3215 PORTER DRIVE

ARB RE-SUBMITTAL FOR MAJOR PROJECT - REVISION 2 **11/04/2019**

Stanford RESEARCH PARK

STUDIOS architecture

THE GUZZARDO PARTNERSHIP INC.

VICINITY MAP

SHEET INDEX

PLANNING & DESIGN OVERVIEW

ARCHITECTURAL DESIGN

SITE - LANDSCAPE / CIVIL / LIGHTING

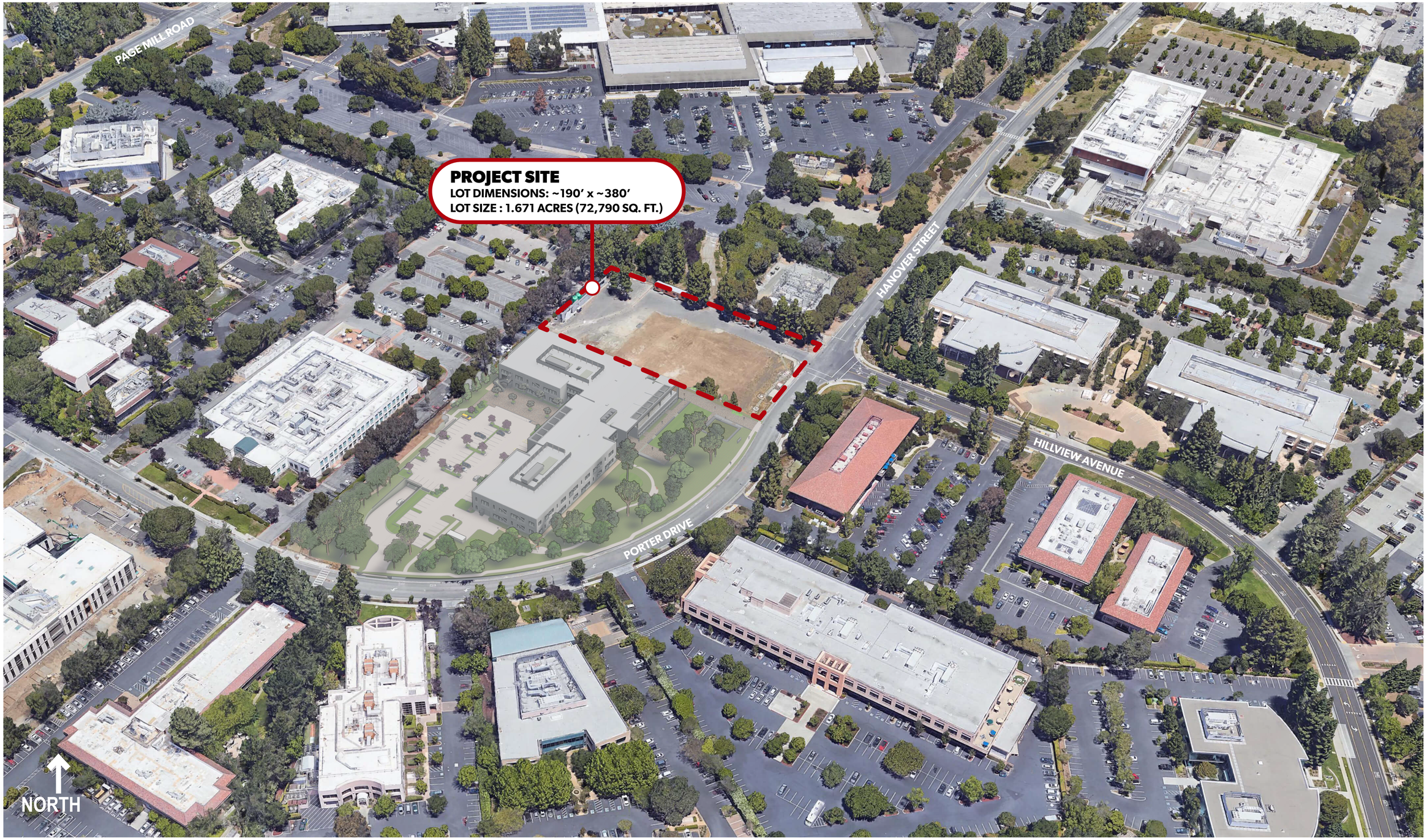
CONSTRUCTION PLANNING

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

A1.0



THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

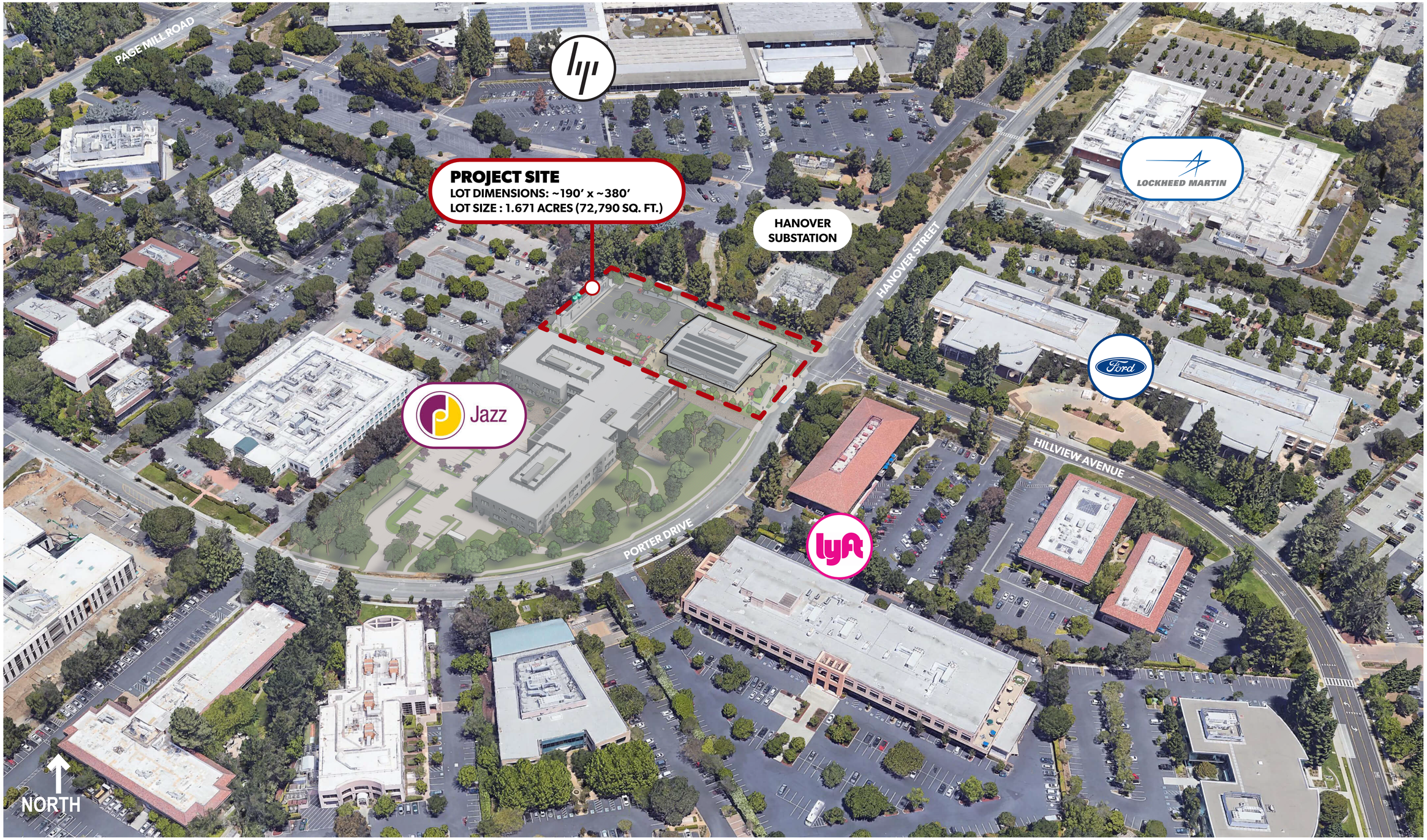
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

AERIAL CONTEXT - EXISTING

A1.1



THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

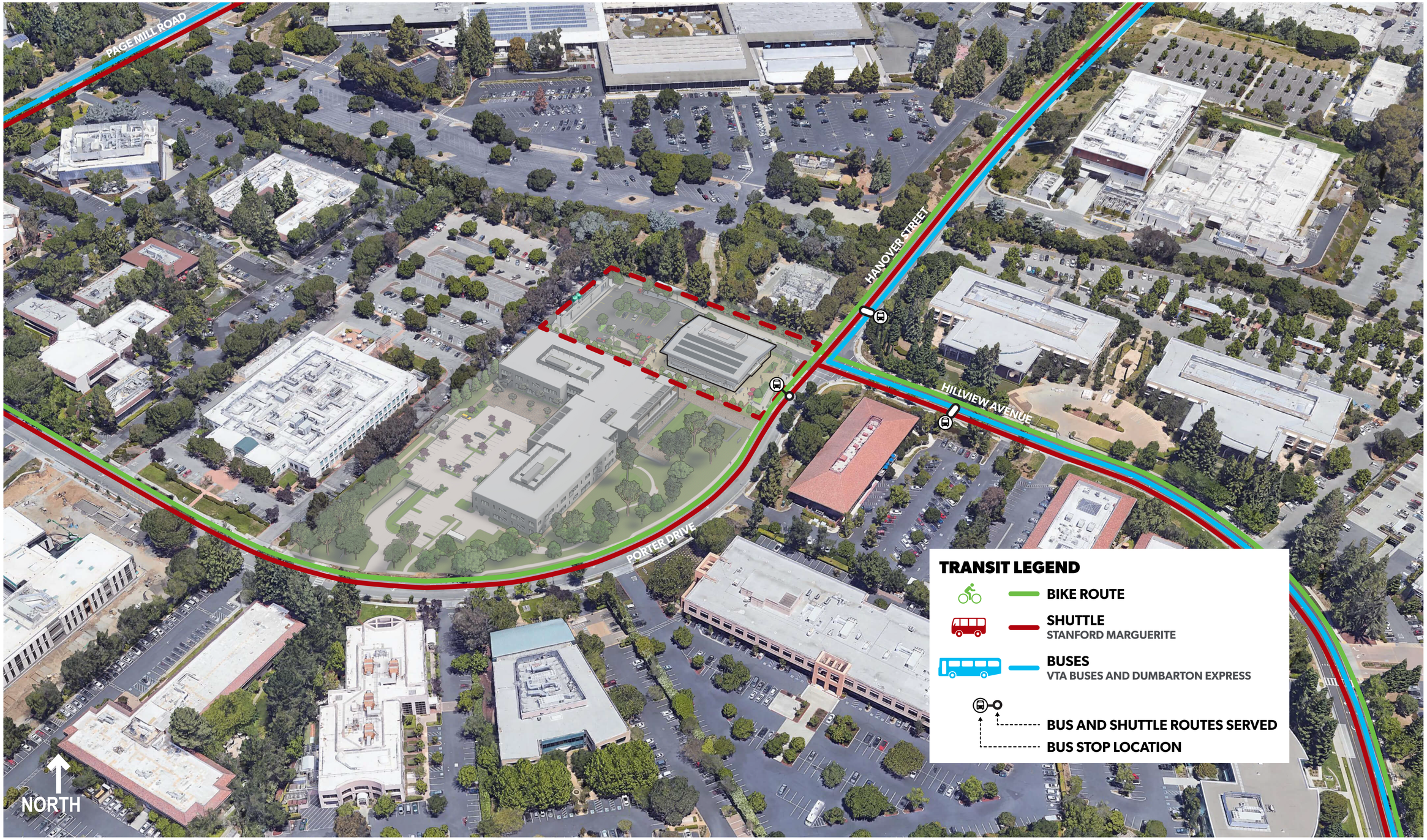
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

AERIAL CONTEXT - PROPOSED

A1.2



THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

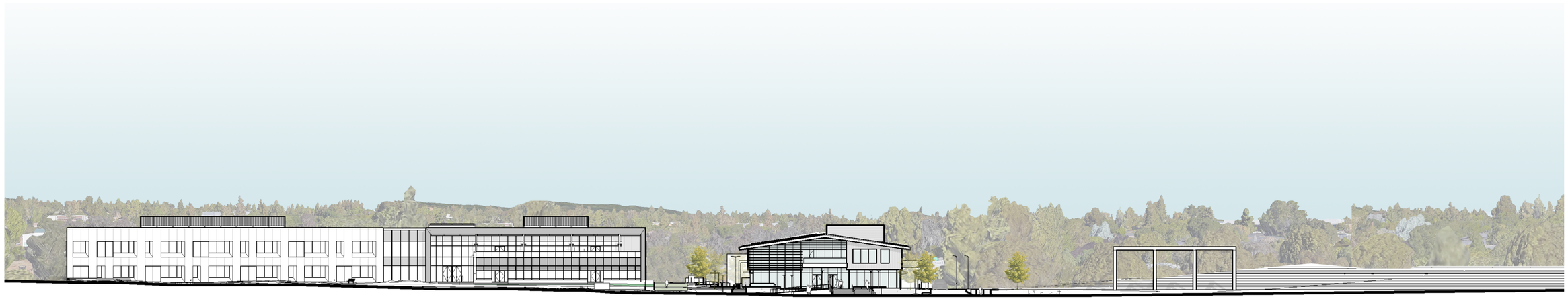
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

TRANSPORTATION

A1.3



3181 PORTER DRIVE

PROPERTY LINE

3215 PORTER DRIVE

PROPERTY LINE

HANOVER SUBSTATION

0 16 32 64 96

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

SITE CONTEXT - ELEVATION

A1.4

0 16 32 64 96

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

SITE CONTEXT - SECTION

A1.5

3250 HANOVER AVENUE
HANOVER SUBSTATION

3181 PORTER DRIVE
JAZZ PHARMACEUTICALS

3200 HILLVIEW AVENUE
LYFT

3251 HILLVIEW AVENUE
FORD GREENFIELD LABS

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

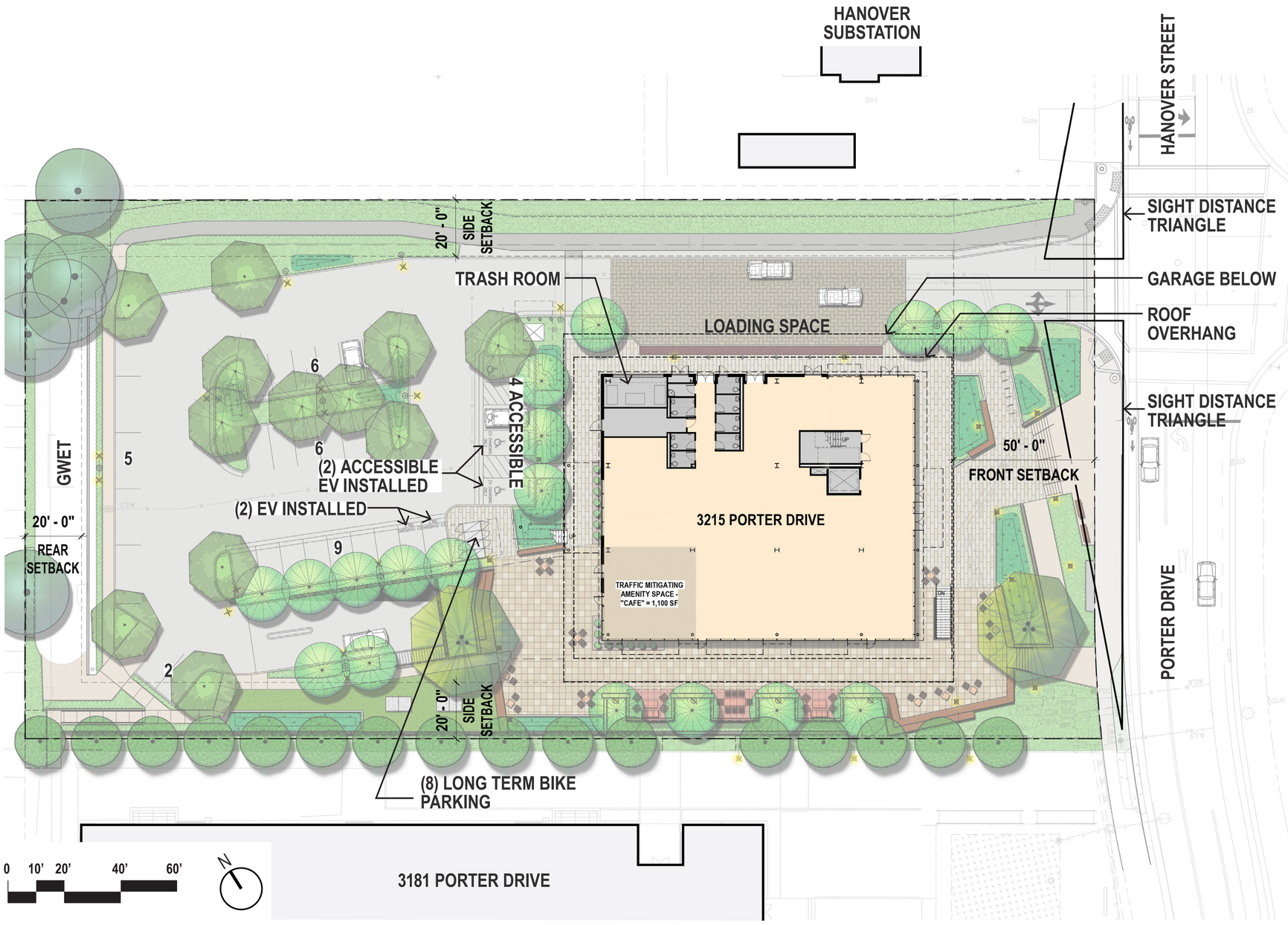
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

PHOTOS - ADJACENT BUILDINGS

A1.6



SITE SUMMARY

TOTAL SITE AREA 1.671 ACRES = 72,790 SF

SITE COVERAGE

Site Coverage Allowable Area (30%) ..... 21,837 SF
Site Coverage Proposed (16.9%) ..... 12,315 SF

BUILDING SUMMARY

Allowable FAR (40%) ..... 29,116 SF

PROPOSED FAR

Total Planning Area (28.6%) 20,833SF
Traffic Mitigating Amenity Area ..... 1,100 SF
Total Proposed Building Area 21,933SF

PARKING

Required Parking (20,833SF x 1:300) ..... 70 Spaces

PROPOSED

	STD	EV Installed	EV Ready	
Surface	26	2	-	28 Spaces
Surface Accessible	2	2	-	4 Spaces
				32 Spaces

	STD	EV Installed	EV Ready	
Garage	26	2	6	34 Spaces
Garage Accessible	2	2	-	4 Spaces
				38 Spaces

Total Proposed Parking ..... 70 Spaces
Loading Space ..... 1 Space

BIKE STORAGE

Required Bike Storage (20,833SF x 1:3000) ..... 7 Spaces

PROPOSED

Surface Short Term Racks ..... 34 Spaces
Surface Long Term Lockers ..... 8 Spaces
Garage Long Term Lockers ..... 10 Spaces

Total Proposed Bike Storage ..... 52 Spaces

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

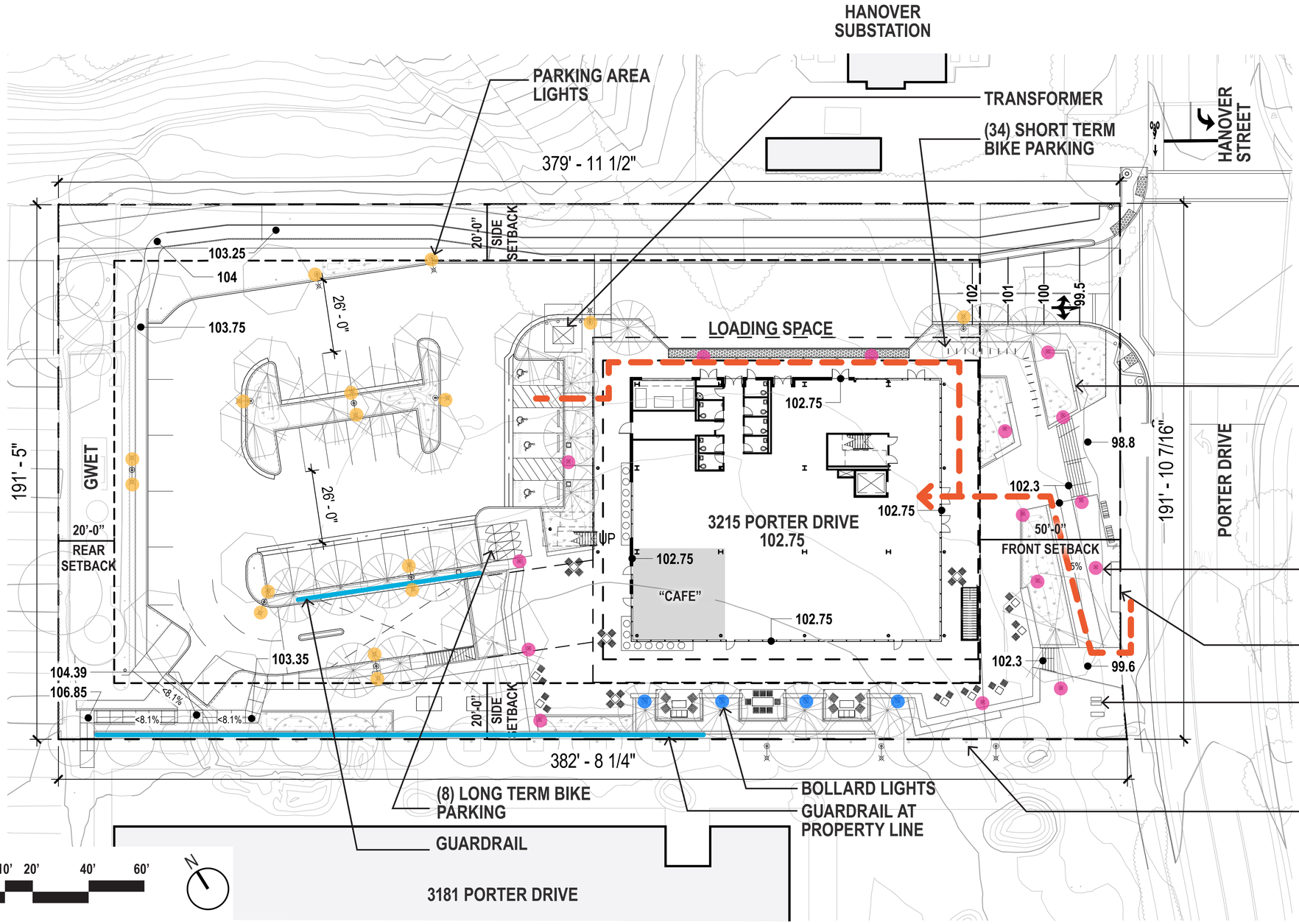
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

SITE PLAN AND SITE SUMMARY

A1.7



SITE LIGHT FIXTURE LEGEND

- PARKING LOT LIGHT
- PEDESTRIAN POLE LIGHT
- BOLLARD LIGHT

SITE FEATURES

- GREENSCREEN FENCE*
- GUARDRAIL*

*For more information regarding locations and heights see; L1.1, L1.3, L1.4, L1.6, L1.8

SITE CIRCULATION LEGEND

- ACCESSIBLE ROUTE

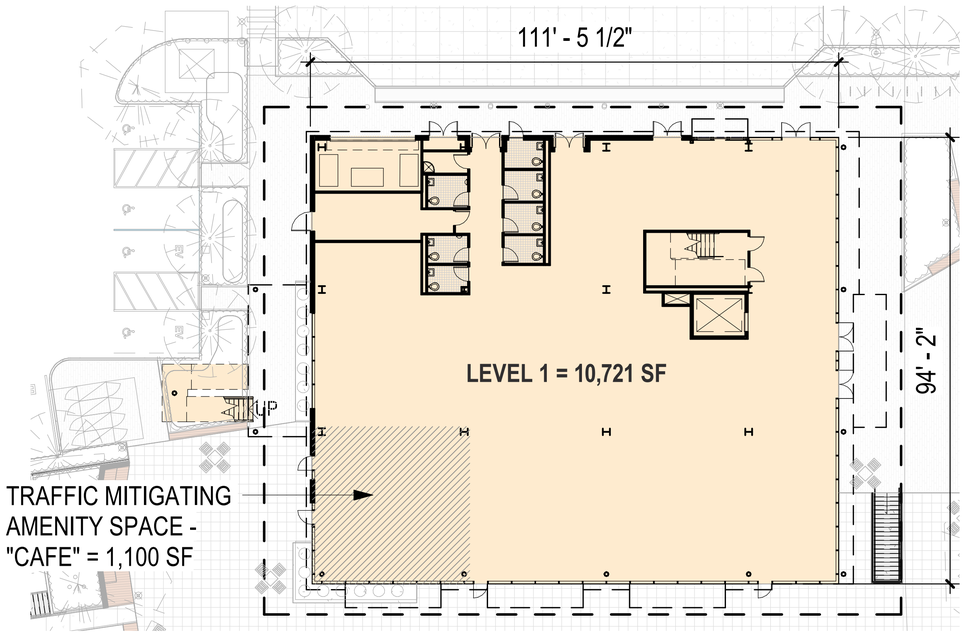
THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

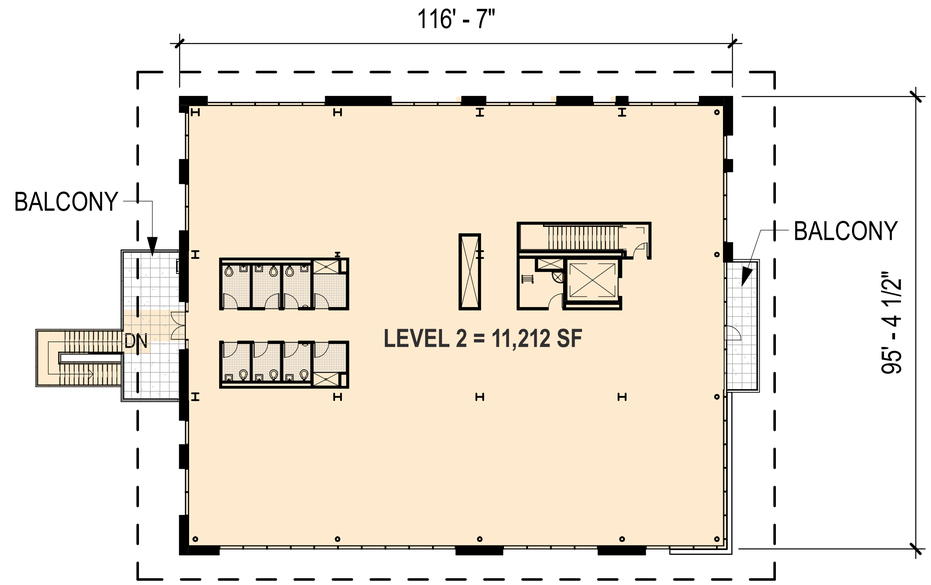
PLANNING & DESIGN OVERVIEW

SITE PLAN A1.8



LEVEL 1 - BUILDING AREA

0 8 16 32 48

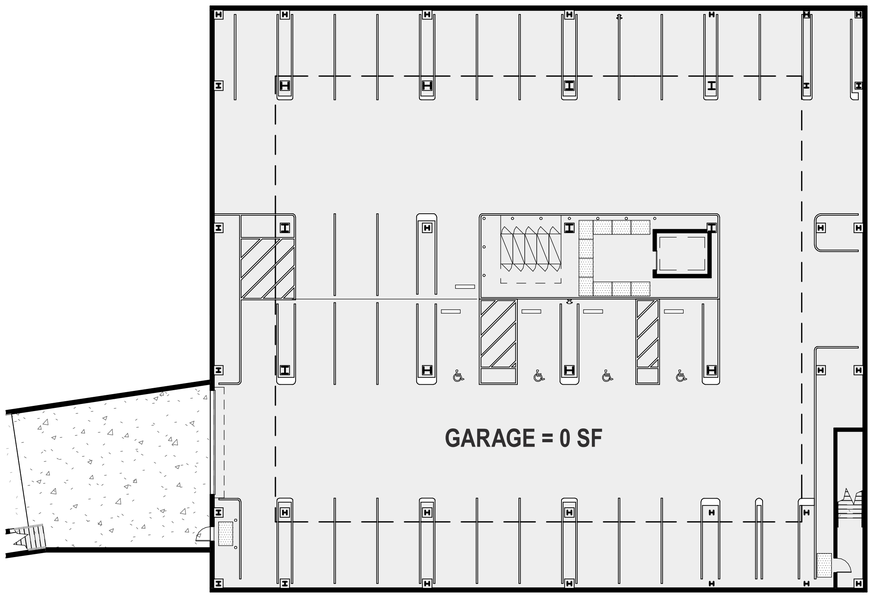


LEVEL 2 - BUILDING AREA

0 8 16 32 48

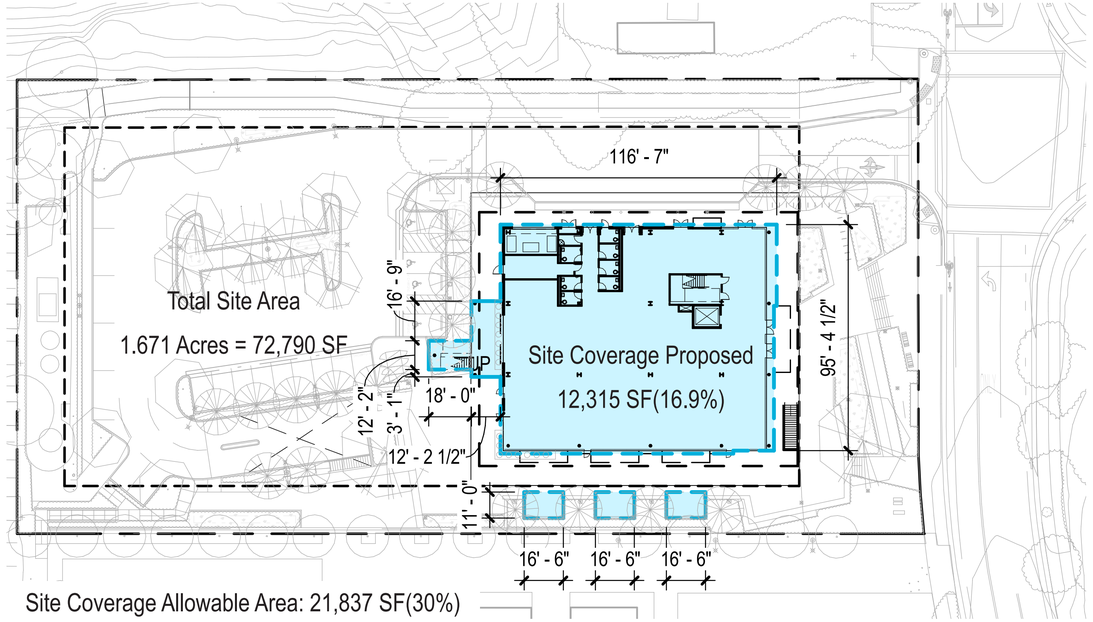
BUILDING AREA

Level 2	11,212 SF
Level 1	10,721 SF
Garage	0 SF
Total Building Area	**21,933SF**



PARKING - BUILDING AREA

0 8 16 32 48



SITE COVERAGE DIAGRAM

0 16 32 64 96

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

AREA ANALYSIS

A1.9

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

CROSSING PORTER DRIVE

A1.10

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

DRIVE AISLE A1.11

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

FRONT PLAZA A1.12

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANNING & DESIGN OVERVIEW

REAR PLAZA A1.13

3215 PORTER DRIVE

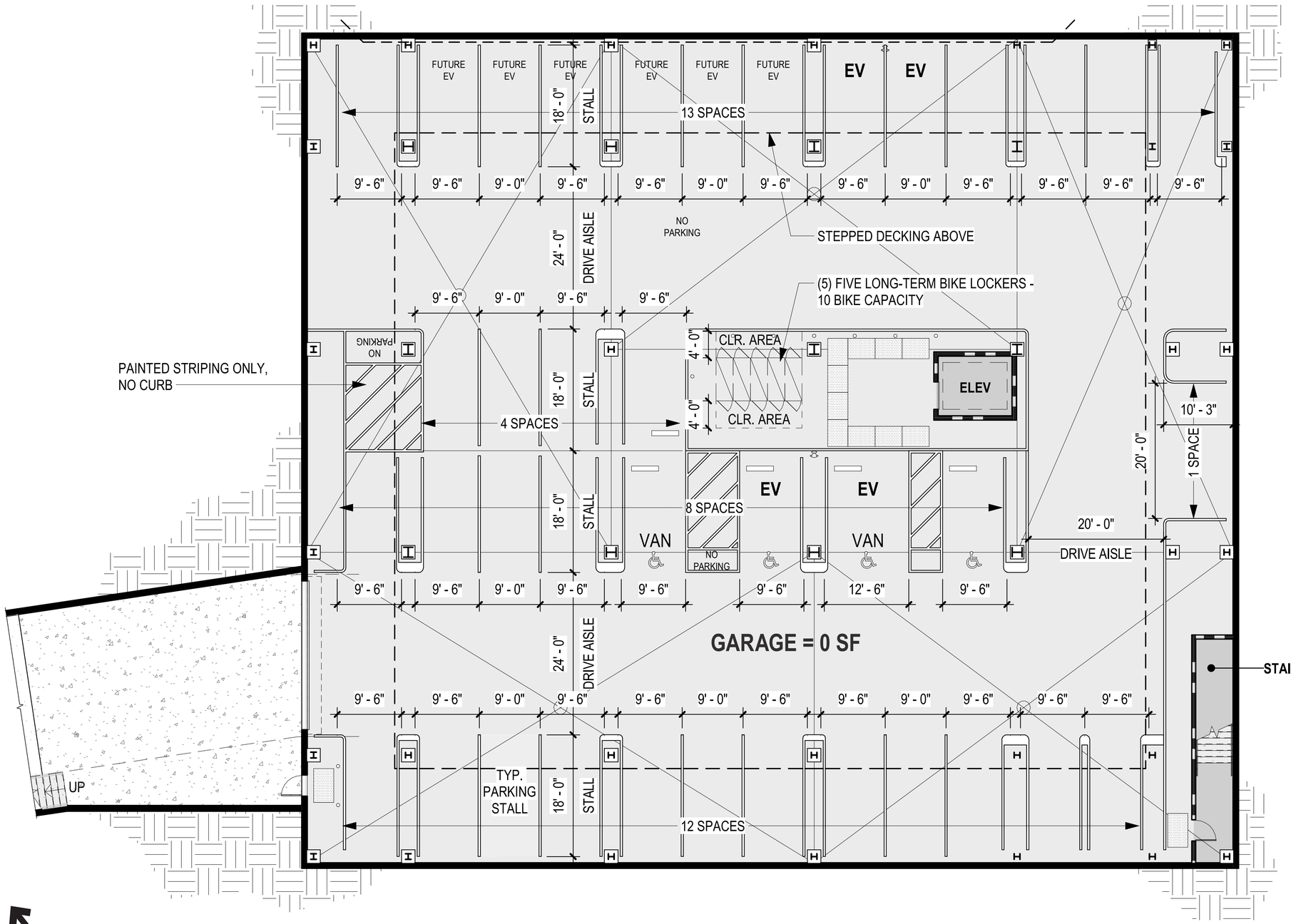
STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

PLANNING & DESIGN OVERVIEW

FREE BIKE REPAIR

A1.14



BUILDING AREA

Level 2	11,212 SF
Level 1	10,721 SF
Garage	0 SF
Total Building Area	**21,933SF**

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

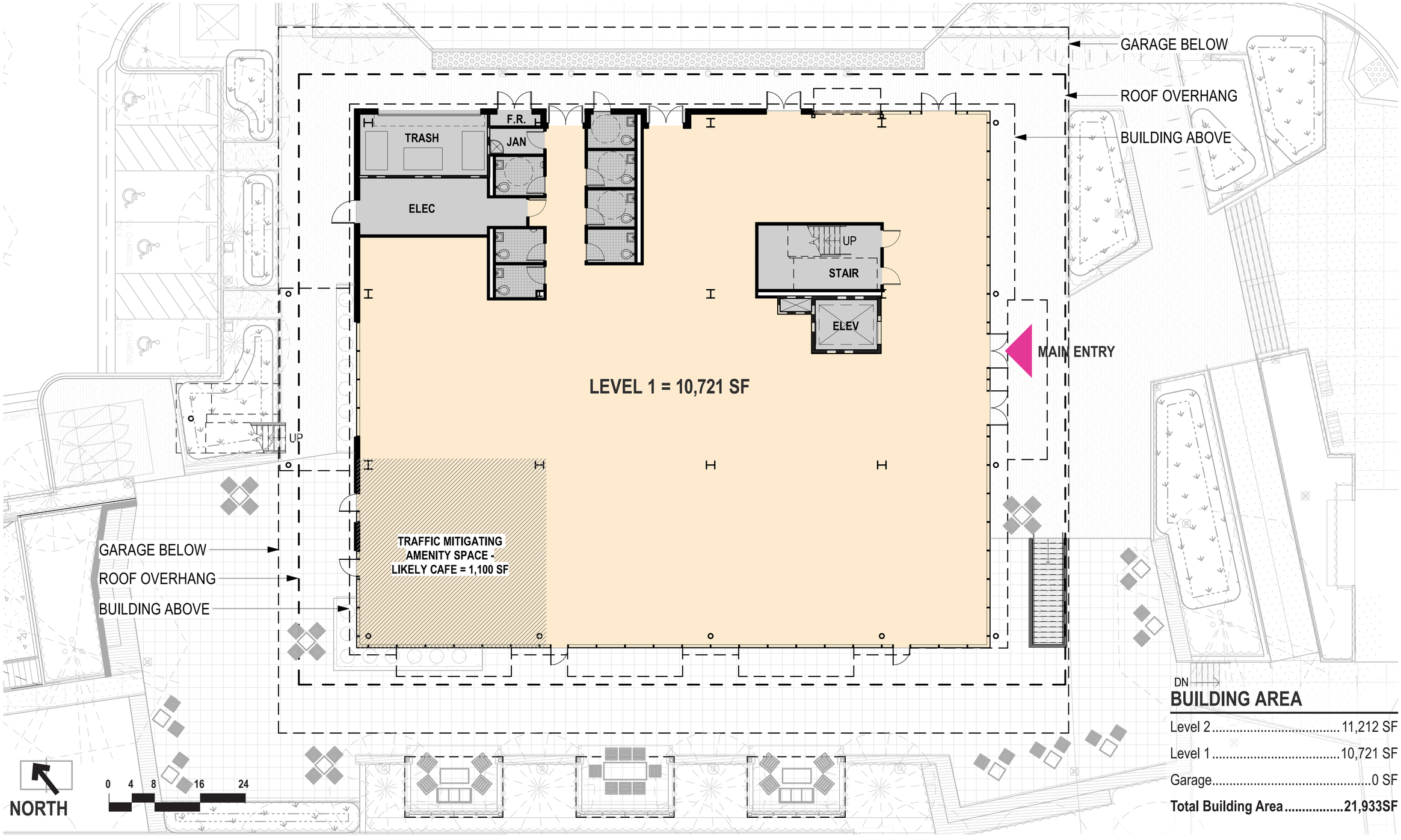
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

FLOOR PLAN - PARKING GARAGE

A2.1



BUILDING AREA

Level 2	11,212 SF
Level 1	10,721 SF
Garage	0 SF
Total Building Area	**21,933SF**

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

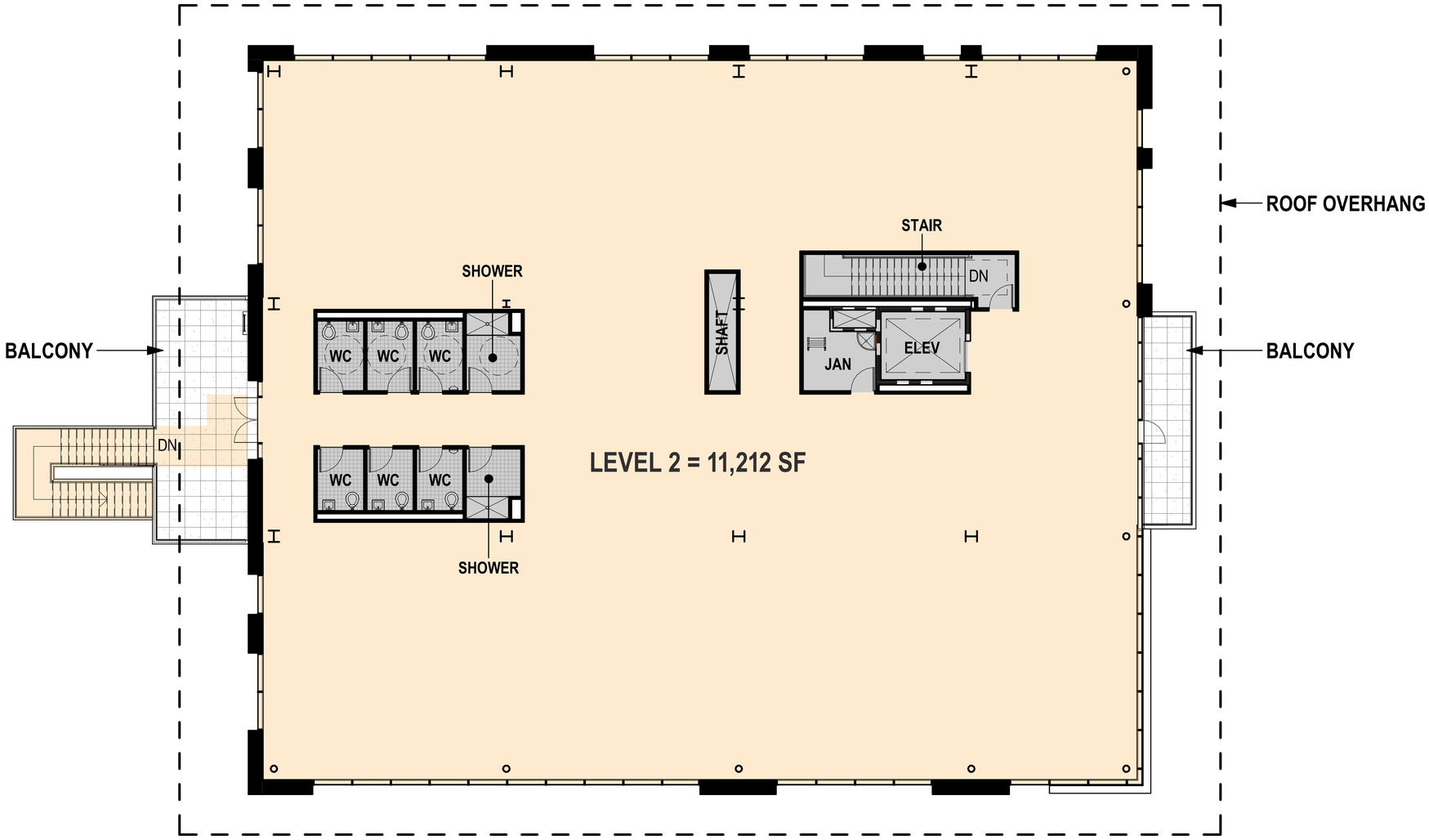
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

FLOOR PLAN - LEVEL 1

A2.2



BUILDING AREA

Level 2	11,212 SF
Level 1	10,721 SF
Garage	0 SF
Total Building Area	**21,933SF**

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

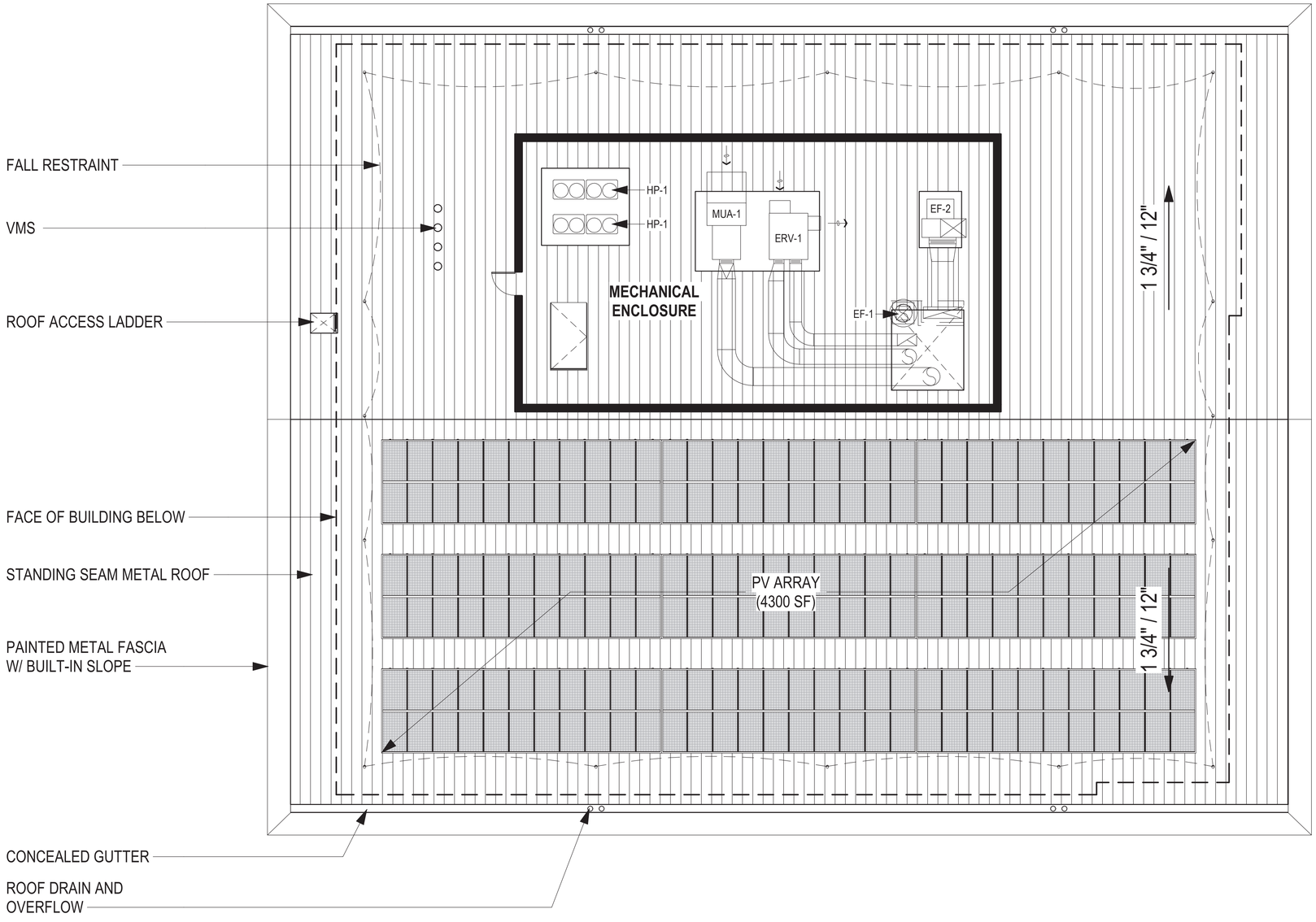
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

FLOOR PLAN - LEVEL 2

A2.3



BUILDING AREA

Level 2	11,212 SF
Level 1	10,721 SF
Garage	0 SF
Total Building Area	**21,933SF**

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

ROOF PLAN A2.4

LG
Life's Good

MULTI V™ 5
WITH
LGRED°

OUTDOOR UNIT
ENGINEERING MANUAL

Variable Refrigerant Flow Outdoor Units
6.0 to 42.0 Tons

MULTI V 5 with LGRED Outdoor Unit Engineering Manual

GENERAL DATA
460V Outdoor Unit Specifications

MULTI V 5 WITH LGRED°

HP-2

Table 8: Dual Frame 460V Outdoor Units.

Combination Unit Model Number		ARUM264DTE5 22.0 Ton	ARUM288DTE5 24.0 Ton	ARUM312DTE5 26.0 Ton	ARUM336DTE5 28.0 Ton
Individual Component Model Numbers		ARUM096DTE5 + ARUM168DTE5	ARUM096DTE5 + ARUM192DTE5	ARUM096DTE5 + ARUM216DTE5	ARUM121DTE5 + ARUM216DTE5
Cooling Performance					
Nominal Cooling Capacity (Btu/h)[1]		264,000	288,000	312,000	336,000
Rated Cooling Capacity (Btu/h)[2]		252,000	276,000	298,000	320,000
Heating Performance					
Nominal Heating Capacity (Btu/h)[1]		297,000	324,000	351,000	378,000
Rated Heating Capacity (Btu/h)[1]		282,000	308,000	332,000	358,000
Operating Range					
Cooling (°F DB)		5 to 122	5 to 122	5 to 122	5 to 122
Heating (°F WB)[2]		-22 to +61	-22 to +61	-22 to +61	-22 to +61
Synchronous — Cooling Based (°F DB)		14 to 81	14 to 81	14 to 81	14 to 81
Synchronous — Heating Based (°F WB)		14 to 61	14 to 61	14 to 61	14 to 61
Compressor					
Inverter Quantity		HSS DC Scroll x 3	HSS DC Scroll x 3	HSS DC Scroll x 3	HSS DC Scroll x 3
Oil/Type		PVE / FVC68D	PVE / FVC68D	PVE / FVC68D	PVE / FVC68D
Fan (Top Discharge)					
Type		Propeller (BLDC)	Propeller (BLDC)	Propeller (BLDC)	Propeller (BLDC)
Motor Output (kW) x Qty.		0.90 x 2 + 0.90 x 2	0.90 x 2 + 0.90 x 2	0.90 x 2 + 0.90 x 2	0.90 x 2 + 0.90 x 2
Motor/Drive		Brushless Digitally Controlled / Direct			
Operating Range (RPM)	Cooling	0 - 1,150	0 - 1,150	0 - 1,150	0 - 1,150
	Heating	80 - 1,150	80 - 1,150	80 - 1,150	80 - 1,150
Maximum Air Volume (CFM)		22,600	22,600	22,600	22,600
Unit Data					
Refrigerant Type		R410A	R410A	R410A	R410A
Refrigerant Control/Location		EEV / Indoor Unit	EEV / Indoor Unit	EEV / Indoor Unit	EEV / Indoor Unit
Factory Charge lbs. of R410A		23.2 + 26.5	23.2 + 30.9	23.2 + 37.5	23.2 + 37.5
Max. No. Indoor Units/System[3]		42	45	52	55
Sound Pressure dB(A)[4]		63.0	63.0	65.0	65.0
Net Unit Weight (lbs.)		507 + 639	507 + 659	507 + 666	507 + 666
Shipping Weight (lbs.)		534 + 666	534 + 688	534 + 694	534 + 694
Communication Cables[5,6]		2 x 18	2 x 18	2 x 18	2 x 18
Heat Exchanger					
Material and Fin Coating		Copper Tube / Aluminum Fin and Black Coated Fin™ / Hydrophilic			
Rows/Fins per inch		2 / 17 + 3 / 17	2 / 17 + 3 / 17	2 / 17 + 3 / 17	2 / 17 + 3 / 17
Piping for Heat Recovery Operation[7]					
Liquid Line Connection (in., OD)		3/8 & 5/8 Braze	3/8 & 5/8 Braze	3/8 & 5/8 Braze	1/2 & 5/8 Braze
Low Pressure Vapor Line Connection (in., OD)		7/8 & 1-1/8 Braze	7/8 & 1-1/8 Braze	7/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze
High Pressure Vapor Line Connection (in., OD)		3/4 & 7/8 Braze	3/4 & 1-1/8 Braze	3/4 & 1-1/8 Braze	3/4 & 1-1/8 Braze
Piping for Heat Pump Operation[7]					
Liquid Line Connection (in., OD)		3/8 & 5/8 Braze	3/8 & 5/8 Braze	3/8 & 5/8 Braze	1/2 & 5/8 Braze
Vapor Line Connection (in., OD)		7/8 & 1-1/8 Braze	7/8 & 1-1/8 Braze	7/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze

[1]Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.
[2]Low ambient performance with LGRED° heat technology is included in units produced after February 2018.
[3]The System Combination Ratio must be between 50~130%.
[4]Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
[5]Communication cable between Master ODU to Slave ODU(s), and Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. ⓖ Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.
[6]Power wiring is field provided, solid or stranded, and must comply with the applicable local and national codes. See the Electrical Data section for more details.
[7]LG requires that LATS software be used on all projects to ensure correct line sizing. Designer must verify the shop drawing design against the as built design using LATS. Contractor must also use LG manufactured Y-Branch and Header Kits only.

MULTI V 5 WITH LGRED°

GENERAL DATA
460V Outdoor Unit Specifications

HP-1

Table 9: Dual Frame 460V Outdoor Units, continued.

Combination Unit Model Number		ARUM360DTE5 30.0 Ton	ARUM384DTE5 32.0 Ton	ARUM408DTE5 34.0 Ton
Individual Component Model Numbers		ARUM144DTE5 + ARUM216DTE5	ARUM168DTE5 + ARUM216DTE5	ARUM192DTE5 + ARUM216DTE5
Cooling Performance				
Nominal Cooling Capacity (Btu/h)[1]		360,000	384,000	408,000
Rated Cooling Capacity (Btu/h)[2]		344,000	366,000	390,000
Heating Performance				
Nominal Heating Capacity (Btu/h)[1]		405,000	432,000	459,000
Rated Heating Capacity (Btu/h)[1]		384,000	410,000	434,000
Operating Range				
Cooling (°F DB)		5 to 122	5 to 122	5 to 122
Heating (°F WB)[2]		-22 to +61	-22 to +61	-22 to +61
Synchronous — Cooling Based (°F DB)		14 to 81	14 to 81	14 to 81
Synchronous — Heating Based (°F WB)		14 to 61	14 to 61	14 to 61
Compressor				
Inverter Quantity		HSS DC Scroll x 4	HSS DC Scroll x 4	HSS DC Scroll x 4
Oil/Type		PVE / FVC68D	PVE / FVC68D	PVE / FVC68D
Fan (Top Discharge)				
Type		Propeller (BLDC)	Propeller (BLDC)	Propeller (BLDC)
Motor Output (kW) x Qty.		0.90 x 2 + 0.90 x 2	0.90 x 2 + 0.90 x 2	0.90 x 2 + 0.90 x 2
Motor/Drive		Brushless Digitally Controlled / Direct		
Operating Range (RPM)	Cooling	0 - 1,150	0 - 1,150	0 - 1,150
	Heating	80 - 1,150	80 - 1,150	80 - 1,150
Maximum Air Volume (CFM)		22,600	22,600	22,600
Unit Data				
Refrigerant Type		R410A	R410A	R410A
Refrigerant Control/Location		EEV / Indoor Unit	EEV / Indoor Unit	EEV / Indoor Unit
Factory Charge lbs. of R410A		26.5 + 37.5	26.5 + 37.5	30.9 + 37.5
Max. No. Indoor Units/System[3]		58	61	64
Sound Pressure dB(A)[4]		66.0	66.0	66.0
Net Unit Weight (lbs.)		639 + 666	639 + 666	666 + 666
Shipping Weight (lbs.)		666 + 694	666 + 694	688 + 694
Communication Cables[5,6]		2 x 18	2 x 18	2 x 18
Heat Exchanger				
Material and Fin Coating		Copper Tube / Aluminum Fin and Black Coated Fin™ / Hydrophilic		
Rows/Fins per inch		3 / 17 x 2	3 / 17 x 2	3 / 17 x 2
Piping for Heat Recovery Operation[7]				
Liquid Line Connection (in., OD)		1/2 & 5/8 Braze	5/8 & 5/8 Braze	5/8 & 5/8 Braze
Low Pressure Vapor Line Connection (in., OD)		1-1/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze
High Pressure Vapor Line Connection (in., OD)		7/8 & 1-1/8 Braze	7/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze
Piping for Heat Pump Operation[7]				
Liquid Line Connection (in., OD)		1/2 & 5/8 Braze	5/8 & 5/8 Braze	5/8 & 5/8 Braze
Vapor Line Connection (in., OD)		1-1/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze	1-1/8 & 1-1/8 Braze

[1]Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.
[2]Low ambient performance with LGRED° heat technology is included in units produced after February 2018.
[3]The System Combination Ratio must be between 50~130%.
[4]Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
[5]Communication cable between Master ODU to Slave ODU(s), and Master ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. ⓖ Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.
[6]Power wiring is field provided, solid or stranded, and must comply with the applicable local and national codes. See the Electrical Data section for more details.
[7]LG requires that LATS software be used on all projects to ensure correct line sizing. Designer must verify the shop drawing design against the as built design using LATS. Contractor must also use LG manufactured Y-Branch and Header Kits only.

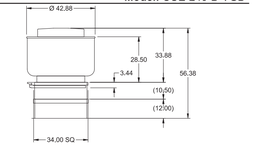
Outdoor Unit Product Data

GREENHECK
Building Value in Air.

EF-1

Printed Date: 08/15/2019
Job: 3215 Porter
Mark: Grease
Model: CUE-240-B-VGD

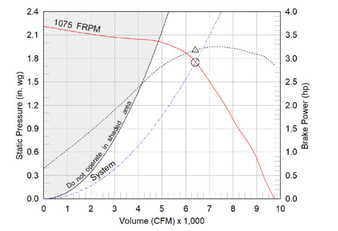
Model: CUE-240-B-VGD
Direct Drive Upblast Centrifugal Roof Exhaust Fan



Dimensional	
Quantity	1
Weight w/o Acc's (lb)	226
Weight w/ Acc's (lb)	297
Max T Motor Frame Size	0
Roof Opening (in.)	26.5 x 26.5

Performance	
Requested Volume (CFM)	6,400
Actual Volume (CFM)	6,400
Total External SP (in. wg)	1.75
Fan RPM	1075
Operating Power (hp)	3.17
Elevation (ft)	49
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.075
Tip Speed (ft/min)	6,897
Static Eff. (%)	56

OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR.



Motor	
Motor Mounted	Yes
Size (hp)	5
Voltage/Cycle/Phase	208/60/3
Enclosure	ODP
Motor RPM	1140
Windings	1

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	86	85	91	83	77	73	69	65	86	74	24

Notes:
All dimensions shown are in units of in.
*Please consult factory for actual motor amp draw.
LwA - A weighted sound power level, based on ANSI S1.4
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft.
Sones - calculated using AMCA 301 at 5 ft.
Sound value does not include carrier frequencies associated with motor controller

AIR PERFORMANCE

Generated by: steve@readeandassoc.com
CAPS 4.29.1685 C:\Users\steve\OneDrive - Reade and Associates\Reade and Associates\CAPS jobs\3215 Porter.gfcj Page 1 of 20

GREENHECK
Building Value in Air.

EF-2

Printed Date: 08/15/2019
Job: 3215 Porter
Mark: Garage
Model: USF-336-BI

Model: USF-336-BI
Centrifugal Utility Fan - Backward Inclined Wheel

Performance	
Quantity	1
Volume (CFM)	12,503
Total External SP (in. wg)	0.836
Operating Power (hp)	2.91
Required Power (hp)	2.91
Fan RPM	530
Max Fan RPM	1051
Oper. Frequency (Hz)	60
Elevation (ft)	49
Start-up Temp.(F)	70
Operating Temp.(F)	70

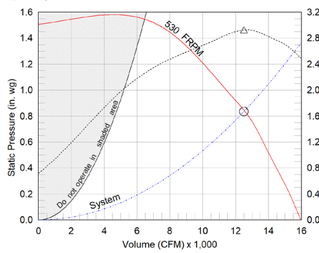
Fan Configuration	
Construction Type	PermaLock
Size	36
Arrangement	10
Rotation	CW
Discharge Position	UB
Spark Resistance	None
Scroll Material	Steel
Wheel Material	Steel
Inlet Cone Material	Steel
Pedestal Material	Steel

Equipment Weights	
Fan (LMD)(lb)	1,007
Motor/Drive (lb)	142
Accessories (lb)	156

Misc Fan Data	
FEG	85
Outlet Velocity (ft/min)	1,632
Static Efficiency (%)	59
Tip Speed (ft/min)	5,060

Motor and Drives	
Motor	Included
Size (hp)	3
RPM	1170
Enclosure	ODP
V/C/P	460/60/3
Frame Size	213T
Max Frame Size	286
Location	Centered
Pulley Type	Constant
Drive Loss (%)	4.4
Drives	Multiple
Drive Service Factor	1.5

Operating Performance



Static Pressure Calculations

External SP	0.7 in. wg
Outlet Guard	0.053 in. wg
System Effect-Free Discharge	0.083 in. wg
Total External SP	0.836 in. wg

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	87	83	79	75	73	69	61	54	78	67	15.4
Outlet	89	85	79	76	75	69	62	55	80	68	16.9

LwA - A weighted sound power level, based on ANSI S1.4
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per octave band at 5 ft- dBA levels are not licensed by AMCA International
Sones - calculated using AMCA 301 at 5 ft

AIR PERFORMANCE

Generated by: steve@readeandassoc.com
CAPS 4.29.1685 C:\Users\steve\OneDrive - Reade and Associates\Reade and Associates\CAPS jobs\3215 Porter.gfcj Page 5 of 20

GREENHECK
Building Value in Air.

ERV-1

Printed Date: 08/15/2019
Job: 3215 Porter
Mark: ERV
Model: ERVe-45-30L

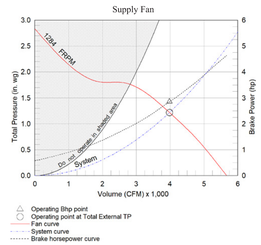
Supply Fan Charts And Performance

Supply Fan Performance									
Total Volume (CFM)	External SP (in. wg)	Total SP (in. wg)	RPM	Operating Power (hp)	Motor		Fan		
					Qty	Size (hp)	Qty	Type	Drive-Type
3,980	0.6	1.219	1284	2.85	1	3	1	Forward Curve	Belt

Pressure Drop (in. wg)				
Weatherhood	Filter	Damper	External	Total
-	-	-	0.6	1.219

Sound Performance in Accordance with AMCA											
Sound Power by Octave Band									Lwa	dBA	Sones
62.5	125	250	500	1000	2000	4000	8000				
82,9	79,7	66,9	65,7	64,6	64,7	64,7	59,7		72,3	60,8	11,9

Supply Fan



Generated by: steve@readeandassoc.com
CAPS 4.29.1685 C:\Users\steve\OneDrive - Reade and Associates\Reade and Associates\CAPS jobs\3215 Porter.gfcj Page 11 of 20

GREENHECK
Building Value in Air.

ERV-1

Printed Date: 08/15/2019
Job: 3215 Porter
Mark: ERV
Model: ERVe-45-30L

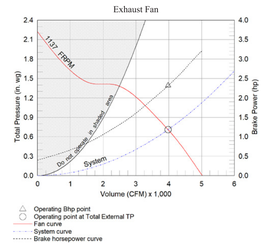
Exhaust Fan Charts And Performance

Exhaust Fan Performance									
Total Volume (CFM)	External SP (in. wg)	Total SP (in. wg)	RPM	Operating Power (hp)	Motor		Fan		
					Qty	Size (hp)	Qty	Type	Drive-Type
3,980	0.6	0.712	1137	2.32	1	3	1	Forward Curve	Belt

Pressure Drop (in. wg)				
Weatherhood	Filter	Damper	External	Total
-	-	-	0.6	0.712

Sound Performance in Accordance with AMCA											
Sound Power by Octave Band									Lwa	dBA	Sones
62.5	125	250	500	1000	2000	4000	8000				
78,6	75,7	64,5	62,9	63,8	62,7	60,1	52,7		69,4	57,9	9,3

Exhaust Fan



Generated by: steve@readeandassoc.com
CAPS 4.29.1685 C:\Users\steve\OneDrive - Reade and Associates\Reade and Associates\CAPS jobs\3215 Porter.gfcj Page 12 of 20

GREENHECK
Building Value in Air.

MUA-1

Printed Date: 08/15/2019
Job: 3215 Porter
Mark: Kitchen MUA
Model: MSX-118-H32

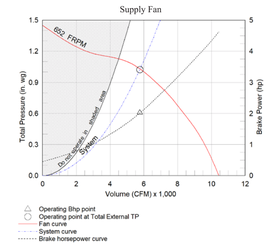
Fan Charts And Performance

Supply Fan Performance									
Total Volume (CFM)	External SP (in. wg)	Total SP (in. wg)	RPM	Operating Power (hp)	Motor		Fan		
					Qty	Size (HP)	Qty	Type	Drive-Type
5,760	0.7	1.023	652	2.02	1	5	1	Forward Curve	Belt

Pressure Drop (in. wg)						
Weatherhood	Filter	Damper	Cooling	Heating	External	Total
-	-	0.038	0.285	-	0.7	1.023

Sound Performance in Accordance with AMCA											
Sound Power by Octave Band									Lwa	dBA	Sones
62.5	125	250	500	1000	2000	4000	8000				
90	77	76	72	69	67	61	55		75	64	12,2

Supply Fan



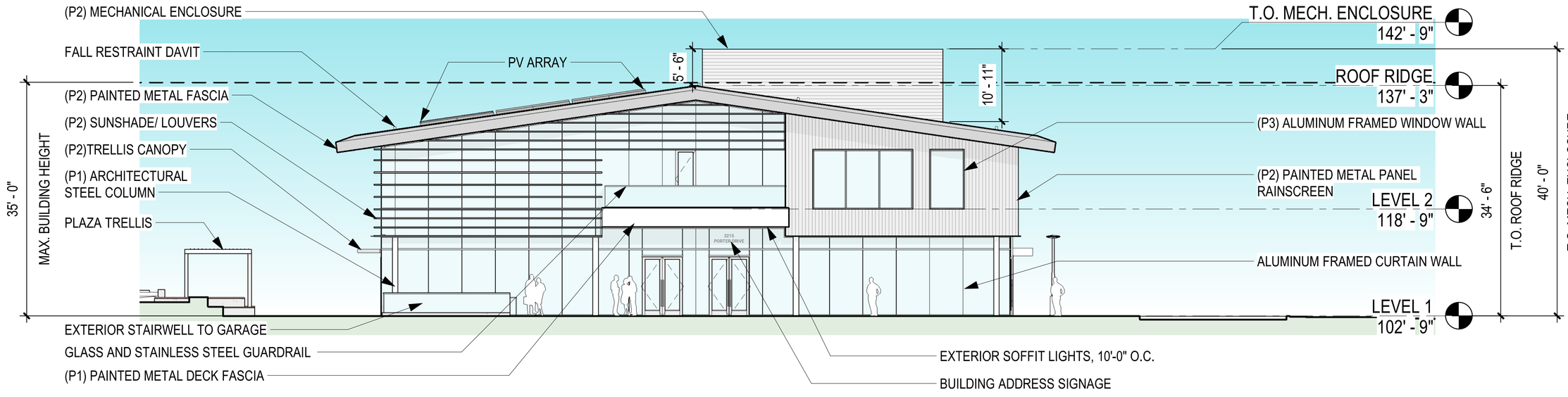
Generated by: steve@readeandassoc.com
CAPS 4.29.1685 C:\Users\steve\OneDrive - Reade and Associates\Reade and Associates\CAPS jobs\3215 Porter.gfcj Page 3 of 12

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

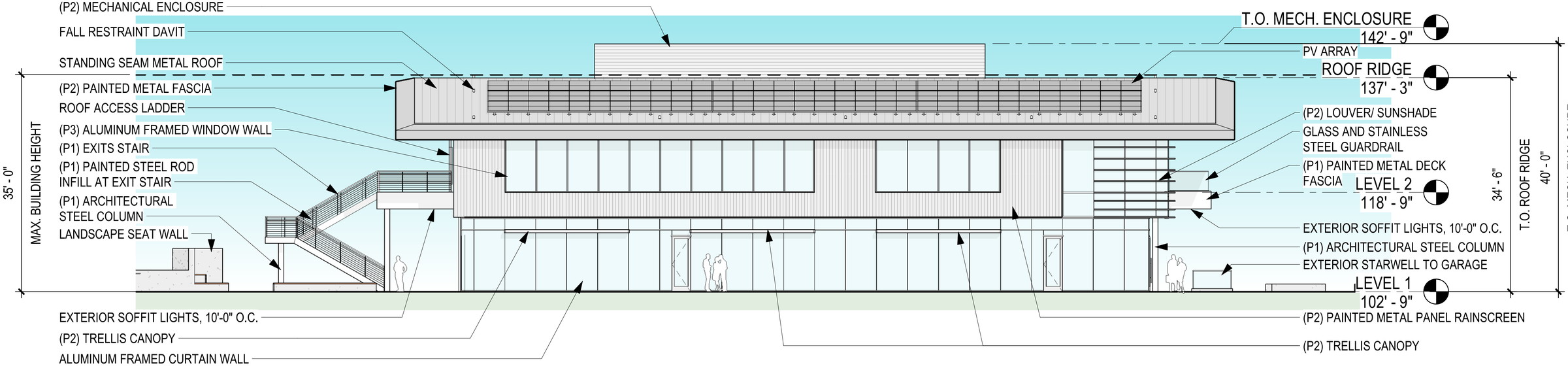
STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN
ROOF HVAC ACOUSTICS
A2.5



EAST ELEVATION

SEE A2.14 FOR ARCHITECTURAL MATERIALS



SOUTH ELEVATION

SEE A2.14 FOR ARCHITECTURAL MATERIALS

0 4 8 16 24

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

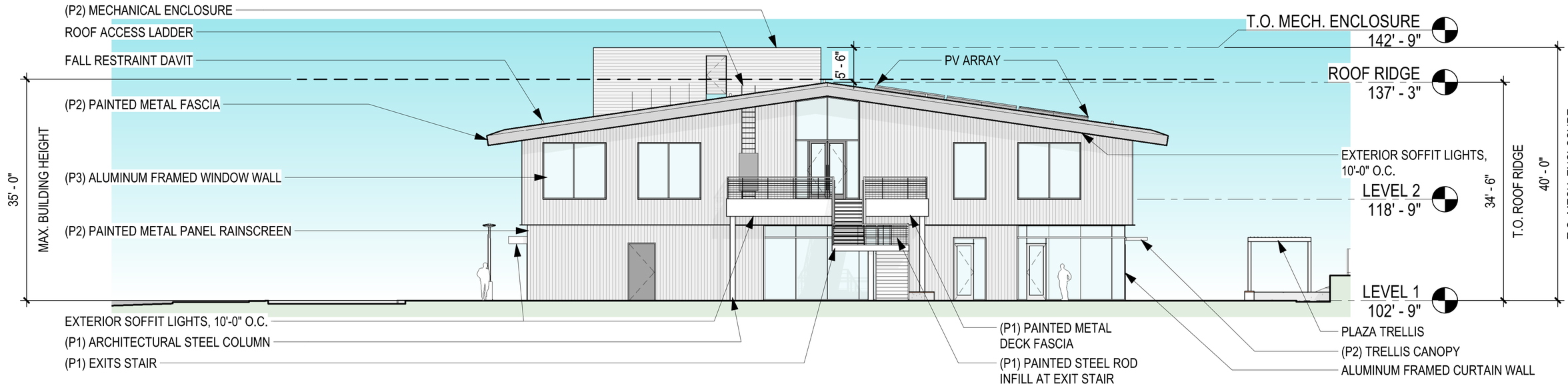
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

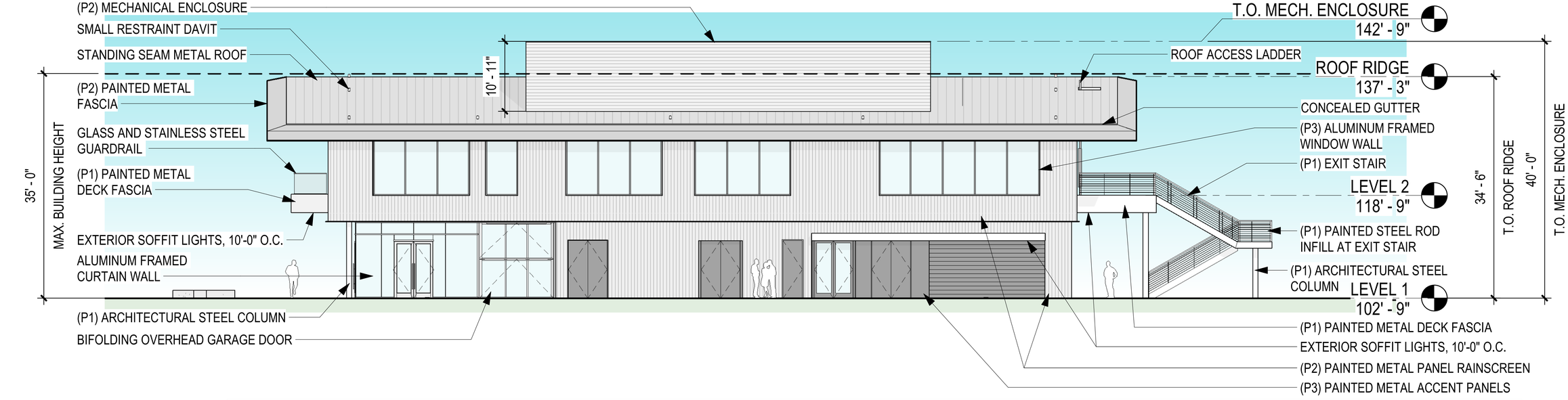
BUILDING ELEVATION - SOUTH & EAST

A2.6



WEST ELEVATION

SEE A2.14 FOR ARCHITECTURAL MATERIALS



NORTH ELEVATION

SEE A2.14 FOR ARCHITECTURAL MATERIALS

0 4 8 16 24

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

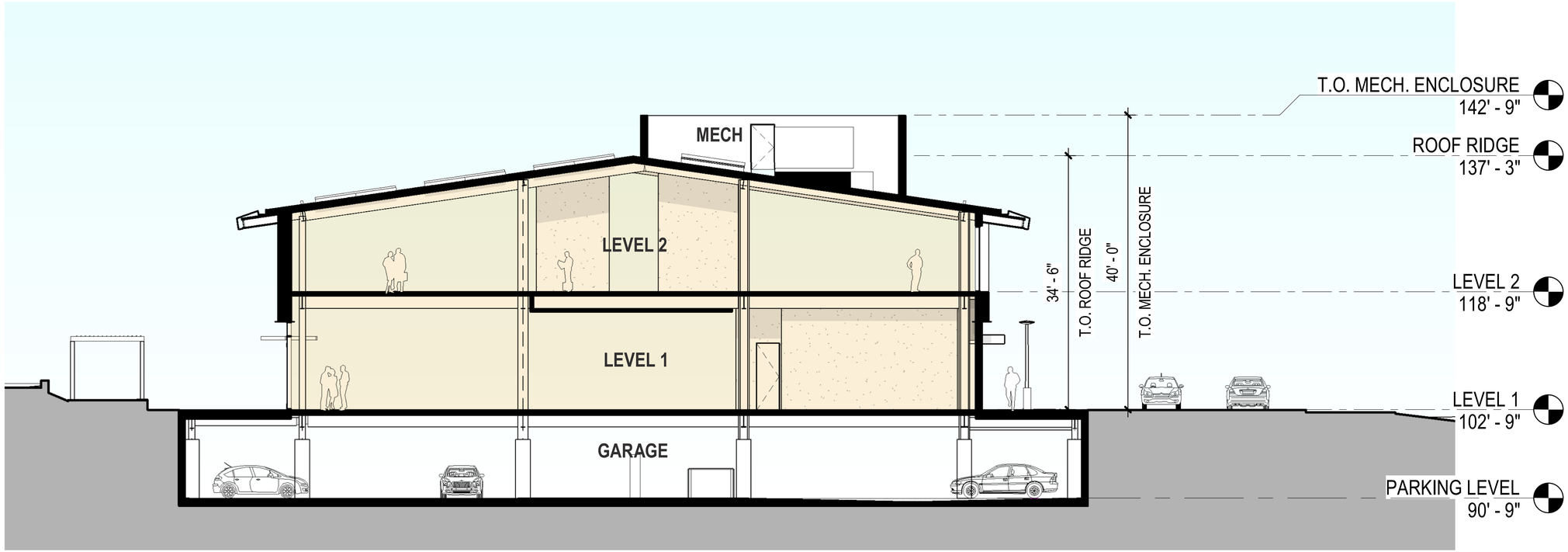
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

BUILDING ELEVATION - NORTH & WEST

A2.7



0 4 8 16 24

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

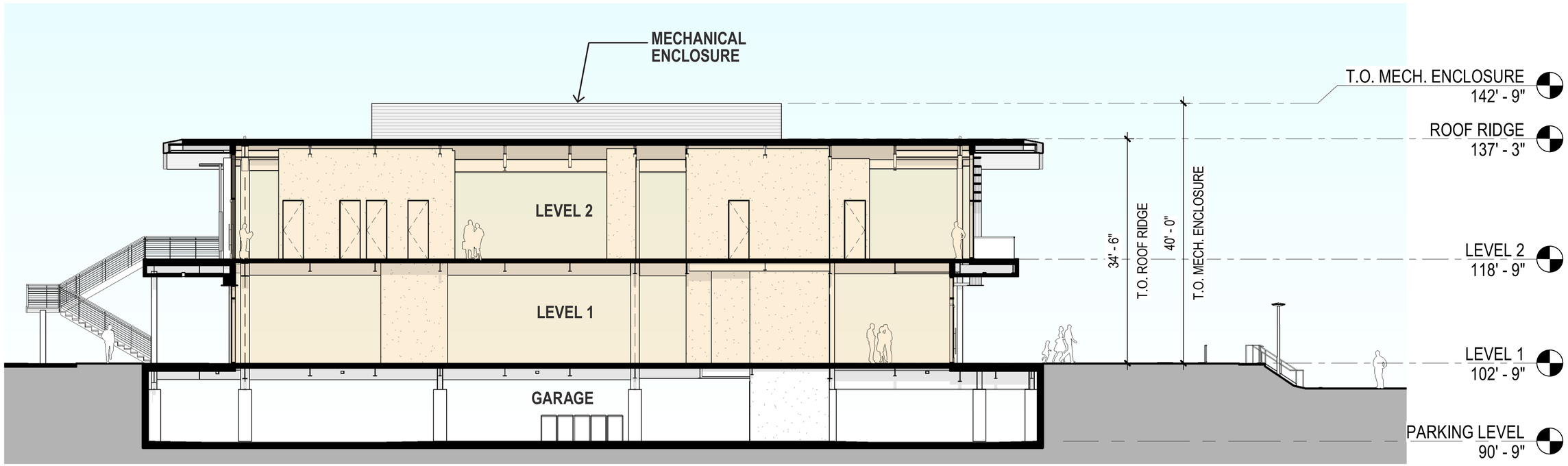
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

BUILDING SECTIONS

A2.8



0 4 8 16 24

THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

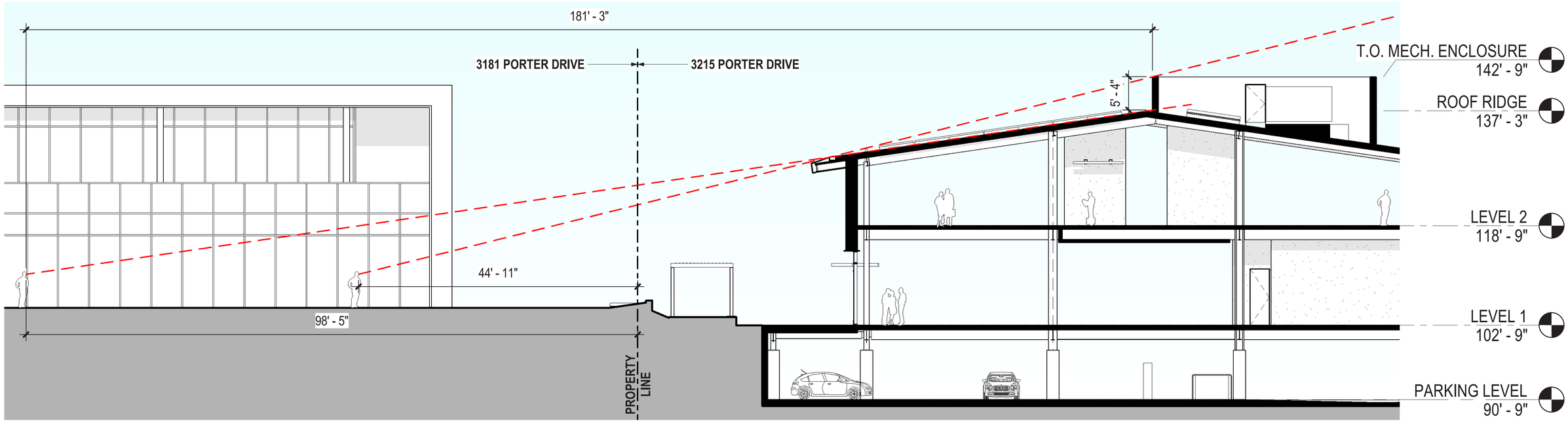
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

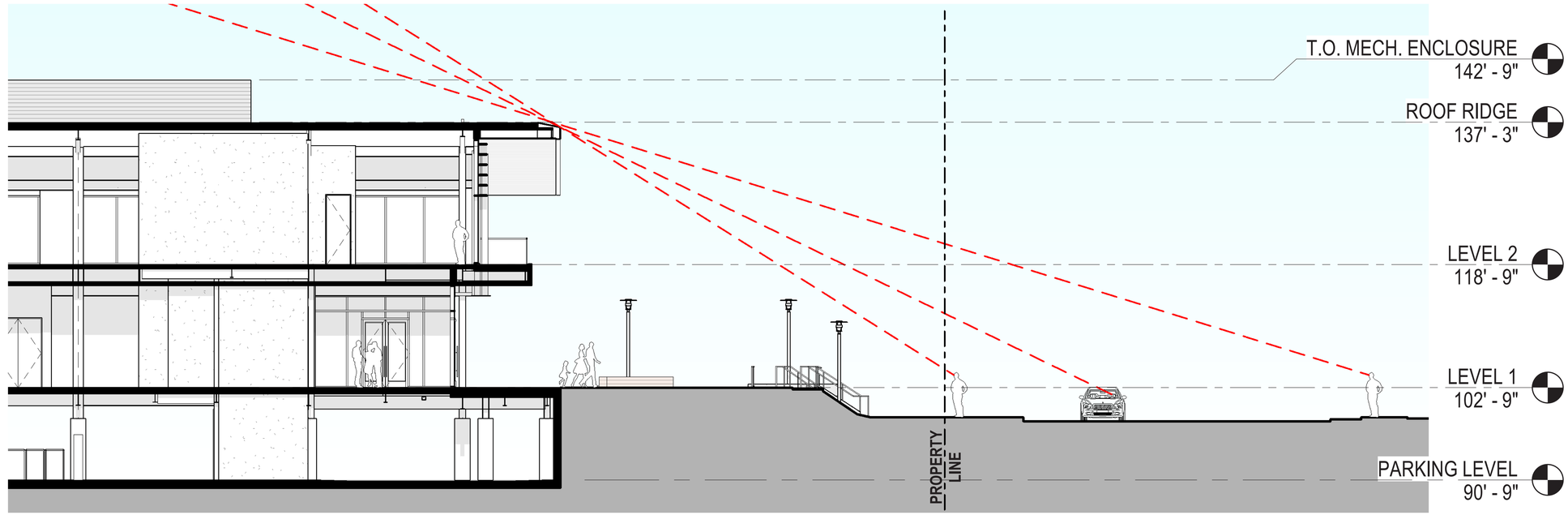
ARCHITECTURAL DESIGN

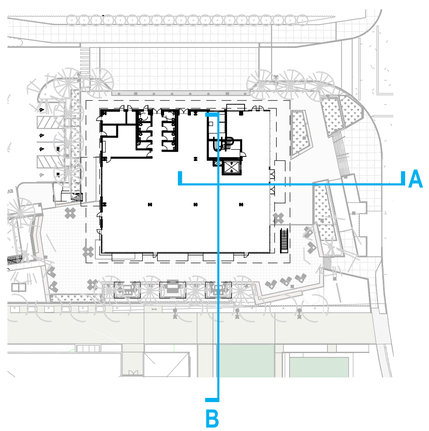
BUILDING SECTIONS

A2.9



SECTION B





SECTION A

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

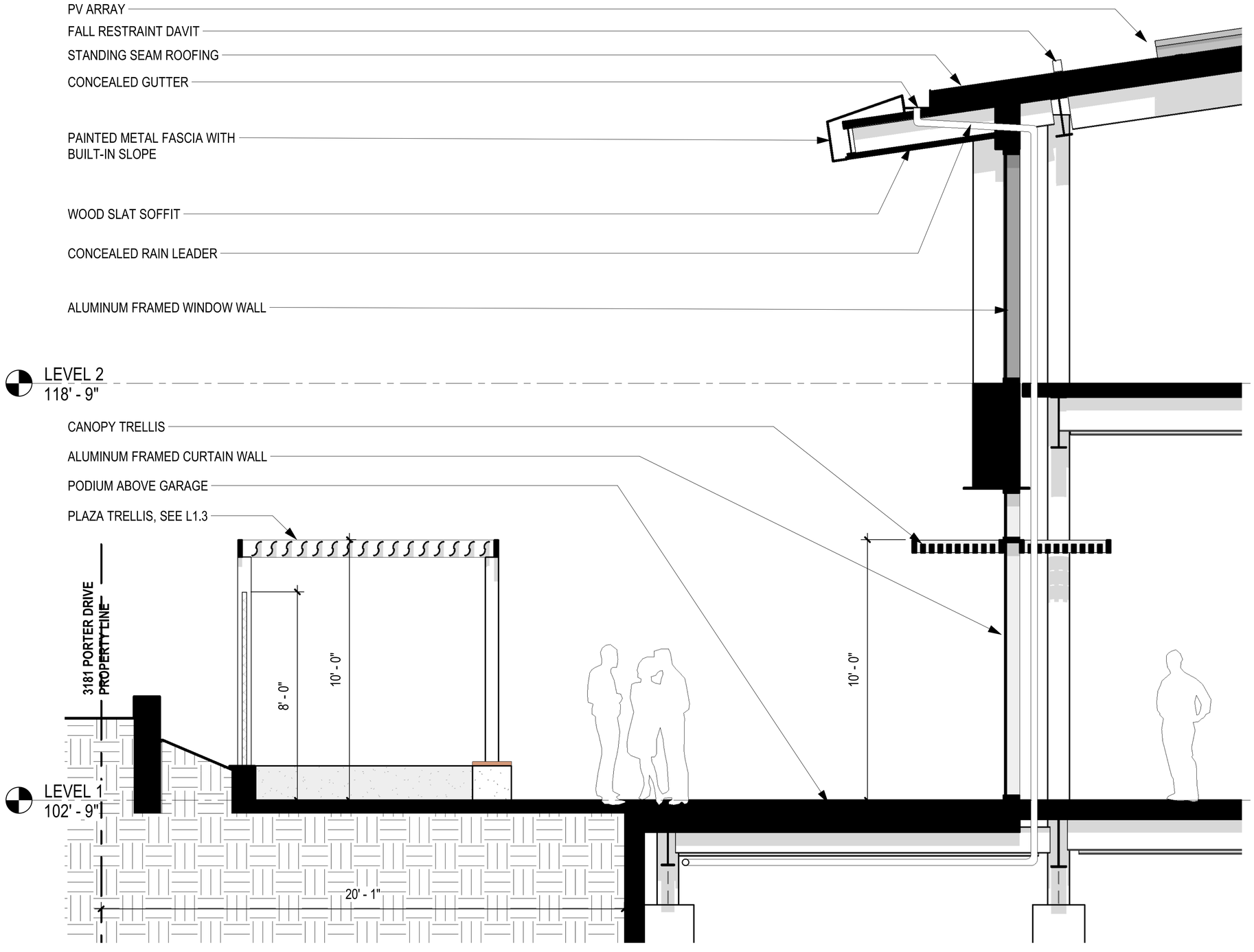
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

LINE OF SIGHT STUDY SECTIONS

A2.10



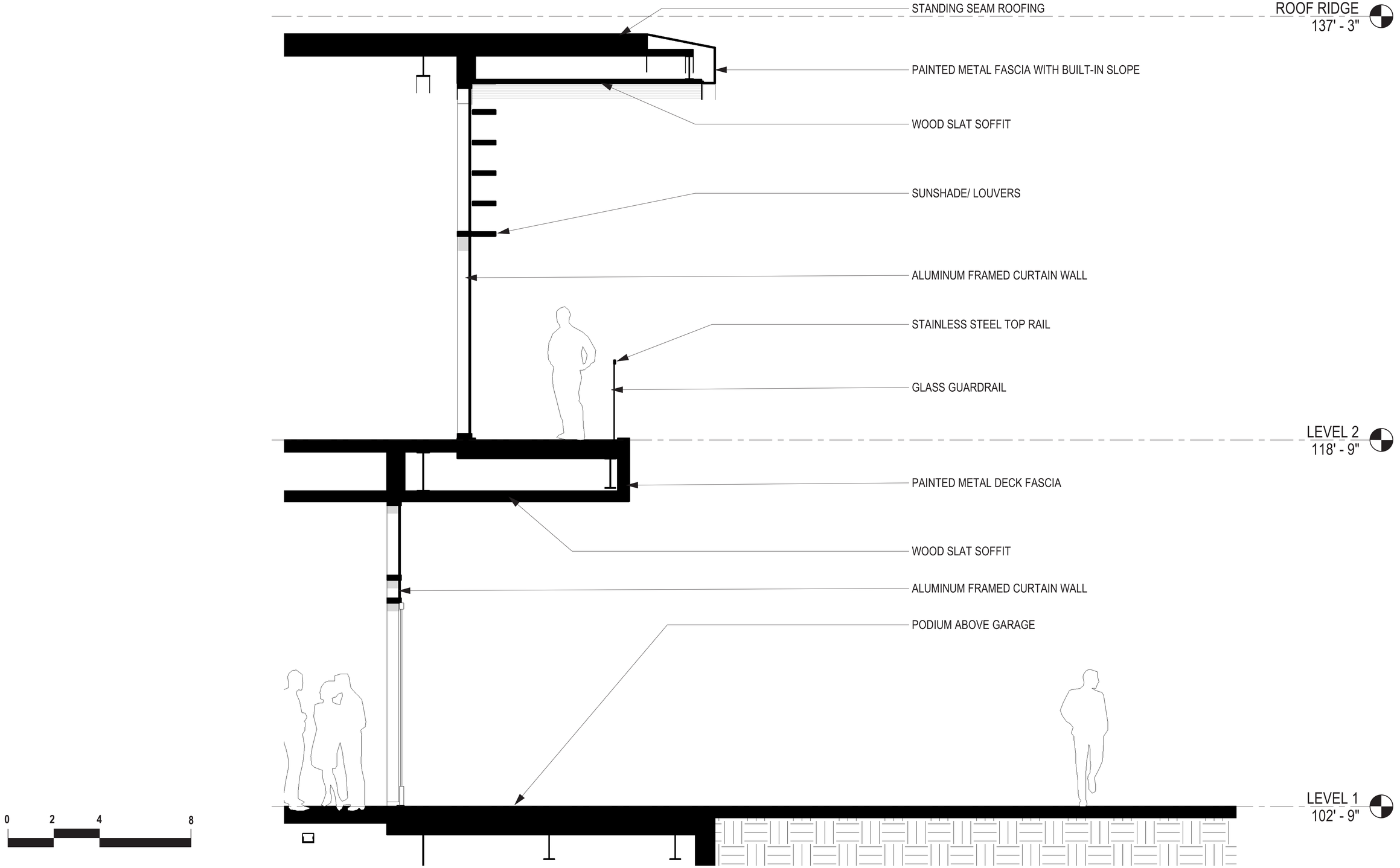
THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

WALL SECTION A2.11



THE GUZZARDO PARTNERSHIP INC.

Stanford RESEARCH PARK

STUDIOS architecture

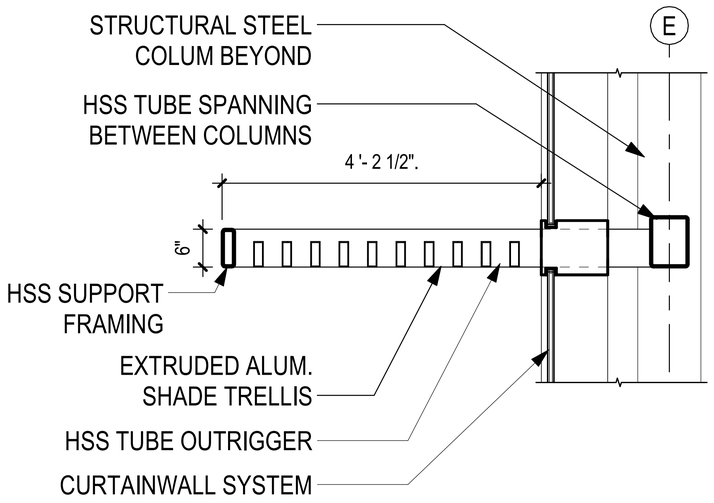
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

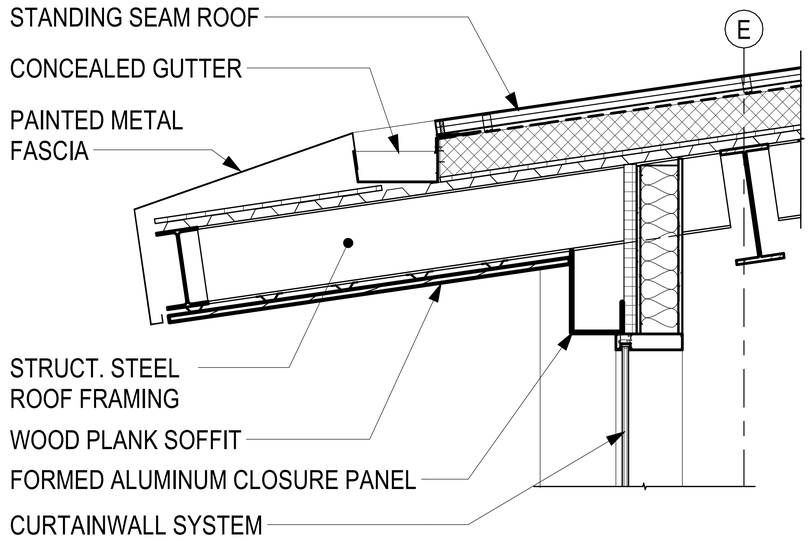
WALL SECTION

A2.12



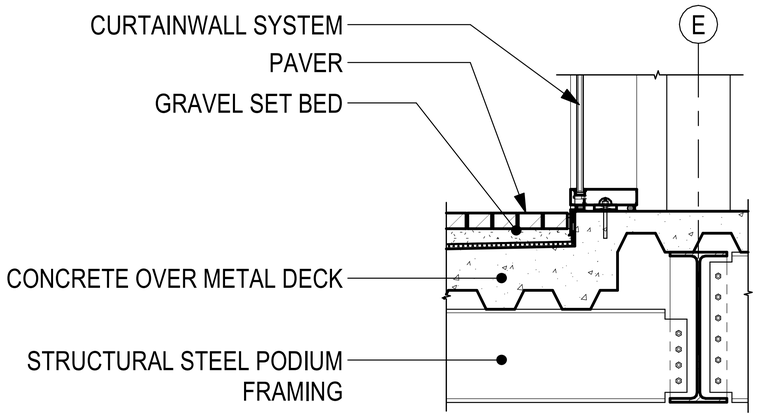
4 PLAZA TRELLIS @ CW

SCALE:



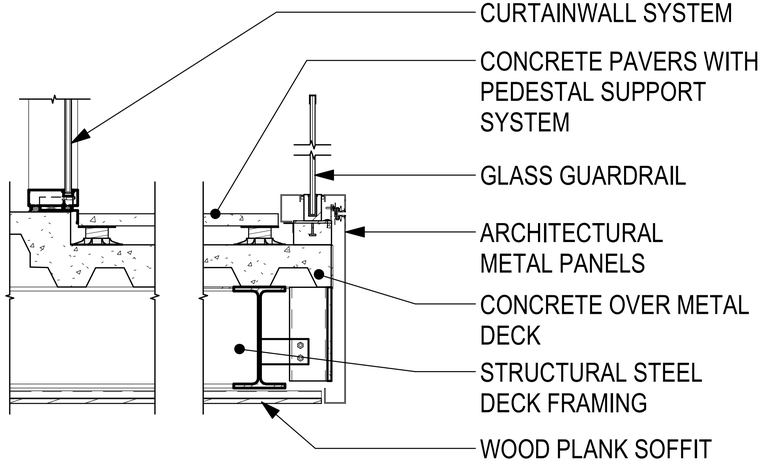
2 ROOF EAVE W/ GUTTER

SCALE:



3 PAVING DETAIL @ BUILDING

SCALE:



1 BALCONY W/ GLASS RAIL

SCALE:

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

DETAILS A2.13

SILVER METAL PANEL

PAVERS AT BALCONY

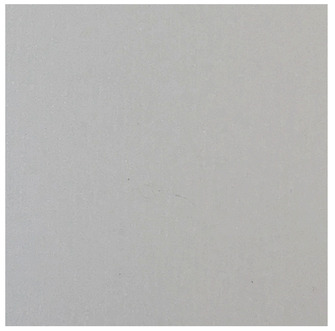
WOOD SLAT SOFFIT

GLASS

PEDESTRIAN TILE SEE SHEET L1.2

VEHICULAR ACCENT PAVING
PEDESTRIAN ACCENT PAVING SEE SHEET L1.2

P1
WHITE STRUCTURAL
& ACCENT METAL



P2
SILVER METAL
ACCENT & MULLION

P3
GREY METAL ACCENT

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

MATERIAL PALETTE A2.14

LED recessed ceiling downlights - wide beam

BEGA

Type:
BEGA Product:
Project:
Modified:

Application
LED recessed ceiling luminaire with wide beam light distribution designed for downlighting atriums, canopies, passages and other interior and exterior locations.

Materials
Luminaire housing and faceplate constructed of die-cast marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Silicone optical collimating lens
Reflector surface made of pure anodized aluminum
High temperature silicone gasket
Stainless steel screw clamps
Galvanized steep rough in ceiling pan with through wiring box

NRTL listed to North American Standards, suitable for wet locations
Protection class IP65
Weight: 2.2 lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-20° C
LED module wattage	8.3 W
System wattage	9.7 W
Controlability	0-10V dimming down to 0.1%
Color rendering index	Ra > 80
Luminaire lumens	1,181 lumens (3000K)
Lifetime at Ta=15°C	> 500,000 h (L70)
Lifetime at Ta=45°C	270,000 h (L70)

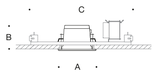
LED color temperature

☐ 4000K - Product number + **K4**
☐ 3500K - Product number + **K35**
☐ 3000K - Product number + **K3**
☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors ☐ Black (BLK) ☐ White (WHT) ☐ RAL:
☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS:



LED recessed ceiling downlights · wide beam

	LED	β	A	B	C
24 823	8.3 W	38°	5 5/8	5	18

β = Beam angle

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Updated 01/25/18

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN
LIGHTING CUTSHEETS

A2.15

PORTER HUB — PLANNING/ZONING ANALYSIS

SITE SUMMARY			PALO ALTO MUNICIPAL CODE (PAMC)
Site Area	1.671	72790 SF	
Zone	RP - Research Park District		PAMC, Chapter 18.20.030, Table 1; Zone Map/Page 11; Chapter 18.82
Planning District:	LM Limited Industrial/Research Park District		PAMC – Chapter 18.20.030, Table 1; Zone Map/ Page 11; Chapter 18.82
Minimum Site Area	1 Acre		PAMC, Chapter 18.20.040, Table 2
Minimum Site Width	100 Feet		PAMC, Chapter 18.20.040, Table 3
Minimum Site Depth	150 Feet		PAMC, Chapter 18.20.040, Table 4
Minimum Front Yard Setback	50 Feet		Porter Drive Special Setback
Minimum Rear Yard Setback	20 Feet		PAMC, Chapter 18.20.040, Table 2
Minimum Side Yard Setback	20 Feet		PAMC, Chapter 18.20.040, Table 2

ALLOWABLE AREA + HEIGHT			
Maximum Site Coverage	30%	21837 SF	PAMC, Chapter 18.20.040, Table 2
Maximum Floor Area Ratio (FAR)	0.4 : 1	29116 SF	PAMC, Chapter 18.20.040, Table 2
Maximum Height	35 Feet		PAMC, Chapter 18.20.040, Table 2

PARKING REQUIREMENTS		
1 Space for each 300 gross square feet	20,833	
Parking Spaces Required	70 Cars	PAMC, Chapter 18.52.040, Table 1
Accessible Parking Stalls		PAMC, Chapter 18.83.070
No paved areas within 5 feet of property lines		
Min 1 Carpool / Vanpool space		
Bike Parking (10%) 1 per 3000 sf	7 Spaces	
EV Charging (5% min; 25% future)	4 Spaces	

Service Areas	Screened from view	PAMC, Chapter 18.52.040, Table 1; SRPH Site Planning Table
Surface Drainage	Must be contained on site	SRPH
Utilities	Lines Underground; equipment screened from view	SRPH
Rooftop Equipment	Screened, with screen appearing as an integral part of the building design Maximum 15 feet above roof, min 20 feet from building edge closest to residential site or min 100 feet from residential property line	SRPH PAMC, Chapter 18.20.040, Table 2 € (3)
Bicycle Circulation and Parking:	Must be incorporated into site design 7 Spaces (Min 10% of Auto Parking) 80% Class I Parking (long term parking) 20% Class II Parking (short term parking)	SRPH
Pedestrian Circulation	5 foot wide; required at street frontage and from street to buildings	SRPH PAMC, Chapter 18.83.050© - Table 1
Fences	None permitted in street-side setback; 8 feet maximum other places; 6 feet maximum at refuse areas	SRPH

3215 PORTER DRIVE — BUILDING CODE ANALYSIS — CBC 2016

BUILDING CLASSIFICATIONS		SECTION 302.1	
Occupancy Group	A / S2		1-hour separation betw. Garage and office building
A (office with assembly)	A / B	Section 303.4	Mixed Use / Non-Separated Occupanicies (Section 508.3.3
S-2 (Basement parking garage, enclosed)		Section 311.3	
Construction Type	II-B	Section 603.1	
Non High Rise	< 75 feet to top occupied Floor	Section 202 Definitions	
Fully Sprinklered			
ALLOWABLE AREA		**CHAPTER 5**	
Max # Stories	3	Table 504.4	2 stories over 1 level basement garage proposed
Max Height	55	Table 504.3	34'-6: proposed
ACTUAL AREA			
Level 1	10,721		
Level 2	11,212		
Basement Garage	0		
	21,933		
REQUIRED SEPARATION / OCC GROUPS		**TABLE 508.4**	
A / S2	1 Hr - S	Table 508.4	A separation from S-2 parking, fully sprinklered
FIRE RESISTIVE REQUIREMENTS		**TABLE 601**	
Structural Frame	NR		Rating required at supporting structure of shaft walls, etc.
Exterior and Interior Bearing Walls	NR		
Nonbearing Interior Partitions	NR		
Shaft Enclosures	1 Hr	Section 713.4	
Floor Construction	NR		Rating required at supporting structure of shaft walls, etc.
Roof Construction	NR		
Stairway Construction	NC		
EXTERIOR WALL FIRE RESISTANCE RATING		**TABLE 602**	
Less than 5 feet	1 Hr	A-2	
Between 5 and 10 feet	1 Hr	A-2	
Between 10 and 30 feet	NR	A-2	
Greater than 30 feet	NR	A-2	Proposed face of builidng is greater than 30' all sides.
EXITS AND TRAVEL DISTANCE			
Enclosed Parking Garage	Two exits required below 500 occupants. S-2 = 200sf/occ. = approx. 200 occupants.	Section 406.5 Section 406.6 Table 1004.1.2	
Travel Distance	A3 with sprinkler: 250' S2 with sprinkler: 400'	Table 1017.2	
Exit Separation	1/3 maximum diagonal distance	Section 1007.1.1	

PLUMBING FIXTURE SUMMARY (PER CPC TABLE 422.1)

			Occupants per CPC chapter 4 Table A		Men	Women	M-WC	W-WC	M-U	M-L	W-L	Drink Fountain	Service Sink	Showers	
Total Building		18686 SF													
A-3 OCC - TERRACES	20%	3737.2 SF	1:30	125	100	100	3	8		2	3				
B OCC	80%	14948.8 SF	1:200	75			11		2	5		2	1	2	TOTAL FIXTURES REQUIRED
			Total Occupants	200											
												To be provided in future interior improvements		To be provided in future interior improvements.	
							13*		4	13*			2		TOTAL FIXTURES PROVIDED
							2.0		2.0	8.0			1.0		TOTAL FIXTURES PROVIDED - TOTAL FIXTURES REQUIRED

*Restrooms will be considered gender-neutral

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

CODE SUMMARY

A2.16

5.1 Planning and Design		Code Section	Y	N	Plan Sheet, Spec or Attachment Reference	Compliance Path Verification: Plan Check CORR	Plan Check INITIAL	Rough GB Inspection IVR # 152 CORR	Rough GB Inspection IVR # 152 INITIAL	Final Inspection IVR # 153 Part 1 CORR	Final Inspection IVR # 153 Part 1 INITIAL	Final Inspection IVR # 153 Part 2 CORR	Final Inspection IVR # 153 Part 2 INITIAL
Mandatory	Mandatory	Storm water pollution prevention	5.106.1	X	BKF	□							
Mandatory	Mandatory	Local storm water pollution prevention	PAMC 16.14.290/ 5.106.1.1	X	BKF	□							
Mandatory	Mandatory	Best management practices	5.106.1.2	X	BKF	□							
Mandatory	Mandatory	Bicycle parking	PAMC 18.54.060/ 5.106.4	X	Studios								
Mandatory	Mandatory	Short term bicycle parking	5.106.4.1.1	X	Studios	□				□		□	
Mandatory	Mandatory	Long term bicycle parking	5.106.4.1.2	X	Studios	□				□		□	
Mandatory	Mandatory	(Bicycle) Parking stall markings	5.106.5.2.1	X	Studios								
Tier 2 Mand.	Tier 2 Mand.	Designated parking - 12% of Parking Capacity	A5.106.5.1.2	X	Studios	□				□		□	
Tier 2 Mand.	Tier 2 Mand.	Electric Vehicle (EV) Charging for Non-Residential Structures (EVSE) [N]- New Construction, Shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 25% of parking spaces, among which at least 5% (and no fewer than one) shall be EVSE Installed.	PAMC 16.14.430/ A5.106.5.3.2	X	Mazetti	□		See EVSE Checklist					
					Mazetti								
Mandatory	Mandatory	Light pollution reduction	PAMC 16.14.295/ 5.106.8	X	Mazetti	□				□		□	
Mandatory	Mandatory	Grading and paving (exception for additions and alterations not altering the drainage path)	5.106.10	X	BKF	□		PW					
Tier 2 Mand.	Tier 2 Mand.	Cool roof for reduction of heat island effect: SRI of 82 ≤ 2:12 and SRI of 27 > 2:12	A5.106.11.2	X	Studios	□				□			
Electives (choose 3)	Electives	Community connectivity	A5.103.1	X	Studios	□							
Electives (choose 3)	Electives	Brownfield or greyfield site redevelopment or infill area development	A5.103.2	X	Studios/Mazetti	□							
Electives (choose 3)	Electives	Reduce development footprint and optimize open space	A5.104.1	X	Studios/Mazetti	□							
Electives (choose 3)	Electives	Existing building structure (75%)	A5.105.1.1	X		□							
Electives (choose 3)	Electives	Existing non-structure elements (50%)	A5.105.1.2	X		□							
Electives (choose 3)	Electives	Salvage	A5.105.1.3	X		□							
Electives (choose 3)	Electives	Storm water runoff rate and quantity	A5.106.2.1	X	BKF	□							
Electives (choose 3)	Electives	Storm water runoff quality	A5.106.2.2	X	BKF	□							
Electives (choose 3)	Electives	Low impact development (LID)	A5.106.3	X	BKF/Guzzardo	□							
Electives (choose 3)	Electives	Greyfield or infill site	A5.106.3.2	X		□							
Electives (choose 3)	Electives	Changing rooms	A5.106.4.3	X		□							
Electives (choose 3)	Electives	Parking capacity	A5.106.6	X	Studios	□							
Electives (choose 3)	Electives	Reduce parking capacity	A5.106.6.1	X		□							
Electives (choose 3)	Electives	Exterior wall shading: Fenestration- East and west walls	A5.106.7.1.1	X		□							
Electives (choose 3)	Electives	Exterior wall shading: Fenestration- South walls	A5.106.7.1.2	X		□							
Electives (choose 3)	Electives	Exterior wall shading: Opaque wall areas	A5.106.7.2	X		□							
Electives (choose 3)	Electives	Heat island effect: Hardscape alternatives and cool roof reduction	A5.106.11	X		□							
Electives (choose 3)	Electives	Heat island effect: Cool roof for reduction of heat island	A5.106.11.2	X									
Electives (choose 3)	Electives	Heat island effect: Solar reflectance	A5.106.11.2.1	X		□							
Electives (choose 3)	Electives	Heat island effect: Thermal emittance	A5.106.11.2.2	X		□							
Electives (choose 3)	Electives	Heat island effect: Solar reflectance index alternative	A5.106.11.2.3	X		□							
PAMC 16.17 Energy Reach Code													
Mandatory	Mandatory or	Option 1: Performance approach specified within the 2016 California Energy Code shall be used to demonstrate that the TDV Energy of proposed non-residential construction is at least: Ten percent less than TDV energy of the Standard Design if the proposed building does not include a photovoltaic system or includes a photovoltaic system smaller than 4kW.	PAMC 16.17.050/ Title 24, Part 6	X	Palo Alto Building Inspector will verify Title 24 Energy Compliance in the Field.	□		See Energy Ace Checklist					
Mandatory	Mandatory	Option 2: Performance approach specified within the 2016 California Energy Code shall be used to demonstrate that the TDV Energy of proposed non-residential construction is at least: Equal to the TDV Energy of the Standard Design if the proposed building includes a 5kW or greater photovoltaic system.	PAMC 16.17.050/ Title 24, Part 6	X	Palo Alto Building Inspector will verify Title 24 Energy Compliance in the Field.	□		See Energy Ace Checklist					
Mandatory	Mandatory	All Electric Exemption: Non-residential construction designed to be all-electric shall be exempt from the Local Energy Efficiency Reach Code. Electricity shall be the only permanent source of energy for water-heating, space-heating, cooking and clothes drying. Compliance to all other requirements of the 2016 California Energy Code shall not be relieved.	PAMC 16.17.060 Section 100.4 / Title 24, Part 6		Palo Alto Building Inspector will verify Title 24 Energy Compliance in the Field.	□							
Mandatory	Mandatory	Energy Star portfolio manager- All new construction or renovation projects greater than $100,000 in value	PAMC 16.14.380/ 5.410.4.6	X	Stanford	□				□	□	□	□
Mandatory	Mandatory	Performance Review- For projects over 10,000 SF	PAMC 16.14.390/ 5.410.4.7	X	Beyond Efficiency/Mazzetti	□				□	□	□	□
5.3 Water Efficiency and Conservation													
Mandatory	Mandatory	Meters	5.303.1	X	Steve Reade	□		□					
Mandatory	Mandatory	New buildings or additions in excess of 50,000 square feet	5.303.1.1	X	Steve Reade	□		□					
Mandatory	Mandatory	Excess consumption (Submeters for additions that consume over 1,000 gal/ day)	5.303.1.2	X	Steve Reade	□		□					
Tier 2 Mand.	Tier 2 Mand.	Water Reduction- 20% savings over the "water use baseline" Table A5.303.2.3.1	A5.303.2.3.2	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Water closets (shall not exceed 1.28 gallons per flush)	5.303.3.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Wall-mounted urinals (0.125gpf)	5.303.3.2.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Floor-mounted urinals (0.5 gpf)	5.303.3.2	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Single showerhead (1.8 gpm at 80 psi)	5.303.3.3.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Multiple showerheads serving one shower (flow rate of 1.8 gpm at 80 psi)	5.303.3.3.2	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Nonresidential lavatory faucets (0.5 gpm at 60 psi)	5.303.3.4.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Kitchen faucets (1.8 gpm at 60 psi)	5.303.3.4.2	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Wash fountains (1.8 gpm at 60 psi)	5.303.3.4.3	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Metering faucets (0.2 gallons/ cycle)	5.303.3.4.4	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Metering faucets for wash fountains (0.2 gallons/ cycle)	5.303.3.4.5	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Commercial kitchen equipment	5.303.4	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Food waste disposers	5.303.4.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor water use: Areas of addition or alteration	5.303.5	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Dual plumbing	PAMC 16.14.300/ 5.303.5	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Indoor Water Use: Standards for plumbing fixtures and fittings (2016 Cal Plumbing Code)	5.303.6	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Outdoor Water Use : Landscape areas ≥ 500 SF	Title 23, Chapter 2.7/ 5.304.1	X	Guzzardo	□				□		□	
Mandatory	Mandatory	Outdoor Water Use : Rehabilitated landscape projects ≥ 2,500 SF	Title 23, Chapter 2.7/ 5.304.3	X	Guzzard	□				□		□	
Mandatory	Mandatory	Outdoor Water Use: Landscape areas of ≤ 2,500 SF	5.304.4	X	Landscape	□				□		□	
Mandatory	Mandatory	Outdoor Water Use: Graywater or Rainwater Use: Landscape areas ≤ 2,500 SF	5.304.5	X	Landscape	□				□		□	
Mandatory	Mandatory	Potable water elimination	PAMC 16.14.350/ 5.304.5	X	Steve Reade/Guzzardo	□				□		□	
Mandatory	Mandatory	New construction; recycled water use for irrigation (See recycled water ordinance # 5002, of PAMC 16.12)	PAMC 16.12.030	X	Steve Reade/Guzzardo	□				□		□	
Mandatory	Mandatory	Invasive species prohibited	PAMC 16.14.360/ 5.304.6	X	Landscape	□				□		□	
Mandatory	Mandatory	Non-residential enhanced water budget	5.305.1	X	Landscape	□				□		□	
Electives (5)	Electives	Indoor water use: 25% reduction	A5.303.2.3.3	X	Steve Reade								
Electives (5)	Electives	Nonpotable water systems for indoor water use	A5.303.2.3.4										
Electives (5)	Electives	Appliances and fixtures for commercial application	A5.303.3	X	Studios	□				□		□	
Electives (5)	Electives	Nonwater supplied urinals	A5.303.4.1	X									
Electives (5)	Electives	Outdoor Water Use: Restoration of areas disturbed by construction	A5.304.6	X	Landscape	□							
Electives (5)	Electives	Outdoor Water Use: Previously developed sites: restore or protect 50 % of site area	A5.304.7	X	Landscape	□							
Electives (5)	Electives	Outdoor Water Use: Graywater irrigation system	A5.304.8	X	Landscape	□							
Electives (5)	Electives	Nonpotable water systems	A5.305.1		X								
Electives (5)	Electives	Irrigation system	A5.305.2	X	Landscape	□				□		□	
5.4 Material Conservation and Resource Efficiency													
Tier 2 Mand.	Tier 2 Mand.	Recycled content: Use materials with a total recycled content of 15%	A5.405.4	X	Devcon/Studios	□						□	
Mandatory	Mandatory	Weather protection	5.407.1	X	Studios	□		See Foundation Inspection checklist					
Mandatory	Mandatory	Moisture control: Sprinklers	5.407.2.1	X	Landscape	□						□	
Mandatory	Mandatory	Moisture control: Entries + Openings	5.407.2.2	X	Studios	□						□	
Mandatory	Mandatory	Moisture control: Exterior door protection	5.407.2.2.1	X	Studios	□						□	
Mandatory	Mandatory	Moisture control: Flashing	5.407.2.2.2	X	Studios	□						□	
Mandatory	Mandatory	Construction waste management	5.408.1	X	Devcon	□							
Mandatory	Mandatory	Construction waste management plan	5.408.1.1	X	Devcon	□							
Mandatory	Mandatory	Waste management company	5.408.1.2	X	Devcon	□							
Mandatory	Mandatory	Waste stream reduction alternative	5.408.1.3	X	Devcon	□							
Mandatory	Mandatory	Documentation: Construction waste management plan, waste management company, waste stream reduction alternative	5.408.1.4	X	Devcon	□							
Mandatory	Mandatory	Excavated soil and land clearing debris (100% reuse or recycle)	5.408.3	X	BKF/Devcon	□							
Tier 2 Mand.	Tier 2 Mand.	Enhanced construction waste reduction (80% diversion rate for projects exceeding $25,000 in value; 65% diversion rate for projects less than $25,000)	PAMC 16.14.370/ A5.408.3.1.1	X	Devcon	See www.greenhalosystems.com							
				x	Devcon								
Mandatory	Mandatory	Recycling by occupants	5.410.1	X	Arch	□							
Mandatory	Mandatory	Commissioning (≥ 10,000 SF) [N]	5.410.2	X	CxA	□		□		□			
Mandatory	Mandatory	Commissioning plan [N]	5.410.2.3	X	CxA	□							
Mandatory	Mandatory	Functional performance testing [N]	5.410.2.4	X	CxA								
Mandatory	Mandatory	Documentation and Training: Systems manual	5.410.2.5	X	CxA								
Mandatory	Mandatory	Documentation and Training: Systems operations training [N]	5.410.2.5.2	X	CxA								
Mandatory	Mandatory	Commissioning report [N]	5.410.2.6	X	CxA								
Mandatory	Mandatory	Testing and adjusting for [N] buildings < 10,000 SF or new systems that serve additions or alterations [AA]	5.410.4	X	CxA	□				□			
Mandatory	Mandatory	Testing and adjusting for systems: HVAC, lighting, water heating, renewable energy, landscape irrigation, and water	5.410.4.2	X	CxA	□				□			
Mandatory	Mandatory	Testing and adjusting: Procedures	5.410.4.3	X	CxA	□				□			
Mandatory	Mandatory	Testing and adjusting: HVAC balancing	5.410.4.3.1	X	CxA	□				□			
Mandatory	Mandatory	Testing, adjusting and balancing: Reporting for HVAC balancing	5.410.4.4	X	CxA	□				□			
Mandatory	Mandatory	Operation and maintenance (O&M) manual	5.410.4.5	X	CxA								
Mandatory	Mandatory	Performance reviews- Water (sites > 1 acre)	PAMC 16.14.400/ 5.410.4.8	X	Guzzardo								
Mandatory	Mandatory	Inspection and reports [AA] + [N] < 10,000 SF	5.410.4.5.1	X	CxA	□				□			

5.4 Material Conservation and Resource Efficiency, continued		Section	Y	N	Plan Sheet, Spec or Attachment Reference	Compliance Path Verification: Plan Check CORR	Plan Check INITIAL	Rough GB Inspection IVR # 152 CORR	Rough GB Inspection IVR # 152 INITIAL	Final Inspection IVR # 153 Part 1 CORR	Final Inspection IVR # 153 Part 1 INITIAL	Final Inspection IVR # 153 Part 2 CORR	Final Inspection IVR # 153 Part 2 INITIAL
Electives (choose 3)	Electives	Wood Framing: Structural or fire-resistance integrity	A5.404.1.1										
Electives (choose 3)	Electives	Wood Framing: Framing specifications	A5.404.1.2										
Electives (choose 3)	Electives	Regional materials	A5.405.1	X	Devcon	□				□			
Electives (choose 3)	Electives	Bio-based materials: Certified wood	A5.405.2.1	X	Studios/Devcon								
Electives (choose 3)	Electives	Bio-based materials: Rapidly renewable materials	A5.405.2.2										
Electives (choose 3)	Electives	Reused materials	A5.405.3										
Electives (choose 3)	Electives	Alternate method for concrete	A5.405.4.5										
Electives (choose 3)	Electives	Cement and concrete: Cement	A5.405.5.1										
Electives (choose 3)	Electives	Cement and concrete: Concrete	A5.405.5.2										
Electives (choose 3)	Electives	Additional means of compliance- Cement: Alternative fuels	A5.405.5.3.1.1										
Electives (choose 3)	Electives	Additional means of compliance- Cement: Alternative power	A5.405.5.3.1.2										
Electives (choose 3)	Electives	Additional means of compliance- Concrete: Alternative energy	A5.405.5.3.2.1										
Electives (choose 3)	Electives	Additional means of compliance- Concrete: Recycled aggregate	A5.405.5.3.2.2	X	Devcon								
Electives (choose 3)	Electives	Additional means of compliance- Concrete: Mixing water	A5.405.5.3.2.3										
Electives (choose 3)	Electives	Additional means of compliance- Concrete: High strength concrete	A5.405.5.3.2.4										
Electives (choose 3)	Electives	Choice of materials: Service life	A5.406.1.1	X	Studios								
Electives (choose 3)	Electives	Choice of materials: Reduced maintenance	A5.406.1.2	X	Studios	□				□			
Electives (choose 3)	Electives	Choice of materials: Recyclability	A5.406.1.3			□				□			
Electives (choose 3)	Electives	Life Cycle Assessment shall be ISO 14044 compliant	A5.409.1			□				□			
Electives (choose 3)	Electives	Whole building life cycle assessment	A5.409.2			□							
Electives (choose 3)	Electives	Materials and system assemblies	A5.409.3			□				□			
Electives (choose 3)	Electives	Substitution of prescriptive standards	A5.409.4			□				□			
Electives (choose 3)	Electives	Verification of compliance	A5.409.5			□				□			
5.5 Environmental Quality													
Mandatory	Mandatory	Fireplaces	5.503.1		n/a	□				□		□	
Mandatory	Mandatory	Temporary ventilation (MERV 8)	5.504.1.3	X	Steve Reade	□		□		□			
Mandatory	Mandatory	Covering of duct openings and protection of mechanical equipment during construction	5.504.3	X	Devcon	□		□		□			
Mandatory	Mandatory	Adhesives, sealants and caulks: Comply with VOC limits (Table 5.504.4.1 and 5.504.4.2)	5.504.4.1	X	Specifications/Devcon	□				□			
Mandatory	Mandatory	Paints and Coatings: Comply with VOC Limits (Table 5.504.4.3)	5.504.4.3	X	Specifications/Devcon								
Mandatory	Mandatory	Aerosol paints and coatings	5.504.4.3.1	X	Specifications/Devcon								
Mandatory	Mandatory	Verification, for paints and coatings	5.504.4.3.2										
Mandatory	Mandatory	Carpet systems: Carpet cushion	5.504.4.4.1	X	Studios	□							
Mandatory	Mandatory	Carpet systems: Carpet adhesive	5.504.4.4.2	X	Studios	□							
Mandatory	Mandatory	Composite wood products: Formaldehyde limits (Table 5.504.4.5)	5.504.4.5	X	All team for applicable materials	□				□			
Mandatory	Mandatory	Composite wood products: Documentation	5.504.4.5.3	X	All team for applicable materials	□							
Tier 2 Mand.	Tier 2 Mand.	Resilient Flooring system, 100%	A5.504.4.7.1	X	Studios	□				□			
Tier 2 Mand.	Tier 2 Mand.	No added formaldehyde- Tier 2 level	A5.504.4.8.1	X	Studios								
Tier 2 Mand.	Tier 2 Mand.	Thermal Insulation	A5.504.4.8.1	X	Studios								
Tier 2 Mand.	Tier 2 Mand.	Filters (MERV 13)	A5.504.5.3.1.1	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Environmental tobacco smoke (ETS) control	5.504.7	X	Steve Reade	□							
Mandatory	Mandatory	Outside air delivery (For Indoor Air Quality)	5.506.1	X	Steve Reade	□							
Mandatory	Mandatory	Carbon dioxide (CO2) monitoring (For Indoor Air Quality)	5.506.2	X	Steve Reade	□				□		□	
Mandatory	Mandatory	Acoustical control (STC Values per ASTM E90 and ASTM E413)	5.507.4	X	Acoustics	□							
Mandatory	Mandatory	Exterior noise transmission, prescriptive method	5.507.4.1	X	Acoustics	□							
Mandatory	Mandatory	Exterior noise transmission, performance method	5.507.4.2	X	Acoustics	□							
Mandatory	Mandatory	Interior sound transmission	5.507.4.3	X	Acoustics	□							
Mandatory	Mandatory	Ozone depletion and greenhouse gas reductions	5.508.1	X	Steve Reade	□							
Mandatory	Mandatory	Chlorofluorocarbons	5.508.1.1	X	Steve Reade	□							
Mandatory	Mandatory	Halons	5.508.1.2	X	Steve Reade	□							
Mandatory	Mandatory	Supermarket refrigerant leak reduction	5.508.2		n/a	□				□			
Mandatory	Mandatory	Refrigerant piping	5.508.2.1	X	Steve Reade	□				□			
Mandatory	Mandatory	Refrigerant piping valves	5.508.2.2	X	Steve Reade	□				□			
Mandatory	Mandatory	Refrigerant piping access valves	5.508.2.2.2	X	Steve Reade	□				□			
Mandatory	Mandatory	Refrigerated service case	5.508.2.3	X	Steve Reade	□				□			
Mandatory	Mandatory	Refrigerant receivers	5.508.2.4	X	Steve Reade	□				□			
Mandatory	Mandatory	Pressure testing	5.508.2.5	X	Steve Reade	□							
Mandatory	Mandatory	Evacuation (after pressure testing)	5.508.2.6	X	Steve Reade	□							
Electives	Electives	Indoor air quality (IAQ) during constructions: Temporary ventilation	A5.504.1.1	X	Steve Reade/Devcon	□							
Electives	Electives	Indoor air quality (IAQ) during constructions: Additional IAQ measures	A5.504.1.2	X	Steve Reade/Devcon	□							
Electives	Electives	IAQ postconstruction	A5.504.2			□				□			
Electives	Electives	IAQ testing	A5.504.2.1			□				□			
Electives (choose 3)	Electives	Maximum levels of contaminants	A5.504.2.1.1										
Electives (choose 3)	Electives	Test protocols	A5.504.2.1.2										
Electives (choose 3)	Electives	Noncomplying building areas	A5.504.2.1.3										
Electives (choose 3)	Electives	No added formaldehyde- Tier 2 requirement	A5.504.4.5.1	X	Studios								
Electives (choose 3)	Electives	Acoustical ceiling and wall panels	A5.504.4.9										
Electives (choose 3)	Electives	Hazardous particulates and chemical pollutants	A5.504.5										
Electives (choose 3)	Electives	Entryway systems (to control pollutants)	A5.504.5.1										
Electives (choose 3)	Electives	Isolation of pollutant sources (to control pollutants)	A5.504.5.2	X	Mechanical/Contractor	□							
Electives (choose 3)	Electives	Lighting and thermal comfort controls: Single occupant spaces- Lighting and Thermal	A5.507.1.1.1			□	□						
			A5.507.1.1.2										
Electives (choose 3)	Electives	Lighting and thermal comfort controls: Multi-occupant spaces	A5.507.1.2			□							
Electives (choose 3)	Electives	Daylight: Toplighting and sidelighting	A5.507.2			□							
Electives (choose 3)	Electives	Views: Direct line of sign to outdoors	A5.507.3.1			□							
Electives (choose 3)	Electives	Views- Multi-occupant spaces	A5.507.3.2										
Electives (choose 3)	Electives	Hydro-chlorofluorocarbons (HCFCs) (for HVAC and refrigeration equipment)	A5.508.1.3	X	Steve Reade	□							
Electives (choose 3)	Electives	Hydro-fluorocarbons (HFCs) (for HVAC, refrigeration and fire suppression equipment)	A5.508.1.4			□							
Required Additional Electives (Choose 3 additional Electives from any category)			**A5.601.3.1**										
Mandatory	Tier 2 Mand.		A5.601.3.1		Team to Select	□							
Mandatory	Tier 2 Mand.		A5.601.3.1		Team to Select	□							
Mandatory	Tier 2 Mand.		A5.601.3.1		Team to Select	□							

Legend:
Y - Yes; the measure is selected as mandatory
N - No; the measure is not selected as an elective
[N] - New Construction

Instructions:

The Green Building Survey is a required project submittal. The survey can be found at the following link. The survey shall be completed on Survey Monkey and a screenshot shall be included on a separate page in this plan set. Please indicate the reference page here _____.

The Energy Star Benchmark Portfolio profile is a required project submittal. The profile can be found at the following link. The portfolio profile shall be opened and a screenshot shall be included on a separate page in this plan set. Please indicate the reference page here _____.

SCHEDULE A GREEN BUILDING INCREMENTAL VERIFICATION (IVR#152) DURING ROUGH INSPECTION

Schedule a Green Building Incremental Verification (IVR#152) if any of the following CALGreen provisions or PAMC Sections are marked with an "X" under the "Y" column of this sheet.

- CALGreen 5.303.1.1 Separate Meters
- CALGreen 5.303.1.2 Separate Meters
- PAMC 16.14.190 Recycled Water Interior Infrastructure
- PAMC 16.14.230 Recycled Water for Irrigation
- CALGreen 5.504.1.3 Temporary Ventilation
- CALGreen 5.504.3 Duct & HVAC Protection
- CALGreen A5.504.1 IAQ During Construction

SECTION TO BE COMPLETED AFTER CONSTRUCTION

In order to schedule a final building inspection with the Building Department, follow the procedures below.

☐ Schedule a **two-part** Final Green Building Inspection with the City Green Building Personnel in accordance with the Palo Alto Non-Residential Green Building Inspection Guideline.

☐ At Part 1 of the Final Green Building Inspection prepare all submittals and supporting documentation for the items identified with a "X" under the "Y" column of this sheet in accordance with the Green Building Inspection Guideline.

☐ At Part 2 of the Final Green Building Inspection prepare for a field inspection for the items identified with a "X" under the "Y" column of this sheet in accordance with the Green Building Inspection Guideline.

I certify that:

☐ There have been no alterations that have impacted the energy report for the project, unless the new report is provided.

☐ All mandatory CALGreen measures and required electives noted in the checklist have been implemented, unless a new checklist is provided along with support for alternative electives claimed.

☐ Within six months (6) from the date of final inspection I will provide the City with the project's Commissioning Report (only required for new projects over 10,000 SF) and execute compliance with landscaping measures, unless completed at the time of final inspection.

Signature (Owner)	Signature (Contractor)
Sign only after construction is completed.	
Print Name	Print Name
Date	Date

THE GUZZARDO PARTNERSHIP INC.
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARCHITECTURAL DESIGN

PRELIMINARY CAL GREEN CHECKLIST

A2.17

Note: Bike lockers are located in underground garage.
See Sheet A1.7 for Quantites and A2.1 for Plan

Tree Protection Fencing
Parking Lot Trees with Structural Soil
Parking Lot Lights, E2
Electrical Transformer
Removable Bollards at Transformer
SUBSTATION
Stormwater Treatment Planter
Vehicular Pavers, PV2
Property Line
Provide hinge slab at structure paving interfaces.
Pedestrian Walkway
Bollards, F8
HANOVER STREET
HILLVIEW AVE
Signage Wall, W1
Intersection View Triangle
Existing Trees to Remain
GWET
Pedestrian Paver, PV1–3
Trash Room (In Building)
Visitor & Bikeshare Parking, F1
Stormwater Treatment Planters
Seatwall, W3
Pole Lights, E2
Bike Stairway Channel
Porter Transit Plaza Steps
Bike Stairway Channel
Property Line
Sloped Walkway (<5%), PV 1–1
Bench Seating, F3
Existing Transit Stop to Remain
Pedestrian Paver, PV1–3
Raised Planter at Top of Garage Ramp
Vehicular Barrier Rail at Garage Ramp (Garage Wall)
Decorative Gravel, PV4
3215 PORTER BUILDING
Planter Pots, F6
Pedestrian Walkway, PV 1–1
Tree Protection Fencing
Seatwall, W3
Bike Locker, F2
Garage Stairwell
Pedestrian Tile, PV1–2
Bollard Lights, E1
Edge of Garage Slab
Specimen Oak Tree 60" box
Pedestrian Walkway, PV 1–1
Garage Ramp
Water Service Utility and Backflow Preventer Area with Landscape Screening
GWET Service Drive
Pedestrian Connection to 3181 Porter Site
Property Line
Tree Protection Fencing
Community Table, F8
Existing Lights
Terraced Seating, W3
Existing Trees on 3181 Porter to Remain
Pedestrian Ramp, PV 1–1
Flex Game/Activity Area 22'x45' Synthetic Turf, PV5
Specimen Oak Tree, 60" box
Concrete Wall, W2
Trellis, F5
Seatwall, W3
Sofa and Coffee Table, F9
7' High Accent Wall, W4
Terraced Seating, W3
Tree Protection Fencing
Seatwall, W3
Stormwater Treatment Planter
Guardrail at Property Line, F9
3181 PORTER
Existing Bike Lockers and Trees at 3181 Porter Site
PORTER DRIVE

Scale: 1" = 30'-0"
0 15 30 60

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LANDSCAPE PLAN L1.1

LANDSCAPE COLOR AND FINISH SCHEDULE

KEY	DESCRIPTION	SIZE/COLOR/FINISH	MANUFACTURER
PAVING			
PV 1-1	PEDESTRIAN CONCRETE	Natural Gray w/ Broom Finish	
PV 1-2	PEDESTRIAN TILE	24"x24" Porcelain paver, Mortar on concrete subslab, Color Jura Beige	Belgard
PV 1-3	PEDESTRIAN PAVER	6"x12", 8cm thick pavers, Agave GSB and Lt. Gray SB, running bond pattern	Ackerstone
PV 2	VEHICULAR PAVER	6"x12", 8cm thick pavers, Agave GSB and Lt. Gray SB, running bond pattern	Ackerstone
PV 3	PEDESTRIAN STAIR AND RAMP	Cast in place concrete, w/ integral color Pebble	Davis Color
PV 4	DECORATIVE GRAVEL	2"x3", Black La Paz Pebble	Lyngso Garden Materials
PV 5	SYNTHETIC TURF	Nutmeg Lush	Heavenly Greens
WALLS			
W 1	SIGNAGE WALL	Cast in place concrete, w/ integral color Pebble	Davis Color, Kebony(or equivalent)
W 2	CONCRETE WALL	Cast in place concrete, w/ integral color Pebble	Davis Color, Kebony(or equivalent)
W 3	SEAT WALL	Cast in place concrete, w/ integral color Pebble, w/ Kebony (or equivalent) wood top	Davis Color, Kebony(or equivalent)
W 4	ACCENT WALL	With Kebony (or equivalent) wood cladding	Kebony (or equivalent)
FIXTURES			
F 1	BIKE RACK	Ring Rack, Stainless Steel	Landscape Forms
F 2	BIKE LOCKER	Model: BTWL02M. Color/Finish: stainless steel.	Palmer Group
F 3	BENCH	Nu Bench 102" with arm, color Mercury w/ Ash wood	Landscape Forms
F 5	TRELLIS	Upfit trellis w/ aluminum louvered top and mesh back panel, Trellis color Mercury, Mesh panel Match architectural paint P3	Landscape Forms
F 6	PLANTER POT - SMALL	Kyoto 35" x 28" High, Color Anthracite	Yard Art
F 8	BOLLARDS	6" Dia x 36" high, Baseplate Mounted Stainless Steel	1-800-BOLLARDS
F 9	GUARDRAIL	42" Minimum, Paint to Match Architectural Pain P2. See Detail	
LIGHTS			
E 1	BOLLARD LIGHT	Hess Linea S LED, Color Silver Gray	Hess
E 2	PARKING LOT LIGHT	Gullwing LED, 16' high pole, black	Gardco
E 3	POLE LIGHT	Bega 84 164, 14' High, Color: Silver	Bega

Integral Color Concrete Paving

Vehicular Accent Paving - Herringbone Pattern
Pedestrian Accent Paving - Running Bond Pattern

Pedestrian Tile

Flex Game Area

Concrete Retaining Wall & Guardrail

Flush Curb/ Truncated Domes

Bike Locker

Planter Pot

Bollards

Bike Rack

Bench Seating

Stormwater Treatment Area

Trellis

mercury

Kebony Wood
(Or Equivalent)

Terraced Seat Wall

THE GUZZARDO PARTNERSHIP INC

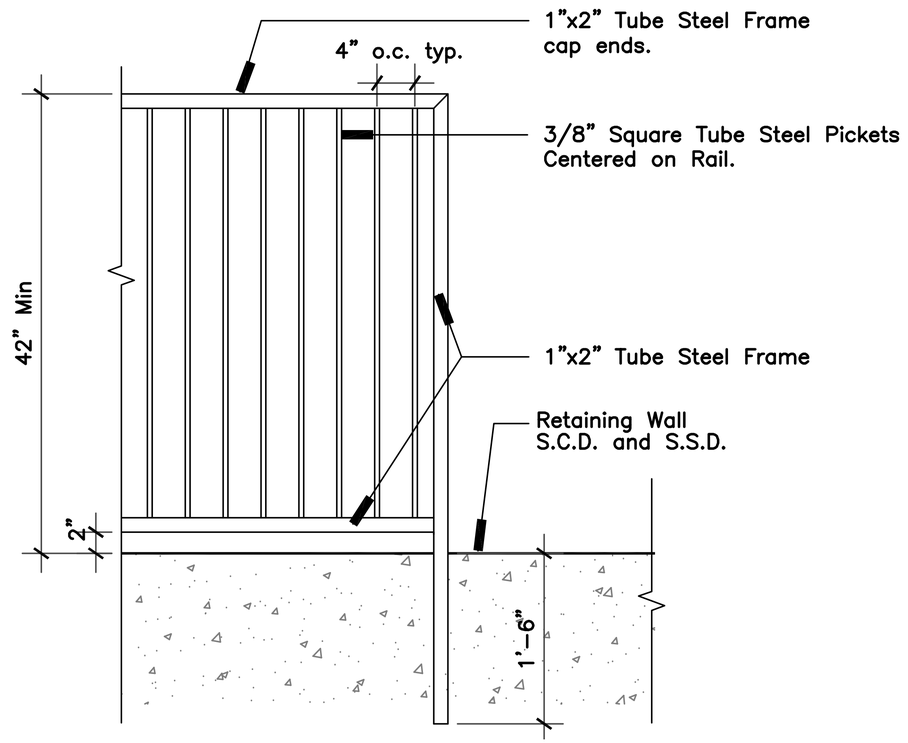
Stanford RESEARCH PARK

STUDIOS architecture

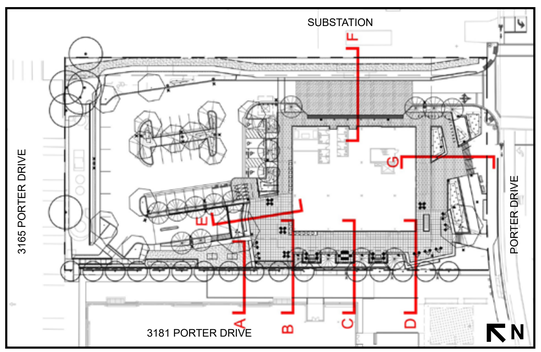
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

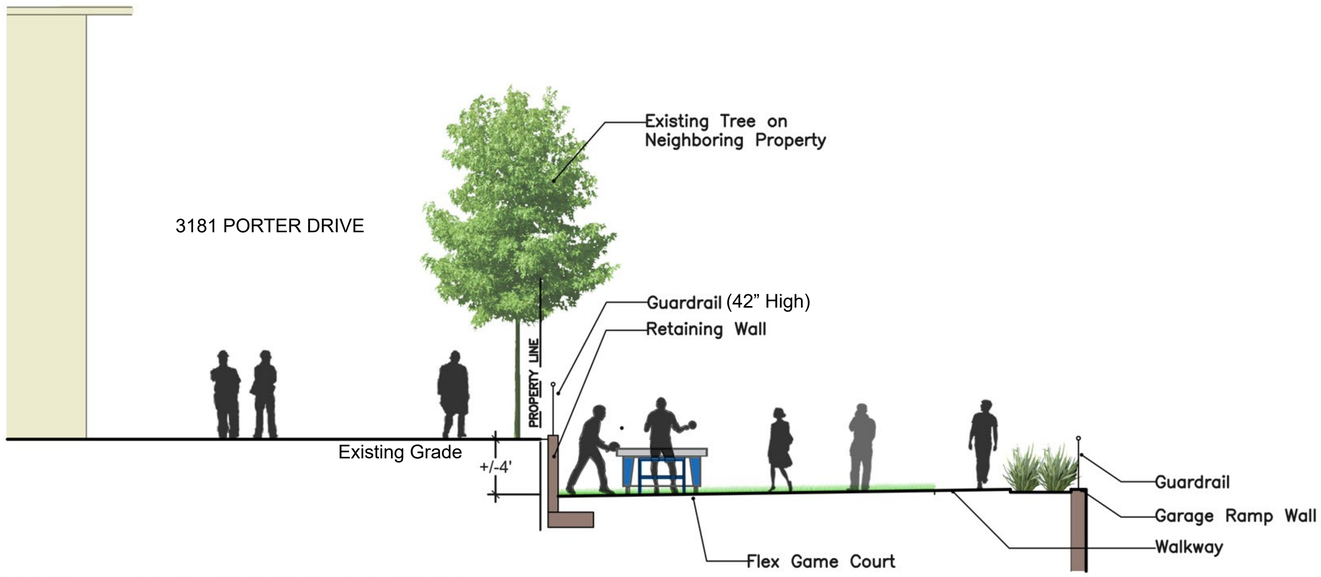
LANDSCAPE MATERIALS L1.3



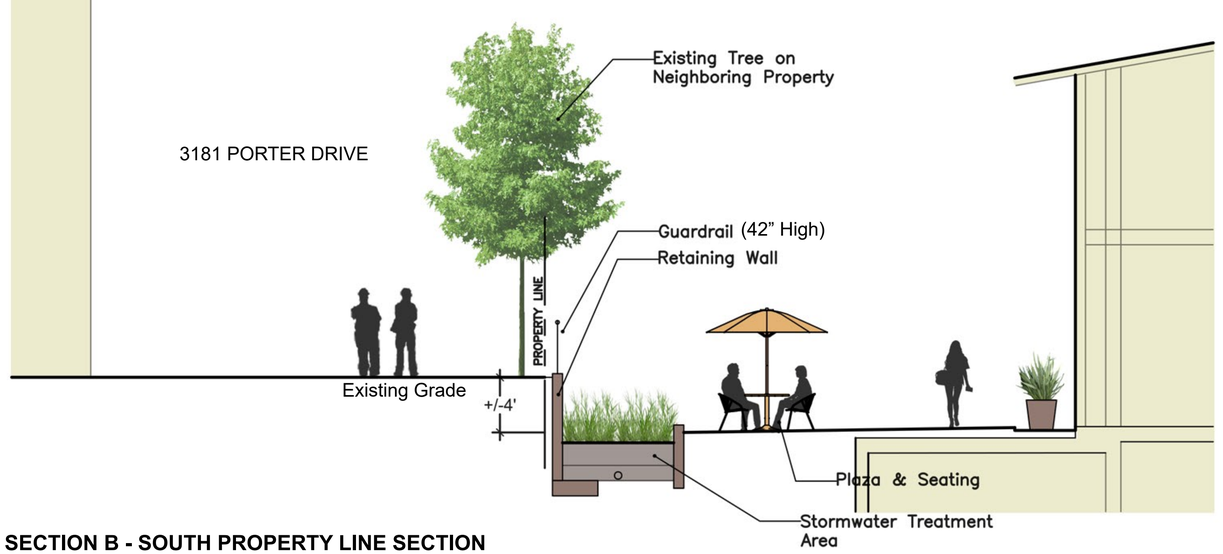
PROPERTY LINE GUARDRAIL
SCALE: 3/4" = 1'-0"



KEY PLAN
Not To Scale



SECTION A - SOUTH PROPERTY LINE SECTION
SCALE: 1" = 10'



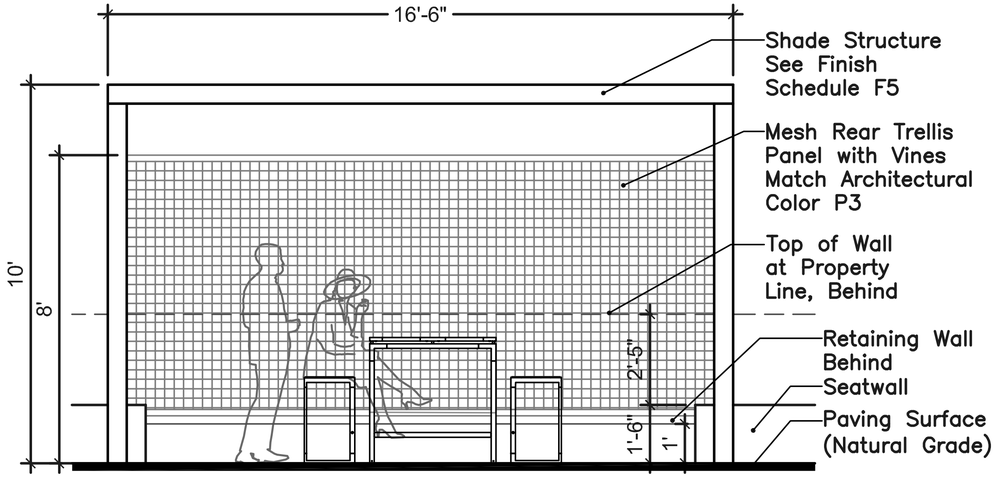
SECTION B - SOUTH PROPERTY LINE SECTION
SCALE: 1" = 10'

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

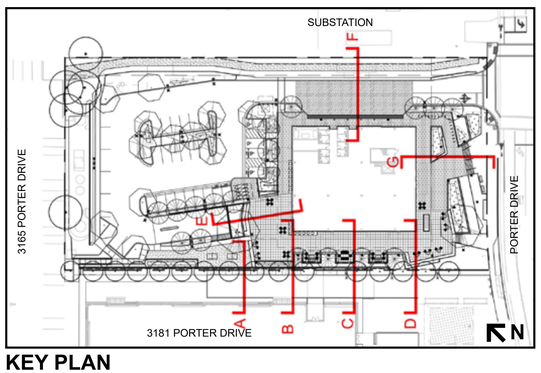
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

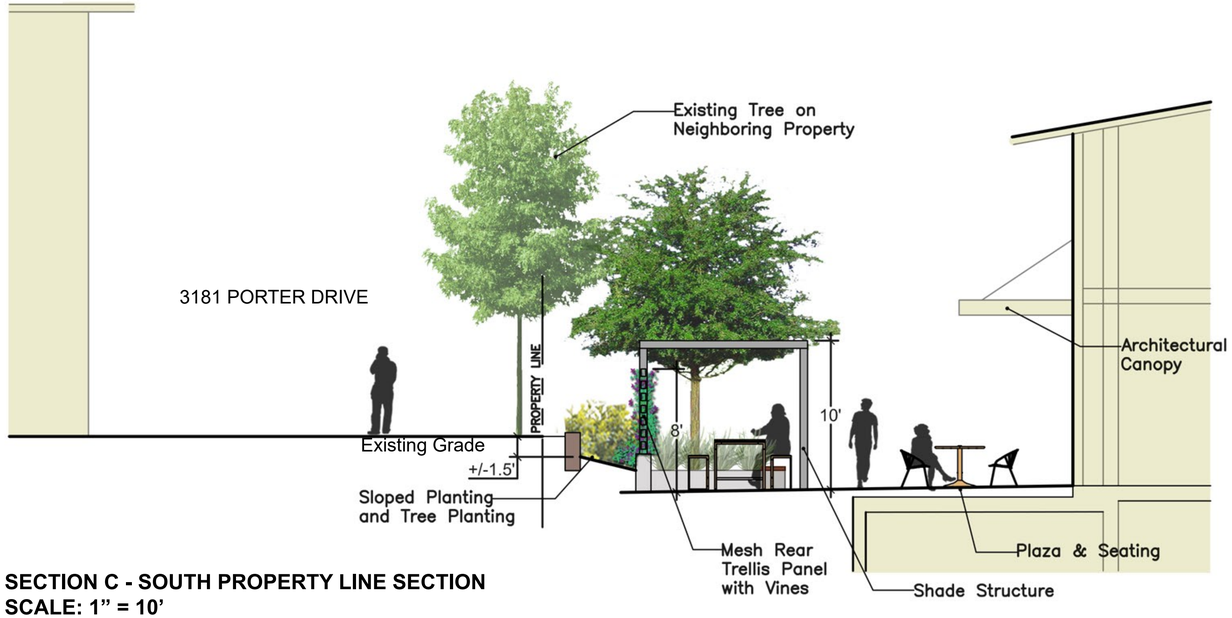
LANDSCAPE SECTIONS L1.4



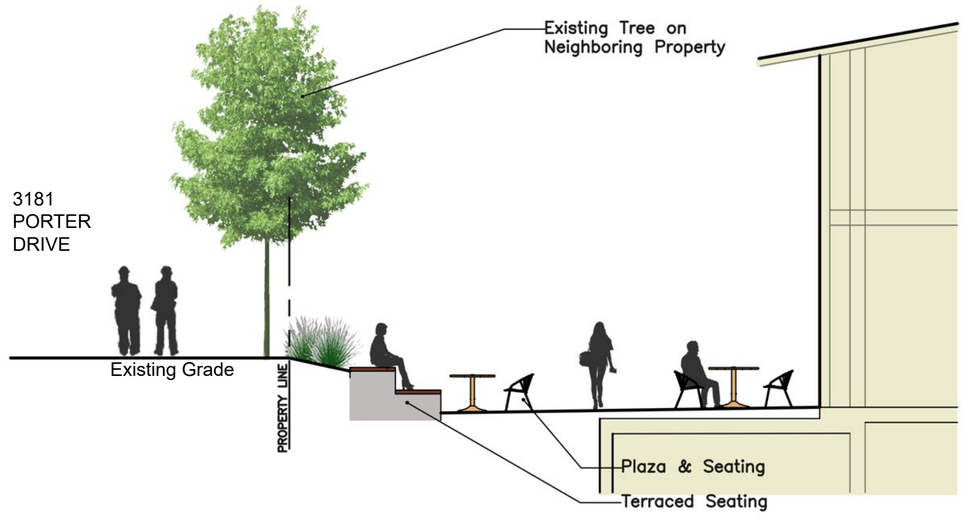
TRELLIS ELEVATION
SCALE: 1/4" = 1'-0"



KEY PLAN
Not To Scale



SECTION C - SOUTH PROPERTY LINE SECTION
SCALE: 1" = 10'



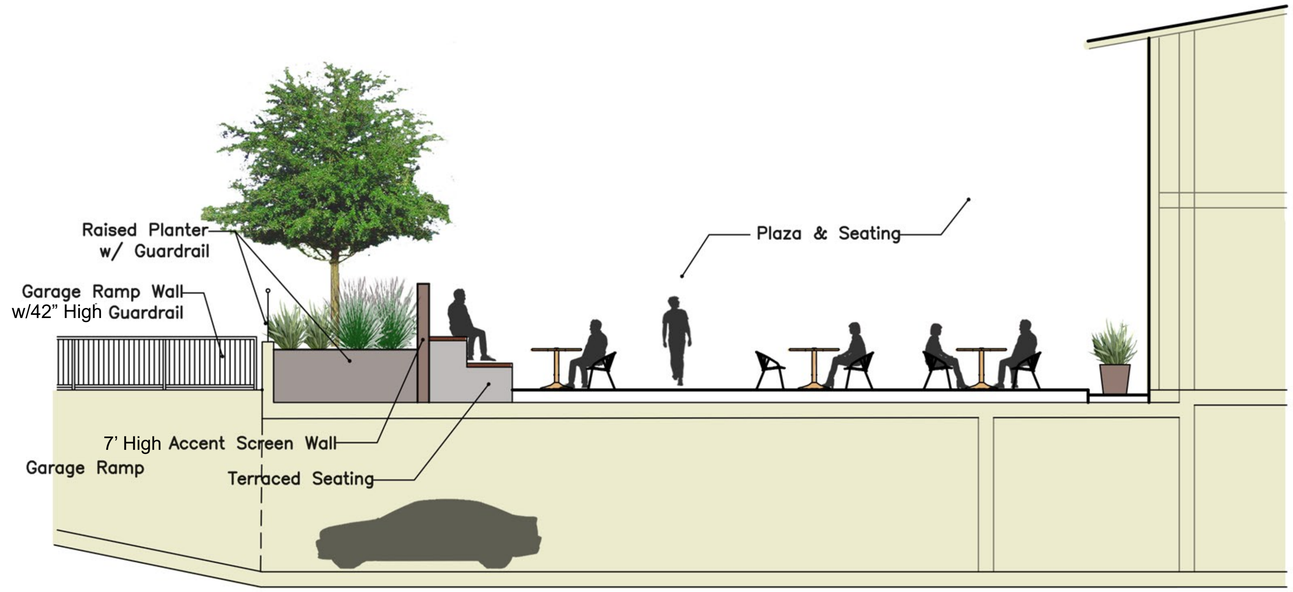
SECTION D - SOUTH PROPERTY LINE SECTION
SCALE: 1" = 10'

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

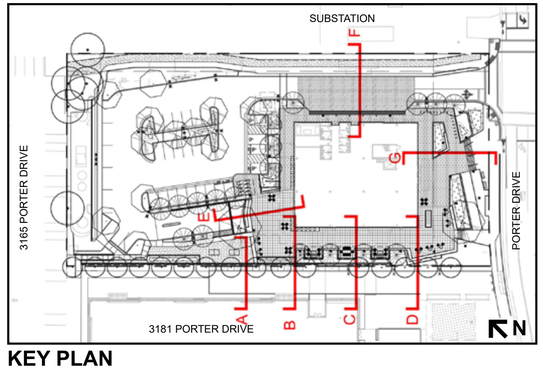
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

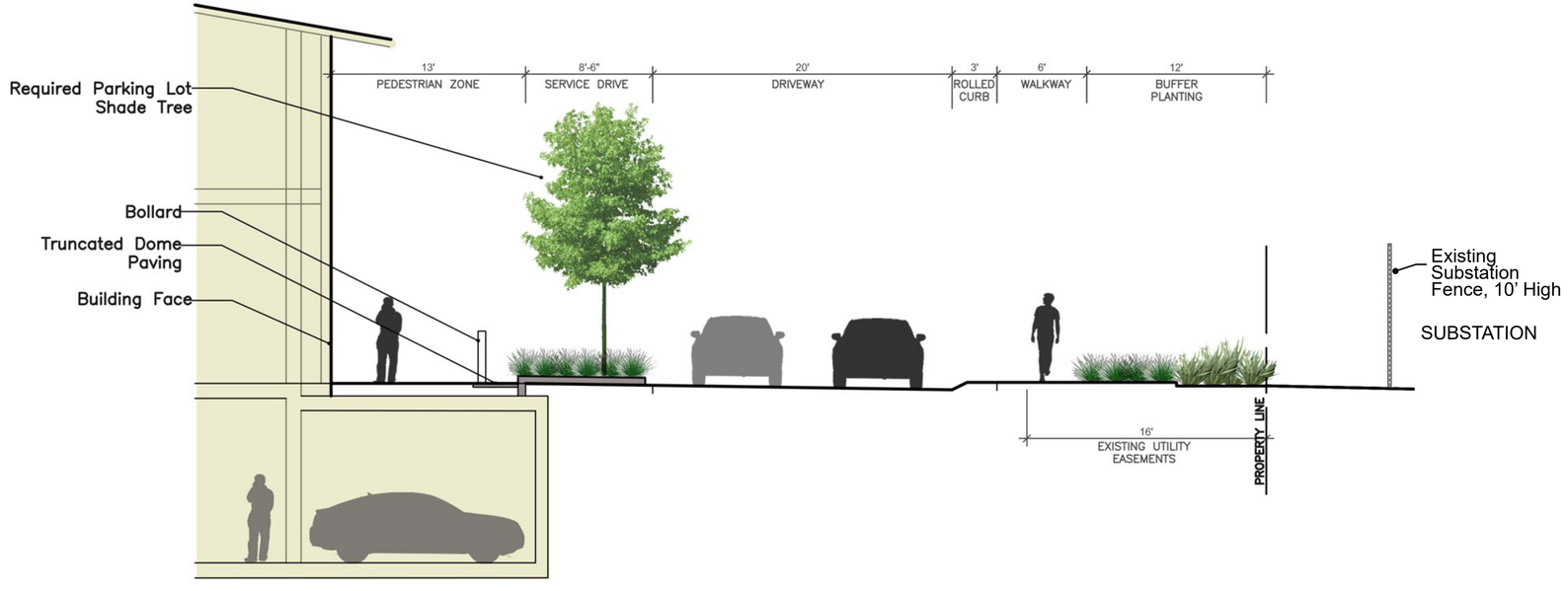
LANDSCAPE SECTIONS L1.5



SECTION E - WEST PLAZA SECTION
SCALE: 1" = 10'



KEY PLAN
Not To Scale



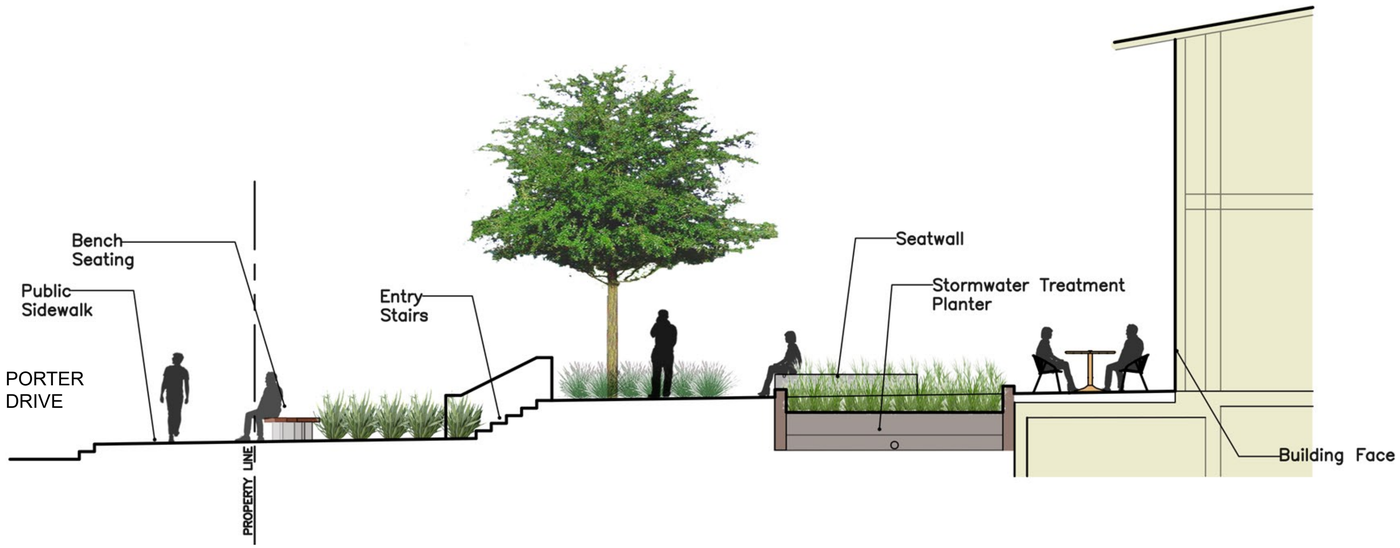
SECTION F - ENTRY DRIVE AND NORTH PROPERTY LINE SECTION
SCALE: 1" = 10'

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

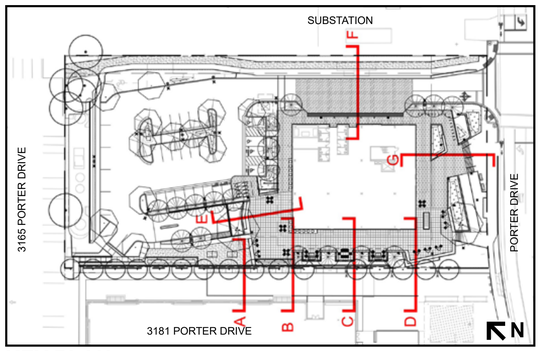
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LANDSCAPE SECTIONS L1.6



SECTION G - ENTRY PLAZA AND EAST PROPERTY LINE SECTION
SCALE: 1" = 10'



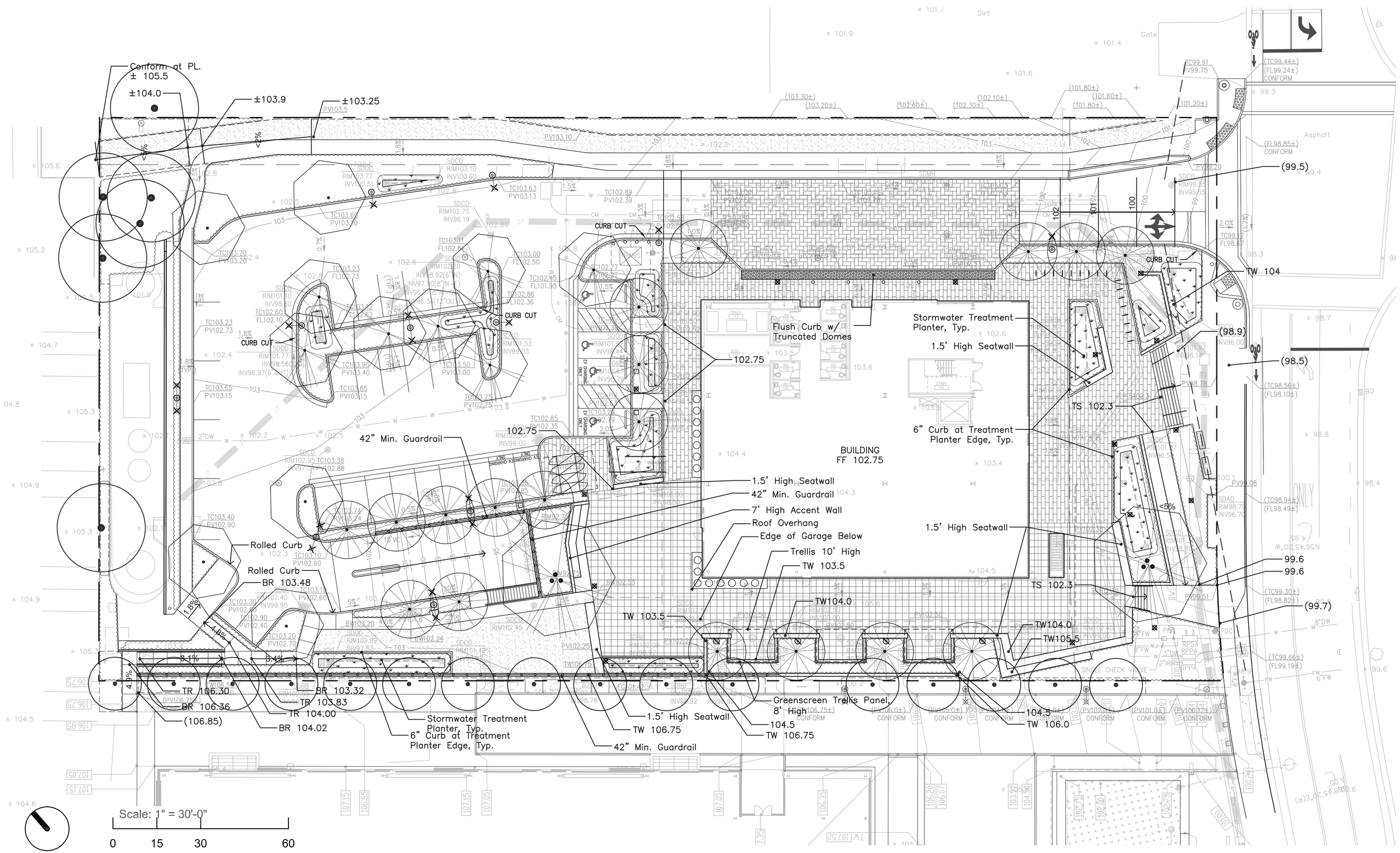
KEY PLAN
Not To Scale

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LANDSCAPE SECTIONS L1.7



THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

GRADING PLAN L1.8

Existing Trees to Remain

Tree Protection Fencing

Ulmus parvifolia
36" Box (Qty 7)
*Structural Soil to be Installed at Parking Lot Trees

Quercus douglasii
36" Box (Qty 5)
*Structural Soil to be Installed at Parking Lot Trees

Quercus frainetto
(Qty 14) 36" Box
*Structural Soil to be Installed at Parking Lot Trees

Existing Easement

Intersection View Triangle Planting to be less than 3' High

Stormwater Treatment Planter, Typ

Stormwater Treatment Planter, Typ

Stormwater Treatment Planter, Typ

Stormwater Treatment Planter, Typ

Quercus lobata
48" Box (Specimen)

Quercus suber
36" Box. (Qty 4)

Quercus lobata
60" Box (Specimen)

Tree Protection Fencing

Existing Lophostemon confertus

Dirt

Gate

Asphalt

Scale: 1" = 30'-0"

0 15 30 60

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANTING PLAN L1.9


Ulmus parvifolia


Quercus suber


Quercus lobata


Quercus frainetto


Quercus douglasii


Arctostaphylos ‘Howard McMinn’


Heteromeles arbutifolia


Muhlenbergia ‘Regal Mist’


Leucadendron ‘Safari Goldstrike’


Asparagus densiflorus ‘Meyersii’


Acacia c. ‘Cousin Itt’


Ceanothus ‘Yankee Point’


Ribes s. ‘Claremont’


Juncus patens


Nephrolepis cordifolia


Myoporum parvifolium


Rhamnus californica


Achillea millefolium californica


Solidago californica


Erigeron karvinskianus


Clematis lasiantha


Macfadyena unguis-cati

PLANT PALETTE

KEY	BOTANICAL NAME	COMMON NAME		SIZE	QTY	WUCOLS
TREES						
QF	Quercus frainetto	Hungarian Oak		24" Box	Per Plan	M
QK	Quercus douglasii	Blue Oak	Native	36" Box	Per Plan	VL
QL	Quercus lobata	Valley Oak	Native	60" Box	Per Plan	L
QS	Quercus suber	Cork Oak		36" Box	Per Plan	L
UP	Ulmus parvifolia	Chinese Elm		36" Box	Per Plan	L
SHRUBS						
ACA	Acacia c. 'Cousin Itt'	Cousin Itt Plant		5 Gal	30" o.c.	L
AHM	Arctostaphylos 'Howard McMinn'	Manzanita	Native	5 Gal	60" o.c.	L
ASP	Asparagus densiflorus 'Meyersii'	Foxtail Fern		1 Gal	24" o.c.	M
CEA	Ceanothus 'Yankee Point'	Yankee Point Ceanothus	Native	5 Gal	36" o.c.	L
HET	Heteromeles arbutifolia	Toyon	Native	5 Gal	72" o.c.	L
LSS	Leucadendron 'Safari Goldstrike'	Yellow Conebush		5 Gal	48" o.c.	L
NEP	Nephrolepis cordifolia	Sword Fern		5 Gal	30" o.c.	M
RHA	Rhamnus californica	Coffeeberry	Native	5 Gal	72" o.c.	L
RHC	Rhamnus cal. 'Mound San Bruno'	Coffeeberry	Native	5 Gal	42" o.c.	L
RIB	Ribes s. 'Claremont'	Pink Flowering Currant	Native	5 Gal	42" o.c.	L
PERENNIALS						
ACH	Achillea millefolium californica	Yarrow	Native	1 Gal	30" o.c.	L
SOL	Solidago californica	California Goldenrod	Native	1 Gal	24" o.c.	L
GRASSES						
CHE	Chondropetalum elephantinum	Cape Rush		5 Gal	30" o.c.	L
JUN	Juncus patens	California Gray Rush	Native**	1 Gal	18" o.c.	L
LEY	Leymus c. 'Canyon Prince'	Canyon Prince Wild Rye	Native	1 Gal	30" o.c.	L
LOM	Lomandra 'Lime Tuff'	Dwarf Mat Rush		1 Gal	30" o.c.	L
MRM	Muhlenbergia 'Regal Mist'	Pink Muhly Grass	Native	5 Gal	30" o.c.	L
GROUNDCOVERS						
APR	Arctostaphylos uu. 'Point Reyes'	Manzanita	Native	5 Gal	36" o.c.	L
ERI	Erigeron karvinskianus	Santa Barbara Daisy	Native	1 Gal	24" o.c.	L
MYP	Myoporum parvifolium	Creeping Myoporum		1 Gal	48" o.c.	L
				1 Gal		
VINES						
CLE	Clematis lasiantha	Chaparral Clematos	Native	15 Gal	48" o.c.	L
MAC	Macfadyena unguis-cati	Cat's Claw Creeper		15 Gal	48" o.c.	L

**To be sourced from local native seed stock

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

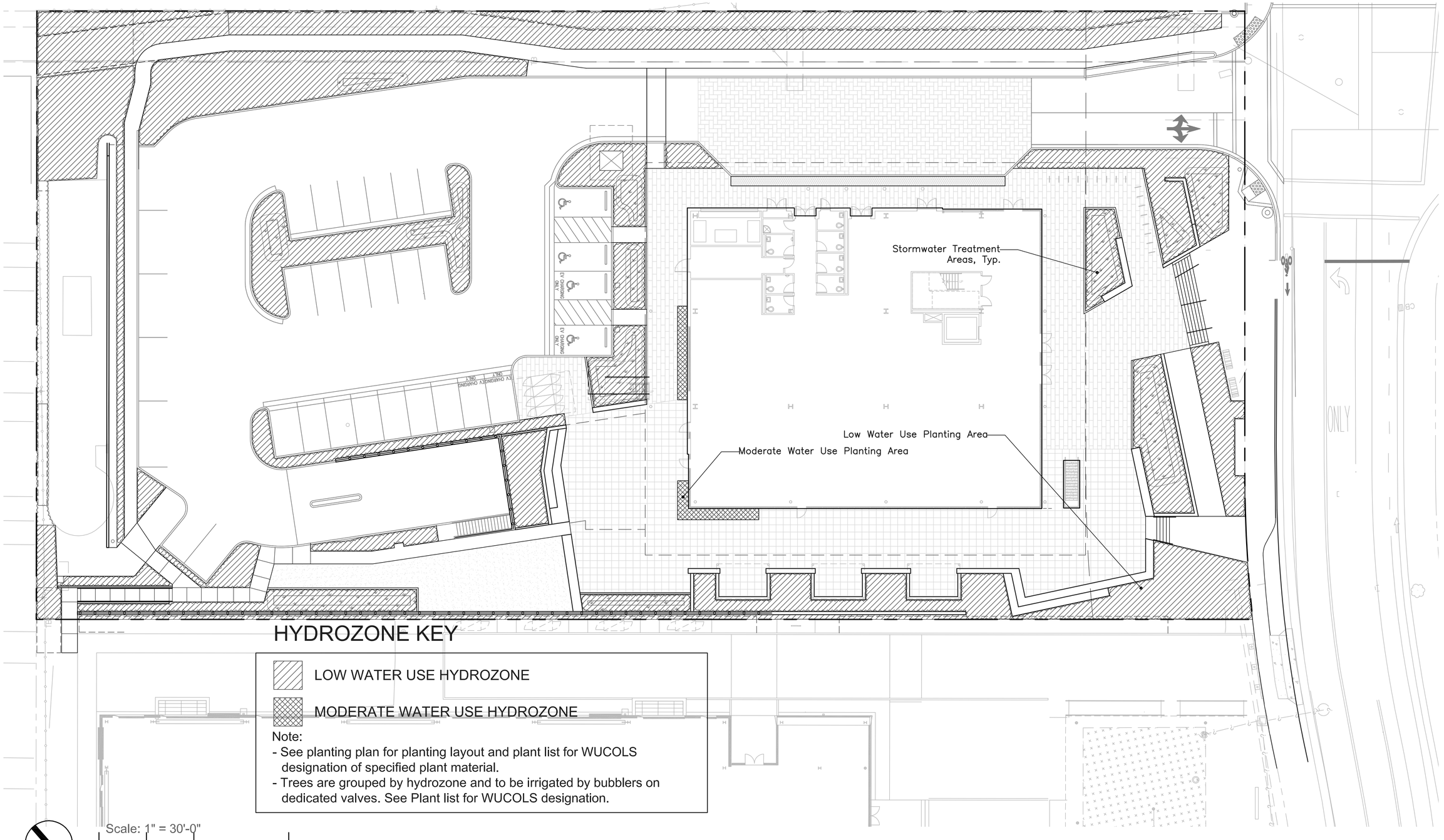
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PLANT LIST & IMAGERY L1.10



HYDROZONE KEY

LOW WATER USE HYDROZONE

MODERATE WATER USE HYDROZONE

Note:
- See planting plan for planting layout and plant list for WUCOLS designation of specified plant material.
- Trees are grouped by hydrozone and to be irrigated by bubblers on dedicated valves. See Plant list for WUCOLS designation.

Scale: 1" = 30'-0"

0 15 30 60

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LANDSCAPE WATER USE L1.11

IRRIGATION WATER USE

Maximum Applied Water Allowance (MAWA)

The maximum allowed water to be used on a site is calculated based on the formula below.

43	0.62	0.70	15,928	0.00	=	297,248	Gallons
ETO	Conversion from inches to gallons.	ETAF	Landscaped Area	Special Landscape			

Estimated Total Water Use Savings

204,511.53

Irrigation System Design Factors

Hydrozone Category (WUCOLS)	Plant Material (from landscape plan)	Species Factor (Ks)	Density Factor (Kd - See Table 2)	Microclimate Factor (Kmc - See Table 2)	Average Landscape Coefficient (KI)	Area (Sqft)	Plant Water Requirement (Gallons)	System Type	Estimated Design Efficiency (from Table 1)	Hydrozone water Requirement (Gallons)
Medium	MIXED	0.5	1	1	0.5	210	2,799.30	DRIP	0.80	3,499.13
Low Water Use	MIXED	0.2	1.1	1	0.22	13,389	78,529.16	DRIP	0.80	89,237.69
Low Water Use	MIXED (Stormwater Treatment Areas)	0.2	1.1	1	0.22	2,329	13,660.05	MICRO SPRAY	0.70	17,740.33
TOTALS						15928	94,988.51			92,736.81

	Option 1
Average Irrigation Design Efficiency	1.02
Total Estimated Irrigation Requirement	92,736.81
Estimated Non-irrigation Landscape Water Required (Water Features) in Gallons	0

The information included on this sheet and associated landscape and irrigation plans represent the landscape water allowance and estimated water requirements of this project.

TABLE 1 ESTIMATE VALUES USED TO DETERMINING KI for SELECTED VEGETATION TYPES

N.B.	Application Device	Range Percent	Average Percent	Notes
A	Multiple Stream & Impact Rotors	60-80	70	Symmetrical patterns, head-to-head spacing, matched precipitation, wind < 5mph
A	Single Stream Rotors	60-80	70	
A	Spray Heads in Turf	40-60	50	
A & B	Spray Heads in Ground Covers and	60-80	70	No plan deflection, win < 5mph
B	Micro Spray - 6 ft Radius or Less	60-80	70	
B	Micros Spray - 6ft Radius or More	40-60	50	
C	Bubblers	60-90	85	Bubblers placed in watering basins to prevent runoff
D	Drip Emitters	50-90	80	Efficiency drops with age (ie clogging, no provisions for expanding root zone)
F	Multi-port Emitters	50-90	80	Efficiency is highly variable

TABLE 2 ESTIMATE VALUES USED TO DETERMINING Ks Kd and Kmc

Vegetation	Species Factor (Ks)			Density Factor (Kd)			Microclimate Factor (Kmc)		
	High	Average	Low	High	Average	Low	High	Average	Low
Trees	0.9	0.5	0.2	1.3	1	0.5	1.4	1	0.5
Shrubs	0.7	0.5	0.2	1.1	1	0.5	1.3	1	0.5
Groundcover	0.7	0.5	0.2	1.1	1	0.5	1.2	1	0.5
Mixed:	0.9	0.5	0.2	1.3	1.1	0.06	1.4	1	0.5
Turf grass	0.8	0.7	na	1	1	0.6	1.2	1	0.8

* Species factor values are from WUCOLS list

*NOTE: It is assumed that there is no bare soil surface within the landscape planting. Otherwise, Kd should be increased 10-20%, especially for trees and shrubs, due to soil surface evapotranspiration.

*NOTE: These numbers assume infiltration uniformity equals distribution uniformity, optimum and consistent operating pressure, and irrigation zone pressure differential maximum.

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LANDSCAPE MWELO CALCULATIONS

L1.12

TREE CANOPY SIZE SUMMARY

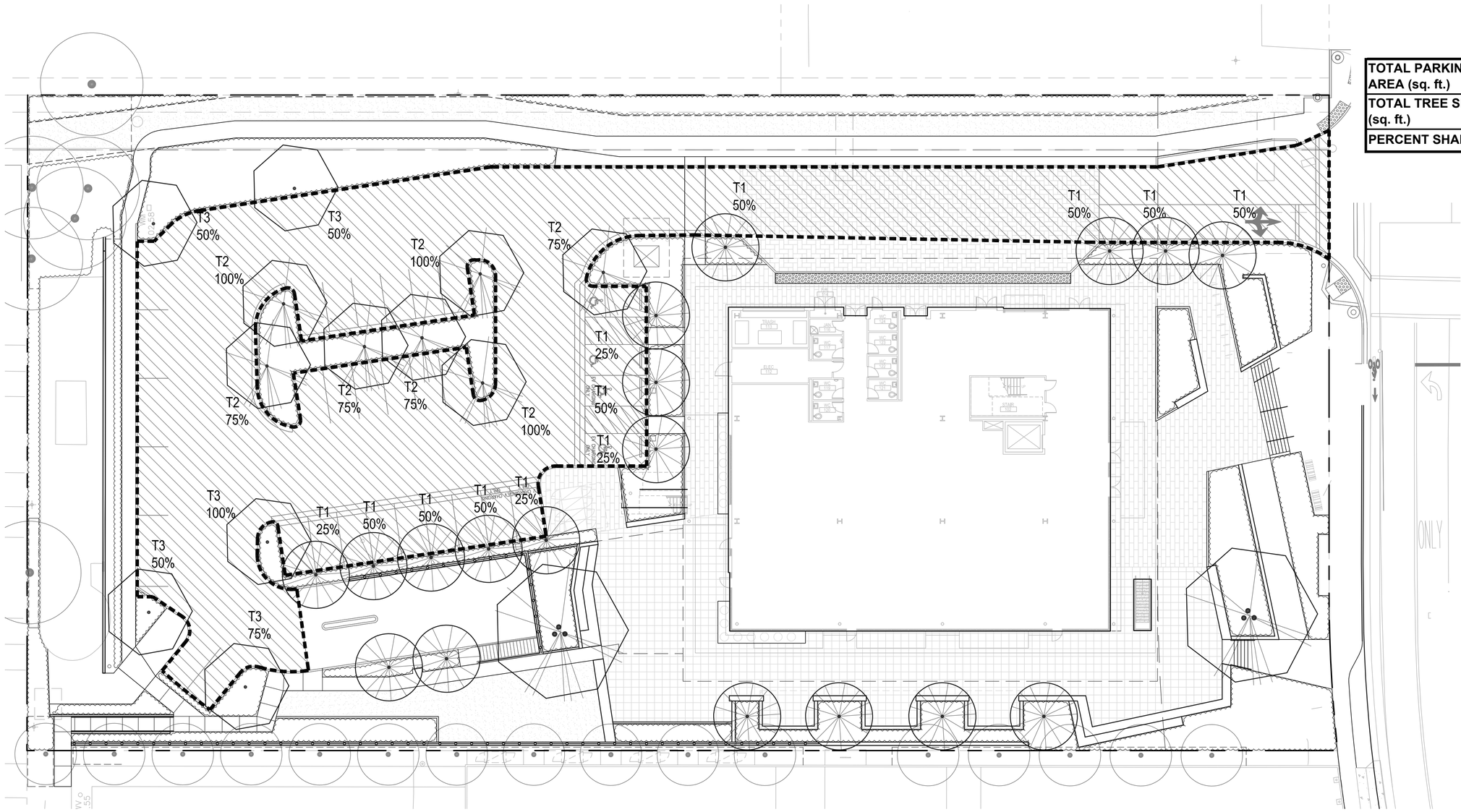
* Tree sizes Based on City of Sunnyvale Parking Lot Shade Requirements

TREE CANOPY SIZE	FULL CANOPY(SF)	3/4 CANOPY(SF)	1/2 CANOPY(SF)	1/4 CANOPY(SF)
35' Dia	962 sf	722 sf	481 sf	241 sf
30' Dia	706 sf	530 sf	353 sf	177 sf
25' Dia	491 sf	368 sf	246 sf	123 sf
20' Dia	236 sf	177 sf	118 sf	59 sf
15' Dia	177 sf	133 sf	89 sf	44 sf
12' Dia	113 sf	85 sf	57 sf	28 sf

PARKING LOT SHADE CALCULATION TABLE

* Tree sizes Based on City of Sunnyvale Parking Lot Shade Requirements

KEY	Species	Canopy Size @ 15yrs	Full Canopy @ 15yrs QTY	Full Canopy @ 15yrs SIZE(SF)	75% Canopy @ 15yrs QTY	75% Canopy @ 15yrs SIZE(SF)	50% Canopy @ 15yrs QTY	50% Canopy @ 15yrs SIZE(SF)	25% Canopy @ 15yrs QTY	25% Canopy @ 15yrs SIZE(SF)	TOTAL TREES	TOTAL SHADE (SF)
T1	Quercus frainetto	30' Dia	0 @	706 sf	0 @	530 sf	8 @	353 sf	4 @	177 sf	12	**3,530 sf**
T2	Ulmus parvifolia	30' Dia	3 @	706 sf	4 @	530 sf	0 @	353 sf	0 @	177 sf	7	**4,236 sf**
T3	Quercus douglasii	35' Dia	1 @	962 sf	1 @	722 sf	3 @	481 sf	0 @	241 sf	5	**3,127 sf**
											24	**10,893 sf**



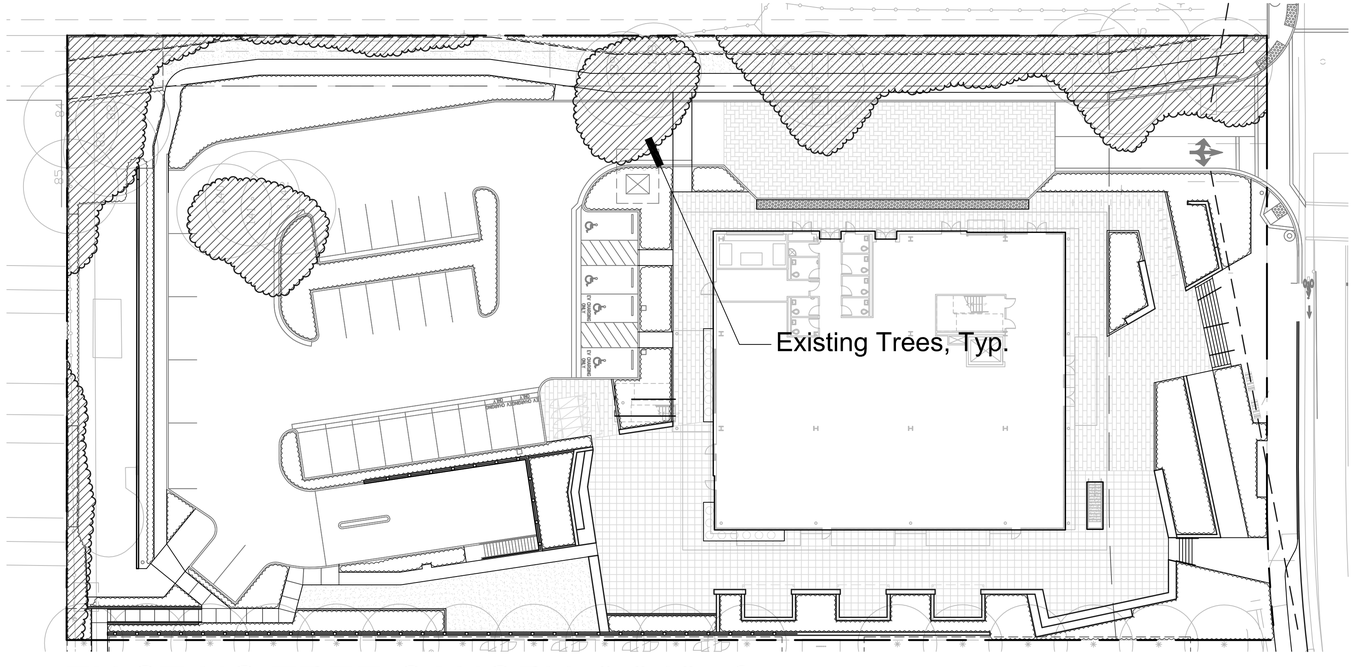
TOTAL PARKING LOT AREA (sq. ft.)	**19,618 sf**
TOTAL TREE SHADE (sq. ft.)	**10,893 sf**
PERCENT SHADE	**55.52% sf**

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PARKING LOT SHADE L1.13



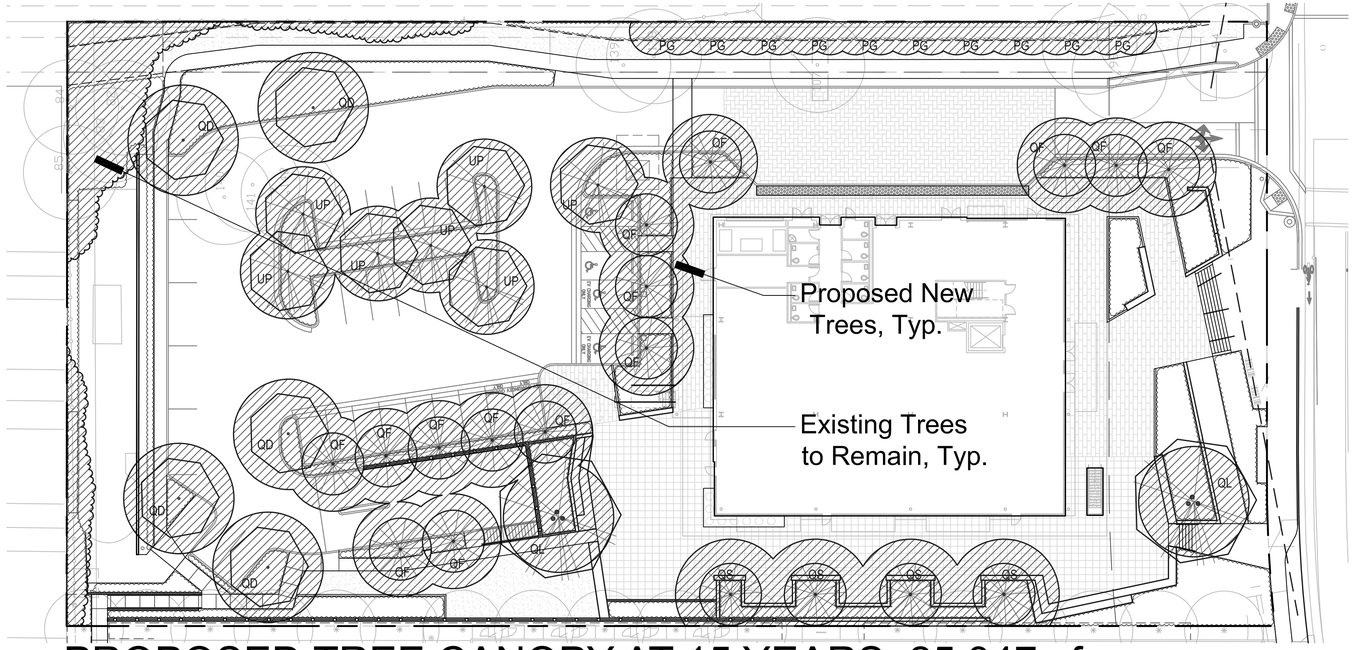
EXISTING TREE CANOPY: 8,946 sf

See Canopy Spread Analysis from Arborist Report for more information on existing tree sizes.

PARKING LOT SHADING LEGEND

TREE KEY	BOTANICAL NAME	COMMON NAME	SIZE	15 Year Canopy
PG	Podocarpus gracilior	Fern Pine	36" Box	15' **
QF	Quercus frainetto	Hungarian Oak	24" Box	30' *
QD	Quercus douglasii	Blue Oak	24" Box	35' **
QL	Quercus lobata	Valley Oak	60" Box	35' *
QS	Quercus suber	Cork Oak	36" Box	35' *
UP	Ulmus parvifolia	Chinese Elm	36" Box	30' *

Note:
* Shade Diameter from City of Sacramento Parking Lot Tree Shading Design and Maintenance Guidelines, June 17, 2003.
** Shade Diameter from typical tree size.



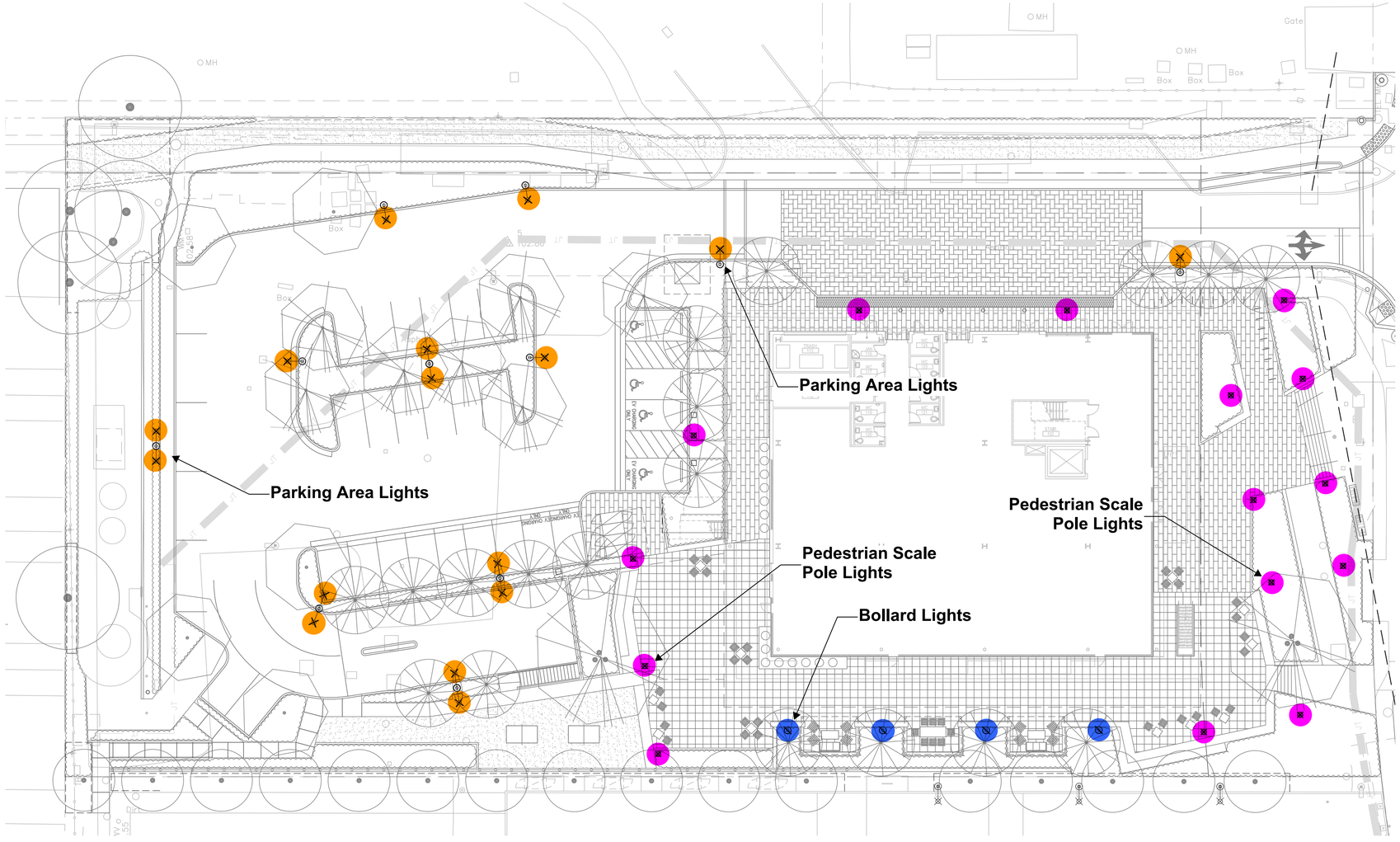
PROPOSED TREE CANOPY AT 15 YEARS: 25,347 sf

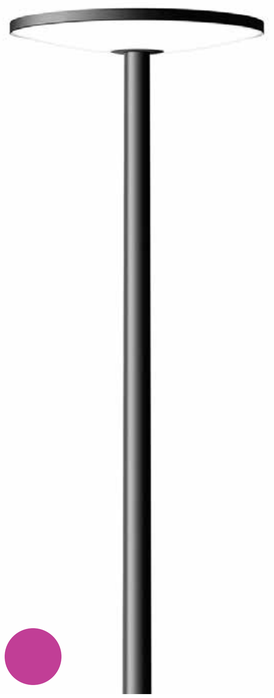
THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

TREE CANOPY L1.14





Pedestrian Pole Light
Bega 84 164 - 14'H
Color: Silver

Parking Lot Light
Gardco Gullwing 16'H
Color: Black

Bollard Light
Hess Linea S
Color: Silver

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

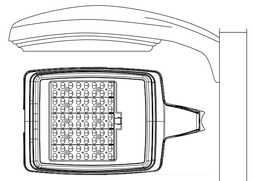
LIGHTING PLAN L1.15

Job:
Type:
Notes:

Gullwing LED

GL13 Luminaires Featuring Motion Response

Philips Gardco Gullwing LED luminaires combine LED performance excellence and advanced Philips Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. The Philips Gardco Gullwing LED is defined by its high performance, sleek profile and rugged construction. The housing is one-piece, die cast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The advanced LED optical systems provide IES Types II, III, IV and V distributions. The luminaire features a state of the art integral thermal control system to maximize LED performance and life, and to extend component life. All LED wattages utilize high performance Class 1 LED systems. The door frame is single-piece die cast aluminum, and includes a tempered glass lens. Luminaires are finished with a fade and abrasion resistant TGIC powdercoat. Gullwing LED luminaires provide full cutoff performance. Available autonmatic profile dimming and motion response versions add integral control to increase energy savings.



PREFIX	MOUNTING	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

Complete Luminaires[1]

GL13	13" Gullwing LED Luminaire - Constant Wattage
GL13-DIM	13" Gullwing LED Luminaire - with 0-10V Dimming
GL13-APD[2]	13" Gullwing LED Luminaire - with Automatic Profile Dimming
GL13-MRI[2]	13" Gullwing LED Luminaire - with Motion Response Integral Motion Sensor
GL13-APD-MRI[2]	13" Gullwing LED Luminaire - with Automatic Profile Dimming - Motion Response Override Integral Motion Sensor

MOUNTING

1	Single Pole Mount
2	Twin Pole Mount at 180°
2@90	Twin Pole Mount at 90°
3	3-way Pole Mount at 90°
3@120°[3]	3-way Pole Mount at 120°
4	4-way Pole Mount
W	Wall Mount, Recessed J-box
WS	Wall Mount, Surface Conduit

3. Not available with PTF option.

OPTICAL SYSTEM

2	Type II
3	Type III
4	Type IV
5	Type V

Type V optical system features unitized lens construction.

1. Retrofit Kits for existing Gullwing 13" HID luminaires are available. See Legacy LED Retrofit Kits Submittal Data Sheet (G200-21) for Retrofit Kit information.
2. APD version available in 120V through 277V only. MRI and APD-MRI versions require 120V or 277V input. See page 3 for more information on luminaire configurations.

LED WATTAGE AND LUMEN VALUES

Ordering Code	Average System Watts[4]	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens[5,6]				Basis of Lumen Data
				TYPE 2	TYPE 3	TYPE 4	TYPE 5	
70LA	71.2	350	CW	5,858	6,177	6,008	5,853	*Photometric tests performed in compliance with IESNA LM-79.*
			NW	5,636	5,854	5,696	5,479	
85LA	85.9	350	CW	7,531	7,714	7,495	7,384	
			NW	6,973	7,143	6,940	6,837	

4. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
5. Values shown are for luminaires without the HS external shield option. Tests are in process for luminaires with the HS option and WW luminaires. Contact Gardco.applications@philips.com if approximate estimates are required for design purposes.
6. LED arrays feature LEDs that provide from 100 to 130 lumens per watt when operated at 350 mA. Lumen values based on tests performed in compliance with IESNA LM-79.

LED SELECTION

CW	Cool White - 5700°K - 75 CRI
NW	Neutral White - 4000°K - 70 CRI
WW	Warm White - 3000°K - 80 CRI

VOLTAGE

120	
208	
240	
277	
347	
480	
UNIV	120V through 277V, 50hz or 60hz
HVU	347V through 480V, 50hz or 60hz (High Voltage Universal)

FINISH

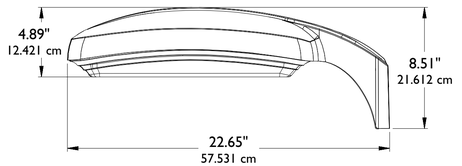
BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint *Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.*
SC	Special Paint *Specify. Must supply color chip.*

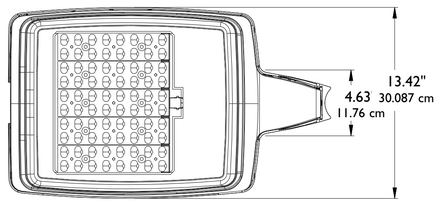
OPTIONS

F[7]	Fusing
LF[7]	In-Line/In-Pole Fusing
PC[8]	Photocontrol and Receptacle
PCR	Photocontrol Receptacle only
HS	External Houseside Shield
MF[9]	Mast Arm Fitter
PTF2[10]	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PTF3[10]	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PTF4[10]	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon
SPA[11]	Square Pole Adapter
TR1[12]	Single Transition
TR2[12]	Twin Transition
DL	Diffusing Lens *(reduces performance significantly)*

7. Specify input voltage.
8. Specify input voltage. Not available above 277V.
9. Mounts to a 2-3/8" O.D. mast arm.
10. Not available in 120° mounting configurations.
11. Required for mounting to straight square poles.
12. Mounts to a 2-3/8" top tenon. Specify a pole with 3.00" top OD for a smooth transition.

DIMENSIONS AND EPA



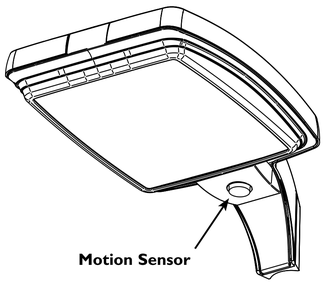


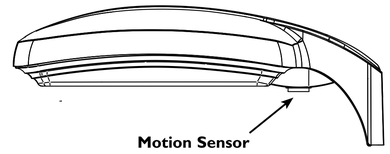
EPA		
1	2	3-4
.8 ft²	1.6 ft²	2.2 ft²
.07 m²	.15 m²	.20 m²

Approximate Weight
Single Luminaire

33 lbs / 14.969 kg

GL13-MRI or GL13-APD-MRI Units





THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LIGHTING CUTSHEETS L1.16

Pole top luminaires with symmetrical light distribution

Housing/fitter: Die-cast aluminum construction with a spun aluminum cap. The fixture slip fits a 3" O.D. pole top or tenon and is secured by six (6) socket head stainless steel set screws threaded into stainless steel inserts. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: Molded 1/8" high impact acrylic diffuser with light diffusing matte white surface. Completely sealed with a high temperature silicone gasket for weather tight operation.

Electrical: 25.2W LED luminaire, 30.0 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 4000K with a >80 CRI. Available in 3000K (>80 CRI); add suffix K3 to order.
Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

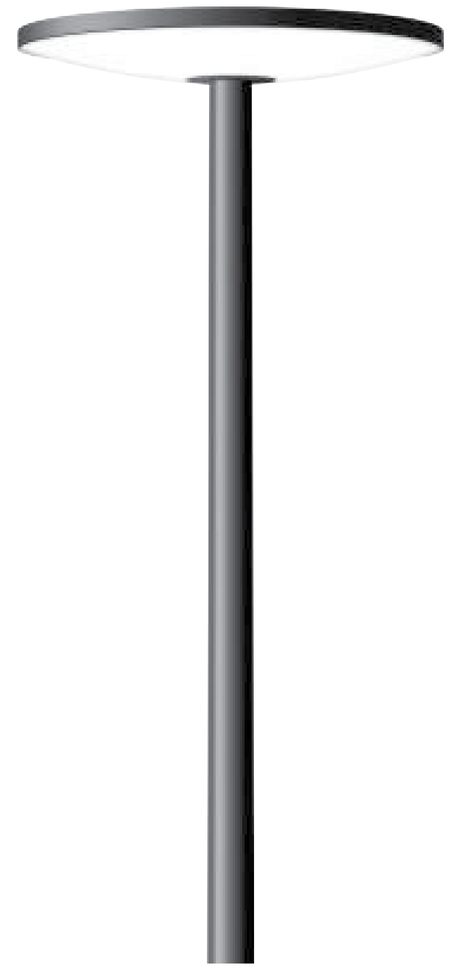
CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

Weight: 13.2 lbs.

EPA (Effective projection area): 0.7 sq. ft.

Luminaire Lumens: 2531

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



Pole-top luminaires · Fig. left

	Lamp	A	B
88 164	25.2 W LED	24 ¼	5 ½

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

.hess

LINEA S 900 Specification

The slender profile of LINEA complements contemporary architecture with well proportioned styling and a modern form. The fabricated aluminum bollard is available as a single or twin mount luminaire in three different heights to meet varying scale requirements. The fully shielded luminaire emits zero uplight and is Dark Sky compliant. Concealed mounting minimizes the footprint. All hardware is stainless steel.

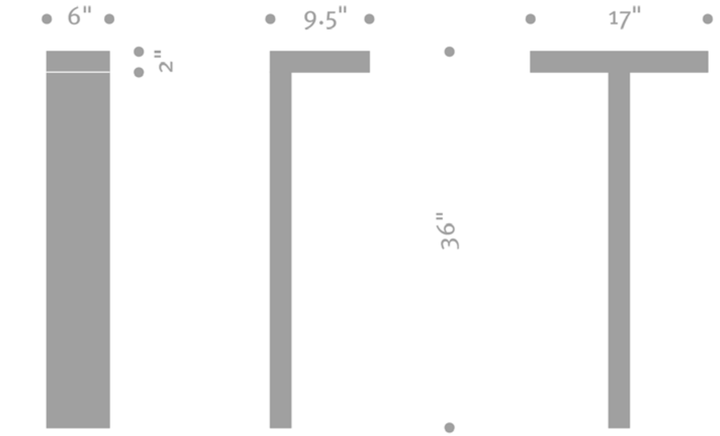
Model	Lamp	Color Temperature	Volt	Mounting	Finish	Option
LN900S	LED	WW -3000K	UNV - 120-277V	A - Single Mount	SG - Silver Grey	DIM - 0-10vDC Dimming
		NW - 4000K		B - Twin Mount	DG - Dark Grey	N - None
					GG - Graphite Grey	
					BLK - Matte Black	
					BRZ - Dark Bronze	
					CC - Custom Color	

Ordering Information

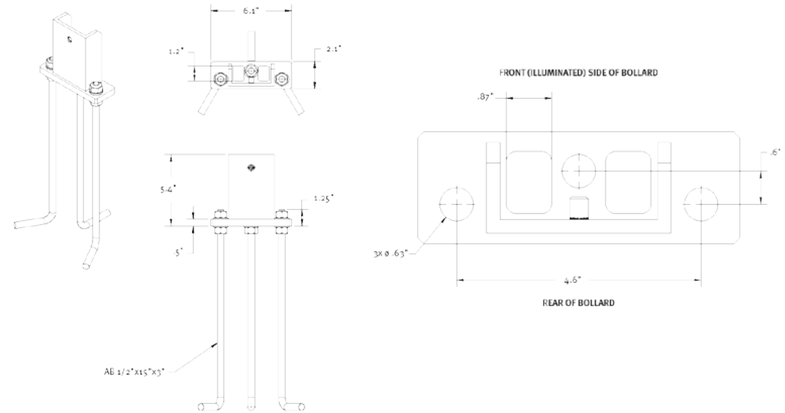
.hess

Additional information

Dimensions



Mounting detail



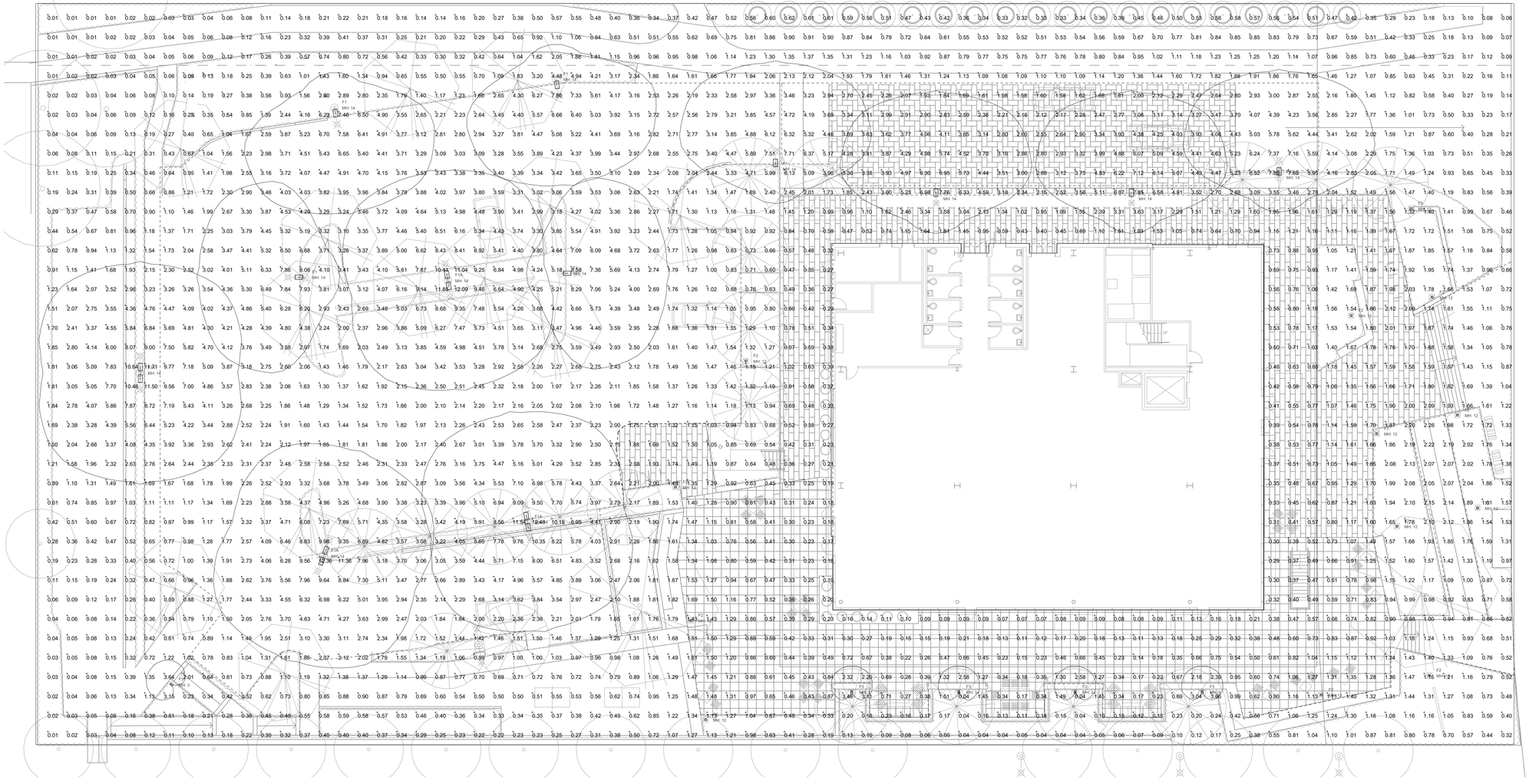
Specifications are subject to change without notification
HessAmerica › Products › Lighting Products › Illuminating Bollard › LINEA S
https://www.hessamerica.com/Products/Lighting/Illuminating_Bollard/LINEA_S/

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

LIGHTING CUTSHEETS L1.18



Scale: 1" = 30'-0"

0 15 30 60

Calculation Summary									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description	Grid Z
Building Front Driveway	Illuminance	Fc	3.94	7.9	1.6	2.46	4.94	IES RP-8-14: Driveway - 4fc Avg, Avg to Min < 4:1	0
Parking Area	Illuminance	Fc	3.59	12.5	0.2	17.95	62.50	IES RP-20-14: Asphalt Parking Lot - 0.5fc Min, Max to Min < 15:1	0
Pedestrian Area	Illuminance	Fc	0.94	3.6	0.1	9.40	36.00	IES 10E 4.33: Pedestrian Walkway - 1fc Average	0

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

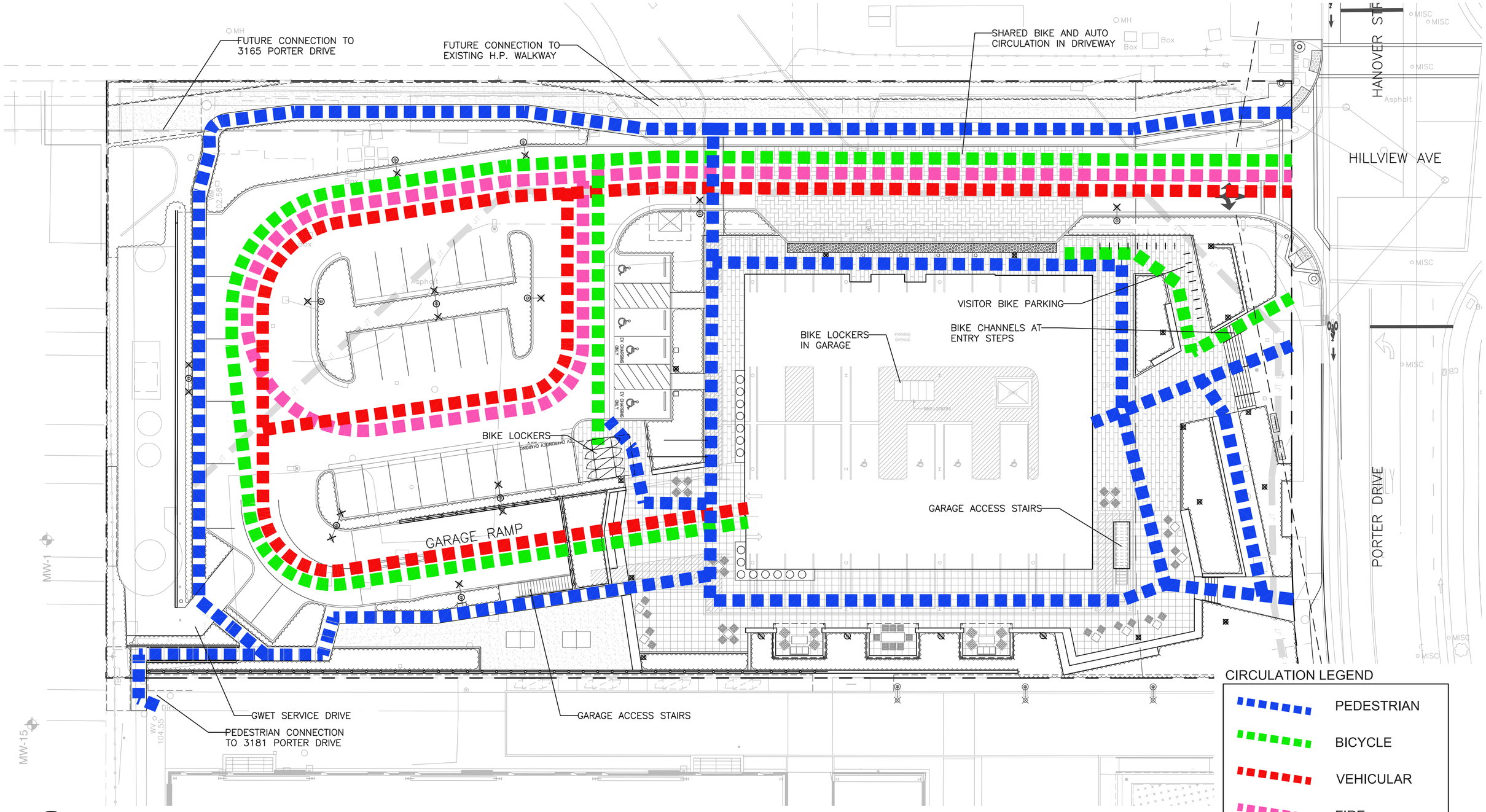
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

PHOTOMETRIC PLAN L1.19



THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

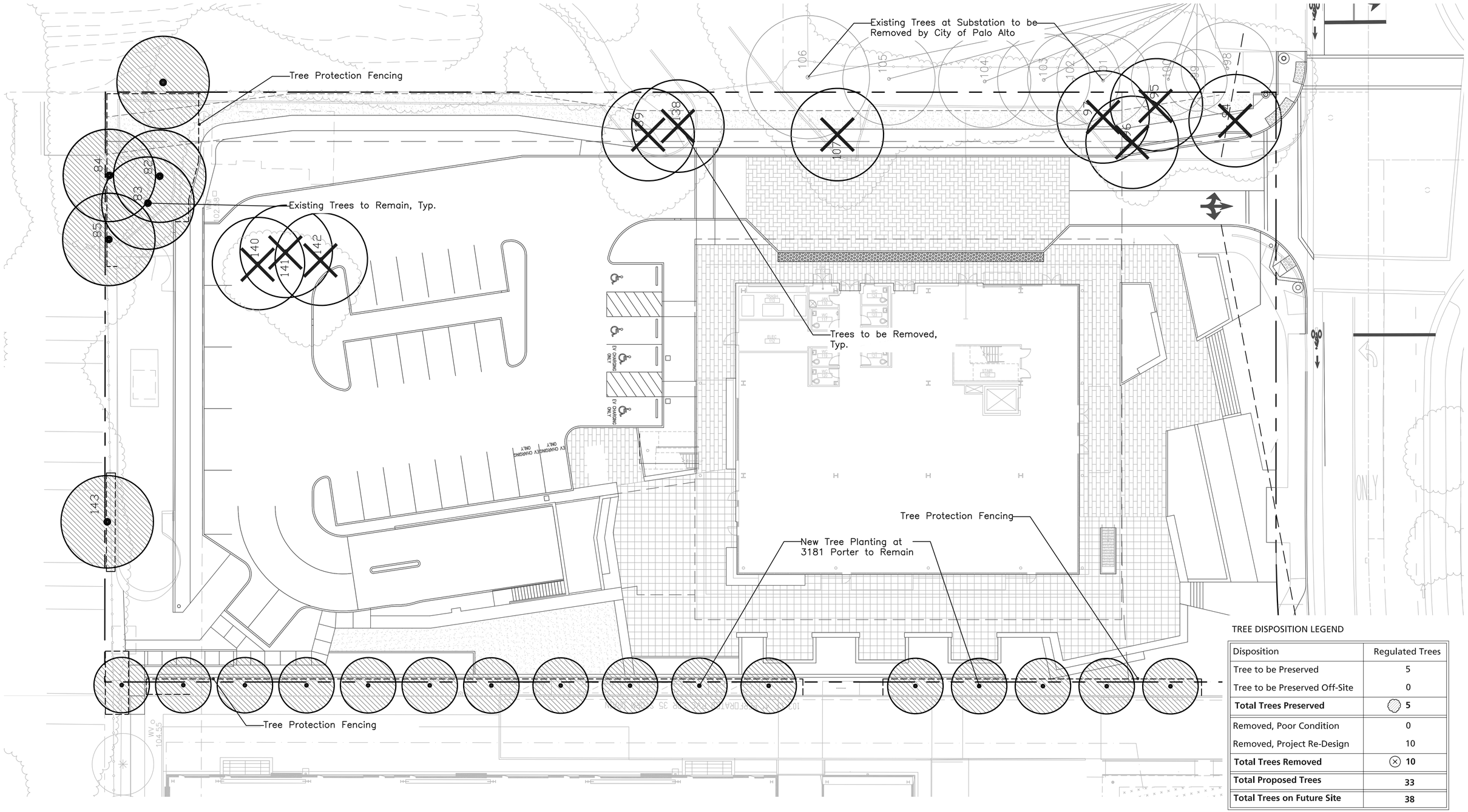
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIRCULATION DIAGRAM L1.20



TREE DISPOSITION LEGEND

Disposition	Regulated Trees
Tree to be Preserved	5
Tree to be Preserved Off-Site	0
Total Trees Preserved	**5**
Removed, Poor Condition	0
Removed, Project Re-Design	10
Total Trees Removed	**10**
Total Proposed Trees	**33**
Total Trees on Future Site	**38**

Note:
- See Arborist Report by Hort Science dated April 4, 2019 for specific information about existing trees.

Scale: 1" = 30'-0"

0 15 30 60

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

TREE DISPOSITION PLAN L1.21

City of Palo Alto

Tree Protection - It's Part of the Plan!

Make sure your crews and subs do the job right!

Fenced enclosures around trees are essential to protect them by keeping the foliage canopy and branching structure clear from contact by equipment, materials and activities, preserving roots and soil conditions in an intact and non-compacted state, and identifying the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved. **An approved tree protection report must be added to this sheet when project activity occurs within the TPZ of a regulated tree.**
For detailed information on Palo Alto's regulated trees and protection during development, review the **City Tree Technical Manual** (TTM) found at www.cityofpaloalto.org/trees/.

TREE DISCLOSURE STATEMENT

CITY OF PALO ALTO
Planning Division, 250 Hamilton Avenue
Palo Alto, CA 94301
(650) 329-2441
http://www.cityofpaloalto.org

Palo Alto Municipal Code, Chapter 8.10.040, requires disclosure and protection of certain trees located on private and public property, and that they be shown on approved site plans. A completed disclosure statement must accompany all building permit applications that include exterior work, all demolition or grading permit applications, or other development activity.

PROPERTY ADDRESS: 3215 PORTER DRIVE

Are there Regulated[1] trees on or adjacent to the property? YES[2] NO (if no, proceed to Section 4)

[Sections 1- 4 MUST be completed by the applicant. Please circle and/or check where applicable.]

1. Where are the trees? Check those that apply. **(Plans must be submitted showing over 4" diameter trees)**
   - ☒ On the property
   - ☒ On adjacent property overhanging the project site
   - ☐ In the City planter strip or right-of-way easement within 30' of property line (Street Trees)*

*Street trees[1] **require special protection by a fenced enclosure,** per the attached instructions. Prior to receiving any permit, you must provide an authorized Street Tree Protection Verification form by calling Public Works Operations at 493-5953 for inspection of required type I, II or III fencing (see attached Detail #605).

2. Are there any Protected[1] or Designated[1] Trees? **YES** (Check where applicable) NO
   - ☐ Protected Tree (s)
   - ☐ Designated Tree (s)
   - ☐ On or overhanging the property

3. Is there activity or grading within the dripline? (radius 10 times the trunk diameter) of these trees? YES NO
   *If Yes, a **Tree Preservation Report** must be prepared by an ISA certified arborist and submitted for staff review (see TTM, Section 6.25). Attach this report to Sheet T-1,"Tree Protection, its Part of the Plan!", per Site Plan Requirements.*

4. Are the Site Plan Requirements** completed? YES NO

**Protection of Regulated trees during development require the following: (1) Plans must show the measured trunk diameter and canopy dripline; (2) Plans must denote, as a bold dashed line, a fenced enclosure area out to the dripline, per Sheet T-1 and Detail #605 - http://www.cityofpaloalto.org/trees/forms.htm (See also TTM[2], Section 2.15 for area to be fenced)

I, the undersigned, agree to the conditions of this disclosure. I understand that knowingly or negligently provicing false or misleading information in response to this disclosure requirement constitutes a violation of the Palo Alto Municipal Code Section 8.10.040, which can lead to criminal and/or civil legal action.

Signature: _____ (Prop. Owner or Agent) Print: JAMES WINSTEAD Date: 10.25.19

FOR STAFF USE:

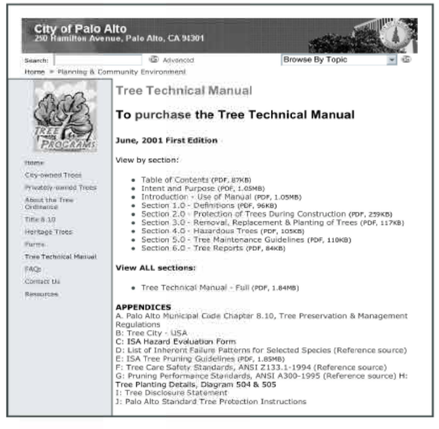
Protective Fencing
Sections 5-6 must be **completed by staff** for the issuance of any development permit (demolition, grading or building permit).

5. Protected Trees. The specified tree fencing is in place. A written statement is attached verifying that protective fencing is correctly in place around protected and/or designated trees. YES NO
(N/A if there are no protected trees, check here ☐)

6. Street Trees. A signed Public Works Street Tree Protection Verification form is attached. YES NO
(N/A if there are no street trees, check here ☐).

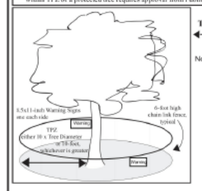
[1] Regulated Trees – a) Street trees – trees on public property; b) Protected trees – Coast Live Oaks or Valley Oaks which are 11.5" in diameter or larger, Coast Redwoods which are 18" in diameter or larger, when measured 54" above natural grade; and Heritage trees are trees designated by City Council; and c) Designated Trees – commercial or non-residential property trees, which are part of an approved landscape plan.

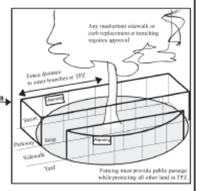
[2] Palo Alto Tree Technical Manual (TTM) contains instructions for all requirements on this form, available at http://www.cityofpaloalto.org/planning-community/tree_technical-manual.htm;

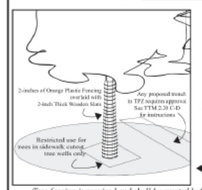


For written specifications associated with illustrations below, see Public Works Specifications Section 31
Detailed specifications are found in the Palo Alto Tree Technical Manual (TTM) (www.cityofpaloalto.org/trees/)

Tree Protection Zone (TPZ) shown in gray (radius of TPZ equals 10-times the diameter of the tree or 10-feet, whichever is greater).
- Restricted activity area – see Tree Technical Manual Sec 2.15(E).
- Restricted trenching area – see Tree Technical Manual Sec 2.20(C-D), any proposed trench or form work within TPZ of a protected tree requires approval from Public Works Operations. Call 650-496-5953.







Note: Street Trees. Issuance of a permit requires Public Works Operations inspection and signed approval on the Street Tree Verification (STV) form provided.

Type III Tree Protection
(to be used only with approval of Public Works Operations)

Tree fencing is required and shall be erected before demolition, grading or construction begins.

Rev	By	Date
0	DWH	12/14/92
H	D.D.	08/04/04
H2	D.D.	08/10/06

Tree Protection During Construction

Approved by: Dave Dockter
PE No.
Date 2006
Dwg No. 605

Scale: NTS — City of Palo Alto Standard

APPENDIX J

PALO ALTO
STREET TREE PROTECTION INSTRUCTIONS
--SECTION 31--

31-1 General
a. **Tree protection has three primary functions.** 1) to keep the foliage canopy and branching structure clear from contact by equipment, materials and activities; 2) to preserve roots and soil conditions in an intact and non-compacted state and 3) to identify the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved.
b. **The Tree Protection Zone (TPZ)** is a restricted area around the base of the tree with a radius of ten-times the diameter of the tree's trunk or ten feet; whichever is greater, enclosed by fencing.

31-2 Reference Documents
a. **Detail 605** – Illustration of situations described below.
b. **Tree Technical Manual (TTM) Forms** (http://www.cityofpaloalto.org/trees/)
1. Trenching Restriction Zones (TTM, Section 2.20(C))
2. Arborist Reporting Protocol (TTM, Section 6.30)
3. Site Plan Requirements (TTM, Section 6.25)
4. Tree Disclosure Statement (TTM, Appendix D)
c. **Street Tree Verification (STV) Form** (http://www.cityofpaloalto.org/trees/forms)

31-3 Execution
a. **Type I Tree Protection:** The fence shall enclose the entire TPZ of the tree(s) to be protected throughout the life of the construction project. In some parking areas, if fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base, if approved by Public Works Operations.
b. **Type II Tree Protection:** For trees situated within a planting strip, only the planting strip and yard side of the TPZ shall be enclosed with the required chain link protective fencing in order to keep the sidewalk and street open for public use.
c. **Type III Tree Protection:** To be used only with approval of Public Works Operations. Trees situated in a tree well or sidewalk planter pit, shall be wrapped with 2-inches of orange plastic fencing from the ground to the first branch and overlaid with 2-inch thick wooden slats bound securely (slats shall not be allowed to dig into the bark). During installation of the plastic fencing, caution shall be used to avoid damaging any branches. Major limbs may also require plastic fencing as directed by the City Arborist.
d. **Size, type and area to be fenced.** All trees to be preserved shall be protected with six (6') foot high chain link fences. Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2-feet at no more than 10-foot spacing. Fencing shall extend to the outer branching, unless specifically approved on the STV Form.
e. **"Warning" signs.** A warning sign shall be weather proof and prominently displayed on each fence at 20-foot intervals. The sign shall be minimum 8.5-inches x 11-inches and clearly state in half inch tall letters: "WARNING - Tree Protection Zone - This fence shall not be removed and is subject to a fine according to PAMC Section 8.10.110."
f. **Duration.** Tree fencing shall be erected before demolition; grading or construction begins and remain in place until final inspection of the project, except for work specifically allowed in the TPZ. Work or soil disturbance in the TPZ requires approval by the project arborist or City Arborist (in the case of work around Street Trees). Excavations within the public right of way require a Street Work Permit from Public Works.
g. **During construction**
1. All neighbors' trees that overhang the project site shall be protected from impact of any kind.
2. The applicant shall be responsible for the repair or replacement plus penalty of any publicly owned trees that are damaged during the course of construction, pursuant to Section 8.04.070 of the Palo Alto Municipal Code.
3. The following tree preservation measures apply to all trees to be retained:
   a. No storage of material, topsoil, vehicles or equipment shall be permitted within the TPZ.
   b. The ground under and around the tree canopy area shall not be altered.
   c. Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

END OF SECTION

City of Palo Alto 2004 Standard Drawings and Specifications
Street Tree Verification of Protection, PWE, Section 31 — Revised 08/06

Table 1-2 Palo Alto Tree Technical Manual

CONTRACTOR & ARBORIST INSPECTION SCHEDULE

Reference: the Palo Alto Tree Technical Manual is available at www.cityofpaloalto.org/environment/

ALL CHECKED ITEMS APPLY TO THIS PROJECT:

1. ☑ **Inspection of Protective Tree Fencing.** For Public Trees, the Street Tree Verification Form shall be signed by the City Arborist. For Protected Trees, the project site arborist shall provide an initial Monthly Tree Activity Report from with a photograph verifying that he has conducted a field inspection of the trees and that the correct type of protective fencing is in place around the designated tree protection zone (TPZ) prior to issuance of a demolition, grading, or building permit. (See TTM, Verification of Tree Protection, Section 1.39)
2. ☑ **Pre-Construction Meeting.** Prior to commencement of construction, the applicant or contractor shall conduct a pre-construction meeting to discuss tree protection with the job site superintendent, grading operators, project site arborist, City Arborist, and, if a city maintained irrigation system is involved, the Parks Manager (Contact 650-496-6962).
3. ☑ **Inspection of Rough Grading or Trenching.** Contractor shall ensure the project site arborist performs an inspection during the course of rough grading or trenching adjacent to or within the TPZ to ensure trees will not be injured by compaction, cut or fill, drainage and trenching, and if required, inspect aeration systems, tree wells, drains and special paving. The contractor shall provide the project arborist at least 24 hours advance notice of such activity.
4. ☑ **Monthly Tree Activity Report Inspections.** The project site arborist shall perform a minimum monthly activity inspection to monitor and advise on conditions, tree health and retention or, immediately if there are any revisions to the approved plans or protection measures. The Tree Technical Manual Monthly Tree Activity Report format shall be used and sent to the Planning Dept. landscape review staff no later than 14 days after issuance of building permit date. Fax to (650) 329-2154. (See TTM, Monthly Tree Activity Inspection Report, Addendum 11 & section 1.17).
5. ☑ **Special activity within the Tree Protection Zone**. Work in the TPZ area (see also #7 below) requires the direct onsite supervision of the project arborist (see TTM, Trenching, Excavation & Equipment, Section 2.20 C).
6. ☐ **Landscape Architect Inspection.** For discretionary development projects, prior to temporary or final occupancy the applicant or contractor shall arrange for the Landscape Architect to perform an on site inspection of all plant stock, quality of the materials and planting (see TTM, Planting Quality, Section 3.20.1 A) and that the irrigation is functioning consistent with the approved construction plans. The Planning Dept. landscape review staff shall be in receipt of written verification of Landscape Architect approval prior to scheduling the final inspection, unless otherwise approved.
7. ☐ **List Other** (please describe as called out in the site Tree Preservation Report, Sheet T-1, T-2, etc.)
   - _____
   - _____

City of Palo Alto
Tree Department
Public Works Operations
PO Box 10250 Palo Alto, CA 94303
650/496-5953 FAX: 650/852-8289
treeprotection@CityofPaloAlto.org

Verification of Street Tree Protection

Applicant Instructions: Complete upper portion of this form. Mail or FAX this form along with signed Tree Disclosure Statement to Public Works Dept. Public Works Tree Staff will inspect and notify applicant.

APPLICATION DATE:	
ADDRESS/LOCATION OF STREET TREES TO BE PROTECTED:	
APPLICANT'S NAME:	
APPLICANT'S ADDRESS:	
APPLICANT'S TELEPHONE & FAX NUMBERS:	

This section to be filled out by City Tree Staff

1. The Street Trees at the above address(es) are adequately protected. The type of protection used is:	YES ☐ NO* ☐ * If NO, go to #2 below
Inspected by:	
Date of Inspection:	
2. The Street Trees at the above address are NOT adequately protected. The following modifications are required: _____ Indicate how the required modifications were communicated to the applicant.	

Subsequent Inspection

Street trees at above address were found to be adequately protected:	YES ☐ NO* ☐ * If NO, indicate in "Notes" below the disposition of case.
Inpsected by:	
Date of Inspection:	
Notes: List City street trees by species, site, condition and type of tree protection installed. Also note if pictures were taken. Use back of sheet if necessary.	

Return approved sheet to Applicant for demolition or building permit issuance.

S:\PROGRS\Tree\DS\St.TreeProtect — 5/1/06

City of Palo Alto Tree Technical Manual — ADDENDUM 11

Arborist Firm Data Here — email: ISA/ISA Certified Arborist #WE-000 Master Cert.#

Monthly Tree Activity Report- *Construction Site*

Inspection Date: _____ **Inspection #** _____	**Site address:** _____ Palo Alto, CA	**Contractor-Main Site Contact Information**	#1: Job site superintendent Company: Email: Job site Office: Cell: Mail:
		Also present:	• _____ • _____
Distribution:	1. City of Palo Alto 2. Others	**Attn: Dave Dockter**	Dave.Dockter@cityofpaloalto.org 650-329-2440

Provide the requested minimum information with each report, customize as necessary. To be completed by project site arborist. Send monthly to city arborist at above address until project completion. Use additional sheets as needed.

1. Assignment Activity (Demolition/grading/sewer/trenching/foundation/list relevant visits)
   a. Pre-construction meeting requirement with sub-contractors
   b. Inspect to verify that tree protection measures are in place
   c. Determine if field adjustments, watering or plan revisions may be needed
2. Field Observations (general site-wide and list by individual tree number)
   a. Tree Protection Fences (TPF) are …
   b. Trenching has/will occur …
3. Action Items (list site-wide, by tree number and date to be satisfied) and Date Due
   a. Tree Protection Fence (TPF) needs adjusting (tree #'s, x, x)
   b. Root zone buffer material (wood chips) can be installed next
   c. Schedule sewer trench, foundation dig with …
4. Photographs (use often)
5. Tree Location Map (mandatory 8.5 x 11 sheet)
6. Recommendations, notes or monitor items for project/staff/schedule
   •
7. Past visits (list carry-over items satisfied/still outstanding)
   •

Respectfully submitted,

Project site arborist
Consultant contact information (Include email, cell#, and mailing)
Cc:

Enter Date — CPA Monthly Tree Activity Report: Type site address here — Page #1 of 1

---WARNING---
Tree Protection Zone

This fencing shall not be removed without City Arborist approval (650-496-5953)

Removal without permission is subject to a $500 fine per day*

Palo Alto Municipal Code Section 8.10.110

City of Palo Alto Tree Protection Instructions are located at http://www.city.palo-alto.ca.us/trees/technical-manual.html

SPECIAL INSPECTIONS — **PLANNING DEPARTMENT**

TREE PROTECTION INSPECTIONS MANDATORY

PAMC 8.10 PROTECTED TREES. CONTRACTOR SHALL ENSURE PROJECT SITE ARBORIST IS PERFORMING REQUIRED TREE INSPECTION AND SITE MONITORING. PROVIDE WRITTEN MONTHLY TREE ACTIVITY REPORTS TO THE PLANNING DEPARTMENT LANDSCAPE REVIEW STAFF BEGINNING 14 DAYS AFTER BUILDING PERMIT ISSUANCE.

BUILDING PERMIT DATE: _____
DATE OF 1ST TREE ACTIVITY REPORT: _____
CITY STAFF: _____

REPORTING DETAILS OF THE MONTHLY TREE ACTIVITY REPORT SHALL CONFORM TO SHEET T-1 FORMAT, VERIFY THAT ALL TREE PROTECTION MEASURES ARE IMPLIMENTED AND WILL INCLUDE ALL CONTRACTOR ACTIVITY, SCHEDULED OR UNSCHEDULED, WITHIN A TREE PROTECTION ROOT ZONE. NON-COMPLIANCE IS SUBJECT TO VIOLATION OF PAMC 8.10.080. REFERENCE: PALO ALTO TREE TECHNICAL MANUAL, SECTION 2.00 AND ADDENDUM 11.

Apply Tree Protection Report on sheet(s) T-2

Use addtional "T" sheets as needed

Project Data

T-1

All other tree-related reports shall be added to the space provided on this sheet (adding as needed)
Include this sheet(s) on Project Sheet Index or Legend Page.
A copy of T-1 can be downloaded at
http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6460

Special Tree Protection Instruction Sheet
City of Palo Alto

T-1

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

TREE PROTECTION T-1 L1.22

Arborist Report
3215 Porter Dr.
Palo Alto, CA

Introduction and Overview

Stanford Real Estate is planning to redevelop the site at 3215 Porter Dr. in Palo Alto, CA. The building on the site was demolished for development of the adjacent site; the parking area and landscaping remain. HortScience | Bartlett Consulting was asked to prepare an **Arborist Report** for the site as part of the development application to the City of Palo Alto.

This report provides the following information:

1. An evaluation of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. An assessment of trees that will be preserved and removed based on plans provided by the client.
3. Guidelines for tree preservation during the design, construction, and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on March 22, 2019. The assessment included all trees located within the proposed project area and with canopies overhanging the site. The assessment procedure consisted of the following steps:

1. Identifying the tree species;
2. Verifying tree tag numbers, which were previously attached to trees in 2016.
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition using a scale of 1 to 5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age, and structural condition of the tree species and its potential to remain an asset to the site.

   High: Trees with good health and structural stability that have the potential for longevity at the site.

   Moderate: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'high' category.

   Low: Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual tree may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

HortScience reevaluated 24 trees. Based on the survey, nine blue gums along the north property line are located off site. Only three species were represented in the assessment (Table 1), with blue gum and Canary Island pine representing the most trees. Descriptions of each tree are found in the ***Tree Assessment*** and approximate locations are plotted on the ***Tree Inventory Map*** (see Exhibits).

Table 1. Condition ratings and frequency of occurrence of trees 3215 Porter Dr., Palo Alto CA

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Blue gum	*Eucalyptus globulus*	2	7	-	**9**
Red ironbark	*Eucalyptus sideroxylon*	-	1	-	**1**
Canary Island pine	*Pinus canariensis*	-	3	11	**14**
Total		**2**	**11**	**11**	**24**

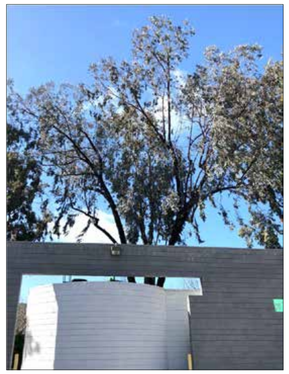
Canary Island pine comprised most of the trees on site, with 14 trees. Trees were mature, with trunk diameters ranging from 13 to 29 inches. Canary Island pines were mostly in good condition with good form and structure and dense crowns (Photo 1). Two trees in fair condition (#95, 140) had slightly thin crowns.

Red ironbark (#143) was the only other on-site tree located along the west property line against the fence. It had multiple trunks of 20, 20, and 18 inches and was in fair condition with a thinning crown (Photo 2).

The remaining nine trees were located just off site along the north property line and consisted of mature blue gums, with trunk diameters ranging from 10 to 36 inches. All trees had codominant or multiple trunks, and all but two trees were in fair condition. Trees had been previously topped and had multiple branches growing from the pruning locations. Two trees in poor condition (#99, 100) had small crowns and crowded form.

Photo 1 (right): Canary Island pines #94-97 were in good and fair conditions.

Photo 2 (far right): Red ironbark #143 was in fair condition with a thinning crown and fair structure.



The City of Palo Alto regulates all trees associated with a development project; therefore all 24 trees are considered protected.

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment, and perform well in the landscape.

Each tree was rated for suitability for preservation based upon its age, health, structural condition, and ability to safely coexist within a development environment (see ***Tree Assessment*** in Exhibits, and Table 2). We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes. Off-site trees were not rated.

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. For example, blue gum # 104, with decay in pruning cuts on the lower trunk, has a higher likelihood of failure and should be removed or monitored.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, Canary Island pine is relatively tolerant of construction impacts.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**
  Species that spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) lists species identified as being invasive. Palo Alto is part of the Central West Floristic Province. Blue Gum is listed as "limited."

Table 2. Tree suitability for preservation
3215 Porter Dr., Palo Alto CA

High	Trees in this category are in good health and structural stability and have the potential for longevity at the site. Ten Canary Island pines were in this category.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. These trees require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. Eight trees had a moderate suitability for preservation.
Low	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Six off-site blue gums were in this category.

Evaluation of Impacts and Recommendations

The *Tree Assessment* was the reference point for tree health, condition, and suitability for preservation. I used the Tree Disposition and Landscape plans (The Guzzardo Partnership, 5/31/19) to estimate impacts to trees.

The plan shows a new building near the front of the site surrounded by patio, parking, and landscaping. A pedestrian pathway transects the north side of the site adjacent to the Palo Alto Hanover utility substation.

Improvements to the substation by the City will result in removal of blue gums #98-106, which are located on the 3350 Hanover site. Trees #94-97, 107, 138 and 139 are within the path alignment and will need to be removed for grading and construction. Canary Island pines #140-142, located within a small parking lot planter, will be removed to accommodate the new parking lot layout, which includes a ramp leading to a subterranean garage.

Based on my evaluation of the plans:

- Ten (10) on-site trees will be removed, all Canary Island pines;
- Nine off-site blue gums will be removed (by the City) for substation improvements;
- Four Canary Island pines (#82-85) at the northwest corner of the site will be preserved, two of the trees will experience minor to moderate impacts from path construction;
- One red ironbark at the northwest property line will remain undisturbed.

Excavation near trees #82-85 should be done carefully to avoid damaging roots. Guidelines for protection and preservation of these trees are included in the following section.

Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **TREE PROTECTION ZONE** can minimize these impacts.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Tree Protection Zone

1. **A TREE PROTECTION ZONE** shall be identified for each tree to be preserved on the Tree Protection Plan prepared by the Project Arborist.
   a. Fence trees #82-85 to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing, or grading. Fences shall be 6 ft. chain link with posts sunk into the ground or equivalent as approved by the City.
   b. **TREE PROTECTION ZONE** shall extend to the edge of proposed pedestrian walkways to the north and east and to tree driplines in all other directions.
   c. Fences must be installed prior to beginning demolition and must remain until construction is complete.
   d. No grading, excavation, construction or storage or dumping of materials shall occur within the **TREE PROTECTION ZONE**. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.

Design recommendations

1. All plans affecting trees shall be reviewed by the Project Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, grading and utility plans, landscape, and irrigation plans.
2. Underground services including utilities, sub-drains, water or sewer shall be routed around the **TREE PROTECTION ZONE**. Where encroachment cannot be avoided, special construction techniques such as hand digging or tunneling under roots shall be employed where necessary to minimize root injury.
3. **Tree Preservation Guidelines**, prepared by the Project Arborist, should be included on all plans.
4. Do not lime within 25' of any tree. Lime is toxic to tree roots.
5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
6. Irrigation systems must be designed so that no trenching will occur not within the **TREE PROTECTION ZONE**.

Pre-construction treatments and recommendations

1. The construction superintendent shall meet with the Project Arborist before beginning work to discuss work procedures and tree protection.
2. Pruning trees to provide construction and access clearance may be required.

3. Prune trees to be preserved to clean the crown and to provide clearance. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300).
4. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent possible, tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for tree protection during construction

1. Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Project Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Project Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2" in diameter should be avoided.
3. If roots 2" and greater in diameter are encountered during site work and must be cut to complete the construction, the Project Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
4. No grading, construction, demolition, or other work shall occur within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Project Arborist.
5. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Project Arborist.
6. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
7. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, trees may require root pruning outside the **TREE PROTECTION ZONE.** Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Project Arborist.
8. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.
9. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
10. Any additional tree pruning needed for clearance during construction must be performed by a Project Arborist and not by construction personnel.

Maintenance of impacted trees

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority.

Inspect trees annually and following major storms to identify conditions requiring treatment to manage risk associated with tree failure.

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client and/or tree owner.

HortScience | Bartlett Consulting

Deanne Ecklund
Registered Consulting Arborist #647

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARBORIST REPORT L1.25

Tree Inventory Map

3215 Porter Dr.
Palo Alto, CA

Prepared for:
Stanford Real Estate

April 2019

No Scale

Notes

Aerial Image provided by Google Maps.

Tree locations are approximate.

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

325 Ray St.
Pleasanton, California 94566
Phone 925.484.0211

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARBORIST REPORT L1.26

Tree Assessment

3215 Porter Dr
Palo Alto, California
January 2016
Updated March 2019

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

TREE No.	SPECIES	SIZE DIAMETER (in inches)	CONDITION 1=POOR 5=EXCELLENT	Regulated?	SUITABILITY FOR PRESERVATION	COMMENTS
82	Canary Island pine	18	3	Yes	Moderate	Codominant trunks at 13' with narrow attachment; fair form; in parking lot planter.
83	Canary Island pine	13	4	Yes	High	Group of trees; slightly crowded form; in parking lot planter.
84	Canary Island pine	19	4	Yes	High	Good form and structure; slightly crowded form; on fence line.
85	Canary Island pine	14	4	Yes	High	Good form and structure; slightly crowded form; on fence line.
94	Canary Island pine	19	4	Yes	High	Good form and structure; lower crown one-sided to south.
95	Canary Island pine	16	3	Yes	Moderate	Good form and structure; lower crown one-sided to south; slightly thin crown.
96	Canary Island pine	17	4	Yes	High	Good form and structure; lower crown one-sided to south.
97	Canary Island pine	17	4	Yes	High	Good form and structure; lower crown one-sided to west.
98	Blue gum	36,19,10	3	Yes	Moderate	Multiple attachments at 3'; slightly thin crown; tortoise beetle foliage damage.
99	Blue gum	14,10	2	Yes	Low	Codominant trunks at 2'; previously topped at 20'; small crown.
100	Blue gum	13,11	2	Yes	Low	Codominant trunks at 2'; large pruning cut at attachment;previously topped at 20'; small crown.
101	Blue gum	18,16	3	Yes	Low	Codominant trunks at 2'; large pruning cut with decay at attachment; previously topped at 20'; dense crown.
102	Blue gum	14	3	Yes	Low	Multiple attachments at 7'; previously topped at 20'; small crown.
103	Blue gum	11,7,8	3	Yes	Moderate	Multiple attachments at 3'; slight lean west; pruning cut at base of 8" stem; previously topped at 20'.
104	Blue gum	20,15,12	3	Yes	Low	Multiple attachments at 4'; large pruning cut with decay on lower trunk; high crown.
105	Blue gum	29	3	Yes	Moderate	Multiple attachments at 15'; high crown; tortoise beetle damage.
106	Blue gum	20,18,14,13	3	Yes	Low	Multiple attachments at 4' with narrow attachments; pruning cut with sulfur fungus on lower trunk; previously topped at 20'.
107	Canary Island pine	18	4	Yes	High	Good form and structure; in 6' planter in parking lot.
138	Canary Island pine	23	4	Yes	High	Group of 2 trees; narrow, slightly crowded form.
139	Canary Island pine	29	4	Yes	High	Group of 2 trees; lifting pavers path; good form; lower trunk
140	Canary Island pine	16	3	Yes	Moderate	Group of 3 trees; codominant trunks high in crown; slightly thin crown.
141	Canary Island pine	13	4	Yes	High	Group of 3 trees; good form and structure; slightly thin crown.
142	Canary Island pine	22	4	Yes	Moderate	Group of 3 trees; correct lean south; roots lifting curb and asphalt.
143	Red ironbark	20,20,18	3	Yes	Moderate	Multiple attachments at base; on fence line between fence and round structure; fair structure; slightly thin crown.

Canopy Spread

3215 Porter Dr
Palo Alto, California
September 2019

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

Tag #	Species	Diameter (in.)	Canopy Spread (ft.) North	East	South	West	Avg.
82	Canary Island pine	18	9	8	9	6	**8**
83	Canary Island pine	13	6	10	12	3	**7.75**
84	Canary Island pine	19	5	9	10	10	**8.5**
85	Canary Island pine	14	9	10	10	5	**8.5**
94	Canary Island pine	19	5	10	18	15	**12**
95	Canary Island pine	16	7	8	11	13	**9.75**
96	Canary Island pine	17	1	8	20	12	**10.25**
97	Canary Island pine	17	6	8	12	10	**9**
98	Blue gum	36,19,10	18	27	20	9	**18.5**
99	Blue gum	14,10	8	7	13	6	**8.5**
100	Blue gum	13,11	7	7	5	6	**6.25**
101	Blue gum	18,16	12	17	20	12	**15.25**
102	Blue gum	14	2	8	7	8	**6.25**
103	Blue gum	11,7,8	2	8	21	10	**10.25**
104	Blue gum	20,15,12	7	16	21	13	**14.25**
105	Blue gum	29	12	19	21	16	**17**
106	Blue gum	20,18,14,13	4	23	21	16	**16**
107	Canary Island pine	18	6	22	20	16	**16**
138	Canary Island pine	23	8	12	17	6	**10.75**
139	Canary Island pine	29	7	12	19	18	**14**
140	Canary Island pine	16	7	11	16	13	**11.75**
141	Canary Island pine	13	5	9	10	8	**8**
142	Canary Island pine	22	1	16	28	8	**13.25**
143	Red ironbark	20,20,18	25	24	17	12	**19.5**

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

ARBORIST REPORT L1.27

3215 PORTER DRIVE
PALO ALTO, CALIFORNIA

GENERAL NOTES

1. CITY'S APPROVAL OF PLANS DOES NOT RELIEVE THE OWNER OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF PALO ALTO STANDARD SPECIFICATIONS AND STANDARD PLAN DETAILS UNLESS NOTED OTHERWISE.
3. ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A. (CA. 1-800-277-2600) 48 HOURS BEFORE DIGGING. EXCAVATION FOR UNDERGROUND FACILITIES SHALL NOT BE PERMITTED PRIOR TO CONTACTING UNDERGROUND SERVICE ALERT. UNDER NO CIRCUMSTANCES WILL EXCAVATION COMMENCE BEFORE BEING ISSUED AN IDENTIFICATION NUMBER FROM U.S.A. (SECTION 4210.1 OF THE GOVERNMENT CODE).
4. HAZARDOUS MATERIALS:
   UPON DISCOVERY OF HAZARDOUS MATERIAL, THE CONTRACTOR SHALL STOP THE WORK PROMPTLY AND NOTIFY THE FIRE DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL SERVICES AND PUBLIC WORKS INSPECTION FOLLOWED BY WRITTEN NOTICE OF ANY:
   A. MATERIAL THAT THE CONTRACTOR BELIEVES MAY BE HAZARDOUS WASTE, AS DEFINED IN SECTION 25117 OF THE HEALTH AND SAFETY CODE, THAT IS REQUIRED TO BE REMOVED TO A CLASS I, CLASS II, OF CLASS III DISPOSAL SITE IN ACCORDANCE WITH PROVISIONS OF EXISTING LAW.
   B. SUBSURFACE OR LATENT PHYSICAL CONDITIONS AT THE SITE DIFFERING FROM THOSE INDICATED ON THE PLANS, NOTES, OR SOILS REPORT.
   C. UNKNOWN PHYSICAL CONDITIONS AT THE SITE OF ANY UNUSUAL NATURE, DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT. THE DEVELOPER'S AGENT SHALL PROMPTLY INVESTIGATE THE SUSPECTED CONDITION AND, AS NECESSARY, INITIATE FURTHER ANALYSIS OF THE PROBLEM. IF REMEDIATION IS REQUIRED, THE OWNER SHALL SUBMIT A REMEDIATION PLAN TO THE DIRECTOR OF PUBLIC WORKS AND, UPON APPROVAL BY THE DIRECTOR, SHALL IMPLEMENT THE PLAN AT THE DEVELOPER'S SOLE EXPENSE.
5. IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT-RELATED CONSTRUCTION SHALL CEASE WITHIN A 100-FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE, AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE SANTA CLARA COUNTY CORONER IMMEDIATELY.
6. CONTRACTOR SHALL STENCIL AND MARK ALL NEW STORM DRAIN INLETS AND CATCH BASINS WITH "NO DUMPING – FLOWS TO MATADERO CREEK" MARKING ON THE FACE OF THE CURB ADJACENT TO THE CATCH BASIN OR THE CATCH BASIN ITSELF. THE STENCILS MAY BE OBTAINED THROUGH THE CITY OF PALO ALTO PUBLIC WORKS INSPECTOR.
7. ALL PCC PAVEMENT SECTION THICKNESS SHOWN SHALL BE BASED ON NET THICKNESS WHICH EXCLUDES INDENTATION FOR ARCHITECTURAL PURPOSES.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS NECESSARY TO PERFORM THE IMPROVEMENTS IN THESE PLANS FROM THE APPROPRIATE AGENCIES AND TO COMPLY WITH THE AGENCIES' REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL LAWS.
9. WHEN IT IS FOUND THAT FIELD CONDITIONS ARE NOT AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO FURTHER CONSTRUCTION.
10. CONTRACTOR SHALL CAREFULLY PRESERVE THE SURROUNDING PROPERTY BY CONFINING OPERATION WITHIN THE LIMITS OF WORK AREA. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER.

TITLE 24 / ADA NOTES

1. ALL SITE WORK SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE AND WITH THE AMERICANS WITH DISABILITIES ACT.
2. CURB RAMPS SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).
3. ENTRANCE RAMPS TO BUILDINGS SHALL NOT EXCEED A SLOPE OF 1:20 (5%) UNLESS RAILINGS ARE SHOWN ON ARCHITECTURAL PLANS, IN WHICH CASE THE SLOPE SHALL NOT EXCEED 1:12 (8.33%).
4. A 2% MAXIMUM SLOPE LANDING SHALL BE PROVIDED AT PRIMARY ENTRANCES TO BUILDINGS.
5. RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES OF 1:20 (5%) AND 1:12 (8.33%), AND SHALL HAVE A MINIMUM WIDTH OF 48" AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 2'-6" VERTICAL DROP SHALL HAVE INTERMEDIATE (2% MAXIMUM SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60". BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72".
6. MAXIMUM CROSS-SLOPE ON ANY SIDEWALK OR RAMP SHALL BE 2%.
7. SEE ARCHITECTURAL AND/OR LANDSCAPE PLANS FOR RAMP DETAILS.

GRADING AND PAVING NOTES

1. PAVEMENT EXCAVATION SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING A.C. PAVEMENT AND PCC CURB REQUIRED FOR THE CONSTRUCTION OF NEW SURFACE IMPROVEMENTS. THE CONTRACTOR SHALL SAW-CUT EXISTING PAVEMENT AT LOCATIONS AS SHOWN ON THE PLANS PRIOR TO REMOVAL OF EXISTING PAVEMENT. ALL EXCAVATED MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AND PROPERLY DISPOSED OF IN AN AREA PROVIDED BY THE CONTRACTOR.
2. CONTRACTOR SHALL GRADE TO THE LINE AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION AS INDICATED.

	HORIZONTAL	VERTICAL	COMPACTION
PAVEMENT SUBGRADE	0.1'±	+0.1' TO −0.1'	95%

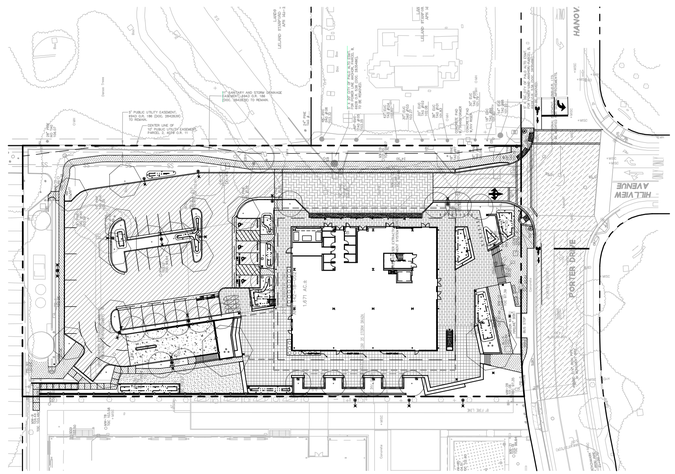
3. NOT USED.
4. CONTRACTOR SHALL ADJUST ALL NEW INLETS, VALVE BOXES, AND OTHER UTILITY STRUCTURES, AND ALL EXISTING UTILITY STRUCTURES WHICH ARE TO REMAIN, TO THE NEW FINISH GRADE.
5. THE CIVIL ENGINEER, BKF ENGINEERS, 1730, NORTH FIRST STREET, SAN JOSE, CALIFORNIA 95112, HAS DESIGNED THIS PROJECT TO COMPLY WITH THE GRADING RECOMMENDATIONS IN THE GEOTECHNICAL REPORT PREPARED BY _____. IF ANY DISCREPANCIES ARE FOUND BETWEEN THE PLANS/SPECS AND THE GEOTECHNICAL REPORT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO FURTHER CONSTRUCTION.
6. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HEREON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
7. DO NOT USE CHEMICALS FERTILIZERS, PESTICIDES, HERBICIDES OR COMMERCIAL SOIL AMENDMENT. USE ORGANIC MATERIALS REVIEW INSTITUTE (OMRI) MATERIALS AND COMPOST. REFER TO THE BAY-FRIENDLY LANDSCAPE GUIDELINES: HTTP://WWW.STOPPWASTE.ORG/RESOURCE/BROCHURES/BAY-FRIENDLY-LANDSCAPE-GUIDELINES-SUSTAINABLE-PRACTICES-LANDSCAPE-PROFESSIONAL FOR GUIDANCE.
8. AVOID COMPACTING SOIL IN AREAS THAT WILL BE UNPAVED.

SURFACE IMPROVEMENT NOTES

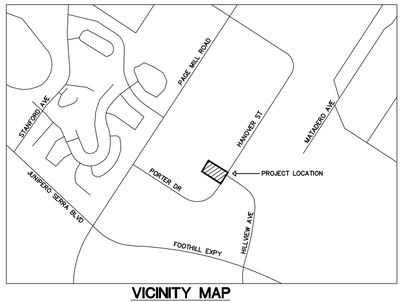
1. ALL PAVING SHALL CONFORM TO THE GEOTECHNICAL INVESTIGATION PREPARED BY _____.
2. AGGREGATE BASE SHALL CONFORM TO CLASS 2 AGGREGATE BASE, PER SECTION 26 OF THE STATE STANDARD SPECIFICATIONS, AND SHALL HAVE A MINIMUM COMPACTION OF 95% RELATIVE FOR ASPHALT CONCRETE PAVEMENT AND 90% RELATIVE FOR EXTERIOR CONCRETE FLATWORK, UNLESS OTHERWISE NOTED OR DIRECTED BY GEOTECHNICAL ENGINEER.
3. THE TOP 6" OF CURB AND GUTTER SUBGRADE SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION, INCLUDING EXPANSIVE ON-SITE SOILS.
4. ASPHALT CONCRETE SHALL CONFORM TO TYPE B, 3/4" MAXIMUM, MEDIUM GRADING, PER SECTION 39 OF THE STATE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
5. PORTLAND CEMENT CONCRETE SHALL CONFORM TO THE CITY OF PALO ALTO SPECIFICATIONS.
6. SURFACE STRUCTURES INCLUDING, BUT NOT LIMITED TO, MANHOLES, WATER VALVE BOXES, CLEAN OUT FRAMES AND COVERS, ETC., SHALL BE BROUGHT TO FINISHED GRADE BY THE CONTRACTOR AFTER PAVING IS COMPLETED.

NOTE TO CONTRACTOR:

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.



SITE MAP
SCALE: 1"=40'



VICINITY MAP
SCALE: NTS

ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AB	AGGREGATE BASE	FG	FINISHED GRADE	RF	RAISED FLOOR
AC	ASPHALT CONCRETE	FH	FIRE HYDRANT	RT	RIGHT
AD	AREA DRAIN	FL	FLOW LINE	R/W	RIGHT OF WAY
AGG	AGGREGATE	G	GAS	S	SLOPE
BC	BEGINNING OF CURVE	GB	GRADE BREAK	SD	STORM DRAIN
BH	BOTTOM OF HEADER	HP	HIGH POINT	SDMH	STORM DRAIN MANHOLE
BLDG	BUILDING	INV	INVERT	SL	STREET LIGHT
BM	BENCH MARK	IRR	IRRIGATION	SS	SANITARY SEWER
BO	BLOWOFF	JT	JOINT TRENCH	S.A.D.	SEE ARCHITECTURAL DRAWINGS
BOW	BOTTOM OF WALL	LF	LINEAR FEET	S.E.D.	SEE ELECTRICAL DRAWINGS
C	CABLE	LG	LIP OF GUTTER	S.L.D.	SEE LANDSCAPE DRAWINGS
BVC	BEGIN VERTICAL CURVE	LP	LOW POINT	S.M.D.	SEE MECHANICAL DRAWINGS
BW	BACK OF WALK	LS	LANDSCAPE	S.P.D.	SEE PLUMBING DRAWINGS
CB	CATCH BASIN	LT	LEFT	S.P.P.	SEE PLUMBING PLANS
C&G	CURB & GUTTER	M	METER	S.S.D.	SEE STRUCTURAL DRAWINGS
℄ , CL	CENTERLINE	M.E.P.	MECHANICAL/ELECTRICAL/PLUMBING	SSMH	SANITARY SEWER MANHOLE
CMP	CORRUGATED METAL PIPE	MH	MANHOLE	STA	STATION
CO	CLEANOUT	MON	MONUMENT	S/W	SIDEWALK
CONC	CONCRETE	NTS	NOT TO SCALE	T OR TELE	TELEPHONE
CPA	CITY OF PALO ALTO	PCC	PORTLAND CEMENT CONCRETE	TC	TOP OF CURB
DI	DROP INLET	PG&E	PACIFIC GAS AND ELECTRIC	TH	TOP OF HEADER
DIP	DUCTILE IRON PIPE	PL	PROPERTY LINE	TOW,TW	TOP OF WALL
DW	DOMESTIC WATER	P.O.C.	POINT OF CONNECTION	TP	TOP OF PAVEMENT
D/W	DRIVEWAY	PRC	POINT OF REVERSE CURVE	TS	TOP OF SLAB (S.S.D.)
E	ELECTRIC	PT	POINT	UCD	UNDERGROUND TRANSFORMER
EC	END OF CURVE	PV	PAVEMENT ELEVATION	VC	VERTICAL CURVE
EL	ELEVATION	PVC	POLYVINYL CHLORIDE	VCP	VITRIFIED CLAY PIPE
EP	EDGE OF PAVEMENT	PVI	POINT OF VERTICAL INTERSECTION	W	WATER
EVC	END VERTICAL CURVE	R	RADIUS	WM	WATER METER
(E) EX	EXISTING	RC	RELATIVE COMPACTION	WV	WATER VALVE
F	FIRE	RCP	REINFORCED CONCRETE PIPE		
FC	FACE OF CURB	RESID	RESIDENTIAL		
FDC	FIRE DEPARTMENT CONNECTION	RET	RETAIL		
FF	FINISHED FLOOR ELEVATION				

BASIS OF BEARINGS

–

VERTICAL DATUM

ALL ELEVATIONS SHALL BE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

SWPPP/NOI NOTE

AN NOI WILL BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD FOR COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. WDID # _____.

UNDERGROUND CONSTRUCTION NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH STANDARD SPECIFICATIONS, CONSTRUCTION DETAILS, AND STANDARD DRAWINGS OF THE CITY OF PALO ALTO UNLESS OTHERWISE NOTED.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE LOCATION AND DEPTHS OF EXISTING UNDERGROUND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE POSITIONS BASED UPON THE INFORMATION AVAILABLE TO THE ENGINEER. ANY ADDED COST TO THE CONTRACTOR AS A RESULT OF THE ACTUAL LOCATIONS OF EXISTING UTILITIES BEING DIFFERENT FROM THAT SHOWN ON THE PLANS SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT PRICES.
3. CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND LOCATIONS OF EXISTING PIPES AND UTILITIES BY POTHOLING BEFORE EXCAVATION WORK OR MAKING CONNECTIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING LOCATE SERVICES FOR THOSE FACILITIES INSTALLED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK HAS BEEN OFFICIALLY ACCEPTED BY THE OWNER AND CITY OF PALO ALTO. THE MARKING AND LABELING OF SUCH LOCATIONS SHALL BE IN CONFORMANCE WITH UNDERGROUND SERVICE ALERT REQUIREMENTS.
5. IN THE EVENT OF WET UNSTABLE TRENCH BOTTOM OR IF GROUND WATER IS ENCOUNTERED, DEWATERING WILL BE REQUIRED AND ALL UNDERGROUND CONSTRUCTION WORK SHALL STOP IMMEDIATELY UNTIL THESE DEWATERING REQUIREMENTS ARE MET. CONTRACTOR SHALL CONTACT PUBLIC WORKS ENGINEERING FOR DEWATERING RECOMMENDATIONS. CONTRACTOR SHALL COMPLY WITH ALL CITY DEWATERING REQUIREMENTS.
6. SANITARY SEWER LATERALS SHALL BE A MINIMUM OF 1' BELOW WATER LATERALS.
7. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE REMOVAL AND/OR RELOCATION OF ANY EXISTING GAS LINES, METERS, AND ASSOCIATED APPURTENANCES WITH THE CITY OF PALO ALTO AND/OR APPROPRIATE UTILITY AGENCY HAVING JURISDICTION.
8. PROPOSED UTILITY LINES AND EXISTING UTILITY LINES TO REMAIN WITHIN THE PROPOSED FOOTING INFLUENCE LINE (AS DETERMINED BY THE STRUCTURAL AND/OR GEOTECHNICAL ENGINEER) SHALL BE PROTECTED WITH CONTROLLED DENSITY FILL (LEAN CONCRETE FILL) OR OTHER MEANS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
9. JOINT TRENCH LINES (ELECTRICAL, GENERATOR, DATA, STREET LIGHT, GAS, ETC.) ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL REFERENCE ELECTRICAL AND MECHANICAL PLANS FOR INFORMATION PERTAINING TO THESE FACILITIES.

SHEET INDEX

EROSION AND SEDIMENT CONTROL NOTES

1. GENERAL CONTRACTOR: DEVCON CONSTRUCTION INCORPORATED
   690 GIBRALTAR DRIVE
   MILPITAS, CA 95035
   (408) 942-8200

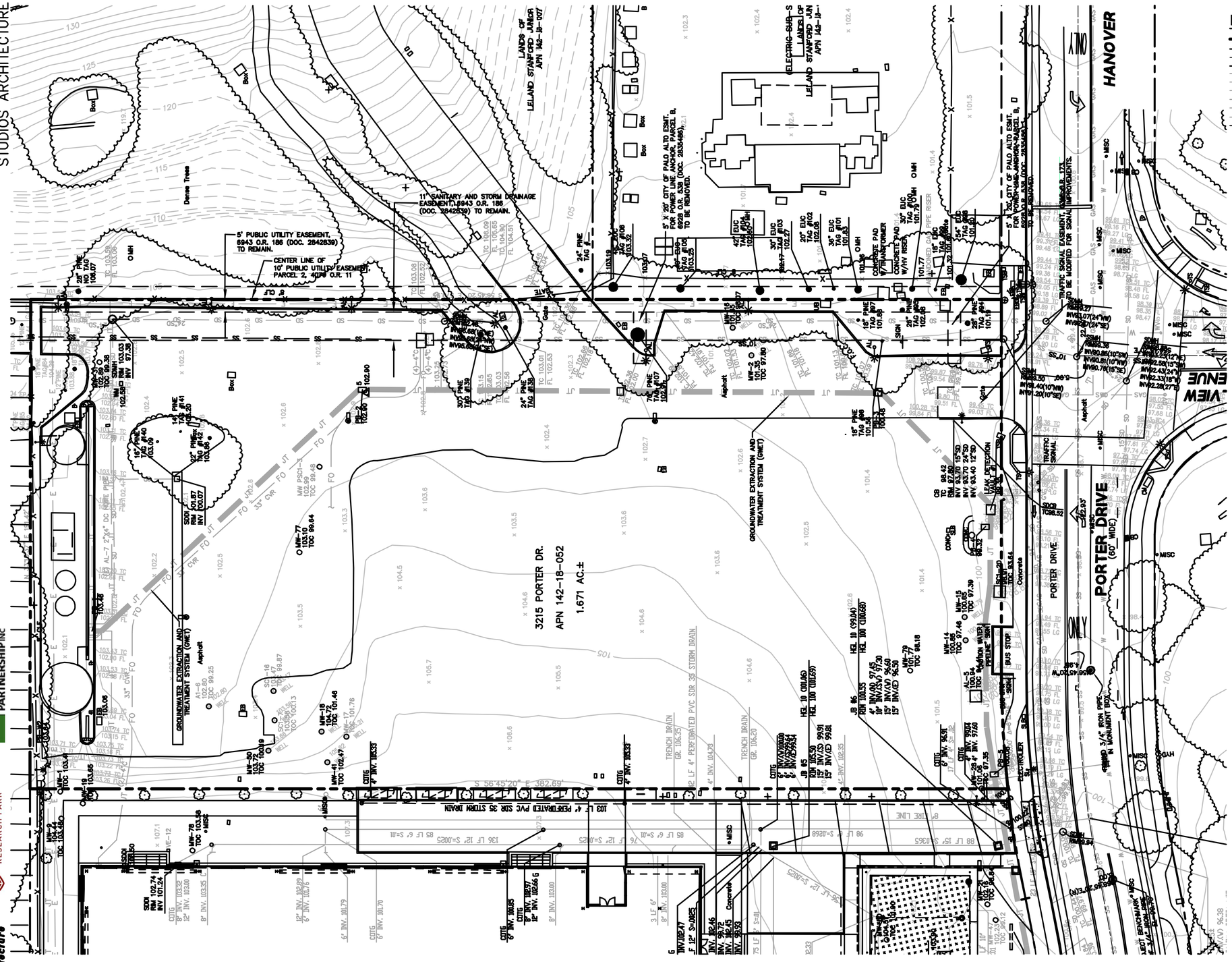
   IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN AND SWPPP. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES FOR THE LIFE OF THE CONSTRUCTION OPERATIONS AS REQUIRED BY THE CITY OF PALO ALTO AND/OR CRWQCB.
2. CIVIL ENGINEER: BKF ENGINEERS
   1730 NORTH FIRST STREET, SUITE 600
   SAN JOSE, CA. 95112
   (408) 467-9100
3. CONSTRUCTION SUPERINTENDENT: TBD ( ) – .
4. THE EROSION AND SEDIMENT CONTROL PLAN IS INTENDED TO BE USED FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY AND IS NOT TO BE USED FOR FINAL ELEVATIONS OR PERMANENT IMPROVEMENTS.
5. OWNER WILL ENSURE THAT ALL EROSION/SEDIMENT MEASURES IDENTIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP ARE IN PLACE. IF MEASURES ARE NOT IN PLACE, OWNER SHALL IMMEDIATELY CONTACT THE WATERSHED PROTECTION GROUP AT (650) 329-2122 AND PAMELA.BOYLERODRIGUEZ@CITYOFPALOALTO.COM.
6. ALL EROSION CONTROL FACILITIES MUST BE MONITORED AS REQUIRED BY THE CITY OF PALO ALTO AND/OR THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (CRWQCB). ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
7. EROSION CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE MAINTAINED, REPAIRED AND REPLACED WITHIN ONE BUSINESS DAY AFTER EACH SIGNIFICANT RAINFALL OR AS DIRECTED BY THE CITY ENGINEER AND/OR CRWQCB. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE CITY ENGINEER AND/OR THE CRWQCB BASED ON FIELD REVIEWS OF THE SITE. STORM DRAIN INLET PROTECTION THAT IS REMOVED BY CITY STAFF DURING A RAIN EVENT SHALL BE REPLACED BY THE CONTRACTOR WITHIN ONE BUSINESS DAY FOLLOWING THE RAIN EVENT.
8. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROADS CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP TWICE DAILY (OR MORE OFTEN) OF ANY MATERIAL SPILLED ON ANY ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
9. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS THROUGHOUT THE LIFE OF THE PROJECT. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATER COURSES.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH, AS WELL AS THE CONSTRUCTION GENERAL PERMIT AND CITY OF PALO ALTO MUNICIPAL CODE.
11. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT. FACILITIES ARE TO BE OPERABLE THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.
12. THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING WITH ASSUMED SITE CONDITIONS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN. PRIOR TO SEPT. 15TH, THE COMPLETION OF SITE IMPROVEMENTS SHALL BE EVALUATED AND REVISIONS MADE TO THIS PLAN AS NECESSARY WITH THE APPROVAL OF THE CITY ENGINEER. PLANS ARE TO BE RESUBMITTED FOR CITY APPROVAL. IF THERE ARE ANY CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN, THE PLAN SHALL BE SENT TO THE WATERSHED PROTECTION GROUP FOR APPROVAL AS WELL.
13. A CONSTRUCTION ENTRANCE AND CONSTRUCTION EXIT SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. DOWNSTREAM INLET PROTECTION AND OTHER BMPs SHALL BE IN PLACE BEFORE DEMOLITION. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE WAYS.
14. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE/EXIT AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY, OR MORE OFTEN IF SOIL HAULING CONTINUES, AND AS REQUIRED BY THE CITY. ALL TRUCK TIRES SHALL BE CLEANED WITH A TIRE WASH STATION PRIOR TO EXITING THE PROPERTY.
15. GRAVEL BAGS SHALL BE USED IN PLACE OF SAND BAGS. REFER TO THE LATEST REVISION OF CASQA OR CALTRANS BMPs.
16. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE OPERABLE YEAR-ROUND. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY 10/10, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH.
17. BORROW AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, ETC.) THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
18. ALL DRAINAGE INLETS WITHIN AND NEAR THE PROJECT SITE SHALL BE PROVIDED WITH SEDIMENT TRAPS OR SEDIMENT BARRIERS AS PER THIS PLAN. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. OFFSITE, DOWNGRADE STORM DRAIN INLETS FROM THE PROJECT SITE SHALL ALSO HAVE STORM DRAIN INLET PROTECTION.
19. DURING GRADING OPERATIONS THE SITE SHALL BE WATERED ON A DAILY BASIS TO MINIMIZE THE RELEASE OF DUST AND OTHER PARTICULATE MATTER. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
20. EARTHWORK SHALL NOT BE PERFORMED DURING UNFAVORABLE CONDITIONS. AFTER INTERRUPTION OF WORK DUE TO HEAVY RAIN, THE GEOTECHNICAL ENGINEER SHALL APPROVE EARTHWORK BEFORE RESUMPTION OF EARTHMOVING OPERATIONS.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR PUTTING IN PLACE THE NECESSARY MEANS AND EXECUTE PROPER METHODS TO PROTECT EARTHWORK AGAINST UNFAVORABLE WEATHER CONDITIONS. CONTRACTOR SHALL NOT BE PAID FOR ANY DELAY OR ADDITIONAL WORK TO REMEDY PREVIOUS EARTHWORK RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO PROTECT ITS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED WITH ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURE MAINTENANCE THROUGHOUT THE DURATION OF THE PROJECT.

EROSION AND SEDIMENT CONTROL MAINTENANCE NOTES

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   A. REPAIR DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION AT THE END OF EACH WORKING DAY.
   B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
   E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   F. RILLS AND GULLIES MUST BE REPAIRED.
   G. STORM DRAIN INLET PROTECTION THAT IS REMOVED BY CITY STAFF DURING A RAIN EVENT SHALL BE REPLACED BY THE CONTRACTOR WITHIN ONE BUSINESS DAY FOLLOWING THE RAIN EVENT.
2. GRAVEL BAGS SHALL BE USED IN PLACE OF SAND BAGS.
3. SEDIMENT DAMS AND TRAPS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT SHALL BE REMOVED FROM THESE DEVICES WHEN IT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
4. DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHIN ONE BUSINESS DAY FOLLOWING THE RAIN EVENT.
5. DURING PERIODS WHEN STORMS ARE FORECAST –
   A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
   B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
   C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS OR OTHER RUNOFF CONTROLS.
   D. USE INLET CONTROLS (E.G. FILTER MAT) FOR STORM DRAINS THROUGHOUT THE CONSTRUCTION PROJECT SITE AND ON OFFSITE, DOWNGRADE INLETS FROM THE PROJECT SITE. ENSURE THAT THESE INLET CONTROLS ARE CLEANED AND IN PLACE.
   E. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
6. DURING PERIODS WHEN STORMS ARE NOT FORECAST –
   A. PREVENT STOCKPILED MATERIAL FROM ENTERING THE STORM DRAIN SYSTEM.
   B. THOROUGHLY REMOVE LOOSE SOIL VIA SWEEPING FOLLOWING REMOVAL OF DIRT.
7. STREET SWEEPING, INLET MAINTENANCE, AND MAINTENANCE FOR CONSTRUCTION ENTRANCES/EXITS SHALL BE IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS FOR THE ASSOCIATED PROJECT TYPE AND RISK LEVEL. IT IS RECOMMENDED THAT AT A MINIMUM, BMPS BE INSPECTED WEEKLY, PRIOR TO FORECASTED RAIN EVENTS, DAILY DURING EXTENDED RAIN EVENTS, AND AFTER THE CONCLUSION OF RAIN EVENTS.

3215 PORTER DRIVE
STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN
TITLE SHEET
C1.0



LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- CENTERLINE
- EASEMENT
- ELECTRIC LINE
- GAS LINE
- STORM DRAIN LINE
- SANITARY SEWER LINE
- WATER LINE
- JOINT TRENCH LINE
- FENCE
- STREET LIGHT
- STORM DRAIN INLET
- SIGN
- MONUMENT
- TREE (28" PINE TAG #94)

ABBREVIATIONS

AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
AL-5	GROUNDWATER EXTRACTION WELL
APN	ASSESSORS PARCEL NUMBER
ASV	ANTI-SIPHON VALVE
BLDG	BUILDING CORNER
CATV	CABLE TELEVISION UTILITY
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CONC	CONCRETE
D	DELTA
E	ELECTRIC
EB	ELECTRIC BOX
EMW	ENVIRONMENT MONITORING WELL
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EUC	EUCALYPTUS TREE
FL	FLOW LINE
FW	FIRE WATER
GM	GAS METER/BOX
GV	GATE VALVE
HYD	HYDRANT
INV	INVERT
JT	JOINT TRENCH
L	LENGTH
LG	LIP OF GUTTER
MW-15	GROUNDWATER MONITORING WELL
PB	PULL BOX
PI	PRESSURE INDICATOR
R	RADIUS
RIM	RIM ELEVATION
SD	STORM DRAIN
SDDI	STORM DRAIN INLET
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
TC	TOP/FACE OF CURB
TEL	TELEPHONE
TSB	TRAFFIC SIGNAL BOX
UB	UTILITY BOX
UV	UTILITY VAULT
W	WATER
WM	WATER METER/BOX
WV	WATER VALVE

NOTES

1. THE UTILITY AND SERVICE LINES SHOWN ON THIS SURVEY ARE DERIVED FROM SURFACE OBSERVATION AND UTILITY REFERENCE MAP "CPA WGW UTILITIES INFORMATION" FROM CITY OF PALO ALTO. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION, SIZE OR PRESENCE OF ANY UTILITY AND SERVICE LINES NOT SHOWN ON THE SURVEY.
2. CALL TWO WORKING DAYS BEFORE YOU DIG. 1-800-277-2600/811 UNDERGROUND SERVICE ALERT - USA
3. EXISTING CONDITIONS PLAN BASED ON THE FOLLOWING:
   - 3.1. 3181, 3221 & 3215 PORTER DRIVE TOPOGRAPHIC SURVEY BY BKF ENGINEERS, 1/27/16 & 1/28/16
   - 3.2. 3181 PORTER DRIVE FOR CONSTRUCTION SET BY SNCE CONSULTING CIVIL ENGINEER, 6/30/17
   - 3.3. GROUNDWATER EXTRACTION AND TREATMENT (GWET) SYSTEM RECONFIGURATION RECORD DRAWINGS BY STANTEC, 2/24/17
   - 3.4. STANTEC REMEDIATION SYSTEM AS-BUILTS, 2/24/17
   - 3.5. 3215 PORTER DRIVE SITE VISIT BY BKF, 6/13/18
   - 3.6. 3215 PORTER DRIVE AERIAL SURVEY BY 360 AERIAL SURVEYS, 2/6/19

BASIS OF BEARING

THE BEARING N56°41'23"W OF THE MONUMENT LINE OF PORTER DRIVE, BETWEEN FOUND MONUMENTS, WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS SURVEY.

BENCH MARK

FOUND ALUMINUM DISK ON MANILA DRIVE AND H STREET, AT THE SOUTHEAST CORNER OF MOFFETT FIELD; 600 FEET NORTHWEST FROM THE INTERSECTION OF HIGHWAY 101 AND HIGHWAY 237. SET ON DIRT AREA OF THE NORTHWEST CORNER OF THE INTERSECTION, 105 FEET NORTHEASTERLY OF CENTERLINE FOR "H" STREET; AND 35 FEET NORTHWESTERLY FROM CENTERLINE FOR MANILA DRIVE. CITY OF SUNNYVALE.

BENCHMARK ID: BM483 (SANTA CLARA VALLEY WATER DISTRICT)
ELEVATION = 36.21 FEET (NAVD88)
BASED ON: NGS/CSRC EPOCH: 2009

FOR THE PROJECT BENCHMARK AT SUBJECT SITE, USE THE POINT OF REVERSE CURVE MONUMENT AT PORTER DRIVE, APPROXIMATELY 207 FEET SOUTHWESTERLY ALONG THE MONUMENT LINE OF PORTER DRIVE FROM THE INTERSECTION WITH HILLVIEW AVENUE. SAID BENCHMARK BEING THE TOP OF 3/4" IRON PIPE INSIDE MONUMENT BOX.

ELEVATION = 99.70 FEET, BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

TRUE NORTH / PROJECT NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

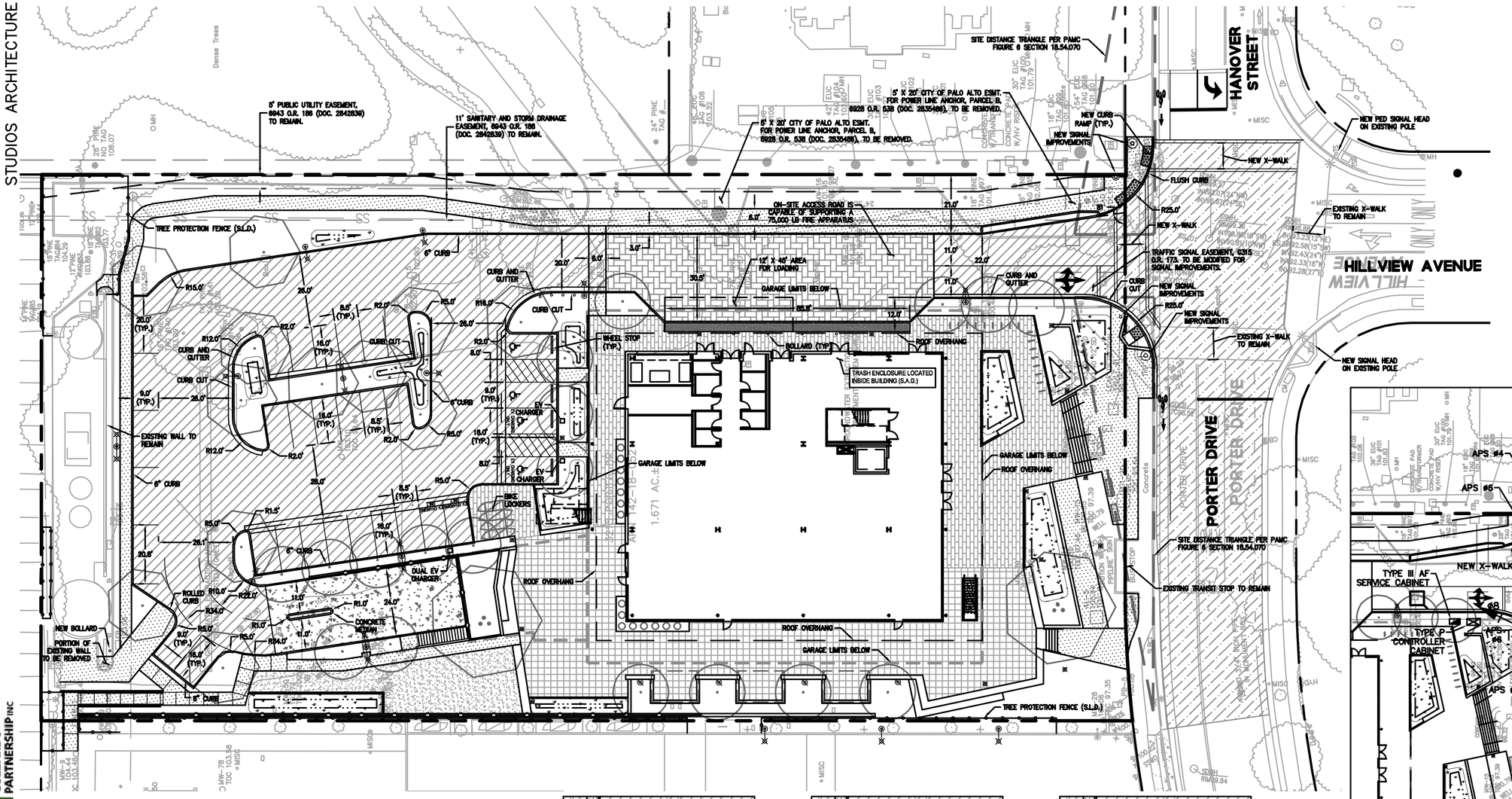
STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2

11/04/2019

CIVIL DESIGN

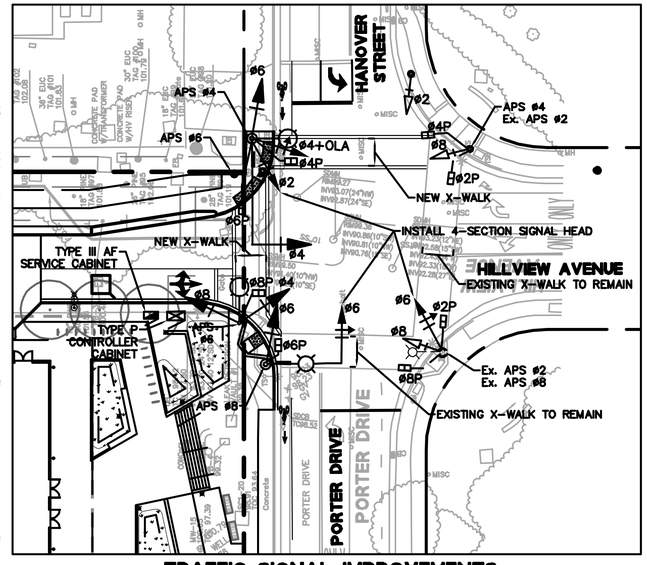
EXISTING CONDITIONS

C2.0

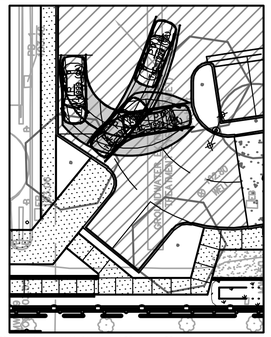


LEGEND

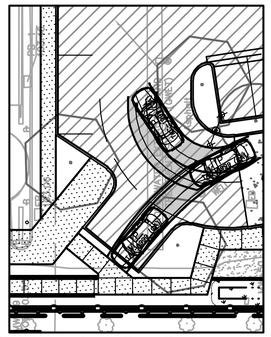
- NEW AC PAVEMENT 3" AC/11" CL II AB (ASSUMED)
- NEW VEHICULAR PAVERS (S.L.D)
- SYNTHETIC TURF (S.L.D.)
- NEW PEDESTRIAN TILES (S.L.D.)
- NEW PEDESTRIAN PAVERS (S.L.D.)
- VEHICULAR CONCRETE 6" PCC W/ #4 AT 12" O.E.C.W./6" CL II AB (ASSUMED)
- 2" GRIND AND AC OVERLAY
- NEW PEDESTRIAN CONCRETE 4" PCC/6" CL II AB (ASSUMED)
- NEW TREE (S.L.D.)
- TREE PROTECTION FENCE



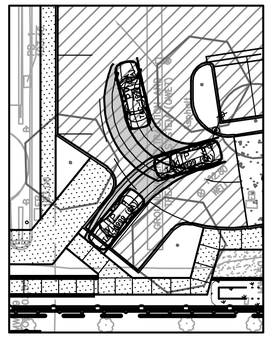
TRAFFIC SIGNAL IMPROVEMENTS
SCALE: 1"=50'



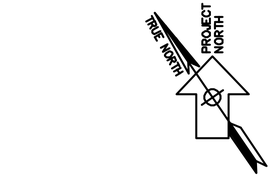
CAR TURNING MOVEMENT 1
SCALE: 1"=40'



CAR TURNING MOVEMENT 2
SCALE: 1"=40'



CAR TURNING MOVEMENT 3
SCALE: 1"=40'



GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

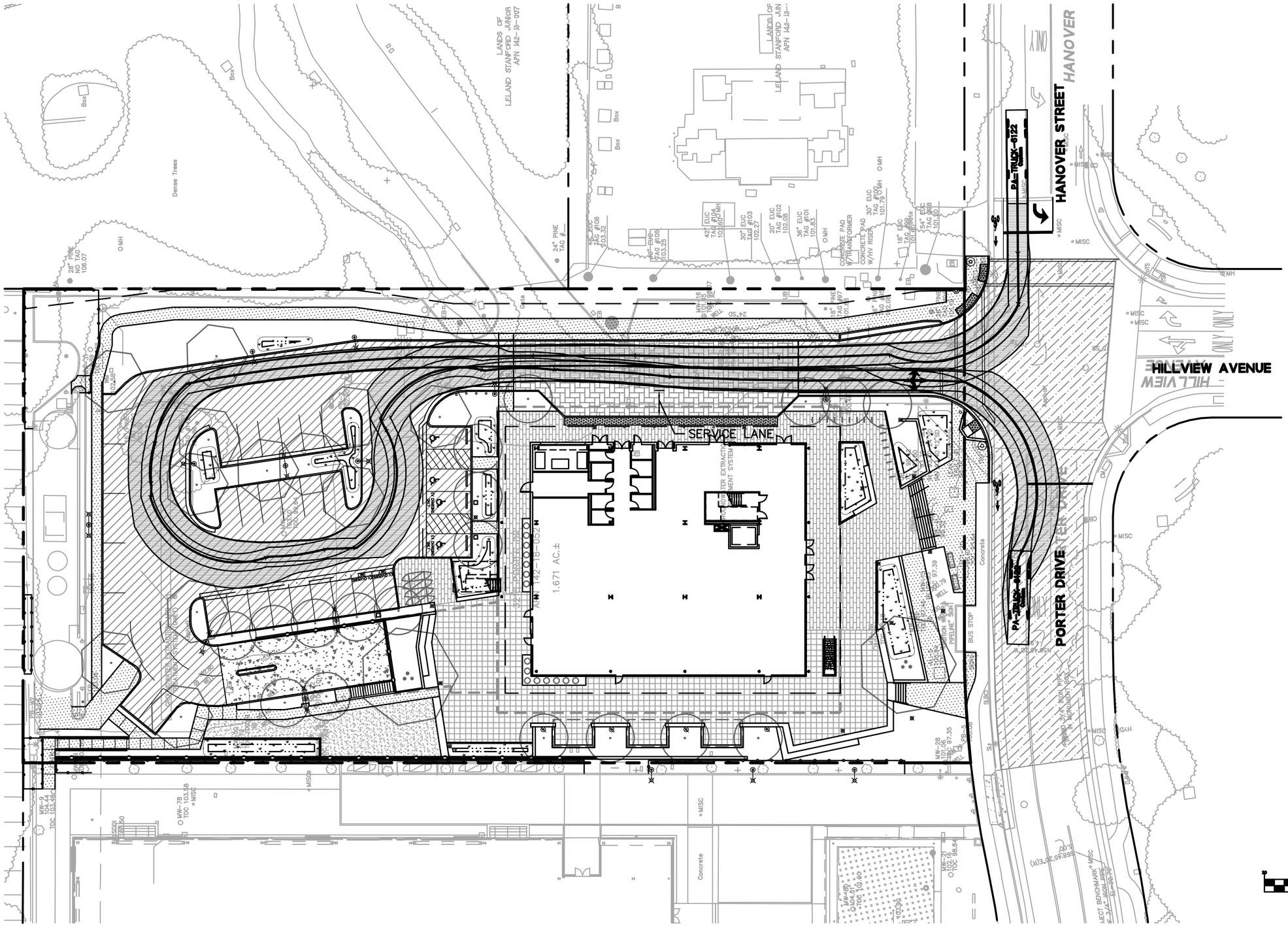
3215 PORTER DRIVE

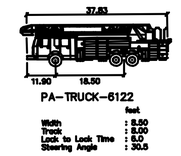
STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

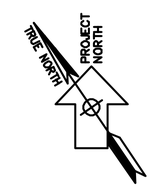
CIVIL DESIGN

HORIZONTAL CONTROL PLAN

C3.0







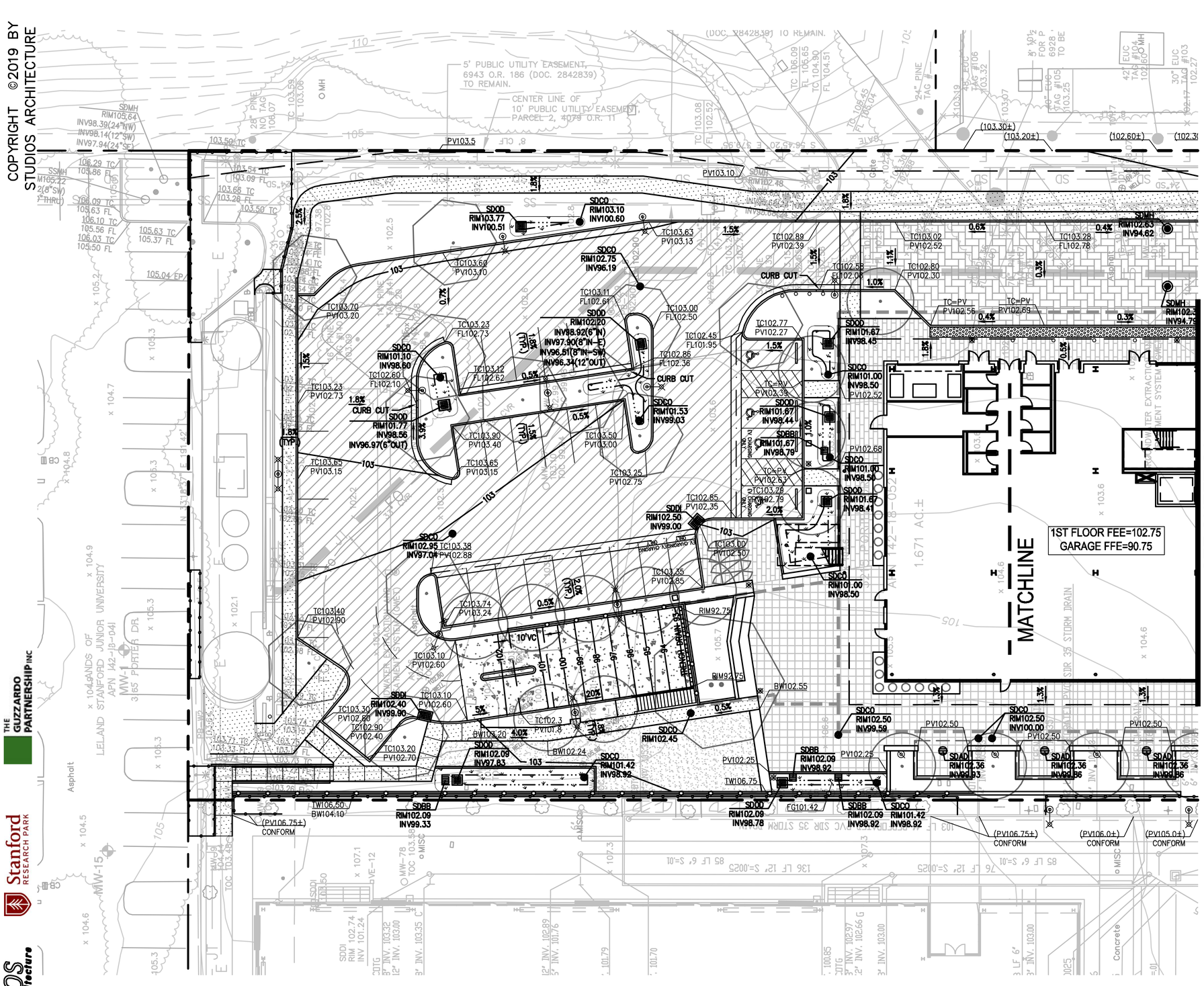
THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN

TRUCK ACCESS C3.1

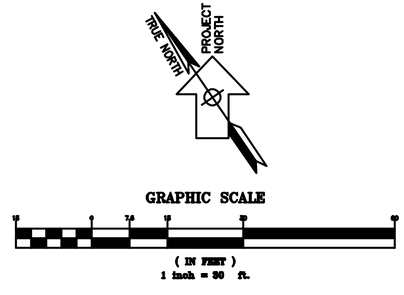


LEGEND

TC 60.10	PROPOSED SPOT GRADE
(TC 60.10±)	EXISTING SPOT GRADE
270	CONTOUR LINE
1.5%	DIRECTION OF FLOW
SDCO	STORM DRAIN CLEAN OUT
SDDI	STORM DRAIN DROP INLET
SDOD	STORM DRAIN OVERFLOW DRAIN
SDBB	STORM DRAIN BUBBLER BOX
SDAD	STORM DRAIN AREA DRAIN
SDMH	STORM DRAIN MANHOLE
TRENCH DRAIN	TRENCH DRAIN (POLYDRAIN SYSTEM WITH H-20 SLOTTED GRATE AND FRAME OR APPROVED EQUAL)
	BIORETENTION AREA

ABBREVIATIONS

BW	BOTTOM OF WALL
FG	FINISHED GRADE
FL	FLOWLINE
INV	INVERT
PV	PAVEMENT
SDAD	STORM DRAIN AREA DRAIN
SDBB	STORM DRAIN BUBBLER BOX
SDCO	STORM DRAIN CLEANOUT
SDOD	STORM DRAIN OVERFLOW DRAIN
TC	TOP OF CURB
TS	TOP OF STAIRS
TW	TOP OF WALL



THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

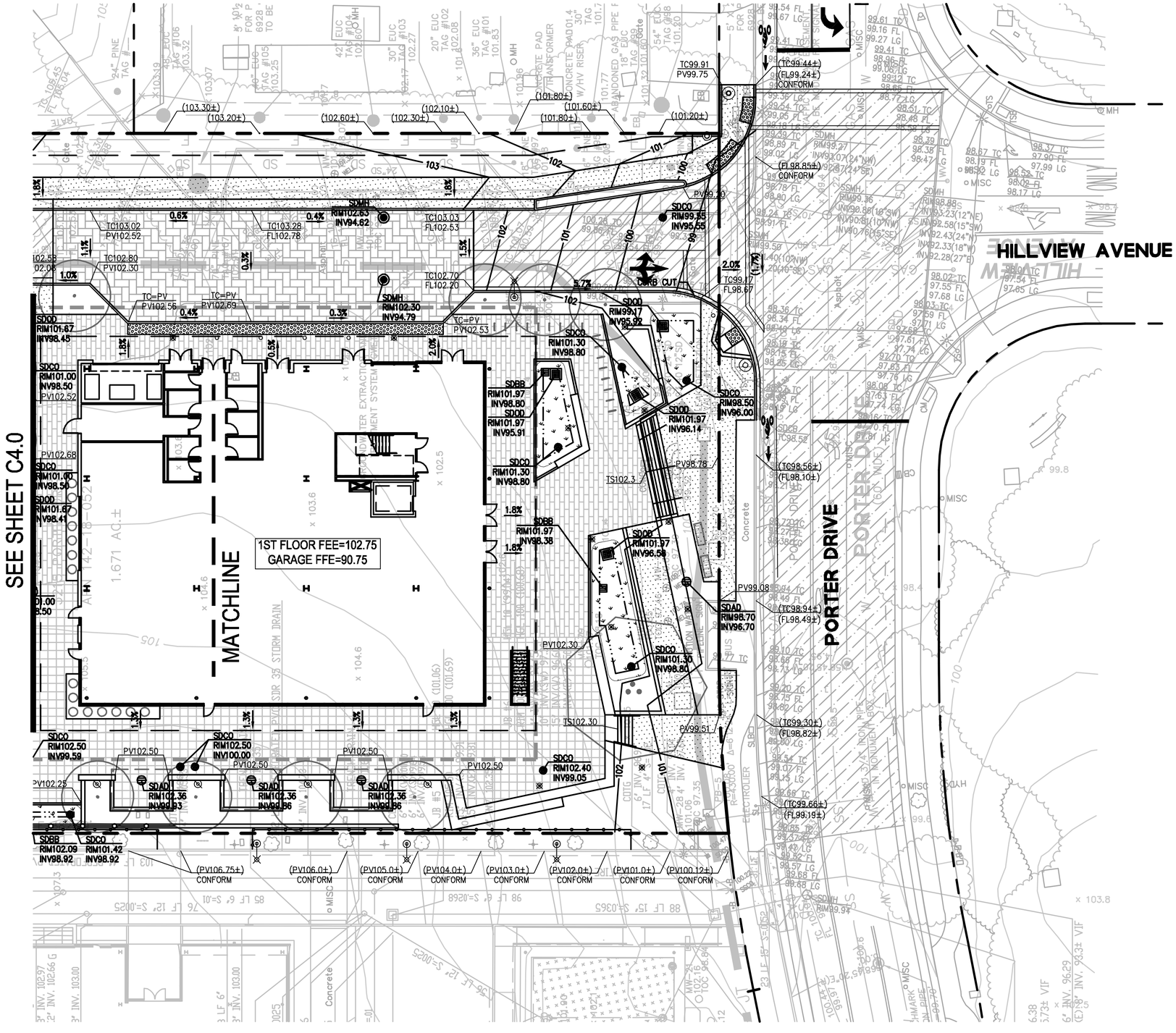
STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN

GRADING PLAN

C4.0

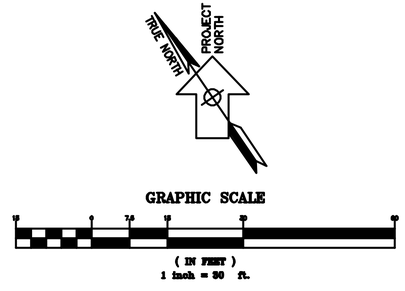


LEGEND

TC 60.10	PROPOSED SPOT GRADE
(TC 60.10±)	EXISTING SPOT GRADE
270	CONTOUR LINE
1.5%	DIRECTION OF FLOW
SDCO	STORM DRAIN CLEAN OUT
SDDI	STORM DRAIN DROP INLET
SDOD	STORM DRAIN OVERFLOW DRAIN
SDBB	STORM DRAIN BUBBLER BOX
SDAD	STORM DRAIN AREA DRAIN
SDMH	STORM DRAIN MANHOLE
TRENCH DRAIN	TRENCH DRAIN (POLYDRAIN SYSTEM WITH H-20 SLOTTED GRATE AND FRAME OR APPROVED EQUAL)
	BIORETENTION AREA

ABBREVIATIONS

BW	BOTTOM OF WALL
FG	FINISHED GRADE
FL	FLOWLINE
INV	INVERT
PV	PAVEMENT
SDAD	STORM DRAIN AREA DRAIN
SDBB	STORM DRAIN BUBBLER BOX
SDCO	STORM DRAIN CLEANOUT
SDOD	STORM DRAIN OVERFLOW DRAIN
TC	TOP OF CURB
TS	TOP OF STAIRS
TW	TOP OF WALL



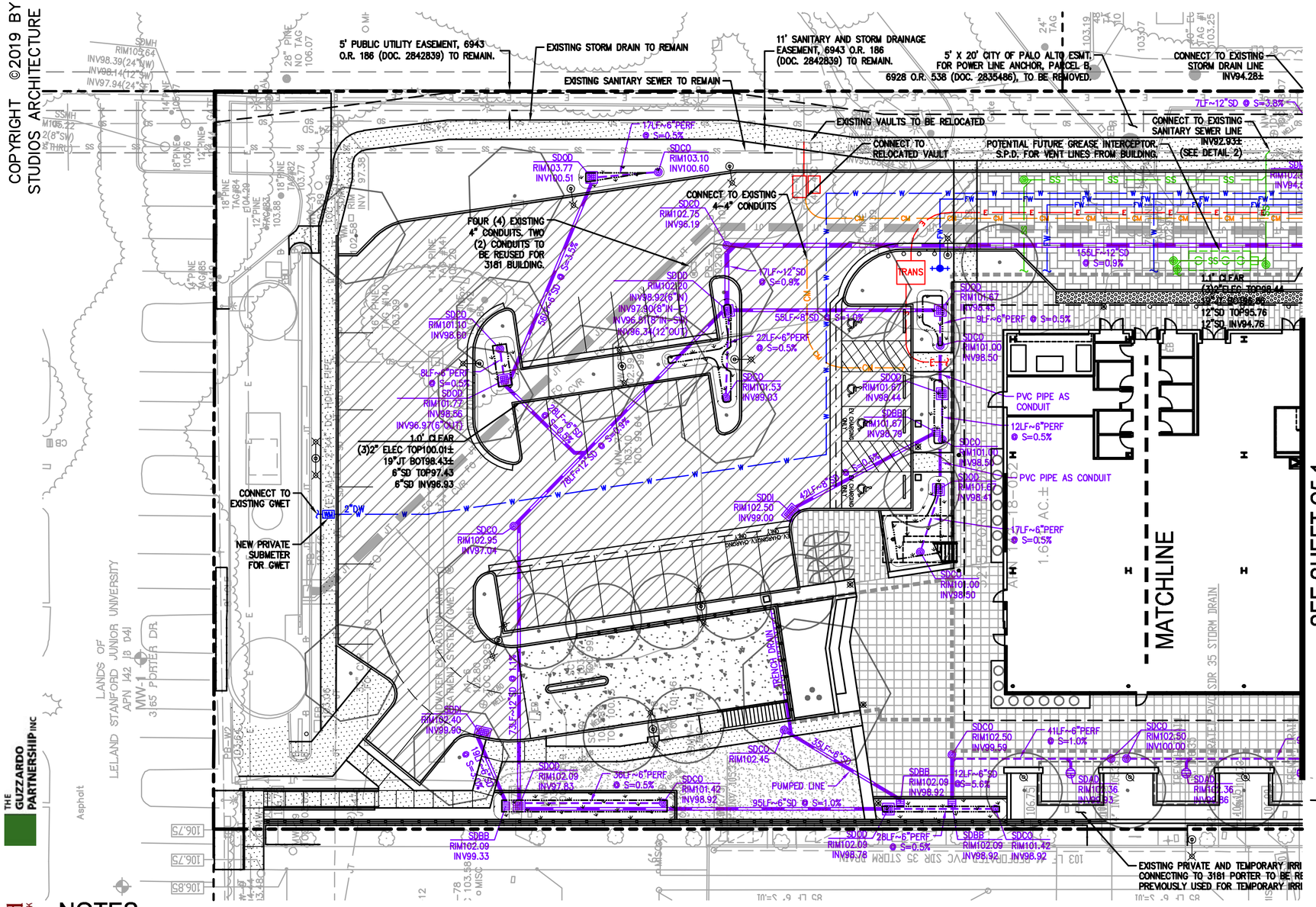
THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN

GRADING PLAN C4.1

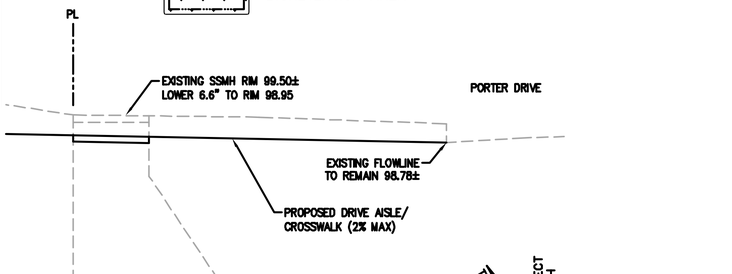


LEGEND

- STORM DRAIN LINE (PVC)
- PERFORATED STORM DRAIN LINE (PVC)
- SANITARY SEWER LINE (PVC)
- DOMESTIC WATER LINE (PVC 900)
- FIRE WATER LINE (SEE NOTE 5)
- ELECTRICAL LINE (S.E.D.)
- COMMUNICATIONS LINE (S.E.D.)
- TRENCH DRAIN — TRENCH DRAIN (POLYDRAIN SYSTEM WITH H-20 SLOTTED GRATE AND FRAME OR APPROVED EQUAL)
- SDCO — STORM DRAIN CLEAN OUT
- SDDI — STORM DRAIN DROP INLET
- SDOD — STORM DRAIN OVERFLOW DRAIN
- SDOD-2 — STORM DRAIN OVERFLOW DRAIN
- SDBB — STORM DRAIN BUBBLER BOX
- SDAD — STORM DRAIN AREA DRAIN
- SDMH — STORM DRAIN MANHOLE
- SSCO — SANITARY SEWER CLEAN OUT
- FDC — FIRE DEPARTMENT CONNECTION 6x4 WAY WITH CHECK VALVE AT VERTICAL PIPE
- FH — FIRE HYDRANT CLOW RICH MODEL 76 W/ 2-2½" OUTLETS AND 1-4½" STEAMER
- RPPA — BACKFLOW PREVENTOR (CPA STANDARD DETAIL WD-17A)
- RPDA — BACKFLOW PREVENTOR (SEE NOTE 4)
- WM — WATER METER (CPA STANDARD DETAILS WD-01A & WD-02A)
- FUTURE GREASE INTERCEPTOR
- BIORETENTION AREA

1 STORM DRAIN LATERAL PROFILE
N.T.S.

2 SEWER LATERAL PROFILE
N.T.S.



3 SEWER MANHOLE DETAIL

NOTES

1. THE CONTRACTOR SHALL PAINT THE "NO DUMPING/FLOWS TO MATADERO CREEK" LOGO IN BLUE COLOR ON A WHITE BACKGROUND ADJACENT TO ALL ON-SITE STORM DRAIN INLETS. STENCILS OF THE LOGO ARE AVAILABLE FROM THE CITY OF PALO ALTO PUBLIC WORKS ENVIRONMENTAL COMPLIANCE DIVISION, WHICH MAY BE CONTACTED AT (650) 329-2598.
2. ALL OFF-SITE MATERIALS AND WORK TO BE PER CPA UTILITIES REQUIREMENTS.
3. NO GAS SERVICE WILL BE PROVIDED TO THE NEW PROJECT.
4. BACKFLOW ASSEMBLY MUST BE AMES LMFM500 RPDA EQUAL (FIXED PRESSURE LOSS AT 1500 GPM FLOW, MUST NOT EXCEED 7 PSI).
5. ON-SITE PRIVATE FIRE WATER PIPE MUST BE C900 DR18 CLASS 235 (NO EXCEPTIONS).

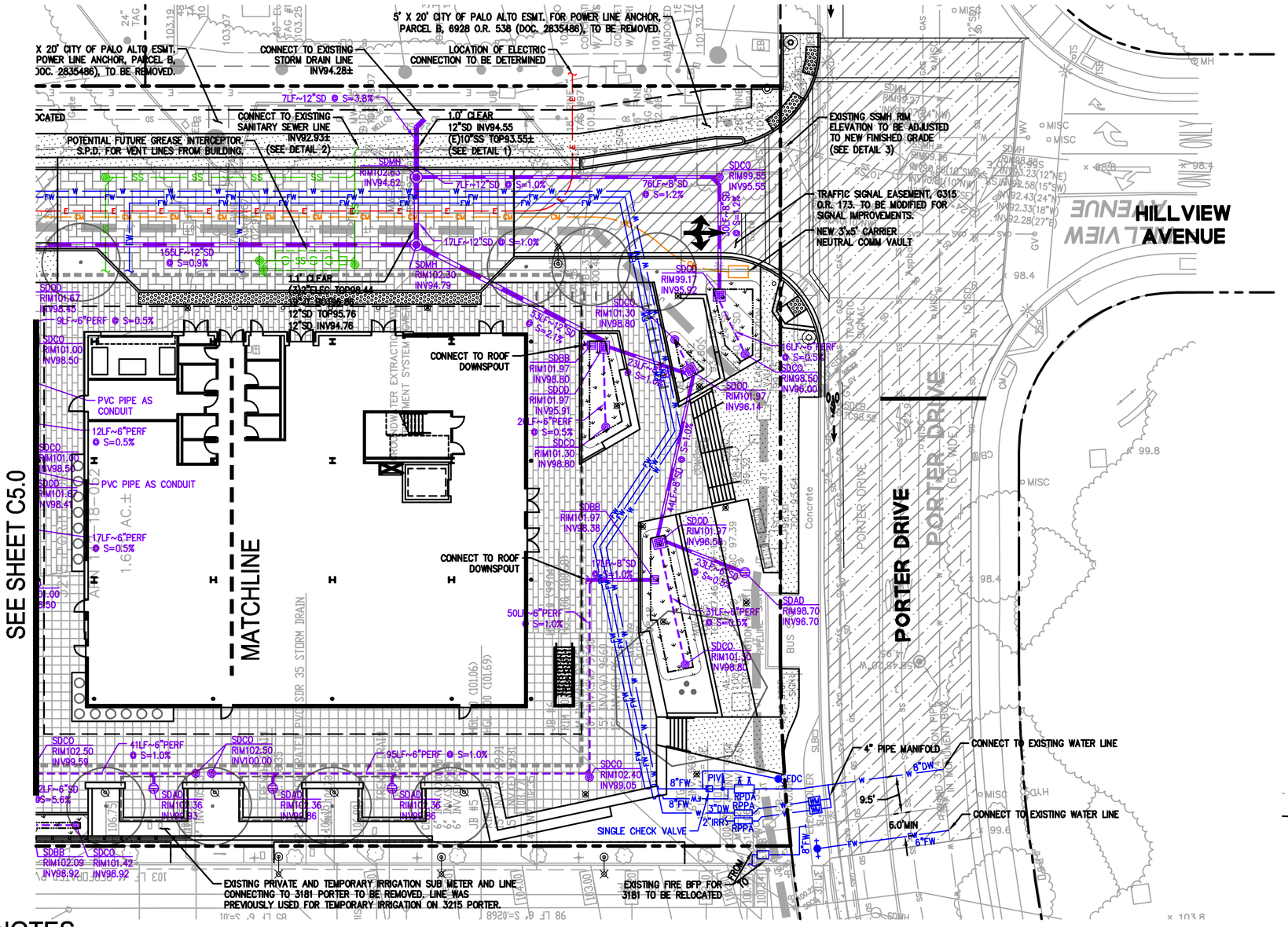
THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

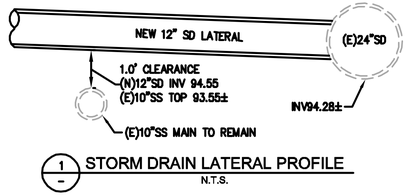
CIVIL DESIGN

UTILITY PLAN C5.0

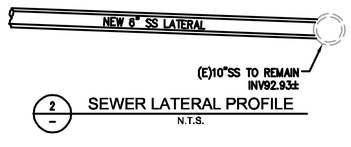


LEGEND

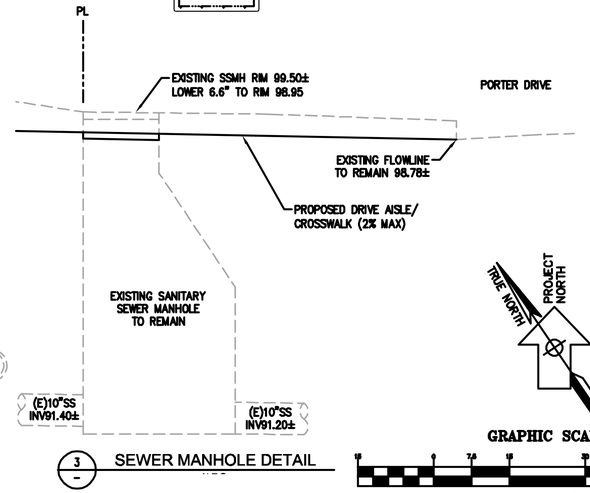
- STORM DRAIN LINE (PVC)
- PERFORATED STORM DRAIN LINE (PVC)
- SS — SS — SANITARY SEWER LINE (PVC)
- W — W — DOMESTIC WATER LINE (PVC 900)
- FW — FW — FIRE WATER LINE (SEE NOTE 5)
- E — E — ELECTRICAL LINE (S.E.D.)
- CM — CM — COMMUNICATIONS LINE (S.E.D.)
- TRENCH DRAIN — TRENCH DRAIN (POLYDRAIN SYSTEM WITH H-20 SLOTTED GRATE AND FRAME OR APPROVED EQUAL)
- SDCO — STORM DRAIN CLEAN OUT
- SDDI — STORM DRAIN DROP INLET
- SDOD — STORM DRAIN OVERFLOW DRAIN
- SDOD-2 — STORM DRAIN OVERFLOW DRAIN
- SDBB — STORM DRAIN BUBBLER BOX
- SDAD — STORM DRAIN AREA DRAIN
- SDMH — STORM DRAIN MANHOLE
- SSCO — SANITARY SEWER CLEAN OUT
- FDC — FIRE DEPARTMENT CONNECTION 6x4 WAY WITH CHECK VALVE AT VERTICAL PIPE
- FH — FIRE HYDRANT CLOW RICH MODEL 76 W/ 2-2½" OUTLETS AND 1-4½" STEAMER
- RPPA — BACKFLOW PREVENTOR (CPA STANDARD DETAIL WD-17A)
- RPDA — BACKFLOW PREVENTOR (SEE NOTE 4)
- WM — WATER METER (CPA STANDARD DETAILS WD-01A & WD-02A)
- FUTURE GREASE INTERCEPTOR
- BIORETENTION AREA



1 STORM DRAIN LATERAL PROFILE
N.T.S.



2 SEWER LATERAL PROFILE
N.T.S.



3 SEWER MANHOLE DETAIL

NOTES

1. THE CONTRACTOR SHALL PAINT THE "NO DUMPING/FLOWS TO MATADERO CREEK" LOGO IN BLUE COLOR ON A WHITE BACKGROUND ADJACENT TO ALL ON-SITE STORM DRAIN INLETS. STENCILS OF THE LOGO ARE AVAILABLE FROM THE CITY OF PALO ALTO PUBLIC WORKS ENVIRONMENTAL COMPLIANCE DIVISION, WHICH MAY BE CONTACTED AT (650) 329-2598.
2. ALL OFF-SITE MATERIALS AND WORK TO BE PER CPA UTILITIES REQUIREMENTS.
3. NO GAS SERVICE WILL BE PROVIDED TO THE NEW PROJECT.
4. BACKFLOW ASSEMBLY MUST BE AMES LMFM500 RPDA EQUAL (FIXED PRESSURE LOSS AT 1500 GPM FLOW, MUST NOT EXCEED 7 PSI).
5. ON-SITE PRIVATE FIRE WATER PIPE MUST BE C900 DR18 CLASS 235 (NO EXCEPTIONS).

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

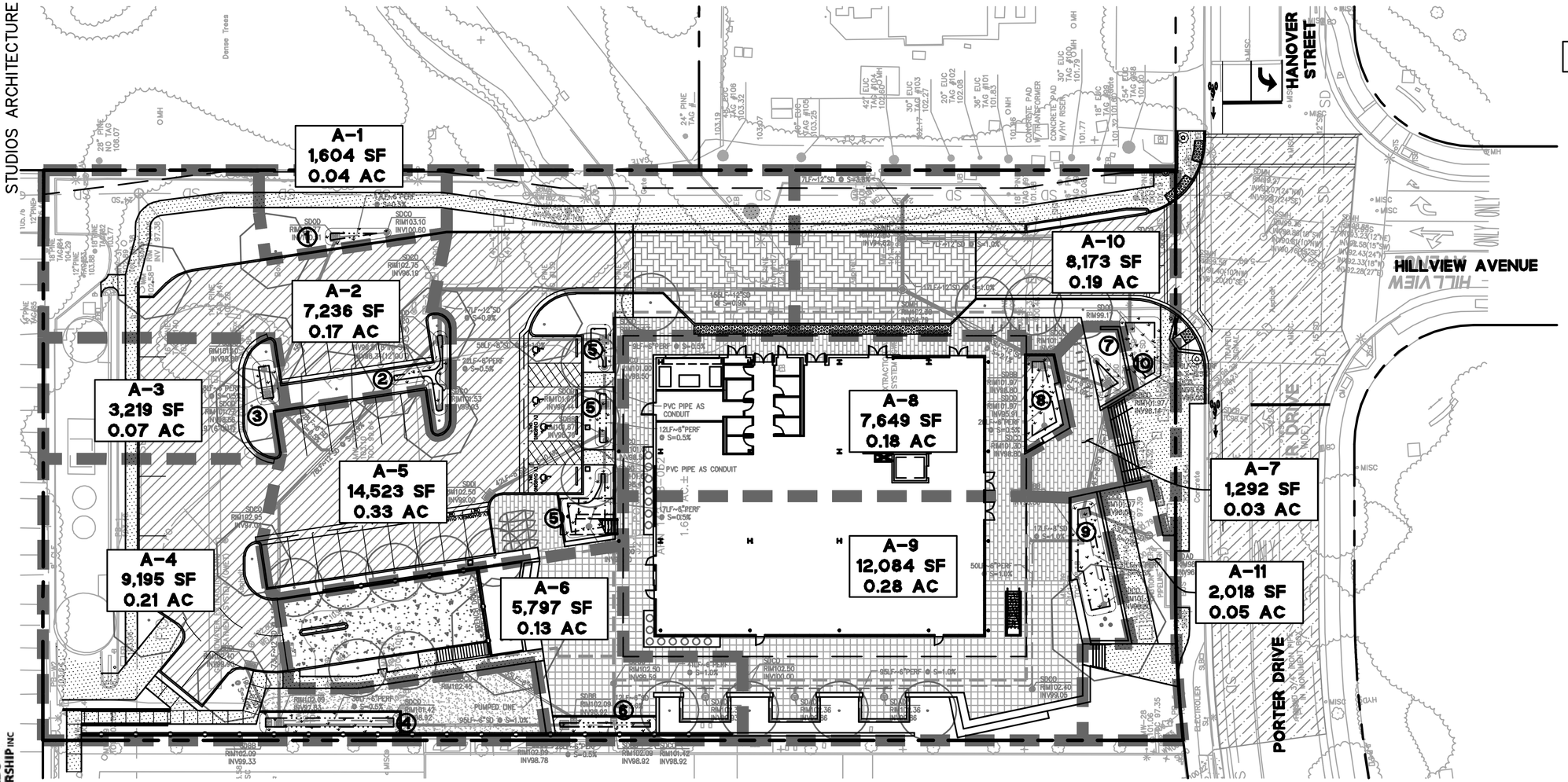
3215 PORTER DRIVE

STANFORD REAL ESTATE

ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN

UTILITY PLAN C5.1



LEGEND

- A-# / X SF / X AC — TRIBUTARY AREA
- (5) — BIORETENTION AREA

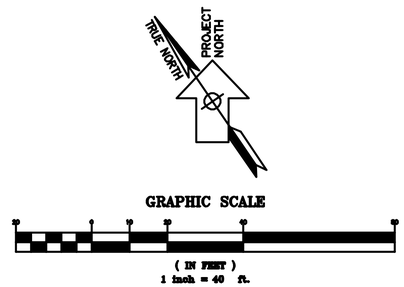
NOTES

1. FOR ALL C.3 FEATURES, VENDOR SPECIFICATIONS REGARDING INSTALLATION AND MAINTENANCE SHOULD BE FOLLOWED AND PROVIDED TO CITY STAFF. COPIES MUST BE SUBMITTED TO PAM BOYLE RODRIGUEZ AT PAMELA.BOYLERODRIGUEZ@CITYOFPALOALTO.ORG.
2. STAFF FROM STORMWATER PROGRAM (WATERSHED PROTECTION DIVISION) MAY BE PRESENT DURING INSTALLATION OF STORMWATER TREATMENT MEASURES. CONTACT PAM BOYLE RODRIGUEZ, STORMWATER PROGRAM MANAGER, AT (650) 329-2421 BEFORE INSTALLATION.
3. DURING THE BEGINNING OF CONSTRUCTION, THE PROJECT APPLICANT SHALL ARRANGE FOR A SITE VISIT BY A THIRD PARTY REVIEWER ACCEPTABLE TO THE CITY TO VERIFY THAT THE INSTALLED MEASURES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED BUILDING PLANS. THE THIRD PARTY REVIEWER WILL RECOMMEND THE REQUIRED NUMBER OF SITE INSPECTIONS AT DIFFERENT INTERVALS OF CONSTRUCTION. THE THIRD PARTY REVIEWER MUST BE A CIVIL ENGINEER, ARCHITECT OR LANDSCAPE ARCHITECT REGISTERED IN THE STATE OF CALIFORNIA AND MUST HAVE A CURRENT TRAINING ON STORMWATER TREATMENT DESIGN. A LIST OF QUALIFIED THIRD-PARTY REVIEWERS CAN BE FOUND ON THE SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM (SCVURPPP) WEB SITE AT: HTTP://WWW.SCVURPPP-W2K.COM/CONSULTANTS.HTM
4. WITHIN 45 DAYS OF THE INSTALLATION OF THE REQUIRED STORM WATER TREATMENT MEASURES AND PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT FOR THE BUILDING, THIRD-PARTY REVIEWER SHALL ALSO SUBMIT TO THE CITY A CERTIFICATION FOR APPROVAL THAT THE PROJECT'S PERMANENT MEASURES WERE CONSTRUCTED AND INSTALLED IN ACCORDANCE TO THE APPROVED PERMIT DRAWINGS.

STORMWATER TREATMENT CALCULATIONS

Area #	Area Size (sf)	Pervious Area (sf)	Impervious Area (sf)		Total Impervious Area Being Treated (sf)	Required Treatment Area (sf)	Treatment Area (sf)	Proposed Treatment Method	Treatment Area #
			Existing To Remain	New / Replaced					
A1	1,604	847	0	757	757	31	95	Bioretention Area	1
A2	7,236	2,151	167	4,918	5,085	192	195	Bioretention Area	2
A3	3,219	717	864	1,638	2,502	93	107	Bioretention Area	3
A4	9,195	3,497	1,415	4,283	5,698	219	323	Bioretention Area	4
A5	14,523	2,530	0	11,993	11,993	442	455	Bioretention Area	5
A6	5,797	1,428	0	4,369	4,369	163	179	Bioretention Area	6
A7	1,292	311	0	981	981	37	96	Bioretention Area	7
A8	7,649	356	0	7,293	7,293	264	271	Bioretention Area	8
A9	12,084	2,055	0	10,029	10,029	369	378	Bioretention Area	9
A10	8,173	1,480	0	6,693	6,693	247	248	Bioretention Area	10
A11	2,018	1,225	0	793	793	-	-	Self-Retaining*	-
Total	72,790	16,597	2,446	53,747	56,193	2,056	2,347	-	-

NOTE*: AREA DRAIN TO BE INSTALLED 3" HIGHER THAN LOW POINT TO ALLOW FOR PONDING WITHIN SELF-RETAINING AREA.



THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

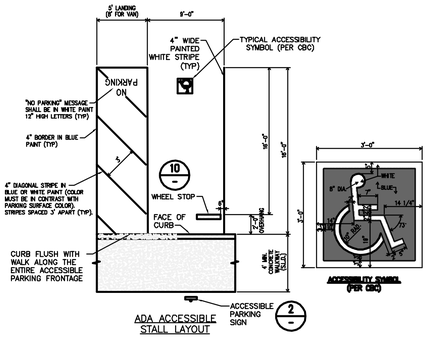
3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

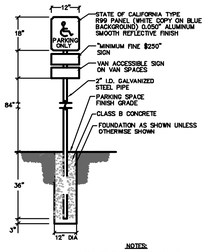
CIVIL DESIGN

STORMWATER TREATMENT PLAN

C6.0

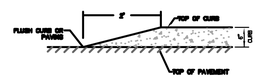


1 ACCESSIBLE PARKING DETAIL
N.T.S.

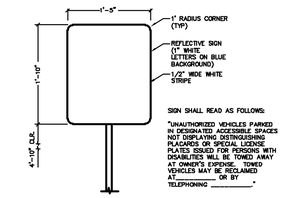


NOTES:
1. EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A PERMANENTLY AFFIXED REFLECTORIZED SIGN.
2. SIGNS SHALL BE CENTERED AT THE INTERIOR OF THE PARKING SPACE.

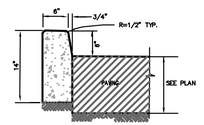
2 ACCESSIBLE PARKING SIGN DETAIL
N.T.S.



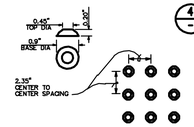
6 CURB TRANSITION
N.T.S.



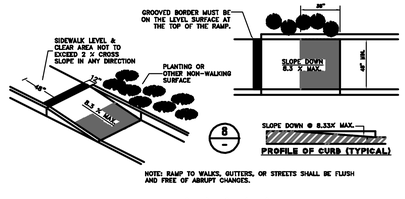
3 ACCESSIBLE PARKING SIGN AT SITE ENTRY DETAIL
N.T.S.



7 VERTICAL CURB
N.T.S.



8 RAISED TRUNCATED DOME DETAIL
N.T.S.

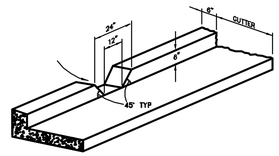


NOTE: RAMP TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

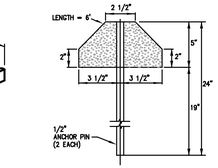
GROOVES AT RAMP

4 CURB RAMP
N.T.S.

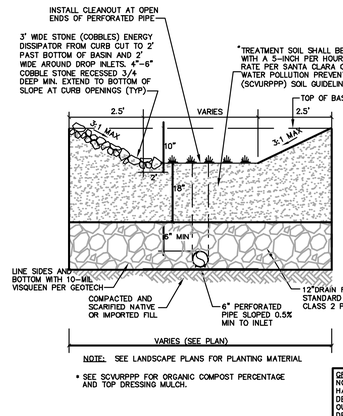
5 NOT USED



9 CURB OPENING (CURB CUT)
N.T.S.



10 CONCRETE WHEEL STOP
N.T.S.



NOTE: SEE LANDSCAPE PLANS FOR PLANTING MATERIAL

* SEE SCVURPPP FOR ORGANIC COMPOST PERCENTAGE AND TOP DRESSING MULCH.

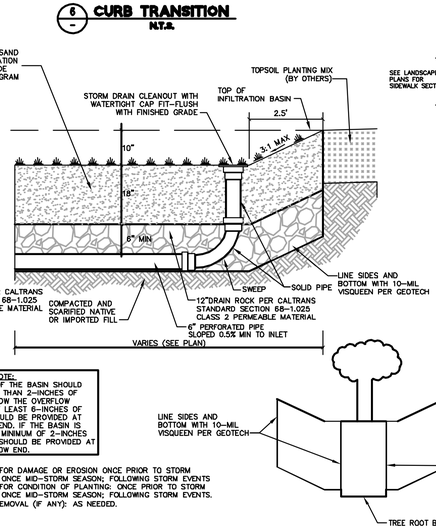
BACKFILL INFILTRATION BASIN ONLY WITH PERMEABLE PLANTING MATERIAL AND DRAIN ROCK AS SPECIFIED IN THIS DETAIL. ABSOLUTELY NO NATIVE MATERIAL SHALL BE USED FOR BACKFILL.

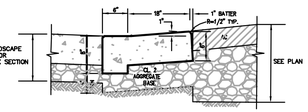
PLANTING: PLANTS SPECIES SHALL BE NATIVE OR "BAY FRIENDLY" AND DROUGHT TOLERANT PER SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM (SCVURPPP) PLANTING GUIDELINES

GRADING NOTE:
NO PART OF THE BASIN SHOULD HAVE LESS THAN 2-INCHES OF DEPTH BELOW THE OVERFLOW OUTLET. AT LEAST 6-INCHES OF DEPTH SHOULD BE PROVIDED AT THE DEEP END. IF THE BASIN IS SLOPED, A MINIMUM OF 2-INCHES OF DEPTH SHOULD BE PROVIDED AT THE SHALLOW END.

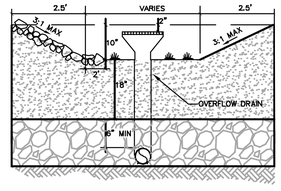
1. INSPECT FOR DAMAGE OR EROSION ONCE PRIOR TO STORM SEASON; ONCE MID-STORM SEASON; FOLLOWING STORM EVENTS
2. INSPECT FOR CONDITION OF PLANTING: ONCE PRIOR TO STORM SEASON; ONCE MID-STORM SEASON; FOLLOWING STORM EVENTS.
3. DEBRIS REMOVAL (IF ANY): AS NEEDED.

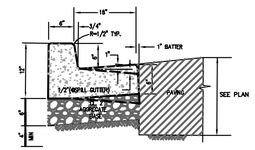
15 BIORETENTION AREA
N.T.S.



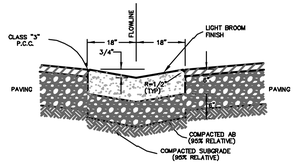


11 FLUSH CURB & GUTTER DETAIL
N.T.S.



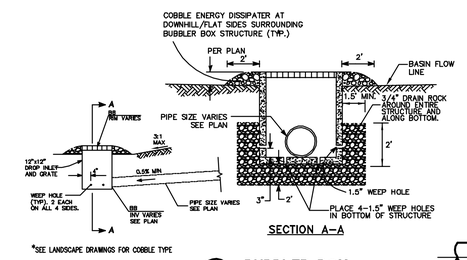


12 CURB AND GUTTER
N.T.S.

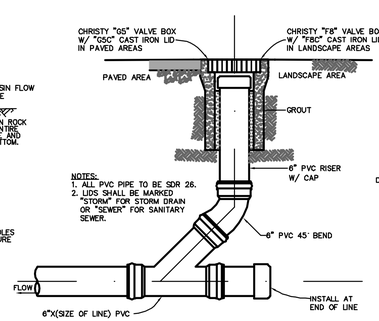


13 VALLEY GUTTER
N.T.S.

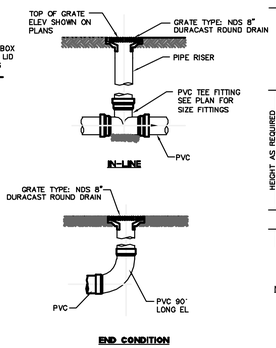
14 NOT USED



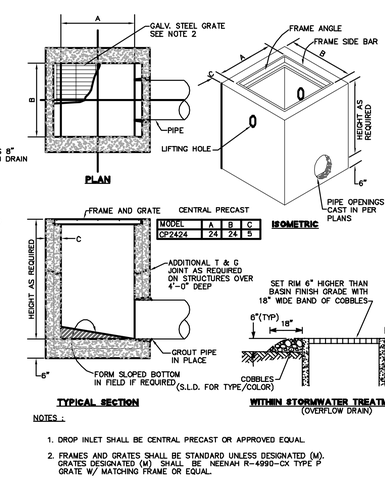
16 BUBBLER BOX
N.T.S.



17 STORM/SANITARY CLEANOUT
N.T.S.



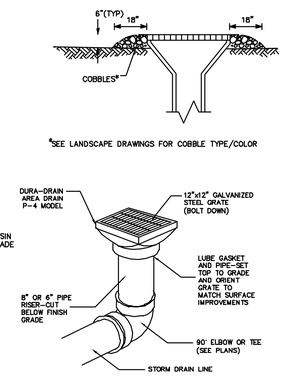
18 AREA DRAIN
N.T.S.



MODEL	A	B	C
CP2424	24	24	5

NOTES :
1. DROP INLET SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. FRAMES AND GRATES SHALL BE STANDARD UNLESS DESIGNATED (M). GRATES DESIGNATED (M) SHALL BE NEENAH R-4990-CX TYPE P GRATE W/ MATCHING FRAME OR EQUAL.

19 OVERFLOW DRAIN
N.T.S.



20 OVERFLOW DRAIN
N.T.S.

THE GUZZARDO PARTNERSHIP INC
Stanford RESEARCH PARK
STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2 11/04/2019

CIVIL DESIGN

CONSTRUCTION DETAILS

C7.0

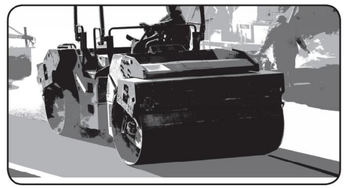
POLLUTION PREVENTION—IT'S PART OF THE PLAN

Construction projects are required to implement year-round stormwater BMPs, as they apply to your project.

Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. Following these guidelines will ensure your compliance with City of Palo Alto Ordinance requirements.








MATERIALS & WASTE MANAGEMENT

Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ☐ Use (but don't overuse) reclaimed water for dust control.
- ☐ Ensure dust control water doesn't leave site or discharge to storm drains.

Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ☐ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ☐ Keep site clear of litter (e.g. lunch items, cigarette butts).
- ☐ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

EQUIPMENT MANAGEMENT & SPILL CONTROL

Maintenance and Parking

- ☐ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ☐ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags).
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report any hazardous materials spills immediately! Call City of Palo Alto Communications, **(650) 329-2413**. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. **(800) 852-7550 (24 hours).**

EARTHMOVING

Grading and Earthwork

- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (e.g., silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandonec underground tanks.
  - Abandonec wells.
  - Buried barrels, debris, or trash.
- ☐ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not disturbed by construction activities.

Landscaping

- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

CONCRETE MANAGEMENT & DEWATERING

Concrete Management

- ☐ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- ☐ Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- ☐ Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at **(650) 329-2598** for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- ☐ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

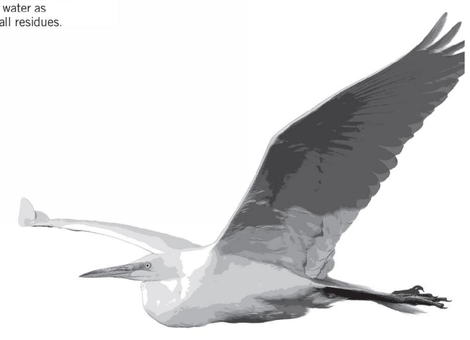
Sawcutting & Asphalt/Concrete Removal

- ☐ Protect storm drain inlets during saw cutting.
- ☐ If saw cut slurry enters a catch basin, clean it up immediately.
- ☐ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

Painting Cleanup and Removal

- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Sweep up or collect paint chips and dust from non hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.

STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO $10,000 PER DAY!

250 Hamilton Avenue
Palo Alto, CA 94301
650.329.2211
cityofpaloalto.org

CITY OF PALO ALTO

THE GUZZARDO PARTNERSHIP INC

Stanford RESEARCH PARK

STUDIOS architecture

3215 PORTER DRIVE

STANFORD REAL ESTATE
ARB RESUBMITTAL, MAJOR - REVISION 2

11/04/2019

CIVIL DESIGN

BMP PLAN

C8.0