



existing

metrics

104,980 sq ft total

65,776 ft² total asphalt
13,286 ft² total concrete
25,918 ft² total planting
1,585 ft/yr annual precipitation
0.1 ft/yr average storm size (85th percentile)

social

recreation 0%
study space 0%
seating 0%

environmental

asphalt 64%
concrete 13%
planting 23%
impermeable 77%
softscape 23%

water

infiltration 0%
drain to creek 99%
retention by trees 1%

tree facts

scientific name	common name	qty	rainfall intercepted/year (gals)
Schinus molle	peruvian pepper tree	13	9,802
Tipuana tipu	tipu tree	8	1,488
Quercus sp.	oak	6	1,332
	total:		12,622

calculations

annual volume of stormwater
annual precipitation x total square footage
1,585 ft/yr x 104,980 ft²
= 166,393.3 ft³/yr // 1,244,708 gal

volume of water in avg stormwater

average storm size x total square footage
0.1 ft/yr x 104,980 ft²
= 10,498 ft³/yr // 78,530 gal

water retention by trees

annual volume of stormwater
total rainfall intercepted / annual volume of stormwater
(12,622 gal / 1,244,708 gal) * 100
= 1%



proposed

metrics

237,681 sq ft total

0 ft² total asphalt
26,838 ft² total concrete
103,054 ft² total planting
25,626 ft² permeable paving
82,163 ft² Decomposed granite
1,585 ft/yr annual precipitation
0.1 ft/yr average storm size (85th percentile)

social

recreation 64%
educational 34%

environmental

asphalt 0%
concrete 11%
planting 43%
permeable 89%
softscape 54%
hardscape 46%
concrete 46%
permeable paving

water

drain to creek 0%
drain to detention basin 97%

calculations

annual volume of stormwater
annual precipitation x total square footage
1,585 ft/yr x 237,681 ft²
= 376,724 ft³/yr // 2,818,091 gal

vol of water in avg stormwater

average storm size x total square footage
0.1 ft/yr x 237,681 ft²
= 23,768 ft³/yr // 177,797 gal

volume of water collected by detention basins

average storm size x area of drainage
41,955 ft² x 0.1 ft/yr = 4,196 ft³/yr
18,424 ft² x 0.1 ft/yr = 1,842 ft³/yr
21,818 ft² x 0.1 ft/yr = 2,181 ft³/yr
149,514 ft² x 0.1 ft/yr = 14,951 ft³/yr

july aung / la 402

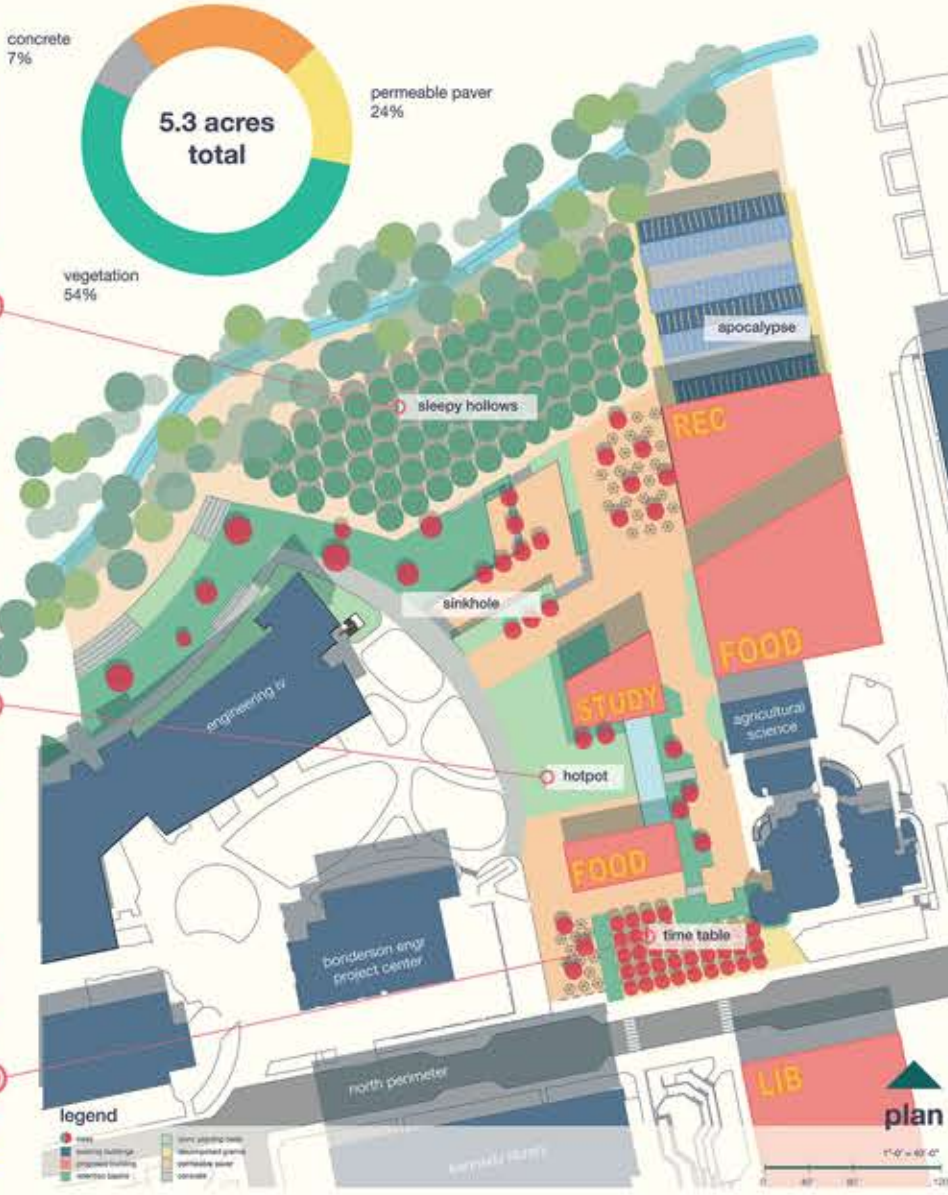
timeline

july aung / la 402 / fall 2017

Transformation of mono-functional parking lot into an active space for students. The main focus is to improve the performance of landscape on the site that currently have no social, environmental, or economic values. Thus, the goal for **timeline** is to reactivate the space for social uses and also contribute to the environment through retention basins, vegetation, and permeability of the site. The underlying concept of timeline is space and time, which is embodied in the uses and form of the five rooms throughout the site: timetable, hotpot, the sinkhole, sleeping hollows and apocalypse.



site analysis



landscape performance benefits

Quantifiable data of how well a landscape functions based on social, environmental and economic. Timeline captures an additional 100,000 sq ft with additional recreational areas, study tables, and seating.

