

A river basin drains out towards a larger body of water such as the ocean or the sea while a watershed may drain towards a smaller body of water if it is referred to as a water basin.

SOUTH CAROLINA RIVER BASINS



These basins are the Broad, Catawba, Edisto, Pee Dee, Salkehatchie, Saluda, Santee, and Savannah.

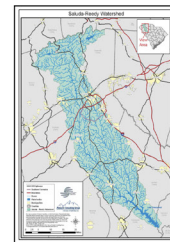
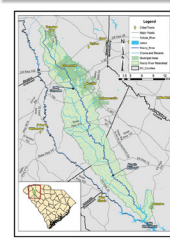
SALUDA RIVER BASIN

The Saluda River Basin covers 2,523 square miles and contains twenty-one (21) watershed, with geographic regions that extend from the Blue Ridge Mountains through the Piedmont and into the Sandhill regions.



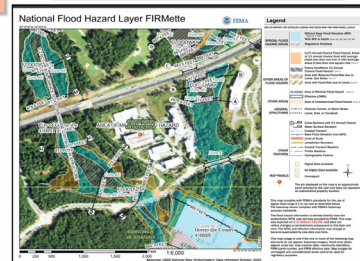
Reedy River Watershed

The watershed is approximately 167,000 acres, but the upper portions of the river include the urban areas of the City of Greenville, Mauldin, and Simpsonville within Greenville County, South Carolina.



FLOODING

Flooding is an overflowing of water onto land that is normally dry. Floods can occur within minutes or over a long period, and may last days, weeks, or longer.



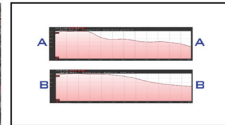
Zone A: No Base Flood Elevations determined
Zone AO: Base Flood Elevation determined
Zone AO: Flood Depths of 1 to 3 feet (usually sheet flow on sloping terrain) average depths determined.
Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
Zone V: Coastal flood zone with velocity hazard (wave action), no Base Flood Elevations determined
Zone VE: Coastal flood zone with velocity hazard (wave action), Base Flood Elevations determined
Zone D: Areas determined to be outside the 0.2% annual chance floodplain.
Zone D: Areas in which flood hazards are undetermined, but possible.

TERRAIN SECTION

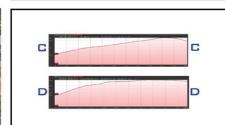
Terrain involves the vertical and horizontal dimensions of land surface. This is usually expressed in terms of the elevation, slope, and orientation of terrain features. Terrain affects surface water flow and distribution.



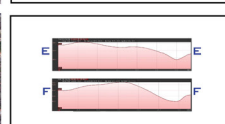
TECHNOLOGY NEIGHBORHOOD 1



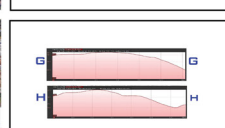
TECHNOLOGY NEIGHBORHOOD 2



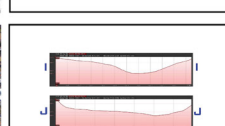
TECHNOLOGY NEIGHBORHOOD 3



TECHNOLOGY NEIGHBORHOOD 4

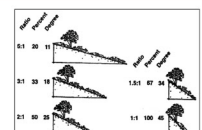


TECHNOLOGY NEIGHBORHOOD 5



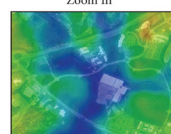
SLOPE & ELEVATION

Slope is the measure of steepness or the degree of inclination of a feature relative to the horizontal plane.

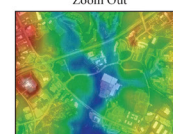


ELEVATION

Elevation is distance above sea level. Elevation in a map can be shown using contour lines or using different bands of colors or with numerical values to indicate the height or depth.



Zoom In

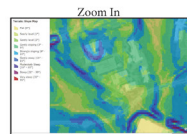


Zoom Out

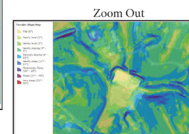
BUILDABLE SLOPE

Under 4%
<4 percent are considered flat and therefore suitable for all types of activity.
4%-10%
Slopes between 4 and 10 percent are considered to be moderate and require considerable effort to climb or descend.
10%-50%
Grades of 10 to 50 percent are steep and may be unusable, or suitable for limited activity only.

Zoom In



Zoom Out



STRENGTHS: They are no serious flooding areas along the site.	WEAKNESSES: The flood areas are the areas where the water is flowing from.	OPPORTUNITIES: They are a lot of buildable areas based on the slope information. Work with creeks and water flow.	THREATS: The Reedy River is one of the most-polluted waterways in South Carolina.
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