



MARCH FIELD **AIR** MUSEUM

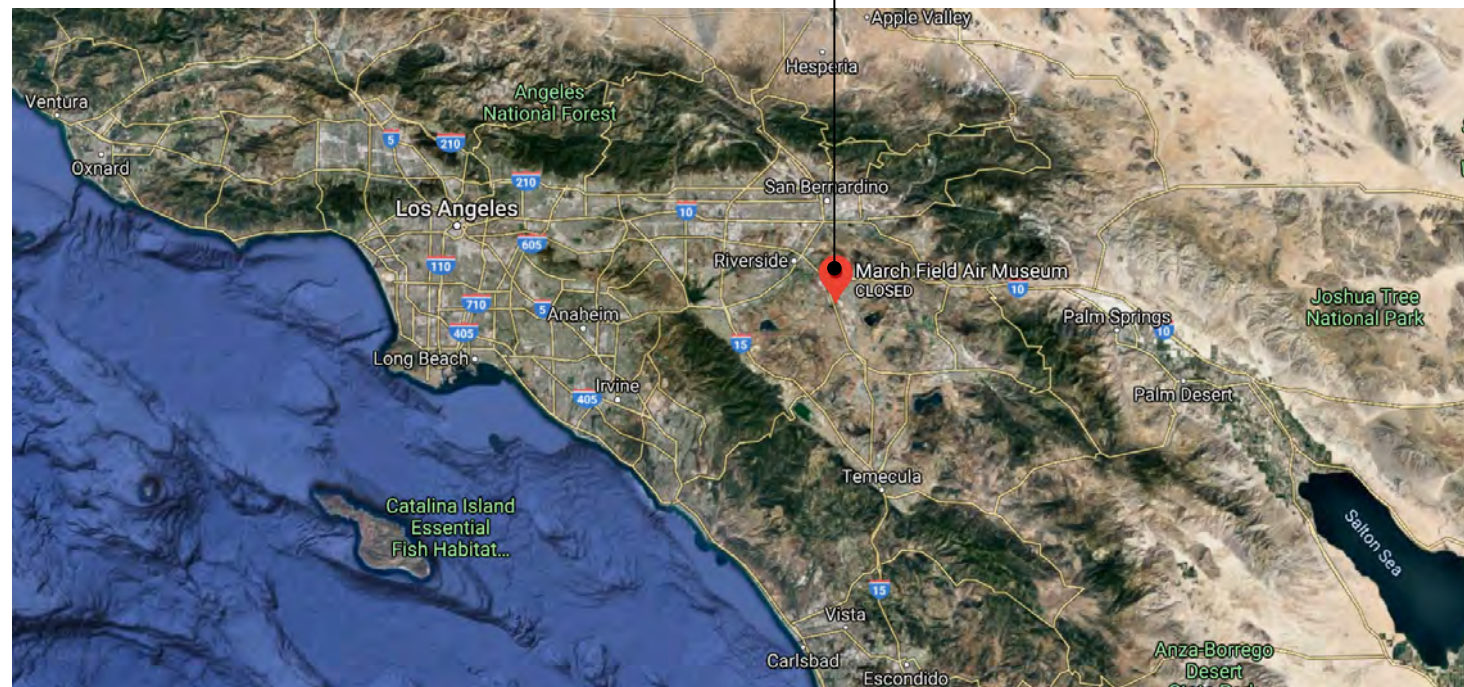
a museum , an educational center, a playground, a garden - a place for everyone

the site

California



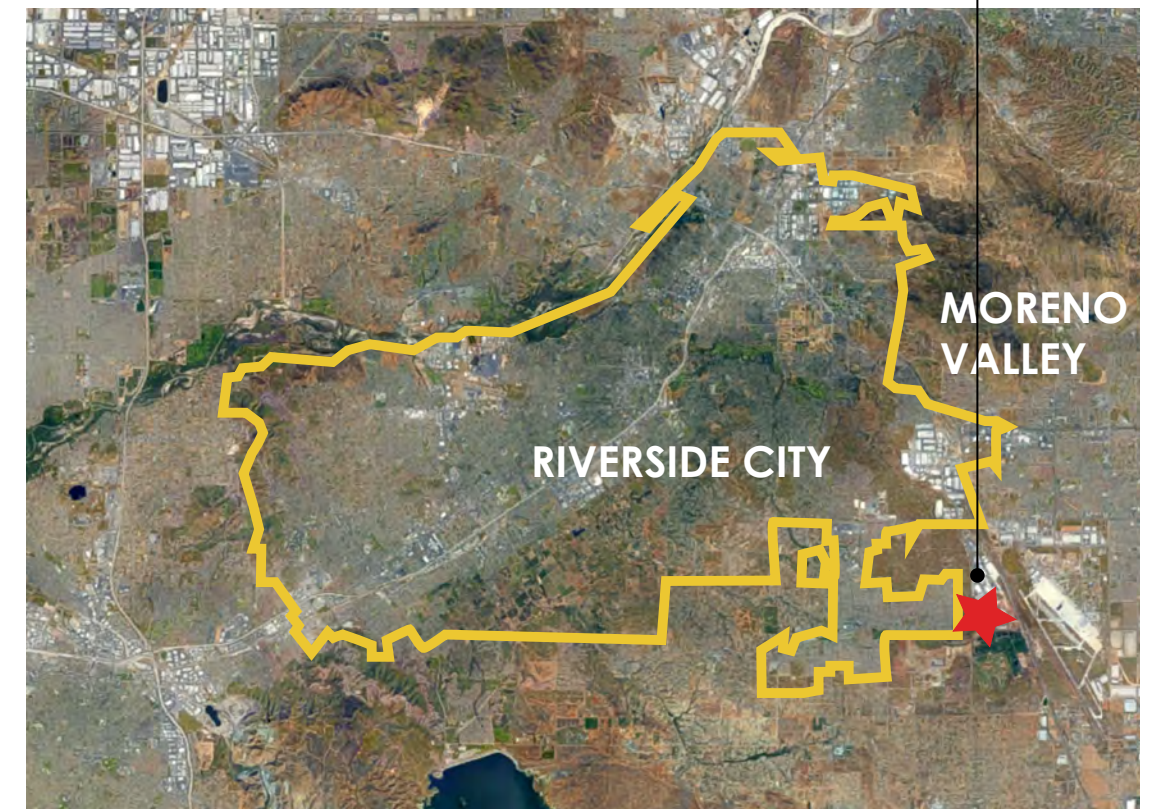
Riverside



10 miles



March Air Reserve Base



2 miles



location map

22550 van buren boulevard
riverside, california 92518



museum history



from march field air museum website



a brief history

The museum was founded in 1979 and today sits adjacent to March Air Reserve Base. The story of the original airbase started in 1918 during a time when the United States was rushing to increase its military training in preparation for World War I. March Air Field was one of the oldest airfields & Air Service training camps operated by the United States military. The March Air Force Base Museum, as it was called, was located on the grounds of the airbase till 1993. In 1996, the government reorganized its military bases and transferred ownership and management responsibilities of the museum to the March Field Museum Foundation.

It also established March as an Air Reserve Base. In May 1999, the museum's official name was changed to the March Field Air Museum to better reflect its broader military aviation focus. The unique site is home to historical Air shows, films, and private events which bring in tens of hundreds of visitors year round. With over 80 aircraft and more than 30,000 individual artifacts, the museum strives to promote an understanding of humanity's reach for the skies and of March Field's pivotal role in the development of flight.



photos and history extracted from March Field Air Museum Website

statement

The project **rethinks** the March Field Air Museum space turning it into a destination to the community as well as a tourist attraction. Promoting an educational, experimental, fun and a contemplative experience.



goals

- turn the museum into a **regional attraction**
- attract **new** visitors of all ages with diverse **interest**
- provide **fun**, educational and experimental experience for all visitors
- a place where **veterans**, families and visitors **can contemplate**
- create spaces that will allow for **flexible uses**
- increase museum's **revenue**

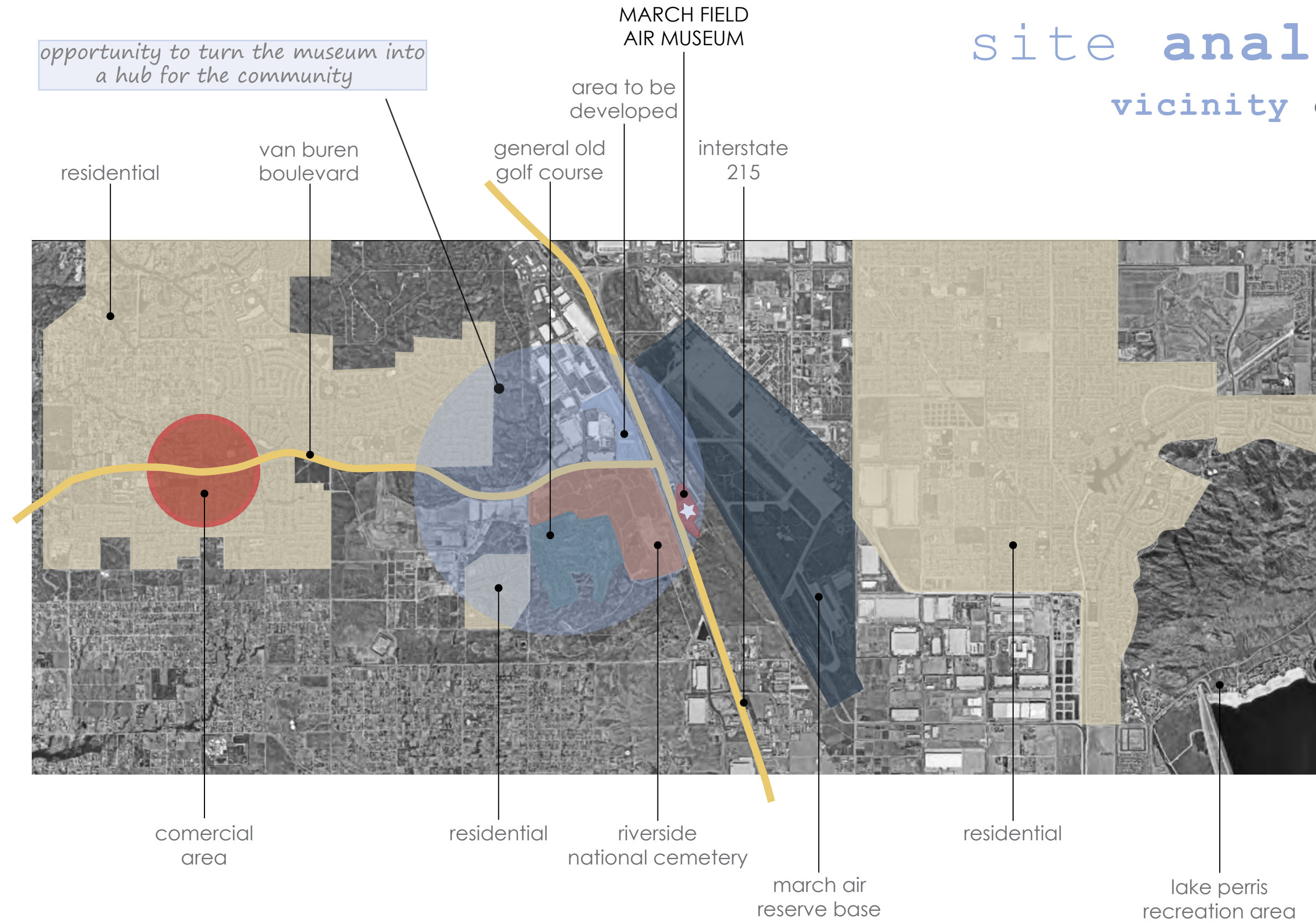
objectives

- reduce site temperature
- create a sustainable site specifying native plants suited for the area
- improve circulation of site
- create a designated area for kids
- create spaces for revenue programming
- reimagine the memorial garden
- reimagine the firebases
- upgrade parking lot
- enhance entrance to the museum
- introduce signage to be seen from the road
- seating opportunities, restrooms and water fountain
- address lack of light for evening events

site analysis

site analysis

vicinity diagram



site analysis

land use diagram

diversify museum's program to attract a more diverse range of visitors



① memorial



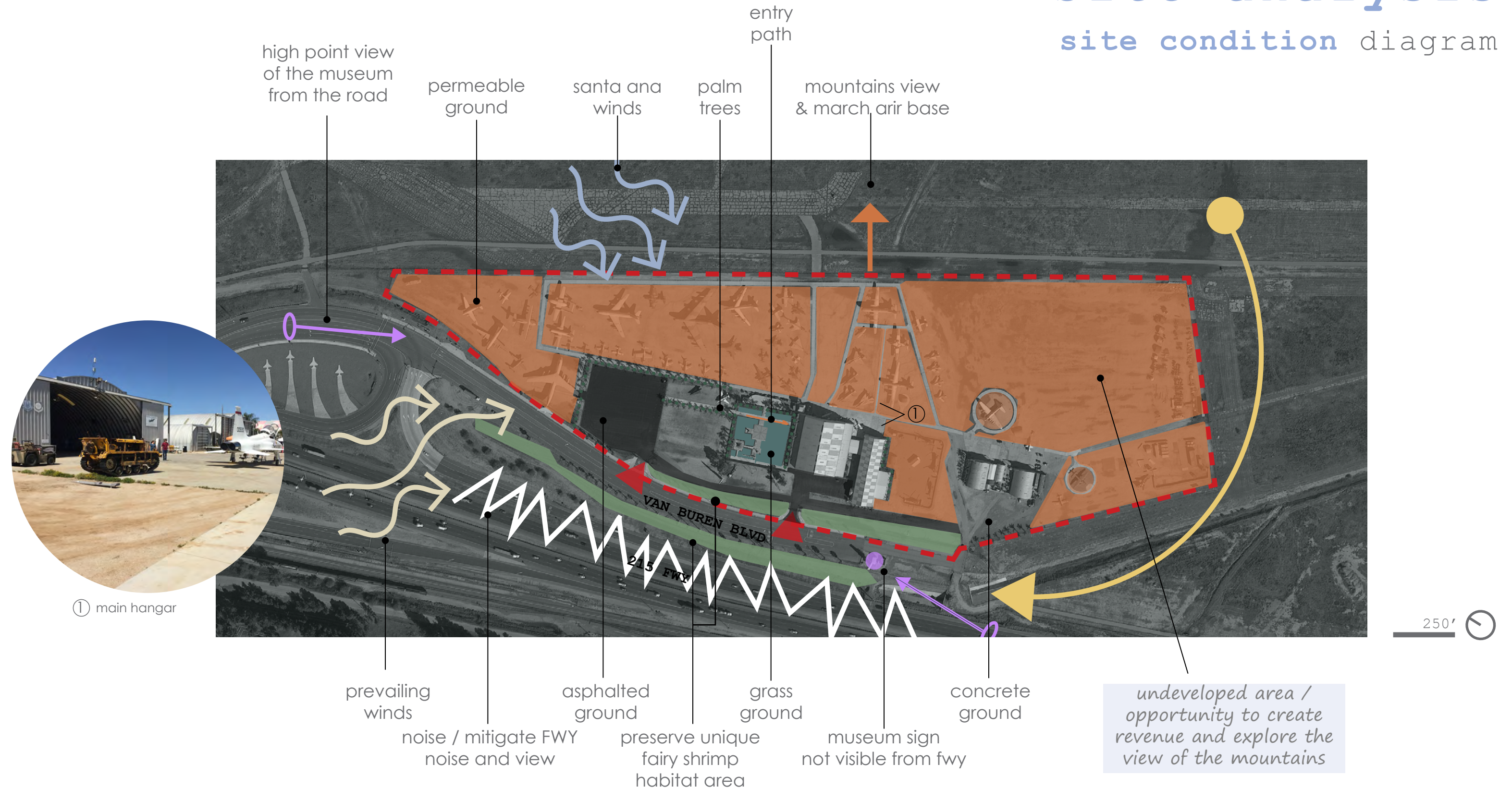
② boneyard

250'

- | | | | |
|-----------------|-----------------|------------|--------------|
| outdoor exhibit | memorial garden | event area | bone yard |
| parking | buildings | fire base | entry points |

site analysis

site condition diagram



site analysis

circulation diagram

enhance view of museum from the road as vehicles approach

develop a more organized circulation in aircraft exhibition area



① view from the road

- ■ ■ vehicle
- ■ ■ pedestrian
- ■ ■ tram

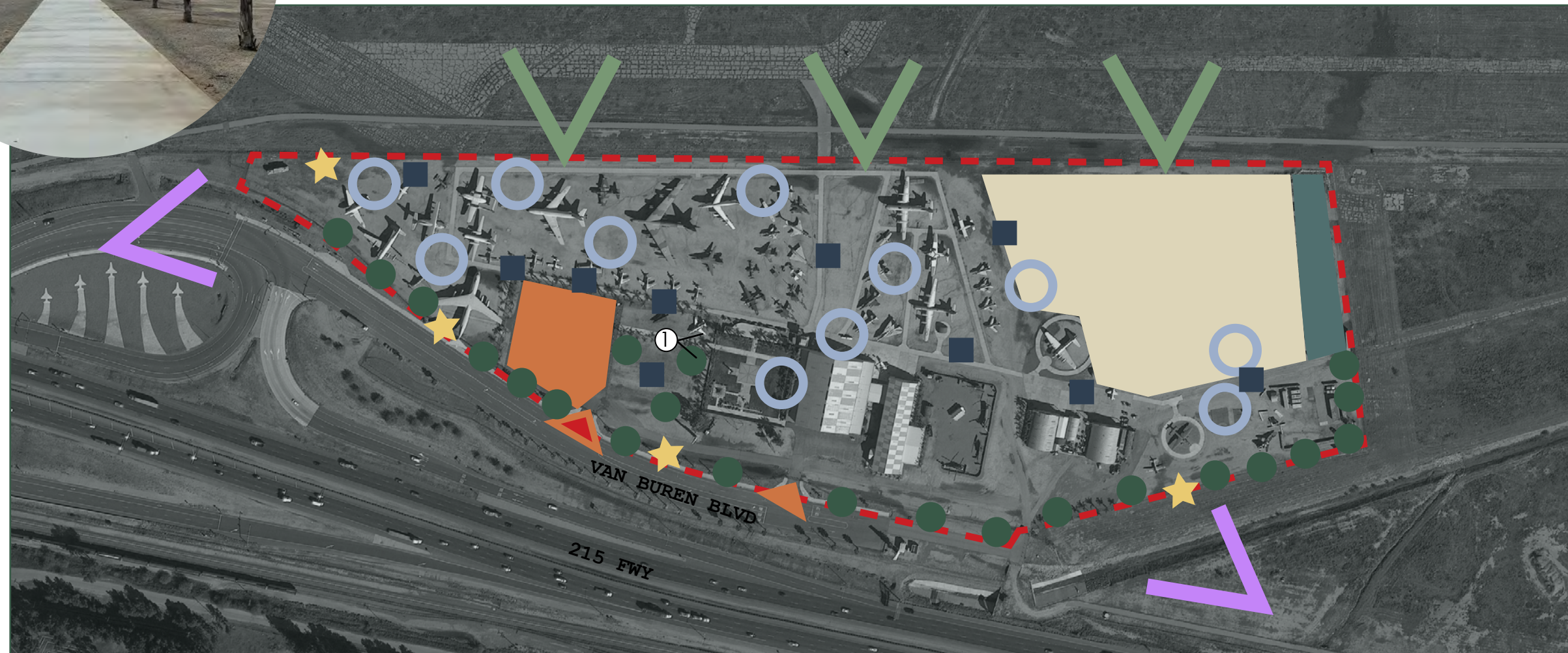
develop an overall circulation plan that allows for the visitors to explore the different programs the museum offers

site analysis

opportunities



① unattractive entrance to main building



250'

grand entrance

signage

plant possibility

shade areas

restaurant/
gift shop

view from road

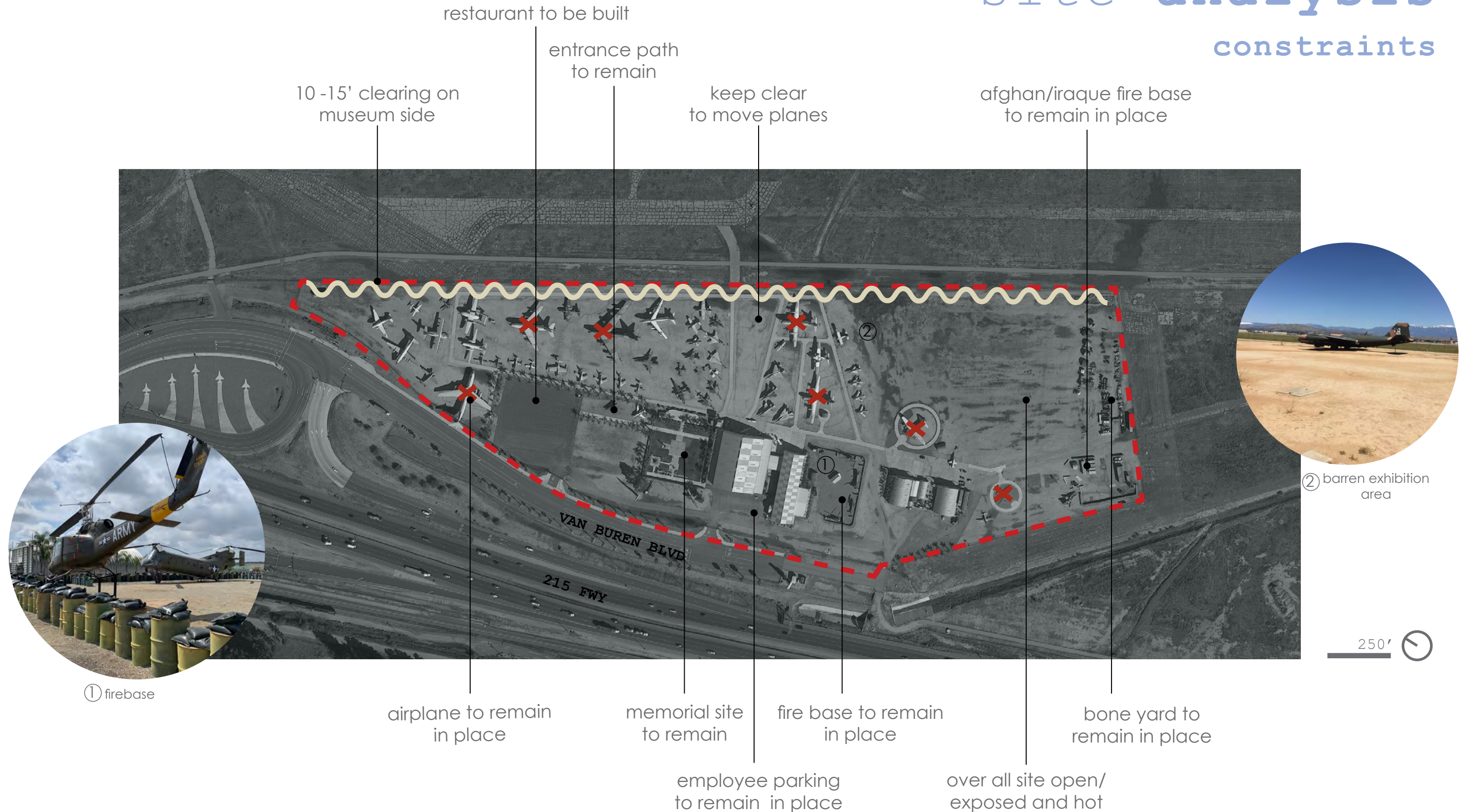
views from
museum

to be develop

bone yard playground
to be re-imagined

site analysis

constraints



elements

program

- entrance redesign
- memorial garden reimagined
- event area
- firebases redesign
- youth educational center
- amphitheater
- airshow viewing areas

revenue

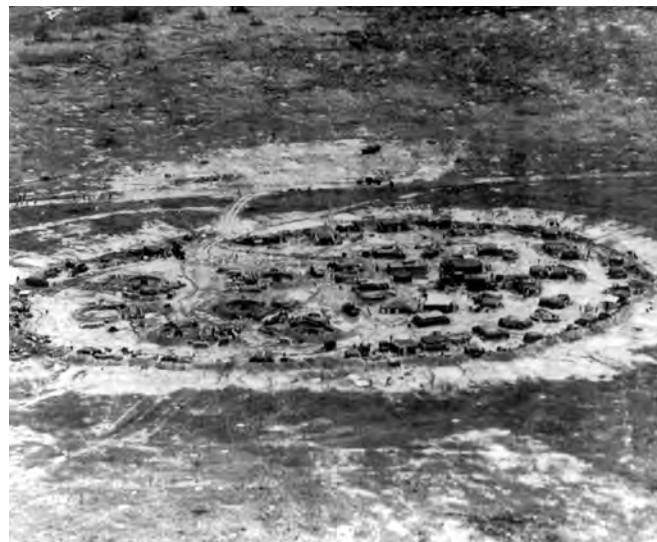
- restaurant
- giftshop
- cafe and snack shop
- drive-in movie theater
- indoor exhibition pavilion for temporary art shows

service

- restrooms
- water fountains
- shaded areas
- seating areas
- existing parking redesign
- overflow parking



soldierstone vietnam war memorial, co



vietnam fire base



museum kroller-muller amphitheater, netherlands



sage scrub

case studies

case study

Datangshan Aviation Museum

Beijing

The museum was first opened to the public on 11 November 1989, to celebrate the 40th anniversary of the founding of the People's Liberation Army Air Force. Part of the museum is located inside a cave in the side of Datangshan Mountain.

- interesting display of aircrafts
- impressive modern façade that resembles an engine



case study

Imperial War Museum Duxford Cambridgeshire

The museum opened in 1920 and remains an active airfield and is used by civilian flying companies, and hosts regular air shows. It is both a family destination and history buffs who want to nose around the inside of a Concorde or learn the mechanics of a biplane.

- it blends with the country side environment
- pleasant integration of elevation and buildings



case study

Museu do Amanhã

Rio de Janeiro

The sustainable museum was designed by Calatrava and opened in 2015.

- makes use of water to cool down site
- intricate extension of the building creates shade
- use of solar power & night lighting
- the circle around a water feature defining a gathering space



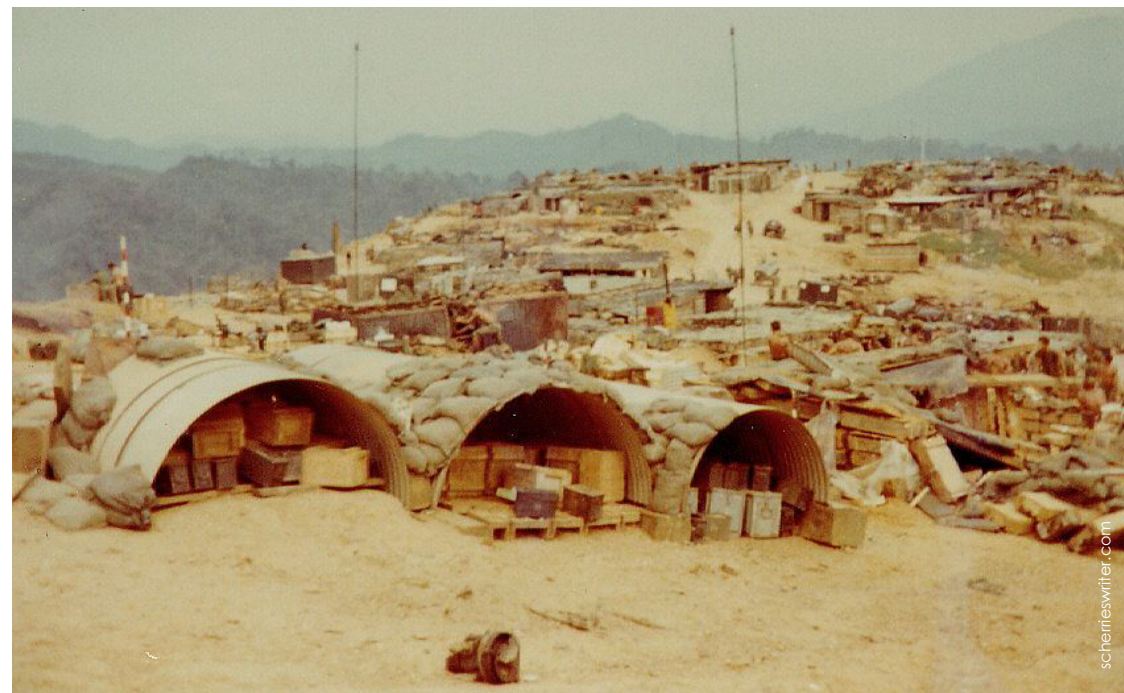
case study

exploring design ideas



Fire Base

- use of flexible materials to build shelter to store gear and sleeping quarters
- canopies to create shade
- strategic shape of fire base





case study

exploring ideas for bone yard

Governors Island recycled adventure playground New York

- playwork encourages risk-taking, experimentation and freedom through self-directed play
- an opportunity to let kids play, pretend, explore, discover and have an adventure



Brooklyn Bridge Parents





case study

exploring outdoor entertainment

Drive-in Theater

- entertainment for all ages
- revenue
- space can be used as a drive-in theater, special events and as extra parking

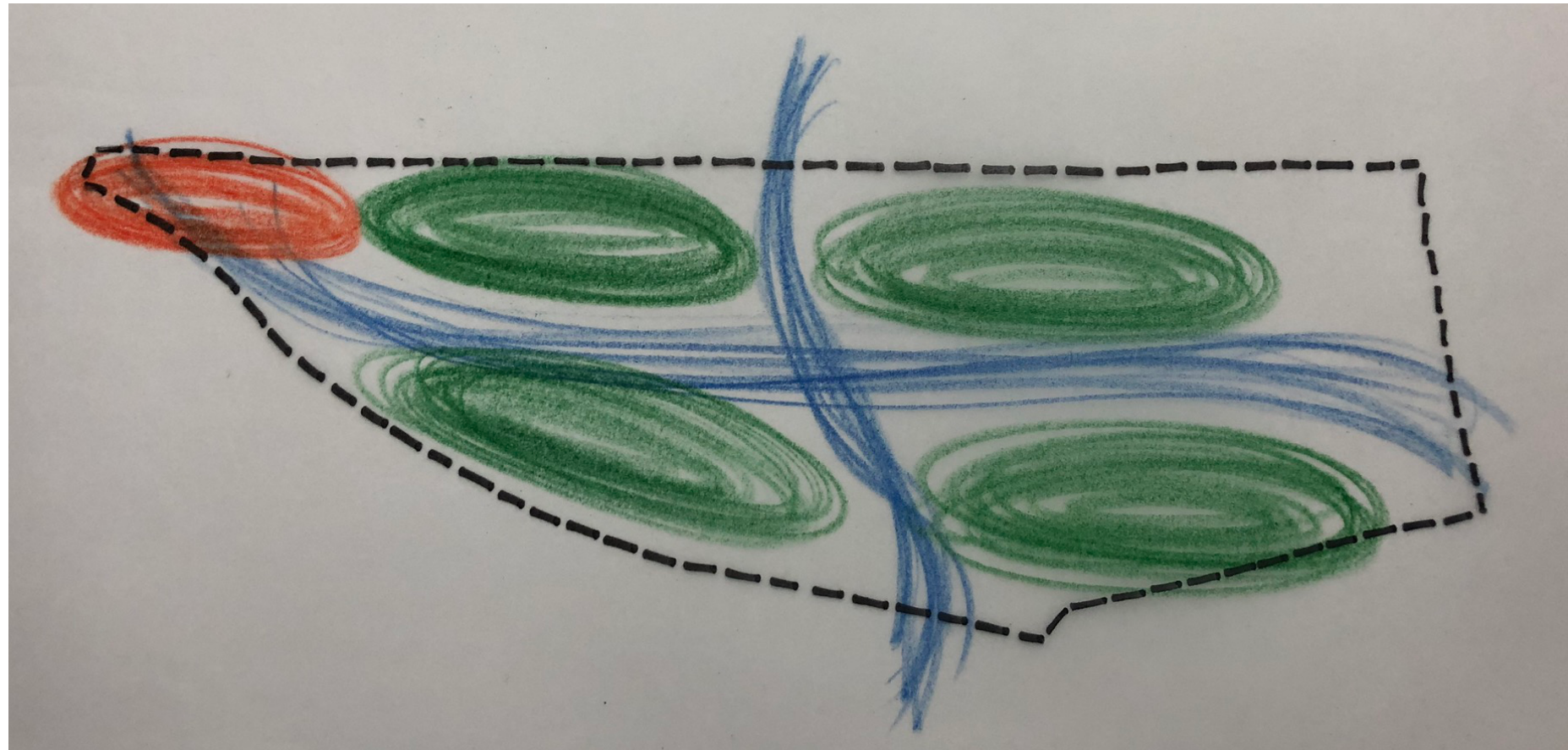
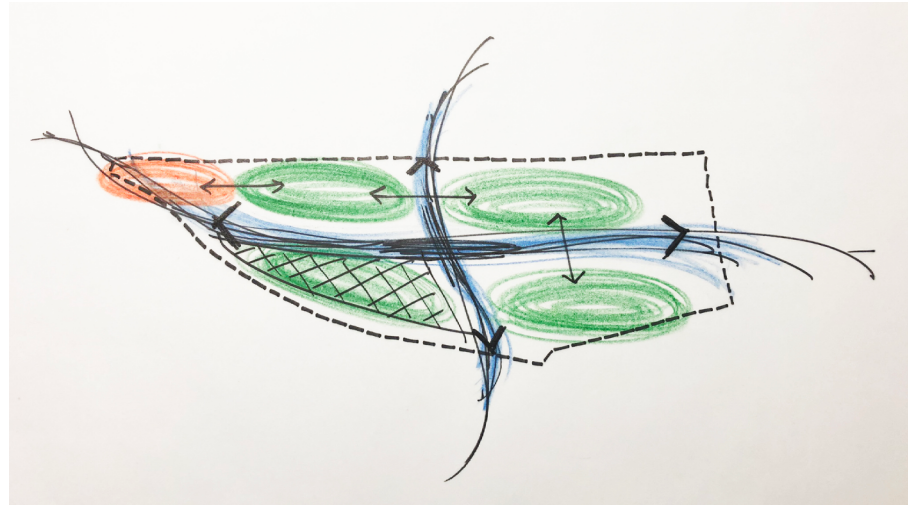


design concept

design concept

bubble diagram **A**

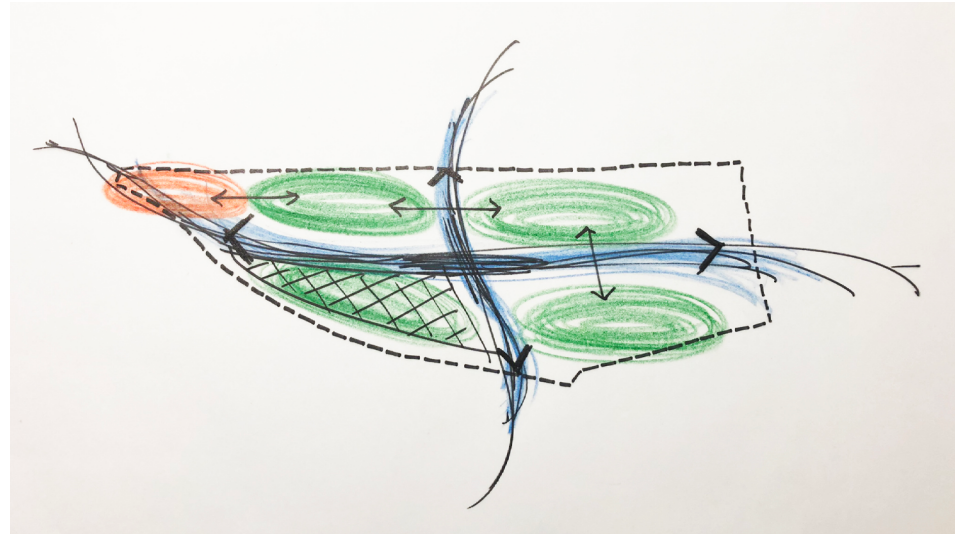
- Looking for inspiration in elements and lines that would contrast with the harsh qualities of the site I was influenced by planes' movement in the sky



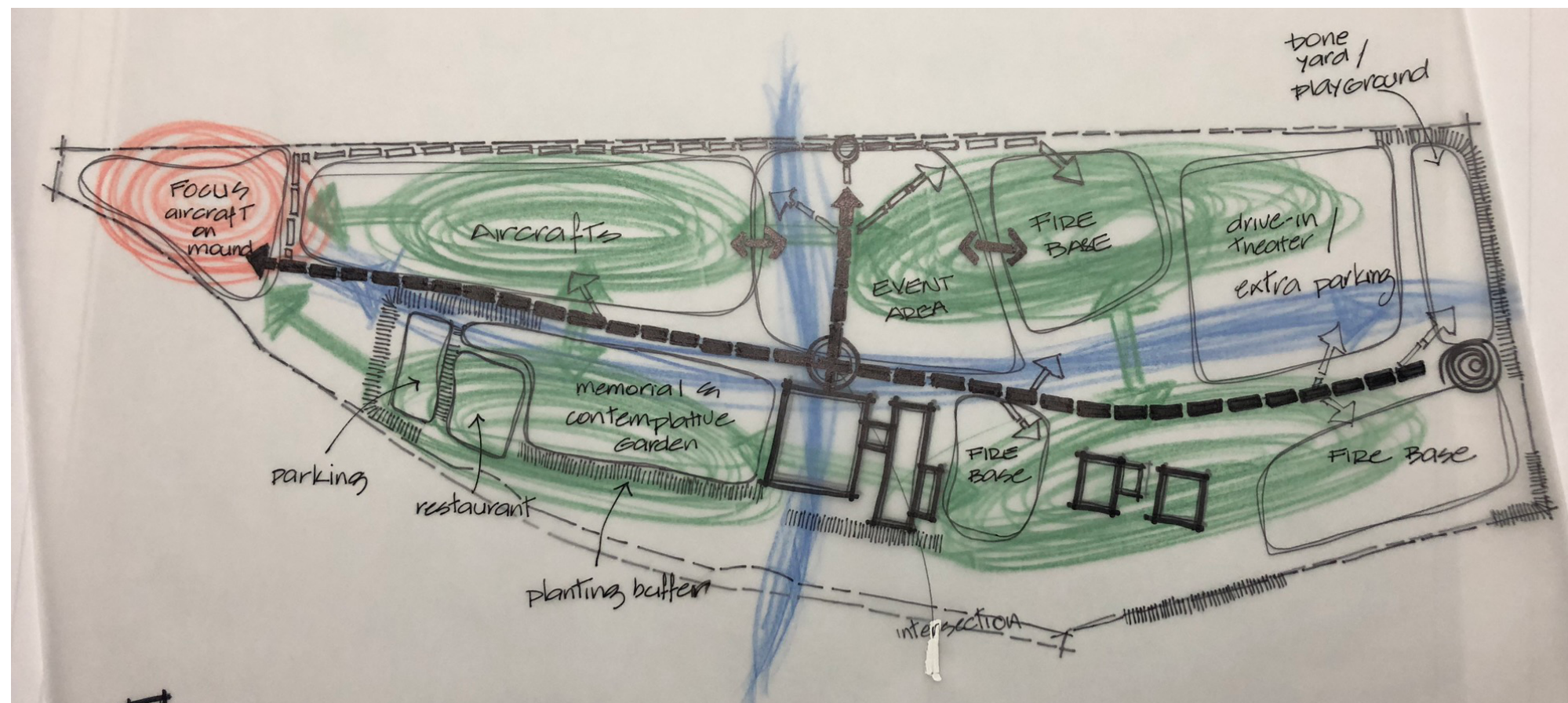
nts ⌚

design concept

bubble diagram **A**



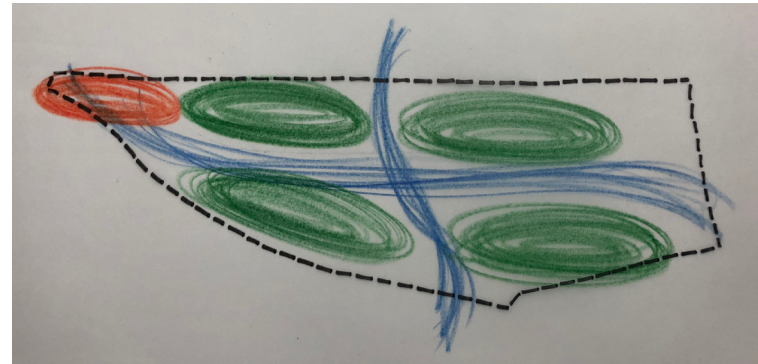
- The lines applied split the site in quartes



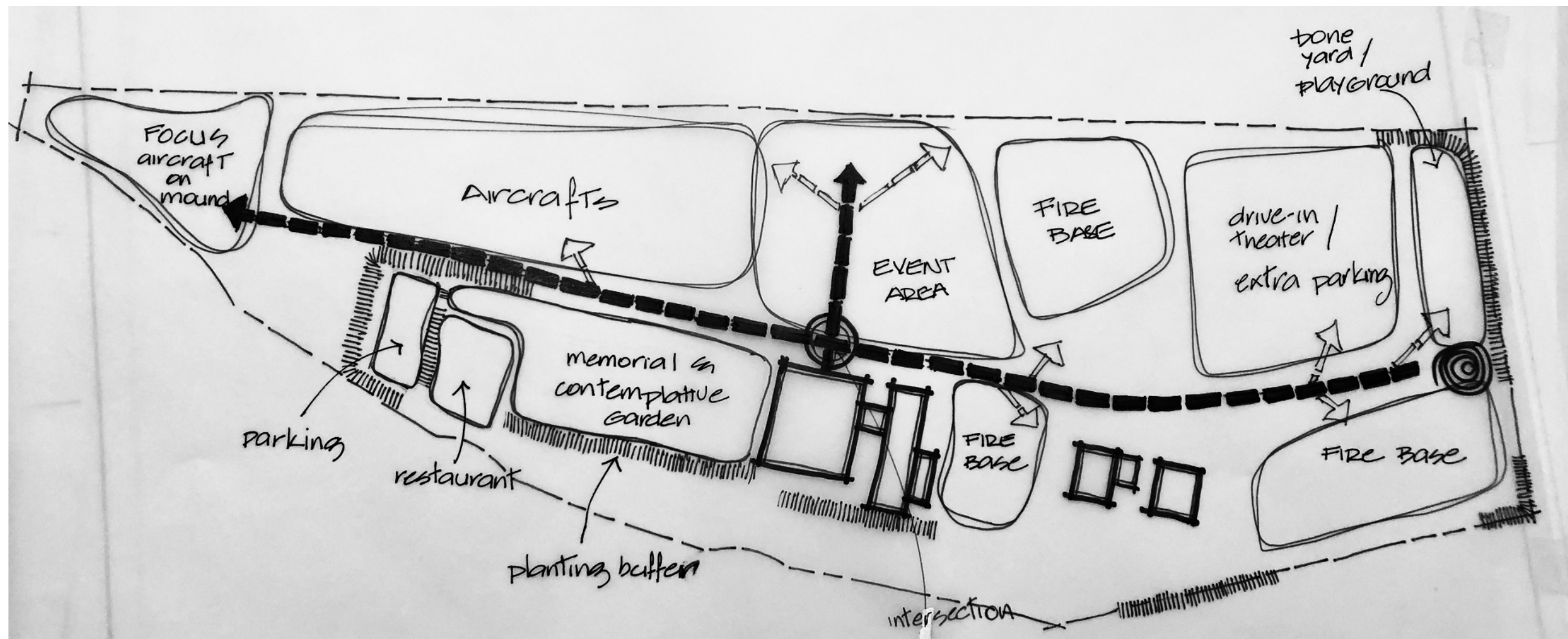
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design concept

bubble diagram A



- circulation split the site and created chambers
- the chambers connected to the main intersection in front of the main hangar through a long path
- the path leads to focus on the highest point of site to the north



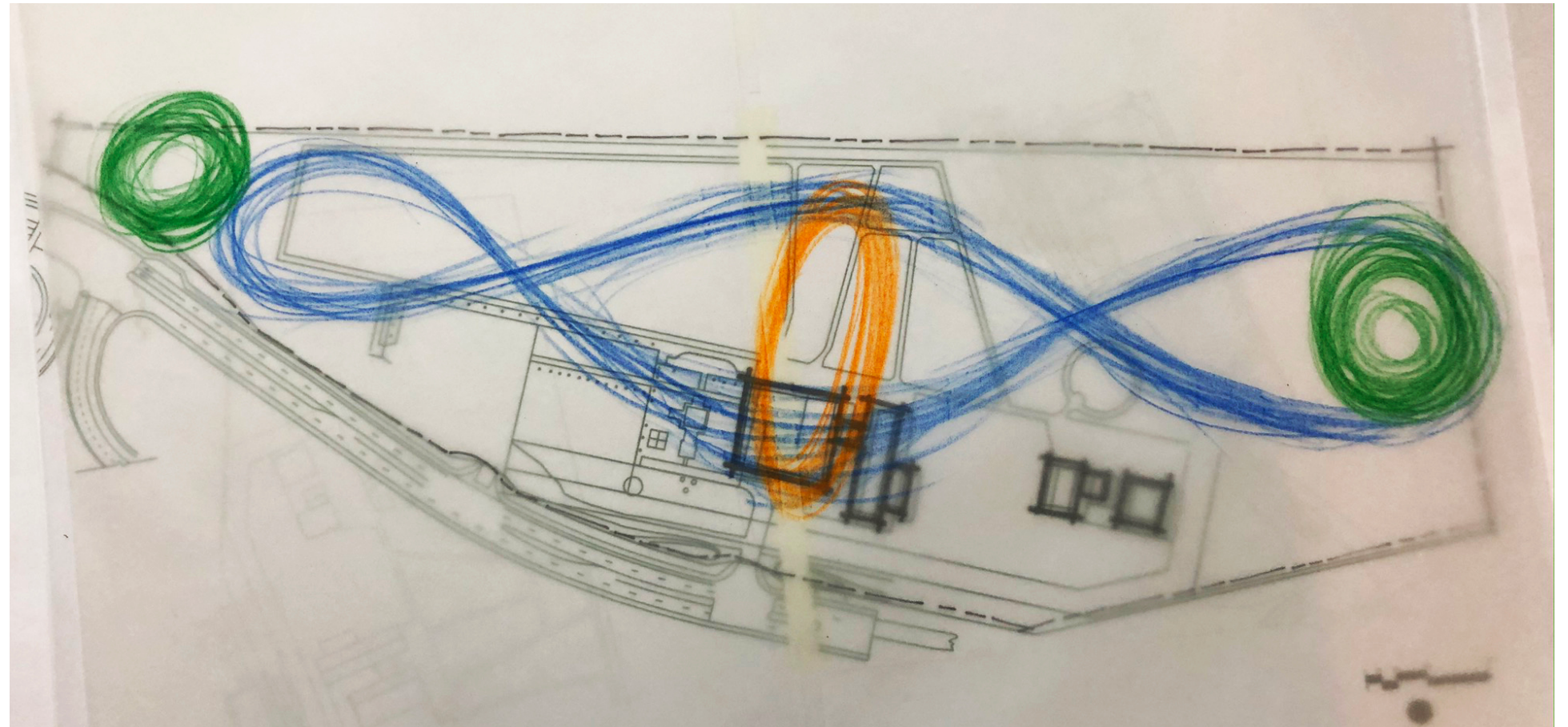
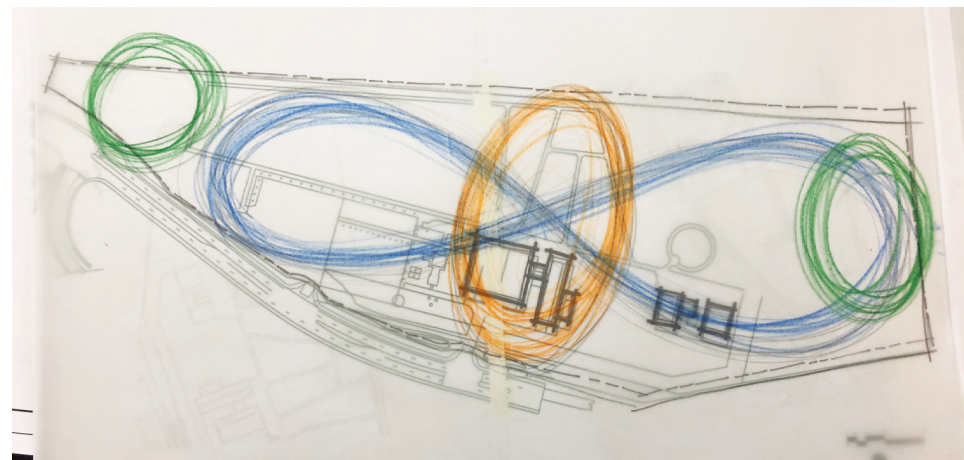
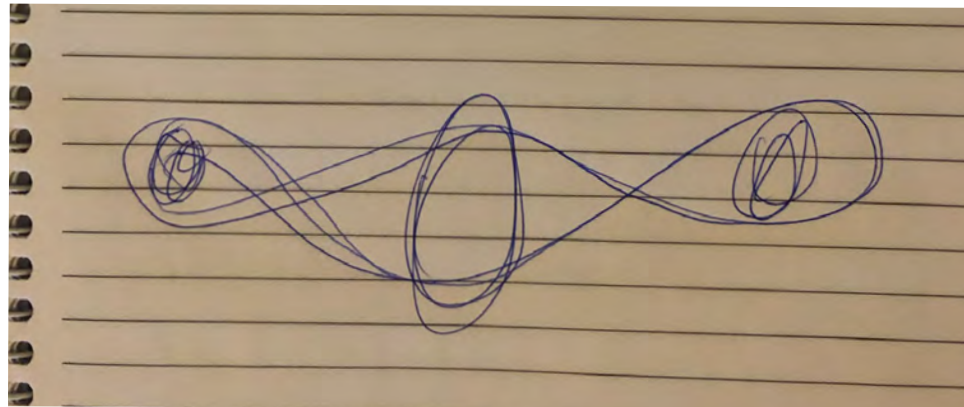
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design concept

bubble diagram B



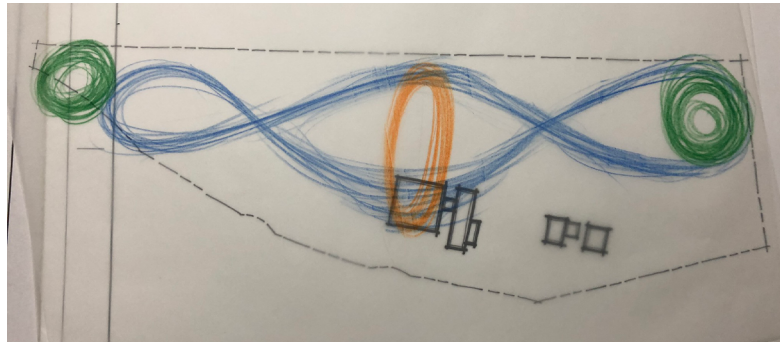
- looking for elements that motivated movement and playing with hand sketches exercises I came accross a shape that inspired this diagram



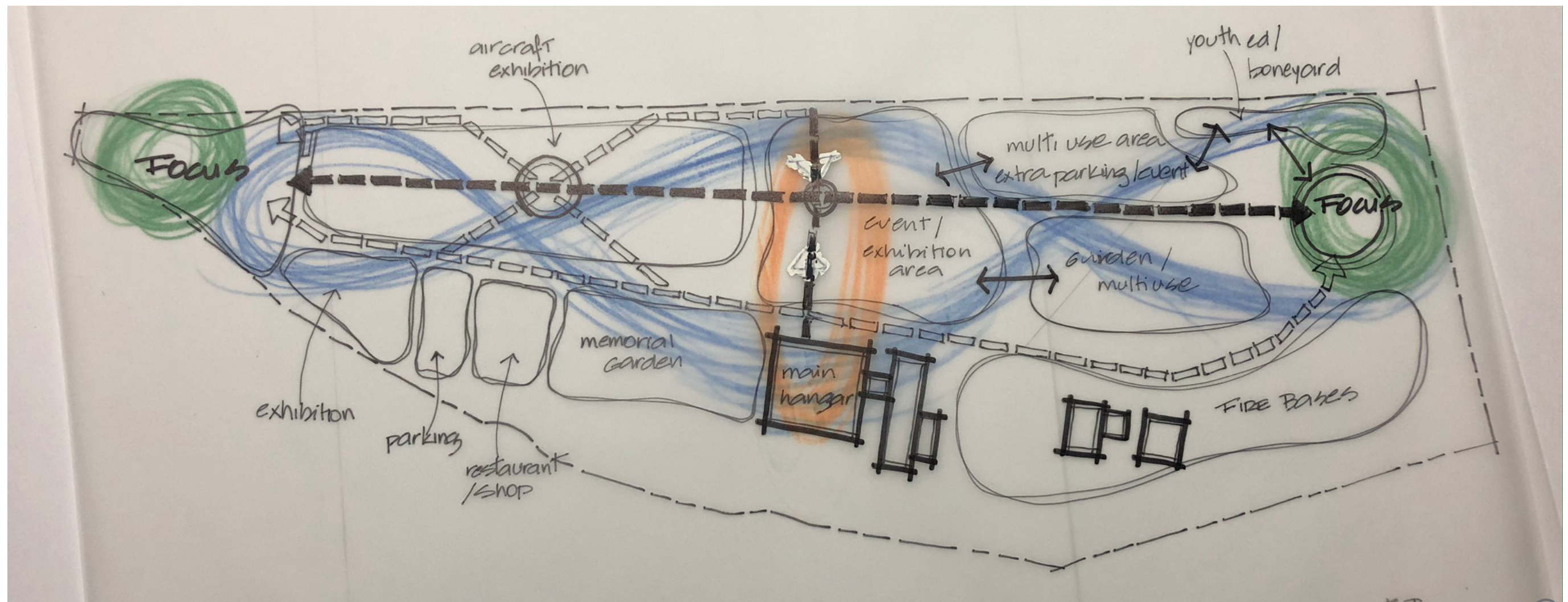
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design concept

bubble diagram B



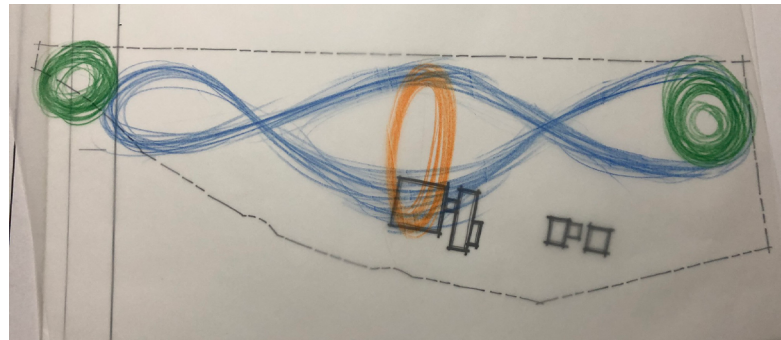
- the result was a circulation with a flow
- the crossing lines resulted in nodes



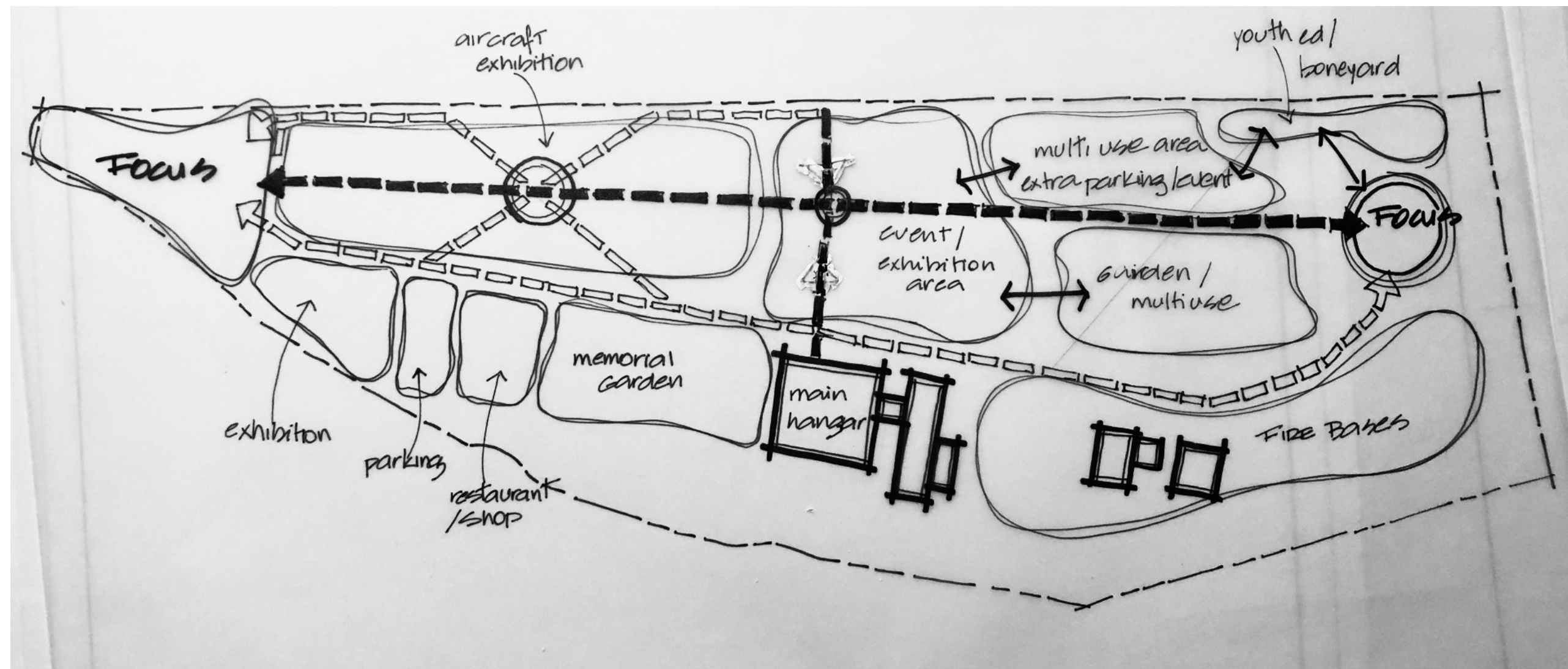
nts

design concept

bubble diagram B



- there is connection between the different areas
- the nodes along the long path create smaller and more intimate areas
- the long path leads to focus on the highest point of site to the north as well as the low opposite end

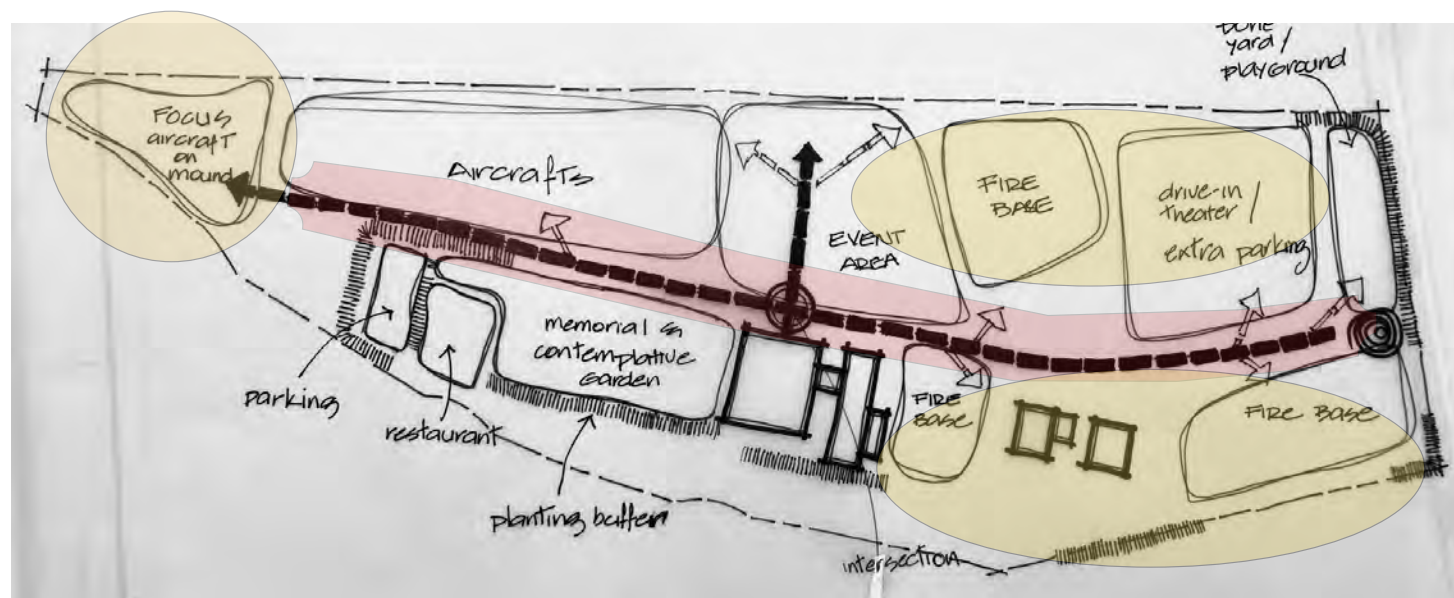


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design concept

bubble diagram A/B

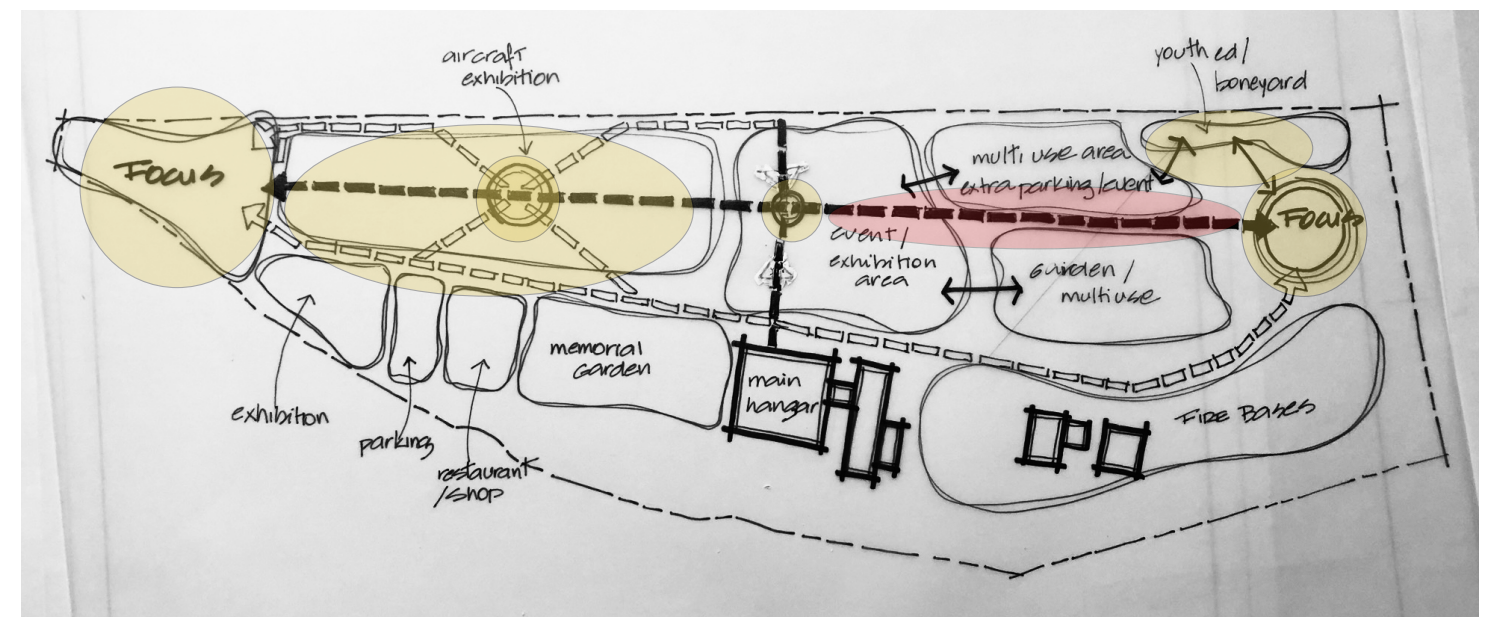
bubble diagram A



- the long main path is not inviting
- doesn't bring a sense of containment / too expansive to be inviting
- a sense of organization started by splitting the site in quarters

nts

bubble diagram B



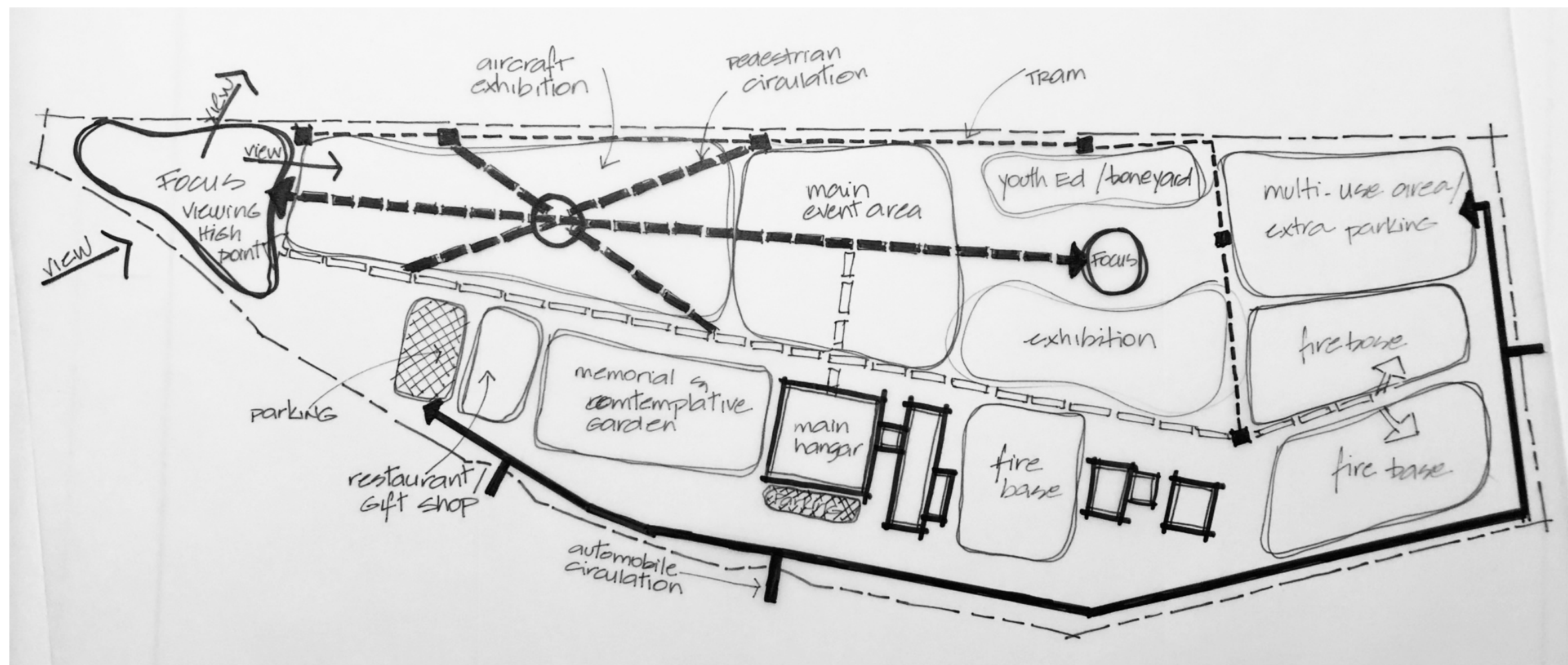
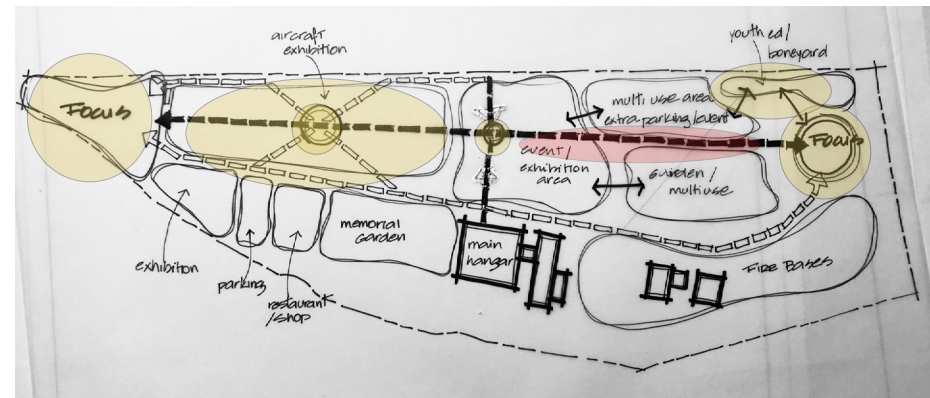
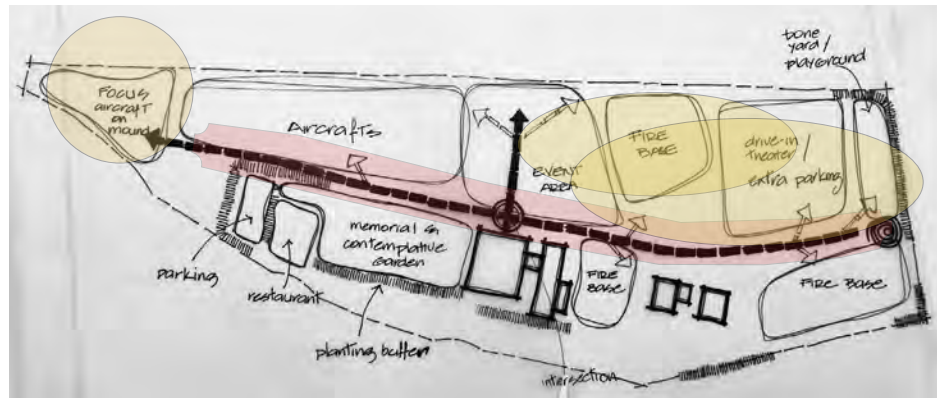
- the south side of the path doesn't organize the area / there is no break
- the main path cutting through the exhibition area with secondary paths crossing diagonally gives a sense of containment

nts

design concept

bubble diagram A/B

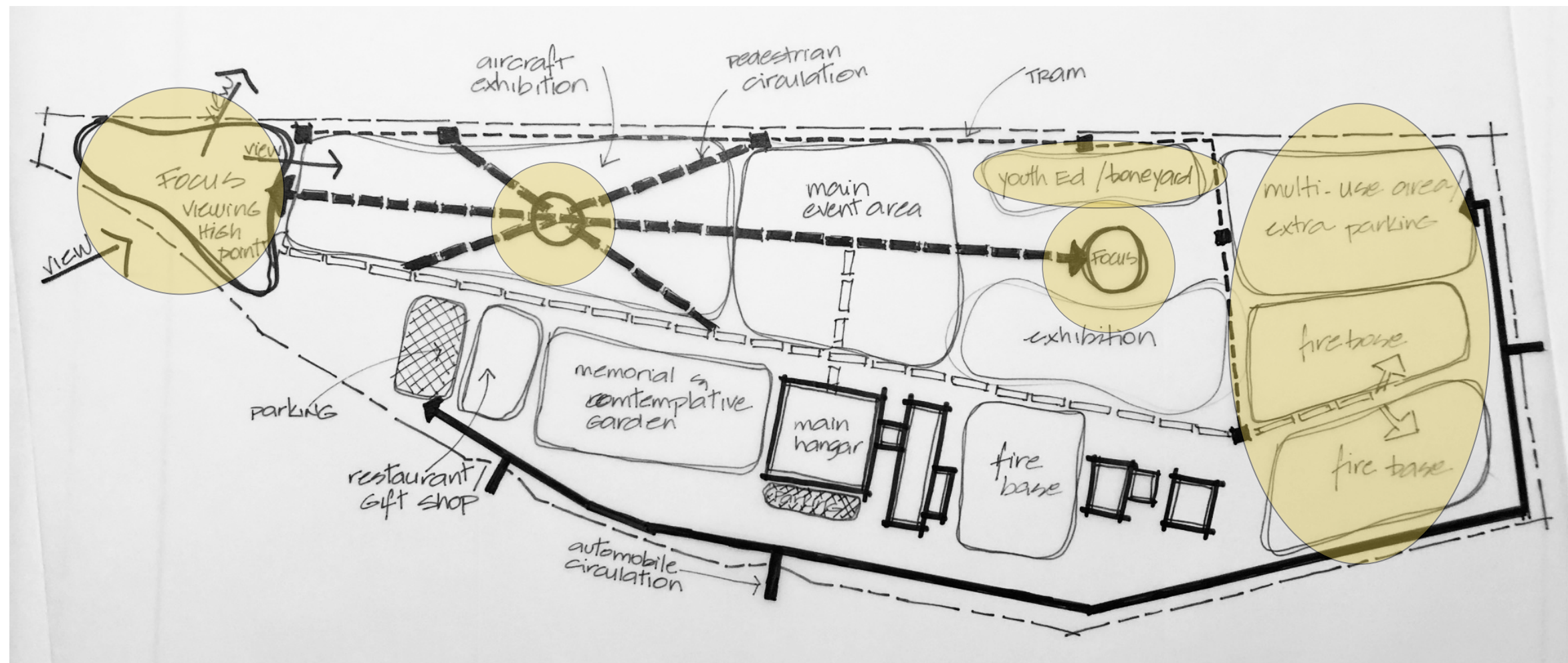
- combining the positive aspects of each diagram a new concept responds to the site needs



nts

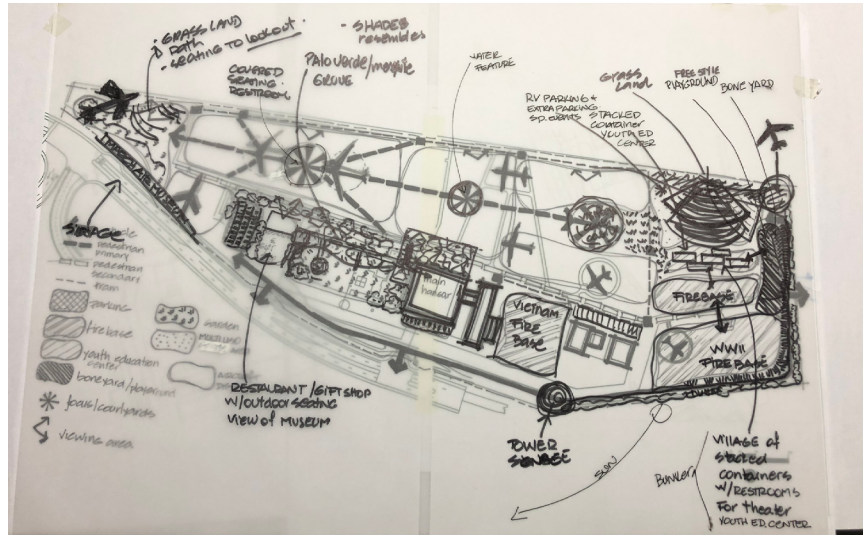
design concept

bubble diagram **A/B**



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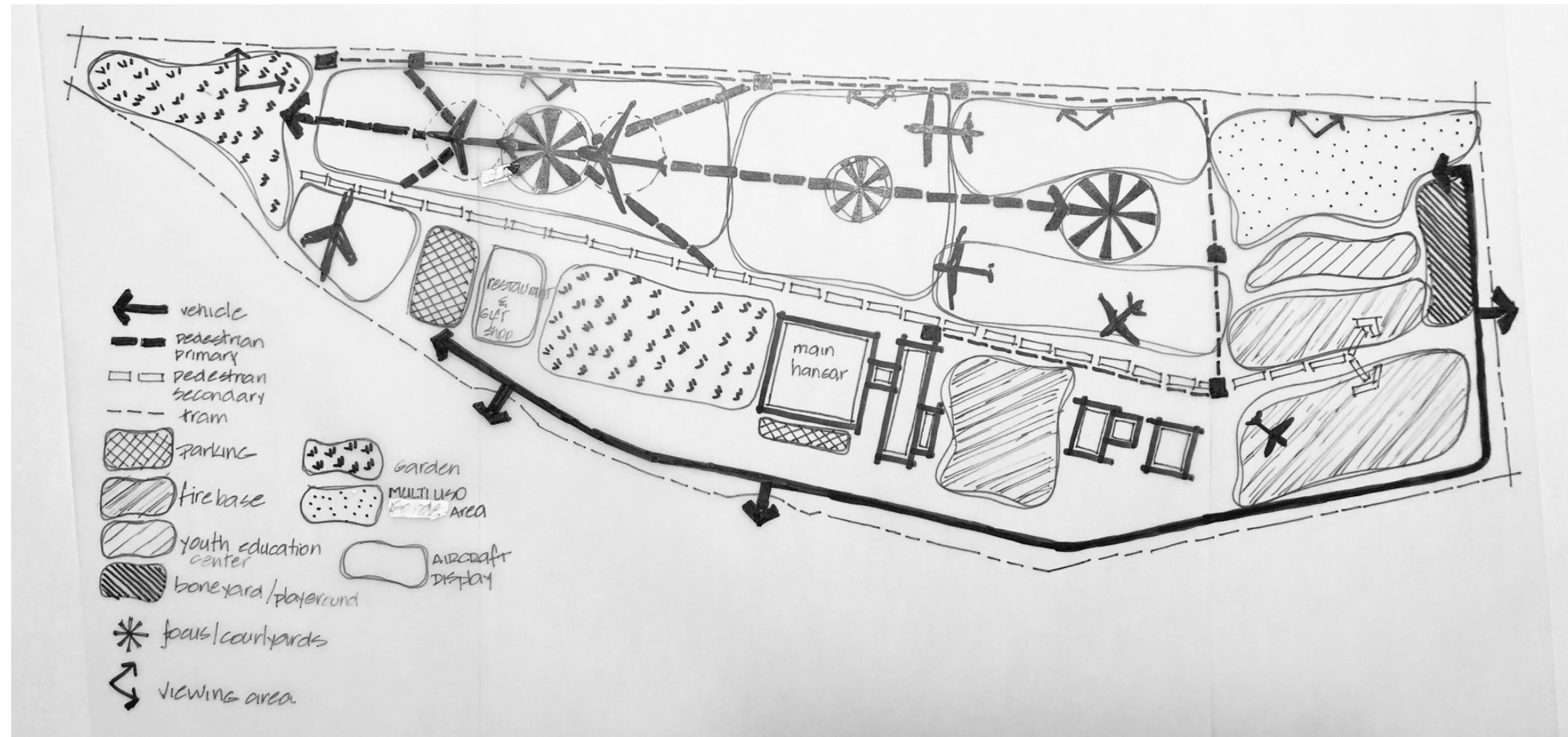
- by shortening the main path and adding nodes, courtyards were created
- the main path is guided by focus on both ends



design concept

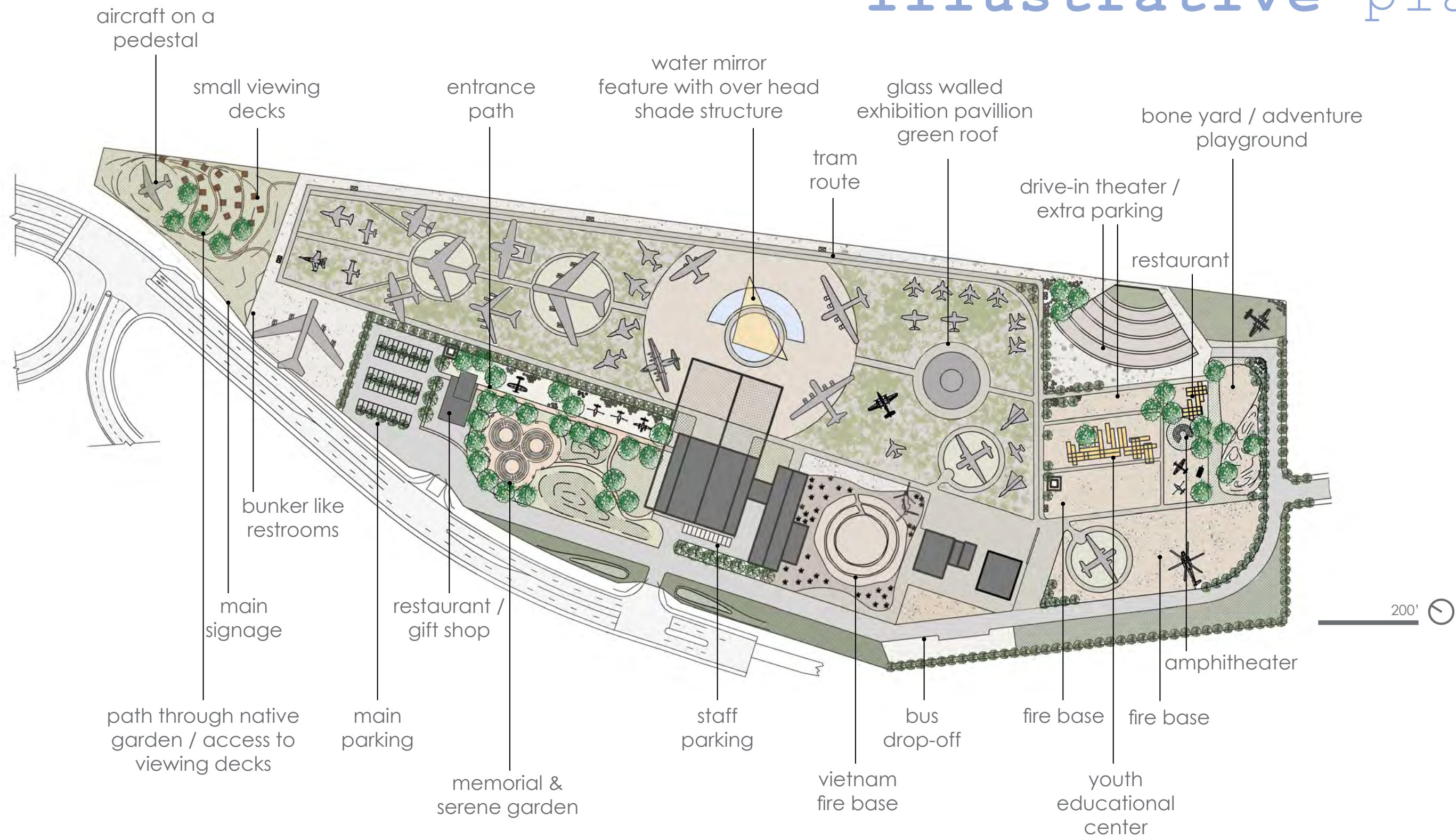
bubble diagram A/B

- the result is an organized circulation plan that entices visitors to explore the museum site and its various programs



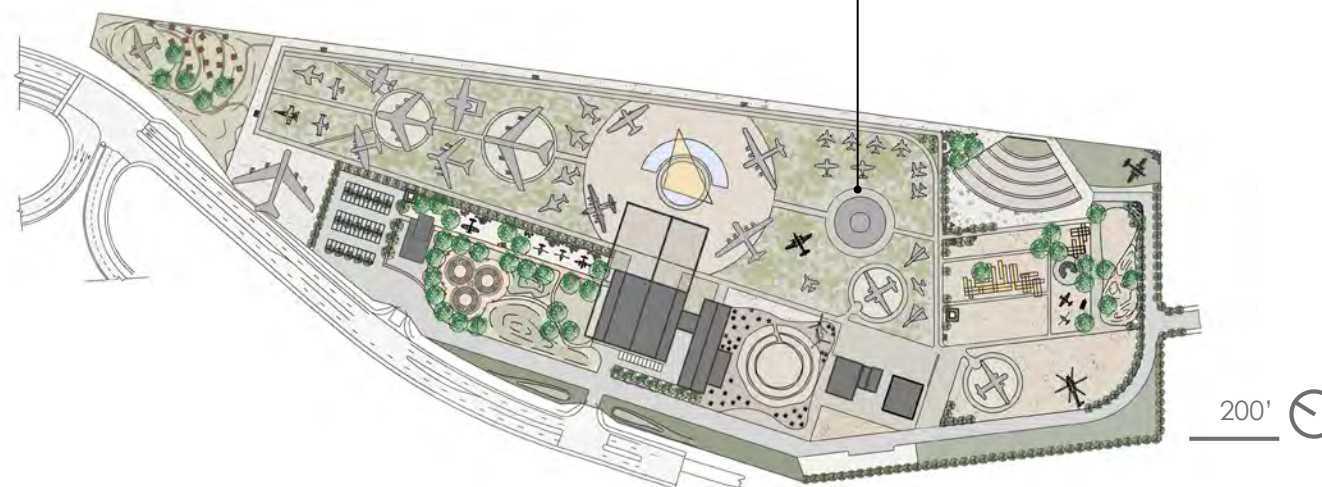
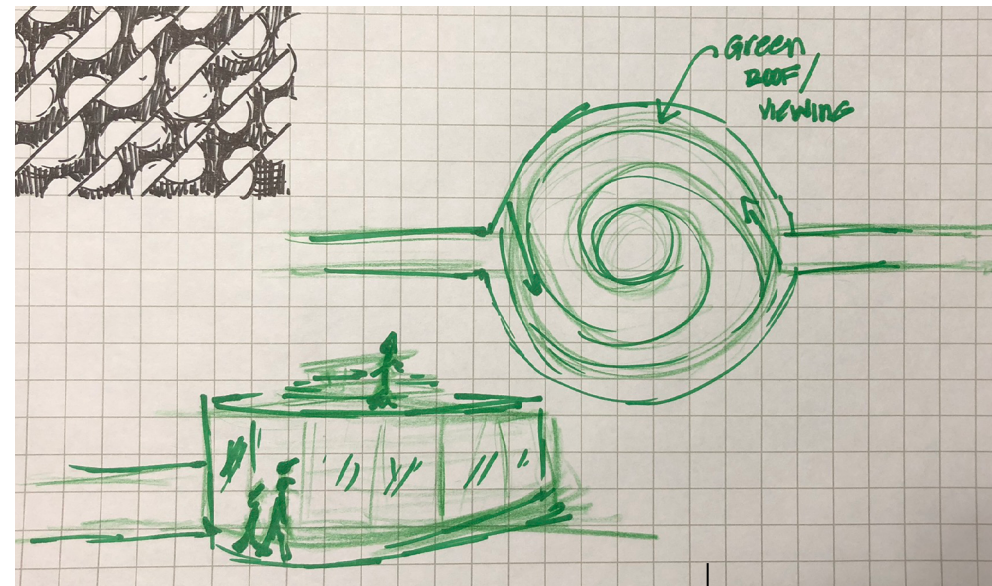
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illustrative plan



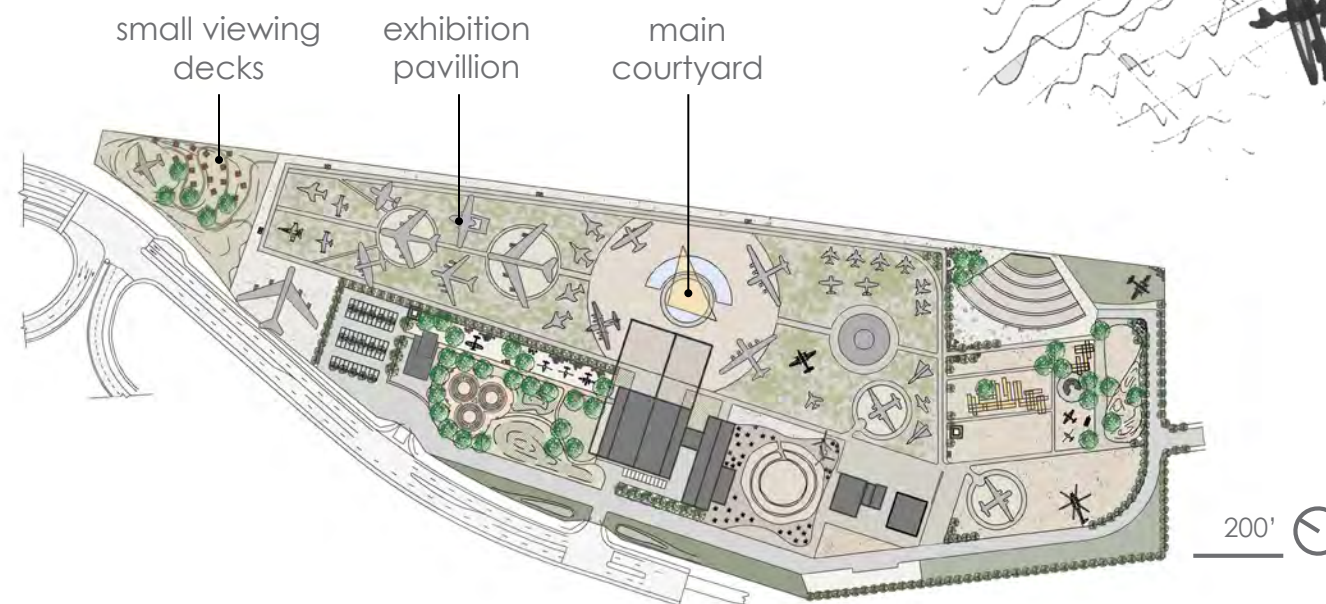
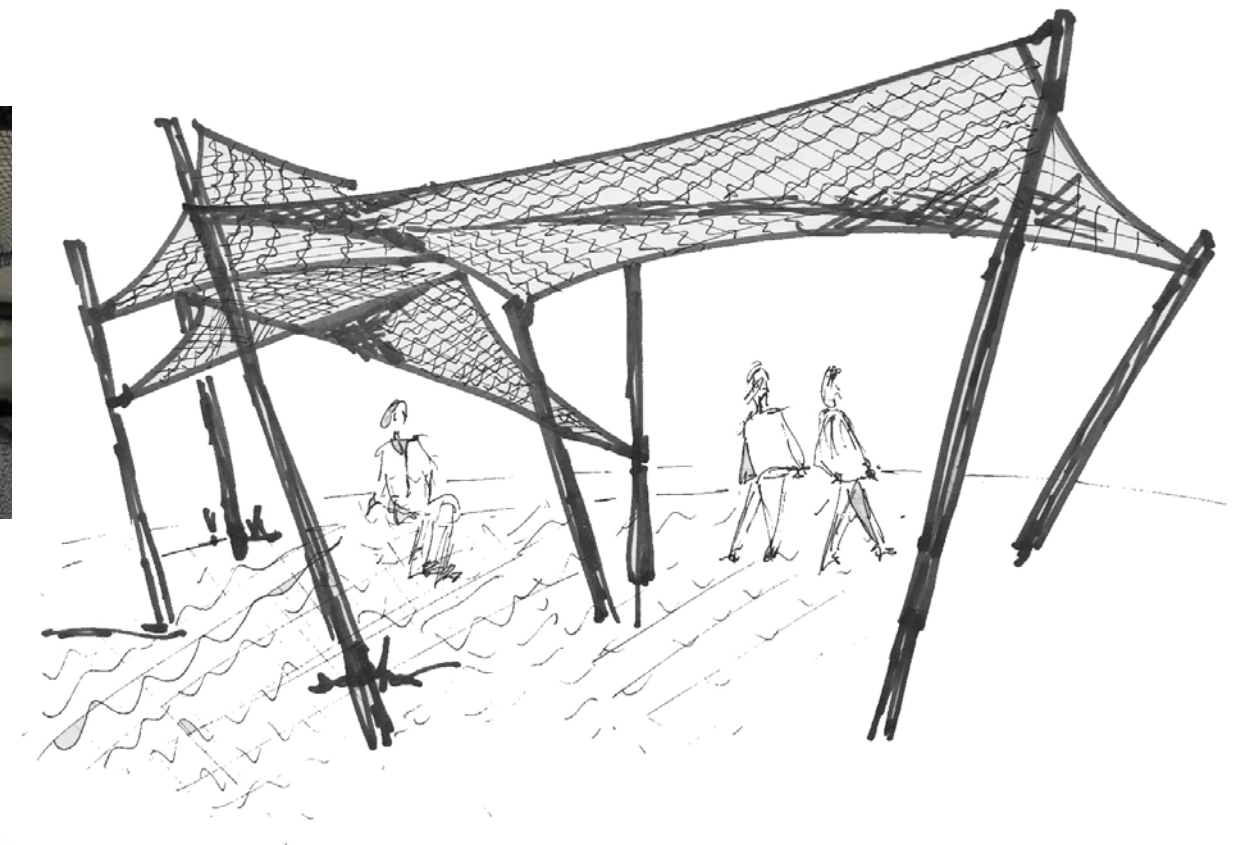
inspiration

glass walled exhibition pavillion
with a green roof



inspiration

shade structures
through out the site



trees



Prosopis chilensis



Parkinsonia aculeata



Yucca shidigera



native & drought tolerant
plant palette

grasses & shrubs



Aristida purpurea



Eriodictyon crassifolium



Solidago californica



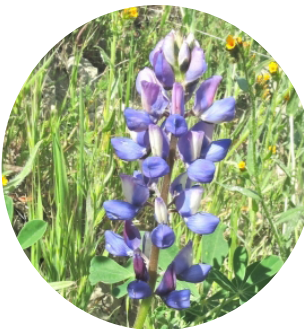
Elymus condensatus



Eriophyllum confertiflorum



annuals



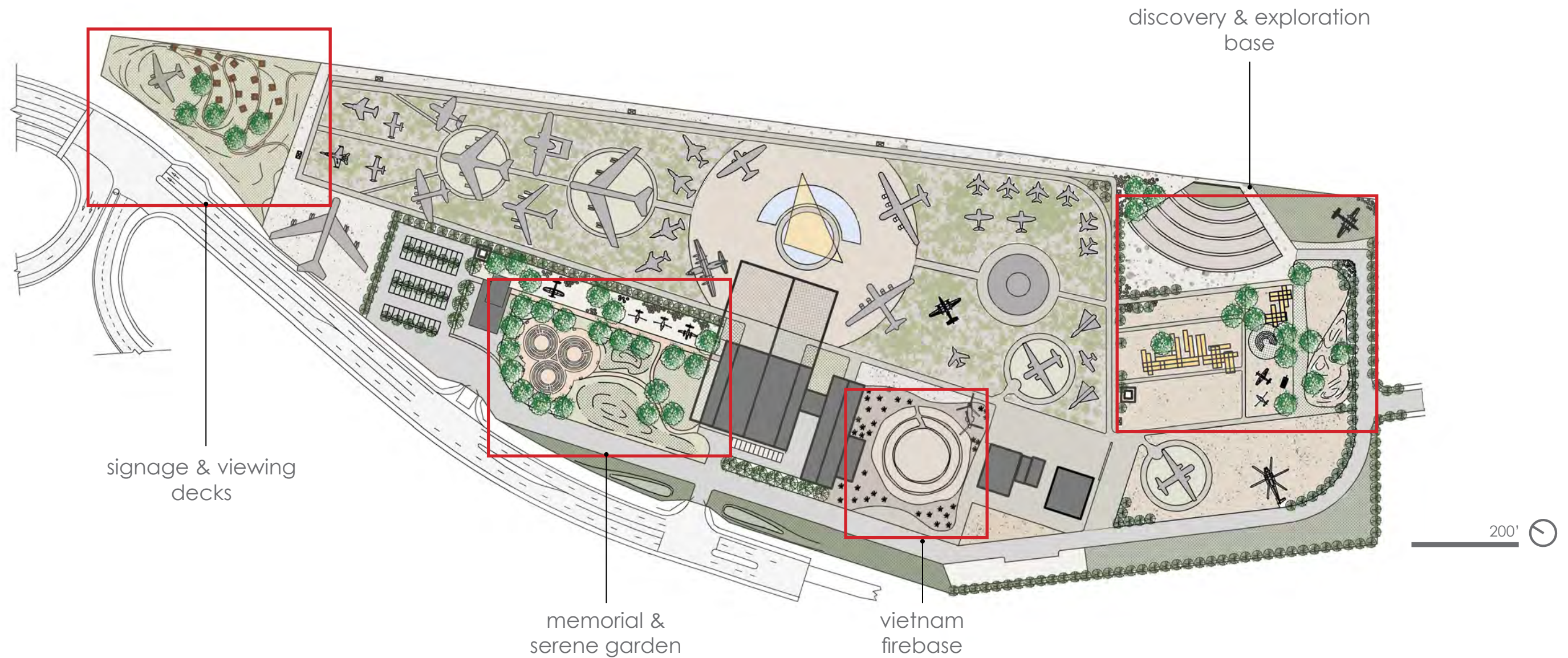
Ceanothus tomentosus



Opuntia littoralis



vignettes & perspectives



signage & viewing decks

arrival and views from the museum

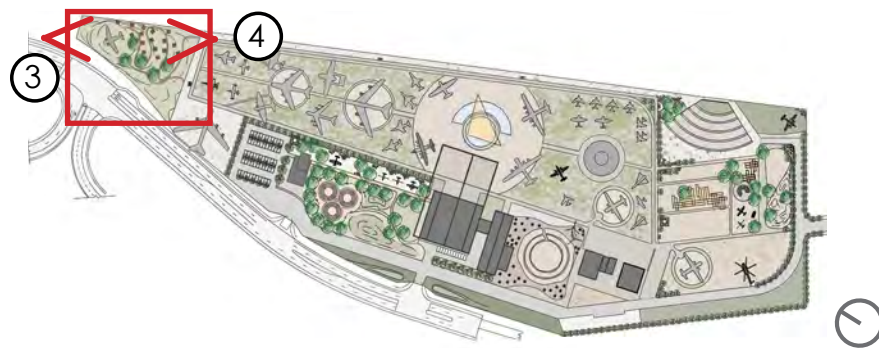
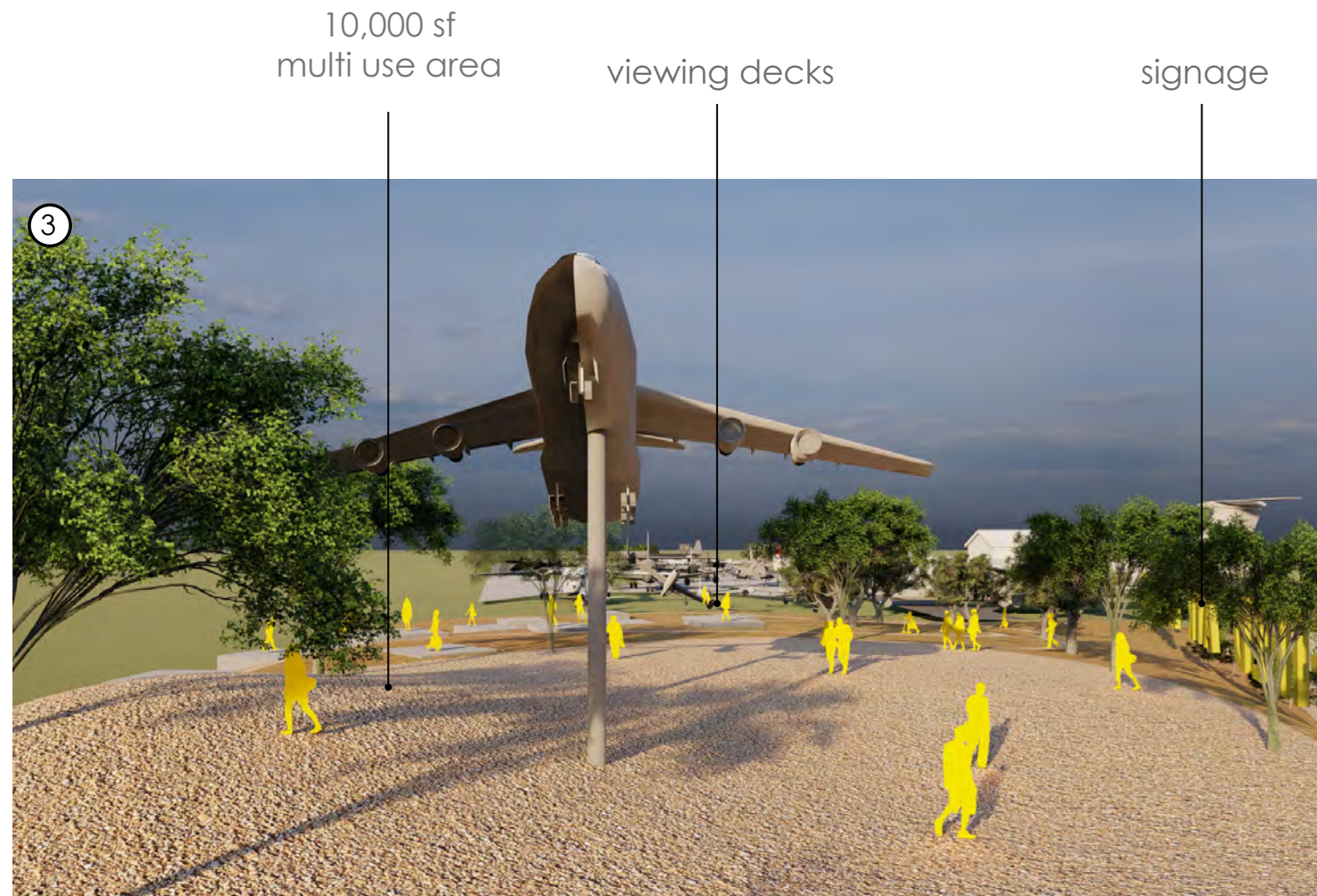


Van Buren
Boulevard

- visitor spots the museum from the freeway
- signage and aircraft view from the street builds up excitement for the visit
- the view of a native garden from the road embellishes the arrival and gets the attention of drivers by

signage & viewing decks

arrival and views from the museum



- small viewing decks for airshows or to hang out and appreciate the view
- multi use area for events under the aircraft area that is surrounded by trees

memorial garden

a space to honor warriors and contemplate



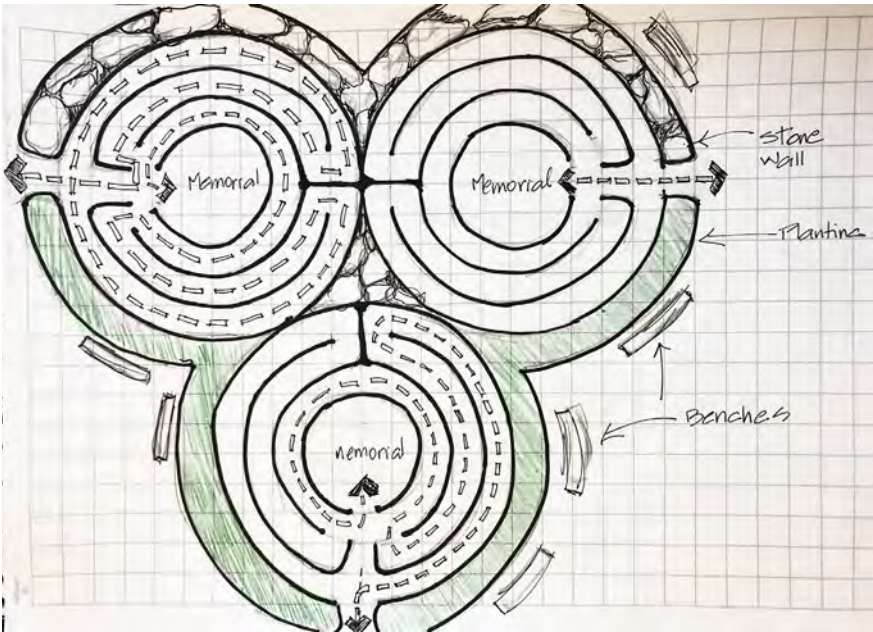
Vietnam war fire base



American University
Washington, DC



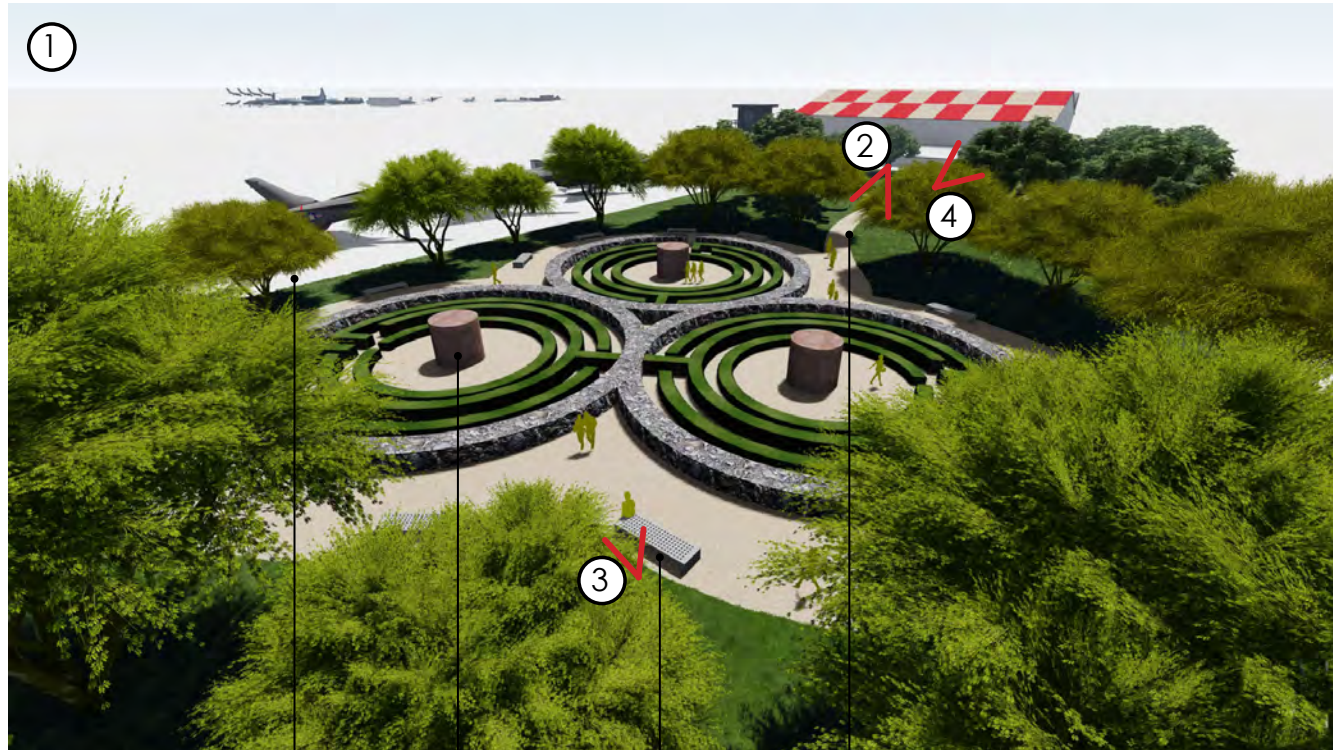
Soldierstone Vietnam War Memorial
saguache, colorado



“The single path leads to a center that depicts a flower, cross, or other symbol. Then, when you are ready, you retrace the path out of the labyrinth, taking with you resolution, healing, or peace”.

- design inspired by firebase and meditation labirynth shape and concept



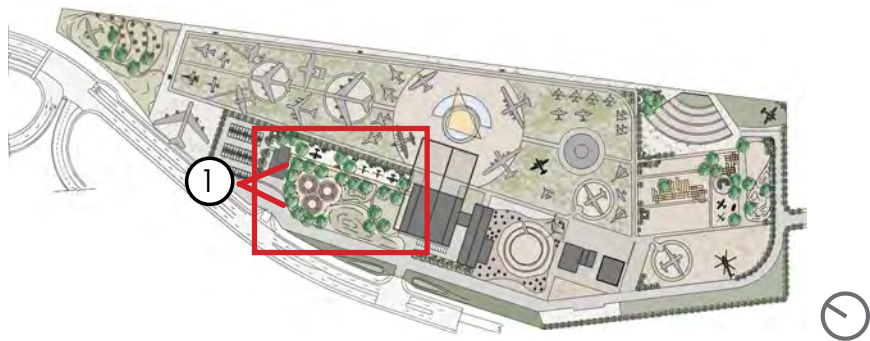


path to museum
entrance through a
grove of palo verde
trees

benches to
contemplate and
enjoy the garden

memorial at the
center of a labyrinth

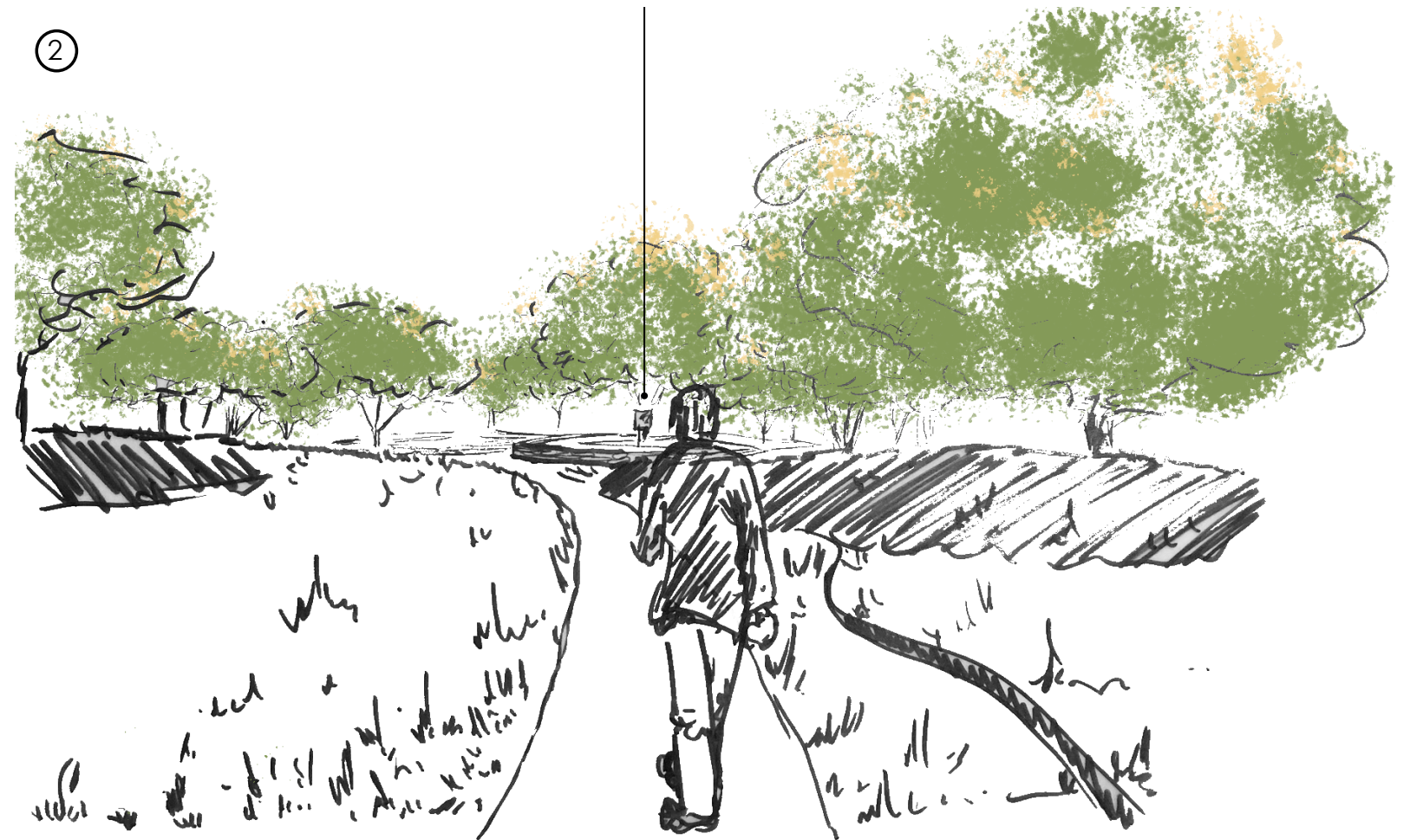
path through
garden



memorial garden

a space to honor warriors and contemplate

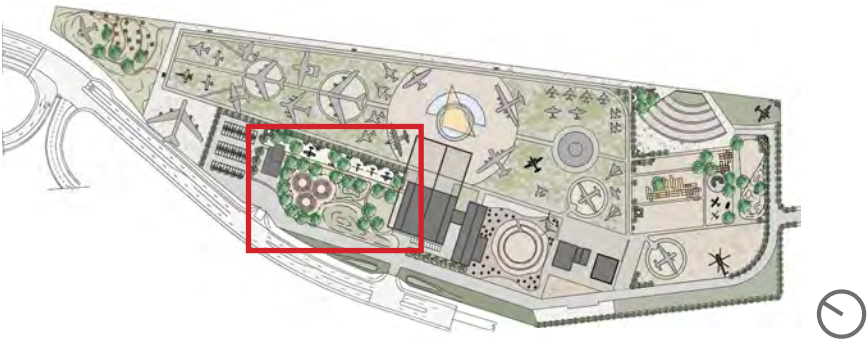
memorial at the
center of a labyrinth



memorial garden

a space to honor warriors and contemplate

memorial at the center of a labyrinth



- the memorial garden becomes a serene place to stroll, hang out or just enjoy the garden

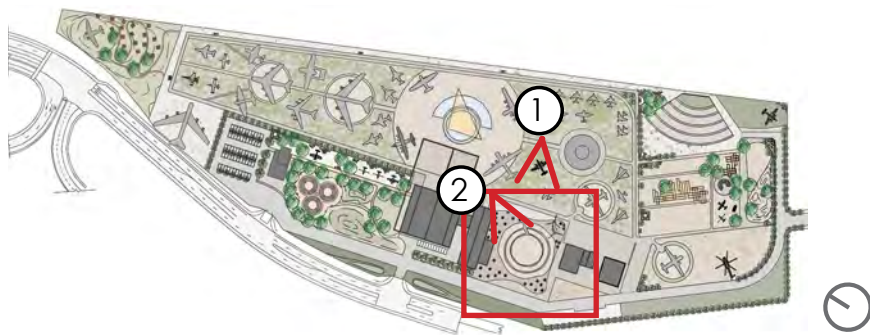
vietnam firebase

experiencing a military encampment

moat
cools down area



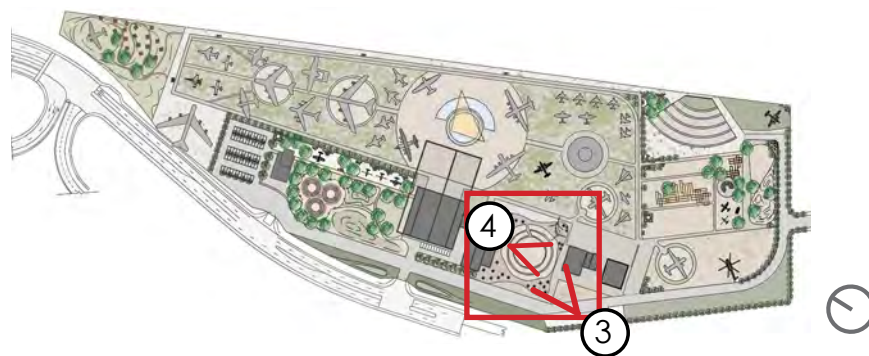
tent /
cafe snack bar



- firebase design inspired by the vietnamese landscape bringing the jungle to the desert
- the exhibition in this area focuses on historical helicopters

vietnam firebase

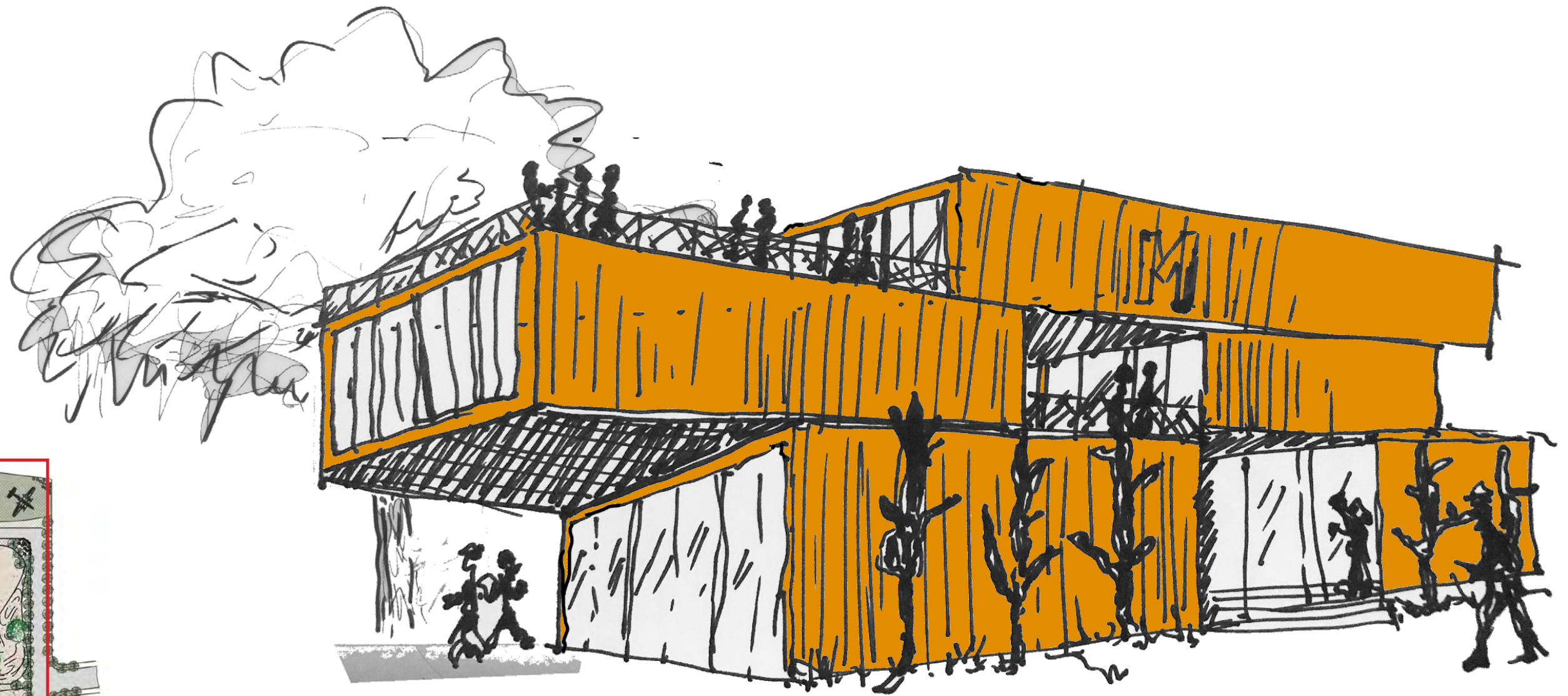
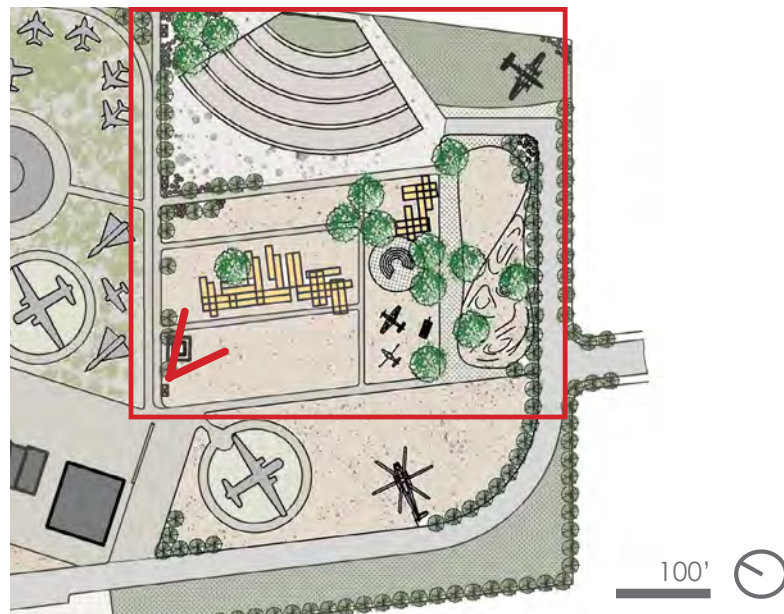
experiencing a military encampment



- the tent can be a fun place to seat and have views of the exhibition
- a tent in the area can turn into a revenue for the museum with a cafe snack bar

youth educational center

discover, learn & explore base



- youth educational center complex built with stacked containers

educational amphitheater

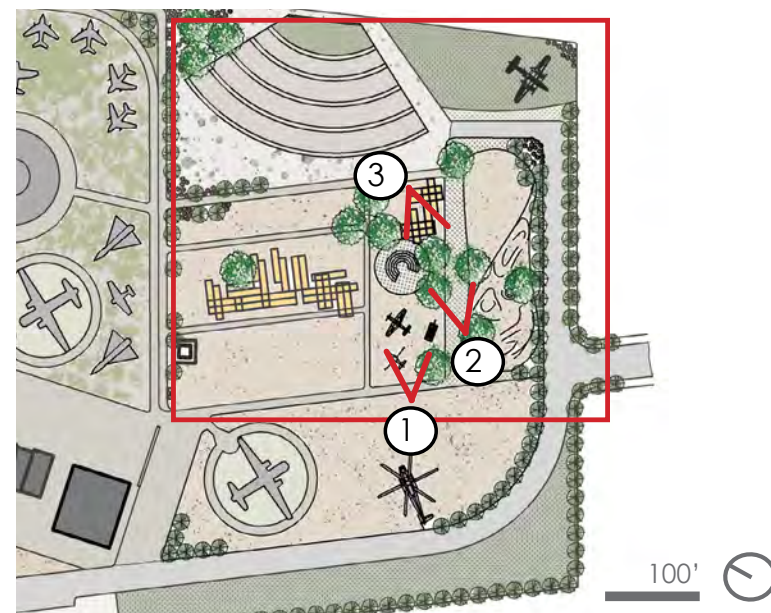
discover, learn & explore base

youth educational center

WWII aircraft open for kids to explore



cafe & restaurant for educational center and movie theater



- amphitheater is a social place for events, classes, gatherings and etc.



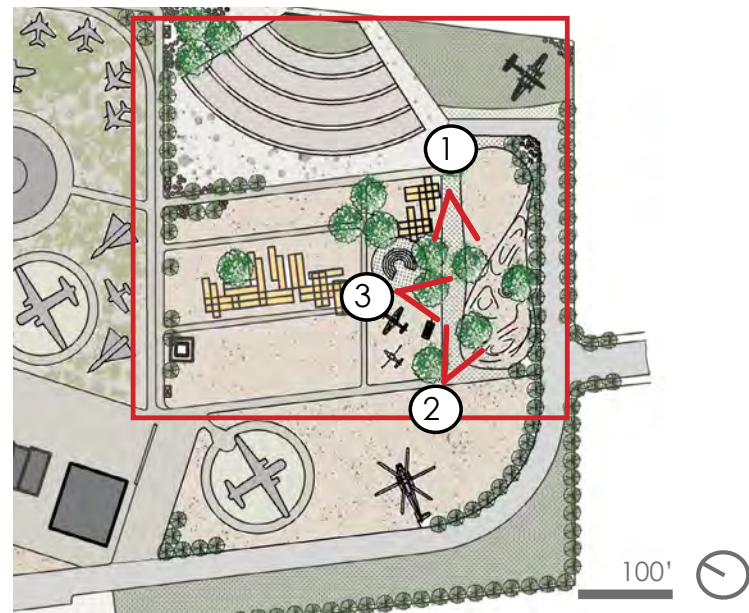
multi use amphitheater for social programs

bone yard playground cafe & restaurant
amphitheater



adventure playground

discover, learn & explore base



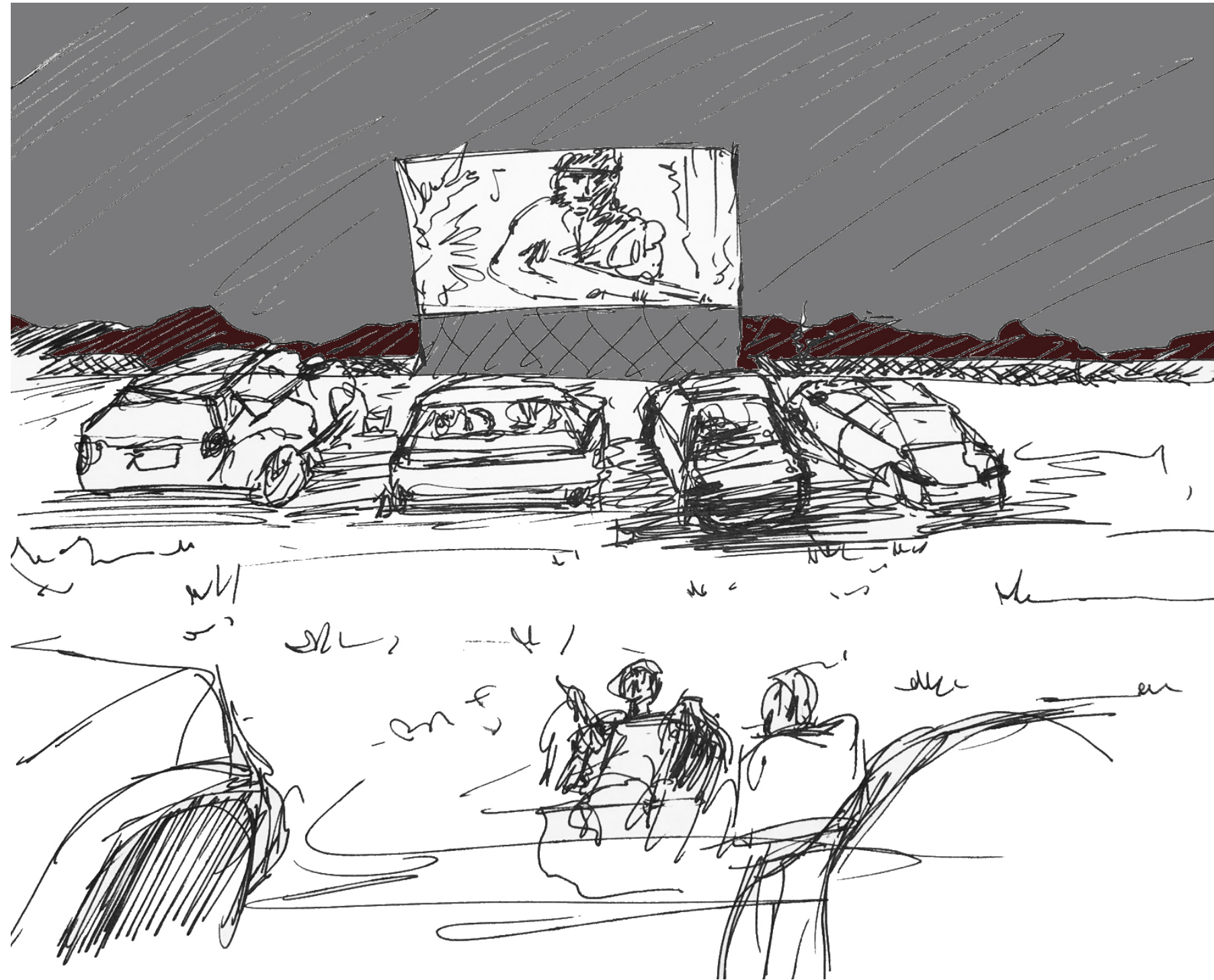
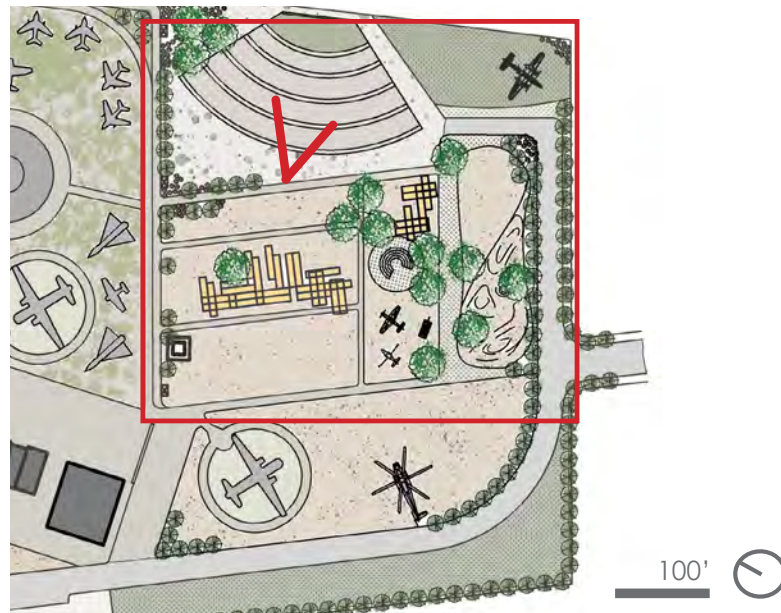
- pieces of aircrafts engine and other elements from the bone yard should be spread in free form around the site
- the look of the adventure playground is of an abandoned land
- the free-spirited kind of play allows kids to explore, experiment, pretend and invent their own adventure
- private parties in the playground can increase museum's revenue

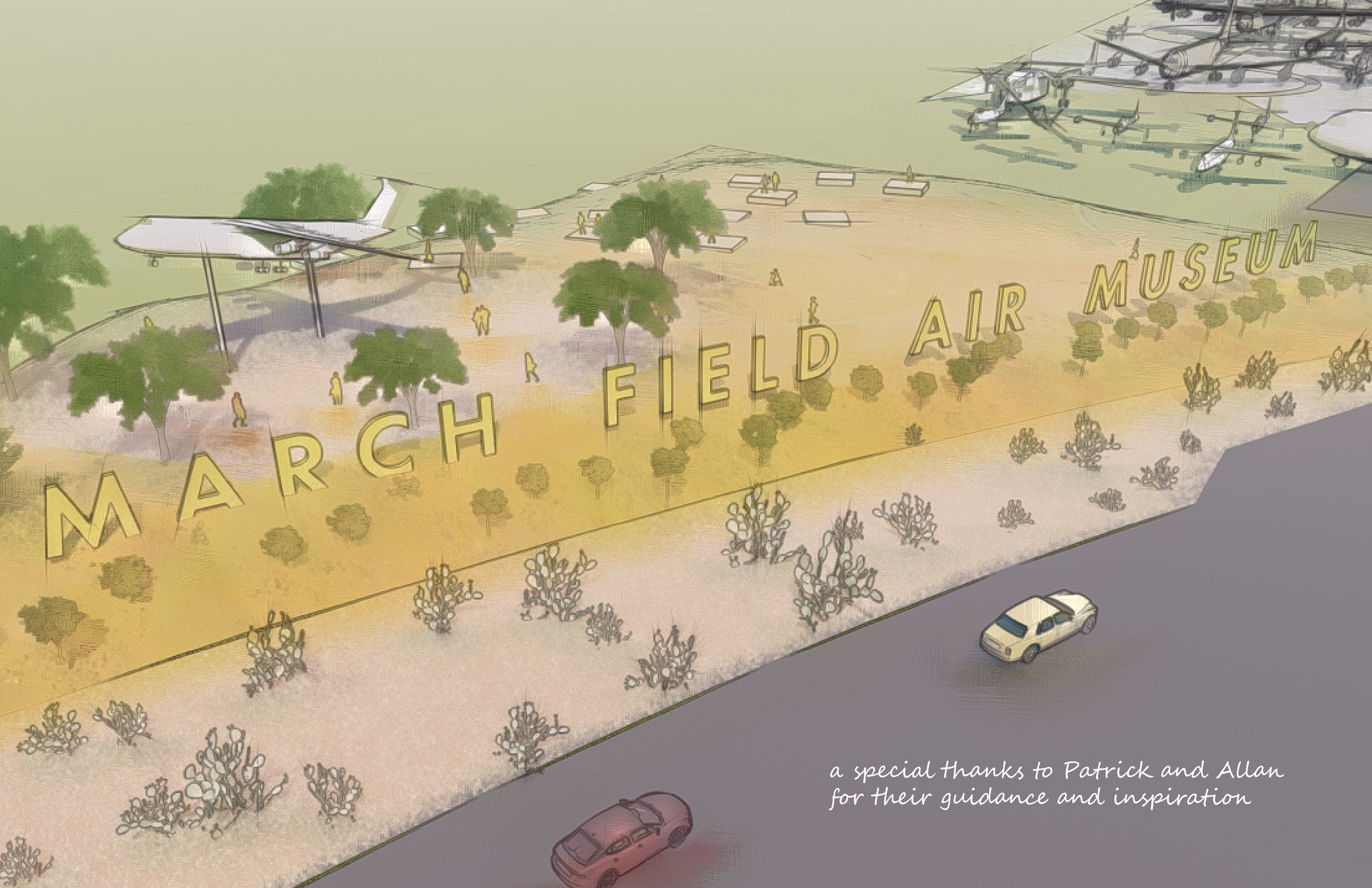


drive-in movie theater

discover, learn & explore base

- a drive in theater is alined with the idea of social distancing
- revenue for the museum
- a program that will attract a wide group of visitors





*a special thanks to Patrick and Allan
for their guidance and inspiration*