

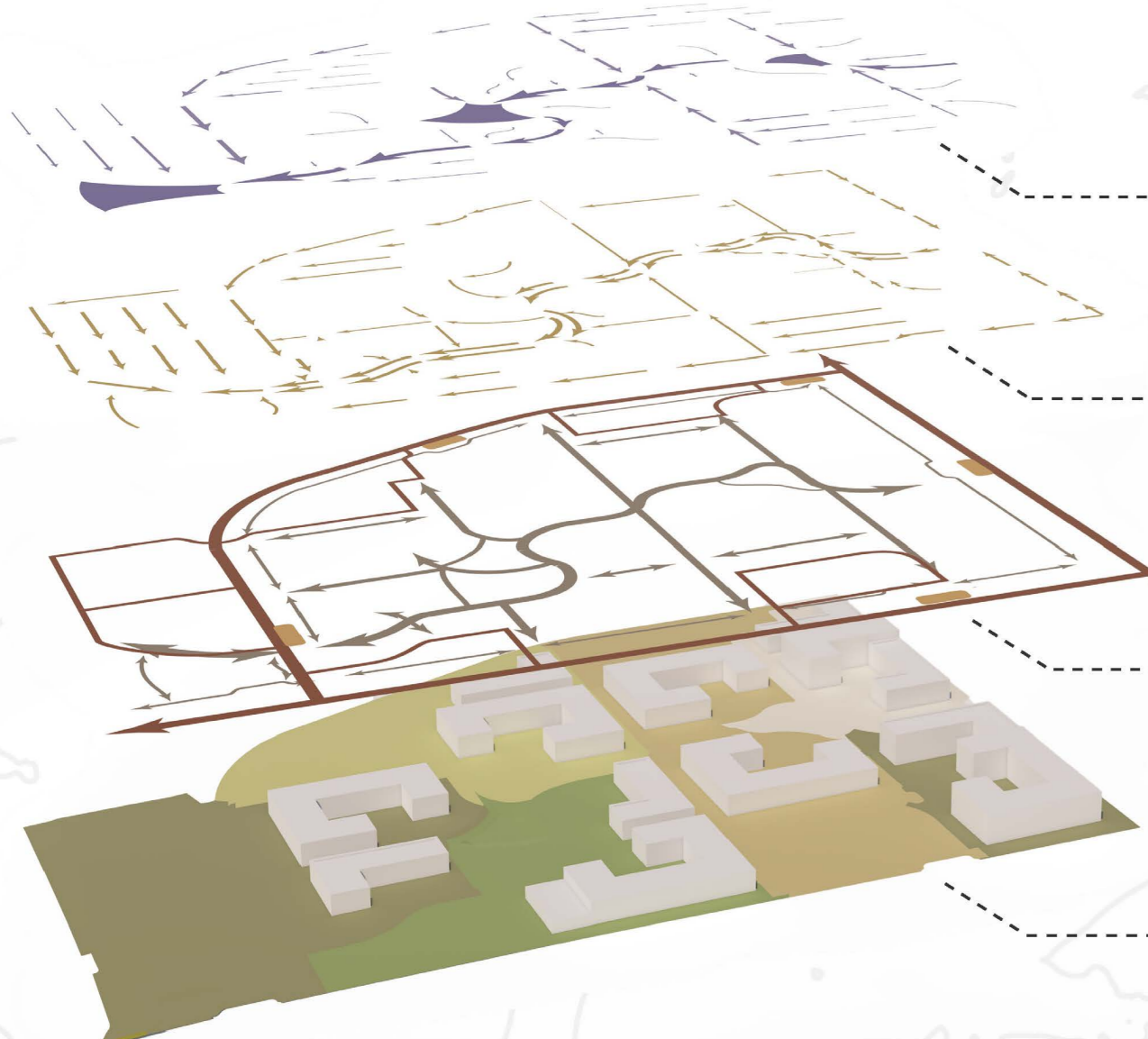


## INTRODUCTION

Bringing The Mountain Home, is a new vision of the current 34 acre on-campus family housing at Utah State University. This site is located on the northern part of campus, and is home to over 450 families. Designed and constructed during the late 1950's, the facilities are slated for significant updates in the near future. The site represents and once in a lifetime opportunity to create a community designed to adapt to an uncertain economic, social, and environmental future. The design adapts the resiliency of the surrounding natural systems in both its goals, structures, and forms.

## MOVEMENT

The site encourages movement of people, resources, and water through a interconnected circulation system. The system includes both ecological systems such as bioswales and storm run-off as well as those of a human impact such as vehicular and pedestrian movement throughout the site. Having these systems overlaid upon each other allows the site to utilize the best sustainably practices; instead of each being separately design apart from one another.



**WATER FLOW**  
This diagram shows how storm water runoff utilizes the existing slope to capture and store this precious resource for future use.

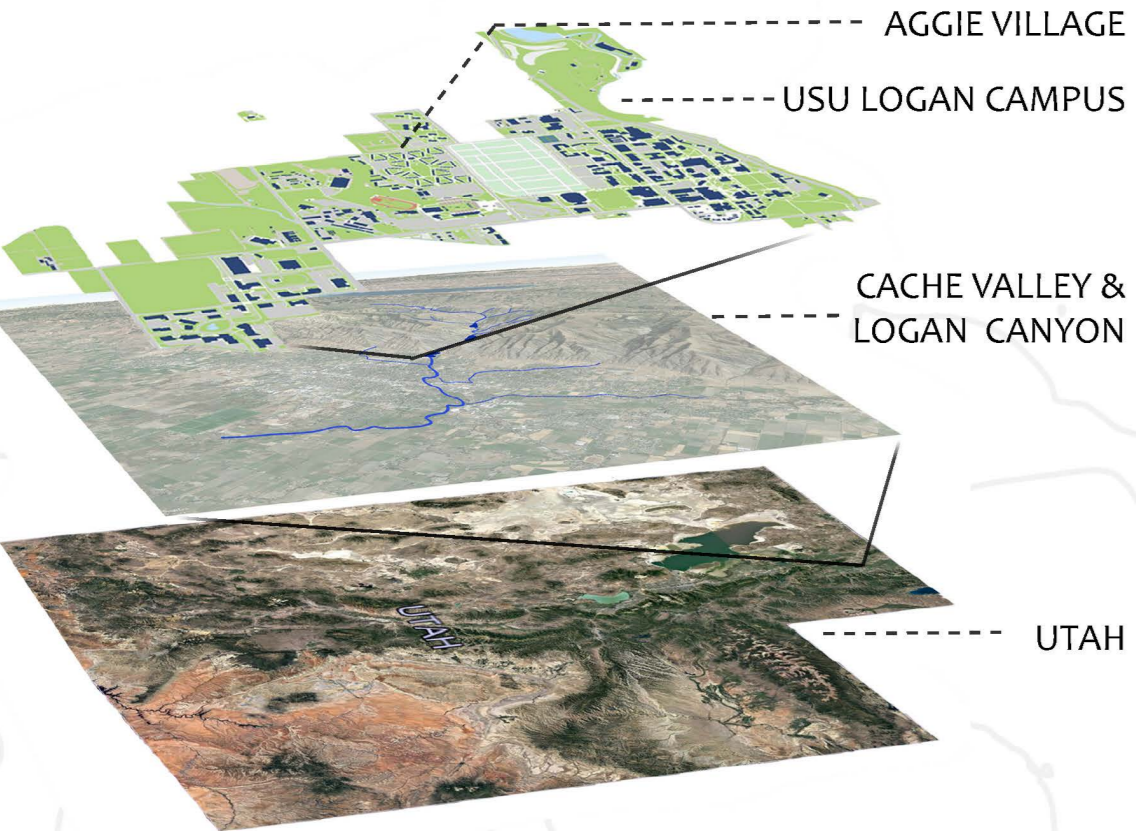
**BIOSWALES**  
Aligned with the water flow, bio-swells filter large debris and water pollutants in situ, enabling the water to be used again.

**PEDESTRIAN AND VEHICULAR**  
Design with the intent that the main corridor would be representing the nearby river, pedestrian traffic is centered within the site, while vehicular, remains accessible but located on the exterior of the site.

**DEVELOPMENT PHASES**  
This design would phased into 6 development stages over a period of 20 years for full completion.

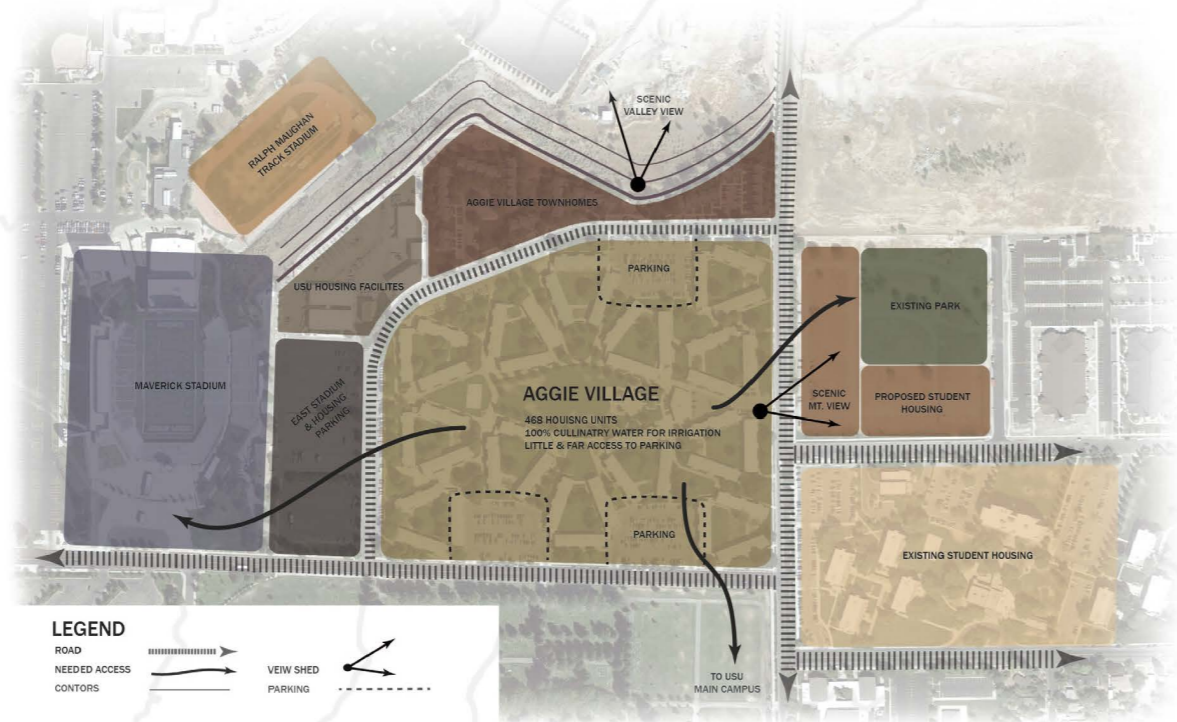
## DESIGN DEVELOPMENT

### LOCATION



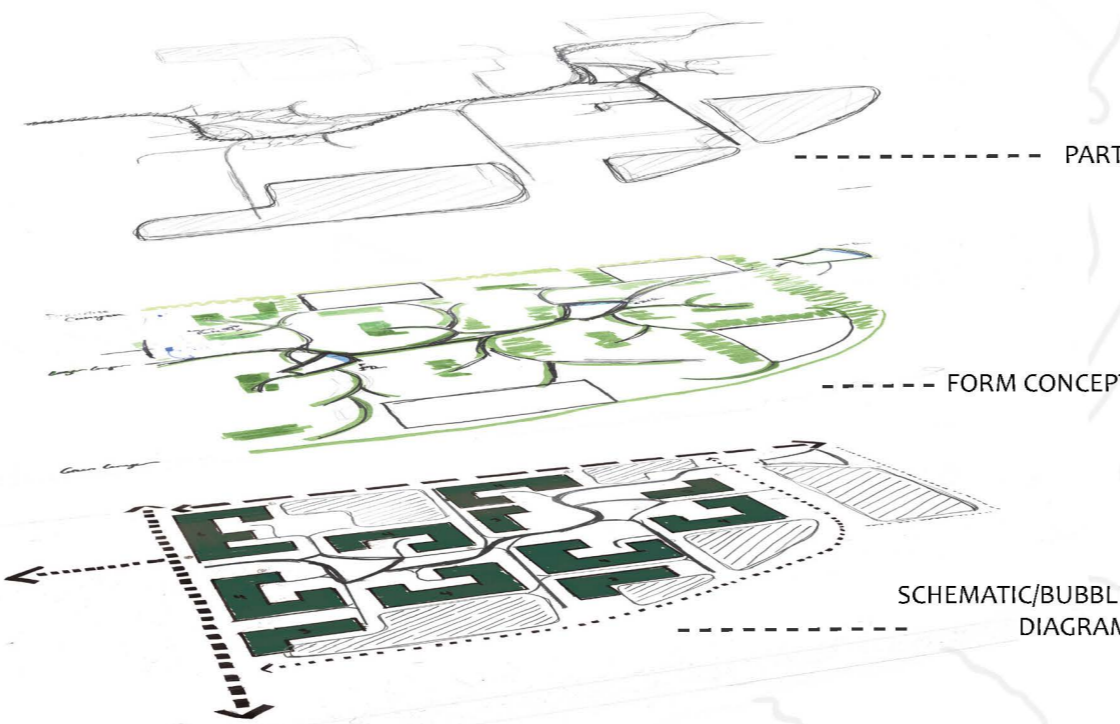
Located within the desert region of the great west, we knew our design had to take into account all the many factors that come with living in a desert landscape. The project focuses on using storm runoff as a precious resource than a problem to be dealt with.

### SITE INVENTORY



When visiting the site in person we identified significant areas, connections, and viewsheds vital to create a livable community. The title, "Bringing the Mountain Home," was inspired by the amazing viewsheds and proximately to the nearby mountain range.

### CONCEPT DEVELOPMENT



Our team worked to mimic natural systems form and function within our site. The design mimics the organic, dendritic forms and replicates the stark contrast between the jagged mountains and sinuous Logan River in both form and context.

### COMMUNITY CORE WATER RETENTION AND OPEN SPACE

View of area during the summer dry season.



### PEDESTRIAN UNDERPASS

Connection point to nearby athletic fields and additional housing areas.

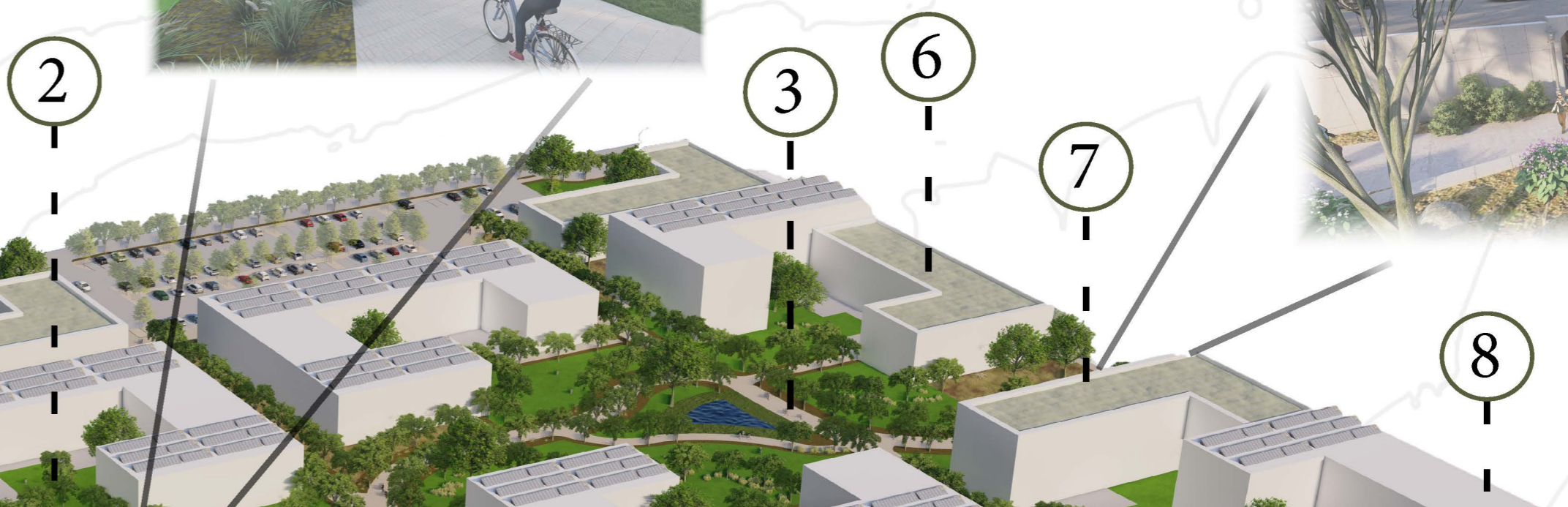


**CROSS SECTION OF DETENTION POND**  
Detailed cross section of the underground, constructed aquifer, corridor pathway, and surrounding bioswales.



**CROSS SECTION OF PARKING/BIOSWALES**

Bioswales are used to collect and move storm water from parking areas to collection sites.



### COMMUNITY CORE WATER RETENTION AND OPEN SPACE

View of area during a storm event.



### SITE INFORMATION

- #1-3 - Retention ponds used to capture, treat, and store stormwater.
- #4 - Stadium and shared housing parking with incorporated bioswales.
- #5 - Solar panels used to reduce carbon emission outputs and costs.
- #6 - Green roofs established on buildings to improve initial water infiltration and storage.
- #7 - Logan Peak, the highest building within site which represents the nearby Logan Peak.
- #8 - Varying buildings height and layouts, maximizes the site's interior & exterior viewsheds.

## FINAL MASTER PLAN

This final design is functional representation of the hydrological cycle of Logan River and the three dams located along it. The design provides for adaptation for the uncertain environmental and economic future. The design establishes a new vision of a more resilient future that meets hydrologic, economic, and social needs we foresee in the future.

### KEY FIGURES

EXISTING DESIGN VS. PROPOSED DESIGN

	OLD	NEW
Total Open Space:	11.53 Acres	15.4 Acres
Xeriscape	0 Acres	9.9 Acres
Lawn	11.53 Acres	5.5 Acres

Total Hard Scope:	OLD	NEW
Building	7.52 Acres	4.8 Acres
Paths	4.2 Acres	5.5 Acres
Roads	1.5 Acres	1.6 Acres
Parking	9.25 Acres	6.7 Acres

Water Retention	0gal	2,972,851gals
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