

The Team



Top: Michael Bailey, Aryobimo Wibowoputro, Hugo Mora
Bottom: Andres Perez, Ryan Dinh, Joseph Horsey (PM)

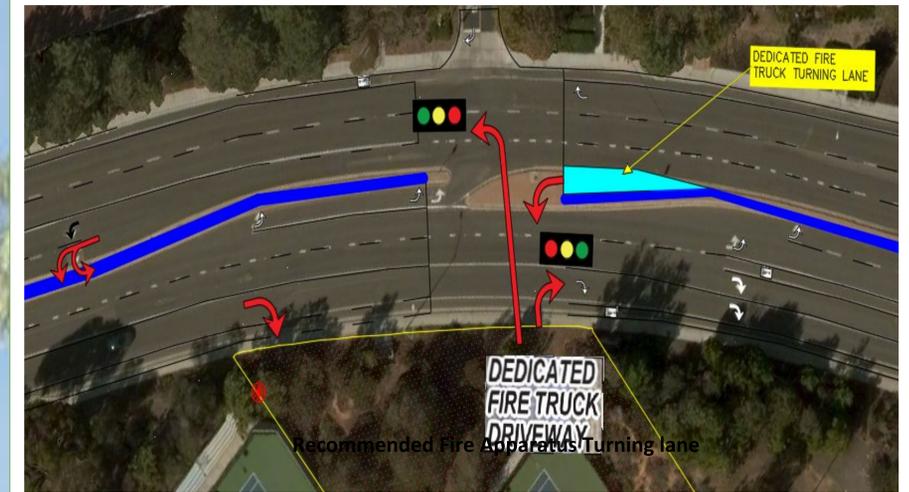
VICINITY MAP

The proposed project site is located east of North Torrey Pines Road between its intersections with Genesee Avenue and North Point Drive at the northern end of the West Campus. The project site is located within the North Campus Neighborhood, which includes an interface between athletic uses and academic uses.



Vicinity Map of project location

TRANSPORTATION



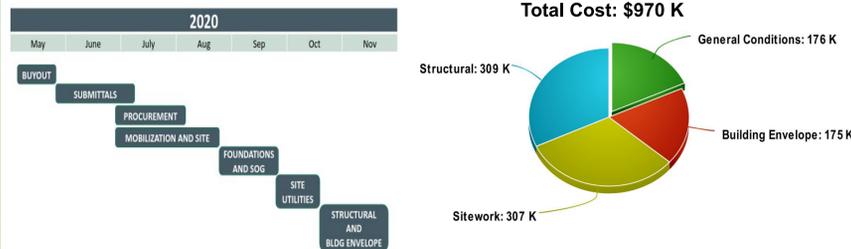
Recommendations:

- Signalize fire station driveway as well as North and Southbound traffic at site
- Provide a southbound left turn lane for emergency services only
- Modify N. Torrey Pines Rd/ UCSD Northpoint southbound left turn lane to allow for U-turns

Project Description

The UCSD - City SD Fire Station is a design-build project that includes the construction of a fire station of approximately 10,500 square feet to accommodate 3 fire apparatus and 9 to 11 emergency personnel.

COST ESTIMATE & SCHEDULE



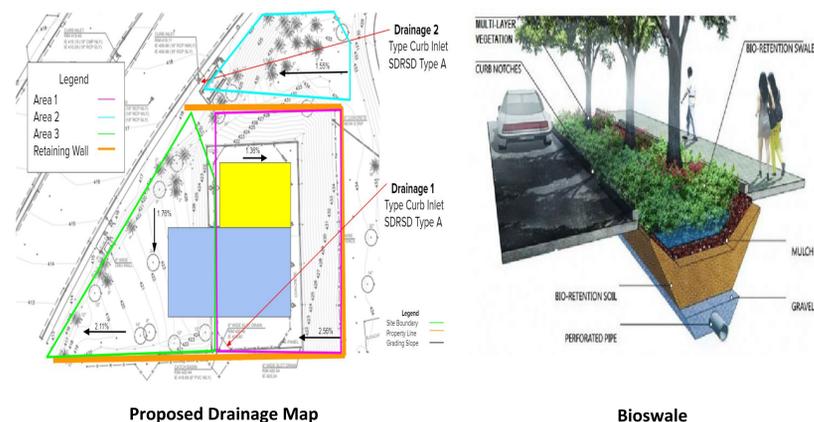
WATER



Extension Sewer Line

Water & Fire Service Laterals

STORMWATER



Proposed Drainage Map

Bioswale

GEOTECHNICAL

Foundation Recommendations:

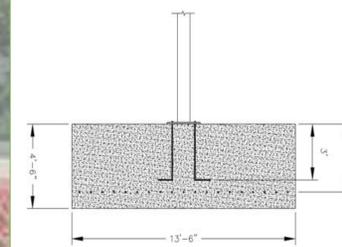
Shallow Square Foundations - Most cost efficient

Cone Penetration Test (CPT) - 110 ft

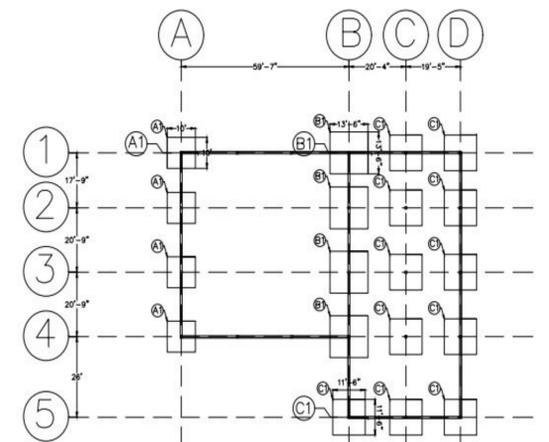
- Non-liquefiable
- Multiple layers of dense sand
- No water table

Load Case	Base (ft)	Width (ft)	Thickness (ft)	Volume (yd ³)
1 (400 Kips)	13.5	13.5	4.5	30.40
2 (150 Kips)	10	10	3.5	12.96
3 (250 Kips)	11.5	11.5	4.0	19.60

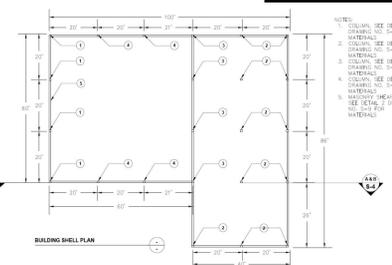
Load Case 1



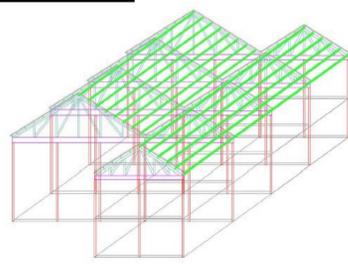
Foundation Plan



STRUCTURAL



Column Plan



Building Shell Plan

Columns	Section Type and Size
1	HSS9x9x $\frac{3}{8}$
2	HSS9x9x $\frac{3}{8}$
3	HSS9x9x $\frac{3}{8}$

Column Size Recommendations

Specifications	Apparatus Bay	Living Quarter
Building Classification	Class A Office Building	Class A Office Building
Occupancy Type	IV	IV
Gross Square Footage	3600 ground square feet	6880 ground square feet
Floor to Floor Height	28 feet	14 feet
Building height	28 feet	28 feet
Risk Category	IV	IV
Seismic Design Load	50 kips	50 kips
Concrete Slab Thickness	9 inches	9 inches
Foundation Type	Shallow Foundation	Shallow Foundation

Building Specs