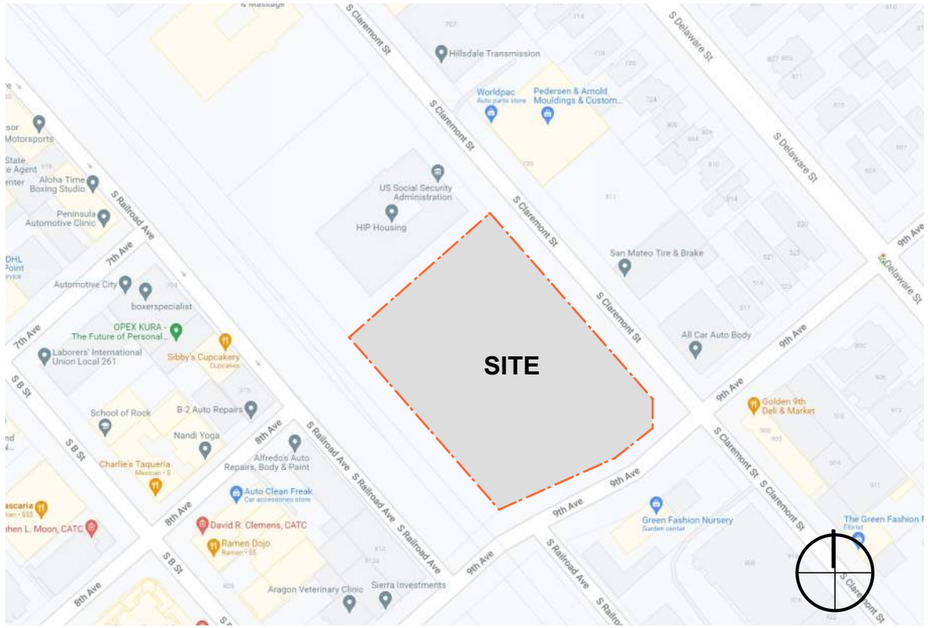
477 9TH AVENUE

MIXED-USE DEVELOPMENT

SAN MATEO, CALIFORNIA JUNE 30, 2022

PROJECT PERSPECTIVE 5



SITE MAP 4

The proposed project consists of demolition of an approximately 21,600 square foot, single-story office building and surface parking that was constructed in the early-1980's. The 1.6-acre site would be redeveloped with 120 rental dwelling units (80 units allowed by zoning and 40 “bonus” units authorized by the Density Bonus Law) constructed over approximately 28,100 square feet of office uses within a five-story, 53'-6"-foot tall building. The project would also include a number of residential amenities and open spaces, including an approximately 1,670 square foot fitness center for residents, a 3,260 square foot lounge area, a 700 square foot residence “club area,” as well as a 750 square foot roof deck and 8,865 square foot central courtyard common area. The building would include a 2,210 square foot lobby/leasing office area. The project would provide 154 vehicle parking spaces in an above-ground garage and 14 surface parking spaces, for a total of 168 vehicle parking spaces; and 132 long-term bicycle parking spaces in a secure area and ten short-term bicycle parking spaces.

PROJECT DESCRIPTION 3

APPLICANT/ OWNER:
THE MARTIN GROUP
1970 BROADWAY SUITE 745
OAKLAND, CA 94612
CONTACT:
STEPHEN SIRI
(415) 429-6044

ARCHITECT:
BDE ARCHITECTURE
934 HOWARD STREET
SAN FRANCISCO, CA 94103
CONTACT:
NATHAN SIMPSON
(415) 677-0966

LANDSCAPE ARCHITECT:
GUZZARDO PARTNERSHIP
181 GREENWICH ST
SAN FRANCISCO, CA 94111
CONTACT:
MARCO LEI
(415) 433-4672

ALTA
SANDIS
636 9TH ST
OAKLAND, CA 94607
CONTACT:
RON SANZO
RSANZO@SANDIS.NET

PROJECT TEAM 2

SHEET INDEX 1

PROJECT INFORMATION A1

BDE ARCHITECTURE

477 9TH AVE SAN MATEO, CALIFORNIA JUNE 30, 2022

UNIT AND AREA SUMMARY — **JOB: TMG - 477 9TH AVE, SAN MATEO**
Date 1/10/2022

CONSTRUCTION TYPE: TYPE VA O/ TYPE IA PODIUM — **BONUS PROJECT**
FLOORS: 3 WOOD OVER 2 CONCRETE

UNIT TYPE	NAME	DESCRIB	Unit Net Rentable	1ST	2ND	3RD	4TH	5TH			ROOF	Unit Total		Rentable Area by Type
STUDIO	S1	STUDIO	587			8	8	8				24	20%	14,088
STUDIO SUB-TOTAL				0	0	8	8	8	0	0	0	**24**	**20%**	14,088
1 BEDROOM	A1	1 BDRM	740			2	2	2				6	5%	4,440
	A1.1	1 BDRM	804			2	2	2				6	5%	4,824
	A2	INSIDE CORNER 1 BDRM	720			10	10	10				30	25%	21,600
	A3	1 BDRM	669			4	4	3				11	9%	7,359
	A3.1	1 BDRM	740			3	4	4				11	9%	8,140
1 BDRM SUB-TOTAL				0	0	21	22	21	0	0	0	**64**	**53%**	46,363
2 BEDROOM	B1.0	2 BDRM/ 2 BATH	1,071			3	3	3				9	8%	9,639
	B1.1	2 BDRM/ 2 BATH	1,150			2	2	2				6	5%	6,900
	B2.0	2 BDRM/ 2 BATH	1,102			1	1	1				3	3%	3,306
	B3.0	2 BDRM/ 2 BATH	945			1	1	1				3	3%	2,835
	B4.0	2 BDRM/ 2 BATH	1,058			1	1	1				3	3%	3,174
	B5.0	2 BDRM/ 1 BATH	1,030			1	1					2	2%	2,060
	B6.0	2 BDRM/ 2 BATH	1,145			1	1	1				3	3%	3,435
2 BDRM SUB-TOTAL				0	0	10	10	9	0	0	0	**29**	**24%**	31,349
3 BEDROOM	C1.0	3 BDRM/ 2 BATH	1,315				1	2				3	3%	3,945
3 BDRM SUB-TOTAL				0	0	0	1	2	0	0	0	**3**	3%	3,945
TOTAL UNITS		**Avg SqFt**	**798**	0	0	39	41	40	0	0	0	**120**	**100%**	95,745

Net rentable residential area is measured center of demising wall, ext face of stud of ext wall, ext face of stud of corridor wall, excl decks

Net rentable Residential by floor (excl decks)				0	0	30,673	32,728	32,344	0	0	0			**95,745**
Gross area by floor (footprint minus net rentable, excl decks)			0	161	1,006	4,631	5,835	4,736	0	0	0			**16,369**
Residential Amenities				1,110	1,670	3,260		700						6,740
Leasing Office				1,100										1,100
Residential Garage (Including Mechanical Areas)				15,098	31,293									46,391
Residential Gross*														**166,345**
Office				14,500	13,600									28,100
Office Garage				14,769										14,769
Office Gross*														**42,869**
Total Gross*			0	46,738	47,569	38,564	38,563	37,780	0	0	0			**209,214**

*27.04.200 (2)(B)Excluded Floor Area: Multiple Level Stairwells and Elevators are counted once (at floor 1 only)
*27.04.200 (2)(E)Excluded Floor Area: Bicycle Parking Facility
**Pursuant to State Density Bonus Law, waiver requested to allow for additional FAR above 2.0
***Consistent with 27.48.065, Open Space includes: Plaza, Planting & Pedestrian Circulation;
Excludes: Building Footprint and Vehicle Paving

FLOOR AREA RATIO (FAR)		
Site Area	69,696	
	ALLOWABLE	PROVIDED
Base FAR = 2.0	139,392	134,337
50% St Density Bonus FAR**		209,214

LOT COVERAGE* **	
REQUIRED	
20% LOT OPEN SPACE=	**13,939**
PROVIDED	**11,483**

VEHICLE PARKING

REQUIRED:		
	OFFICE @ 1.7 STALL/1000SF=	48
	1 STALL : 1 RESIDENTIAL DU	120
REQUIRED STALL TOTAL:		168

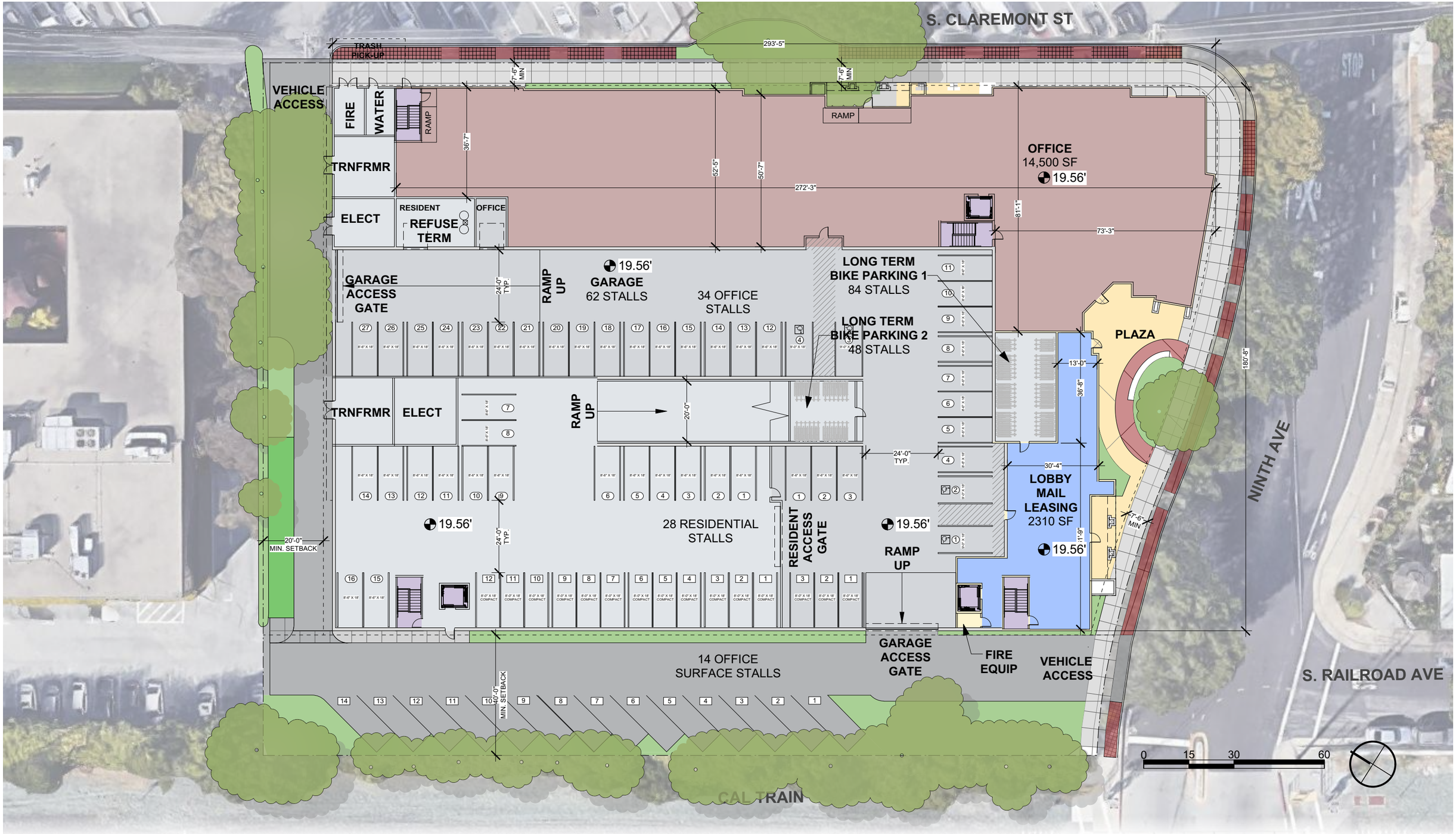
PROVIDED:	STD	VAN ADA	ADA	COMPACT	TANDEM
FLOOR 1	42	2	3	15	
FLOOR 2	70	2	1	15	4
SURFACE	14				
PROVIDED STALL TOTAL:					168

1. Office Parking: Pursuant to San Mateo Municipal Code Section 27.64.100(a)(1), applicant to fund a City-commissioned project-specific parking demand study to determine the number of required parking spaces
2. Residential Parking: As permitted to State Density Bonus Law, applicant requests reduced residential parking ratio of 1 space per unit

BICYCLE PARKING

REQUIRED:		
SHORT TERM		
	1 STALL : 20,000 SF OFFICE	2.1
	0.05 STALL : STUDIO & 1BED DU	4.4
	0.10 STALL : 2 BED DU	2.9
	TOTAL SHORT TERM	**9.4**
LONG TERM		
	1 STALL: 10,000SF OFFICE	4.3
	1 STALL : STUDIO & 1 BED DU	88.0
	1.25 STALL : 2 BED DU	36.3
	TOTAL LONG TERM	**128.5**
REQUIRED STALL TOTAL:	138	

PROVIDED:		
SHORT TERM		
	OFFICE	2
	RESIDENTIAL	8
	TOTAL SHORT TERM	**10**
LONG TERM		
	OFFICE	4
	RESIDENTIAL	128
	TOTAL LONG TERM	**132**
PROVIDED STALL TOTAL:	142	



FLOOR 1 - PLAN

1" = 30'-0"

A3

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

FLOOR 2 - PLAN

1" = 30'-0"

A4

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

FLOOR 3 - PLAN

1" = 30'-0"

A5

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

FLOOR 4 - PLAN

1" = 30'-0"

A6

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

FLOOR 5 - PLAN

1" = 30'-0"

A7

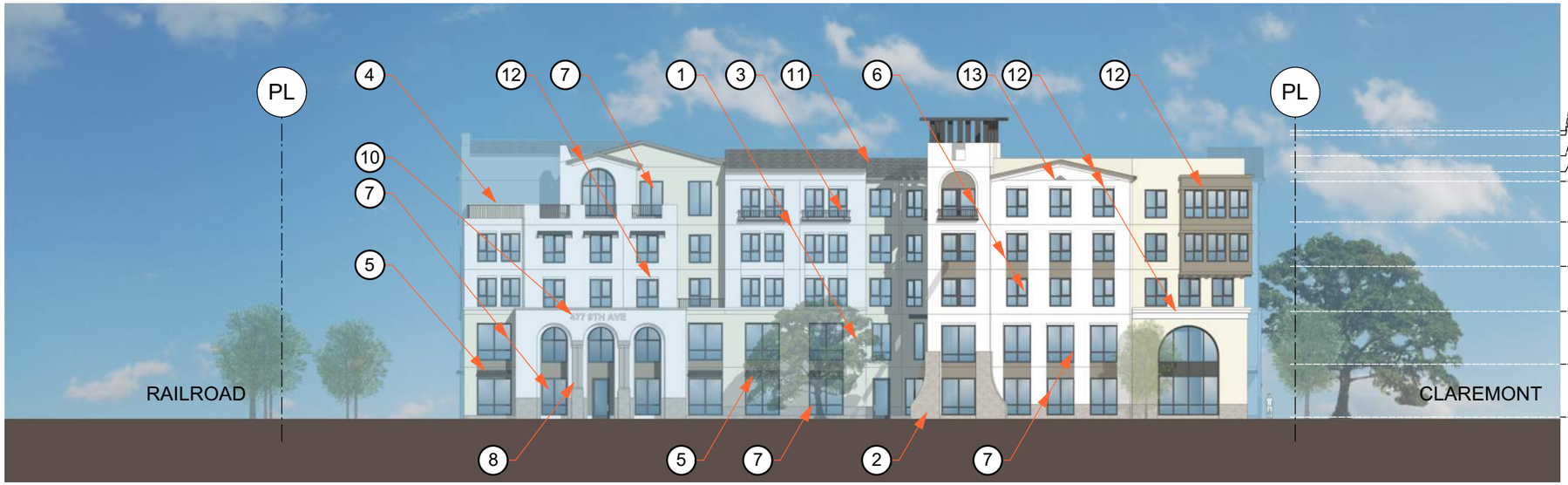
477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

ELEVATION - CLAREMONT ST **2**

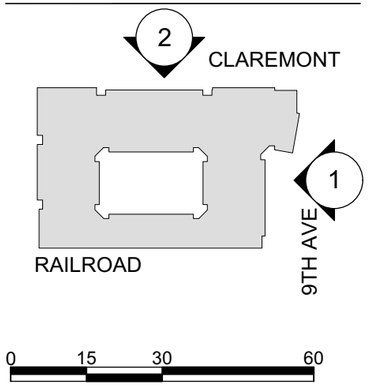


ELEVATION - 9TH AVENUE **1**

SHEET NOTES

1. CEMENT PLASTER, SMOOTH SAND
2. CAST STONE
3. JULIETTE BALCONY, BOLT-ON, HOT-DIP GALV, PTD
4. RAILING, HOT-DIP GALV. PTD ARCH BRONZE
5. METAL AWNING, NON-RAIN THRU
6. VINYL NAIL-FIN WINDOW FIN ARCH BRONZE
7. STOREFRONT FIN ARCH BRONZE
8. CAST STONE COLUMN/PILASTER POTENTIAL ART ELEMENT
9. GARAGE ACCESS
10. BLDG SIGNAGE, HT 18", DEPTH 2", CAST METAL, SIM.
11. SLOPED MANSARD ROOF, CONCRETE S-TILE
12. FOAM TRIM, 3" MIN DEPTH, PLATER FIN.
13. TILE "FAUX" ROOF VENT

KEY PLAN



0 15 30 60

ELEVATIONS

1" = 30'-0"

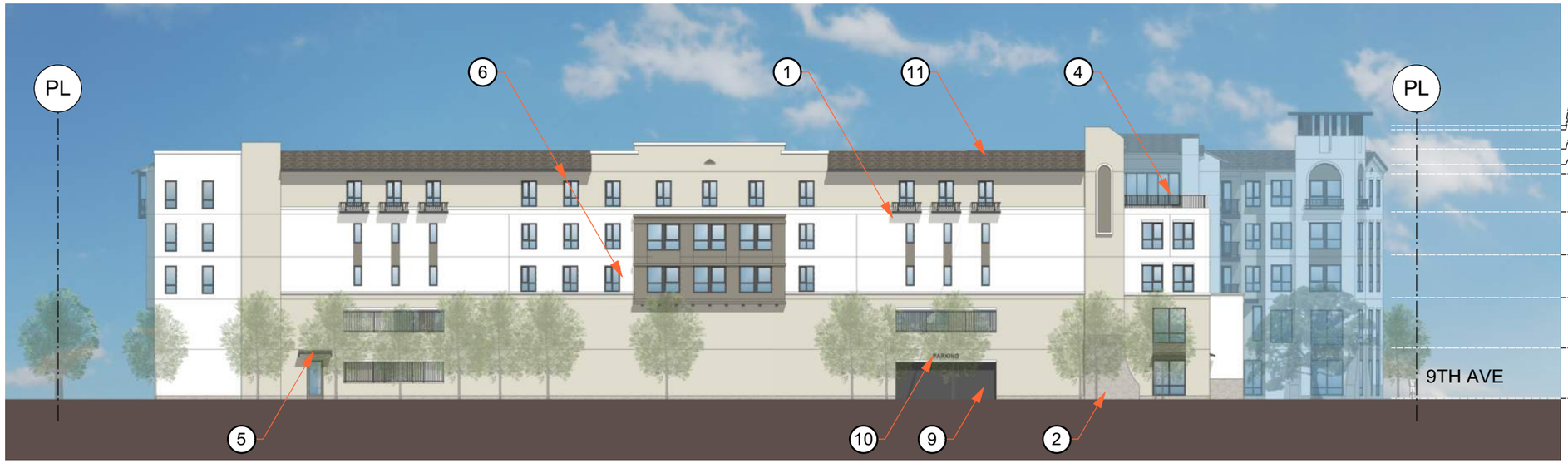
A8

ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022



ELEVATION - WEST **2**

ELEVATION - NORTH **1**

SHEET NOTES

1. CEMENT PLASTER, SMOOTH SAND
2. CAST STONE
3. JULIETTE BALCONY, BOLT-ON, HOT-DIP GALV, PTD
4. RAILING, HOT-DIP GALV. PTD ARCH BRONZE
5. METAL AWNING, NON-RAIN THRU
6. VINYL NAIL-FIN WINDOW FIN ARCH BRONZE
7. STOREFRONT FIN ARCH BRONZE
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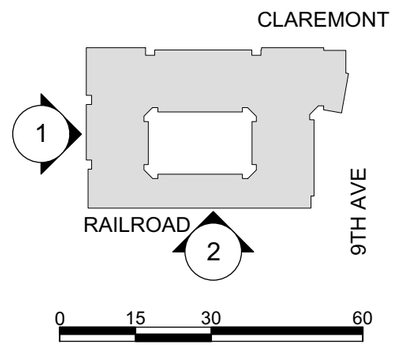
KEY PLAN



ELEVATIONS

1" = 30'-0"

A9

ARCHITECTURE

477 9TH AVE

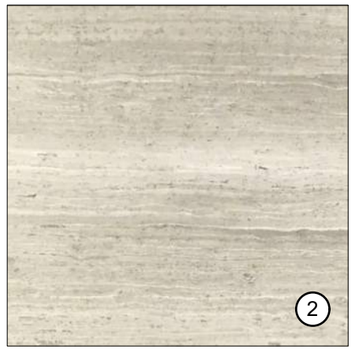
SAN MATEO, CALIFORNIA

JUNE 30, 2022

VINYL NAIL-FIN WINDOW
FIN ARCH BRONZE

RAILING, HOT-DIP GALV.
PTD ARCH BRONZE

METAL AWNING,
NON-RAIN THRU

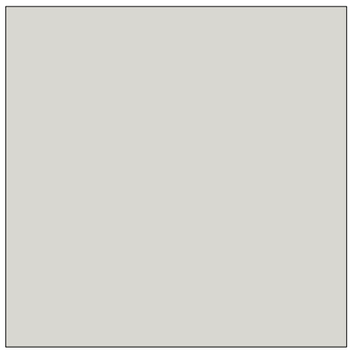


CAST IN PLACE
CONCRETE, SEALED

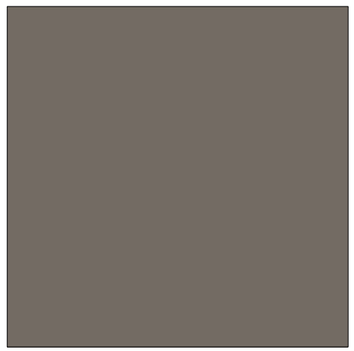
CONCRETE ROOF TILE,
S-SHAPE

STOREFRONT
FIN ARCH BRONZE

VPI VINYL WINDOWS -
'ARCHITECTURAL BRONZE'
STOREFRONT, METALWORK
& TRIM/ACCENT TO MATCH



PAINT - SHORELINE
BM 1471



PAINT - BEAR CREEK
BM 1470

CEMENT PLASTER:
SMOOTH SAND
(SAMPLE FOR TEXTURE
ONLY)

ARCHITECTURE

MATERIAL BOARD **A10**

477 9TH AVE SAN MATEO, CALIFORNIA JUNE 30, 2022

PERSPECTIVE - EAST ON 9TH AVE

A11

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

PERSPECTIVE - NORTH ON S RAILROAD AVE

A12

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

PERSPECTIVE - SOUTH ON CLAREMONT ST

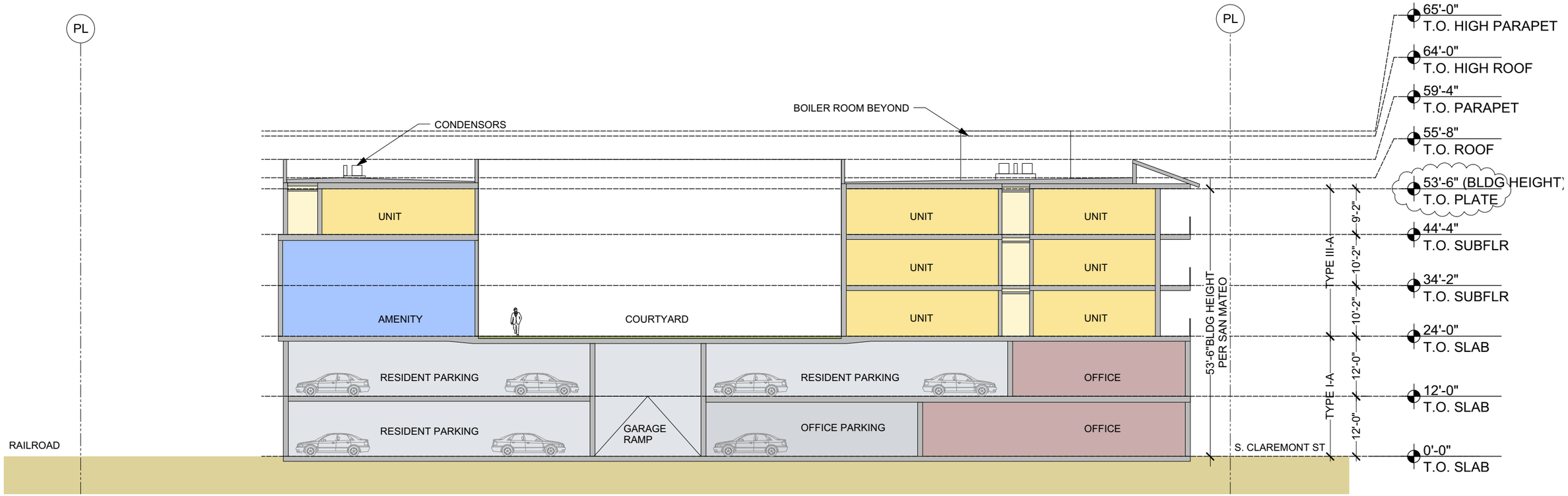
A13

477 9TH AVE

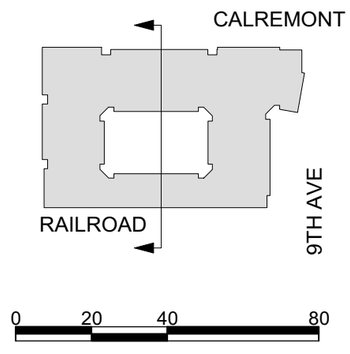
SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE



KEY PLAN



BUILDING SECTION

1" = 40'

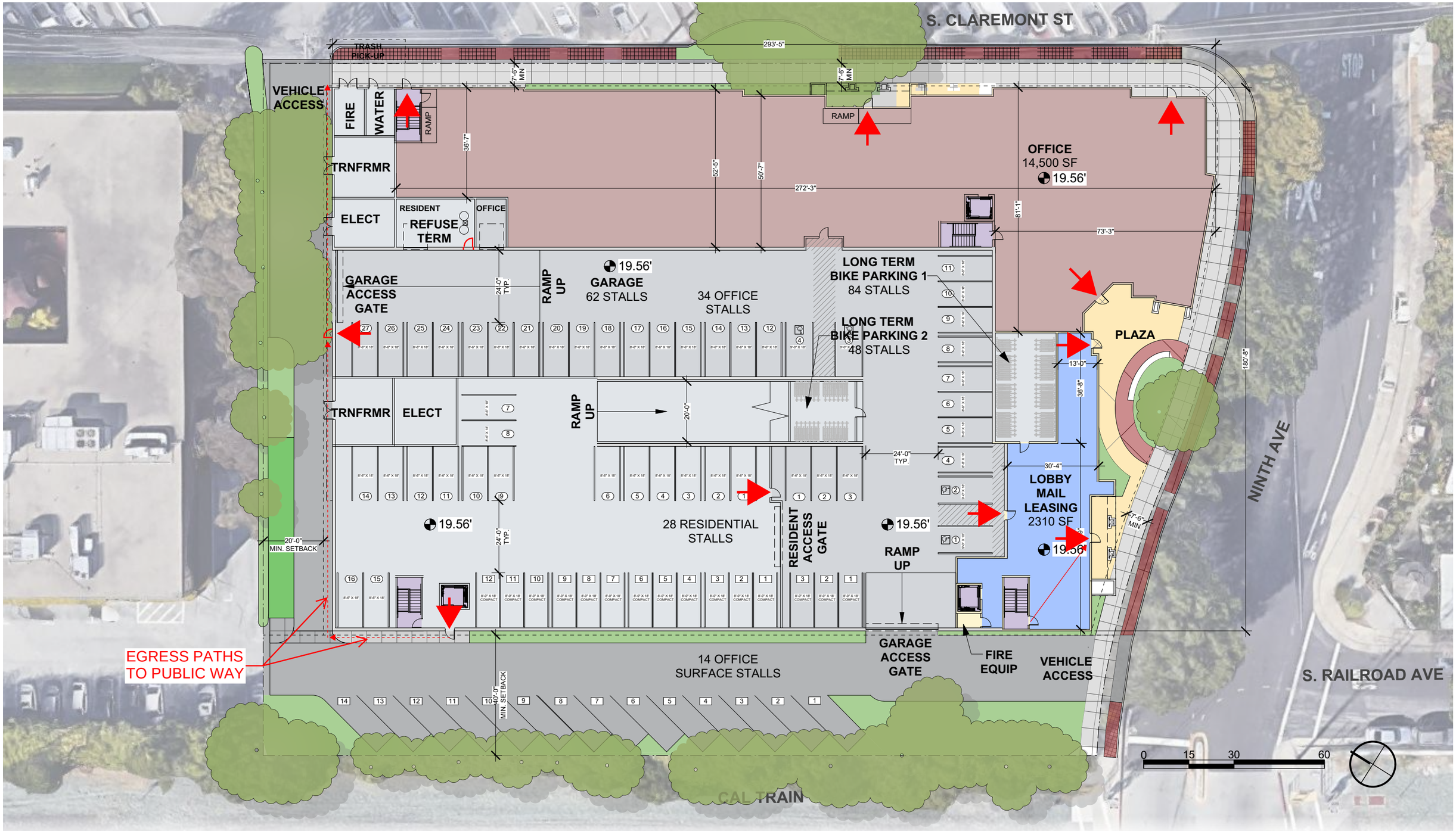
A14

ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022



EGRESS DIAGRAM - FLOOR 1 - PLAN

1" = 30'-0"

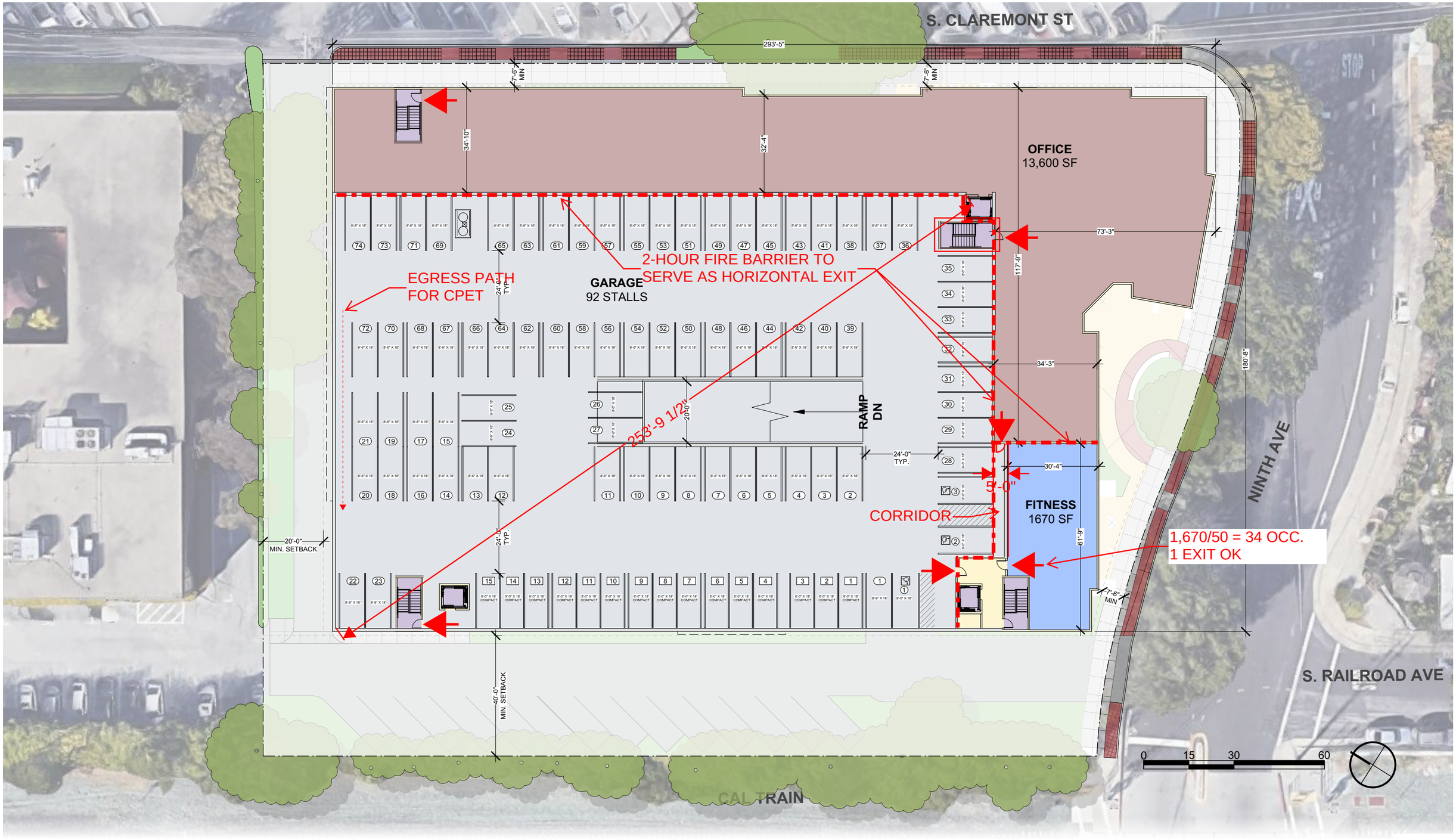
A20

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE



EGRESS DIAGRAM - FLOOR 2 - PLAN

1" = 30'-0"

A21

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

EGRESS DIAGRAM - FLOOR 3 - PLAN

1" = 30'-0"

A22

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

EGRESS DIAGRAM - FLOOR 4 - PLAN

1" = 30'-0"

A23

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

BDE ARCHITECTURE

EGRESS DIAGRAM - FLOOR 5 - PLAN

1" = 30'-0"

A24

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 30, 2022

3DE ARCHITECTURE

S. CLAREMONT ST

Sheet Index:

EXISTING EUCALYPTUS TREES WITHIN DRIVE ISLAND TO BE PRESERVED (OUTSIDE OF PL).

GARAGE DRIVEWAY

section 1

section 2

section 3

section 4

EXISTING OAK TREE TO BE PRESERVED, NEW PLANTING AREA.

PLANTING AREA AGAINST BLDG FACE.

BLDG MAIN ENTRANCE.

PLANTING AREA AGAINST BLDG FACE.

NEW PUBLIC SIDEWALK, TYP.:
- 4' PLANTER ZONE:
ACCENT PAVING BAND,
4'X6' TREE GRATES W/ STREET TREES, STREET LIGHTS, STREET FURNITURE

- 8' THROUGH ZONE:
CONCRETE PAVING

NEW PUBLIC SIDEWALK, TYP.:
- 4' PLANTER ZONE:
ACCENT PAVING BAND,
4'X6' TREE GRATES W/ STREET TREES, STREET LIGHTS, STREET FURNITURE

- 8' THROUGH ZONE:
CONCRETE PAVING

2ND FLOOR COURTYARD

FIRE LADDER SETUP PAD, TYP.

STORMWATER TREATMENT PLANTERS, TYP. (HATCH AREA)

PODIUM ACCENT PAVING, TYP.

CLUB ROOM
(2ND FLOOR SHOWN)

5TH FLOOR ROOF

OFFICE AND LEASING PLAZA:
- ACCENT PAVING
- (1) EXISTING OAK TREE TO BE PRESERVED WITHIN NEW PLANTING AREA W/ SEAT / BENCH SURROUND
- SHORT TERM BIKE PARKING (10 BIKE PARKING SPACES). TYPICAL DIMENSION: 3' ON CENTER BETWEEN RACKS, 6' LONG.

9TH AVE

BLDG MAIN ENTRANCE.

EXISTING TREES TO BE PRESERVED.

GARAGE DRIVEWAY

DOG PARK AREA:
- ARTIFICIAL TURF
- FENCE
- BENCHES

CALTRAIN PROPERTY WITH PRESERVED TREES.

North

0 15 30 60

ILLUSTRATIVE LANDSCAPE PLAN **L-1.1**

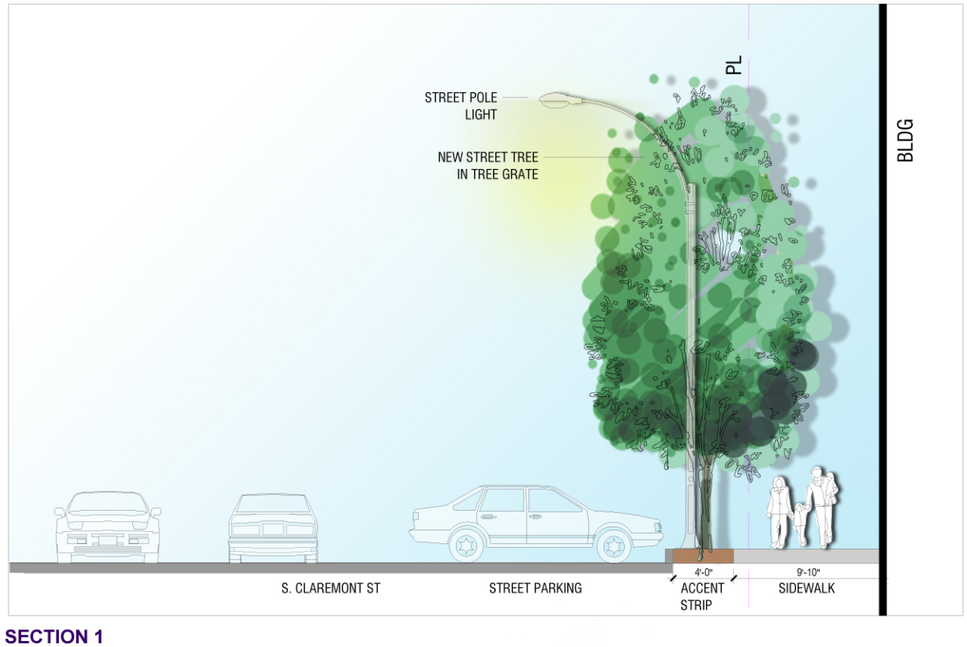
477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021

BDE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners



SECTION 1
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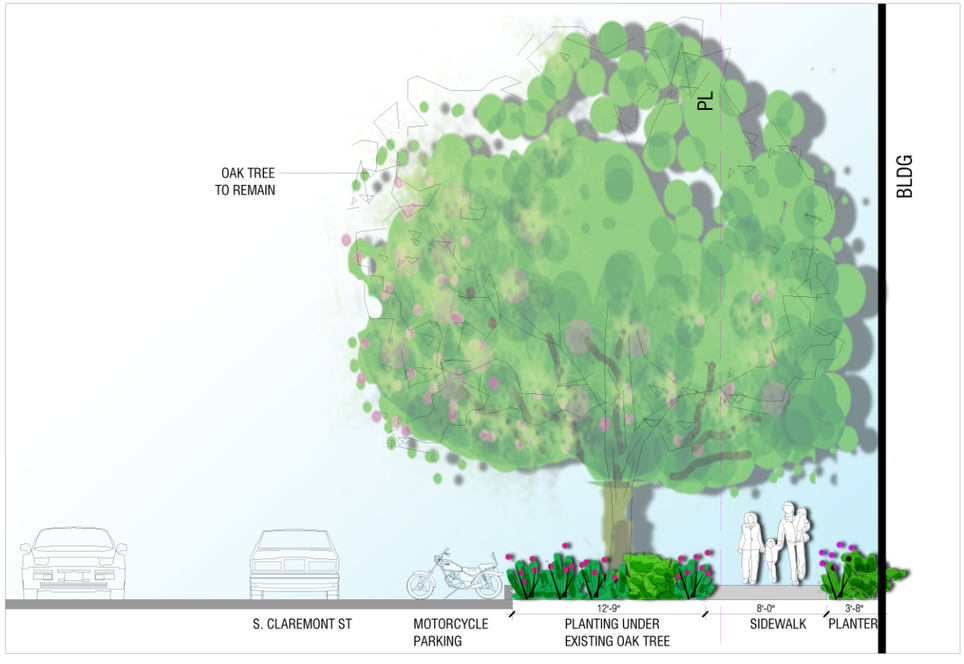

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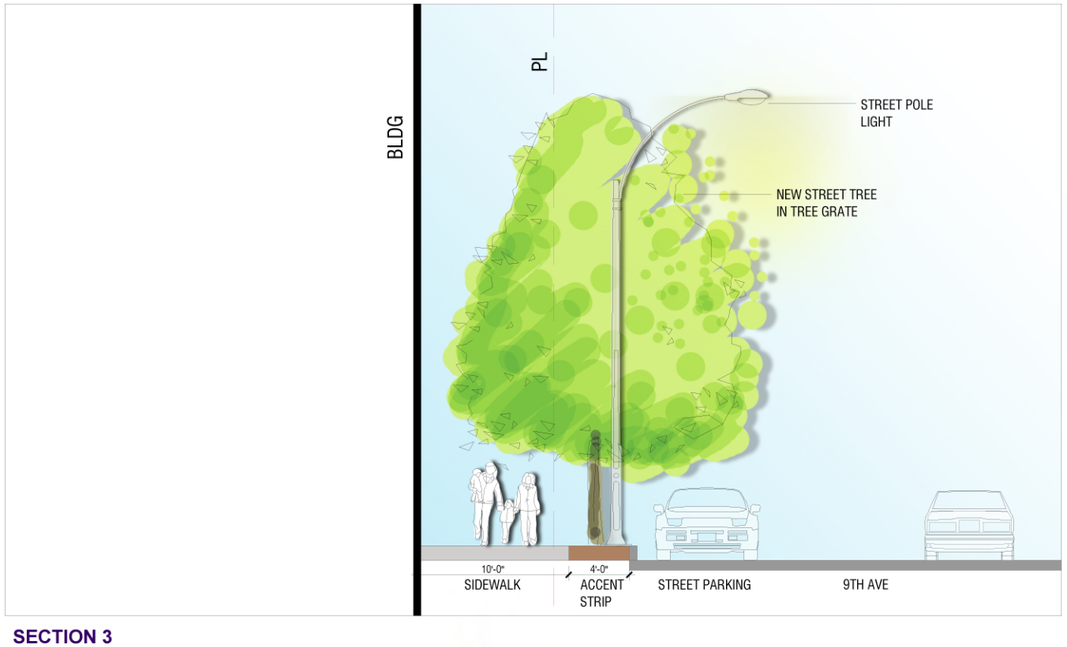

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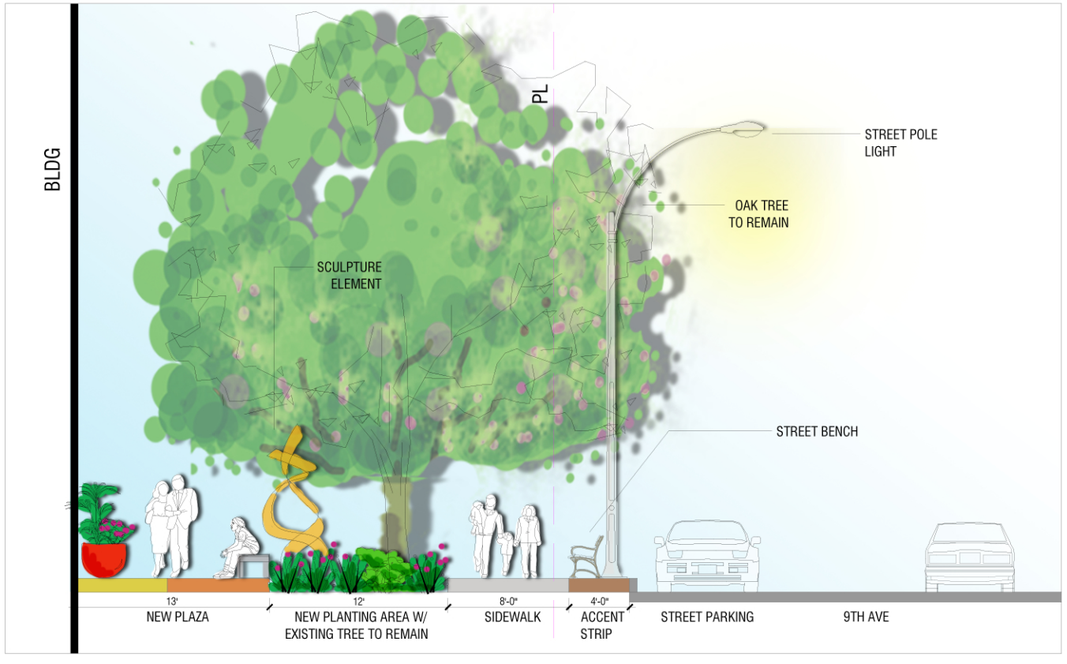


SECTION 4
scale 1" = 10'-0"

LANDSCAPE SECTIONS **L-1.2**

BDE ARCHITECTURE

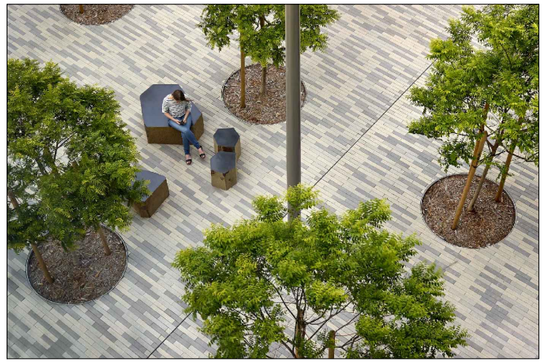
THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

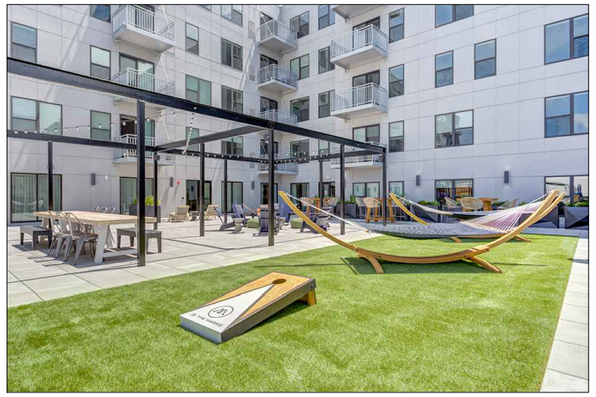
477 9TH AVE

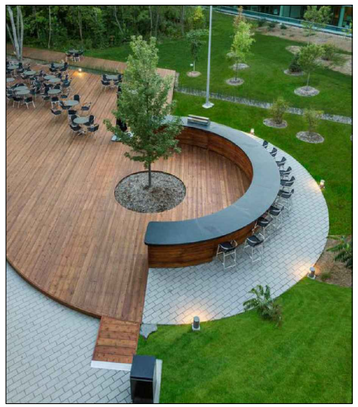
SAN MATEO, CALIFORNIA

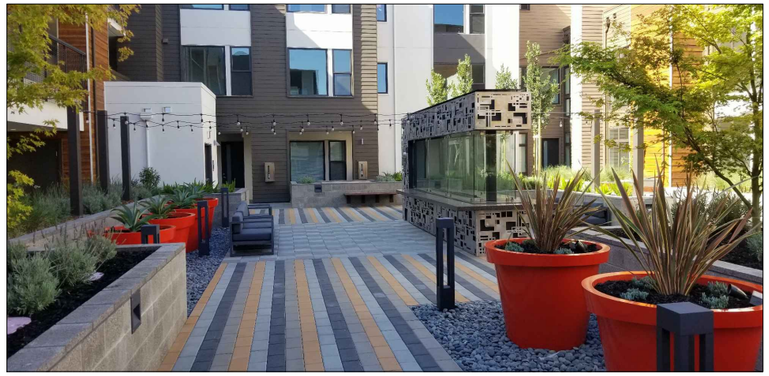
JUNE 10, 2022

SITE

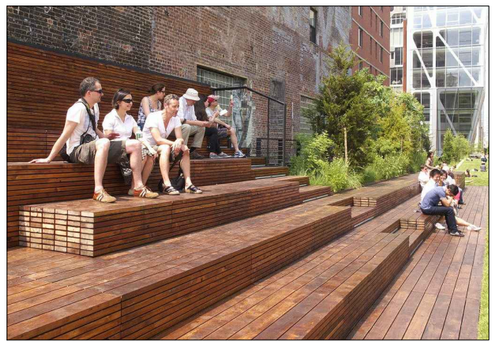








PODIUM + ROOF



LANDSCAPE INSPIRATION IMAGERY **L-1.3**

477 9TH AVE SAN MATEO, CALIFORNIA JUNE 10, 2021

BDE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

S. CLAREMONT ST

CITY STANDARD TREE GRATE, TYP.

Model: Urban Accessories - OT - Title 24
Dimension: 4' x 4'
Material: Standard Cast Iron
Color: Powdercoat RAL 6004 (Black)
Note: Customized to provide two 4" holes for bubbler access, tree stakes, and uplighting.

CITY STANDARD PEDESTRIAN CONCRETE SIDEWALK, TYP.

Medium broom finish.

GARAGE DRIVEWAY

CITY STANDARD PEDESTRIAN ACCENT PAVING, TYP.

PEDESTRIAN ACCENT PAVING , TYP.

2ND FLOOR COURTYARD

CLUB ROOM
(2ND FLOOR SHOWN)

ACCENT PLANTER POTS, TYP.

Model: Yard Art Capsule Planter CAPL-SL
Size: 28" dia x 21.5" tall
Color: Aluminum Linen White

PEDESTRIAN ACCENT PAVING, TYP.

PEDESTRIAN ACCENT PAVING, TYP.

ACCENT SEAT WALL W/ SKATE / SLEEP DETERRENTS.

ACCENT PLANTER POTS, TYP.

BIKE RACK, TYP.

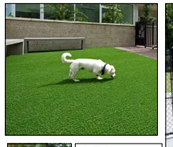
Model: Landscape Forms 35 Collection Loop Bike Rack
Color: Matte Black
Mounting: Surface mount.

6', typ.

3', typ.

9TH AVE

DOG PARK AREA:
- ARTIFICIAL TURF
- FENCE ENCLOSURE W/ GATES
- PET WASTE STATION
- PET DRINKING FOUNTAIN



CITY STANDARD PEDESTRIAN CONCRETE SIDEWALK, TYP.

CITY STANDARD STREET LIGHT, SEE CIVIL DRAWINGS

CITY STANDARD PEDESTRIAN ACCENT PAVING, TYP.

CITY STANDARD TRASH RECEPTACLE, TYP.

CITY STANDARD BENCH, TYP.

CITY STANDARD TREE GRATE, TYP.

PROPERTY LINE

PEDESTRIAN CONCRETE SIDEWALK TO MATCH CITY STANDARD (BEYOND PROPERTY LINE TO FACE OF BLDG), TYP.

SCULPTURE ELEMENT WITHIN PLANTING AREA (TBD.)

CITY STANDARD BENCH, TYP.

Model: Wabash Valley - Estate Series - Slat Bench
Dimension: 72" Long
Material: Steel
Color: Black Powdercoat
Mounting: Surface mount with mounting plate covers

North

0 15 30 60

ARCHITECTURE

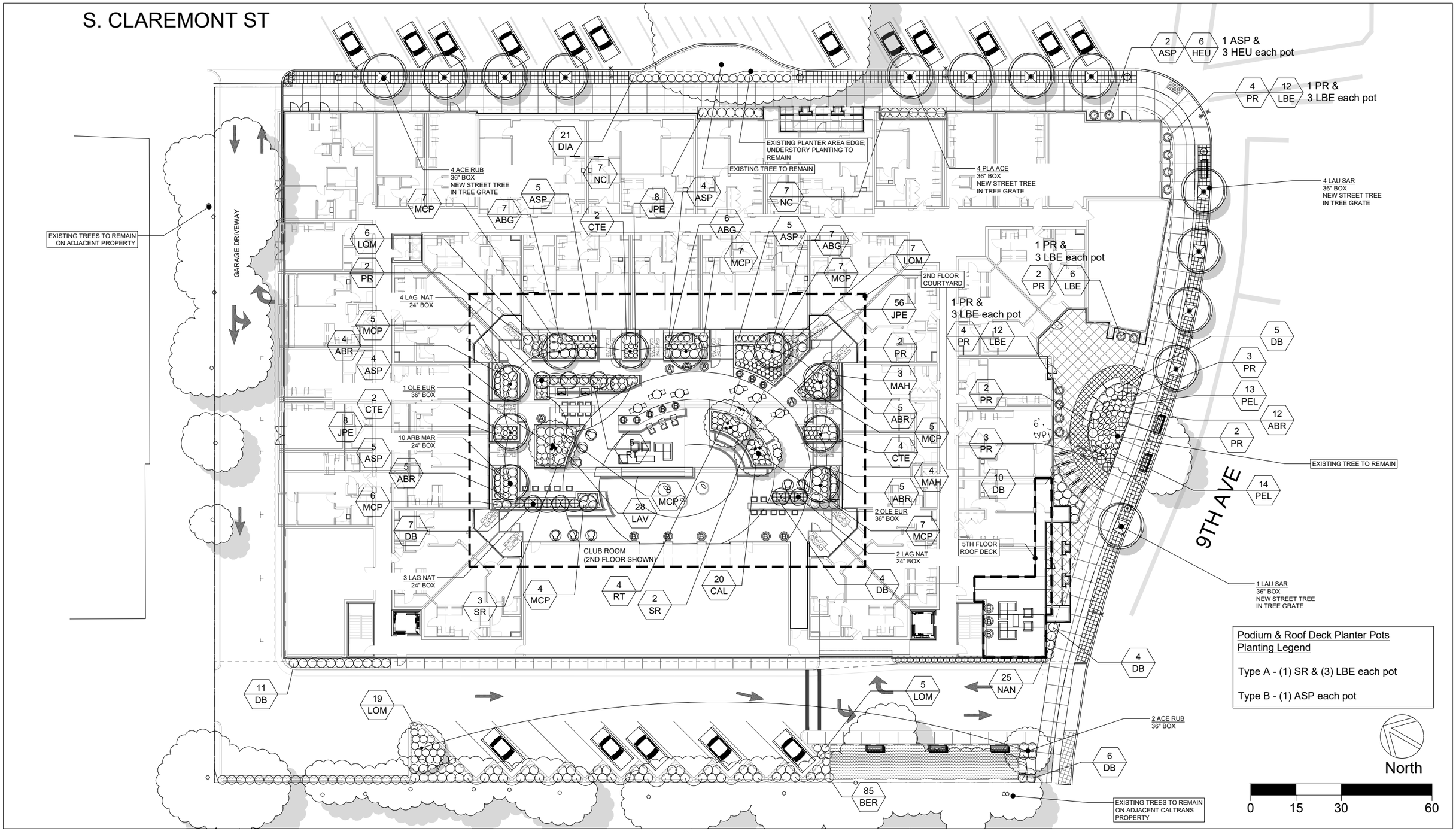
THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

SITE LANDSCAPE MATERIALS PLAN **L-2.1**

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021



SITE PLANTING PLAN **L-3.1**

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021

3DE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

PLANTING NOTES

1. All work shall be performed by persons familiar with planting work and under supervisions of a qualified planting foreman.
2. Plant material locations shown are diagrammatic and may be subject to change in the field by the Landscape Architect before the maintenance period begins.
3. All trees are to be staked as shown in the staking diagrams.
4. All tree stakes shall be cut 6" above tree ties after stakes have been installed to the depth indicated in the staking diagrams. Single stake all conifers per tree staking diagram.
5. Plant locations are to be adjusted in the field as necessary to screen utilities but not to block windows nor impede access. The Landscape Architect reserves the right to make minor adjustments in tree locations after planting at no cost to the Owner. All planting located adjacent to signs shall be field adjusted so as not to interfere with visibility of the signs.
6. The Landscape Architect reserves the right to make substitutions, additions, and deletions in the planting scheme as felt necessary while work is in progress. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary and subject to the Owner's approval.
7. The contractor is to secure all vines to walls and columns with approved fasteners, allowing for two (2) years growth. Submit sample of fastener to Landscape Architect for review prior to ordering.
8. All planting areas, including planter pots, except lawns and storm-water treatment zones (as defined by the civil engineer), shall be top-dressed with a 3" layer of recycled wood mulch, "Muir Woods Brown Mulch" by WM Earthcare (877.963.2784; wmearthcare.com) or approved equal. Submit sample to Landscape Architect for review prior to ordering. Hold all mulch six (6) inches from all plants where mulch is applied over the rootball.
9. All street trees to be installed in accordance with the standards and specifications of the City of San Mateo, CA. Contractor to contact the city arborist to confirm plant type, plant size (at installation), installation detailing and locations prior to proceeding with installation of street trees. Contractor is to obtain street tree planting permit from the city, if a permit is required, prior to installation of street trees. Contractor is to consult with the Landscape Architect during this process.
10. Plants shall be installed to anticipate settlement. See Tree and Shrub Planting Details.
11. All trees noted with 'deep root' and those planted within 5'-0" of concrete paving, curbs, and walls shall have deep root barriers installed per manufacturer's specifications. See specifications and details for materials, depth of material, and location of installation.
12. The Landscape Contractor shall arrange with a nursery to secure plant material noted on the drawings and have those plants available for review by the Owner and Landscape Architect within thirty (30) days of award of contract. The Contractor shall purchase the material and have it segregated and grown for the job upon approval of the plant material. The deposit necessary for such contract growing is to be born by the Contractor.
13. The project has been designed to make efficient use of water through the use of drought tolerant plant materials. Deep rooting shall be encouraged by deep watering plant material as a part of normal landscape maintenance. The irrigation for all planting shall be limited to the amount required to maintain adequate plant health and growth. Water usage should be decreased as plants mature and become established. The irrigation controllers shall be adjusted as necessary to reflect changes in weather and plant requirements.
14. The Landscape Contractor shall verify the location of underground utilities and bring any conflicts with plant material locations to the attention of the Landscape Architect for a decision before proceeding with the work. Any utilities shown on the Landscape drawings are for reference and coordination purposes only. See Civil Drawings.
15. The design intent of the planting plan is to establish an immediate and attractive mature landscape appearance. Future plant growth will necessitate trimming, shaping and, in some cases, removal of trees and shrubs as an on-going maintenance procedure.
16. Install all plants per plan locations and per patterns shown on the plans. Install all shrubs to ensure that anticipated, maintained plant size is at least 2'-0" from the face of building(s) unless shown otherwise on the plans. Refer to Plant Spacing Diagram for plant masses indicated in a diagrammatic manner on the plans. Refer to Plant Spacing Diagram for spacing of formal hedge rows.
17. Contractor to provide one (1) Reference Planting Area for review by Landscape Architect prior to installation of the project planting. The Reference Planting Area shall consist of a representative portion of the site of not less than 900 (nine hundred) square feet. Contractor to set out plants, in containers, in the locations and patterns shown on the plans, for field review by the Landscape Architect. The Reference Planting Area will be used as a guide for the remaining plant installation.
18. The Maintenance Period(s) shall be for 60 (sixty) days. Portions of the installed landscape of a project may be placed on a maintenance period prior to the completion of the project at the Owner's request and with the Owner's concurrence.
19. Contractor to verify drainage of all tree planting pits. See Planting Specifications. Install drainage well per specifications and Tree Planting Detail(s) if the tree planting pit does not drain at a rate to meet the specifications.
20. Contractor shall remove all plant and bar code labels from all installed plants and landscape materials prior to arranging a site visit by the Landscape Architect.
21. Versicell Drainage panel or approved equal is to be installed in all on-structure planters and all pre-cast planters/pots as shown in the drawings. Material available through: Tournesol, CA 800-542-2282. All drainage panels shall be completely covered with filter fabric as shown in the drawings and per manufacturer's specifications.
22. All tree rootballs shall be irrigated by water jet during the sixty (60) day maintenance period established by specifications. This irrigation shall occur each time normal irrigation is scheduled.
23. The Landscape Contractor shall, as a part of this bid, provide for a planting allowance for the amount of $5,000.000 (Five Thousand Dollars) to be used for supplying and installing additional plant material as directed by the Landscape Architect and approved by the Owner in writing. The unused portion of the alllowance shall be returned to the Owner at the beginning of the maintenance period.
24. The contractor is required to submit plant quantities and unit prices for all plant materials as a part of the bid.
25. Assume 15 gallon plant for any un-labelled or un-sized tree; 5 gallon plant for any un-labelled or un-sized shrub; and 1 gallon @ 18" o.c. for any un-labelled ground cover.
26. Assume 5 gallon plant size at 36" o.c. for all planting beds not provided with planting callouts or planting information.
27. The planting areas on grade shall be ripped to a depth of 8" to reduce compaction. The native subgrade soil shall be treated with 100 lbs of gypsum/1000 sf and leached to improve drainage and reduce the soil interface barrier. Contractor shall coordinate this work with other trades. This is subject to the final recommendations of the soils test (see below) and review by the Landscape Architect and the Owner.
28. All planting areas on grade are to receive Vision Comp OMRI Listed Compost by Vision Recycling, (510) 429-1300, or approved equal, at the rate of 6 cubic yards/1000 square feet, evenly tilled 6" deep into the soil to finish grade. All planting areas shall have 6-20-20 Commercial Fertilizer at 25lbs/1000 square feet evenly distributed into the soil. This is subject to the final recommendations and review of the soils test (see below) by the Landscape Architect and the Owner.
29. Planting pits are to be backfilled with a mixture of 50% native soil and 50% amended native soil per note #5 above.
30. The General Contractor is to provide an agricultural suitability analysis for representative samples of on-site rough graded soil and any imported topsoil. Recommendations for amendments contained in this analysis are to be carried out before planting occurs. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary. See specifications for testing procedure.
31. The Maintenance Period(s) shall be for 60 (sixty) days. Portions of the installed landscape of a project may be placed on a maintenance period prior to the completion of the project at the Owner's request and with the Owner's concurrence.
32. For built in place planters on structure, use imported regular weight soil mix.
33. For planter pots, use lightweight soil mix.
34. See civil drawings for imported storm water treatment area soil. Contractor to provide agricultural suitability analysis of the soil with amendment recommendations to the Landscape Architect for review.

PLANT PALETTE

TREES

KEY	SIZE	BOTANICAL NAME	COMMON NAME	COMMENTS	WUCOLS
ACE RUB	24"/36"box	Acer rubrum 'October Glory'	'October Glory' Red Maple	standard	Medium
ARB MAR	24"box	Arbutus 'Marina'	Marina Strawberry Tree	standard	Low
LAU SAR	36"box	Laurus nobilis 'Saratoga'	Saratoga Laurel	standard	Low
PLA ACE	36"box	Platanus a. 'Columbia'	London Plane Tree		Medium
LAG NAT	24"box	Lagerstroemia i 'Natchez'	Natchez Crepe Myrtle	multi	Low
OLE EUR	specimen	Olea europaea 'Wilsonii'	Fruitless Olive Tree	multi	Very Low

SHRUBS

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING	WUCOLS
ABG	5 gal	Anigozanthos 'Bush Gold'	Yellow Kangaroo Paw	24" oc	L
ABR	5 gal	Anigozanthos 'Big Red'	Red Kangaroo Paw	24" oc	L
ACA	5 gal	Acacia 'Cousin Itt'	Little River Wattle	36" oc	L
ASI	5 gal	Asparagus 'Sprengeri'	Sprengeri Aspragus Ferns	36" oc	M
ASP	5 gal	Asparagus d. 'Meyeri'	Myers Asparagus	24" oc	M
BER	5 gal	Berberis aquifolium repens	Creeping Barberry	36" oc	L
CAL	5 gal	Caladrina spectabilis	Rock Purslance	24" oc	L
DB	5 gal	Dietes bicolor 'Orange Drop'	Fortnight Lily	36" oc	L
DIA	1 gal	Dianella caerulea "Cassa Blue'	Cassa Blue Flax Lily	24" oc	M
DIT	5 gal	Dianella tasmanica 'Variegata'	Variegated Flax Lily	36" oc	M
HEU	5 gal	Heuchera 'Wendy'	Wendy Coral Bells	24" oc	L
LAV	5 gal	Lavandula intermedia 'Provence'	Provence French Lavendar	24" oc	L
PR	5 gal	Phormium 'Rainbow Queen'	Rainbow Queen Flax	36" O.C.	L
MAH	5 gal	Mahonia 'Soft Caress'	Soft Caress Mahonia	36" O.C.	M
NAN	5 gal	Nandina 'Flirt'	Flirt Heavenly Bamboo	24" O.C.	L
SR	15 gal	Strelitzia reginae	Birds of Paradise	36" O.C.	M
NC	5 gal	Nephrolepis cordifolia	Southern Sword Fern	36" O.C.	M
RT	5 gal	Rosamarinus 'Tuscan Blue'	Tuscan Blue Rosemary	36" O.C.	L

SUB SHRUBS, GRASSES, FERNS

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING	WUCOLS
CDI	5 gal	Carex divulsa	Berkeley Sedge	24" O.C.	M
CTE	5 gal	Chondropetalum tectorum	Cape Rush	36" O.C.	L
FES	1 gal	Festuca glauca 'Elijah Blue'	Elijah Blue Fescue	18" O.C.	L
JPE	1 gal	Juncus patens 'Elk Blue'	Elk Blue California Gray Rush	18" O.C.	L
MCP	5 gal	Muhlenbergia capillaris 'Regal Mist'	Pink Muhly Grass	36" O.C.	L
LBB	1 gal	Liriope m. 'Big Blue'	Big Blue Lily Turf	18" O.C.	M
LOM	5 gal	Lomandra 'Lime Tuff'	Lime Tuff Lomandra Grass	30" O.C.	L
NEP	1 gal	Nepeta faassenii	Catmint	24" O.C.	L
PEL	5 gal	Pennisetum a. 'Llittle Bunny'	Little Bunny Fountain Grass	24" O.C.	L

GROUNDCOVERS & VINES

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING	WUCOLS
LBE	3 gal	Lotus berthelotii	Parrot's Beak	-	L

PLANTING DESIGN NOTES:

- The above plants have been selected as being representative of the overall planting design intent, but does not preclude use of other appropriate planter material. The landscape shall incorporate plants that are tolerant of the challenging conditions of the site and that are appropriate to the local climate.
- All trees shall be a minimum of 24" box size. All shrubs and vines shall be a minimum of 5 gallon size. All groundcover shall be a minimum of 1 gallon size.
- All planted areas are to be watered with an approved automatic underground irrigation system. The system shall be designed to make efficient use of water through conservation techniques, and be in compliance with the State's and Water District's rules and regulations for water service and water use.
- Water use value based on WUCOLS (Water Use Classification of Landscape Species) IV, 2014 edition.

S. CLAREMONT ST

GARAGE DRIVEWAY

2ND FLOOR COURTYARD

CLUB ROOM
(2ND FLOOR SHOWN)

6', typ.

3', typ.

9TH AVE

WATER USE LEGEND

	WUCOLS Low	2,821 sq ft (total both levels)
	WUCOLS Moderate	799 sq ft (total both levels)
	WUCOLS High	0 sq ft
	Water Features	0 sq ft
	Special Landscape Area	0 sq ft

North

0 15 30 60

3DE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

IRRIGATION HYDROZONE PLAN **L-4.1**

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 45.3

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
Low Water-Use Plants	0.30	Drip	0.81	0.37	2,821	1,044	29,315
Moderate Water- Use Plants	0.50	Drip	0.81	0.62	799	495	13,913
High Water-Use Plants	0.80	Drip	0.81	0.99	0	0	0
Moderate Water-Use Turf EVA	0.50	Spray	0.75	0.67	0	0	0
					(A)	(B)	
				Totals	3,620	1,539	43,229
Special Landscape Areas							
water feature					0		
					(C)	(D)	
				Totals	0	0	
						ETWU Total	43,229
			Maximum Allowed Water Allowance (MAWA)[e]				45,752

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray
or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU* (Annual Gallons Required) = *Eto x 0.62 x ETAF x Area***
where 0.62 is a conversion factor that converts acre- inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed) = (****Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Regular Landscape Areas

Total ETAF x Area (B)	1,539
Total Area (A)	3,620
Average ETAF	**0.425179558**

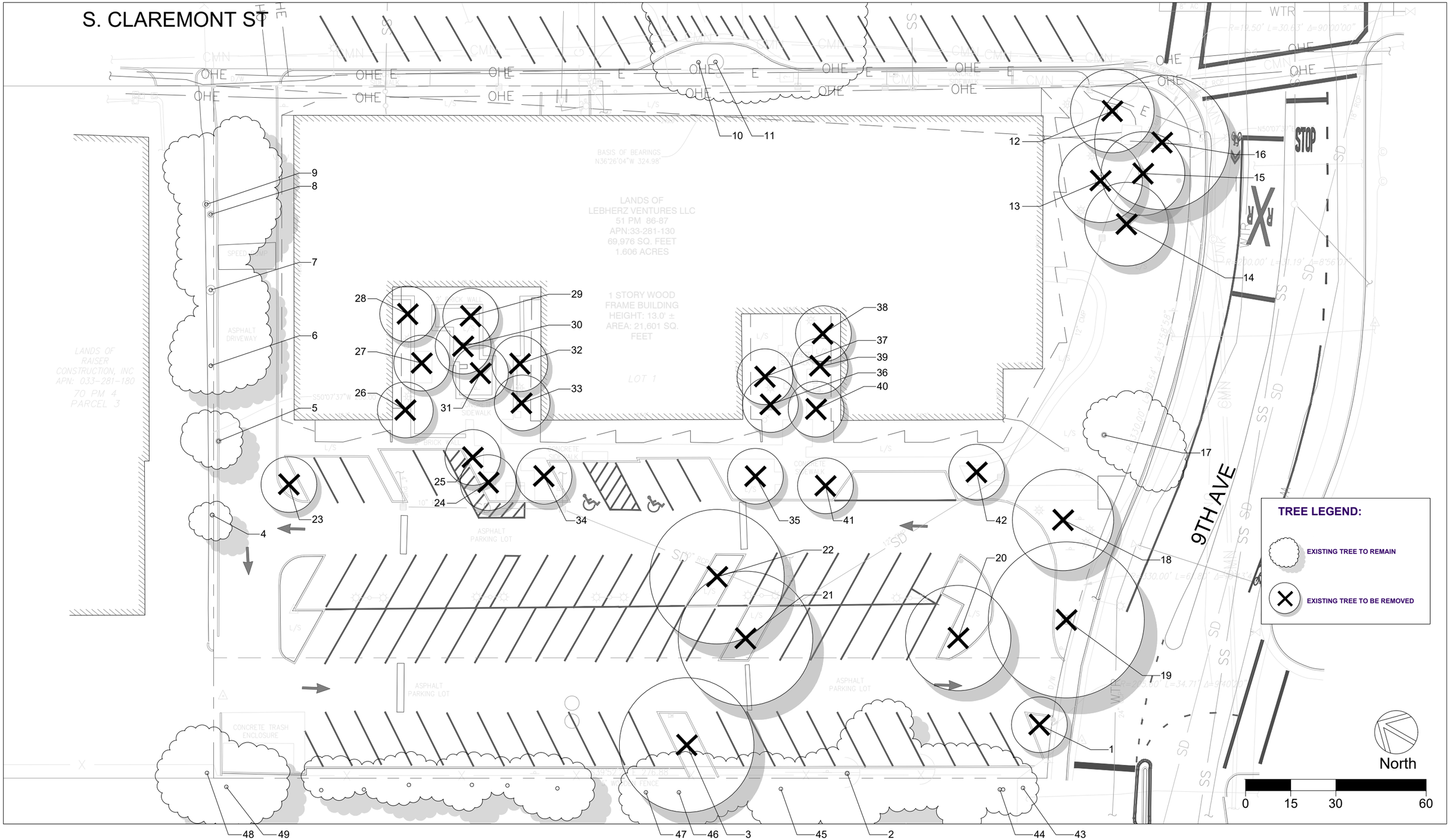
All Landscape Areas

Total ETAF x Area	(B+D)	1,539
Total Area	(A+C)	3,620
Sitewide ETAF	**(B+D) ÷ (A+C)**	**0.42517955801105**

PRELIMINARY IRRIGATION SYSTEM LEGEND

IRRIGATION BACKFLOW PREVENTION DEVICE - FEBCO-825Y-BV

IRRIGATION SUPPLYLINE- 2" AND LARGER	-1120/CLASS 315 PVC PIPE	-18" COVER
IRRIGATION SUPPLYLINE-1.5" & SMALLER	-1120/SCHEDULE 40 PVC PIPE	-18" COVER
IRRIGATION SPRINKERLINE	-1120/CLASS 200 PVC PIPE	-12" COVER
ELECTICAL CONDUIT	-1120/SCHEDULE 40 ELECTRICAL CONDUIT	-24" COVER
SLEEVING	-1120/SCHEDULE 40 PVC PIPE	-24" COVER



TREE DISPOSITION PLAN **L-5.1**

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021

BDE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

REQUIRED TREE PLANTING CALCULATION

a.	4,393 sq. ft. Total Landscape Area / 400 = 11	11
b.	# of Existing Trees from Tree Evaluation with at Least a 6" diam. to be Preserved	17
c.	Landscape Unit (LU) Value of Trees to be Removed from the Tree Evaluation	155.5
d.	Min. LU Value to be Replaced [a - b + c = d], 11 - 17 + 155.5 =	149.5

NEW TREES

QUANTITY	SIZE	LU VALUE	TOTAL LU VALUE
0	15 gal.	1	0
19	24" box	2	38
18	36" box	3	54
0	48" box	4	0
37			92

NOTE: See sheets L5.15 and L5.16 for Disposition Table.

TREE PROTECTION/DISPOSITION NOTES

1. See Disposition Plan for trees to be removed and to remain.
2. Tree drip zone areas shall be protected with a 5' high fence enclosure mounted on 2 inch diameter galvanized iron posts driven into the ground to a depth of at least 2 feet at no more than 10 foot spacing. The fence shall enclose the entire area under the dripline. Spray paint the top of the fence with bright orange paint before unrolling the fabric to ensure visibility of the barrier. In no case shall any vehicles or equipment be permitted to be stored within this enclosed area. Fence shall be erected before construction begins and remain in place until time for relocation.
3. No materials or topsoil shall be stored within the tree enclosure area.
4. No trenching within enclosure shall be permitted. Any tree roots encountered outside of the enclosure smaller than 2" shall be cut clean with the approved tree pruning tools and sealed with an approved fungicidal tree sealant. Tree roots 2" or larger shall not be cut. Route pipes into alternate location to avoid conflict. Any damaged or torn roots are to be root pruned and sealed with orange shellac.
5. No grading or trenching shall be permitted within the fenced zone or under the dripline except as specifically noted on the plans.
6. No soil sterilants shall be applied under pavement near existing trees.
7. Regular irrigation, fertilizing, and other tree care shall continue in accordance with Arborist recommendations.
8. Above ground surface runoff shall not be directed into the tree canopy area from adjacent areas.
9. Periodic inspections by a qualified Arborist are recommended during construction activities, particularly as trees are impacted by trenching/grading operations. Any recommendations by the Arborist for maintaining the health of trees are to be implemented.

Preliminary Arborist Report

477 9th Avenue
San Mateo, CA 94402

PREPARED FOR:
The Martin Group
1970 Broadway, Suite 745
Oakland, CA 94612

PREPARED BY:
HortScience | Bartlett Consulting
325 Ray Street
Pleasanton, CA 94566

May 16, 2022

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

Preliminary Arborist Report

477 9th Avenue
San Mateo, CA 94402

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Exhibits

Preliminary Arborist Report
477 9th Avenue
San Mateo, CA 94402

Introduction and Overview

The Martin Group is redeveloping a commercial property located at 477 9th Avenue in San Mateo. HortScience | Bartlett Consulting (Divisions of The F.A. Bartlett Tree Expert Company) was asked to prepare a **Preliminary Arborist Report** for the trees potentially impacted by this project as required by the City of San Mateo's Protected Trees Ordinance 13.40.

This report provides the following information:

1. Assessment of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. Preliminary evaluation of the impacts to trees based on site plans provided by The Martin Group.
3. Guidelines for tree preservation during the design, construction and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on April 25, 2022. The assessment included all trees with a trunk diameter of 4" or larger within the project boundary or with canopy overhanging the property. Trees were tagged #1-49. The assessment procedure consisted of the following steps:

1. Identifying the tree species.
2. Tagging each tree with an identifying number and recording its location on a map.
3. Measuring the trunk diameter at a point 54" above grade.
4. Evaluating the health and structural condition using a scale of 1 – 5 based on a visual inspection from the ground:

   5 - A healthy, vigorous tree, reasonably free of signs and symptom 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, and its potential to remain an asset to the site for years to come.

   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 that 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: Tree 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 may have characteristics that are undesirable for landscapes and generally are unsuited for use areas.

Description of Trees

Forty-nine (49) trees representing 10 species were evaluated. Tree conditions ranged from poor (11 trees) to good (6 trees) with 65% of the trees in fair condition. Seven off-site trees were included in this assessment (#43-49). Descriptions of each tree are found in the ***Tree Assessment***, and approximate locations are plotted on the ***Tree Assessment Map*** (see Exhibits).

Table 1. Condition ratings and frequency of occurrence of trees.
477 9th Avenue, San Mateo, CA

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Blackwood acacia	*Acacia melanoxylon*	-	1	-	**1**
European white birch	*Betula pendula*	4	1	-	**5**
Silver dollar gum	*Eucalyptus polyanthemos*	-	6	-	**6**
Ginkgo	*Ginkgo biloba*	1	-	-	**1**
Sweetgum	*Liquidambar styraciflua*	1	9	-	**10**
Olive	*Olea europaea*	3	4	2	**9**
Purpleleaf plum	*Prunus cerasifera*	-	-	1	**1**
Coast live oak	*Quercus agrifolia*	1	7	2	**10**
Valley oak	*Quercus lobata*	-	1	-	**1**
Chinese elm	*Ulmus parvifolia*	1	3	1	**5**
Total		**11**	**32**	**6**	**49**

A single story office building was surrounded by a parking lot, landscaping, and pedestrian sidewalks. The majority of the trees were located around the building and the perimeter of the parking lot, with a few trees located near parking stalls in the parking lot. Much of the landscaped area was covered in rocks of varying sizes. The most frequently occurring species were coast live oaks and sweetgums, with 10 of each species on the site.

HortScience | Bartlett Consulting • Divisions of The F.A. Bartlett Tree Expert Company
325 Ray St. Pleasanton, CA 925.484.0211 • www.hortscience.com

The largest tree assessed (56 inch trunk diameter) was valley oak #11 on the northeast side of the property (Photo #1). Along with purpleleaf plum #12, these were the only street trees and were growing in an aproximately 8 foot by 35 foot island extending into South Claremont Street. Cavities were visible in three large limbs including a beehive within the southeast stem. The west-side canopy of the tree had been pruned for utility line clearance.

Ten coast live oaks were included in the assessment. The majority (7 trees) of the coast live oaks were in fair condition. Coast live oaks #48 and 49 (both off-site) were in good condition with dense green crowns. Coast live oak #19 was in poor condition, with a sparse canopy, twig dieback, and abnormally enlarged buttress roots on the north side of the tree (Photo #2). The live oaks ranged from young (8-inch trunk diameter) to mature (37 inch trunk diameter) with an average trunk diameter of 19 inches.

Photo 1. The crown of valley oak #11 had been pruned for overhead utilities but extended far over South Claremont Street.

Ten sweetgums were included in the assessment. All the sweetgums were planted in the same courtyard, and 7 of the 10 sweetgums were growing in raised planters. All the sweetgums had been topped and had weakly attached branches as a result. Nine sweetgums were in fair condition and sweetgum #27 was in poor condition; the roots of this sweetgum had been pruned on three sides at 1 foot from the trunk (Photo #2).

Nine multi-trunked olives were growing on the southeast and southwest sides of the existing building. Tree conditions ranged from poor (#35, 41, 42) to good (#12, 15). Four olives were in fair condition. The three olives in poor condition had been topped; their crowns were sparse with poor color and twig dieback throughout the canopy. The olives were all semi-mature with multiple trunks arising at 1-2 ft above ground and stems ranging from 12 inches to 3 inches in diameter.

Photo 2. Roots had been cut on three sides of sweetgum #27.

Six silver dollar gums were assessed, and all were in fair condition. All six trees were growing in a 3-foot-wide planting strip on the northwest side of the property (Photo 3). Silver dollar gums #4-6 had sparse, crowded canopies due to their proximity to one another. Silver dollar gums were some of the largest trees assessed with an average trunk diameter of 25 inches. In particular, trees #7-9 had larger diameter trunks that filled the narrow planting strip.

Five European white birches were assessed. All the European white birch had been topped. Four of the birches (36, 37, 39, 40) were in poor condition, with sparse crowns and twig dieback throughout the canopy. One birch (#38) was in fair condition, with a slightly fuller crown and minor twig dieback. Trunk diameters for these five trees ranged from 5 to 8 inches.

Photo 3. The silver dollar gums (#5 and 6 shown) were growing in a row in narrow planting strip.

Five Chinese elms were included in the assessment, and all were planted in the parking lot on the southwest side of the building. Three elms (#2, 21, & 22) were in fair condition, elm #3 was in good condition (Photo 4), and elm #20 was in poor condition. Three of the five elms had been topped. Chinese elm #2 had a metal pole embedded in the trunk up to a height of 3.5 feet.

The remaining three species were represented by one tree each. These trees included:

- Ginkgo #1 was a young tree in poor condition. The tree had multiple trunks arising from the base, and the west-most trunk was mostly dead.
- Purpleleaf plum #10 was in good condition. The young tree was growing under the canopy of valley oak #11, and had a dense canopy
- Blackwood acacia #16 was in fair condition. The 41-inch trunk divided into two stems at 5 feet, and the crown had separated, potentially indicating a future failure.

San Mateo Tree Protection Requirements

The City of San Mateo Municipal Code 27.71 protects all trees during on construction projects 6" and greater in diameter. Municipal Code 13.40 defines oaks with a trunk diameter of 10 inches and larger and any other species with a trunk diameter of 15 inches as **Heritage Trees**. Based on these definitions, **all trees are protected, and 21 trees are Heritage Trees**. There are also two street trees included in the assessment, one of which is also Heritage. Protected status designations for individual trees are provided in the ***Tree Assessment*** (see *Exhibits*). Permits and replacement tree plantings are required for the removal of all protected trees. Tree replacements should be selected from species on the City's Official Replant List.

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 to function well over an extended length of time. 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.

Our goal is to identify trees that have the potential for long-term health, structural stability, and longevity. When trees are growing in open fields and are away from areas where people and property are present, structural defects and/or poor health present a low risk of damage or injury if they fail. However, we must be concerned about safety in areas that are used by people or occupied by structures and property. Therefore, where development encroaches into existing plantings, we must consider the structural stability of the tree as well as the potential of the tree to grow and thrive in a new environment. Where development will not occur, the normal tree life cycles of decline, structural failure, and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **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. The young, vigorous purpleleaf plum is healthy and will likely tolerate construction better than a less healthy tree.

- **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. Sweetgum #27 has poorly attached branches re-growing from heading cuts and should not be preserved.
- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. For example, coast live oaks and olives are more tolerant of construction impacts than valley oak and European white birch.

- **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. While valley oak #11 is a tree that all parties want to preserve, there will be some challenges due to its age.

- **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/plants/inventory/ lists species identified as being invasive. San Mateo is part of the Central West Floristic Province. Purpleleaf plums and olives are invasive on a limited basis.

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.

Table 3. Tree suitability for preservation
499 9th Avenue, San Mateo, CA.

High	These are trees with good health and structural stability that have the potential for longevity at the site. One tree (#12) had high suitability for preservation.
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 lifespans than those in the "high" category. Nineteen (19) trees had 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. Twenty-nine (29) trees had low suitability for preservation.

Preliminary Evaluation of Impacts and Recommendations

The ***Tree Assessment Form*** was the reference point for tree health, condition, and suitability for preservation. Full development plans were not yet available at the writing of this report. I used the Illustrative Landscape plan created by The Guzzardo Partnership dated March 18, 2022 to evaluate preliminary impacts to trees. These plans appear to have accurate trunk locations of trees planned for preservation, but not those being removed. The plan showed a larger building, filling much of the property with redesigned landscaping and parking. This report is considered preliminary because the team is relatively early in the design process, and I did not review a comprehensive plan set.

Based on my review of the proposed plans and my evaluation of the trees:

- 17 trees can potentially be preserved [14 Heritage and 2 Street Trees (valley oak #11 is both a Heritage and Street Tree)].
- 32 trees will be removed (7 Heritage).

While 17 trees are listed to be potentially preserved, more evaluation and planning will be required along with careful construction techniques to actually preserve these trees. For mature trees growing in small spaces in the urban environment, traditional approaches (such as the City preferred 10x TPZ system) are difficult to enact.

For instance, trees #11 and #17 are large oaks with construction planned within 10 feet of their trunk. The planter that contains valley oak #11 is proposed to be expanded enlarging the growth space at the base. Construction work performed near the valley oak could result in significant root loss depending on the exact location of the sidewalk. The canopy of the tree may also need to be reduced to accommodate a scaffolding during building construction. These actions have the potential to have a significant impact on the health of the valley oak. Coast live oak #17 may also experience significant negative impacts, the sidewalk will be moved closer to the trunk of the tree on one side, and a brick patio area will be installed within ten feet of the trunk on the other side. These impacts could be significant.

The proposed increase in the size of the building will result in 28 tree removals. Conflicts with hardscape or parking lot account for the rest of the removals. The design team would like to preserve Tree #3. The tree was not accurately plotted on the plans, however maintaining a similar or larger parking cutout will provide plenty of space for the tree to continue to thrive, especially if irrigation is added.

Details about individual trees are listed in the ***Tree Disposition*** exhibit, and successful retention of the trees to be preserved will require adherence to the **Tree Preservation Guidelines** below**.**

Landscape Unit (LU) Calculation

The City of San Mateo requires the calculation of the Landscape Unit (LU) value for all trees with a diameter of 6 inches or more proposed for removal. The calculation is described in the City's Zoning Code, Section 27.21. The value is based on the factors of species, condition and location, adapted from the *Guide for Plant Appraisal* prepared by Council of Tree and Landscape Appraisers. The City of San Mateo provides a form for use in this calculation. Key elements of the LU calculation include:

- Using the trunk diameter measurements obtained during our field assessment. Where trees had more than one stem, the trunk diameter equivalent to the sum of the cross-sectional areas of each stem was used.
- Assigning a rating to each species based on the *Species Classification and Group Assignment* prepared by the Western Chapter of the International Society of Arboriculture (2004).
- Assigning a condition rating based on our observations in the field.
- Assigning a location rating based on each tree's site, placement, and contribution.
- Determining if the tree is located within the buildable area. Off-site and street trees were considered to be outside of the buildable area.
- Determining if any trees met the City's criteria for *Heritage* status.

Based on my observations at the site and assessment of the key factors, I calculated the LU value of the 49 trees to be 442.7 Landscape Units (See ***LU Evaluation Schedule*** in *Exhibits*). The value of the 32 trees planned for removal is 155.5 Landscape Units.

The City of San Mateo requires replacement of the LU values to be lost during development. Replacement can either be through tree planting in excess of any required planting or through payment of an in-lieu fee. The total in-lieu fee for the 49 trees is $138,554.

Estimate of Value

To estimate the value of the trees, I used the cost approach, reproduction method, trunk formula technique, as described in the ***Guide for Plant Appraisal***, 10th edition (International Society of Arboriculture, Champaign IL, 2018). In addition, I referred to ***Species Classification and Group Assignment*** (2004), a publication of the Western Chapter of the International Society of Arboriculture.

When estimating reproduction cost, the trunk formula technique considers four factors: size, condition, functional limitations and external limitations. Size is measured as trunk diameter, normally 54" above grade. Condition reflects the health and structural integrity of the tree. Functional limitations reflect constraints to tree development based on the site and species. For this site, I did not factor in any external limitations.

The total reproduction cost of all 49 assessed trees is $312,400. The estimated value of each tree is listed in the **Estimated Value** exhibit.

Preliminary 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 depends on the amount of excavation and grading, care with which demolition is undertaken, and 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 all trees to be retained 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. No grading, excavation, construction or storage or dumping of materials shall occur within the **TREE PROTECTION ZONE**.
   c. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.

Design recommendations

1. Plot accurate locations of all trees to be preserved on all project plans. The development plans shall be reviewed by the consulting arborist with regard to tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.
2. Plan for tree preservation by designing adequate space around trees to be preserved. This is the **TREE PROTECTION ZONE:** No grading, excavation, construction or storage of materials should occur within that zone. Route underground services including utilities, sub-drains, water or sewer around the **TREE PROTECTION ZONE**. For design purposes, the **TREE PROTECTION ZONE** shall be the limits shown on the Tree Protection Plan.
3. Consider the vertical clearance requirements near trees during design. Avoid designs that would require pruning more than 15% of a tree's canopy.
4. Irrigation systems must be designed so that no trenching severs roots larger than 1" in diameter will occur within the **TREE PROTECTION ZONE**.
5. **Tree Preservation Guidelines** prepared by the Consulting Arborist, which include specifications for tree protection during demolition and construction, should be included on all plans.
6. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
7. Do not lime the subsoil within 50' of any tree. Lime is toxic to tree roots.
8. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.
9. Ensure adequate but not excessive water is supplied to trees; in most cases occasional irrigation will be required. Avoid directing runoff toward trees.

Pre-demolition and pre-construction treatments and recommendations

1. The demolition and construction superintendents shall meet with the Consulting Arborist before beginning work to review all work procedures, access routes, storage areas, and tree protection measures.
2. Fence all trees to be retained to completely enclose the Tree Protection Zone prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link. Fences are to remain until all grading and construction is completed. The **TREE PROTECTION ZONE** shall be the limits shown on the Tree Protection Plan.
3. Where demolition must occur close to trees, such as removing curb and pavement, install temporary trunk protection devices such as winding silt sock wattle or wood planks around trunks or stacking hay bales around tree trunks to a height of approximately 5'. Any low branches that are within the work zone should also be protected. Remove trunk protection after demolition is completed and install protective fence at the limits of the tree protection zone. Do not retain wattling around tree trunks for more than 2-3 weeks to avoid damaging trunks from excess moisture.
4. Apply and maintain 4-6" wood chip mulch within the **TREE PROTECTION ZONE**. Keep the mulch 2' from the base of tree trunks.
5. Structures and underground features to be removed within the **TREE PROTECTION ZONE** shall use equipment that will minimize damage to trees above and below ground and operate from outside the **TREE PROTECTION ZONE**. Tie back branches and wrap trunks with protective materials to protect from injury as directed by the Project arborist. The Project arborist shall be on-site during all operations within the **TREE PROTECTION ZONE** to monitor demolition activity.
6. 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 feasible 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. Any approved grading, construction, demolition or other work within the **TREE PROTECTION ZONE** or within 15 feet or any tree being preserved should be monitored by the Consulting Arborist.
2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
3. Tree protection devices are to remain until all site work has been completed within the work area. Fences or other protection devices may not be relocated or removed without permission of the Consulting Arborist.
4. Construction trailers, traffic and storage areas must remain outside **TREE PROTECTION ZONE** at all times.
5. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Consulting 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.
6. Spoil from trench, footing, utility or other excavation shall not be placed within the **TREE PROTECTION ZONE**, neither temporarily nor permanently.
7. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the **TREE**

PROTECTION ZONE. Any modifications must be approved and monitored by the Consulting Arborist.

8. All trees shall be irrigated on a schedule to be determined by the Consulting Arborist (every 3 to 6 weeks is typical). Each irrigation shall wet the soil within the **TREE PROTECTION ZONE** to a depth of 30".
9. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
10. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
11. Any additional tree pruning needed for clearance during construction must be performed by a Certified 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.

If you have any questions about my observations or recommendations, please contact me.

HortScience | Bartlett Consulting

Darya Barar, Managing Consulting Urban Forester & Arborist
Registered Consulting Arborist #693
ISA Certified Arborist No. WE-6757A
ISA Tree Risk Assessment Qualified
Qualified Tree and Plant Appraiser

Exhibits

Tree Assessment Plan

Tree Assessment Form

Tree Appraisal Form

LU Evaluation Schedule

Tree Disposition Form

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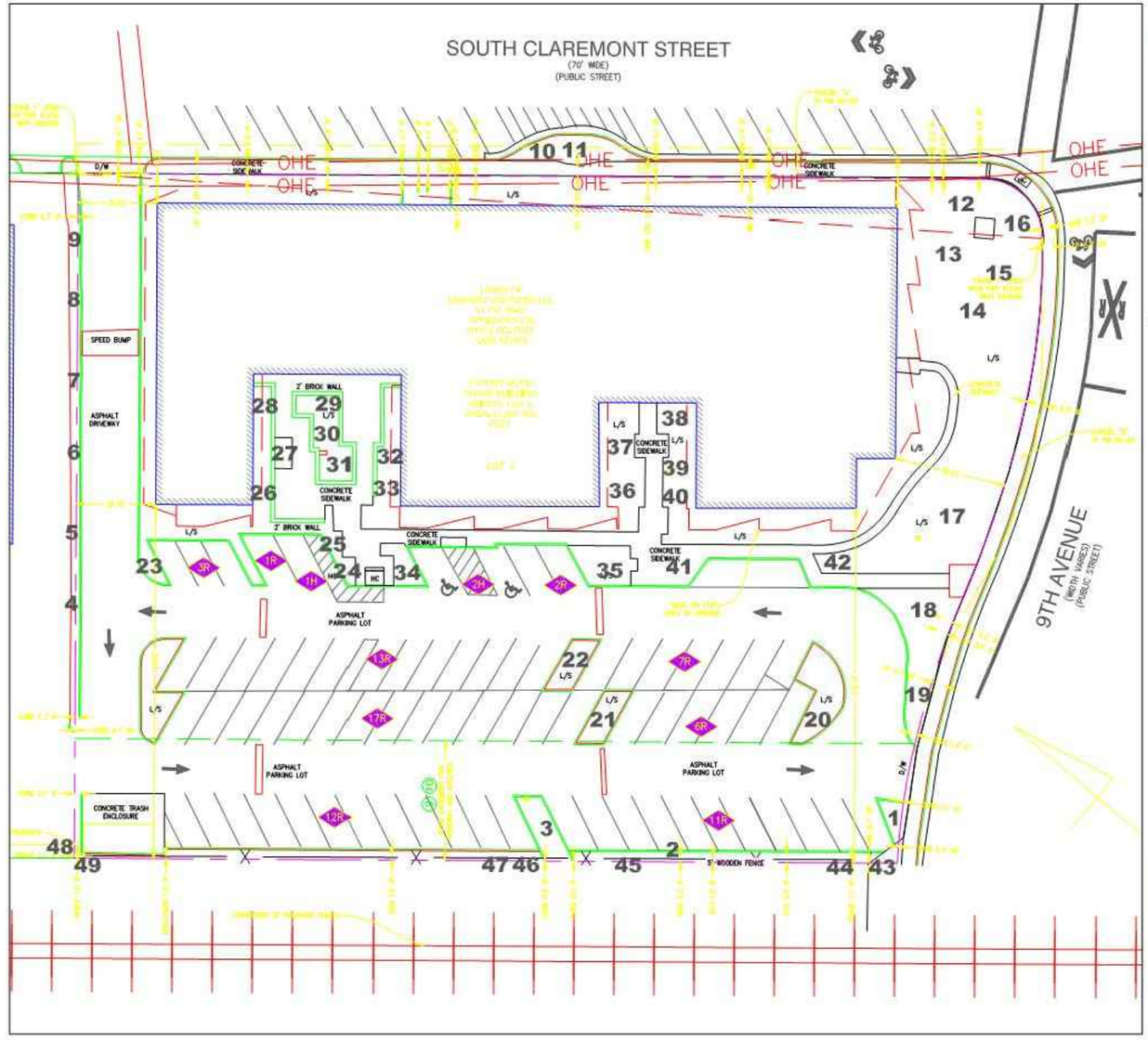

Tree Assessment Plan

477 9th Avenue
San Mateo, CA

Prepared for:
The Martin Group
Oakland, CA

April 2022

No Scale

Notes:
Base map provided by:
Sandis

Numbered tree locations are approximate.

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Tree Assessment

477 9th Avenue
San Mateo, California
May 10, 2022

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
1	Ginkgo	3,3,2	No	2	Low	Multiple attachments from base; west leader mostly dead.
2	Chinese elm	19	Yes	3	Moderate	Lean to east; restricted root space; multiple attachments at 8 ft; metal pole embedded in trunk to 3.5 ft.
3	Chinese elm	22	Yes	4	Moderate	Multiple attachments at 8 ft; 7 ft wide planting space; full canopy; minor dieback in upper crown.
4	Silver dollar gum	19	Yes	3	Low	3ft planting space; sparse canopy; slightly one sided to west.
5	Silver dollar gum	22	Yes	3	Low	Codominant at 10 ft; 3 ft planting space; sparse canopy.
6	Silver dollar gum	15	Yes	3	Low	3 ft planting space; sparse crowded canopy; one sided to west.
7	Silver dollar gum	36	Yes	3	Moderate	Codominant at 10 ft; trunk fills 3 ft planting space; broken branch in canopy.
8	Silver dollar gum	28	Yes	3	Moderate	Codominant at 10 ft; trunk fills 3 ft planting space.
9	Silver dollar gum	31	Yes	3	Low	Codominant at 12 ft; pruned for utility lines; trunk fills 3 ft planting space.
10	Purpleleaf plum	3,3,3	Street Tree	4	Moderate	Multiple attachments at 2 ft; full canopy; young; growing under canopy of #11.
11	Valley oak	56	Heritage Street Tree	3	Moderate	Codominant at 10 ft; beehive in southeast stem; cavity with decay on southwest stem; topped for utility lines.
12	Olive	12,11,9	No	4	High	Multiple stems at 1 ft; topped for lines; full dense crown.
13	Olive	10,7,6,5,4	No	3	Moderate	Multiple attachments at 1 ft; 6 in stem has significant decay; suppressed on east; one sided to west.
14	Olive	9,6,5	No	3	Moderate	Multiple attachments at 1 ft; suppressed on east; one sided to west.
15	Olive	9,9,8,5	No	4	Moderate	Multiple attachments at 1 ft; topped; full crown.
16	Blackwood acacia	41	Yes	3	Low	Codominant at 5 ft; slight lean to south; slight separation in crown; roots cut at sidewalk on south.
17	Coast live oak	23	Yes	3	Moderate	Multiple attachments at 3 ft; epicormic sprouting; sparse crown; in fake turf with river rocks over roots and against trunk.

Tree Assessment

477 9th Avenue
San Mateo, California
May 10, 2022

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
18	Coast live oak	26	Yes	3	Low	Multiple attachments at 6 and 8 ft; river rocks over roots and against trunk; slight dieback; sparse crown.
19	Coast live oak	37	Yes	2	Low	Enlarged abnormal buttress roots on north side; heavy lateral limbs over road on south; sparse canopy; dieback; river rocks over roots and against trunk.
20	Chinese elm	15	Yes	2	Low	Multiple attachments at 7 ft; topped; extremely sparse canopy.
21	Chinese elm	17	Yes	3	Moderate	Multiple attachments at 8 ft; topped; slightly chlorotic; 7 ft planter.
22	Chinese elm	16	Yes	3	Moderate	Multiple attachments at 7 ft; topped; slightly sparse chlorotic crown; 7 ft planter.
23	Olive	9,8	No	3	Moderate	Codominant at 2 ft; decay on north stem; full dense crown; river rocks over roots and against trunk.
24	Sweetgum	6	No	3	Low	Girdling root on west; sparse crown; topped; river rocks over roots and against trunk.
25	Sweetgum	9	No	3	Low	Topped; dieback; river rocks over roots and against trunk.
26	Sweetgum	11	No	3	Low	Trunk 1 ft from building; topped; in raised planter.
27	Sweetgum	10	No	2	Low	Roots pruned on 3 sides 1 ft from trunk; topped; river rocks over roots and against trunk.
28	Sweetgum	10	No	3	Low	Trunk 2 ft from building; topped; in raised planter.
29	Sweetgum	12	No	3	Moderate	Topped; full canopy; in raised planter.
30	Sweetgum	8	No	3	Low	Topped; narrow form; in raised planter.
31	Sweetgum	12	No	3	Moderate	Multiple attachments at 4 ft; topped; full crown; in raised planter.
32	Sweetgum	11	No	3	Moderate	Trunk 3.5 ft from building; topped; full crown extends over top of building; in raised planter.
33	Sweetgum	10	No	3	Low	Trunk 3.5 ft from building; topped; slightly sparse crown; in raised planter.

Tree Assessment

477 9th Avenue
San Mateo, California
May 10, 2022

HORT SCIENCE BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
34	Olive	11,8,4	No	3	Moderate	Multiple attachments at 1 ft; topped; slight twig dieback; river rocks over roots and against trunk.
35	Olive	6,5,5,4,4	No	2	Low	Multiple attachments at 1 ft; topped; dieback; poor color.
36	European white birch	7	No	2	Low	Topped; twig dieback; sparse crown.
37	European white birch	7	No	2	Low	Topped; twig dieback; girdling root; sparse crown; decay in topping wound.
38	European white birch	7	No	3	Low	Topped; twig dieback; slightly sparse crown.
39	European white birch	5	No	2	Low	Topped; twig dieback; sparse crown.
40	European white birch	8	No	2	Low	Topped; twig dieback; sparse crown.
41	Olive	5,4,4,4,4,3,3	No	2	Low	Multiple attachments at 1 ft; topped; sparse crown; poor color; twig dieback; river rocks over roots and against trunk.
42	Olive	6,5,4,4,3	No	2	Low	Multiple attachments at 1 ft; topped; sparse crown; poor color; twig dieback; river rocks over roots and against trunk.
43	Coast live oak	9	No	3	Low	Off site; lean to south; crowded by oleander on north.
44	Coast live oak	10,5,4	Yes	3	Low	Off site; multiple attachments at base;10 in stem has multiple attachments at 5 ft; suppressed and bowing to south.
45	Coast live oak	10,9,5,3	Yes	3	Low	Off site; tagged on fence; base at fence line; suppressed and bowing south.
46	Coast live oak	11	Yes	3	Low	Off site; tagged on fence; base at fence line; suppressed and bowing south.
47	Coast live oak	8	No	3	Low	Off site; tagged on fence; base at fence line; suppressed and bowing south.
48	Coast live oak	16,15	Yes	4	Moderate	Off site; tagged on fence; base at fence line; multiple attachments at 3 ft; suppressed and bowing south.

Tree Assessment

477 9th Avenue
San Mateo, California
May 10, 2022

HORT SCIENCE BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
49	Coast live oak	12,8	Yes	4	Moderate	Off site; tagged on fence line; codominant at base; suppressed and bowing south.

Estimated Value

477 9th Ave.
San Mateo, CA
May 2022

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Tree No.	Species	Trunk Diameter (in.)	Heritage Tree	Estimated Value
1	Ginkgo	3,3,2	Protected	$ 250
2	Chinese elm	19	Heritage	$ 7,250
3	Chinese elm	22	Heritage	$ 14,500
4	Silver dollar gum	19	Heritage	$ 7,800
5	Silver dollar gum	22	Heritage	$ 10,400
6	Silver dollar gum	15	Heritage	$ 4,950
7	Silver dollar gum	36	Heritage	$ 27,600
8	Silver dollar gum	28	Heritage	$ 16,750
9	Silver dollar gum	31	Heritage	$ 20,500
10	Purpleleaf plum	3,3,3	Street Tree	$ 400
11	Valley oak	56	Heritage Street Tree	$ 85,500
12	Olive	12,11,9	Protected	$ 4,150
13	Olive	10,7,6,5,4	Protected	$ 1,750
14	Olive	9,6,5	Protected	$ 1,450
15	Olive	9,9,8,5	Protected	$ 2,600
16	Blackwood acacia	41	Heritage	$ 9,150
17	Coast live oak	23	Heritage	$ 8,650
18	Coast live oak	26	Heritage	$ 11,050
19	Coast live oak	37	Heritage	$ 12,650
20	Chinese elm	15	Heritage	$ 3,050
21	Chinese elm	17	Heritage	$ 6,300
22	Chinese elm	16	Heritage	$ 5,600
23	Olive	9,8	Protected	$ 2,000
24	Sweetgum	6	Protected	$ 700
25	Sweetgum	9	Protected	$ 1,400
26	Sweetgum	11	Protected	$ 2,000
27	Sweetgum	10	Protected	$ 1,100
28	Sweetgum	10	Protected	$ 1,700
29	Sweetgum	12	Protected	$ 2,350
30	Sweetgum	8	Protected	$ 1,150
31	Sweetgum	12	Protected	$ 2,350
32	Sweetgum	11	Protected	$ 2,000
33	Sweetgum	10	Protected	$ 1,700
34	Olive	11,8,4	Protected	$ 2,300
35	Olive	6,5,5,4,4	Protected	$ 600
36	European white birch	7	Protected	$ 350
37	European white birch	7	Protected	$ 350
38	European white birch	7	Protected	$ 450
39	European white birch	5	Protected	$ 250
40	European white birch	8	Protected	$ 400

Estimated Value

477 9th Ave.
San Mateo, CA
May 2022

HORT SCIENCE
BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Heritage Tree	Estimated Value
41	Olive	5,4,4,4,4,3,3	Protected	$ 450
42	Olive	6,5,4,4,3	Protected	$ 600
43	Coast live oak	9	Protected	$ 1,450
44	Coast live oak	10,5,4	Heritage	$ 2,200
45	Coast live oak	10,9,5,3	Heritage	$ 3,100
46	Coast live oak	11	Heritage	$ 2,100
47	Coast live oak	8	Protected	$ 1,200
48	Coast live oak	16,15	Heritage	$ 11,000
49	Coast live oak	12,8	Heritage	$ 4,850
			Total	**$ 312,400**

LU Evaluation Schedule

477 9th Ave.
San Mateo, CA
May 2022

HORT SCIENCE
BARTLETT CONSULTING

Tree No.	Common Name	Species Class	Condition Class	Location Value	"/.35"	Trunk Diameter	Allowable Building Area	1.25 if Heritage	LU Value	In-Lieu Fee
1	Ginkgo	0.3	0.3	0.4	0.35	4.7	0.7	1	0.3	$106
2	Chinese elm	0.7	0.5	0.4	0.35	19.0	0.7	1.25	6.7	$2,081
3	Chinese elm	0.7	0.7	0.5	0.35	22.0	0.7	1.25	13.5	$4,218
4	Silver dollar gum	0.7	0.5	0.5	0.35	19.0	0.7	1.25	8.3	$2,602
5	Silver dollar gum	0.7	0.5	0.5	0.35	22.0	0.7	1.25	9.6	$3,013
6	Silver dollar gum	0.7	0.5	0.5	0.35	15.0	0.7	1.25	6.6	$2,054
7	Silver dollar gum	0.7	0.5	0.5	0.35	36.0	0.7	1.25	15.8	$4,930
8	Silver dollar gum	0.7	0.5	0.5	0.35	28.0	0.7	1.25	12.3	$3,834
9	Silver dollar gum	0.7	0.5	0.5	0.35	31.0	0.7	1.25	13.6	$4,245
10	Purpleleaf plum	0.3	0.7	0.7	0.35	5.2	1	1	2.2	$683
11	Valley oak	0.9	0.5	0.7	0.35	56.0	1	1.25	63.0	$19,719
12	Olive	0.7	0.7	0.6	0.35	18.6	0.7	1	10.9	$3,423
13	Olive	0.7	0.5	0.6	0.35	15.0	0.7	1	6.3	$1,976
14	Olive	0.7	0.5	0.6	0.35	11.9	0.7	1	5.0	$1,567
15	Olive	0.7	0.7	0.6	0.35	15.8	0.7	1	9.3	$2,916
16	Blackwood acacia	0.3	0.5	0.7	0.35	41.0	0.7	1.25	10.8	$3,369
17	Coast live oak	0.9	0.5	0.7	0.35	23.0	0.7	1.25	18.1	$5,669
18	Coast live oak	0.9	0.5	0.7	0.35	26.0	0.7	1.25	20.5	$6,409
19	Coast live oak	0.9	0.3	0.6	0.35	37.0	0.7	1.25	15.0	$4,690
20	Chinese elm	0.7	0.3	0.5	0.35	15.0	0.7	1.25	3.9	$1,232
21	Chinese elm	0.7	0.5	0.5	0.35	17.0	0.7	1.25	7.4	$2,328
22	Chinese elm	0.7	0.5	0.5	0.35	16.0	0.7	1.25	7.0	$2,191
23	Olive	0.7	0.5	0.5	0.35	12.0	0.7	1	4.2	$1,319
24	Sweetgum	0.5	0.5	0.7	0.35	6.0	0.7	1	2.1	$657
25	Sweetgum	0.5	0.5	0.7	0.35	9.0	0.7	1	3.2	$986
26	Sweetgum	0.5	0.5	0.7	0.35	11.0	0.7	1	3.9	$1,205
27	Sweetgum	0.5	0.3	0.5	0.35	10.0	0.7	1	1.5	$470
28	Sweetgum	0.5	0.5	0.5	0.35	10.0	0.7	1	2.5	$783
29	Sweetgum	0.5	0.5	0.4	0.35	12.0	0.7	1	2.4	$751

LU Evaluation Schedule

477 9th Ave.
San Mateo, CA
May 2022

HORT SCIENCE
BARTLETT CONSULTING

Tree No.	Common Name	Species Class	Condition Class	Location Value	"/.35"	Trunk Diameter	Allowable Building Area	1.25 if Heritage	LU Value	In-Lieu Fee
30	Sweetgum	0.5	0.5	0.4	0.35	8.0	0.7	1	1.6	$501
31	Sweetgum	0.5	0.5	0.4	0.35	12.0	0.7	1	2.4	$751
32	Sweetgum	0.5	0.5	0.7	0.35	11.0	0.7	1	3.9	$1,205
33	Sweetgum	0.5	0.5	0.7	0.35	10.0	0.7	1	3.5	$1,096
34	Olive	0.7	0.5	0.6	0.35	14.2	0.7	1	6.0	$1,864
35	Olive	0.7	0.3	0.5	0.35	10.9	0.7	1	2.3	$714
36	European white birch	0.3	0.3	0.3	0.35	7.0	0.7	1	0.4	$118
37	European white birch	0.3	0.3	0.3	0.35	7.0	0.7	1	0.4	$118
38	European white birch	0.3	0.5	0.3	0.35	7.0	0.7	1	0.6	$197
39	European white birch	0.3	0.3	0.3	0.35	5.0	0.7	1	0.3	$85
40	European white birch	0.3	0.3	0.3	0.35	8.0	0.7	1	0.4	$135
41	Olive	0.7	0.3	0.5	0.35	9.4	0.7	1	2.0	$620
42	Olive	0.7	0.3	0.5	0.35	10.1	0.7	1	2.1	$664
43	Coast live oak	0.9	0.5	0.8	0.35	9.0	1	1	9.3	$2,897
44	Coast live oak	0.9	0.5	0.8	0.35	11.9	1	1.25	15.3	$4,779
45	Coast live oak	0.9	0.5	0.8	0.35	14.7	1	1.25	18.9	$5,901
46	Coast live oak	0.9	0.5	0.8	0.35	11.0	1	1.25	14.1	$4,427
47	Coast live oak	0.9	0.5	0.8	0.35	8.0	1	1	8.2	$2,576
48	Coast live oak	0.9	0.7	0.8	0.35	21.9	1	1.25	39.5	$12,356
49	Coast live oak	0.9	0.7	0.8	0.35	14.4	1	1.25	26.0	$8,125
							Total		**442.7**	**$138,554**

Tree Disposition

477 9th Avenue
San Mateo, California
May 10, 2022

HORT SCIENCE
BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Disposition	Comments
1	Ginkgo	3,3,2	Protected	Remove	Poor condition, not located on plan
2	Chinese elm	19	Heritage	Potentially Preserve	Planting area being widened.
3	Chinese elm	22	Heritage	Remove	In parking lot
4	Silver dollar gum	19	Heritage	Potentially Preserve	Planting strip being preserved
5	Silver dollar gum	22	Heritage	Potentially Preserve	Planting strip being preserved
6	Silver dollar gum	15	Heritage	Potentially Preserve	Planting strip being preserved
7	Silver dollar gum	36	Heritage	Potentially Preserve	Planting strip being preserved
8	Silver dollar gum	28	Heritage	Potentially Preserve	Planting strip being preserved
9	Silver dollar gum	31	Heritage	Potentially Preserve	Planting strip being preserved
10	Purpleleaf plum	3,3,3	Street Tree	Potentially Preserve	Planting area being preserved
11	Valley oak	56	Heritage Street Tree	Potentially Preserve	Planting area being preserved, sidewalk potentially moving farther from trunk, potentially significant root damage and reduction of approximately 15% of crown.
12	Olive	12,11,9	Protected	Remove	Inside building footprint
13	Olive	10,7,6,5,4	Protected	Remove	Inside building footprint
14	Olive	9,6,5	Protected	Remove	Inside building footprint
15	Olive	9,9,8,5	Protected	Remove	Inside building footprint
16	Blackwood acacia	41	Heritage	Remove	Inside building footprint
17	Coast live oak	23	Heritage	Potentially Preserve	Brick patio approx 9 ft from trunk, sidewalk being moved closer
18	Coast live oak	26	Heritage	Remove	Inside building footprint
19	Coast live oak	37	Heritage	Remove	Inside building footprint
20	Chinese elm	15	Heritage	Remove	Inside building footprint
21	Chinese elm	17	Heritage	Remove	Inside building footprint
22	Chinese elm	16	Heritage	Remove	Inside building footprint
23	Olive	9,8	Protected	Remove	Inside building footprint
24	Sweetgum	6	Protected	Remove	Inside building footprint

Tree Disposition

477 9th Avenue
San Mateo, California
May 10, 2022

HORT SCIENCE BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Disposition	Comments
25	Sweetgum	9	Protected	Remove	Inside building footprint
26	Sweetgum	11	Protected	Remove	Inside building footprint
27	Sweetgum	10	Protected	Remove	Inside building footprint
28	Sweetgum	10	Protected	Remove	Inside building footprint
29	Sweetgum	12	Protected	Remove	Inside building footprint
30	Sweetgum	8	Protected	Remove	Inside building footprint
31	Sweetgum	12	Protected	Remove	Inside building footprint
32	Sweetgum	11	Protected	Remove	Inside building footprint
33	Sweetgum	10	Protected	Remove	Inside building footprint
34	Olive	11,8,4	Protected	Remove	Inside building footprint
35	Olive	6,5,5,4,4	Protected	Remove	Inside building footprint
36	European white birch	7	Protected	Remove	Inside building footprint
37	European white birch	7	Protected	Remove	Inside building footprint
38	European white birch	7	Protected	Remove	Inside building footprint
39	European white birch	5	Protected	Remove	Inside building footprint
40	European white birch	8	Protected	Remove	Inside building footprint
41	Olive	5,4,4,4,4,3,3	Protected	Remove	Inside building footprint
42	Olive	6,5,4,4,3	Protected	Remove	Inside building footprint
43	Coast live oak	9	Protected	Potentially Preserve	Planting area widened.
44	Coast live oak	10,5,4	Heritage	Potentially Preserve	Planting area widened.
45	Coast live oak	10,9,5,3	Heritage	Potentially Preserve	Planter size approximately the same.
46	Coast live oak	11	Heritage	Potentially Preserve	Planter size approximately the same.

Tree Disposition

477 9th Avenue
San Mateo, California
May 10, 2022

HORT SCIENCE BARTLETT CONSULTING

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Disposition	Comments
47	Coast live oak	8	Protected	Potentially Preserve	Planter size approximately the same.
48	Coast live oak	16,15	Heritage	Potentially Preserve	Planting area widened.
49	Coast live oak	12,8	Heritage	Potentially Preserve	Planting area widened.

S. CLAREMONT ST

GARAGE DRIVEWAY

OUTDOOR EATING AREA (PODIUM): 220 SQ FT

2ND FLOOR COURTYARD

17'-3"

12'-9"

12'

24'

19'-2"

14'-3"

22'-1"

OUTDOOR SEATING/STUDY AREA (PODIUM): 130 SQ FT

7'

18'-9"

15'-7"

19'

OUTDOOR SEATING/STUDY AREA (PODIUM): 163 SQ FT

CLUB ROOM
(2ND FLOOR SHOWN)

OUTDOOR SEATING/LOUNGE AREA (PODIUM): 360 SQ FT

OUTDOOR EATING AREA (PODIUM): 400 SQ FT

27'-3"

27'-9"

6', typ.

3', typ.

11'-5"

OUTDOOR SEATING AREA (SITE PLAZA): 487 SQ FT

9TH AVE

19'-10"

13'-6"

OUTDOOR SEATING AREA (ROOF): 270 SQ FT

62'

11'-9"

DOG PARK / RUN AREA: 729 SQ FT

North

0 15 30 60

LANDSCAPE PARK CREDITS AREAS **L-6.1**

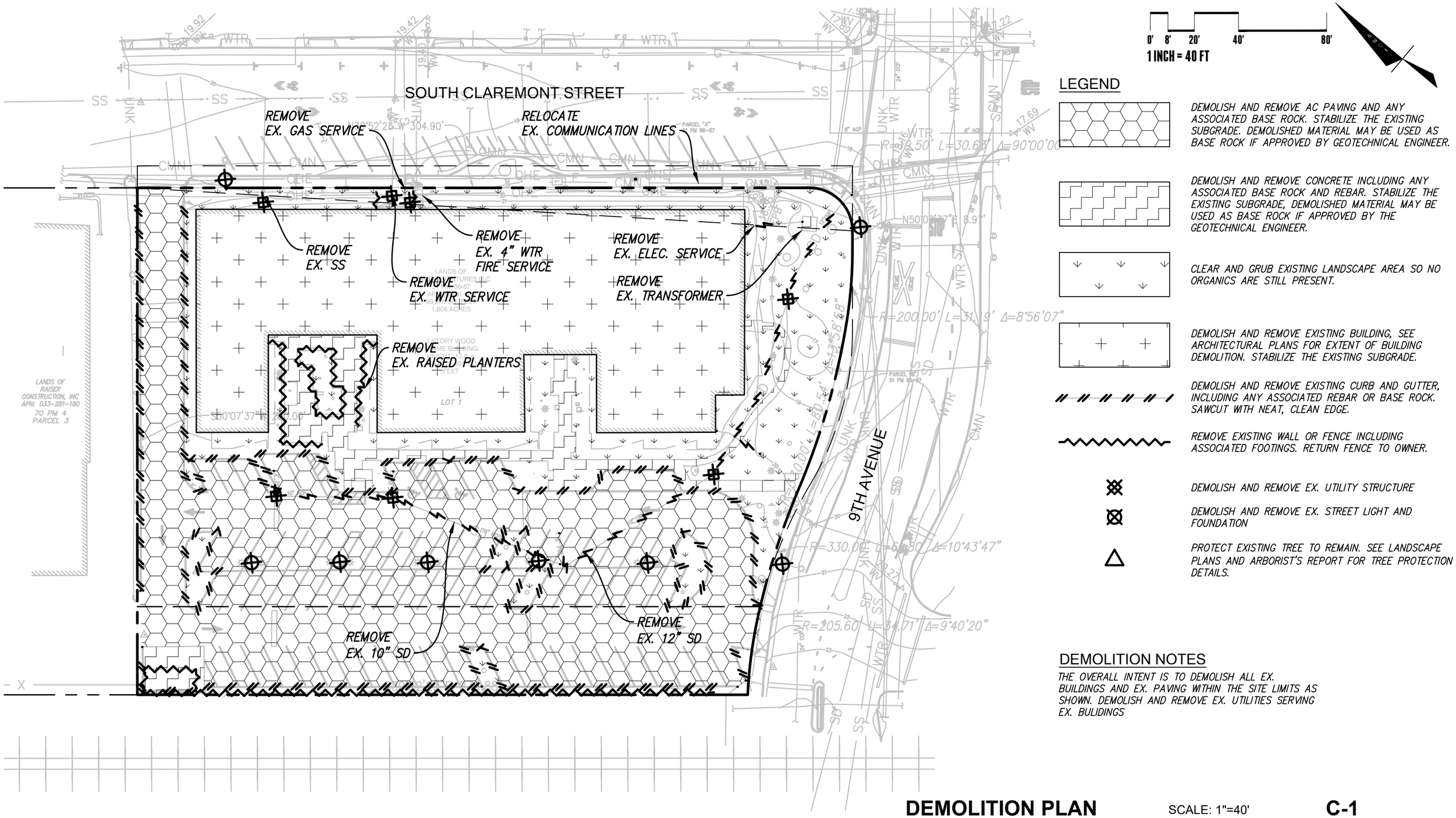
3DE ARCHITECTURE

THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners

477 9TH AVE

SAN MATEO, CALIFORNIA

JUNE 10, 2021



LEGEND

- DEMOLISH AND REMOVE AC PAVING AND ANY ASSOCIATED BASE ROCK. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY GEOTECHNICAL ENGINEER.
- DEMOLISH AND REMOVE CONCRETE INCLUDING ANY ASSOCIATED BASE ROCK AND REBAR. STABILIZE THE EXISTING SUBGRADE, DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY THE GEOTECHNICAL ENGINEER.
- CLEAR AND GRUB EXISTING LANDSCAPE AREA SO NO ORGANICS ARE STILL PRESENT.
- DEMOLISH AND REMOVE EXISTING BUILDING, SEE ARCHITECTURAL PLANS FOR EXTENT OF BUILDING DEMOLITION. STABILIZE THE EXISTING SUBGRADE.
- DEMOLISH AND REMOVE EXISTING CURB AND GUTTER, INCLUDING ANY ASSOCIATED REBAR OR BASE ROCK. SAWCUT WITH NEAT, CLEAN EDGE.
- REMOVE EXISTING WALL OR FENCE INCLUDING ASSOCIATED FOOTINGS. RETURN FENCE TO OWNER.
- DEMOLISH AND REMOVE EX. UTILITY STRUCTURE
- DEMOLISH AND REMOVE EX. STREET LIGHT AND FOUNDATION
- PROTECT EXISTING TREE TO REMAIN. SEE LANDSCAPE PLANS AND ARBORIST'S REPORT FOR TREE PROTECTION DETAILS.

DEMOLITION NOTES

THE OVERALL INTENT IS TO DEMOLISH ALL EX. BUILDINGS AND EX. PAVING WITHIN THE SITE LIMITS AS SHOWN. DEMOLISH AND REMOVE EX. UTILITIES SERVING EX. BULIDINGS

DEMOLITION PLAN

SCALE: 1"=40'

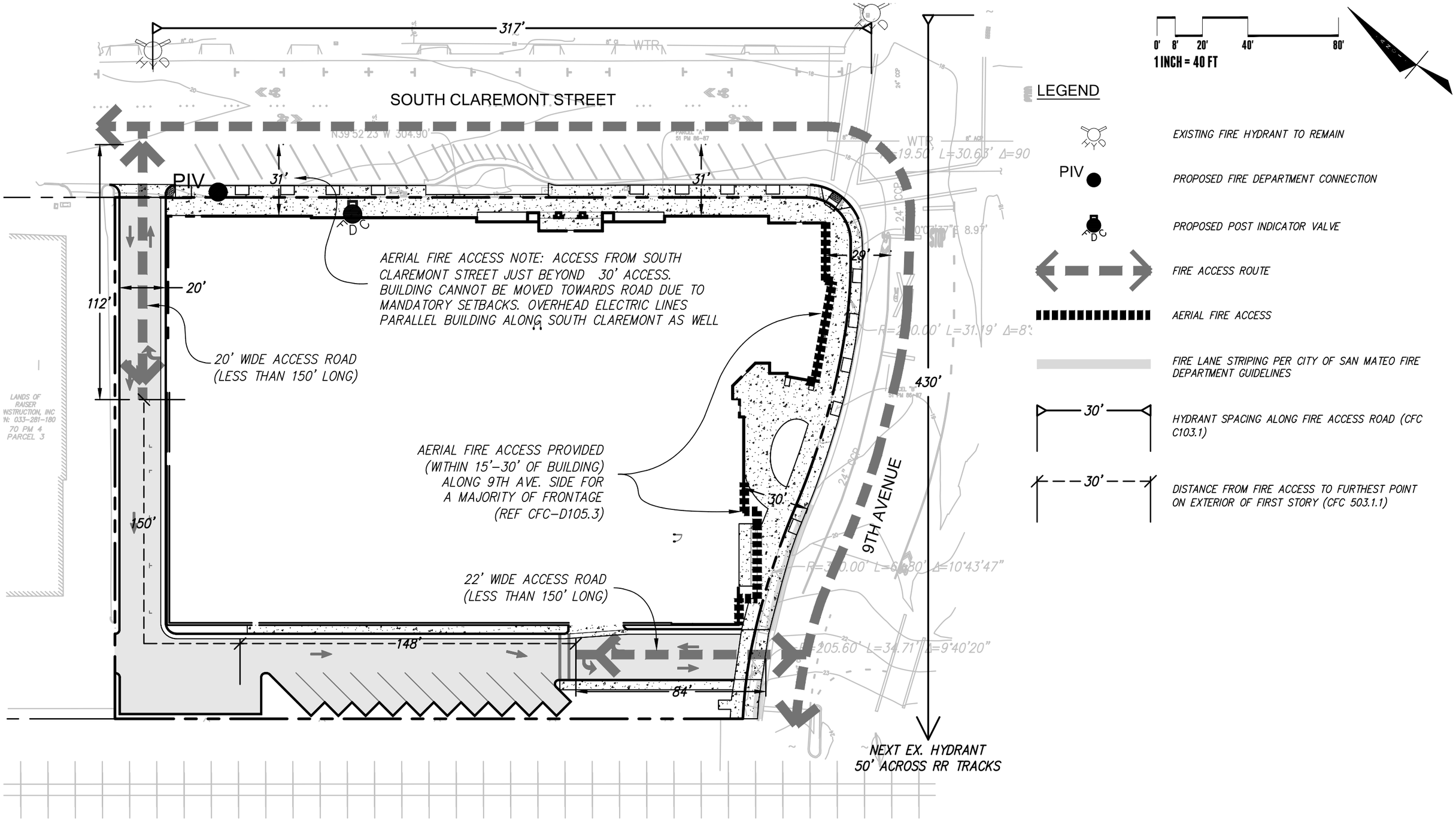
C-1

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022



FIRE ACCESS PLAN

SCALE: 1"=40'

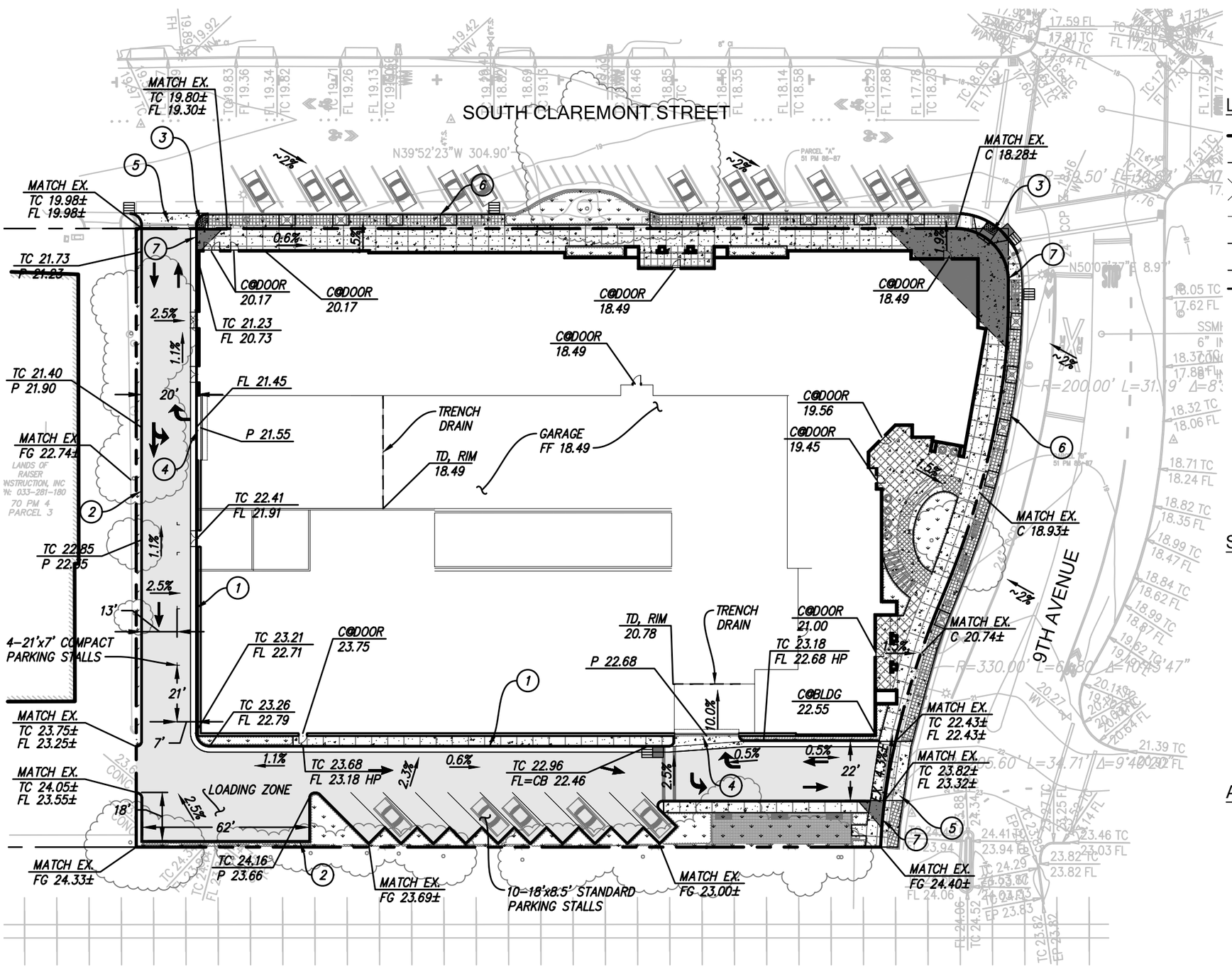
C-2

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022



0' 8' 20' 40' 80'

1 INCH = 40 FT

LEGEND

- PROPERTY LINE
- SAWCUT LINE
- DIRECTION OF STEEP SLOPE
- FLOW LINE
- GRADE BREAK
- 194 / 195 CONTOURS
- AC PAVEMENT
- PERVIOUS PAVEMENT
- CONCRETE SIDEWALK
- LANDSCAPING (SEE LANDSCAPE PLANS)

SHEET NOTES

1. CURB & GUTTER ALONG DRIVE ADJACENT TO BUILDING
2. VERTICAL CURB ALONG DRIVE ADJACENT TO PERIMETER LANDSCAPING
3. CORNER PEDESTRIAN CURB RAMP
4. GARAGE ENTRY
5. DRIVEWAY APPROACH
6. SIDEWALK, LANDSCAPING, AND STREET LIGHTS ALONG CITY STREETS
7. SIGHT TRIANGLES (45' AT INTERSECTION AND 10' AT DRIVEWAYS) IN ACCORDANCE WITH SMMC 27.84.050

ABBREVIATIONS

- C – CONCRETE
- EX – EXISTING
- FF – FINISH FLOOR
- FG – FINISH GRADE
- FL – FLOW LINE
- G – GROUND
- P – PAVEMENT
- TC – TOP OF CURB

PRELIMINARY EARTHWORK

TOTAL CUT	4,800	CU YD
TOTAL FILL	100	CU YD
NET EARTHWORK	4,700	CU YD (CUT / EXCESS)

GRADING PLAN

SCALE: 1"=40'

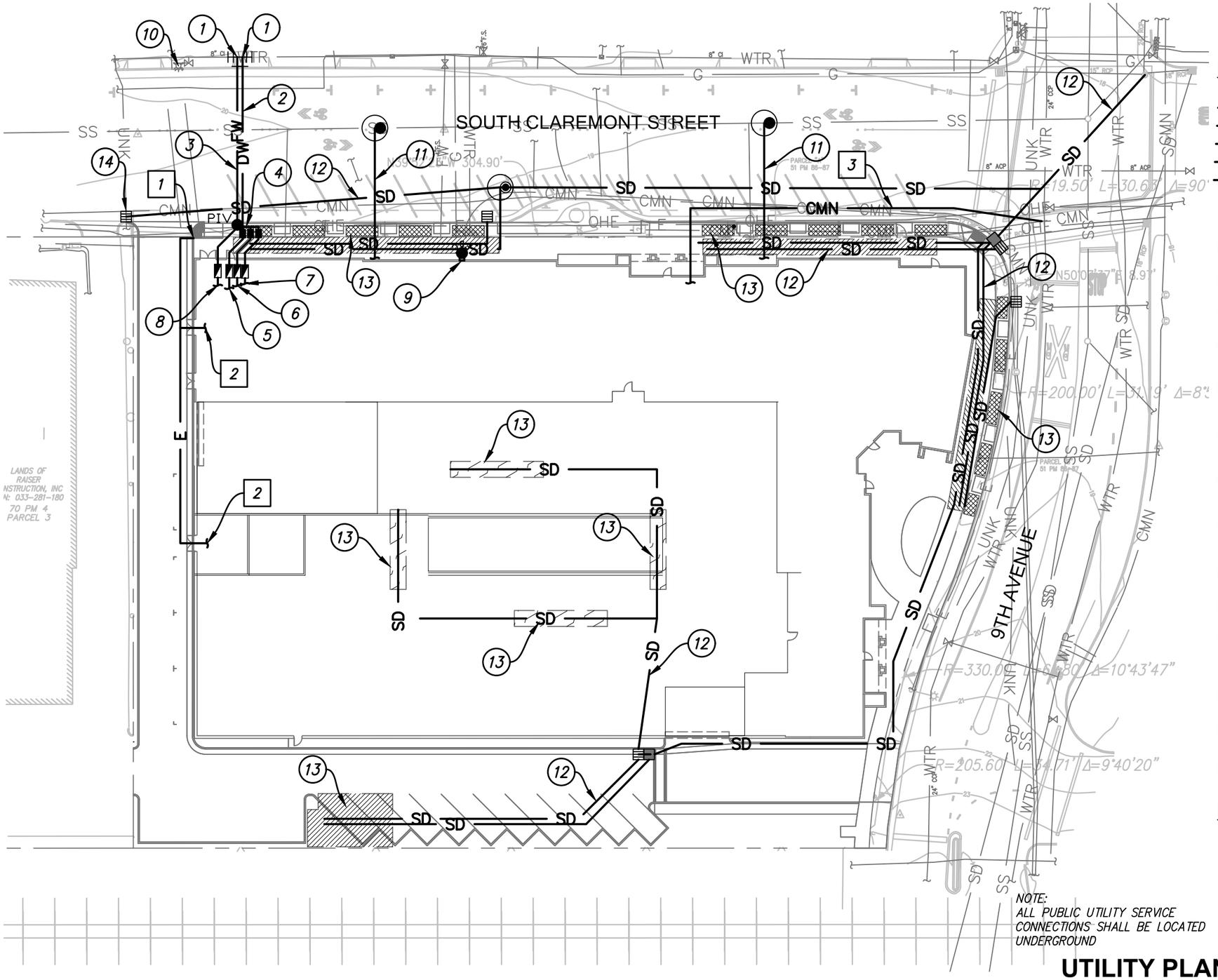
C-3

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022



LEGEND

FW	FIRE WATER LINE
DW	DOMESTIC WATER LINE
SS	SANITARY SEWER LINE
SS	STORM DRAIN LINE
E	ELECTRIC LINE
CMN	COMMUNICATIONS LINE

WET UTILITY NOTES

1. CONNECT TO EXISTING WATER SYSTEM. ASSUMED 6-INCH HOT TAP AND VALVE
2. 4" DOMESTIC WATER PIPING
3. 6" FIRE WATER PIPING
4. BRANCHES FOR DOMESTIC, RETAIL, AND IRRIGATION WATER SERVICES FOR THE PROJECT CONSTRUCT VALVES ON EACH BRANCH.
5. DOMESTIC WATER SERVICE AND BUILDING POINT OF CONNECTION. 4" LATERAL AND METER. BACKFLOW PREVENTER INSIDE WATER UTIILTY ROOM.
6. RETAIL WATER SERVICE AND BULIDING POINT OF CONNECTION. 2" LATERAL AND METER. BACKFLOW PREVENTER INSIDE WATER UTILITY ROOM.
7. IRRIGATION WATER SERVICE AND BULIDING POINT OF CONNECTION. 2" LATERAL AND METER. BACKFLOW PREVENTER INSIDE WATER UTILTY ROOM.
8. FIRE WATER SERVICE AND BULIDING POINT OF CONNECTION. 6" LATERAL, CHECK VALVE, AND PIV. BACKFLOW PREVENTER INSIDE FIRE UTILTY ROOM.
9. FIRE DEPARTMENT CONNECTION FOR BULIDING SPRINKLER SERVICE.
10. EXISTING FIRE HYDRANT
11. SEWER CONNECTION TO MAIN. CONSTRUCT MANHOLE AT SEWER MAIN CONNECTION IF NOT CONNECTING TO EXISTNG MANHOLE. CONSTRUCTION CLEANOUT AT PROPERTY LINE AND BULIDING FACE.
12. STORM DRAIN PIPING. OUTFALL INTO EXISTING BOXES ON 9TH AVE.
13. STORMWATER BMP
14. CATCH BASIN TO DIVERT AND BYPASS OFF-SITE RUN-OFF OUTSIDE OF FRONTAGE THROUGH STORM DRAIN PIPES TO CITY OUTFALL.

DRY UTILITY NOTES

1. TRANSITION FROM EXISTING OVERHEAD JOINT POWER OLE TO UNDERGROUND ELECTRIC MAIN.
2. BUILDING ELECTRICAL SERVICE AND TRANSFORMER INSIDE TRANSFORMER UTILITY ROOM.
3. RELOCATE EXISTING COMMUNICATIONS DUCT BANK UNDER CONCRETE.

NOTE:
ALL PUBLIC UTILITY SERVICE CONNECTIONS SHALL BE LOCATED UNDERGROUND

UTILITY PLAN

SCALE: 1"=40'

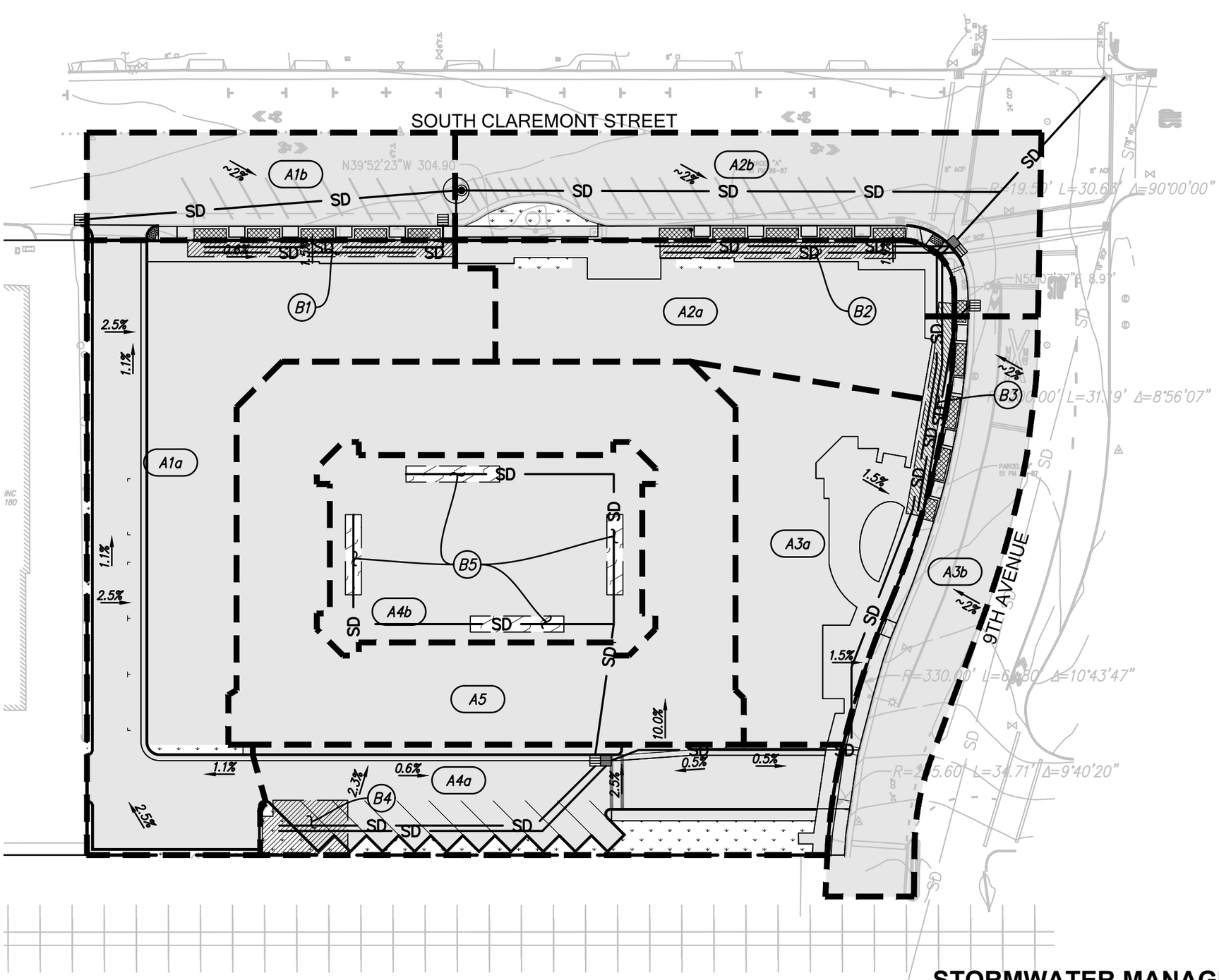
C-4

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022



0' 8' 20' 40' 80'

1 INCH = 40 FT

STORMWATER MANAGEMENT PLAN LEGEND

- PROPOSED PERVIOUS AREA, SELF TREATING
- PROPOSED IMPERVIOUS AREA
- OFF-SITE SILVA CELLS
- ON-SITE SILVA CELLS
- BIO-RETENTION PLANTER
- DRAINAGE AREA BOUNDARY
- (A1) DRAINAGE AREA ID, SEE C.3 TABLE ON FOLLOWING SHEET
- (B1) BMP ID, SEE C.3 TABLE ON FOLLOWING SHEET

SILVA CELL NOTES:

1. EACH SILVA CELL IS ASSUMED TO PROVIDE 9.5 SQUARE FEET OF TREATMENT AREA PER THE DEEPROOT SILVA CELL SIZING CALCULATOR.
2. EACH SILVA CELL IS 2.25' X 4.25' WHICH INCORPORATES 0.25' BETWEEN EACH CELL (0.08'-0.50' REQUIRED).
3. NEW TREE ROOT BALL INCLUDED IN TREATMENT AREA.
4. SILVA CELL AREAS ARE DESIGNED TO TREAT THE 0.2 INCHES/HOUR STORM EVENT AND SIZED USING THE FLOW BASED SIZING CRITERIA "4 PERCENT METHOD".
5. THE PERFORATED PIPING OF THE DISTRIBUTION SYSTEM IN THE SILVA CELLS IS DESIGNED FOR THE 0.2 IN/HR STORM EVENT. WATER IN EXCESS OF THE 0.2 INCHES/HOUR STORM WILL POND IN THE SILVA CELL AND OUTFALL INTO AN OVERFLOW STRUCTURE.
6. WATER IN EXCESS OF THE C.3 STORM EVENT OF 0.2 IN/HR OVERFLOWS THE WEIR INSTALLED IN THE CATCH BASINS AND DRAINS DIRECTLY TO THE STORM DRAIN NETWORK.
7. SILVA CELLS TO BE CONSIDERED "TREE WELL FILTER" FOR PURPOSES OF SELECTED PLANT TYPES UNDER SAN MATEO COUNTY C.3 REGULATED PROJECTS GUIDE APPENDIX A "PLANT LIST".
8. EACH INLET TO USE "FULL CAPTURE" TRASH CAPTURE DEVICES CONSISTENT WITH THE STATE WATER RESOURCES CONTROL BOARD'S REGULATIONS.

STORMWATER MANAGEMENT PLAN SCALE: 1"=40' C-5

BDE ARCHITECTURE

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022

C.3 SIZING CALCULATIONS

AREA ID	DESCRIPTION	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	TOTAL AREA (SF)	EFFECTIVE IMPERVIOUS AREA* (SF)	REQUIRED BMP AREA (4.0% IMPERVIOUS AREA) (SF)	BMP ID	BMP AREA PROVIDED (SF)	TYPE OF TREATMENT
A1a	ON-SITE NW DRIVEWAY / ROOF / WALKWAY	16,945	594	17,539	17,004	680	B1	680	SILVA CELL
A1b	OFF-SITE NW S. CLAREMONT ST / WALKWAY	5,551	0	5,551	5,551	222	B1	240	SILVA CELL
A1 Subtotal	A1a + A1b	22,496	594	23,090	22,555	902	B1	920	SILVA CELL
A2a	ON-SITE NE ROOF / WALKWAY	8,150	174	8,324	8,167	327	B2	528	SILVA CELL
A2b	OFF-SITE NE S. CLAREMONT ST / WALKWAY	9,506	294	9,800	9,535	381	B2	240	SILVA CELL
A2 Subtotal	A2a + A2b	17,656	468	18,124	17,703	708	B2	768	SILVA CELL
A3a	ON-SITE S ROOF / WALKWAY	8,675	0	8,675	8,675	347	B3	480	SILVA CELL
A3b	OFF-SITE S 9TH AVE / WALKWAY	7,398	0	7,398	7,398	296	B3	208	SILVA CELL
A3 Subtotal	A3a + A3b	16,073	0	16,073	16,073	643	B3	688	SILVA CELL
A4a	ON-SITE SW DRIVEWAY / WALKWAY	7,284	1,590	8,874	7,443	298	B4	616	SILVA CELL
A4b	ON-SITE BULIDING COURTYARD**	6,389	2,130	8,518	6,602	264	B4	0	SILVA CELL
A4 Subtotal	A4a + A4b	13,673	3,720	17,392	14,045	562	B3	616	SILVA CELL
A5	ON-SITE INNER ROOF	18,045	0	18,045	18,045	722	B2	750	BIO-RETENTION PLANTERS
TOTAL		87,943	4,782	92,724	88,421	3,537		3,742	

NOTES:
* EFECTIVE IMPERVIOUS SURFACES IS THE SUM OF THE IMPERVIOUS AREA AND THE PERVIOUS AREA MULTIPLIED BY 0.1.
** INTERIOR COURTYARD ASSUMED TO BE 75% IMPERVIOUS.

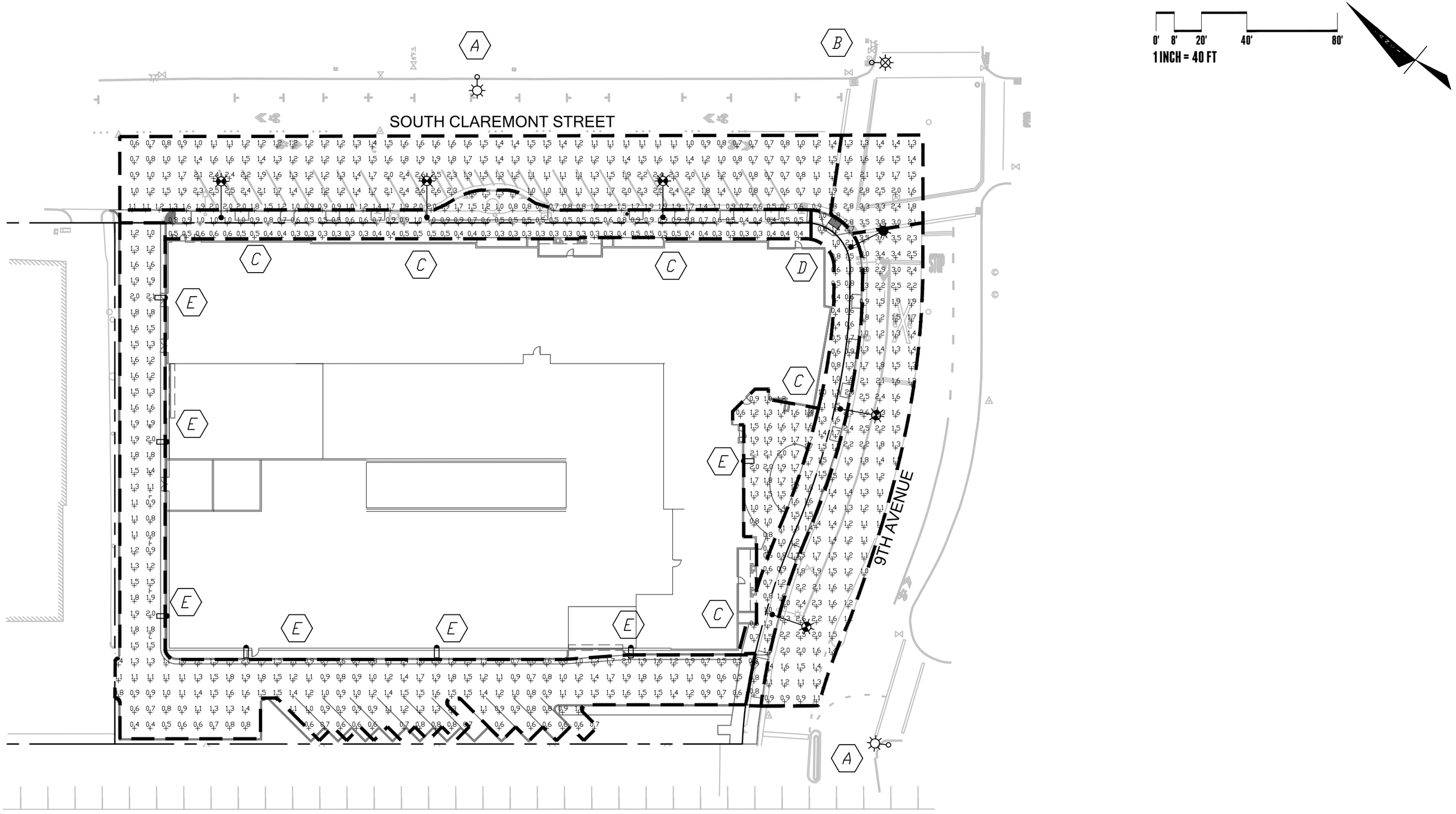
STORMWATER MANAGEMENT NOTES:

1. FLOOD ZONE DESIGNATION: FOR THIS PROJECT AREA: MAP PANEL 06081C0154G EFFECTIVE APRIL 5, 2019. THE PROJECT AREA IS LOCATED IN ZONE X (AREA OF MINIMAL FLOOD HAZARD).
2. PERMIT APPLICABILITY: THE PROPOSED PROJECT WILL INCLUDE MORE THAN 10,000 SQUARE FEET OF IMPERVIOUS SURFACE ADDITION OR REPLACEMENT AND THEREBY WILL HAVE TO COMPLY WITH PROVISION C.3 – NEW DEVELOPMENT AND REDEVELOPMENT OF THE MUNICIPAL REGIONAL STORMWATER PERMIT (MRP) (ORDER NO. R2-2015-0049). THIS PLAN PRESENTS METHODS AND CALCULATIONS FOR COMPLYING WITH THE REQUIREMENTS OF PROVISION C.3 OF THE MRP IN ACCORDANCE WITH THE SAN MATEO COUNTY PROGRAM AND THE CITY OF SAN MATEO REQUIREMENTS.
3. THE GENERAL STORMWATER QUALITY APPROACH IS AS FOLLOWS:

   DEVELOPMENT PARCEL (ON-SITE): THE DEVELOPMENT PARCEL WILL MITIGATE OR TREAT ITS OWN RUNOFF IN COMPLIANCE WITH C.3.c OF THE MRP BY INSTALLING BEST MANAGEMENT PRACTICES USING SITE DESIGN MEASURES (INCLUDING INTERCEPTOR TREES), SOURCE CONTROL MEASURES, AND LID STRATEGIES (BIOTREATMENT, INFILTRATION, RAINWATER HARVESTING).

   EXISTING ROADWAY FRONTAGES (OFF-SITE): IN ACCORDANCE WITH SAN MATEO GREEN INFRASTRUCTURE REQUIREMENTS THE DEVELOPMENT IS REQUIRED TO CONSTRUCTION GREEN IMPROVEMENT MEASURES ALONG THE PROPERTY BOUNDARY FRONTAGES TO TREAT OFF-SITE RUNOFF FROM THE ADJACENT ROADWAY AND PUBLIC RIGHT OF WAY IMPERVIOUS SURFACES..
4. 50% RULE COMPLIANCE – WHERE A REDEVELOPMENT PROJECT RESULTS IN AN ALTERATION OF MORE THAN 50% OF THE IMPERVIOUS SURFACE OF A PREVIOUSLY EXISTING DEVELOPMENT, THE ENTIRE PROJECT, CONSISTING OF ALL EXISTING, NEW, AND/OR REPLACED IMPERVIOUS SURFACES, MUST BE INCLUDED IN THE TREATMENT SYSTEM DESIGN.

   THE DEVELOPMENT PROJECT IS ALTERING NEARLY ALL OF THE EXISTING IMPERVIOUS SURFACE OF THE EXISTING DEVELOPMENT, THEREFORE, THE 50% RULE IS TRIGGERED BY THIS DEVELOPMENT.
5. HYDROMODIFICATION MANAGEMENT (PROVISION C.3.g): THE PROJECT IS EXEMPT FROM HYDROMODIFICATION REQUIREMENTS PER THE SAN MATEO COUNTY C.3 TECHNICAL GUIDANCE DOCUMENT. THE PROJECT IS EXEMPT DUE TO THE WATER SHED DRAINING INTO A HARDENED CHANNEL AS INDICATED ON THE SAN MATEO HM CONTROL AREA MAP REVISED MARCH 27, 2009.
6. MANAGING PEAK FLOWS: THE EXISTING SITE DRAINS TO THE SAN MATEO STORM STORM DRAIN SYSTEM VIA PIPES BELOW GRADE. THE PROJECT DESIGN WILL INCLUDE AN ON-SITE STORM DRAIN SYSTEM SIZED FOR THE 10 YEAR PEAK STORM DRAIN EVENT. ANY STORM EVENTS THAT EXCEED THIS DESIGN EVENT WILL DISCHARGE OFF-SITE VIA OVERLAND FLOW TO PUBLIC STREETS. THE PROJECT WILL MAINTAIN PRE-DEVELOPMENT FLOW RATES TO THE SAN MATEO STORM DRAIN SYSTEM FOR THE 10-YEAR PEAK DISCHARGE EVENT.
7. OVERLAND FLOW REQUIREMENT: STREET CROSS SECTIONS SHALL BE DESIGNED TO ACCOMODATE THE 100 YEAR STORM EVENT VIA OVERLAND FLOW.
8. STORMWATER MANAGEMENT DURING CONSTRUCTION – ALL PROJECTS SHALL COMPLY WITH THE CONSTRUCTION GENERAL PERMIT. COVERAGE AND REPORTING REQUIREMENTS SHALL BE MAINTAINED FOR EACH PROJECT ON AN INDEPENDENT BASIS. THE FILING OF NOTICES OF INTENT AND NOTICES OF TERMINATION WILL CORRESPOND TO THE PHASING OF THE PROJECT.
9. OPERATION AND MAINTENANCE RESPONSIBILITY: THIS PROJECT WILL PREPARE AN OPERATION AND MAINTENANCE MANUAL FOR THE BMPS IT WILL BE CONSTRUCTING. THE O&M MANUAL WILL BE SUBMITTED FOR APPROVAL TO THE CITY DURING THE PERMITTING PROCESS. FOLLOWING CONSTRUCTION, A MAINTENANCE AGREEMENT WITH THE CITY WILL BE RECORDED WITH THE COUNTY.



PHOTOMETRIC PLAN

SCALE: 1"=40'

C-7

477 9TH AVE

SAN MATEO, CALIFORNIA

MAY 25, 2022

BDE ARCHITECTURE

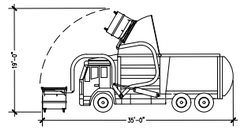
LIGHTING FIXTURE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	POLE HEIGHT	MAST ARM	LUMINAIRE TYPE	VOLTAGE	QUANTITY
A		EXISTING 29W COBRA HEAD LUMINAIRE	30'	3	LED	120–277	2
B		EXISTING 65W COBRA HEAD LUMINAIRE	30'	3	LED	120–277	1
C		PROPOSED 95W COBRA HEAD LUMINAIRE	30'	8	LED	120–277	5
D		PROPOSED 135W COBRA HEAD LUMINAIRE	30'	8	LED	120–277	1
E		PROPOSED 49W WALL MOUNTED LUMINAIRE	24'	NA	LED	120–277	7

ILLUMINANCE VALUES

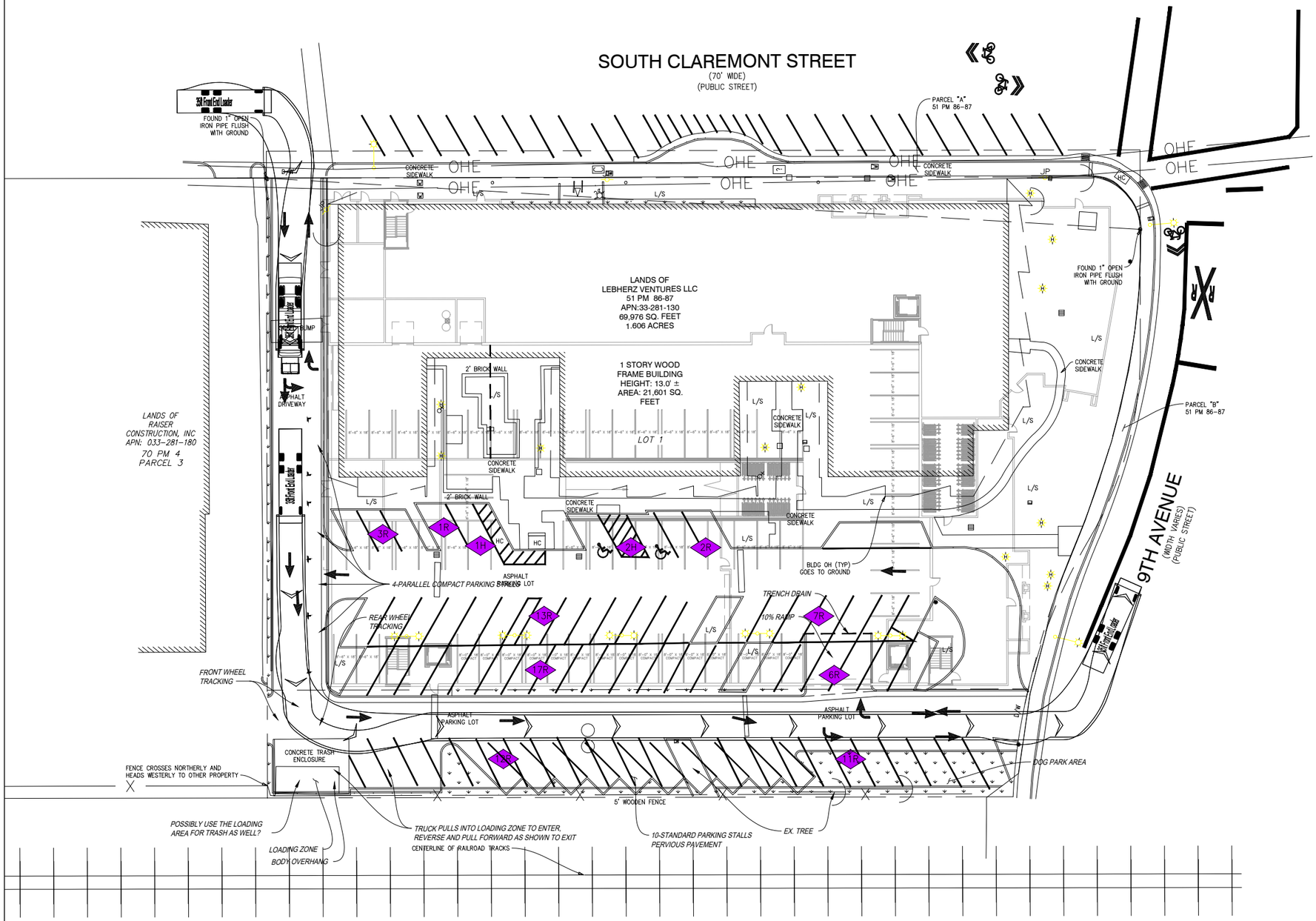
		DESIGN	CALCULATED
9TH AVE ROAD	AVERAGE FOOTCANDLES	1.3	1.7
	AVERAGE/MINIMUM	3.0	2.16
	MAXIMUM/MINIMUM	5.0	4.63
CLAREMONT ST ROAD	AVERAGE FOOTCANDLES	0.8	1.4
	AVERAGE/MINIMUM	3.5	2.36
	MAXIMUM/MINIMUM	6.0	4.33
9TH AVE SIDEWALK	AVERAGE FOOTCANDLES	0.5	1.2
	AVERAGE/MINIMUM	4.0	2.94
CLAREMONT ST SIDEWALK	AVERAGE FOOTCANDLES	0.5	0.8
	AVERAGE/MINIMUM	4.0	2.74
9TH AVE/ CLAREMONT ST INTESECTION	AVERAGE FOOTCANDLES	2.0	2.1
	AVERAGE/MINIMUM	3.0	1.63
9TH AVE FRONTAGE	AVERAGE FOOTCANDLES	1	1.5
	MINIMUM	0.3	0.6
	AVERAGE/MINIMUM	4	2.49
PARKING DRIVE AISLE	AVERAGE FOOTCANDLES	1	1.2
	MINIMUM	0.3	0.4
	AVERAGE/MINIMUM	4	3.02

*DESIGN VALUES WERE DETERMINED BASED ON:
- ANSI/ IES RP-8-18 ROADWAY LIGHTING SECTIONS
- CITY OF SAN MATEO STREETLIGHT PHOTOMETRIC ANALYSIS ZONE GUIDELINES (JUNE 2021)
- CITY OF SAN MATEO STREETLIGHT PHOTOMETRIC ANALYSIS ZONE GUIDELINES – EXAMPLE (NOVEMBER 10, 2021)
- CITY OF SAN MATEO COMMENTS DATED FEBRUARY 11, 2022



35ft Front End Loader

Overall Length	35.000ft
Overall Width	8.330ft
Overall Body Height	1.400ft
Min Body Ground Clearance	1.400ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	32.000ft



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BDE
ARCHITECT

MARTIN GROUP
OWNER / DEVELOPER

NO.	DATE	ISSUE / REVISION	ISSUED BY

477 9TH STREET
SAN MATEO
PROJECT

FRONT LOAD TRUCK STUDY
DRAWING TITLE

PROJECT NO.	
DRAWN	PH
APPROVED	SB
DATE	05/18/2022
SCALE	AS SHOWN

DRAWING NO.
TR0.1