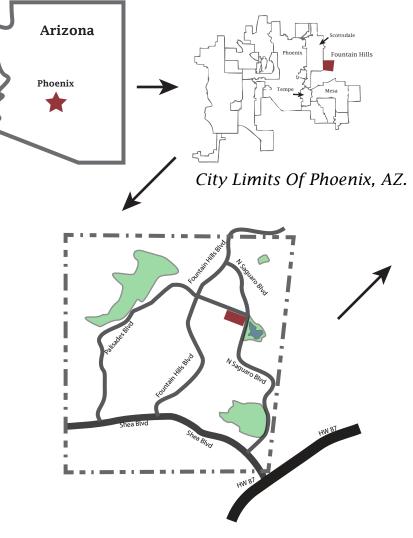
Aaron Hendrickson North Dakota State University

Urban Revitilization through Urban Agriculture and Art Park

Fountain Hills, Arizona

Context map of Fountain Hills, Arizona





Study Site in Fountain Hills

Fountain[®]Park

- Population- 23,000

The fountian shoots an average of 330 ft. with a max height of 550 ft.



Fountain Hills

Primary Advisor : Matthew Kirkwood

Secondary Advisor : Dominic Fischer

LA 572 Design Thesis

General Informtion

Founded- December 15, 1970

Landsize- 20.32 sq. mi.

Altitude- 1,525 to 3,160 feet above sea level

(500 feet over Phoenix)

Mountain Ranges surrounding- Scottsdale Mountains, McDowel Mountians, Supersitions Mountains

Intresting Feature- Fountain Park Fountain runs for 15 minutes, every hour from 9 a.m. to 9 p.m.



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Site- 15 Acres

Land Type- Undevelped Desert

Major Roads Surrounding- Ave of the Fountains, and Suguaro Boulevard

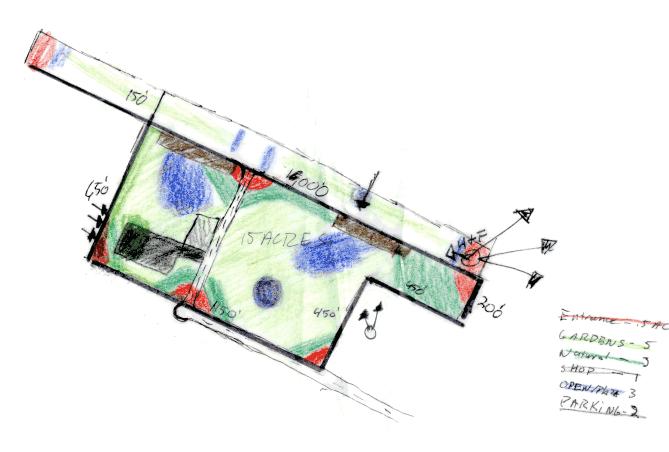
Plants- Volunteer Plants, No Formal Plantings on the Site

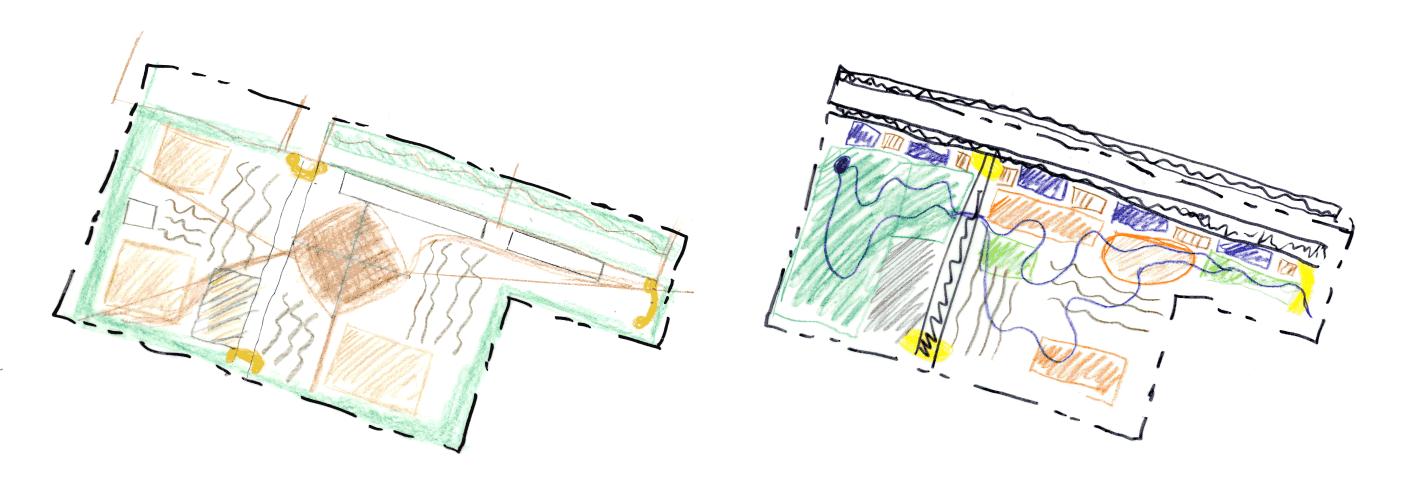




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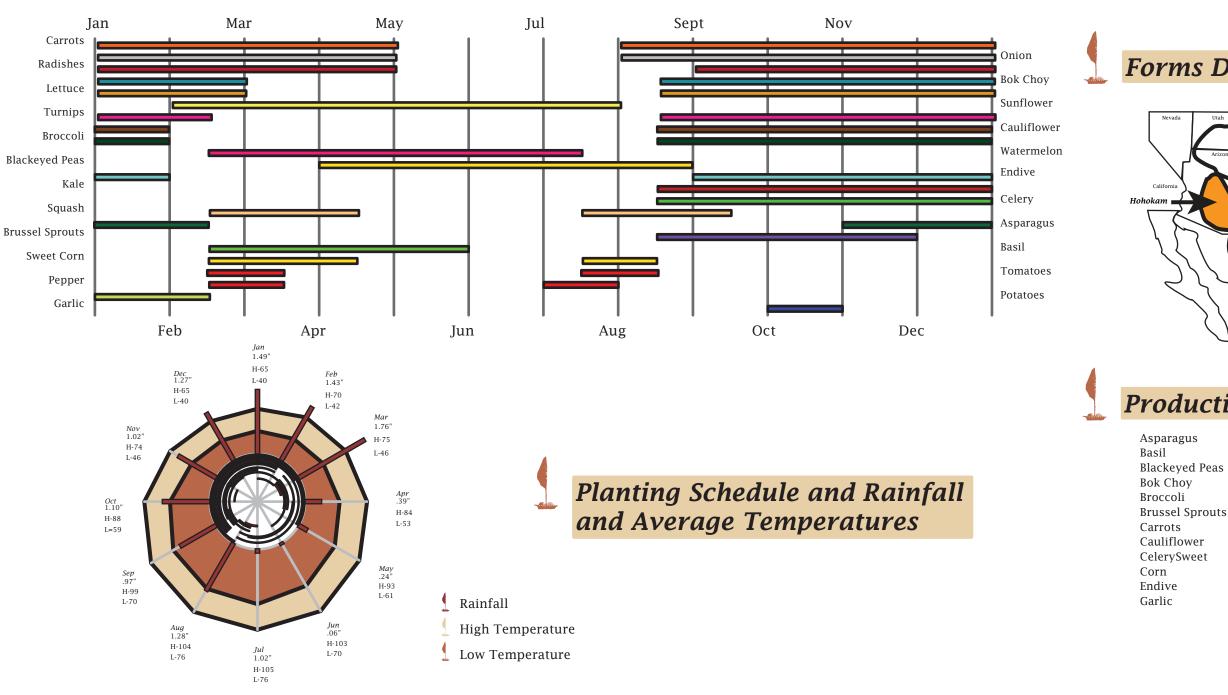


Farm

Plaza

River and Gardens

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Mountains Geometric Design Strucutur Geometric Design Moon Phases **Production Plants** Native Plants Kale Aloe Plant Lemon Tree Lettuce Lime Tree Barrel Cactus Mexican Fan Palm Tree Watermelon Olive Tree Onion Peach tree Yucca Agave Pepper Pomegranate Tree Prickly Pear Potatoes Radishes Mesquite Tree Strawberry Hedgehog Palo Verde Tree Squash Organ Pipe Cactus Saguaro Cactus Sunflower Tomatoes Turnips

Rain Water Collection

From the research collected, the average production plant needs 1 to 2 inches of water per week. The average rainfall in Fountain Hills per month is 1 inch. It will take roughly 5 square feet of rain water collection for every square foot of plantings to allow enough water for the plant to survive.

By using the water runoff from the hardscapes and buildings, 82,600 sq ft of area was designed to collect water. The planter area amounts to 3,300 sq ft and the orchard area is 3,400 sq ft. There is 6,700 sq ft of planting area. Multipy that number by 5, and you get 33,500 sq ft of collection needed. The design can support and is able to collect extra water and store on site underground and use it at a later time.

82,600 sq ft of Rain Water Collection 3,300 sq ft of Planters 3,400 sq ft of tree line

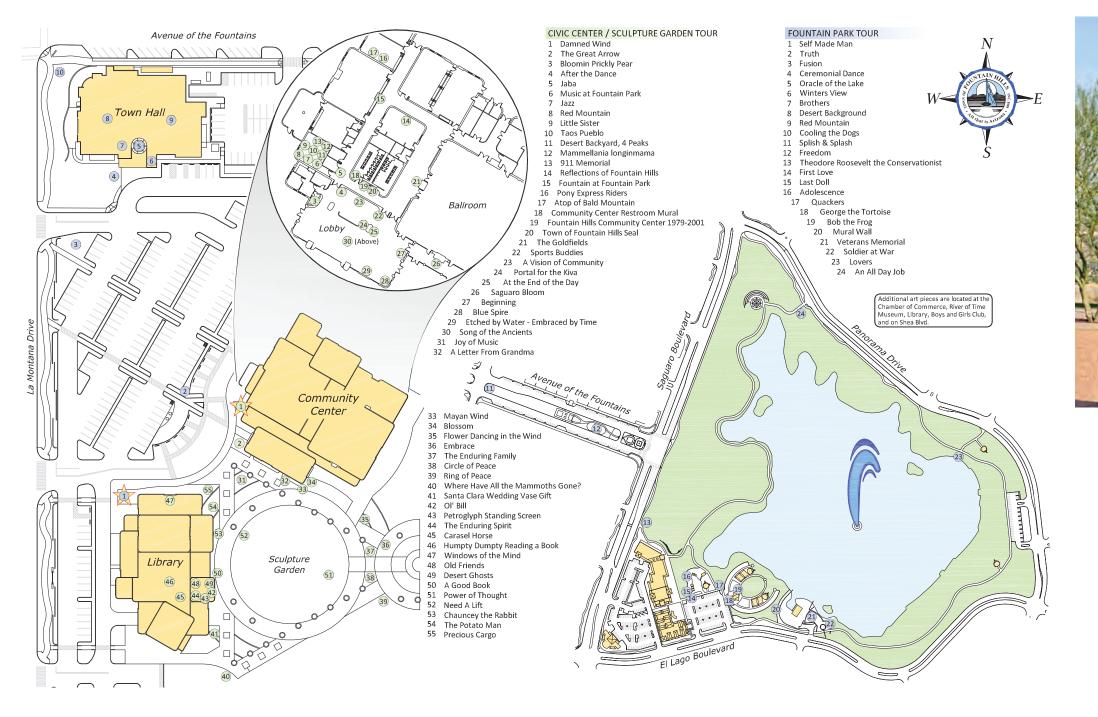
5 sq ft of collection for every 1 sq ft of plantes

3,300 sq ft + 3,400 sq ft = 6,700 sq ft

6,700 sq ft x 5 = 33,500 sq ft

33,500 <82,600

Forms Derived from the Native Hohokam Culture



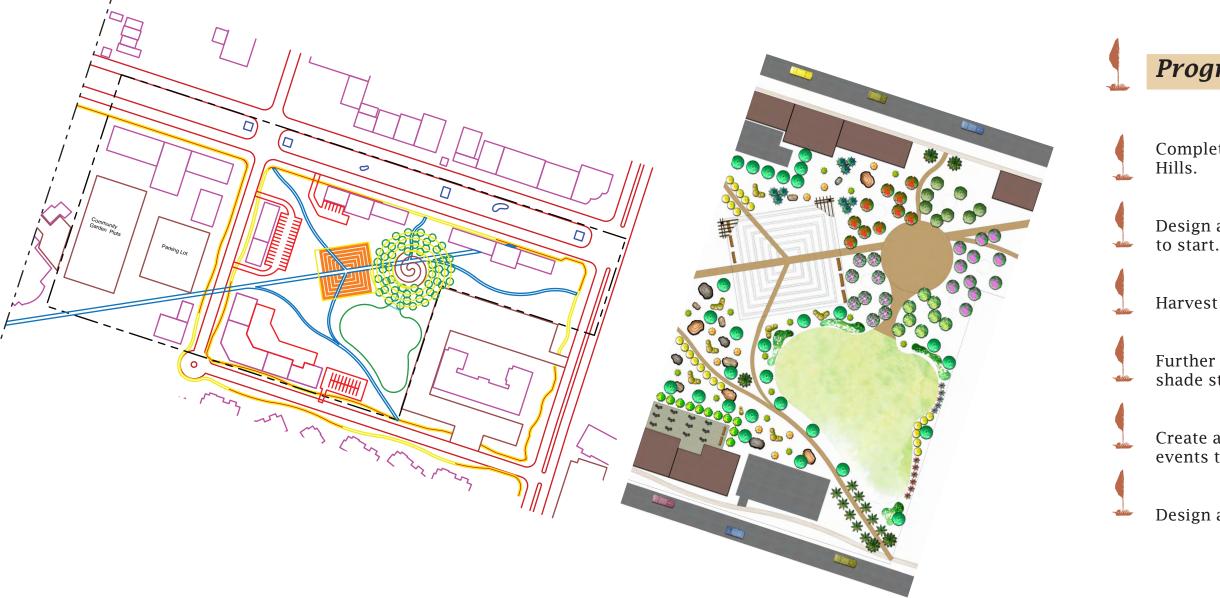








Urban Revitilization through Urban Agriculture and Art Park



Urban Agriculture and Art Gardens Art and Ancient Symbols

Program

Completing the Avenue of the Fountains Streetscape to further promote commerce and draw visitors to Fountain

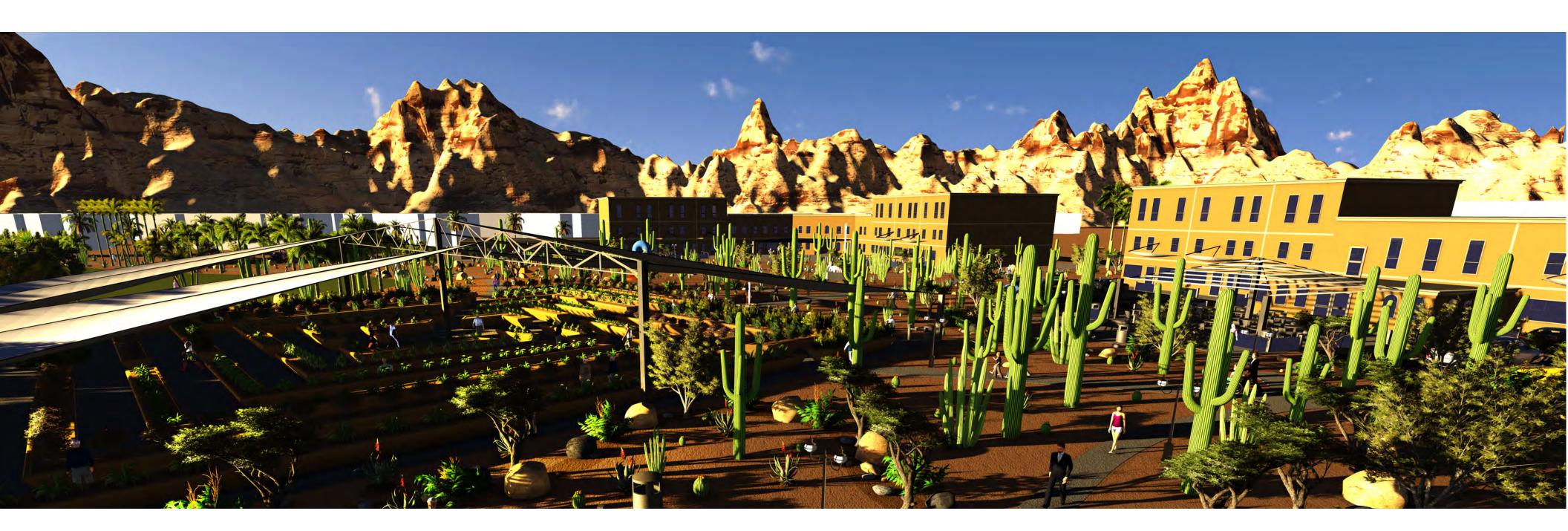
Design an Urban Agriculture installation that generates produce for area businesses and for a local farmers market

Harvest storm water to be reused as the main source of irrigation for the plants on this site.

Further develop the existing Fountain Hills Art Walk and introduce new art into the landscape through sculptures, shade structures and plant specimens.

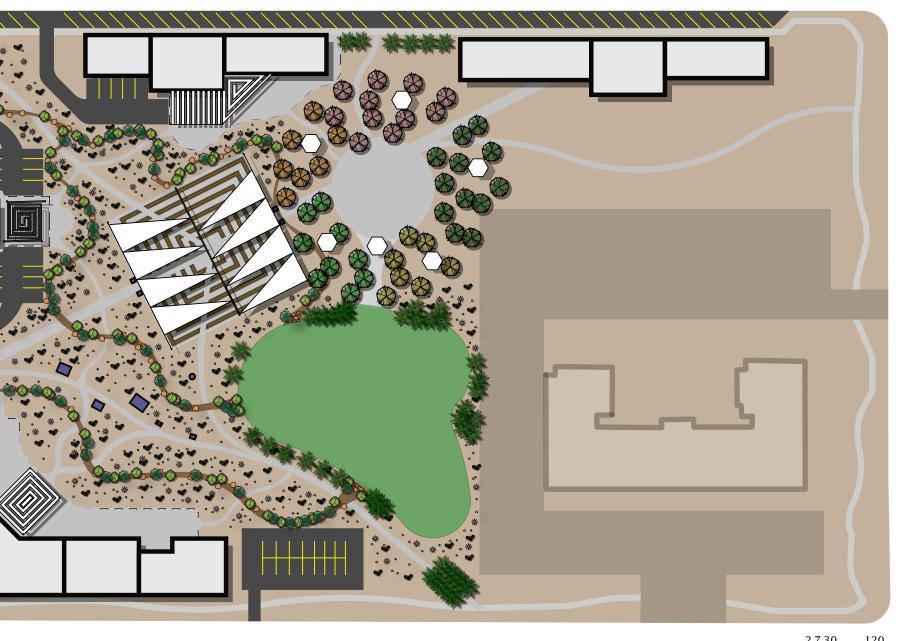
Create a connection between Fountain Park (across the street) and Fountain Plaza and Art Gardens for community events to be held simultaneously between the two.

Design a plaza and open spaces for events to be held at a community and individual scale.



Urban Revitilization through Urban Agriculture and Art Park



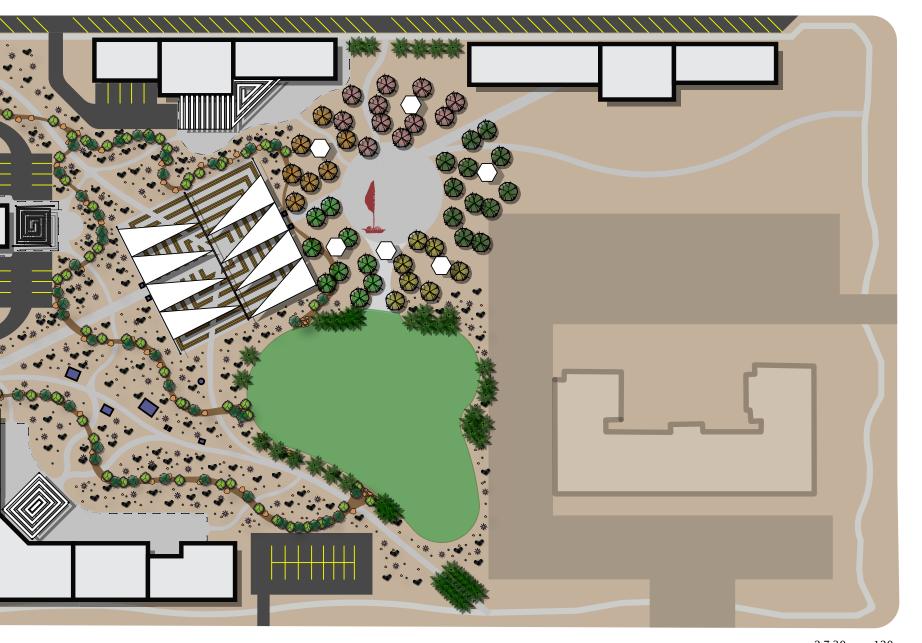


15 60 \

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Tree Rain Scupltures



2 7 30 120 4 15 60 \



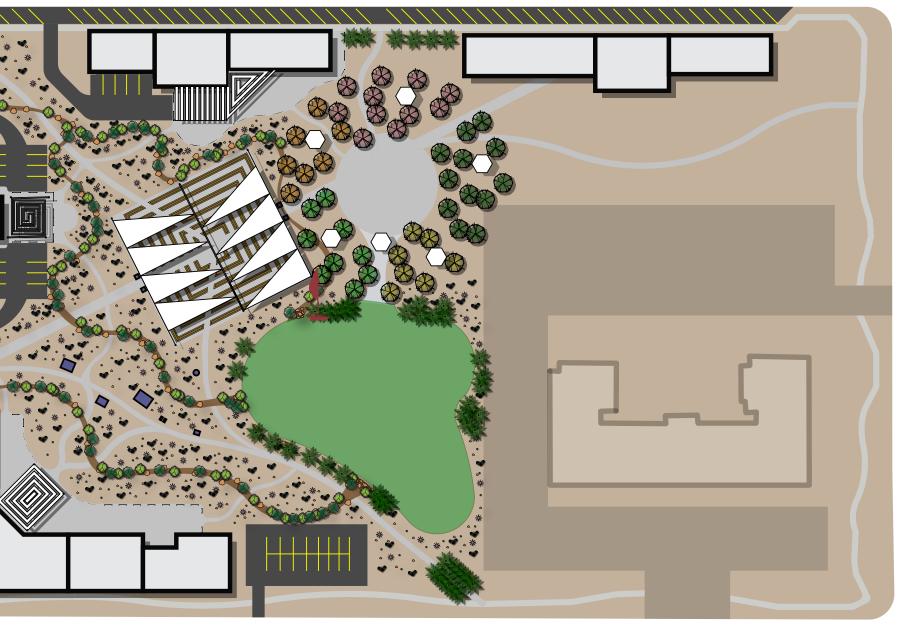




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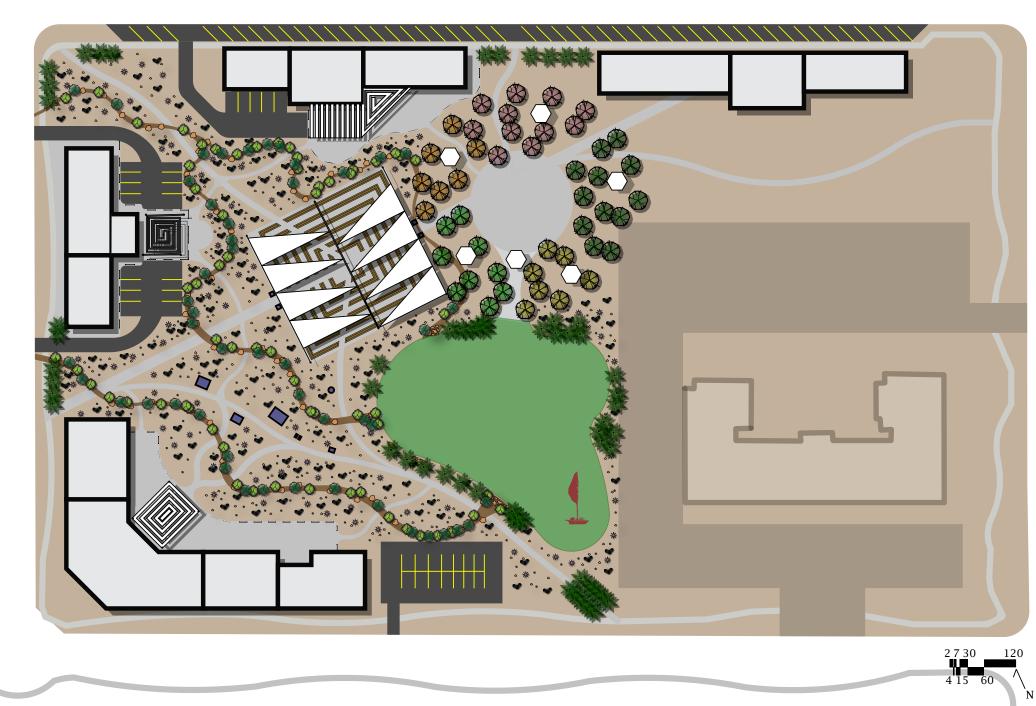
Urban Planters



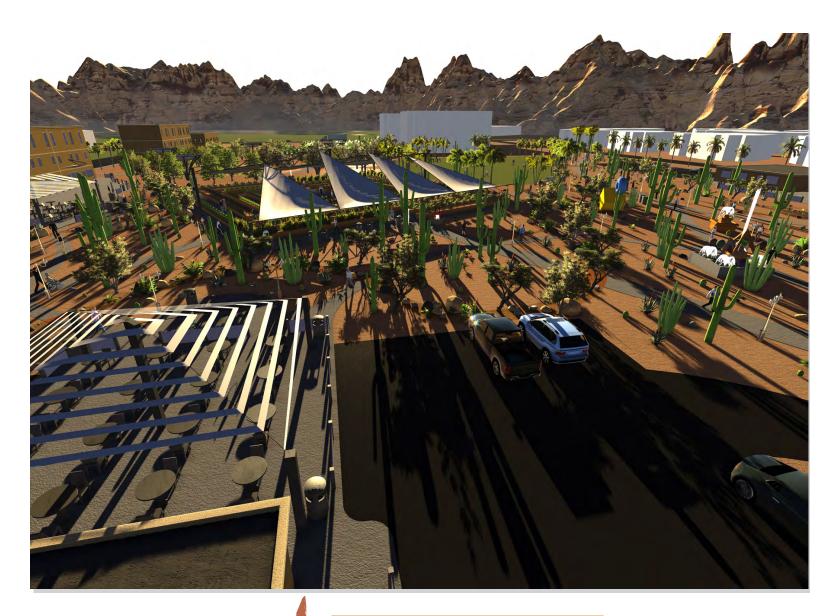
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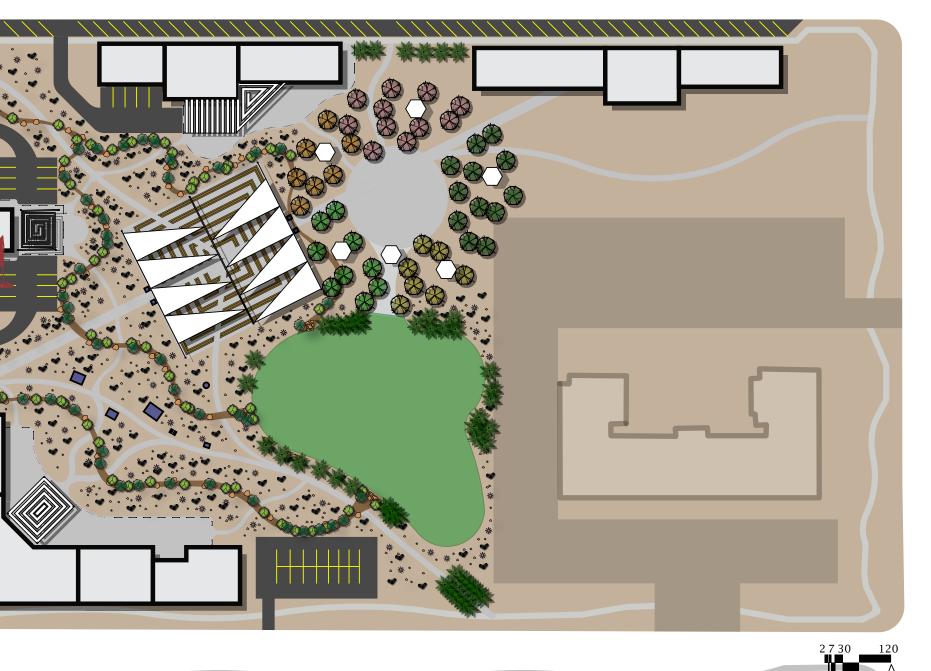




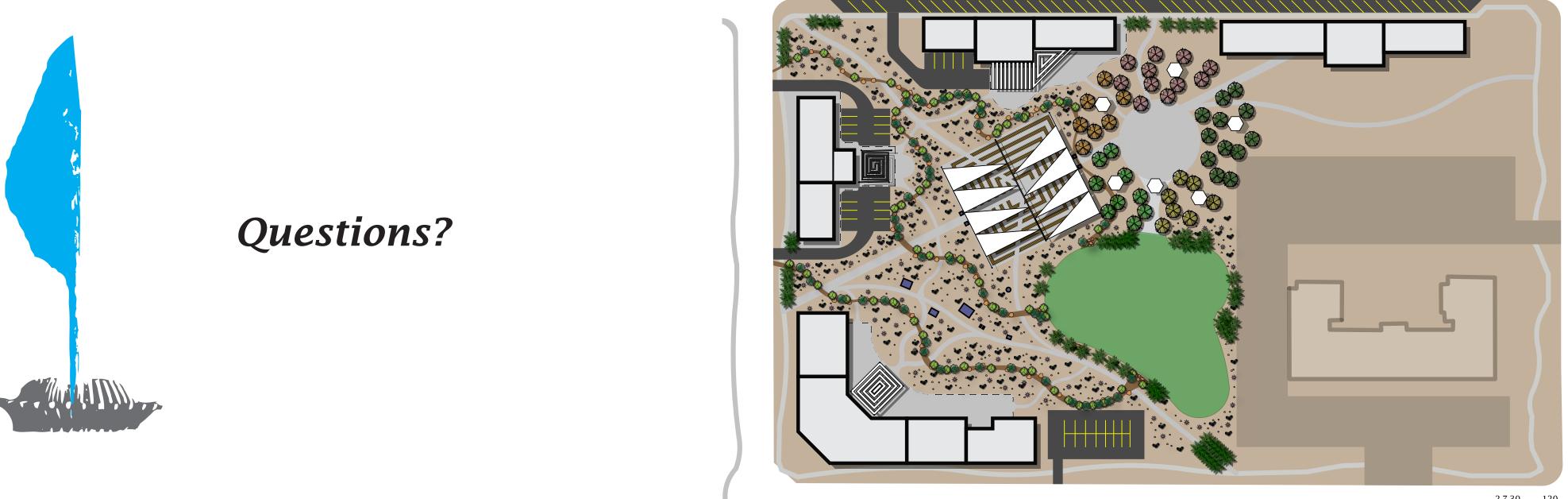
Urban Revitilization through Urban Agriculture and Art Park



Shade Structures



Urban Revitilization through Urban Agriculture and Art Park



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