

PARKING LOT SHADE PLAN

PARKING LOT AREAS NOTE:

- PER GREEN BUILDING CODE STANDARDS 5.106.12.1
- 50% TREE SHADING REQUIREMENT OVER PARKING AREAS WITHIN 15 YEARS.**
- SHADE PERCENTAGE FIGURES ARE BASED ON THE CANOPY SPREAD PER CODE REQUIREMENTS.
- TREE IS ASSUMED TO BE PLANTED FROM 15 GALLON CONTAINERS MINIMUM.

PARKING LOT SHADE CALCULATIONS

SHADE COVERAGE					
TREE TYPE	CANOPY	1 (100%)	2 (75%)	3 (50%)	4 (25%)
A	30'-35'	1 @ 962 SF= 962	---	3 @ 481 SF= 1,443	---
B	25'-30'	2 @ 706 SF= 1,412	---	3 @ 354 SF= 1062	1 @ 177 SF= 177
C	20'-25'	---	---	---	---
D	15'-20'	---	---	---	---
TOTALS		2,374 SF	---	2,505 SF	177 SF
		5,056 SF			

TOTAL PARKING AREA 8,279 SF

TOTAL SHADED AREA 5,056 SF

REQUIRED SHADED AREA (50%) 4,140 SF

PERCENT SHADED 61%

MEETS CODE REQUIREMENTS

○ TREES NOT APPLIED TO SHADE COVERAGE CALCULATION

XX TREE APPLIED TO SHADE COVERAGE CALCULATION

▨ REPRESENTS PARKING AREA REQUIRED TO MEET SHADING REQUIREMENTS.

HARDSCAPE SHADE PLAN

HARDSCAPE AREAS NOTE:

- PER GREEN BUILDING CODE STANDARD 5.106.12.3.
- 20% TREE SHADING REQUIREMENT OVER WALKS AND HARDSCAPE AREAS WITHIN 15 YEARS.**
- SHADE PERCENTAGE FIGURES ARE BASED ON THE CANOPY SPREAD PER CODE REQUIREMENTS.
- TREE IS ASSUMED TO BE PLANTED FROM 15 GALLON CONTAINERS MINIMUM.

HARDSCAPE SHADE CALCULATIONS

SHADE COVERAGE		
TREE TYPE	TREE #	SHADE (SF)
A	T1	51
A	T2	148
A	T3	205
B	T4	88
B	T5	88
A	T6	252
B	T7	33
D	T8	7
D	T9	28
D	T10	24
C	T11	211
B	T12	113
D	T13	89
D	T14	56
D	T15	95
C	T16	92
D	T17	165
D	T18	190
TOTAL:		1,935 SF

TOTAL HARDSCAPE AREA 5,033 SF

TOTAL SHADED AREA 1,935 SF

REQUIRED SHADED AREA (20%) 1,007 SF

PERCENT SHADED 38%

MEETS CODE REQUIREMENTS

○ TREES NOT APPLIED TO SHADE COVERAGE CALCULATION

XX TREE APPLIED TO SHADE COVERAGE CALCULATION

▨ REPRESENTS PAVED AREA REQUIRED TO MEET SHADING REQUIREMENTS.

LANDSCAPE SHADE PLAN

LANDSCAPE AREAS NOTE:

- PER GREEN BUILDING CODE STANDARD 5.106.12.3.
- 20% TREE SHADING REQUIREMENT OVER LANDSCAPE AREAS WITHIN 15 YEARS.**
- SHADE PERCENTAGE FIGURES ARE BASED ON THE CANOPY SPREAD PER CODE REQUIREMENTS.
- TREE IS ASSUMED TO BE PLANTED FROM 15 GALLON CONTAINERS MINIMUM.

LANDSCAPE SHADE CALCULATIONS

SHADE COVERAGE		
TREE TYPE	TREE #	SHADE (SF)
B	T1	248
A	T2	250
A	T3	136
B	T4	130
A	T5	210
B	T6	180
B	T7	180
A	T8	172
B	T9	199
D	T10	120
D	T11	115
D	T12	77
C	T13	191
B	T14	487
D	T15	152
D	T16	171
D	T17	145
C	T18	212
D	T19	143
D	T20	49
TOTAL:		3,742 SF

TOTAL LANDSCAPE AREA 8,167 SF

TOTAL SHADED AREA 3,567 SF

REQUIRED SHADED AREA (20%) 1,633 SF

PERCENT SHADED 44%

MEETS CODE REQUIREMENTS

○ TREES NOT APPLIED TO SHADE COVERAGE CALCULATION

XX TREE APPLIED TO SHADE COVERAGE CALCULATION

▨ REPRESENTS LANDSCAPE AREA REQUIRED TO MEET SHADING REQUIREMENTS.



SIEGFRIED

3428 Brookside Road
Stockton, California 95219
209-943-2021
Fax: 209-942-0214
www.siegfriedeng.com

- CIVIL
- STRUCTURAL
- LANDSCAPE ARCHITECTURE
- SURVEYING
- PLANNING
- ATHLETIC FACILITY DESIGN
- GEOTECHNICAL

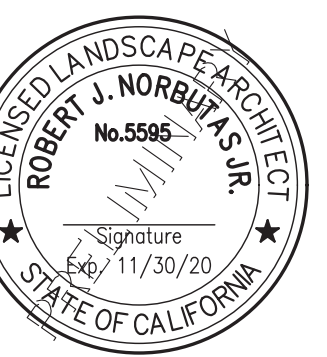
REVISIONS

No. Date Description

PROJECT

ALPINE CLIMB GYM - ROSEVILLE

1730 FREEDOM WAY
ROSEVILLE, CA 95678



SHEET TITLE

SHADE CALCULATIONS

Proj Mgr AKM

Drawn by AEM

Date 05/11/2023

Job No. 21203

SHEET:

L1.1

12 OF: 12



Know what's below.
Call before you dig.

