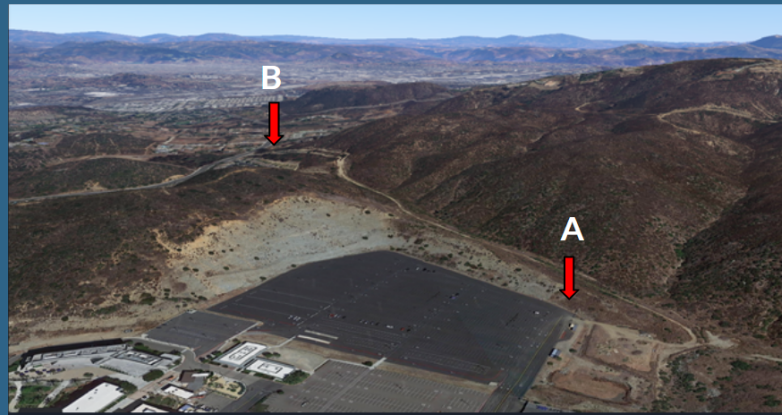


CSU San Marcos Palm Canyon Drive Extension

Project Concept

Design and build a road extension between Palm Canyon Road and La Moree Road to provide accessibility to the south side of CSU San Marcos campus. Our plans will include two proposed building pads that will accommodate the University's vision for future developments in the area.



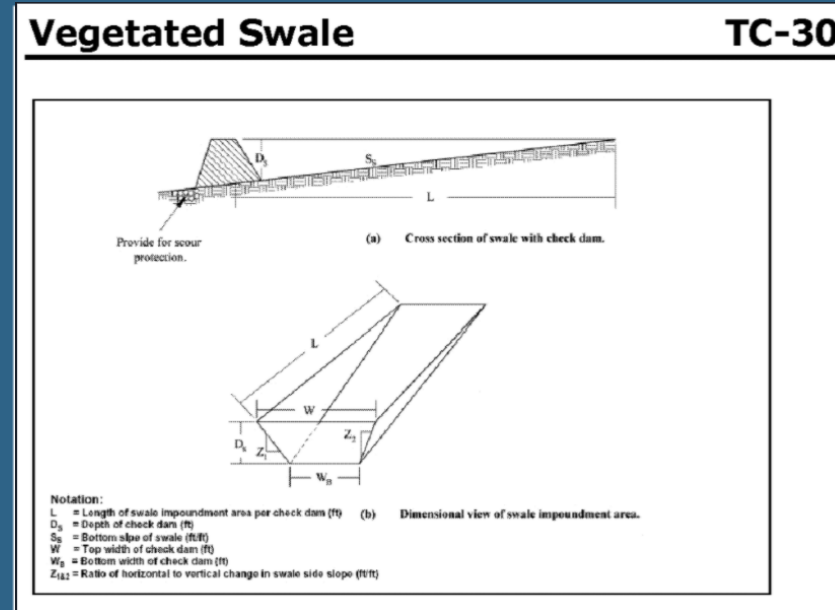
Road Design

The two-way road will incorporate roundabout intersections, bikelanes, and sidewalks. The implementation of green infrastructure and vegetation that is local to the region along the side of the roadway will help to stabilize the climate and provide a living space for the wildlife. Utilizing the Public Road Standards for the county of San Diego, BoJack Engineering recommends a two lane road with a design speed of 35mph



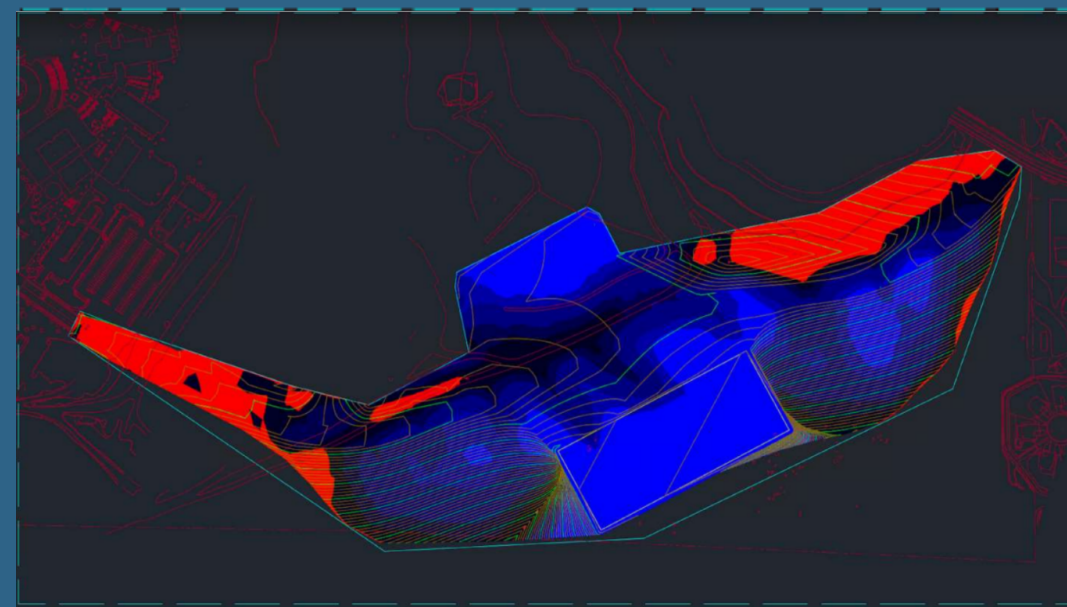
Stormwater and Water Treatment

Design drainage structures to direct stormwater to appropriate locations. A vegetated swale will be utilized to capture and treat stormwater on-site. Open channel stormwater conveyance structures will direct water to appropriate locations.



Grading/Land Development

The site will require a large amounts of cut ranging from 0-200ft. Fill will also be required, ranging from 0-50 ft. There will be retaining walls in the vicinity of the building pad.



Transportation

23,781 new trips generated for phase 3 campus developments. This means that La Moree road will provide 8% more trips. LOS in surrounding roads will decline by one level including Craven Dr., La Moree Rd., and Braham Dr.

Primary Street (First Cross Street/ Second Cross Street)	Road Type	Existing ADT (2015)	Phase 3 ADT (2015)	Existing LOS	Phase 3 LOS
Twin Oaks Valley Road (Route 78 / Barham Dr)	Primary Arterial	39800	46459	C	C
Twin Oaks Valley Rd (Barham Dr / Craven Rd)	Primary Arterial	25600	27265	B	B
Craven Dr. (Twin Oaks Valley Road/ CSU San Marcos)	Collector	10300	20288	B	D
Craven Dr. (Discovery St/ Twin Oaks Valley Rd)	Collector	16400	19733	C	C
Barham Dr. (Twin Oaks Valley Road/ RT 78 Off Ramp)	Major Arterial	12200	18383	A	B
La Moree Rd (Barham Dr/Coronado Hills Dr.)	Collector (No FP)	2100	4953	A	B

Construction



BoJack Engineering and Construction