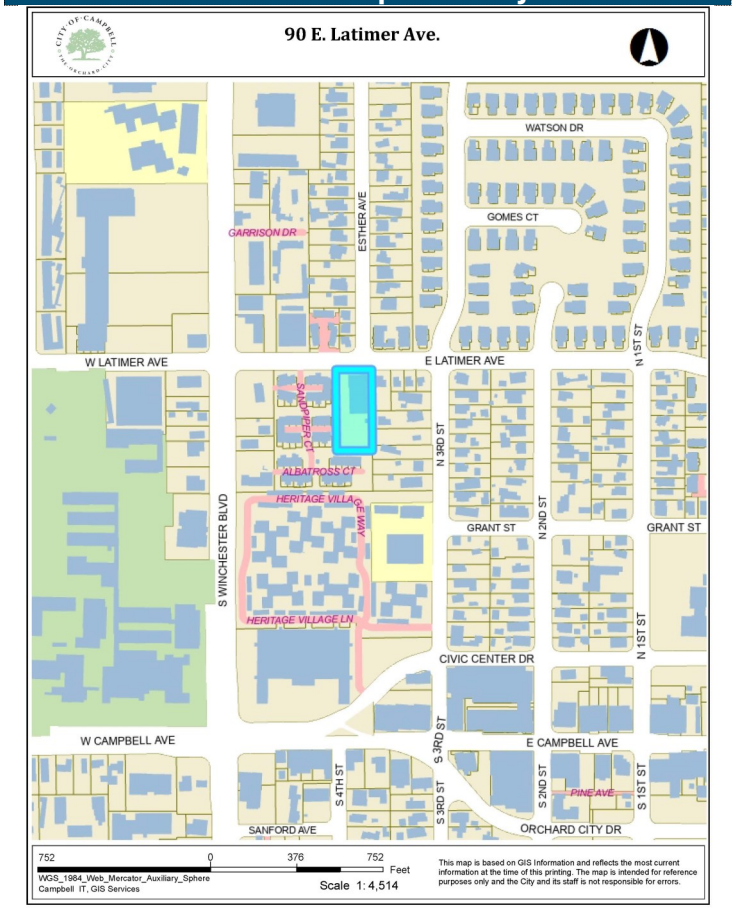
Location of Proposed Project



City of Campbell
70 North First Street
Campbell, CA 95008 –1423

Project Image



Notice of Public Hearing

Dear Campbell Resident, **November 12, 2024**

The Planning Commission of the City of Campbell will hold a Public Hearing at 7:00 p.m., or shortly thereafter, on Tuesday November 26, 2024,in the City Hall Council Chambers, 70 North First Street, Campbell, California, to consider the following item:

Project Address: 90 E Latimer Ave
Zoning | Area Plan: MDR | N/A
Neighborhood Association(s): N/A
Council District: 3
File No.: PLN-2024-92
APN: 279-38 017
Applicant: Granite Ridge Properties
Property Owner: Granite Ridge Properties
Application Type: Minor Housing Development Project Permit with use of Density Bonus Law (DBL) waivers/concessions, Tentative Subdivision Map.
Project Planner: Larissa Lomen, Assistant Planner
Email Contact: larissal@campbellca.gov

Project Description:

Public Hearing to consider the application by Granite Ridge Properties to allow the construction of 20 townhome units across four buildings and creation of 20 private lots and two common lots.

You may participate virtually or watch online:

- ◊ Register online to speak via Zoom: (https://campbellca.gov/PCSignup.)
- ◊ Watch YouTube live-stream: (https://www.youtube.com/user/CityofCampbell.)

Hearing impaired or TTY/TDD text telephones users may contact the City by dialing 711 for California Relay Services (CRS)) or by telephoning any other providers' CRS telephone number. We may provide appropriate aids and communication services for qualified persons with disabilities such as: sign language interpreters, assistive hearing devices, and other services for people with speech vision, and hearing impairments

Please be advised that if you challenge this item in court, you may be limited to raising only those items identified at the Public hearing or submitted in writing to the Planning Division at, or prior to, the Public Hearing. Failure to exhaust all administrative appeals may preclude a challenge in court.

- City of Campbell -
Community Development Department
70 N. First Street, Campbell CA 95008
(408)866-2140 | planning@campbellca.gov

Note: Applications may change after initial application submittal. To view the project plans, please scan the QR code.

****Asistencia en Español disponible,**
Simplemente marque (408) 866-2140 y pida traduccion en Español

90 E. LATIMER AVENUE

3 STORY TOWNHOMES

90 E. LATIMER AVENUE, CAMPBELL CA

PLANNING RESUBMITTAL

AUGUST 14, 2024

PROJECT DIRECTORY

OWNER

SACHNEEL PATEL, OWNER REP.
GRANITE RIDGE DEVELOPMENT
PHONE: (312) 519-0303

ARCHITECT

LANCE CRANNELL, AIA
SDG ARCHITECTS INC.
3361 WALNUT BLVD. SUITE 120
BRENTWOOD, CA 94513
PHONE: (925) 634-7000

CIVIL ENGINEER

DILIP KISHNANI
STERLING CONSULTANTS
46560 FREMONT BLVD, SUITE 205
FREMONT, CA 94538
PHONE: (510) 344-8956

LANDSCAPE ARCHITECT

THOMAS PHELPS
IDLA, INC.
P.O.BOX 170129
BOISE, ID 83717
PHONE: (208) 906-1300

PROJECT DATA SUMMARY

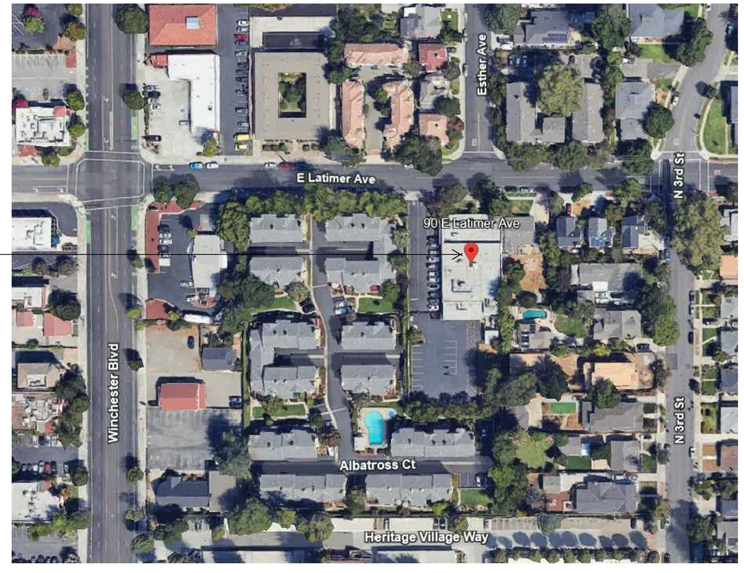
ADDRESS	90 E. LATIMER AVENUE, CAMPBELL, CA
APN	279-38-017
ZONING	MDR (MEDIUM DENSITY RESIDENTIAL)
SITE AREA	34,999 SQ. FT.
TYPE OF CONSTRUCTION	TYPE V-B
PROPOSED USE	RESIDENTIAL
DESCRIPTION OF WORK	DEMOLITION OF AN EXISTING COMMERCIAL BUILDING, AND CONSTRUCTION OF (4) 3-STORY TOWNHOME BUILDINGS TOTALING 20 TOWNHOME UNITS TO INCLUDE (1) 7-UNIT BUILDING, (1) 5-UNIT BUILDING, & (2) 4-UNIT BUILDINGS. THE AREAS OF THE UNITS RANGE FROM 1,830 S.F. TO 2,018 S.F.

SHEET INDEX

A01	COVER SHEET
A02	SITE PHOTOS
A03	STREETSCAPE
A05	EXISTING SITE PLAN
A06	ARCHITECTURAL SITE PLAN
A06.1	DESIGN SITE PLAN
A06.2	EMERGENCY ACCESS PLAN
A06.3	BUILDING SECTIONS
A07	UNIT 1 FLOOR PLANS
A08	UNIT 2 FLOOR PLANS
A09	4 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A10	4 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A11	4 UNIT BUILDING ELEVATIONS TYPE A
A12	4 UNIT BUILDING ELEVATIONS TYPE A
A13	5 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A14	5 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A15	5 UNIT BUILDING ELEVATIONS
A16	7 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A17	7 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A18	7 UNIT BUILDING ELEVATIONS
A19	COLOR & MATERIALS
TM1	PROPOSED SUBDIVISION PLAN & NOTES
TM2	SITE PHOTOGRAPHY
TM3	EXISTING CONDITIONS MAP & PRELIMINARY DEMOLITION PLAN
TM4	PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN
TM5	PRELIMINARY STORMWATER PLAN
TM6	PRELIMINARY FIRE ACCESS PLAN
L1	PLANTING PLAN
L2	IRRIGATION PLAN
L3	LANDSCAPE DETAILS
L4	LANDSCAPE SPECIFICATIONS
L5	LANDSCAPE SPECIFICATIONS
L6	LANDSCAPE SPECIFICATIONS
L7	PLANT PALETTE



CONCEPTUAL PERSPECTIVE



PROJECT SITE

VICINITY MAP

FIRE DEPARTMENT NOTES

1. FIRE SPRINKLERS REQUIRED: APPROVED AUTOMATIC SPRINKLER SYSTEMS ARE REQUIRED IN NEW AND EXISTING BUILDINGS. FIRE SPRINKLER PLANS SHALL BE SUBMITTED AS A DEFERRED SUBMITTAL WHEN THE PROJECT GET SUBMITTED FOR PERMIT ISSUANCE.
2. ADDRESS IDENTIFICATION: ALL BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, ADDRESS NUMBERS SHALL BE PROVIDED IN ADDITIONAL APPROVED LOCATIONS TO FACILITATE EMERGENCY RESPONSE. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MINIMUM OF 6 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. ADDRESS NUMBERS SHALL BE MAINTAINED. CFC SECTION 505.1.
3. CONSTRUCTION SITE FIRE SAFETY: ALL CONSTRUCTION SITES MUST COMPLY WITH APPLICABLE PROVISIONS OF THE CFC CHAPTER 33 AND OUR STANDARD DETAIL AND SPECIFICATION S1-7. PROVIDE APPROPRIATE NOTATIONS ON SUBSEQUENT PLAN SUBMITTALS, AS APPROPRIATE TO THE PROJECT.

GENERAL NOTES

1. AS OF MAY 9, 2024, CAMPBELL HAS SUSPENDED ENFORCEMENT OF ITS ELECTRIFICATION REQUIREMENTS FOR ALL NEW HOMES AND ADUS. THE GAS BAN PORTION OF CAMPBELL'S REACH CODE ADOPTED IN 2020 AND 2022 HAS BEEN DEEMED UN-ENFORCEABLE. ALL PROJECTS ARE NOW ABLE TO USE NATURAL GAS AND NATURAL GAS APPLIANCES.
2. THIS PROJECT SHALL MEET THE 2022 CRC SECTION R320 & 2022 CBC CHAPTER 11A ACCESSIBILITY STANDARDS.
3. THIS SITE CONTAINS NO COMMON USE AREAS (OTHER THAN THE "CLUSTER MAILBOXES") AND NO PUBLIC USE AREAS, AS DEFINED IN 2022 CBC CHAPTER 2. CBC 1102A.3.1, ITEM #4.

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

COVER SHEET
A01

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



VIEW 1



VIEW 2



VIEW 3



VIEW 4



VIEW 5



KEY MAP

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

SITE PHOTOS
A02

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



LATIMER AVENUE STREETSCAPE

0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

STREETSCAPE
A03

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com

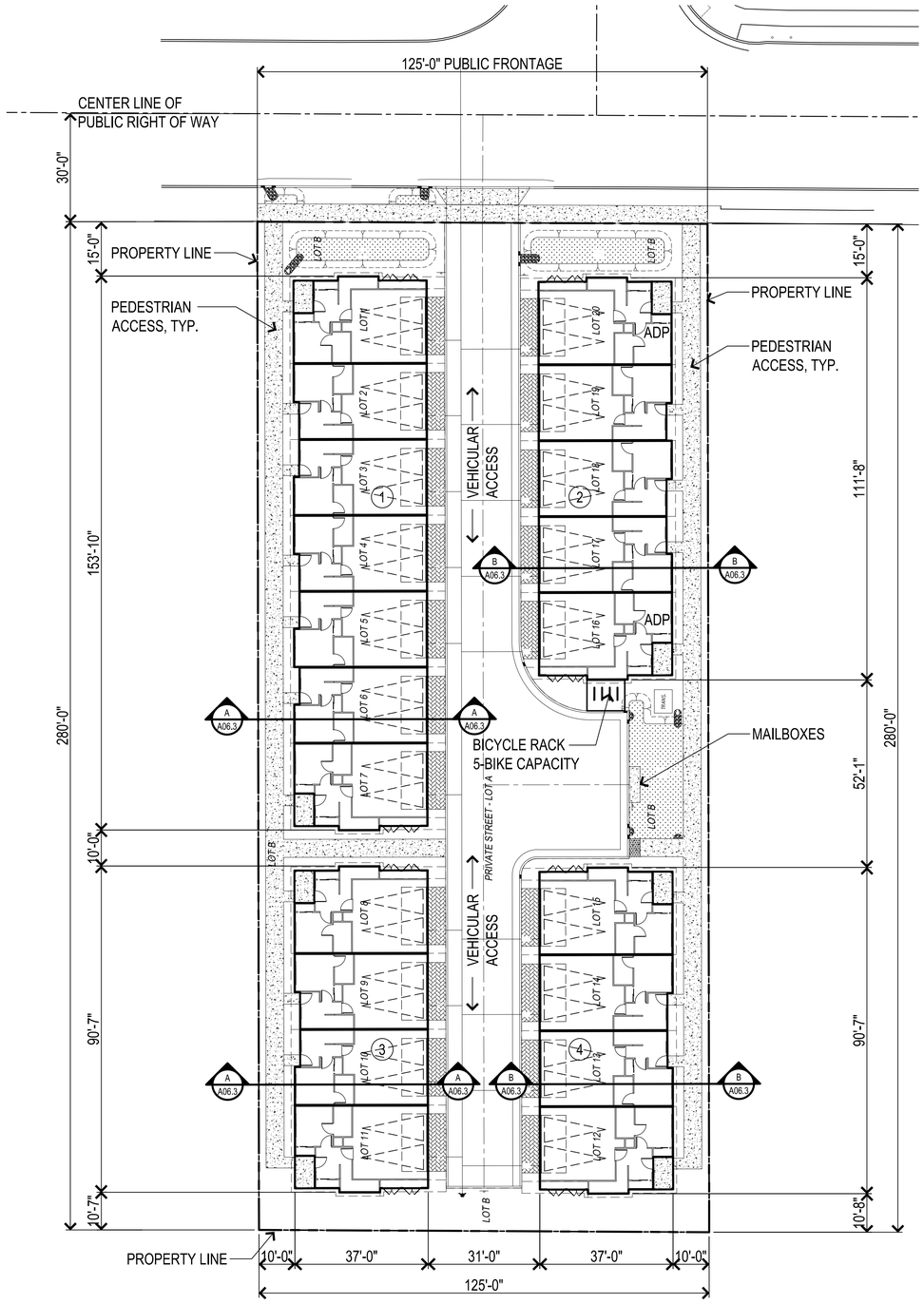


399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

EXISTING SITE PLAN
A05

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



DENSITY		
Maximum Density		**20 DU/AC**
Proposed Density*		**25 DU/AC**
Net Lot Area		28,787 S.F.
Public Right of Way		6,212 S.F.
Gross Site Area	**0.80 ACRES**	**34,999 S.F.**
Total Dwelling Units		**20 Dwelling Units**

FLOOR AREA RATIO				
Lot	Porch	Dwelling	Garage	**Total**
1	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
2	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
3	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
4	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
5	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
6	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
7	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
8	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
9	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
10	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
11	49 S.F.	2,018 S.F.	456 S.F.	2,523 S.F.
12	49 S.F.	2,018 S.F.	456 S.F.	2,523 S.F.
13	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
14	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
15	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
16	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
17	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
18	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
19	0 S.F.	1,830 S.F.	456 S.F.	2,286 S.F.
20	49 S.F.	2,018 S.F.	428 S.F.	2,495 S.F.
Total Area	392 S.F.	38,104 S.F.	8,952 S.F.	**47,448 S.F.**
FLOOR AREA RATIO				**1.65 F.A.R.**

LOT COVERAGE						
Lot	Net Lot Area	Porch	1st Floor	Driveway	Garage	**Total**
Bldg 1	6,246 S.F.	98 S.F.	2,263 S.F.		3,136 S.F.	5,497 S.F.
Bldg 2	4,077 S.F.	98 S.F.	1,645 S.F.		1,799 S.F.	3,542 S.F.
Bldg 3	3,632 S.F.	98 S.F.	1,336 S.F.		1,770 S.F.	3,204 S.F.
Bldg 4	3,632 S.F.	98 S.F.	1,336 S.F.		1,770 S.F.	3,204 S.F.
Total Area	**17,587 S.F.**					**15,447 S.F.**

= (1) PARKING SPACE
40 PARKING SPACES PROVIDED

LOT COVERAGE						
Lot	Net Lot Area	Porch	1st Floor	Driveway	Garage	**Total**
Bldg 1	6,246 S.F.	98 S.F.	2,263 S.F.		3,136 S.F.	5,497 S.F.
Bldg 2	4,077 S.F.	98 S.F.	1,645 S.F.		1,799 S.F.	3,542 S.F.
Bldg 3	3,632 S.F.	98 S.F.	1,336 S.F.		1,770 S.F.	3,204 S.F.
Bldg 4	3,632 S.F.	98 S.F.	1,336 S.F.		1,770 S.F.	3,204 S.F.
Total Area	**17,587 S.F.**					**15,447 S.F.**

BUILDING 1 FLOOR AREA					
Lot	Porch	Dwelling	Driveway	Garage	**Total**
1	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
2	0 S.F.	1,830 S.F.	107 S.F.	456 S.F.	2,393 S.F.
3	0 S.F.	1,830 S.F.	107 S.F.	456 S.F.	2,393 S.F.
4	0 S.F.	1,830 S.F.	107 S.F.	456 S.F.	2,393 S.F.
5	0 S.F.	1,830 S.F.	107 S.F.	456 S.F.	2,393 S.F.
6	0 S.F.	1,830 S.F.	107 S.F.	456 S.F.	2,393 S.F.
7	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
Total Area	98 S.F.	13,186 S.F.	749 S.F.	3,136 S.F.	**17,169 S.F.**

BUILDING 2 FLOOR AREA					
Lot	Porch	Dwelling	Driveway	Garage	**Total**
16	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
17	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
18	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
19	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
20	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
Total Area	98 S.F.	7,508 S.F.	535 S.F.	1,799 S.F.	**9,784 S.F.**

BUIDING 3 FLOOR AREA					
Lot	Porch	Dwelling	Driveway	Garage	**Total**
8	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
9	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
10	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
11	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
Total Area	98 S.F.	7,696 S.F.	428 S.F.	1,770 S.F.	**9,992 S.F.**

BUILDING 4 FLOOR AREA					
Lot	Porch	Dwelling	Driveway	Garage	**Total**
12	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
13	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
14	0 S.F.	1,830 S.F.	107 S.F.	457 S.F.	2,394 S.F.
15	49 S.F.	2,018 S.F.	107 S.F.	428 S.F.	2,602 S.F.
Total Area	98 S.F.	3,848 S.F.	428 S.F.	1,770 S.F.	**4,996 S.F.**

OPEN SPACE						
Lot	Lot Area					**Total**
Lot A - Private St.	6,212 S.F.					6,212 S.F.
Lot B -	13,216 S.F.					13,216 S.F.
Total Area	**19,428 S.F.**					**19,428 S.F.**

SITE CIRCULATION

1) VEHICLES, PEDESTRIANS, AND CYCLISTS TRAFFIC PASSES BY PROJECT SITE ON LATIMER AVENUE
2) RESIDENTS PARK IN THEIR RESPECTIVE GARAGES

NOTE
FOR REFERENCE ONLY, SEE CIVIL PLANS FOR MORE INFORMATION

0 4' 8' 12' 16' 20' 40'

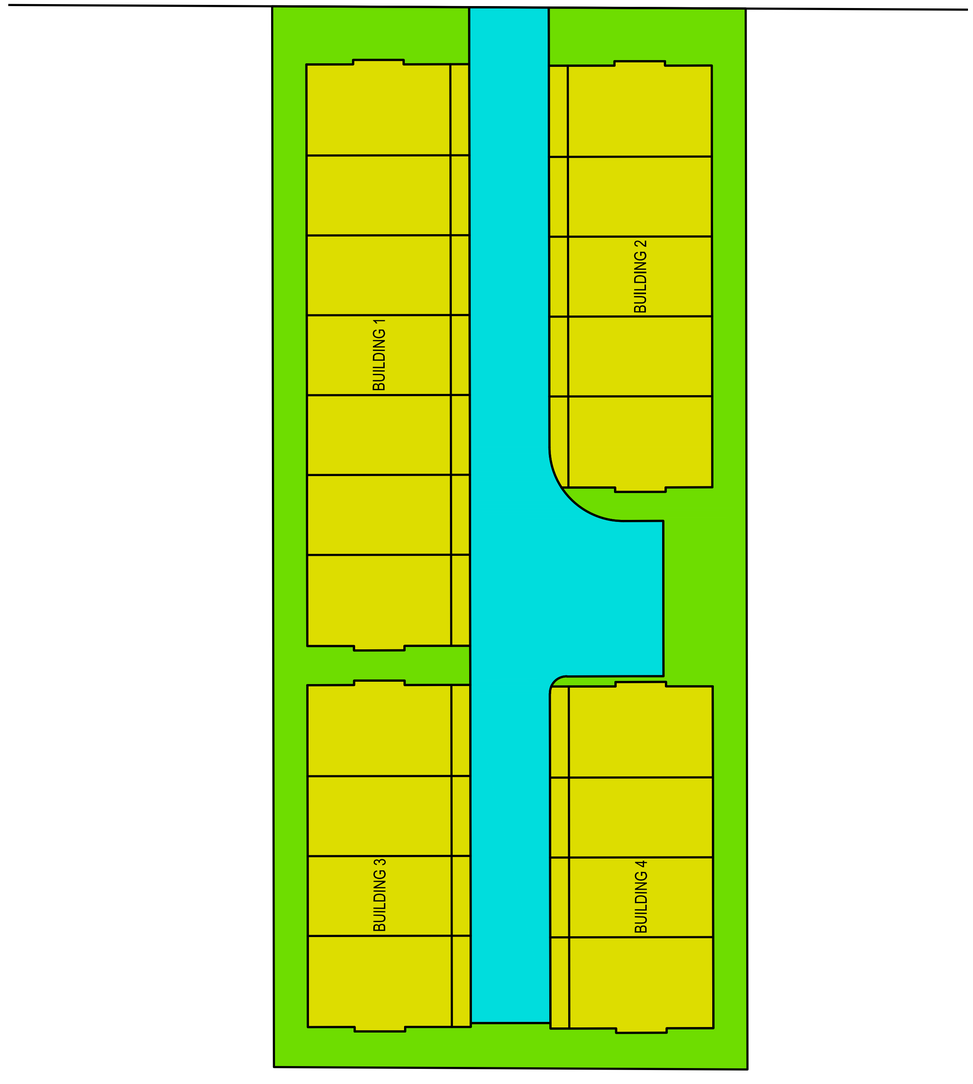
399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

ARCHITECTURAL SITE PLAN
A06

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com

EAST LATIMER AVE.



LOT A (DRIVE AISLE)

LOT B (LANDSCAPE)

LOTS 1 - 20 (UNITS)

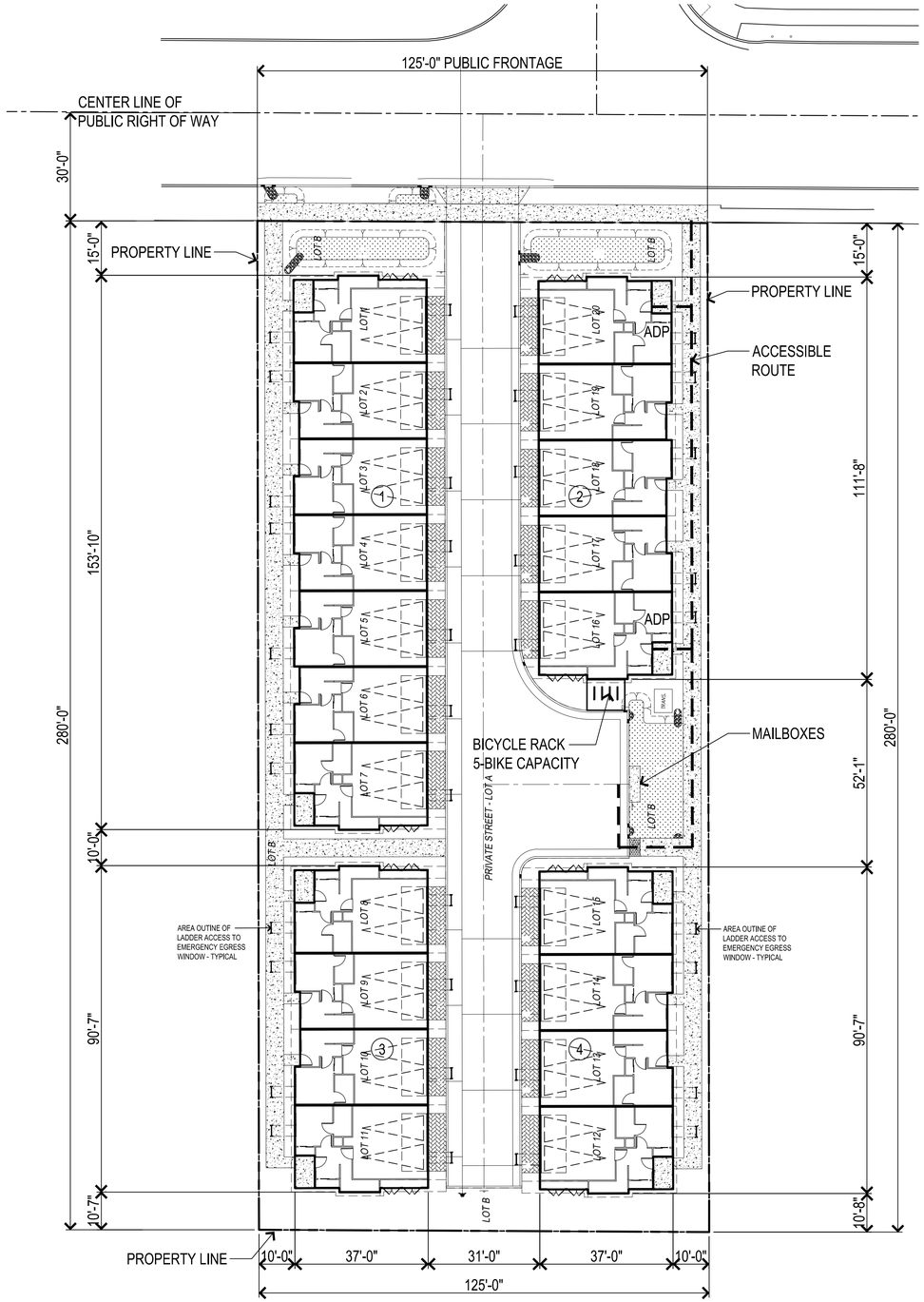
0 4' 8' 12' 16' 20' 40'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

DESIGN SITE PLAN
A06.1

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



NOTE
FOR REFERENCE ONLY, SEE CIVIL PLANS FOR MORE INFORMATION

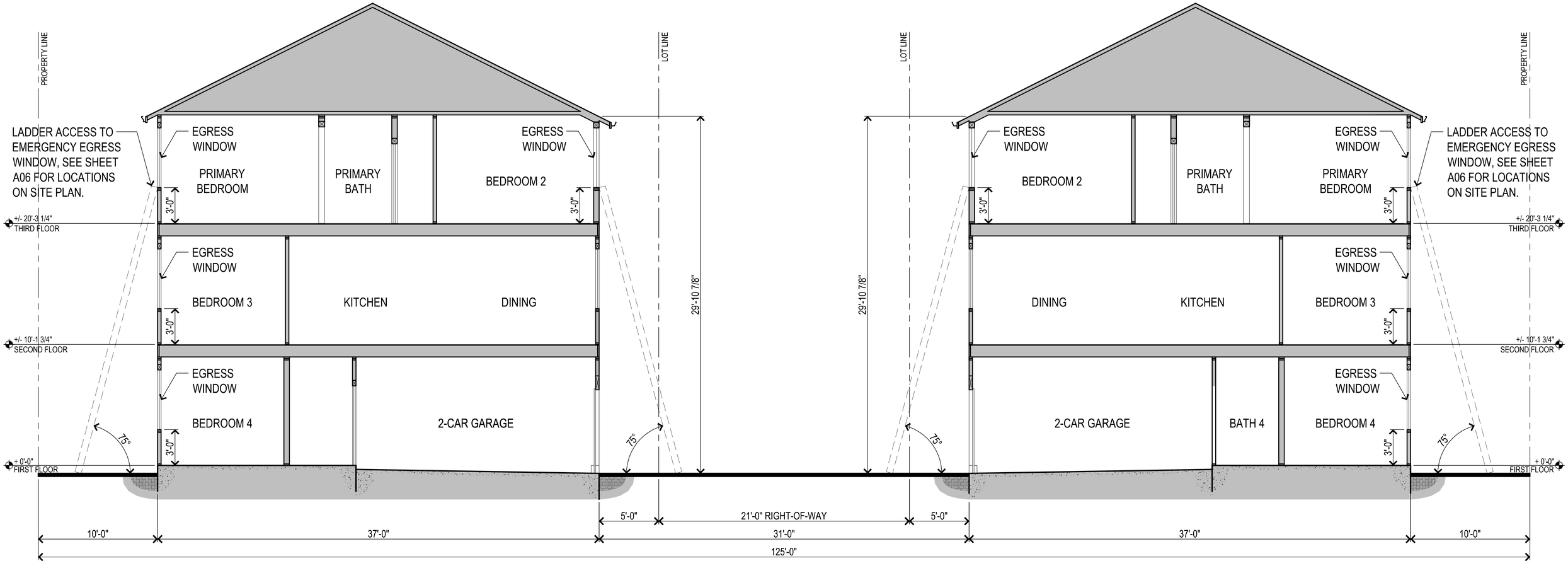
0 4' 8' 12' 16' 20' 40'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

EMERGENCY ACCESS PLAN
A06.2

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



SECTION A
TYPICAL AT LOTS 1-11

SECTION B
TYPICAL AT LOTS 12-20

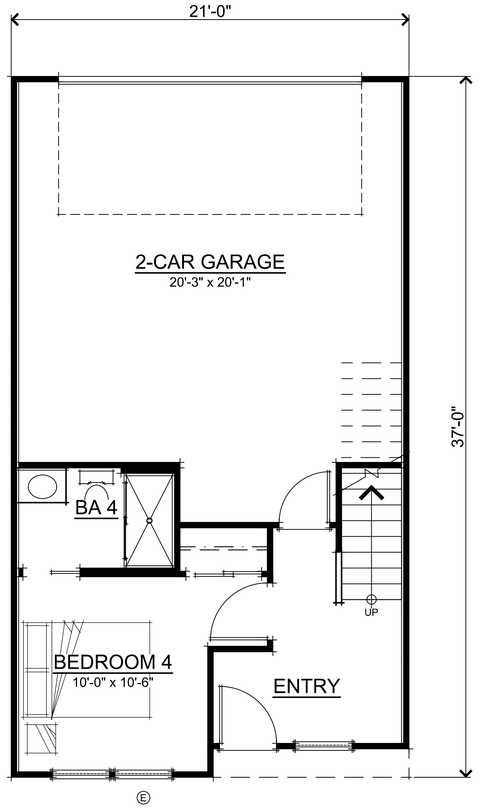
0 1' 2' 3' 4' 8'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

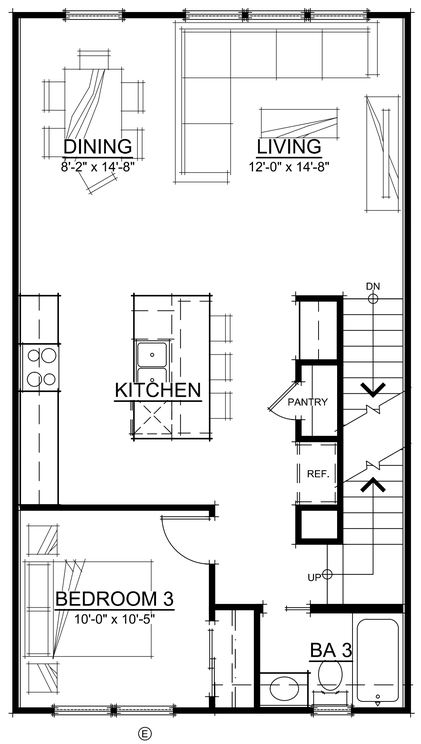
BUILDING SECTIONS
A06.3

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

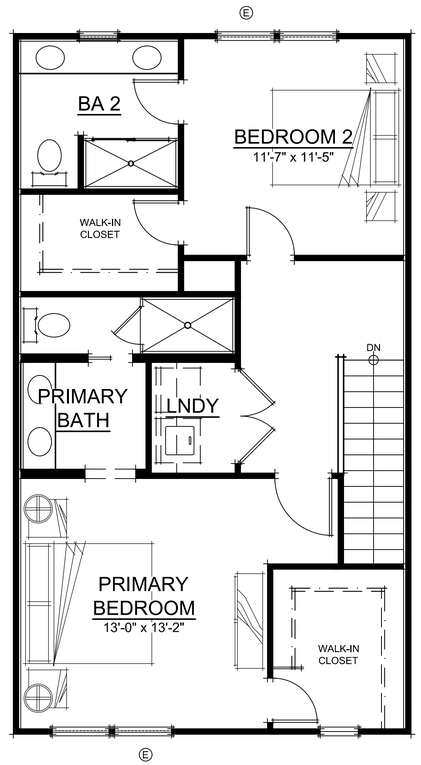
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN

SQUARE FOOTAGES	
FIRST FLOOR	309 SQ. FT.
SECOND FLOOR	780 SQ. FT.
THIRD FLOOR	741 SQ. FT.
TOTAL LIVING	1830 SQ. FT.
2-CAR GARAGE	456 SQ. FT.

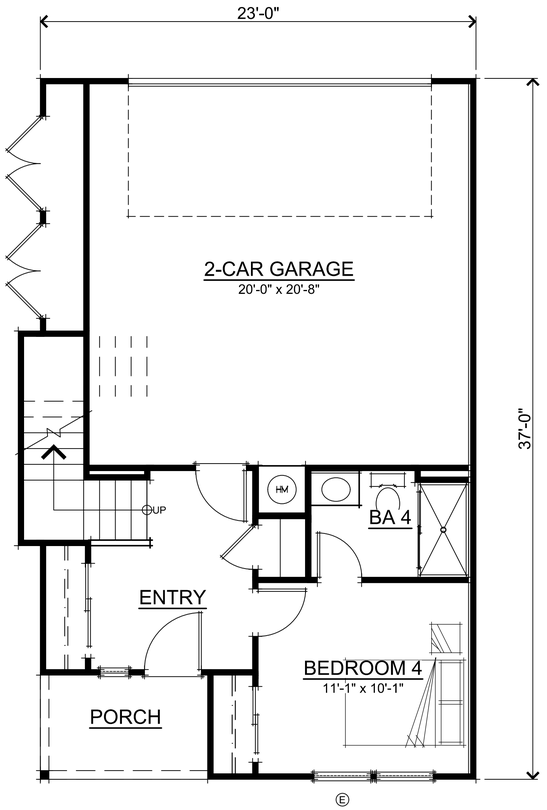
0 1' 2' 3' 4' 8'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

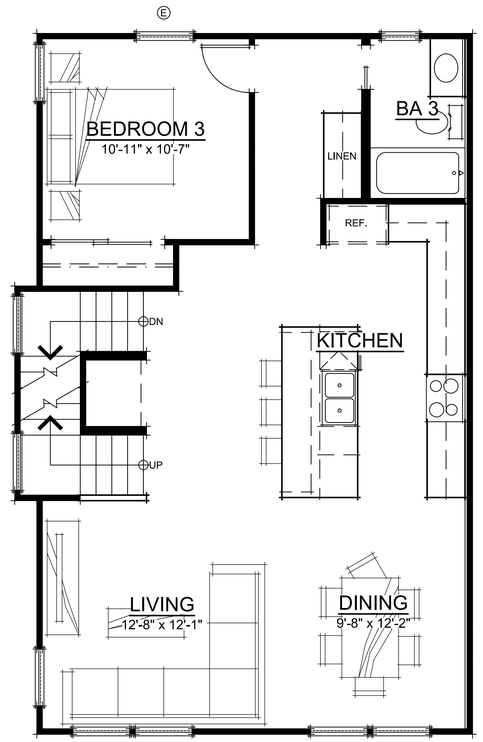
UNIT 1 FLOOR PLANS
A07

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

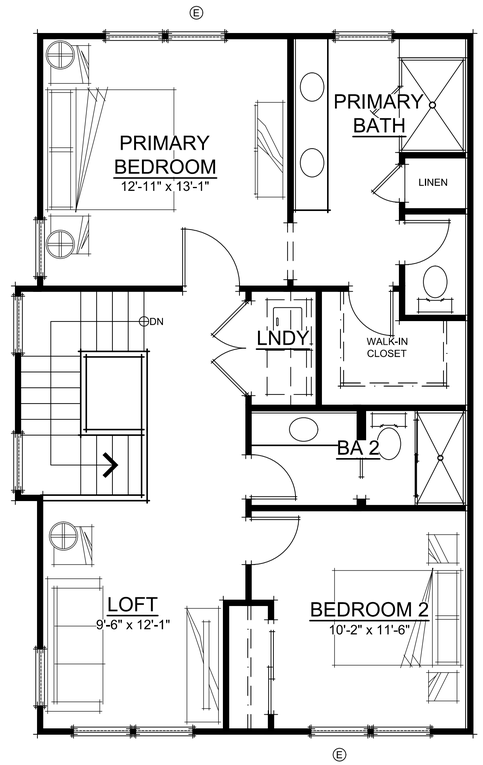
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN

SQUARE FOOTAGES	
FIRST FLOOR	359 SQ. FT.
SECOND FLOOR	866 SQ. FT.
THIRD FLOOR	793 SQ. FT.
TOTAL LIVING	2018 SQ. FT.
2-CAR GARAGE	428 SQ. FT.
PORCH	49 SQ. FT.

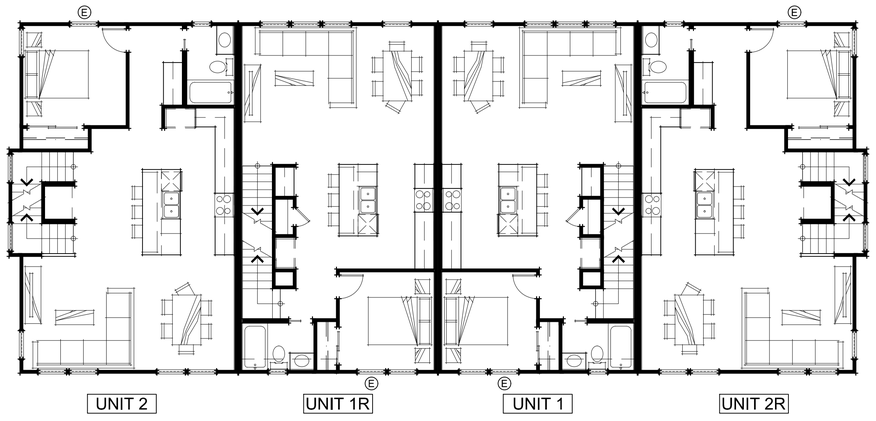
0 1' 2' 3' 4' 8'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

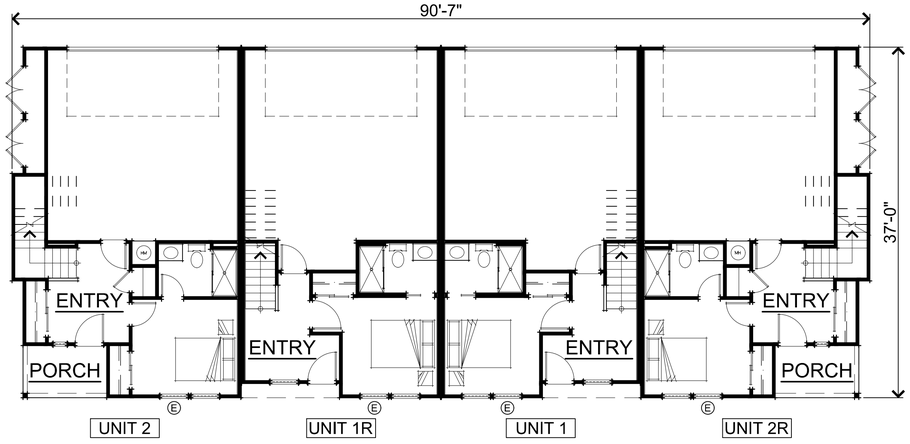
UNIT 2 FLOOR PLANS
A08

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



SECOND FLOOR PLAN



FIRST FLOOR PLAN

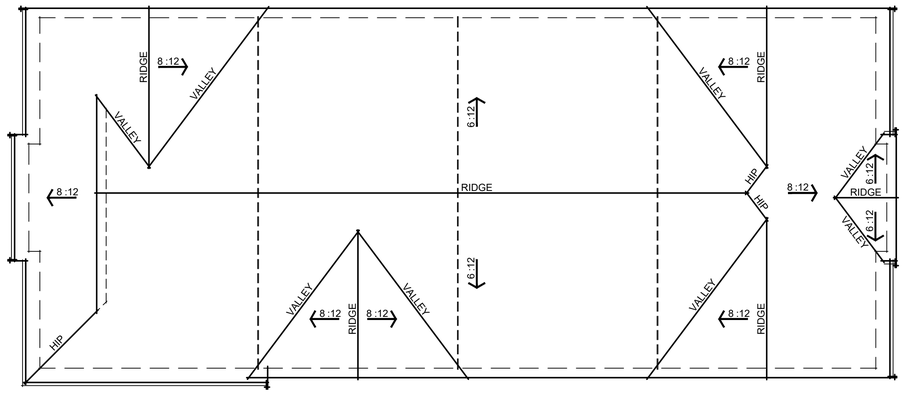
0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

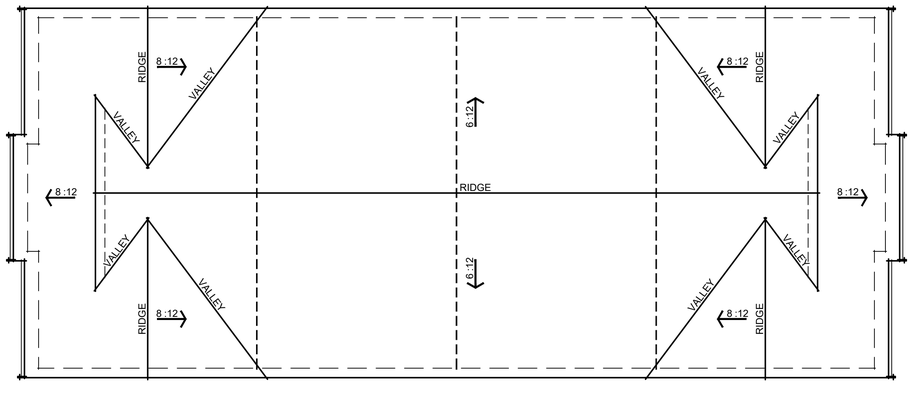
4 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A09

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

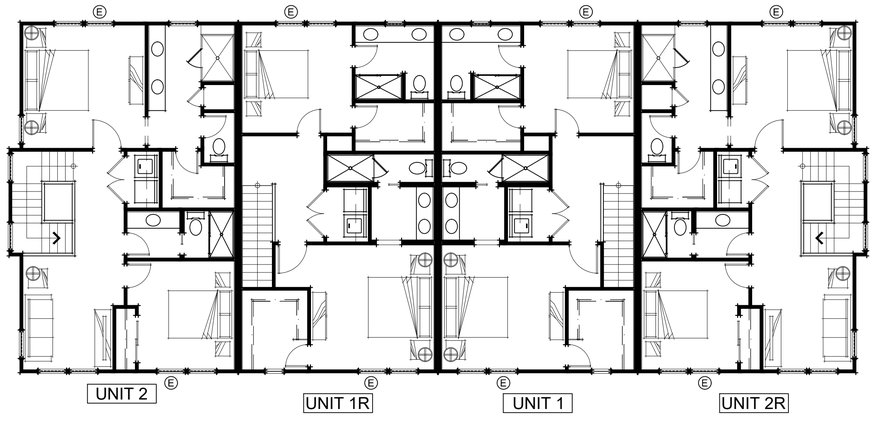
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



ROOF PLAN - TYPE B



ROOF PLAN - TYPE A



THIRD FLOOR PLAN

0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

4 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A10

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



FRONT ELEVATION

0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

4 UNIT BUILDING ELEVATIONS TYPE A
A11

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



FRONT ELEVATION

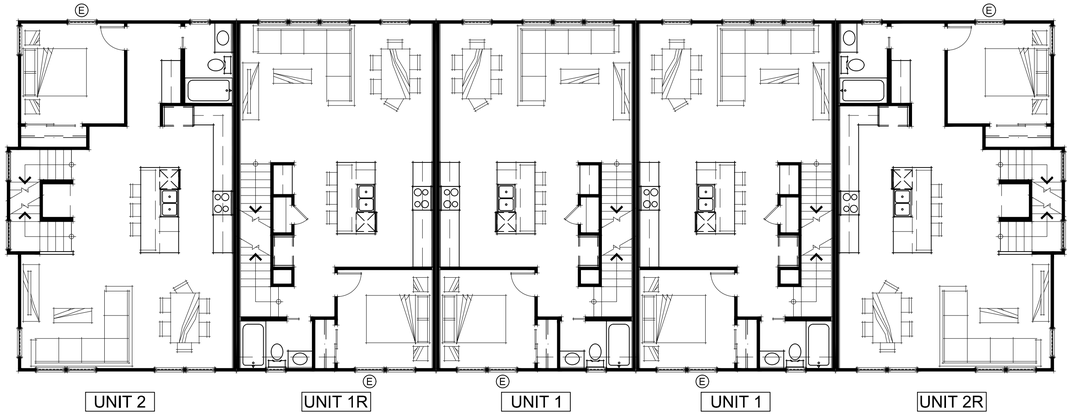
0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

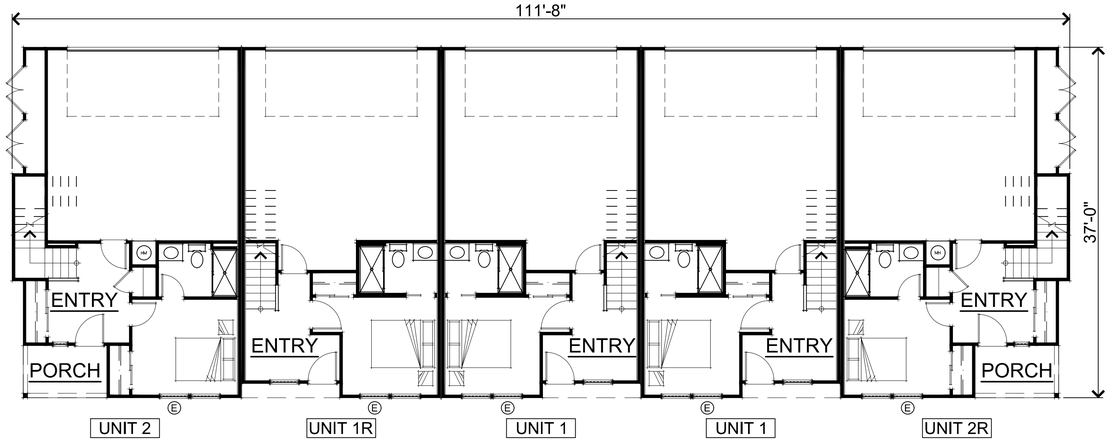
4 UNIT BUILDING ELEVATIONS TYPE B
A12

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



SECOND FLOOR PLAN



FIRST FLOOR PLAN

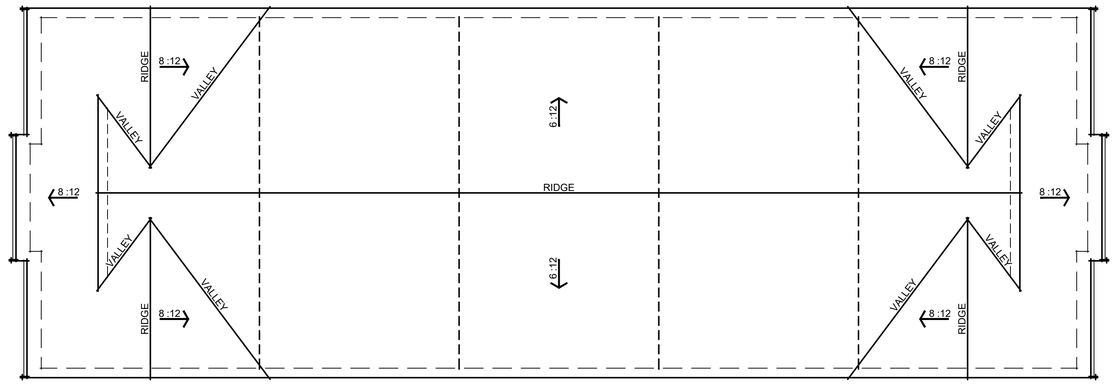
0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

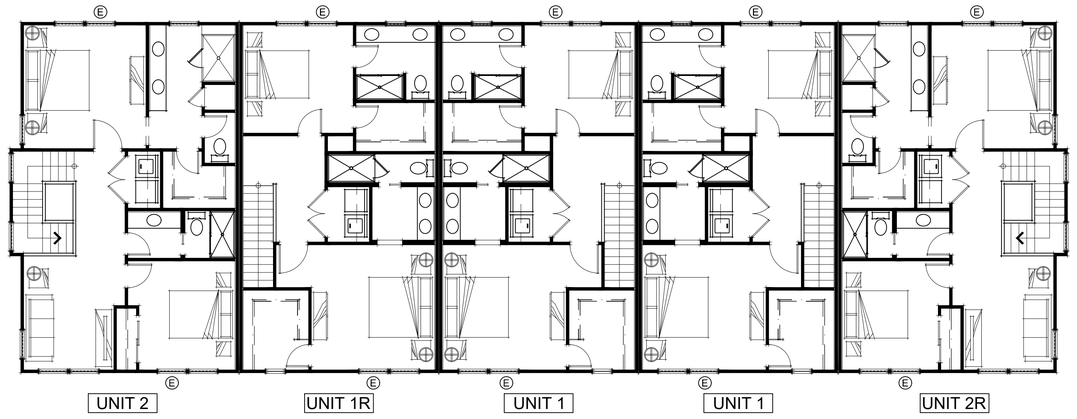
5 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A13

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

5 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A14

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



FRONT ELEVATION

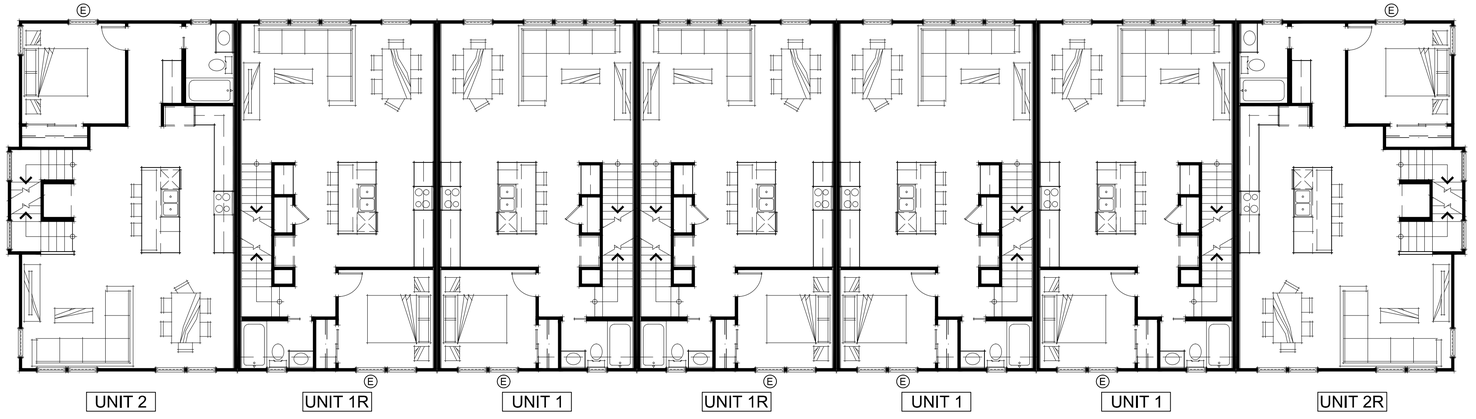
0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

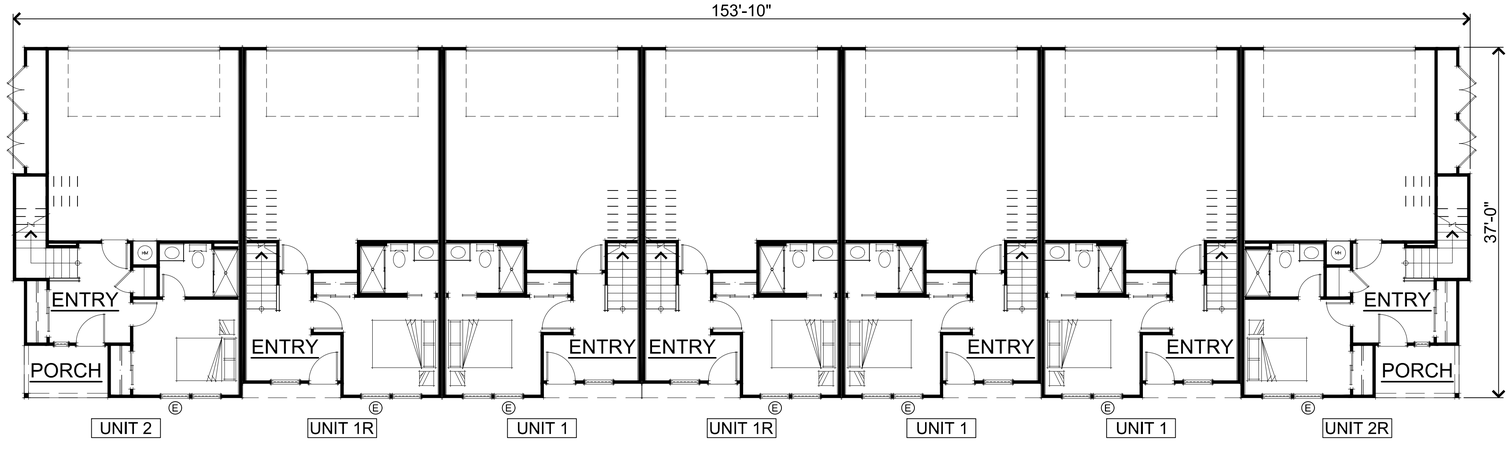
5 UNIT BUILDING ELEVATIONS
A15

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



SECOND FLOOR PLAN



FIRST FLOOR PLAN

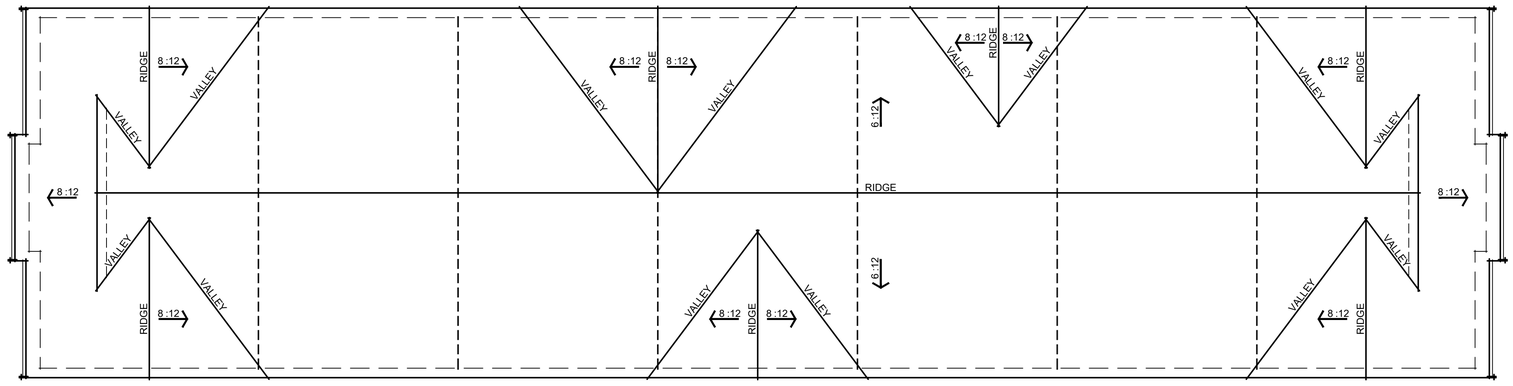
0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

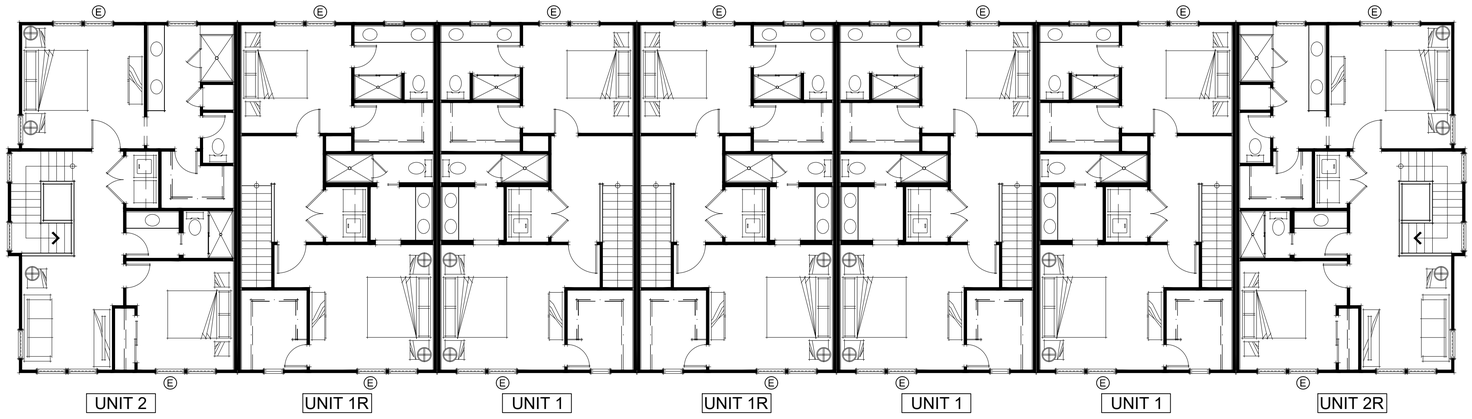
7 UNIT BUILDING FIRST & SECOND FLOOR PLANS
A16

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6' 8' 16'

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

7 UNIT BUILDING THIRD FLOOR & ROOF PLANS
A17

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



FRONT ELEVATION

0 2' 4' 6' 8' 16'

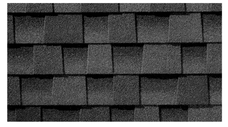
399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

7 UNIT BUILDING ELEVATIONS
A18

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com

COLOR SCHEME 1



GAF Roofing
Charcoal

Stucco
SW 7011 Natural Choice (254-C6)

Horizontal Siding
SW 7011 Natural Choice (254-C6)

Vertical Siding
SW 7011 Natural Choice (254-C6)

Fascia
SW 7069 Iron Ore (251-C7)

Entry Door / Accent
SW 7069 Iron Ore (251-C7)

COLOR SCHEME 2



GAF Roofing
Weathered Wood

Stucco
SW 7011 Natural Choice (254-C6)

Horizontal Siding
SW 0055 Light French Gray (305)

Vertical Siding
SW 6164 Svelte Sage (212-C3)

Fascia
SW 7019 Gauntlet Gray (244-C6)

Entry Door / Accent
SW 7645 Thunder Gray (278-C1)

COLOR SCHEME 3



GAF Roofing
Weathered Wood

Stucco
SW 7011 Natural Choice (254-C6)

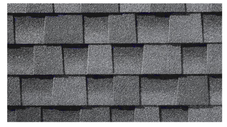
Horizontal Siding
SW 9165 Gossamer Veil (247-C1)

Vertical Siding
SW 7047 Porpoise (245-C6)

Fascia
SW 7048 Urbane Bronze (245-C7)

Entry Door / Accent
SW 6251 Outerspace (225-C7)

COLOR SCHEME 4



GAF Roofing
Pewter Gray

Stucco
SW 7011 Natural Choice (254-C6)

Horizontal Siding
SW 7005 Pure White (255-C1)

Vertical Siding
SW 7073 Network Gray (235-C2)

Fascia
SW 7069 Iron Ore (251-C7)

Entry Door / Accent
SW 7020 Black Fox (244-C7)

Note: *All colors and textures are representative samples only, pending verification of actual material suppliers and manufacturers for this particular project.*

399.268 Latimer Townhomes
Campbell, CA
August 14, 2024

COLORS & MATERIALS
A19

Granite Ridge Properties
225 Demeter Street, East Palo Alto, CA 94303
312.519.0303

SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com

TENTATIVE TRACT MAP
90 EAST LATIMER AVENUE

CITY OF CAMPBELL — SANTA CLARA COUNTY — CALIFORNIA

LEGEND

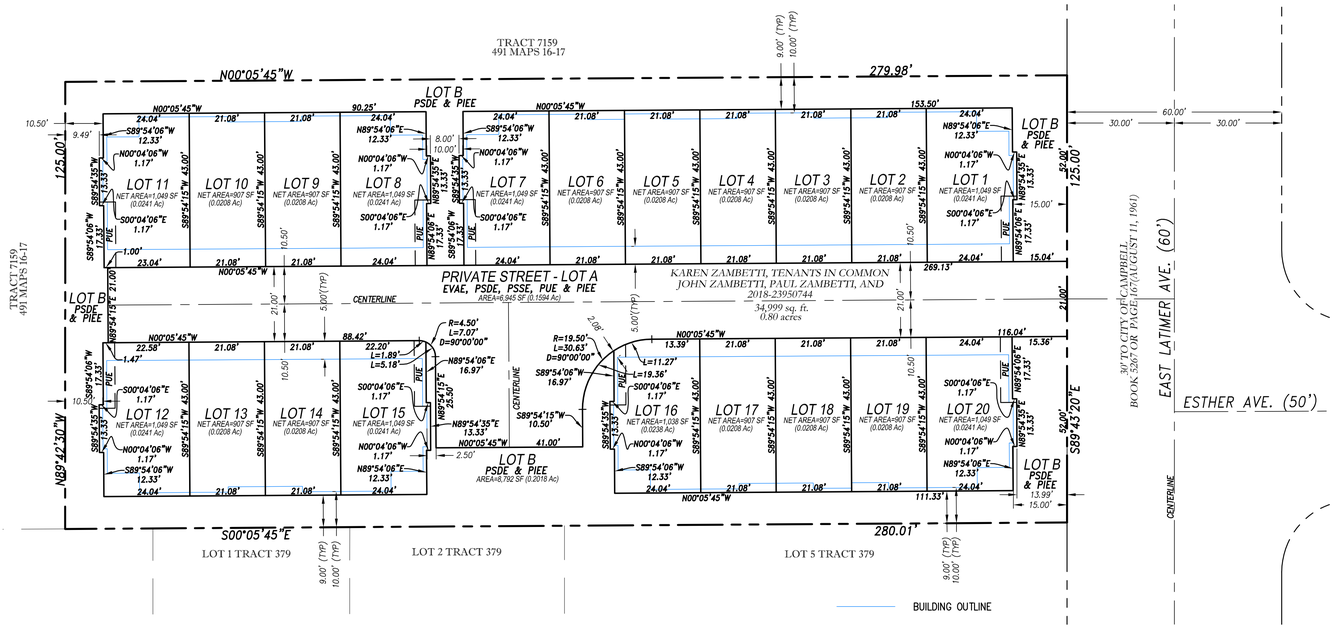
SYMBOL EXISTING	SYMBOL PROPOSED	DESCRIPTION
		HINGE LINE/TOP/TOE
		CONCRETE V-DITCH
		GRADED SWALE
205	202	CONTOUR LINES
		DAYLIGHT LINE/LIMIT OF GRADING
		PROPERTY LINE/ BOUNDARY / RIGHT-OF-WAY
		EASEMENT LINE
		CENTERLINE (℄)
		FENCE (CHAIN LINK)
		DRIVEWAY
		CURB, GUTTER & SIDEWALK
	RETAINING WALL (AS DESCRIBED) w/ SUB-DRAIN	
		CITY STANDARD BARRICADE
8"W	8"W	WATER LINE AND VALVE
8"SS	8"SS	SANITARY SEWER LINE AND MANHOLE OR CLEANOUT
15"SD	15"SD	STORM DRAIN LINE AND MANHOLE
SDCO		4" PERF/SOLID SUBDRAIN WITH CLEANOUTS
WM		WATER LATERAL / METER
4"SS		SANITARY SEWER CLEANOUT (SSCO)
		AREA DRAIN WITH SUMP BOTTOM (NDS 1212 OR APPROVED EQUAL)
		FLAT DRAIN INLET AS SPECIFIED
RELOCATED		FIRE HYDRANT
		STREETLIGHT STANDARD WITH MAST ARM AND LUMINAIRE (ELECTROLIER)
		PULL BOX (AS NOTED)
E	E	ELECTRICAL CONDUIT
G	G G	GAS MAIN
T	T T	TELEPHONE CONDUIT
		STREET MONUMENT
		BOLLARD
		JOINT POLE w/ GUY ANCHOR
	2%	PERCENT GRADE
		VERTICAL GRADE BREAK (PROFILE)
	BR #1	BIO-RETENTION AREA NUMBER
		TREE

ABBREVIATIONS

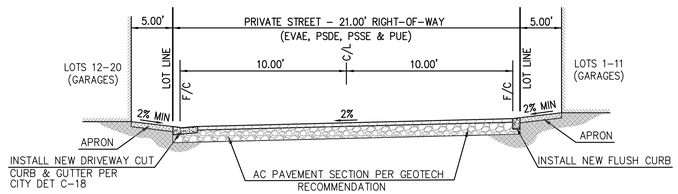
AB	AGGREGATE BASE	N/B	NORTH BOUND
AC	ASPHALT CONCRETE	P	PAD
AD	AREA DRAIN	PA	PLANTER AREA
BC	BEGIN CURVE	PL, P/L	PROPERTY LINE
BM	BENCHMARK	PCC	POINT OF COMPOUND CURVATURE
BMP	BEST MANAGEMENT PRACTICE	PERF.	PERFORATED
BOT.	BOTTOM	PIEE	PRIVATE INGRESS & EGRESS EASEMENT
BSW	BACK OF SIDEWALK	PRC	POINT OF REVERSE CURVATURE
BVC	BEGIN VERTICAL CURVE	PROJ.	PROJECTED
BW	BOTTOM OF WALL (EXPOSED)	PSDE	PRIVATE STORM DRAIN EASEMENT
CL	CENTER LINE	PUE	PUBLIC UTILITY EASEMENT
CB	CATCH BASIN	PSEE	PRIVATE SANITARY SEWER EASEMENT
CO	CLEAN OUT	PVI	POINT OF VERTICAL INTERSECTION
CR	CURB RETURN	R=	RADIUS OF CURVE
DI	DRAIN INLET	△=	INCLUDED ANGLE OF CURVE
DS	ROOF DOWN SPOUT	L=	ARC LENGTH OF CURVE
EC	END CURVE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	RIM	RIM ELEVATION
EP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
EVC	END VERTICAL CURVE	S	SLOPE
EX	EXISTING	S/B	SOUTH BOUND
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	SD	STORM DRAIN
FC, F/C	FACE OF CURB	SDCO	STORM DRAIN CLEANOUT
FDC	FIRE DEPARTMENT CONNECTION	SDE	STORM DRAIN EASEMENT
FF	FINISHED FLOOR	SDMH	STORM DRAIN MANHOLE
FG	FINISHED GRADE	SE	SIDEWALK EASEMENT
FH	FIRE HYDRANT	SF	SQUARE FEET
FL	FLOW LINE	S.O.	SIDE OPENING
FOGLN	FOG LINE (WHITE STRIPE)	SS	SANITARY SEWER
GB	GRADE BREAK	SSE	SANITARY SEWER EASEMENT
GI	GREASE INTERCEPTOR	SSCO	SANITARY SEWER CLEANOUT
GM	GAS METER	SSMH	SANITARY SEWER MANHOLE
GR	GRATE ELEVATION	STD	STANDARD
HP	HIGH POINT	TB	TOP OF BERM
IRR	IRRIGATION	TC	TOP OF CURB
JT	JOINT TRENCH	TCM	TREATMENT CONTROL MEASURE
LF	LINEAL FEET	TW	TOP OF WALL
LIP	LIP OF GUTTER	TYP	TYPICAL
LP	LOW POINT	VC	VERTICAL CURVE
MAX	MAXIMUM	W	WATER LINE
MH	MANHOLE	WM	WATER METER

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.



PROPOSED SUBDIVISION PLAN
SCALE: 1"=20'



PRIVATE STREET - TYPICAL SECTION
NOT TO SCALE

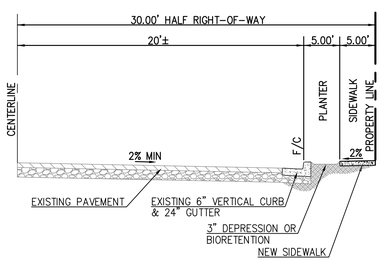
LOT AREA TABLE			
LOT(s)	NET LOT AREA	LOT WIDTH	PUBLIC FRONTAGE
1, 7, 8, 11, 12, 15, 20	1,049 SF	24.04'	N/A
16	1,038 SF	24.04'	N/A
2–6, 9, 10, 13, 14, 17–19	907 SF	21.08'	N/A
TOTAL	19,265 SF		

DEVELOPMENT STANDARDS	
DENSITY	20 TO 21 UNITS/GROSS ACRE
PARKING PER UNIT	2 SPACES
GUEST PARKING PER UNIT	0 SPACES
MINIMUM PARCEL SIZE	900 SF
BUILDING COVERAGE	100% MAXIMUM
FRONT YARD SETBACK	0 FEET MINIMUM
SIDE YARD SETBACK	0 FEET MINIMUM
REAR YARD SETBACK	0 FEET MINIMUM

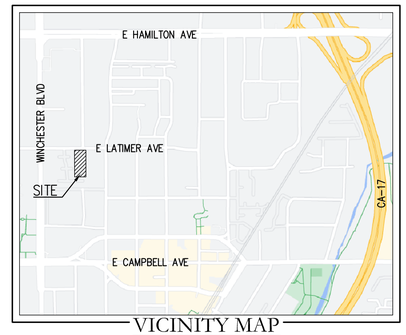
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



EAST LATIMER AVENUE - TYPICAL 1/2 R/W
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

PROJECT GENERAL NOTES:

1.	OWNER:	JOHN & PAUL ZAMBETTI
2.	APPLICANT/DEVELOPER:	GRANITE RIDGE PROPERTIES 225 DEMETER STREET EAST PALO ALTO, CA 94303
3.	CIVIL ENGINEER:	STERLING CONSULTANTS 46560 FREMONT BLVD, SUITE 205 FREMONT, CA 94538 CONTACT: DILIP S. KISHNANI, P.E., QSD TEL: 925-705-3633
4.	LANDSCAPE ARCHITECT:	THOMAS H PHELPS PO BOX 170129 BOISE, ID 83717 TEL: 208-906-1300
5.	SOILS ENGINEER:	TBD
6.	APNs:	279-38-017
7.	EXISTING LAND USE:	PRIVATE SCHOOOL
8.	PROPOSED LAND USE:	MULTI FAMILY RESIDENTIAL
9.	SITE AREA:	34,999 SF (0.8035 ACRES)
10.	NUMBER OF LOTS :	20 FOR SALE LOTS; 2 COMMON AREA LOTS
11.	GENERAL PLAN:	MEDIUM DENSITY RESIDENTIAL
12.	EXISTING ZONING:	MDR (MEDIUM DENSITY RESIDENTIAL) (R-2)
13.	PROPOSED ZONING:	MDR (MEDIUM DENSITY RESIDENTIAL) (R-2)
14.	WATER SYSTEM:	SAN JOSE WATER COMPANY
15.	SEWER SYSTEM:	WEST VALLEY SANITATION DISTRICT
16.	STORM DRAIN SYSTEM:	CITY OF CAMPBELL
17.	GAS & ELECTRIC:	PACIFIC GAS & ELECTRIC (P.G.&E.)
18.	CABLE:	COMCAST CABLE
19.	TOPOGRAPHY:	EXISTING TOPOGRAPHY IS BASED ON A FIELD SURVEY DONE BY STERLING CONSULTANTS IN APRIL 2024.
20.	BOUNDARY:	BOUNDARY AS SHOWN IS BASED ON A FIELD SURVEY DONE BY STERLING CONSULTANTS IN APRIL 2024.
21.	STREETS:	ACCESS TO THE PROPOSED LOTS IS THROUGH A PRIVATE STREET FROM EAST LATIMER AVENUE.
22.	FLOOD ZONE:	ZONE X; PANEL NO. 06085C0237H
23.	GRADING:	PRELIMINARY GRADES FOR THE PROPOSED SUBDIVISION ARE SHOWN ON SHEET TM-4.
24.	DIMENSIONS:	LOT DIMENSIONS (SHOWN TO NEAREST TENTH OF A FOOT) AND AREAS SHOWN HEREIN ARE APPROXIMATE AND SUBJECT TO MINOR CHANGES DURING FINAL DESIGN.
25.	CONTOURS:	EXISTING CONTOURS ARE SHOWN.
26.	UTILITIES:	ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND. ALL STORM DRAINS, SANITARY SEWERS AND WATER MAINS SHALL ADHERE TO MINIMUM SIZES & SLOPES PER THE GOVERNING AGENCIES.
27.	STORMWATER:	C.3 COMPLIANCE WILL BE MET THROUGH AT GRADE BIORETENTION PLANTERS
28.	MONUMENTS:	DEVELOPER SHALL INSTALL IRON PIPES AT PROPERTY CORNERS PER APPROVED FINAL MAP TO THE SATISFACTION OF THE CITY ENGINEER.
29.	FIRE SPRINKLERS:	FIRE SPRINKLER SYSTEM WILL BE PROVIDED AND INSTALLED PER NFPA 13D 2016 EDITION STANDARD.

SHEET INDEX

SHEET NO.	DESCRIPTION
TM1	PROPOSED SUBDIVISION PLAN & NOTES
TM2	SITE PHOTOGRAPHY
TM3	EXISTING CONDITION MAP & PRELIMINARY DEMOLITION PLAN
TM4	PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN
TM5	PRELIMINARY STORMWATER PLAN
TM6	PRELIMINARY FIRE ACCESS PLAN

DATE: AUGUST 1, 2024						
SCALE: AS NOTED						
DRAWN: DSK, MTM						
DESIGNED: DSK, MTM						
ENGINEER: DSK						
MANAGER: DSK	NO.	BY	DATE	REVISIONS		CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER
DILIP S. KISHNANI
C 51620
STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:

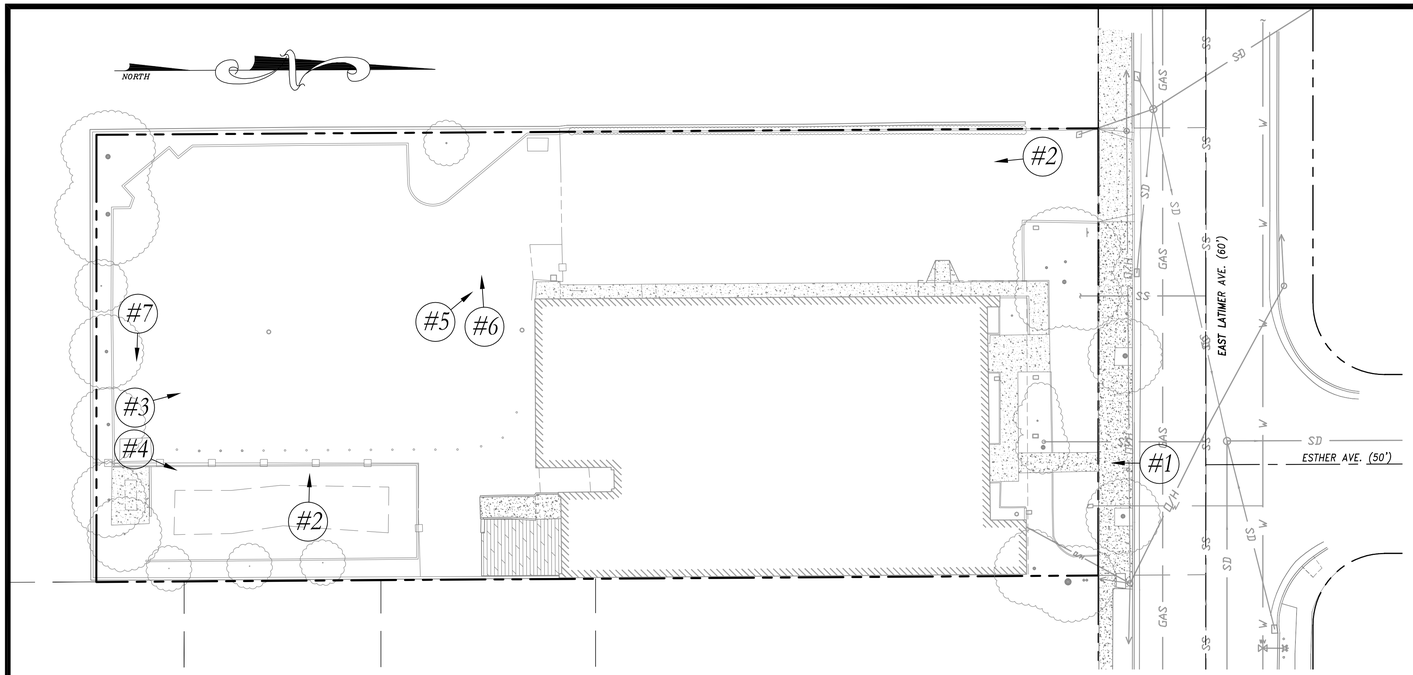
GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017 — 90 E. LATIMER AVENUE

90 EAST LATIMER HOMES
PROPOSED SUBDIVISION PLAN & NOTES

CITY OF CAMPBELL — COUNTY OF SANTA CLARA — CALIFORNIA

SHEET NO. TM1
1 OF 6 SHEETS
JOB NO. 2024-072



SITE PHOTOGRAPHY
SCALE: 1"=20'


PHOTOGRAPH #1


PHOTOGRAPH #2


PHOTOGRAPH #3


PHOTOGRAPH #4


PHOTOGRAPH #5


PHOTOGRAPH #6


PHOTOGRAPH #7

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

DATE: AUGUST 1, 2024					
SCALE: AS NOTED					
DRAWN: DSK, MTM					
DESIGNED: DSK, MTM					
ENGINEER: DSK					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER
DILIP S. KISHNANI
C 51620
STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:
GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017
90 E. LATIMER AVENUE

90 EAST LATIMER HOMES
SITE PHOTOGRAPHY

CITY OF CAMPBELL COUNTY OF SANTA CLARA CALIFORNIA

SHEET NO. TM2
2 OF 6 SHEETS
JOB NO. 2024-072

DEMOLITION LEGEND

PROPERTY LINE

SAWCUT LINE

183.45
27" OAK + TAG 3 — EX. TREE WITH GROUND ELEV., DBH,

REMOVE EXISTING TREE

REMOVE EXISTING AC/CONC./BUILDING

REMOVAL NOTES

1. REMOVE EXISTING FENCE
2. REMOVE EXISTING CONCRETE
3. REMOVE EXISTING BUILDING
4. REMOVE EXISTING ASPHALT
5. REMOVE EXISTING WOOD DECK
6. REMOVE EXISTING BOLLARDS
7. REMOVE EXISTING WALL
8. REMOVE EXISTING SHED
9. REMOVE EXISTING PLAYGROUND
10. REMOVE EXISTING CURB
11. REMOVE EXISTING UTILITY

PROTECTION NOTES

A — PROTECT EXISTING SOUND WALL

DEMOLITION NOTES

1. DEVELOPER'S CONTRACTOR SHALL OBTAIN A DEMOLITION PERMIT FROM CITY OF CAMPBELL'S BUILDING DEPARTMENT PRIOR TO START OF DEMOLITION.
2. THE PROPERTY LINE SHALL BE THE LIMITS OF DEMOLITION UNDER THE GRADING PERMIT.
3. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS WITH THE RESPECTIVE UTILITY AGENCIES PRIOR TO START OF DEMOLITION ON THE SITE.
4. UTILITIES TO BE ABANDONED WITHIN THE AREAS OF PROPOSED IMPROVEMENTS SHALL BE REMOVED IN THEIR ENTIRETY OR ABANDONED IN PLACE PER RECOMMENDATIONS OF THE PROJECT SOILS REPORT.

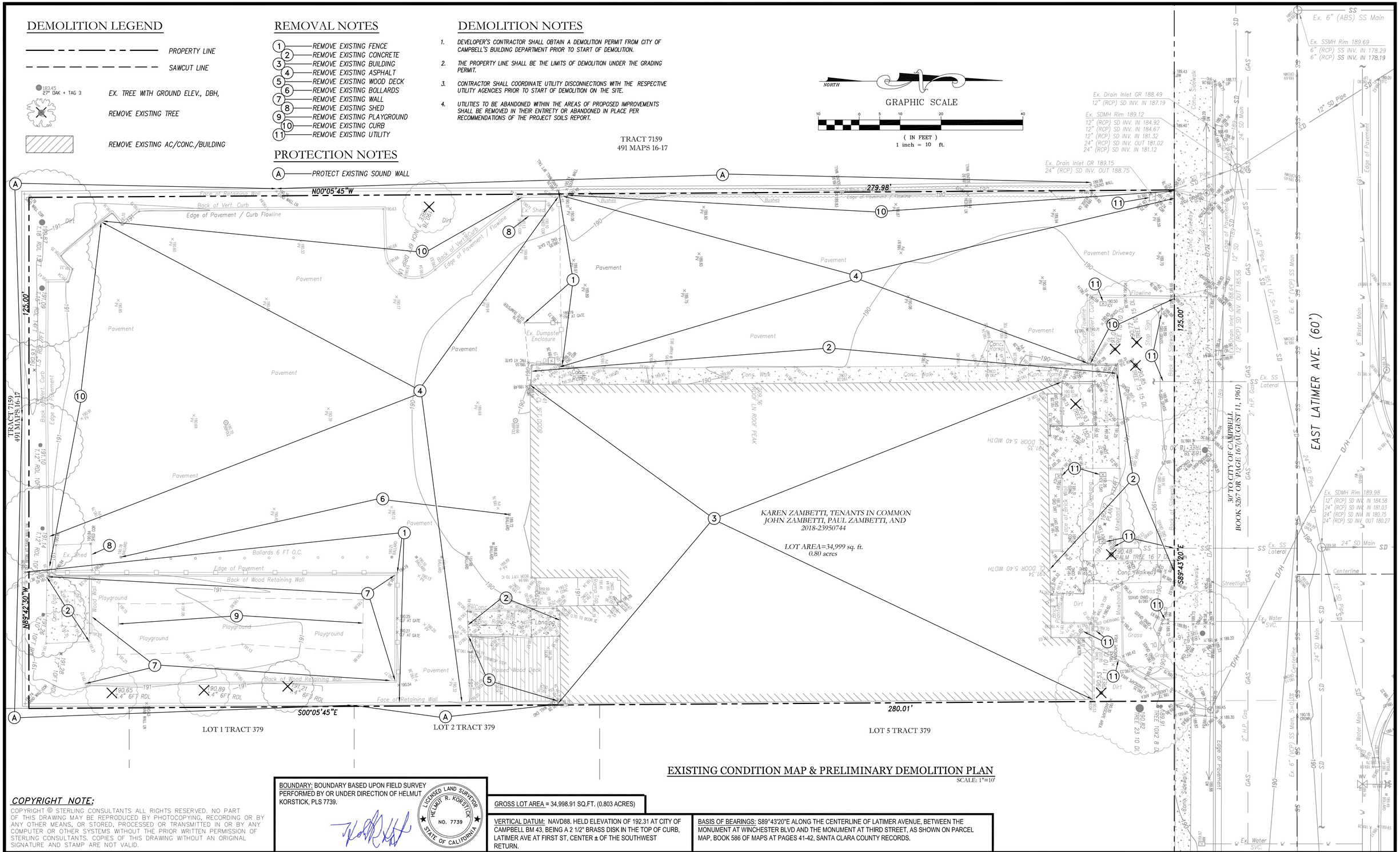
TRACT 7159
491 MAPS 16-17

NORTH

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



EXISTING CONDITION MAP & PRELIMINARY DEMOLITION PLAN

SCALE: 1"=10'

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.

BOUNDARY: BOUNDARY BASED UPON FIELD SURVEY PERFORMED BY OR UNDER DIRECTION OF HELMUT KORSTICK, PLS 7739.

LICENSED LAND SURVEYOR — HELMUT R. KORSTICK — NO. 7739 — STATE OF CALIFORNIA

GROSS LOT AREA = 34,998.91 SQ.FT. (0.803 ACRES)

VERTICAL DATUM: NAVD88. HELD ELEVATION OF 192.31 AT CITY OF CAMPBELL BM 43, BEING A 2 1/2" BRASS DISK IN THE TOP OF CURB, LATIMER AVE AT FIRST ST, CENTER ± OF THE SOUTHWEST RETURN.

BASIS OF BEARINGS: S89°43'20"E ALONG THE CENTERLINE OF LATIMER AVENUE, BETWEEN THE MONUMENT AT WINCHESTER BLVD AND THE MONUMENT AT THIRD STREET, AS SHOWN ON PARCEL MAP, BOOK 586 OF MAPS AT PAGES 41-42, SANTA CLARA COUNTY RECORDS.

DATE: AUGUST 1, 2024					
SCALE: AS NOTED					
DRAWN: DSK, MTM					
DESIGNED: DSK, MTM					
ENGINEER: DSK					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER — DILIP S. KISHNANI — C 51620 — STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:
GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017

90 E. LATIMER AVENUE

90 EAST LATIMER HOMES

EXISTING CONDITION MAP & PRELIMINARY DEMOLITION PLAN

CITY OF CAMPBELL COUNTY OF SANTA CLARA CALIFORNIA

SHEET NO. TM3
3 OF 6 SHEETS
JOB NO. 2024-072

GRADING NOTES:

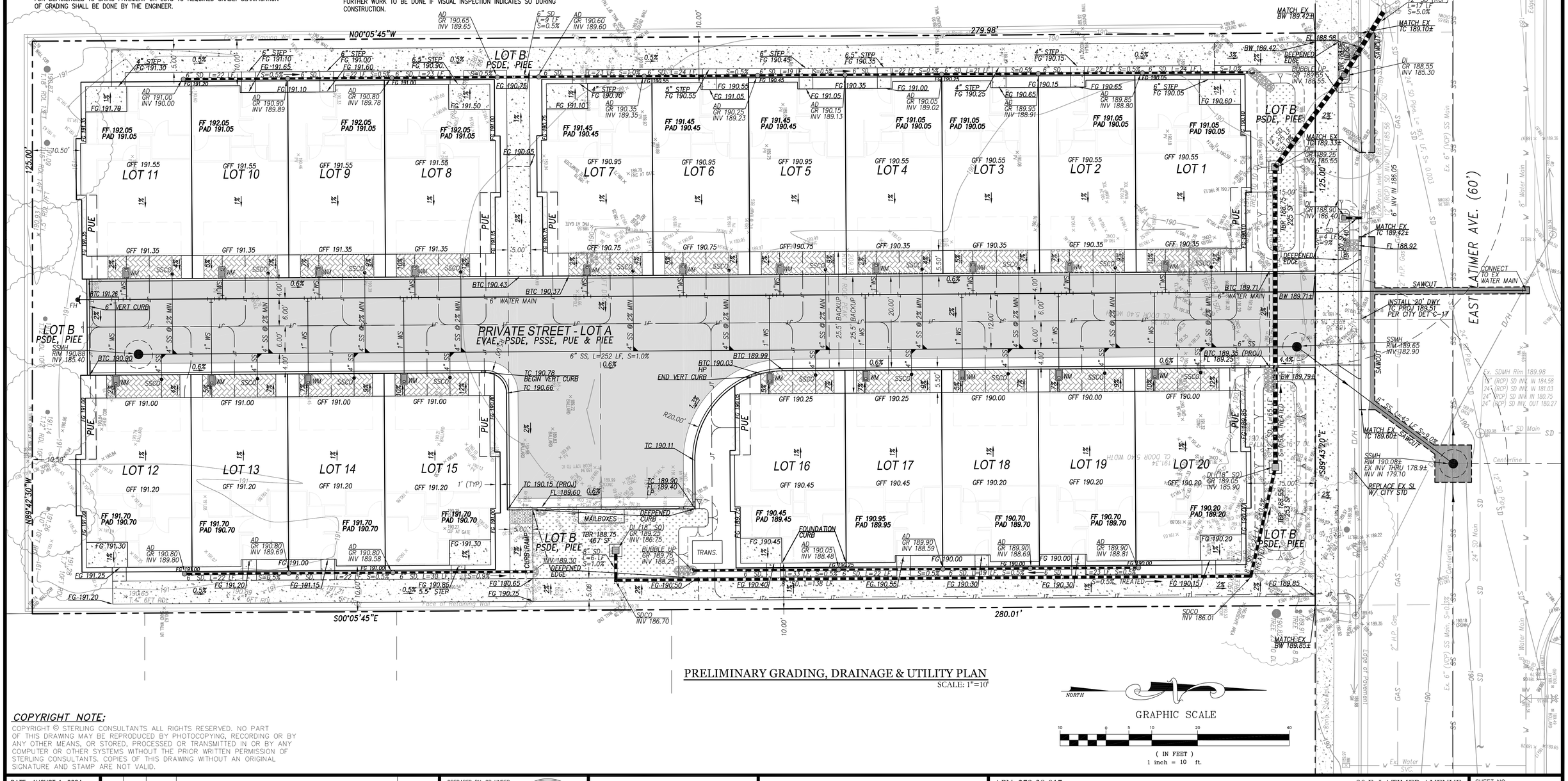
1. SITE GRADING & EXCAVATIONS SHALL ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT.
2. ALL GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED.
3. ALL CUT AND FILL SLOPES AT THE BOUNDARY LINES SHALL BE CONSTRUCTED IN SUCH A MANNER THAT ADJACENT FENCES WILL NOT BE DAMAGED. GRADING SHALL CONFORM AT BOUNDARY LINES.
4. ALL CUT SLOPES SHALL BE ROUNDED TO MEET EXISTING GRADES AND BLEND WITH SURROUNDING TOPOGRAPHY. ALL GRADED SLOPES OVER FIVE FEET IN HEIGHT SHALL BE PLANTED WITH SUITABLE GROUND COVER.
5. DURING GRADING OPERATIONS, THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES BOTH ON-SITE. STREETS SHALL BE SWEPT PER REQUIREMENTS SPECIFIED IN BLUEPRINT FOR CLEAN BAY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF SAID GRADING QUANTITIES PRIOR TO THE START OF THE GRADING OPERATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DISTRIBUTING ANY EXCESS MATERIAL OR SUPPLY MATERIAL FOR DEFICIENCIES TO BRING PAVEMENT OR LOTS TO REQUIRED GRADE. CLARIFICATION OF GRADING SHALL BE DONE BY THE ENGINEER.
7. WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS WHICH COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS WHICH ARE DESIGNED TO PREVENT EXPOSURE TO RAINFALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREA.
8. FLUSHING OF STREETS/PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED. AREAS REQUIRING CLEANING SHOULD BE SWEPT.
9. WHERE UNSTABLE OR UNSUITABLE MATERIALS ARE ENCOUNTERED DURING SUBGRADE PREPARATION, THE AREA IN QUESTION SHALL BE OVER EXCAVATED AND REPLACED BY SELECT BACKFILL MATERIAL AS NEEDED.
10. WHERE ABANDONED UNDERGROUND STRUCTURES ARE ENCOUNTERED IN THE STREET AREAS, REMOVE TO SUFFICIENT DEPTH TO ALLOW UNDERGROUND LINES TO CROSS, BACKFILL AND COMPACT DURING ROUGH GRADING. THE INSPECTOR MAY REQUIRE FURTHER WORK TO BE DONE IF VISUAL INSPECTION INDICATES SO DURING CONSTRUCTION.
11. PRIOR TO ANY GRADING, DEMOLITION OF THE SITE SHOULD BE COMPLETED. DEMOLITION SHOULD INCLUDE THE COMPLETE REMOVAL OF ALL SURFACE AND SUBSURFACE STRUCTURES. IF ANY OF THE FOLLOWING ARE ENCOUNTERED: TREE ROOT SYSTEMS, CONCRETE, SEPTIC TANKS, GAS OR OIL TANKS, STORM INLETS, IRRIGATION PIPES, FOUNDATIONS, ASPHALT, DEBRIS AND TRASH, THESE SHOULD ALSO BE REMOVED, WITH THE EXCEPTION OF ITEMS SPECIFIED BY THE OWNER FOR SALVAGE.
12. EARTHWORK QUANTITIES IF SHOWN ON THESE PLANS ARE APPROXIMATE ESTIMATED QUANTITIES AND ARE FURNISHED FOR THE CITY OF CAMPBELL'S INFORMATION ONLY. THE ACTUAL AMOUNT MAY VARY DEPENDING ON COMPACTION, CONSOLIDATION, STRIPPING AND THE CONTRACTOR'S METHOD OF OPERATION.
13. ALL NEW/UPGRADED UTILITIES SHALL BE INSTALLED UNDERGROUND.

EARTHWORK SUMMARY

MEASURED RAW CUT: (UNDER FOOTPRINT & OUTSIDE)	**705 CY**
MEASURED RAW FILL: (UNDER FOOTPRINT & OUTSIDE)	**272 CY**
ESTIMATED EXPORT:	**433 CY**

EARTHWORK QUANTITIES SHOWN HEREON ARE APPROXIMATE ONLY FOR ESTABLISHMENT OF FEES. CONTRACTORS SHALL BASE BID AND OR CONTRACT AMOUNTS UPON THEIR OWN EARTHWORK ESTIMATES FOR COMPLETION OF THE WORK SHOWN HEREON, NOT ON THE QUANTITIES SHOWN ABOVE.

NO ADJUSTMENTS HAVE BEEN APPLIED FOR SHRINK OR SWELL.



PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN

SCALE: 1"=10'

NORTH

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.

DATE:	AUGUST 1, 2024
SCALE:	AS NOTED
DRAWN:	DSK, MTM
DESIGNED:	DSK, MTM
ENGINEER:	DSK
MANAGER:	DSK

NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:

GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017

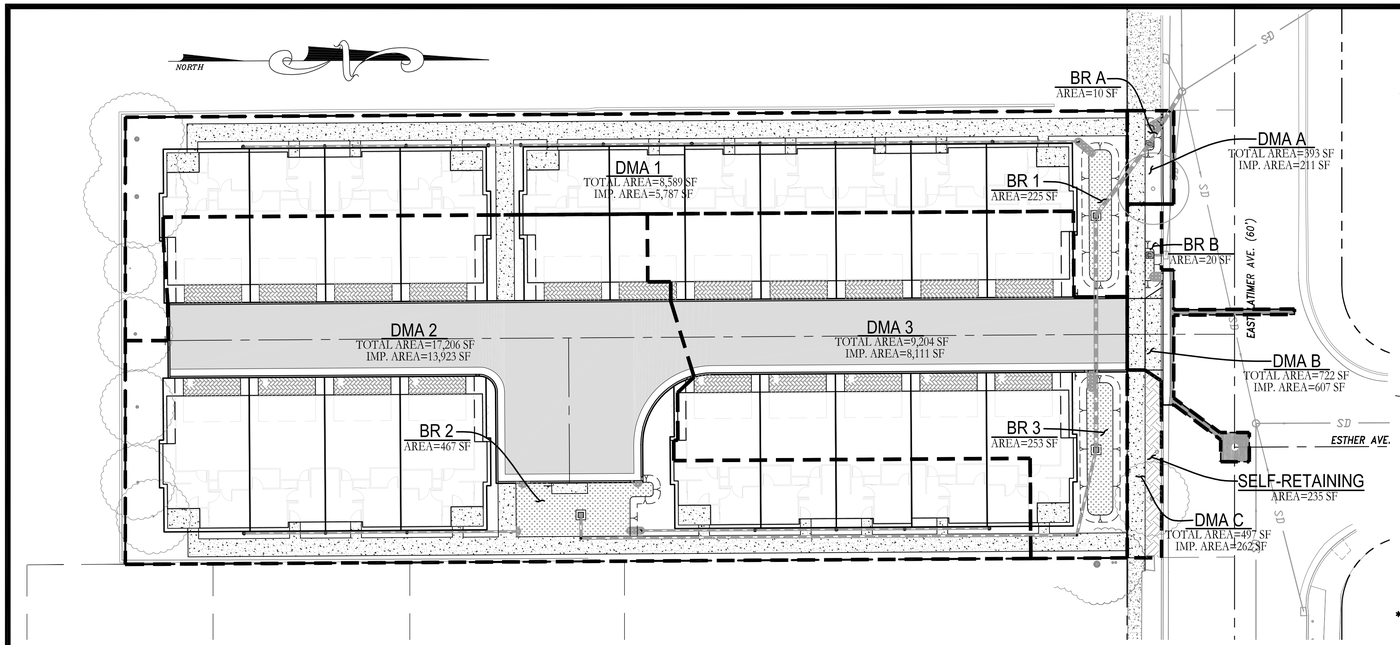
90 E. LATIMER AVENUE

90 EAST LATIMER HOMES

PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN

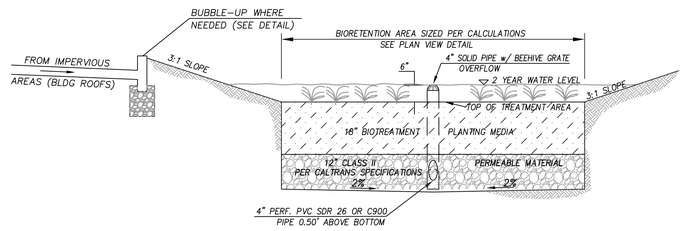
CITY OF CAMPBELL COUNTY OF SANTA CLARA CALIFORNIA

SHEET NO. TM4
4 OF 6 SHEETS
JOB NO. 2024-072



PRELIMINARY STORMWATER CONTROL PLAN

SCALE: 1"=20'

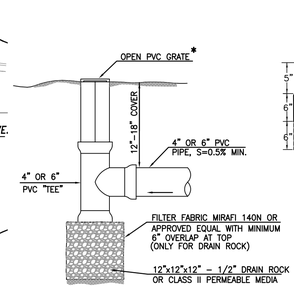


BIO-RETENTION PLANTER

NOT TO SCALE

SURFACE LEGEND

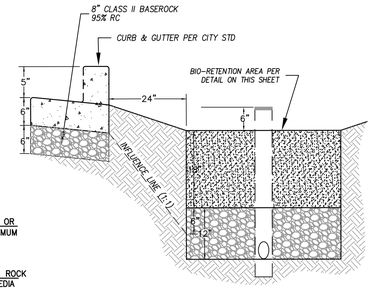
- IMPERVIOUS AREA BORDER
- BIORETENTION AREA
- SELF-RETAINING AREA



* USE FLAT TOP GRATES FOR LAWN AREAS AND DOMED OR ATRIUM GRATES WHERE MOWING OR TRIPPING IS NOT OF CONCERN & CAST IRON GRATES IN PARKING AREAS.

BUBBLE UP DETAIL

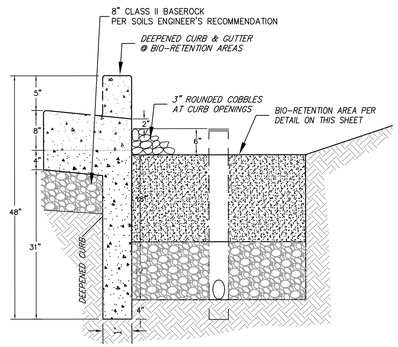
NOT TO SCALE



*PER STRUCTURAL ENGINEER'S RECOMMENDATIONS

EXISTING CURB & GUTTER ADJACENT TO BIO-RETENTION AREAS

NOT TO SCALE



*PER STRUCTURAL ENGINEER'S RECOMMENDATIONS

MODIFIED VERTICAL CURB & GUTTER (DEEPENED) ADJACENT TO BIO-RETENTION AREAS

NOT TO SCALE

BIORETENTION 1

Instructions: Complete this worksheet for each Drainage Management Area of the project that has a combination flow- and volume-based treatment measure. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

Worksheet for Sizing Flow- and Volume-Based Treatment Measures (Combination Flow and Volume Approach)

Stormwater Treament Measure: Bioretention area

For bioretention areas and flow-through planters, the following approach may be used to take into consideration both the flow of stormwater through the planting media and the volume of stormwater in the surface ponding area.

Step 1 Determine the contributing drainage area to the treatment measure:
Drainage Area = 8589 square feet

Step 2 Determine the Percent Imperviousness of the drainage area.
Enter the amount of surface area draining to the BMP:
a Impervious Area = 5787 square feet *Includes rooftops, hardscape, streets, and sidewalks, etc.*
b Pervious Area = 2802 square feet
% Impervious = 67 %

Step 3 Determine the required treatment volume (using Adopted CASQA Stormwater BMP Handbook Approach).
a Find the mean annual precipitation at the site (MAPsite).
Estimate where the site is on Figure B-1 and estimate the mean annual precipitation in inches from the rain line (isopleth) nearest to the project site.
Interpolate between isopleths if necessary. Click here for map (Figure B-1)
MAP_site = 15 inches *Site Mean Annual Precipitation*
b Identify the reference rain gage closest to the project site (San Jose Airport, Palo Alto, or Mergan Hill).
Closest Reference Rain Gage: San Jose Airport
MAP_gage = 13.9 inches *Reference Gage Mean Annual Precipitation*
c Determine the rain gage correction factor for the precipitation at the site from Step 3 and Step 4.
MAP correction factor = 1.08 *Correction factor = MAP site/MAP gage*
d Identify the representative soil type for the drainage area.
Identify from Figure B-1 or from site soils data, the soil type that is representative of the previous portion of the project (see dropdown menus).
Click here for map (Figure B-1)
Site Soil Type = Clay (D) *If soil will be compacted during site preparation and grading, the soil's infiltration rate will be decreased. Modify your answer to a soil with a lower infiltration rate)*
Does the site planning allow for protection of natural areas, vegetation, and soils so that the soils outside the building footprint are not graded/compacted?
No
If your answer is no, and the soil will be compacted during site preparation and grading, the soil's infiltration ability will be decreased. Modify your answer to a soil with a lower infiltration rate (e.g., Silt Loam to Clay Loam or Clay).
e Determine the average slope for the drainage area:
Average Slope (%) = 0.5
f Determine the unit basin storage volume from sizing curves:
Unit Basin Storage (UBS) = 0.46 inches *Unit basin storage volume from Figure B-2, B-3, or B-4, based on slope*
g Determine the Adjusted Unit Basin Storage Volume for the site:
Adjusted UBS = 0.49 inches *Adjusted UBS = Rain Gage Correction Factor x Unit Basin Storage Volume*
h Determine the Design Volume:
Design Volume = 353 cubic feet *Design Volume = Adj. Unit Basin Storage Volume x Total Drainage Area*

Step 4 Determine the Design Rainfall Intensity (Uniform Intensity Approach), Section III.C. Step 3) which is 0.2 in/hr:
Design Rainfall Intensity = 0.20 in/hr

Step 5 Assume that the rain event that generates the Adjusted Unit Basin Storage Volume of runoff occurs at the Design Rainfall Intensity for the entire length of the storm. Calculate the duration of the storm by dividing the Adjusted Unit Basin Storage Volume by the Design Rainfall Intensity. In other words, determine the amount of time required for the Adjusted Unit Basin Storage Volume to be achieved at the design intensity rate.
Duration = 2.47 hours *Adjusted UBS ÷ Design Rainfall Intensity*

Step 6 Make a preliminary estimate of the surface area of the treatment measure:
Try a preliminary surface area estimate = 173.61 Square feet *2% of total drainage area*
BMP Surface Area = 225 Square feet

Step 7 Calculate the volume of runoff that filters through the bioretention soil at a rate of 5 inches per hour (the design surface loading rate for bioretention facilities), for the duration of the storm calculated in Step 5.
Volume of Treated Runoff = 232 cubic feet *Surface Area x Duration*

Step 8 Calculate the portion of the water quality design (WQD) volume remaining after treatment is accomplished by filtering through the bioteatment soil.
The result is the amount that must be stored in the ponding area above the bioretention surface area estimated in Step 6.
Volume in Ponding Area = 122

Step 9 Calculate the depth of the volume in the ponding area by dividing this volume by the estimated surface area in Step 6.
Depth of Ponding = 6 inches
The average ponding depth is acceptable
The range of allowable ponding depths in a bioretention facility or flow-through planter is between 0.5 and 1.0 feet (6 and 12 inches)
0.5 feet is recommended

BIORETENTION 2

Instructions: Complete this worksheet for each Drainage Management Area of the project that has a combination flow- and volume-based treatment measure. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

Worksheet for Sizing Flow- and Volume-Based Treatment Measures (Combination Flow and Volume Approach)

Stormwater Treament Measure: Bioretention area

For bioretention areas and flow-through planters, the following approach may be used to take into consideration both the flow of stormwater through the planting media and the volume of stormwater in the surface ponding area.

Step 1 Determine the contributing drainage area to the treatment measure:
Drainage Area = 17206 square feet

Step 2 Determine the Percent Imperviousness of the drainage area.
Enter the amount of surface area draining to the BMP:
a Impervious Area = 13923 square feet *Includes rooftops, hardscape, streets, and sidewalks, etc.*
b Pervious Area = 3283 square feet
% Impervious = 81 %

Step 3 Determine the required treatment volume (using Adopted CASQA Stormwater BMP Handbook Approach).
a Find the mean annual precipitation at the site (MAPsite).
Estimate where the site is on Figure B-1 and estimate the mean annual precipitation in inches from the rain line (isopleth) nearest to the project site.
Interpolate between isopleths if necessary. Click here for map (Figure B-1)
MAP_site = 15 inches *Site Mean Annual Precipitation*
b Identify the reference rain gage closest to the project site (San Jose Airport, Palo Alto, or Mergan Hill).
Closest Reference Rain Gage: San Jose Airport
MAP_gage = 13.9 inches *Reference Gage Mean Annual Precipitation*
c Determine the rain gage correction factor for the precipitation at the site from Step 3 and Step 4.
MAP correction factor = 1.08 *Correction factor = MAP site/MAP gage*
d Identify the representative soil type for the drainage area.
Identify from Figure B-1 or from site soils data, the soil type that is representative of the previous portion of the project (see dropdown menus).
Click here for map (Figure B-1)
Site Soil Type = Clay (D) *If soil will be compacted during site preparation and grading, the soil's infiltration rate will be decreased. Modify your answer to a soil with a lower infiltration rate)*
Does the site planning allow for protection of natural areas, vegetation, and soils so that the soils outside the building footprint are not graded/compacted?
No
If your answer is no, and the soil will be compacted during site preparation and grading, the soil's infiltration ability will be decreased. Modify your answer to a soil with a lower infiltration rate (e.g., Silt Loam to Clay Loam or Clay).
e Determine the average slope for the drainage area:
Average Slope (%) = 0.5
f Determine the unit basin storage volume from sizing curves:
Unit Basin Storage (UBS) = 0.51 inches *Unit basin storage volume from Figure B-2, B-3, or B-4, based on slope*
g Determine the Adjusted Unit Basin Storage Volume for the site:
Adjusted UBS = 0.55 inches *Adjusted UBS = Rain Gage Correction Factor x Unit Basin Storage Volume*
h Determine the Design Volume:
Design Volume = 784 cubic feet *Design Volume = Adj. Unit Basin Storage Volume x Total Drainage Area*

Step 4 Determine the Design Rainfall Intensity (Uniform Intensity Approach), Section III.C. Step 3) which is 0.2 in/hr:
Design Rainfall Intensity = 0.20 in/hr

Step 5 Assume that the rain event that generates the Adjusted Unit Basin Storage Volume of runoff occurs at the Design Rainfall Intensity for the entire length of the storm. Calculate the duration of the storm by dividing the Adjusted Unit Basin Storage Volume by the Design Rainfall Intensity. In other words, determine the amount of time required for the Adjusted Unit Basin Storage Volume to be achieved at the design intensity rate.
Duration = 2.74 hours *Adjusted UBS ÷ Design Rainfall Intensity*

Step 6 Make a preliminary estimate of the surface area of the treatment measure:
Try a preliminary surface area estimate = 417.60 Square feet *2% of total drainage area*
BMP Surface Area = 467 Square feet

Step 7 Calculate the volume of runoff that filters through the bioteatment soil at a rate of 5 inches per hour (the design surface loading rate for bioretention facilities), for the duration of the storm calculated in Step 5.
Volume of Treated Runoff = 533 cubic feet *Surface Area x Duration*

Step 8 Calculate the portion of the water quality design (WQD) volume remaining after treatment is accomplished by filtering through the bioteatment soil.
The result is the amount that must be stored in the ponding area above the bioretention surface area estimated in Step 6.
Volume in Ponding Area = 251

Step 9 Calculate the depth of the volume in the ponding area by dividing this volume by the estimated surface area in Step 6.
Depth of Ponding = 6 inches
The average ponding depth is acceptable
The range of allowable ponding depths in a bioretention facility or flow-through planter is between 0.5 and 1.0 feet (6 and 12 inches)
0.5 feet is recommended

BIORETENTION 3

Instructions: Complete this worksheet for each Drainage Management Area of the project that has a combination flow- and volume-based treatment measure. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

Worksheet for Sizing Flow- and Volume-Based Treatment Measures (Combination Flow and Volume Approach)

Stormwater Treament Measure: Bioretention area

For bioretention areas and flow-through planters, the following approach may be used to take into consideration both the flow of stormwater through the planting media and the volume of stormwater in the surface ponding area.

Step 1 Determine the contributing drainage area to the treatment measure:
Drainage Area = 9204 square feet

Step 2 Determine the Percent Imperviousness of the drainage area.
Enter the amount of surface area draining to the BMP:
a Impervious Area = 8111 square feet *Includes rooftops, hardscape, streets, and sidewalks, etc.*
b Pervious Area = 1093 square feet
% Imperviousness = 88 %

Step 3 Determine the required treatment volume (using Adopted CASQA Stormwater BMP Handbook Approach).
a Find the mean annual precipitation at the site (MAPsite).
Estimate where the site is on Figure B-1 and estimate the mean annual precipitation in inches from the rain line (isopleth) nearest to the project site.
Interpolate between isopleths if necessary. Click here for map (Figure B-1)
MAP_site = 15 inches *Site Mean Annual Precipitation*
b Identify the reference rain gage closest to the project site (San Jose Airport, Palo Alto, or Mergan Hill).
Closest Reference Rain Gage: San Jose Airport
MAP_gage = 13.9 inches *Reference Gage Mean Annual Precipitation*
c Determine the rain gage correction factor for the precipitation at the site from Step 3 and Step 4.
MAP correction factor = 1.08 *Correction factor = MAP site/MAP gage*
d Identify the representative soil type for the drainage area.
Identify from Figure B-1 or from site soils data, the soil type that is representative of the previous portion of the project (see dropdown menus).
Click here for map (Figure B-1)
Site Soil Type = Clay (D) *If soil will be compacted during site preparation and grading, the soil's infiltration rate will be decreased. Modify your answer to a soil with a lower infiltration rate)*
Does the site planning allow for protection of natural areas, vegetation, and soils so that the soils outside the building footprint are not graded/compacted?
No
If your answer is no, and the soil will be compacted during site preparation and grading, the soil's infiltration ability will be decreased. Modify your answer to a soil with a lower infiltration rate (e.g., Silt Loam to Clay Loam or Clay).
e Determine the average slope for the drainage area:
Average Slope (%) = 0.5
f Determine the unit basin storage volume from sizing curves:
Unit Basin Storage (UBS) = 0.53 inches *Unit basin storage volume from Figure B-2, B-3, or B-4, based on slope*
g Determine the Adjusted Unit Basin Storage Volume for the site:
Adjusted UBS = 0.58 inches *Adjusted UBS = Rain Gage Correction Factor x Unit Basin Storage Volume*
h Determine the Design Volume:
Design Volume = 440 cubic feet *Design Volume = Adj. Unit Basin Storage Volume x Total Drainage Area*

Step 4 Determine the Design Rainfall Intensity (Uniform Intensity Approach), Section III.C. Step 3) which is 0.2 in/hr:
Design Rainfall Intensity = 0.20 in/hr

Step 5 Assume that the rain event that generates the Adjusted Unit Basin Storage Volume of runoff occurs at the Design Rainfall Intensity for the entire length of the storm. Calculate the duration of the storm by dividing the Adjusted Unit Basin Storage Volume by the Design Rainfall Intensity. In other words, determine the amount of time required for the Adjusted Unit Basin Storage Volume to be achieved at the design intensity rate.
Duration = 2.89 hours *Adjusted UBS ÷ Design Rainfall Intensity*

Step 6 Make a preliminary estimate of the surface area of the treatment measure:
Try a preliminary surface area estimate = 243.33 Square feet *2% of total drainage area*
BMP Surface Area = 253 Square feet

Step 7 Calculate the volume of runoff that filters through the bioteatment soil at a rate of 5 inches per hour (the design surface loading rate for bioretention facilities), for the duration of the storm calculated in Step 5.
Volume of Treated Runoff = 304 cubic feet *Surface Area x Duration*

Step 8 Calculate the portion of the water quality design (WQD) volume remaining after treatment is accomplished by filtering through the bioteatment soil.
The result is the amount that must be stored in the ponding area above the bioretention surface area estimated in Step 6.
Volume in Ponding Area = 136

Step 9 Calculate the depth of the volume in the ponding area by dividing this volume by the estimated surface area in Step 6.
Depth of Ponding = 6 inches
The average ponding depth is acceptable
The range of allowable ponding depths in a bioretention facility or flow-through planter is between 0.5 and 1.0 feet (6 and 12 inches)
0.5 feet is recommended

BIORETENTION A

Instructions: Complete this worksheet for each Drainage Management Area of the project that has a combination flow- and volume-based treatment measure. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

Worksheet for Sizing Flow- and Volume-Based Treatment Measures (Combination Flow and Volume Approach)

Stormwater Treament Measure: Bioretention area

For bioretention areas and flow-through planters, the following approach may be used to take into consideration both the flow of stormwater through the planting media and the volume of stormwater in the surface ponding area.

Step 1 Determine the contributing drainage area to the treatment measure:
Drainage Area = 393 square feet

Step 2 Determine the Percent Imperviousness of the drainage area.
Enter the amount of surface area draining to the BMP:
a Impervious Area = 221 square feet *Includes rooftops, hardscape, streets, and sidewalks, etc.*
b Pervious Area = 172 square feet
% Imperviousness = 56 %

Step 3 Determine the required treatment volume (using Adopted CASQA Stormwater BMP Handbook Approach).
a Find the mean annual precipitation at the site (MAPsite).
Estimate where the site is on Figure B-1 and estimate the mean annual precipitation in inches from the rain line (isopleth) nearest to the project site.
Interpolate between isopleths if necessary. Click here for map (Figure B-1)
MAP_site = 15 inches *Site Mean Annual Precipitation*
b Identify the reference rain gage closest to the project site (San Jose Airport, Palo Alto, or Mergan Hill).
Closest Reference Rain Gage: San Jose Airport
MAP_gage = 13.9 inches *Reference Gage Mean Annual Precipitation*
c Determine the rain gage correction factor for the precipitation at the site from Step 3 and Step 4.
MAP correction factor = 1.08 *Correction factor = MAP site/MAP gage*
d Identify the representative soil type for the drainage area.
Identify from Figure B-1 or from site soils data, the soil type that is representative of the previous portion of the project (see dropdown menus).
Click here for map (Figure B-1)
Site Soil Type = Clay (D) *If soil will be compacted during site preparation and grading, the soil's infiltration rate will be decreased. Modify your answer to a soil with a lower infiltration rate)*
Does the site planning allow for protection of natural areas, vegetation, and soils so that the soils outside the building footprint are not graded/compacted?
No
If your answer is no, and the soil will be compacted during site preparation and grading, the soil's infiltration ability will be decreased. Modify your answer to a soil with a lower infiltration rate (e.g., Silt Loam to Clay Loam or Clay).
e Determine the average slope for the drainage area:
Average Slope (%) = 2
f Determine the unit basin storage volume from sizing curves:
Unit Basin Storage (UBS) = 0.42 inches *Unit basin storage volume from Figure B-2, B-3, or B-4, based on slope*
g Determine the Adjusted Unit Basin Storage Volume for the site:
Adjusted UBS = 0.46 inches *Adjusted UBS = Rain Gage Correction Factor x Unit Basin Storage Volume*
h Determine the Design Volume:
Design Volume = 15 cubic feet *Design Volume = Adj. Unit Basin Storage Volume x Total Drainage Area*

Step 4 Determine the Design Rainfall Intensity (Uniform Intensity Approach), Section III.C. Step 3) which is 0.2 in/hr:
Design Rainfall Intensity = 0.20 in/hr

Step 5 Assume that the rain event that generates the Adjusted Unit Basin Storage Volume of runoff occurs at the Design Rainfall Intensity for the entire length of the storm. Calculate the duration of the storm by dividing the Adjusted Unit Basin Storage Volume by the Design Rainfall Intensity. In other words, determine the amount of time required for the Adjusted Unit Basin Storage Volume to be achieved at the design intensity rate.
Duration = 2.28 hours *Adjusted UBS ÷ Design Rainfall Intensity*

Step 6 Make a preliminary estimate of the surface area of the treatment measure:
Try a preliminary surface area estimate = 6.63 Square feet *2% of total drainage area*
BMP Surface Area = 10 Square feet

Step 7 Calculate the volume of runoff that filters through the bioteatment soil at a rate of 5 inches per hour (the design surface loading rate for bioretention facilities), for the duration of the storm calculated in Step 5.
Volume of Treated Runoff = 10 cubic feet *Surface Area x Duration*

Step 8 Calculate the portion of the water quality design (WQD) volume remaining after treatment is accomplished by filtering through the bioteatment soil.
The result is the amount that must be stored in the ponding area above the bioretention surface area estimated in Step 6.
Volume in Ponding Area = 5

Step 9 Calculate the depth of the volume in the ponding area by dividing this volume by the estimated surface area in Step 6.
Depth of Ponding = 7 inches
The average ponding depth is acceptable
The range of allowable ponding depths in a bioretention facility or flow-through planter is between 0.5 and 1.0 feet (6 and 12 inches)
0.5 feet is recommended

BIORETENTION B

Instructions: Complete this worksheet for each Drainage Management Area of the project that has a combination flow- and volume-based treatment measure. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

Worksheet for Sizing Flow- and Volume-Based Treatment Measures (Combination Flow and Volume Approach)

Stormwater Treament Measure: Bioretention area

For bioretention areas and flow-through planters, the following approach may be used to take into consideration both the flow of stormwater through the planting media and the volume of stormwater in the surface ponding area.

Step 1 Determine the contributing drainage area to the treatment measure:
Drainage Area = 722 square feet

Step 2 Determine the Percent Imperviousness of the drainage area.
Enter the amount of surface area draining to the BMP:
a Impervious Area = 607 square feet *Includes rooftops, hardscape, streets, and sidewalks, etc.*
b Pervious Area = 115 square feet
% Imperviousness = 84 %

Step 3 Determine the required treatment volume (using Adopted CASQA Stormwater BMP Handbook Approach).
a Find the mean annual precipitation at the site (MAPsite).
Estimate where the site is on Figure B-1 and estimate the mean annual precipitation in inches from the rain line (isopleth) nearest to the project site.
Interpolate between isopleths if necessary. Click here for map (Figure B-1)
MAP_site = 15 inches *Site Mean Annual Precipitation*
b Identify the reference rain gage closest to the project site (San Jose Airport, Palo Alto, or Mergan Hill).
Closest Reference Rain Gage: San Jose Airport
MAP_gage = 13.9 inches *Reference Gage Mean Annual Precipitation*
c Determine the rain gage correction factor for the precipitation at the site from Step 3 and Step 4.
MAP correction factor = 1.08 *Correction factor = MAP site/MAP gage*
d Identify the representative soil type for the drainage area.
Identify from Figure B-1 or from site soils data, the soil type that is representative of the previous portion of the project (see dropdown menus).
Click here for map (Figure B-1)
Site Soil Type = Clay (D) *If soil will be compacted during site preparation and grading, the soil's infiltration rate will be decreased. Modify your answer to a soil with a lower infiltration rate)*
Does the site planning allow for protection of natural areas, vegetation, and soils so that the soils outside the building footprint are not graded/compacted?
No
If your answer is no, and the soil will be compacted during site preparation and grading, the soil's infiltration ability will be decreased. Modify your answer to a soil with a lower infiltration rate (e.g., Silt Loam to Clay Loam or Clay).
e Determine the average slope for the drainage area:
Average Slope (%) = 2
f Determine the unit basin storage volume from sizing curves:
Unit Basin Storage (UBS) = 0.52 inches *Unit basin storage volume from Figure B-2, B-3, or B-4, based on slope*
g Determine the Adjusted Unit Basin Storage Volume for the site:
Adjusted UBS = 0.56 inches *Adjusted UBS = Rain Gage Correction Factor x Unit Basin Storage Volume*
h Determine the Design Volume:
Design Volume = 34 cubic feet *Design Volume = Adj. Unit Basin Storage Volume x Total Drainage Area*

Step 4 Determine the Design Rainfall Intensity (Uniform Intensity Approach), Section III.C. Step 3) which is 0.2 in/hr:
Design Rainfall Intensity = 0.20 in/hr

Step 5 Assume that the rain event that generates the Adjusted Unit Basin Storage Volume of runoff occurs at the Design Rainfall Intensity for the entire length of the storm. Calculate the duration of the storm by dividing the Adjusted Unit Basin Storage Volume by the Design Rainfall Intensity. In other words, determine the amount of time required for the Adjusted Unit Basin Storage Volume to be achieved at the design intensity rate.
Duration = 2.81 hours *Adjusted UBS ÷ Design Rainfall Intensity*

Step 6 Make a preliminary estimate of the surface area of the treatment measure:
Try a preliminary surface area estimate = 18.21 Square feet *2% of total drainage area*
BMP Surface Area = 20 Square feet

Step 7 Calculate the volume of runoff that filters through the bioteatment soil at a rate of 5 inches per hour (the design surface loading rate for bioretention facilities), for the duration of the storm calculated in Step 5.
Volume of Treated Runoff = 23 cubic feet *Surface Area x Duration*

Step 8 Calculate the portion of the water quality design (WQD) volume remaining after treatment is accomplished by filtering through the bioteatment soil.
The result is the amount that must be stored in the ponding area above the bioretention surface area estimated in Step 6.
Volume in Ponding Area = 10

Step 9 Calculate the depth of the volume in the ponding area by dividing this volume by the estimated surface area in Step 6.
Depth of Ponding = 6 inches
The average ponding depth is acceptable
The range of allowable ponding depths in a bioretention facility or flow-through planter is between 0.5 and 1.0 feet (6 and 12 inches)
0.5 feet is recommended

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

DATE:	AUGUST 1, 2024
SCALE:	AS NOTED
DRAWN:	DSK, MTM
DESIGNED:	DSK, MTM
ENGINEER:	DSK
MANAGER:	DSK

NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER — DILIP S. KUSHWAHA — C 51620 — STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:

GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017

90 E. LATIMER AVENUE

90 EAST LATIMER HOMES

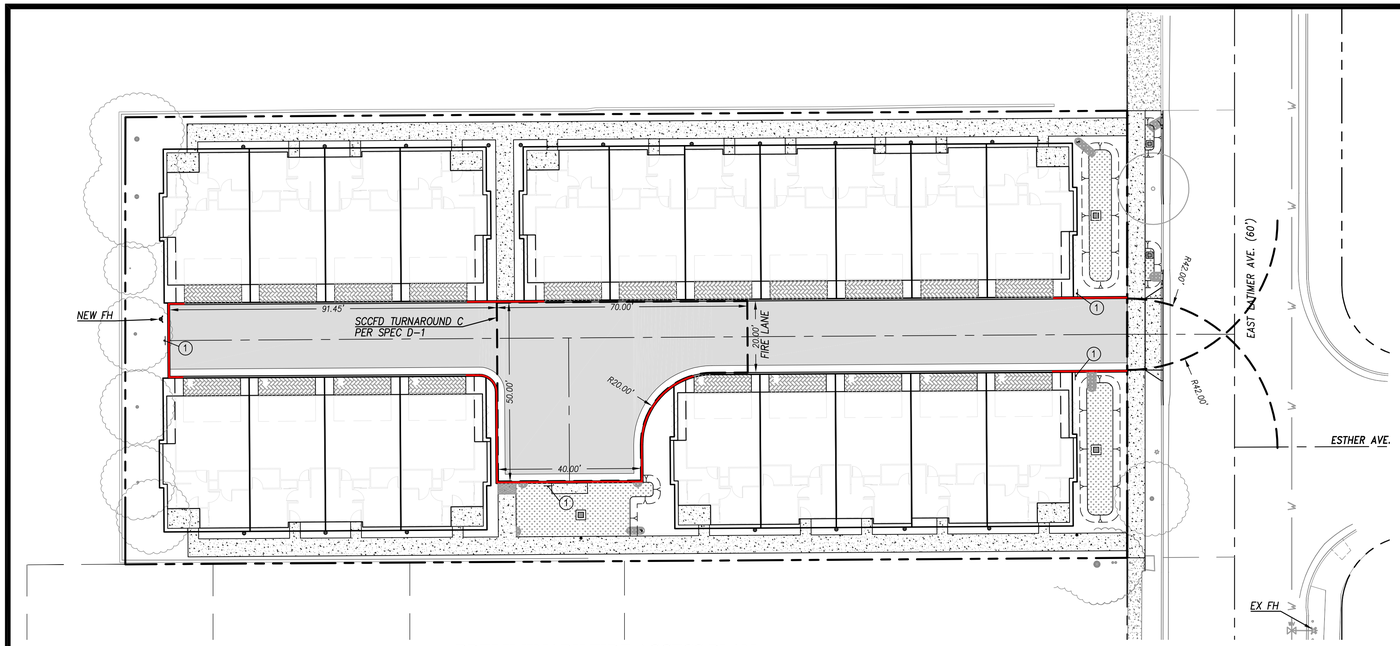
PRELIMINARY STORMWATER CONTROL PLAN

CITY OF CAMPBELL COUNTY OF SANTA CLARA CALIFORNIA

SHEET NO. TM5

5 OF 6 SHEETS

JOB NO. 2024-072



PRELIMINARY FIRE ACCESS PLAN
SCALE: 1"=20'

FIRE LANE LEGEND

① R26F (CA)

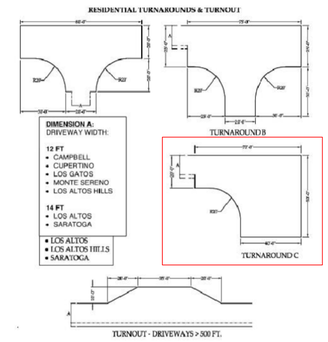
RED CURB FIRE LANE MARKING PER SCCFD STD. A-6

NO STOPPING FIRE LANE
① R26F (CA)
CA MUTCD

SANTA CLARA COUNTY FIRE DEPARTMENT
14700 Winchester Blvd., Los Gatos, CA 95032 | (408) 378-4010 | www.sccfd.org

X. TURNAROUNDS:

Turnarounds are required for all driveways with a length in excess of 150 feet.



NOTE: Turnarounds cannot exceed 5% in any one direction.

SD&S D-1/bh/04.27.21 Driveway Turnaround 4 of 4

Serving Santa Clara County and the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga.

COPYRIGHT NOTE:

COPYRIGHT © STERLING CONSULTANTS ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF STERLING CONSULTANTS. COPIES OF THIS DRAWING WITHOUT AN ORIGINAL SIGNATURE AND STAMP ARE NOT VALID.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

DATE: AUGUST 1, 2024					
SCALE: AS NOTED					
DRAWN: DSK, MTM					
DESIGNED: DSK, MTM					
ENGINEER: DSK					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, SUITE NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8956

PREPARED FOR:

GRANITE RIDGE PROPERTIES
225 DEMETER ST
EAST PALO ALTO, CA 94303

APN: 279-38-017

90 E. LATIMER AVENUE

90 EAST LATIMER HOMES
PRELIMINARY FIRE ACCESS PLAN

CITY OF CAMPBELL COUNTY OF SANTA CLARA CALIFORNIA

SHEET NO. TM6
6 OF 6 SHEETS
JOB NO. 2024-072

PLANT SCHEDULE ⚠

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	WATER USE
TREES						
	ACER RUBRUM 'OCTOBER GLORY' STREET TREE	OCTOBER GLORY RED MAPLE	24" BOX		1	MEDIUM
SHRUBS						
	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY JAPANESE BARBERRY	5 GAL		3	LOW
	MAHONIA REPENS	CREEPING MAHONIA	5 GAL		77	LOW
	NANDINA DOMESTICA 'GULF STREAM'	GULF STREAM HEAVENLY BAMBOO	5 GAL		47	LOW
	PITTOSPORUM TENUIFOLIUM 'WRINKLED BLUE'	WRINKLED BLUE TAWHIWHI	15 GAL		4	MEDIUM
	PRUNUS CAROLINIANA `COMPACTA`	COMPACT CAROLINA CHERRY LAUREL	15 GAL		3	LOW
	RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN	5 GAL		20	LOW
GRASSES						
	FESTUCA MAIREI	ATLAS FESCUE	5 GAL		12	LOW
	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	5 GAL		8	LOW
PERENNIALS						
	ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW	5 GAL		41	LOW
	DIANELLA TASMANICA 'VARIEGATA'	VARIEGATED FLAX LILY	5 GAL		56	LOW
	DIETES VEGETA	AFRICAN IRIS	5 GAL		63	LOW
	LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON CREEPING LILYTURF	5 GAL		137	LOW
	SALVIA GREGGII 'DEEP RED'	DEEP RED AUTUMN SAGE	5 GAL		1	LOW
	TULBAGHIA VIOLACEA	SOCIETY GARLIC	5 GAL		14	LOW
	ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	5 GAL		2	VERY LOW
STORM WATER MANAGEMENT PLANTINGS						
	CAREX BARBARAE	SANTA BARBARA SEDGE	5 GAL		198	LOW
	JUNCUS PATENS `CARMAN'S GREY`	SPREADING RUSH	5 GAL		64	LOW
VINES						
	FICUS PUMILA	CREEPING FIG	5 GAL	STAKED	19	MEDIUM
	PARTHENOCISSUS TRICUSPIDATA 'VEITCHII'	BOSTON IVY	5 GAL	STAKED	33	MEDIUM

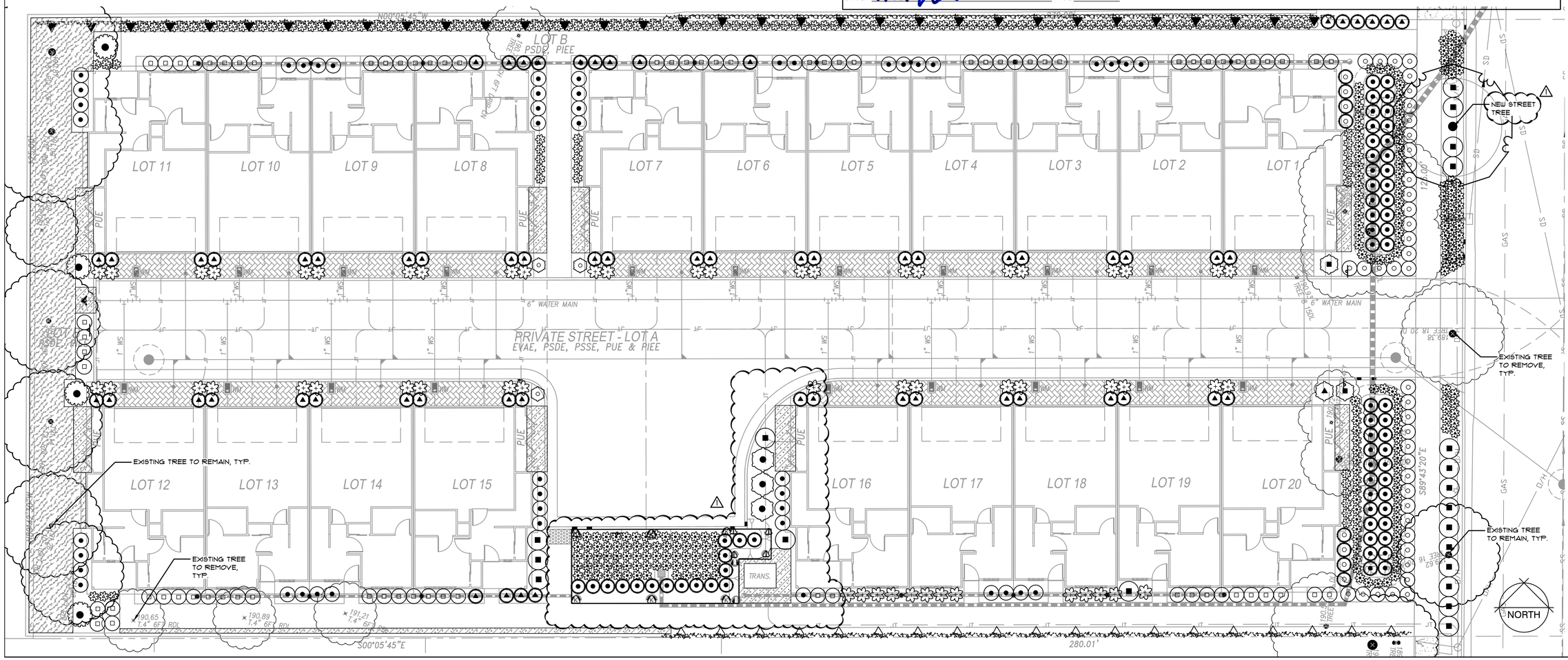
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	QTY	WATER USE
MATERIALS							
	2" DEPTH 1-1/2" DRAIN ROCK PLACE OVER LANDSCAPE FABRIC		---			596 SF	
	BARK MULCH 'WALK-ON' PLACE OVER LANDSCAPE FABRIC	3`` DEPTH	---			1,223 SF	

GENERAL NOTES:

1. STREET TREES SHOWN IN THE PUBLIC RIGHT-OF-WAY ARE FOR INFORMATION ONLY. THE PLANNING PERMIT DOES NOT AUTHORIZE THE INSTALLATION OR REMOVAL OF TREES IN THE PUBLIC RIGHT OF WAY. ACTUAL STREET TREE LOCATION WILL BE DETERMINED BY PUBLIC WORKS AT THE IMPLEMENTATION STAGE ON THE PUBLIC IMPROVEMENT PLAN. THE INSTALLATION OR REMOVAL OF THE STREET TREES REQUIRES A PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS. THE CITY ARBORIST WILL SPECIFY THE SPECIES
2. STORM WATER TREATMENT PLANTERS ARE TO INCLUDE 3 INCHES OF COMPOSTED, NON-FLOATABLE MULCH IN AREAS BETWEEN STORM WATER TREATMENT PLANTINGS AND SIDE SLOPES
3. ⚠ ALL PLANTINGS DESIGNATED FOR STORMWATER TREATMENT AREAS ARE CONSISTENT WITH APPENDIX D OF THE C.3 STORM WATER HANDBOOK PUBLISHED BY THE SANTA CLARA VALLEY URBAN POLLUTION PREVENTION PROGRAM

"I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN."

SIGNED THP DATE 8/2/24



THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title

PLANTING PLAN

Seal

LICENSED LANDSCAPE ARCHITECT — THOMAS H. PHELPS — 08/31/25 Renewal date — STATE OF CALIFORNIA

No.	Date	Revision
⚠ 08/02/24	PLAN CHK CMNT PC1	

Project Mgr.: THP
Drawn By: THP
Scale: 1"=10'
Date: 08/02/24
File Name: 24-022

Sheet No.: L1 of _____ sheets

BUILDING PERMIT PC1 - 08/02/24

2024-08-01 09:05

⚠ VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	3.54	1.23	30.3	44.6	0.96 IN/H
2	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	6.13	0.45	31.1	41.0	0.96 IN/H
3	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	8.82	0.75	33.0	51.8	0.96 IN/H
4	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	7.14	0.25	31.5	48.8	0.96 IN/H
5	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	3.2	0.1	28.9	43.6	0.96 IN/H
6	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	5.34	0.78	31.0	46.8	0.96 IN/H
7	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	4.59	0.56	30.3	45.6	0.96 IN/H
8	HUNTER ICV-G	1"	SHRUB ROTARY	2.13	0.04	32.2		0.4 IN/H
9	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	14.34	4.67	40.3		0.96 IN/H
10	HUNTER ICZ-101-25	1"	AREA FOR DRIPLINE	4.01	1.22	30.6	45.2	0.97 IN/H
11	HUNTER ICV-G	1"	BUBBLER	1	0.01	27.0		1.97 IN/H

⚠ MUELO WATER USE CALCULATIONS

Job Name: Latimer TH, Campbell, CA

Date: 08/02/2024

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o): 44.2 — Project Type: Residential — 0.55

Rain Fall (Inches): Usable Rain Fall (Inches): 0

Zone#	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)[D]	% Landscape Area
	Regular Landscape Areas								
1	SHRUB - L	0.2	Drip	0.81	0.25	351	87	2375	5.52%
2	SHRUB - M	0.4	Drip	0.81	0.49	613	303	8296	9.65%
3	SHRUB - L	0.2	Drip	0.81	0.25	882	218	5968	13.88%
4	STRM WTR - L	0.4	Drip	0.81	0.49	714	353	9662	11.24%
5	SHRUB - L	0.2	Drip	0.81	0.25	320	79	2165	5.04%
6	STRM WTR - L	0.4	Drip	0.81	0.49	534	264	7227	8.40%
7	SHRUB - M	0.4	Drip	0.81	0.49	459	227	6212	7.22%
8	STRM WTR - L	0.4	Rotary Nozzle	0.75	0.53	550	293	8039	8.65%
9	SHRUB - L	0.2	Drip	0.81	0.25	1,453	359	9832	22.86%
10	SHRUB - L	0.2	Drip	0.81	0.25	379	94	2564	5.96%
11	TREE - M	0.4	Bubblers	0.81	0.25	100	25	677	1.57%
					Totals	6355	2300	63016	100.00%
							ETWU Total	63016	
							Maximum Allowed Water Allowance (MAWA)[E]	95784	

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	2300
Total Area	6355
Average ETAF	0.32

All Landscape Areas

Total ETAF x Area	2300
Total Area	6355
Average ETAF	0.32

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

ETWU ACRE FEET	0.193388
MAWA ACRE FEET	0.293950
% ETWU OF MAWA	0.66
PASS:	YES

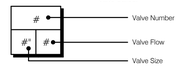
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
1000	HUNTER MP1000 PRS-06-PRS30-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 30 PSI, MP ROTATOR NOZZLE ON PRS30 BODY. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICZ-101-25 DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 25PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN.
	PIPE TRANSITION POINT ABOVE GRADE PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RISER TO ABOVE GRADE INSTALLATION.
	AREA TO RECEIVE DRIPLINE HUNTER ECO-WRAP-17 0.6GPH FLEECE WRAPPED INLINE EMITTER TUBING, WITHOUT THE BLANKET ECO-MAT. EVENLY DISPERSES WATER FROM UNDER THE SURFACE. EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. SPECIFY PLD-LOC FITTING.
	AREA TO RECEIVE DRIPLINE HUNTER HDL-06-12-CV HDL-06-12-CV: HUNTER DRIPLINE W/ 0.6 GPH EMITTERS AT 12" O.C. CHECK VALVE, DARK BROWN TUBING WITH GRAY STRIPING. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. INSTALL WITH HUNTER PLD BARBED OR PLD-LOC FITTINGS.

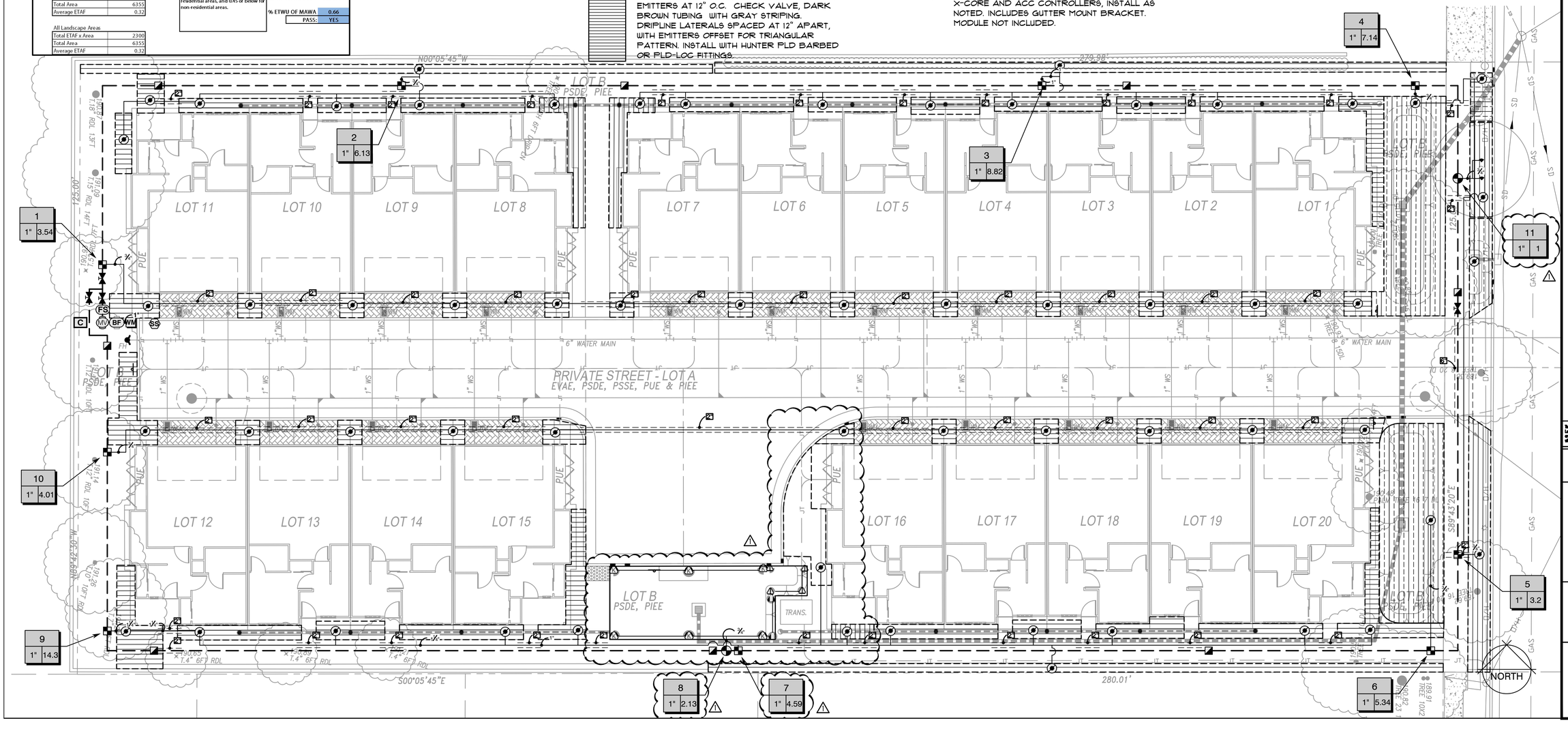
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	HUNTER ICV-G 1IN., 1-1/2IN., 2IN., AND 3IN. PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.
	HUNTER HQ-44RC QUICK COUPLER VALVE, YELLOW RUBBER COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT INLET, 2-PIECE BODY.
	NIBCO T-113 CLASS 125 BRONZE GATE SHUT OFF VALVE WITH WHEEL HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 1/4IN. - 3IN.
MV	HUNTER ICV-G MASTER VALVE 1" 1IN., 1-1/2IN., 2IN., AND 3IN. PLASTIC ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER
C	HUNTER A2C-1200-PP 12-STATION CONTROLLER IN AN OUTDOOR PLASTIC PEDESTAL
SS	HUNTER WSS-SEN WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER X-CORE AND ACC CONTROLLERS, INSTALL AS NOTED. INCLUDES GUTTER MOUNT BRACKET. MODULE NOT INCLUDED.
FS	CREATIVE SENSOR TECHNOLOGY FSI-T10-001 1IN. PVC TEE TYPE FLOW SENSOR W/SOCKET ENDS, CUSTOM MOUNTING TEE AND ULTRA-LIGHTWEIGHT IMPELLER ENHANCES LOW FLOW MEASUREMENT. 2 WIRE DIGITAL OUTPUT COMPATIBLE W/ALL IRRIGATION CONTROLLERS. FLOW RANGE: .86 GPM - 52 GPM.
WM	WATER METER 1" STATIC PRESSURE ASSUMED. VERIFY PRIOR TO BEGINNING ANY LANDSCAPE WORK
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40

Valve Callout



"I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE IRRIGATION PLAN."

SIGNED THP DATE 8/2/24



THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

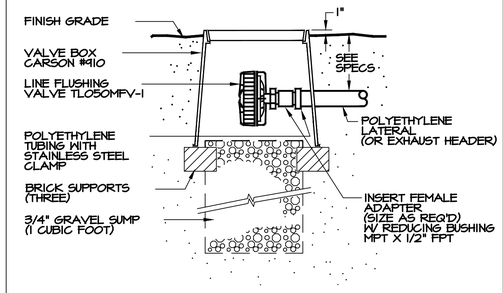
Sheet Title: IRRIGATION PLAN

Seal: LICENSED LANDSCAPE ARCHITECT — THOMAS H. PHELPS — 08/31/2024 — STATE OF CALIFORNIA

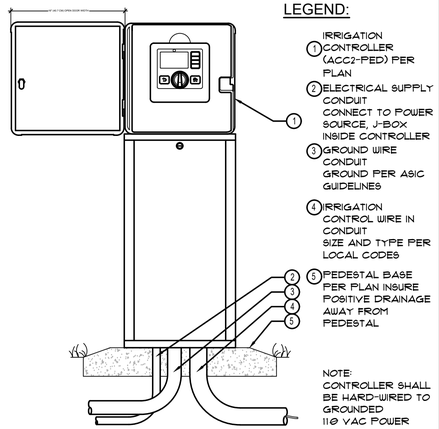
No.	Date	Revision
1	08/02/24	PLAN CHK CMNT PC1

Project Mgr.: THP	Sheet No.:
Drawn By: THP	
Scale: 1"=10'	L2
Date: 5/29/24	
File Name: 24-022	of _____ sheets

BUILDING PERMIT PC1 - 08/02/24

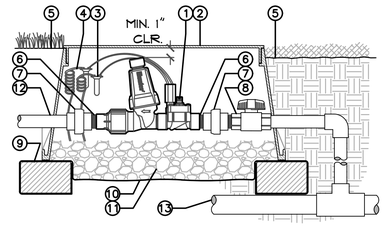


(PLUMBED TO POLY) SECTION - NO SCALE



LEGEND

1. HUNTER REMOTE CONTROL VALVE (PCZ) WITH FILTER REGULATOR
2. IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
3. WATERPROOF CONNECTORS (2) 18"-24" COILED WIRE TO CONTROLLER
4. FINISH GRADE AT ADJACENT
5. SURFACE (TURF OR MULCH)
6. SCH. 80 CLOSE NIPPLE, MATCH SIZE TO VALVE
7. PVC SLIP X FPT UNION
8. ISOLATION VALVE, SIZE AND TYPE PER PLAN
9. BRICK SUPPORTS (4)
10. FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
11. 3/4" WASHED GRAVEL - 4" MIN. DEPTH
12. IRRIGATION LATERAL
13. MAINLINE LATERAL AND FITTINGS

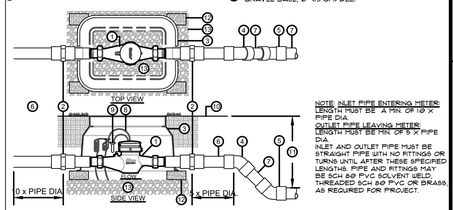


DETAIL - NO SCALE

FLOW METER SPECIFICATIONS

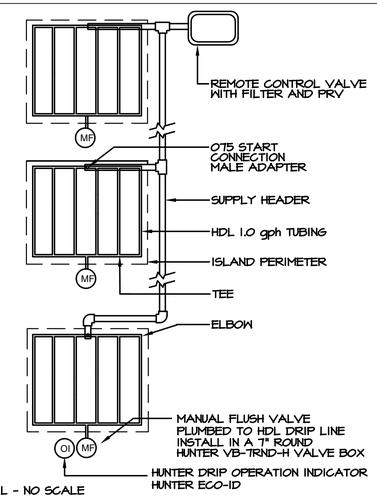
DETAIL LEGEND:

1. HUNTER HC FLOW METER HC-150 WITH UNION CONNECTIONS
2. SCH 80 PVC FEMALE ADAPTER (6 x 1)
3. RECTANGULAR VALVE BOX PER SPECIFICATIONS
4. SCH 80 PVC 45 DEGREE ELBOW (6 x 6) TO LOWER MAIN LINE TO PROPER DEPTH (SIZE FOR LARGER MAIN LINE AS NEEDED)
5. SCH 80 PVC 45 DEGREE ELBOW (6 x 6) TO LOWER MAIN LINE TO PROPER DEPTH
6. 2" DIA. (50 MM) MAIN LINE AT INLET & OUTLET
7. MAIN LINE TO SYSTEM (SEE LEGEND AND PLANS FOR TYPE AND SIZE)
8. TWO WIRES TO FLOW SENSOR TERMINALS AT CONTROLLER: MIN. 18 AWG-UP (0.08 MM²) SHIELDED WIRE WITH DIFFERENT COLOR FROM CONTROL/COMMON WIRE
9. WEATHERPROOF WIRE CONNECTOR
10. FINISH GRADE
11. SPECIFIED SOIL COVER (SEE LEGEND)
12. COMMON BRICK
13. GRAVEL BASE, 6" (15 CM) DEEP



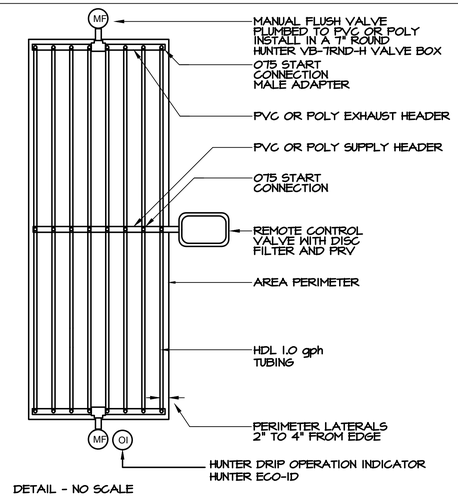
NOTE: INLET PIPE ENTERING METER: LENGTH MUST BE A MIN. OF 10 x PIPE DIA.
OUTLET PIPE LEAVING METER: LENGTH MUST BE MIN. OF 5 x PIPE DIA.
INLET AND OUTLET PIPE MUST BE STRAIGHT PIPE WITH NO FITTINGS OR TURNS UNTIL AFTER THESE SPECIFIED LENGTHS. PIPE AND FITTINGS MAY BE SCH 80 PVC SOLVENT WELD, THREADED SCH 80 PVC OR BRASS, AS REQUIRED FOR PROJECT.

DETAIL - NO SCALE



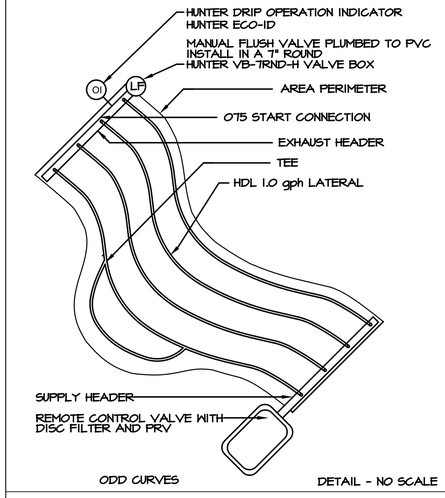
DETAIL - NO SCALE

HDL ISLAND LAYOUT



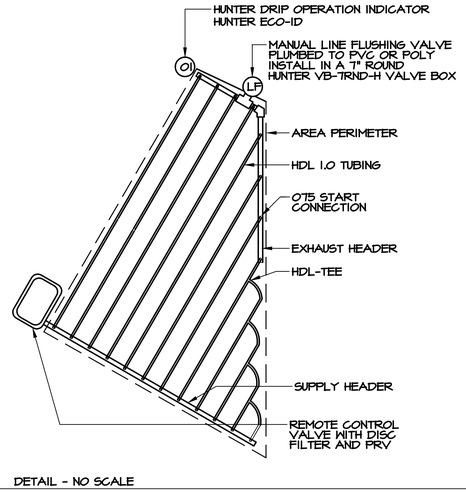
DETAIL - NO SCALE

HDL CENTER FEED LAYOUT



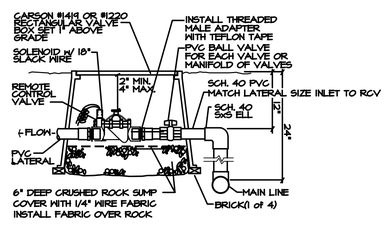
ODD CURVES DETAIL - NO SCALE

HDL IRREGULAR AREAS



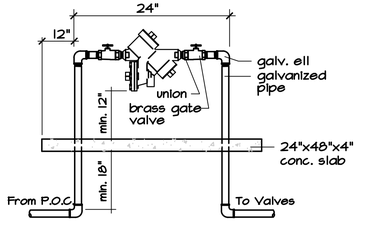
DETAIL - NO SCALE

HDL TRIANGULAR AREAS



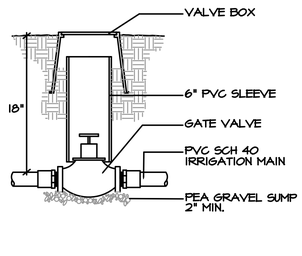
DETAIL - NO SCALE

IRRIGATION CONTROLLER



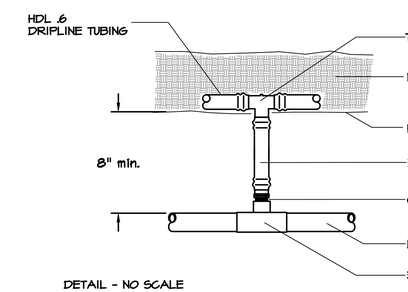
DETAIL - NO SCALE

DRIP CONTROL ZONE KIT (PCZ-101-LF)



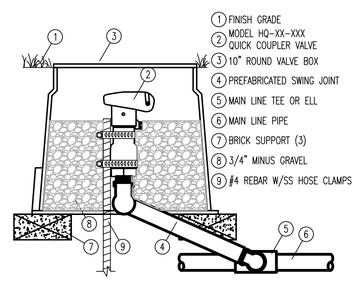
DETAIL - NO SCALE

HC-075 FLOW METER (3/4")



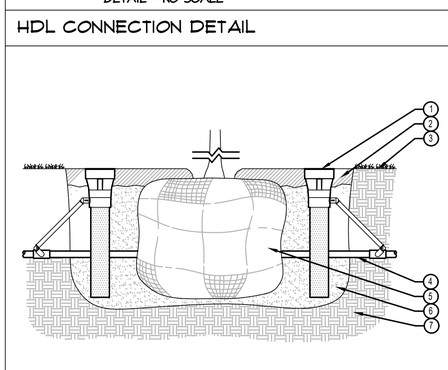
DETAIL - NO SCALE

REMOTE CONTROL VALVE



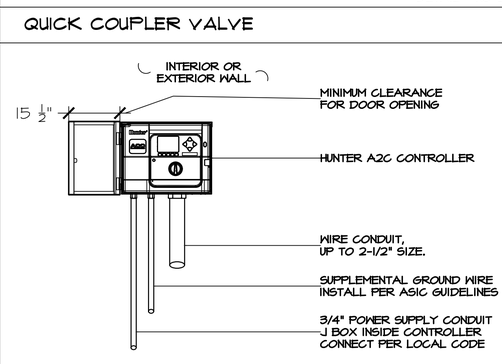
DETAIL - NO SCALE

REDUCED PRESSURE TYPE BPD



HDL CONNECTION DETAIL

QUICK COUPLER VALVE



DETAIL - NO SCALE

ROOT WATERING ZONE DETAIL

SOLAR SYNC WEATHER SENSOR

DETAIL - NO SCALE

THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

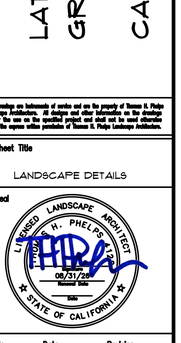
LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title

LANDSCAPE DETAILS

Seal



No.	Date	Revision
△		
△		
△		
△		
△		

Project Mgr.: THP
Drawn By: THP
Scale:
Date:
File Name:

Sheet No.: L3

of _____ sheets

BUILDING PERMIT PCI - 08/02/24

SECTION 02810

IRRIGATION SYSTEM

PART 1 - GENERAL

For the purpose of these specifications, the Owner's Representative shall be defined as the Landscape Architect, The Project Superintendant, and or the Architect.

1.01 SECTION INCLUDES

A. The work included under this Section consists of furnishing all fees and permits, all labor, tools, materials, equipment, transportation, and services required to complete the installation of the Underground Sprinkler Irrigation system, including revisions to existing systems, as shown on the Drawings and as specified in this section.

B. Related Sections:

1. Section 2900 - Planting: Provision of requirements for fine grading of planting areas.

1.02 REFERENCES

A. National Electric Code (NEC).

B. Uniform Plumbing Code (UPC).

C. Underwriters Laboratories Inc. (UL):

1. BMD - Building Materials Directory.

1.03 QUALITY ASSURANCE

A. All work and materials shall be in full accordance with the latest rules and regulations of the National Electric Code, the Uniform Plumbing Code, and other applicable State or local laws or regulations. Nothing in these Drawings or Specifications is to be construed to permit work not conforming to these Codes.

B. When the Specifications call for materials or construction of a better quality or larger size than required by the above mentioned rules and regulations, the provision of the Specifications shall take precedence over the requirements of the said rules and regulations.

C. The Contractor shall furnish, without any extra charge, any additional material and labor when required by the compliance mentioned on these particular Specifications or shown on the Drawings.

D. The Contractor shall erect and maintain barricades, guards, warning signs, and lights as necessary or required by OSHA regulations and as required by these contract documents for the protection of the public or workmen.

E. Any existing buildings, equipment, piping, sewers, sidewalks, landscaping or other Site improvements damaged by the Contractor during the course of his work shall be replaced or repaired by the Contractor in a manner satisfactory to the Owner's representative and at the Contractor's own expense, and before the final payment is made. The Contractor shall be responsible for damage caused by leaks in the piping systems being installed or having been installed by him. He shall repair, at his own expense, all damage so caused, in a manner satisfactory to the Owner's representative.

F.Installing company and its job site superintendent shall have at least 3 years immediate and continuous experience installing systems of similar design and type of equipment.

G. The Contractor shall obtain and pay all fees, licenses, and permits required for the Project.

H. Before making bid, examine the Site carefully, verifying dimensions and other Site conditions in relation to the Plans. The Contractor is responsible for informing himself of all conditions under which work is to be done before submitting his bid.

I. In case of an apparent discrepancy among Drawings, Specifications, and actual Site conditions, bring the discrepancy to the attention of the Owner's Representative or Architect, in writing.

J. Attend pre-construction conferences, if requested to do so.

1.04 PERFORMANCE REQUIREMENTS

A. Sprinkler System:

1. Construct sprinkler system to sizes, grades, and locations indicated on the Drawings.

2. Sprinkler lines indicated on the Drawings are essentially diagrammatic.

3. Establish exact locations of sprinkler heads, shrub heads, and similar type items, at time of construction.

4. Do not exceed typical spacings of sprinkler heads indicated on the Drawings.

1.05 SUBMITTALS

A. Submit and cut sheets provide for all irrigation system components.

B. Record Drawings

1. The Contractor shall maintain, in good order, in the field office, one complete Set of Sprinkler Drawings showing all water lines, sprinklers, valves, controllers, stub-outs, and sleeves. In the event any work is not installed as indicated on the Drawings, such work shall be immediately corrected and dimensioned accurately from the building walls on these Record Drawings.

2. All underground stub-outs and sleeves for future connections shall be located and dimensioned accurately from the building walls on these Record Drawings.

3. Upon completion of the work, and prior to final acceptance, the Contractor shall obtain a duplicate vellum from the Owner's representative and neatly correct the vellum to show the 'As Built' conditions. Furnish these corrected vellums to the Owner's Representative.

C. Contract Closeout Submittals:

1. Submit to Owner's Representative

2. Project Record Documents:

a. After final acceptance of project, turn over record documents to the Owner's Representative.

3. Operation and Maintenance: Provide operation and maintenance manuals covering the system and its components.

4. Provide Owner's Representative with detailed typewritten instructions for Winter and Summer controller programming, including demonstration for Owner's maintenance personnel. Give controller instruction booklet to the Owner's Representative.

1.06 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping:

1. Deliver plastic pipe, fittings, and connectors to project site in unbroken bundles or rolls, packaged in such manner as to provide adequate protection for pipe ends, threaded or plain.

B. Storage and Protection

1. During construction and storage protect materials from damage and prolonged exposure to sunlight, excessive heat, and/or deleterious materials.

1.07 JOB CONDITIONS

A. Proceed with and complete irrigation work as rapidly as portions of Site become available, working within seasonal limitations.

B. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate as required.

C. Maintain grade stakes set by others until removal is mutually agreed on by parties concerned.

D. Make field measurements necessary to lay out work.

1.08 SUBSTITUTION AND VERIFICATION

A. Certain numbers on the Drawings and the Specifications are taken from the catalogues of the manufacturers named. The Contractor shall be responsible for verifying that listed numbers correspond to appropriate equipment currently available from the manufacturers.

B. Numbers on the Drawings refer to the basic equipment required and the Contractor shall be responsible for determining additional incidental parts necessary for the attachment or assembly of equipment within the system.

C. Requests for substitutes must be in writing and approved of by the Owner's Representative.

1.09 SEQUENCING AND SCHEDULING

A. Closing in Uninspected Work:

1. Do not allow nor cause any work to be covered or enclosed until it has been inspected, tested, and accepted by the Owner's Representative.

2. Should any work be enclosed or covered before such inspection and test, uncover such work at no additional cost to the Contract.

PART 2 - PRODUCTS

2.01 PVC PLASTIC PIPING AND FITTINGS

A. Exterior main lines (pressure lines): All main line piping is to be PVC SCH40 (ASTM 01784) plastic pipe. Use Type 1 Schedule 40 High Impact PVC solvent weld fittings.

B. Exterior lateral lines (non-pressure) shall be PVC Schedule 40 (ATM D 1785) plastic pipe with Type 1 Schedule 40 High Impact PVC solvent weld fittings.

C. Connections between mainlines and RCV's shall be of Schedule 80 PVC nipples and fittings as per Detail on Plan.

D. Plastic to metal connections shall be made with Schedule 80 male adapter or threaded nipple.

E. Plastic saddles and flange type fittings are not to be used.

2.02 GALVANIZED STEEL PIPE AND FITTINGS

A. Steel pipe shall be standard weight Schedule 40 as specified in Section 15252, mild steel pipe of domestic origin, galvanized, and shall be new and scale free. All nipples shall be of the same material.

B. Steel pipe fittings shall be heavy pattern, banded, galvanized malleable iron, threaded pipe fittings.

C. Nipples are to be of same material as pipe.

D. Crosses, bushings, and close nipples are not to be used.

E. All galvanized steel pipe and fittings occurring below grade, including to 6 inches above finish grade, are to be field wrapped with a PVC tape. The wrapping tape and technique are to be subject to Owner's Representative approval.

F. All dissimilar metal piping are to be joined with a dielectric fitting.

2.03 SLEEVES AND CHASES

A. All irrigation pipe sleeves and/or electrical chases shall be PVC Schedule 40 (ASTM D 1785). Size as required.

B. Class 1 and Class 2 electrical conductors are not to be placed in the same conduit.

2.04 SPRINKLER SYSTEM EQUIPMENT

A. The backflow prevention assembly, automatic sprinkler controller, control valves, and other miscellaneous equipment shall be as specified on the Plans and/or in the Sprinkler System Legend.

A. Sprinkler Heads:

1. Type and Sizes: Provide types and sizes with diameter (or radius) of throw, pressure, discharge, and any other designations as indicated on the Drawings.

2. For Each Particular Type: Provide from same manufacturer and mark with manufacturer's name and identification in such position that they can be identified without removing the sprinkler from the system.

B. Sprinkler Risers:

1. Rotor Pop-up Sprinklers: Are to have adjustable assembly (double swing joint) risers as indicated on the Drawings.

2. Stationary Pop-up Sprinklers: Are to have swing joint risers or as indicated on the Drawings.

2.05 CONTROL WIRE

A. Control wire shall be type UF, 600 volt, single conductor wire with PVC insulation 4\64 inches thick (minimum). Control wire shall be #14 single conductor solid copper wire. All control or 'hot' wires shall be of one color (RED) and all common or 'ground' wires shall be (WHITE). Common ground wires size shall be #12 single conductor.

B. Electrical wire connections shall be made with 3M Brand DBY Direct Bury Splice Kit. The electrical connector shall be a 'Scotchlok' DBY. The device shall be installed per manufacture's instructions and all applicable codes. The device shall be UL Listed as a Wire Connector System For Use With Underground Conductors.

2.06 AUTOMATIC CONTROLLER

A. Provide and install automatic irrigation controller in approximate location shown on the Drawings. The exact location will be determined on the Site by the Owner's Representative.

2.07 BACKFLOW PREVENTERS

A. Backflow prevention devices are to be installed as per plan details and specifications. Verify point of connection size and location in field. Contact Owner's Representative if contrary to plan.

2.08 VALVE BOXES

B. Valve boxes shall be Carson #1419-13 and Drip Zone valve boxes shall be Carson #1220 Jumbo Valve Box & Lid as manufactured by Carson Industries, Inc. and are to have bolt down lids, with bolts, with "RCV" cast on lid.

C. Install only one RCV or gate valve per valve box.

D. Install all valve boxes on a 6" pea gravel base.

2.09 MISCELLANEOUS EQUIPMENT AND MATERIALS

A. PVC pipe connections: Solvent cement and primer for solvent weld joints shall be of make and type approved by manufacturer of pipe and fittings. Cement shall be maintained at proper consistency throughout use.

B. Galvanized pipe connections: Pipe joint compound shall be 'Rectorseal' or equivalent, non-hardening, non-toxic material designed specifically for use on threaded connections in water-carrying pipe.

C. PVC threaded connections: Use Teflon tape or approved equal.

D. Provide the Owner, at completion of the maintenance period, three each of all operating and servicing keys, wrenches, and adjustment screwdrivers required for complete maintenance and operation of all heads and valves. Include all wrenches necessary for complete disassembly of all heads and valves.

PART 3 - EXECUTION

3.01 SUPERVISION AND WORKMANSHIP

A. The Contractor, personally or through an authorized and competent representative, shall supervise the work constantly and shall, as far as possible, keep the same foreman and workmen on the job from commencement to completion. The workmanship of the entire job shall in every way be first class, and only experienced and competent workmen shall be allowed on the job.

3.02 LAYOUT OF THE WORK

A. Stake out the irrigation system as shown on the Drawings. Any necessary changes from the original system shall be determined at this time. Verify location of existing underground utilities and make any necessary adjustments to avoid damage.

3.03 INSTALLATION PREPARATION

A. Schedule and coordinate placement of materials and equipment in a manner to complete the work as quickly as possible in conformance with construction and progress schedules.

B. Handling and Storage

1. Protect work and materials from damage during construction and storage.

2. Plastic pipe shall be handled carefully and protected from prolonged exposure to sunlight.

3. Grade areas to be irrigated to final contours before installation of irrigation system.

3.04 COORDINATION OF WORK

A. Coordinate work with other trades. In particular, schedule placement of irrigation and wiring (Schedule 40) sleeves prior to paving work.

3.05 EXCAVATING, TRENCHING AND BACKFILL

A. Excavation and Backfill for Sprinkler Lines:

1. Excavation:
a. General: Place when pipe and soil temperatures are approximately the same.
2. Backfill:
3. Compaction:
a. Top 6 inches in landscaped areas may be 85 percent.

THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title
LANDSCAPE SPECIFICATIONS

Seal
LICENSED LANDSCAPE ARCHITECT
THOMAS H. PHELPS
08/31/24
Renewal Date
STATE OF CALIFORNIA

No.	Date	Revision
△		
△		
△		
△		
△		

Project Mgr.: THP
Drawn By: THP
Scale:
Date:
File Name:
Sheet No.: L4
of _____ sheets

BUILDING PERMIT PCI - 08/02/24

B. Excavation shall be in all cases ample space for joining. Provide warning signs and barricades as needed for open trenches. Bottom of trenches shall provide continuous support for pipe.

C. Make trenches for pipe lines deep enough to provide minimum cover from finish grade as follows:

1. 18 inches minimum cover over main lines to control valves and quick coupler valves, 24 inches under paving.
2. 18 inches minimum cover over control wires from controller to valves. 24 inches under paving.
3. 16 inches minimum cover over valve-controlled rotary sprinkler lateral lines. 24 inches under paving.
4. 12 inches minimum cover over valve controlled spray sprinkler lateral lines. 24 inches under paving.
5. When rocky conditions exist, as determined by the Owner's Representative, the bottom of all trenches shall have 3 inches of sand placed in them. Trenching depth shall be sufficient to allow for the 3 inches of bedding sand.

D. Restore surfaces, existing underground installations, or other Site improvements damaged or cut as a result of excavations, to original condition in a manner approved by the Owner's Representative.

E. Where other utilities interfere with irrigation trenching and pipe work, adjust the trench depth as instructed by the Owner's Representative.

F. No work on excavating, trenching, or backfilling shall be done when soil is muddy, as determined by the Owner's Representative.

3.06 PIPELINE ASSEMBLY / PLASTIC PIPE

A. All pipe shall be assembled free from dirt. Field cut ends shall be reamed only to full diameter, with rough edges and burrs removed.

B. Solvent weld joints: Assemble PVC pipe using primer, solvents, and methods in accordance with manufacturer's recommendations. Wipe excess cement off the outside of the joints.

C. For long pipe runs, 'snake' pipe from side to side in trench to allow for thermal expansion. Install pipe with manufacturer's labels face up for inspection before backfill.

` D. THREADED JOINTS

1. Field threading of plastic pipe or fittings is not permitted, factory formed threads only will be permitted.

2. All plastic to metal connections shall be made with PVC male adapters. All screwed joints shall have teflon tape applied to the male threads.

3. Where assembling threaded plastic fittings, take up joint no more than one full turn beyond hand tight. Use strap-eye friction wrench only; do not use metal jawed wrench.

E. Cap or plug openings as pipeline is assembled to prevent entrance of dirt or obstruction. Remove caps or plugs only when necessary to continue assembly.

F. Where pipes or control wires pass through sleeves, provide removable non-decaying seal at ends of sleeve to prevent entrance of earth.

G. Install concrete thrust blocks on the main line at all changes in pipe direction associated with PVC tee's, el's, and other fittings as needed and as per detail on the plans. Do not cover thrust blocks until fully acceptable to the Owner's Representative.

3.07 REMOTE CONTROL VALVES (RCV)

A. Install where shown and group together where practical. Limit one RCV per valve box. Locate in shrub or ground cover beds wherever possible.

B. The valve designation (i.e.: controller and station no.) shall be painted on the inside of each valve box lid.

C. Locate valves no closer than 12 inches from pavement or curbs, buildings, and walks.
D. Thoroughly flush main line before installing valve.

3.08 QUICK COUPLER VALVES (QCV)

A. Install in valve box in accordance with Detail of Plan Sheet.

B. Install 12 inches from adjacent curb or concrete paving.

3.09 AUTOMATIC CONTROL WIRING

A. Run wires along main lines wherever practical. Tie wires in bundles with pipe wrapping tape at 20 foot intervals and allow slack for contraction between strapping. Place all above ground wiring in conduit.

B. Make connections with 3M Brand DBY Direct Bury Splice Kit, shall splice and effectively moisture seal two or more conductors. The electrical connector shall be a 'Scotchlok' DBY. The device shall be installed per manufacture's instructions and all applicable codes. The device shall be UL Listed as a Wire Connector System For Use With Underground Conductors.

C. Loop a minimum of three (3) feet of extra control wire and ground wire in each valve box and at all corners and at 200 foot intervals.

D. Splicing will be permitted only at valve locations or in junction boxes, equivalent to valve boxes, and approved by Engineer.

E. Where control lines pass under paving, or where interior wires are exposed, they shall pass through Schedule 40 PVC conduit.

3.10 AUTOMATIC CONTROLLER

A. The automatic sprinkler controller is to be a new automatic controller. Reference irrigation equipment legend. Contractor is to provide the following:

1. Furnish and install the new auto sprinkler controller, controller steel enclosure, and or enclosure concrete base as specified.

2. Provide all 100X electrical work required to heat the new controller.

3. Provide all 120 volt electrical work required to reconnect the existing systems control wires to the new auto controller.

4. Provide telephone service to controller location, if required per plan legend. Coordinate with installing contractor

1. Provide adequate electrical surge protection for the new automatic controller and as approved by the Owner's Representative.

3.11 SPRINKLER HEADS

A. General:

1. Set heads perpendicular to finished grades, unless otherwise indicated on the Drawings.

2. Sprinkler heads adjacent to Existing Walks, Curbs, or Other Paved Areas are to be set to grade, and as shown on the drawings.

3. Sprinkler heads in lawn areas where turf has not be established are to be set 2 inches above finished grade.

a. Lower heads installed in this manner to grade when turf is sufficiently established to allow walking on it without appreciable damage.

b. Complete lowering of heads within 30 calendar days after written notification by the Owner's Representative.

B. Flush lines thoroughly before installing heads, with the most distant circuit flushed last. Once the flushing water is clean, put on sprinkler heads, starting with the closest circuit to the vacuum breaker.

C. The Contractor shall be responsible for providing full and even coverage. Make all necessary adjustments for proper distribution and coverage.

D. Avoid overthrow onto windows and keep overthrow onto buildings and pavement to an absolute minimum.

E. Bring any potential problems to the attention of the Owner's Representative prior to completion of the work.

3.12 BACKFILLING

A. Use earth excavated from trenches, free from rocks or other deleterious material. Avoid any sharp objects adjacent to pipe which could cause damage. At the Contractor's option, rock-free imported topsoil may be used to backfill around piping.

B. All PVC piping is to be covered with a 3 inch layer of sand wherever the backfill is rocky in nature as determined by Owner's Representative.

C. The sprinkler system trenches are to be backfilled in 6 inch lifts and adequately compacted to prevent subsequent settling.

D. Finish grade areas of backfill to match adjacent grade, removing any rocks or debris from the Site. Obtain approval from the Owner's Representative for relocating any excess earth on Site.

E. If settlement occurs along trenches, make all necessary adjustments to bring irrigation system, soil and turf or paving to proper grade at no additional cost to the Contract.

3.13 FIELD QUALITY CONTROL

A. All testing to be in full compliance with the requirements of the specifications.

B. Trench Inspection and Main Line Pressure Test

1. The Contractor shall not backfill pressure main line trench until an open trench inspection has been conducted and approved.

2. Test all pressure lines and connections to quick coupler valves, remote control valves and gate valves under hydrostatic pressure of 120 pounds per square inch prior to installation of remote control valves.

3. Trench Inspection and Main Line Pressure Test

A. The Contractor shall not backfill pressure main line trench until an open trench inspection has been conducted and approved.

B. Test all pressure lines and connections to quick coupler valves, remote control valves and gate valves under hydrostatic pressure of 120 pounds per square inch prior to installation of remote control valves.

C. All piping under paved areas shall be tested under hydrostatic pressure of 120 pounds per square inch prior to paving.

D. Sustain pressure in pressure lines for not less than twenty-four (24) hours. If leaks develop, replace joints and repeat test until entire system is proven watertight.

E. All hydrostatic tests shall be made only in the presence of the Owner. No pipe shall be backfilled, except for center loading, until it has been observed, tested and approved in writing by the Owner. Should any work be covered up before such observation and tests are completed, the Contractor shall, at his own expense, uncover the work; and after it has been observed, tested and approved, he then shall make all repairs with such materials as required to restore all work disturbed to original and proper condition.

F. Furnish necessary force pump and all other test equipment.

4. All piping under paved areas shall be tested under hydrostatic pressure of 120 pounds per square inch prior to paving.

5. Sustain pressure in pressure lines for not less than twenty-four (24) hours. If leaks develop, replace joints and repeat test until entire system is proven watertight.

6. All hydrostatic tests shall be made only in the presence of the Owner. No pipe shall be backfilled, except for center loading, until it has been observed, tested and approved in writing by the Owner. Should any work be covered up before such observation and tests are completed, the Contractor shall, at his own expense, uncover the work; and after it has been observed, tested and approved, he then shall make all repairs with such materials as required to restore all work disturbed to original and proper condition.

C. Furnish necessary force pump and all other test equipment

D, PIPE TESTING: Notify Owner's Representative at least three (3) working days in advance of testing. All tests shall be at Contractor's expense. Use small amounts of backfill to stabilize pipe before testing, but keep all joints exposed. Test lines as follows:

1. Flushing and Testing:

a. After new sprinkler piping and risers are in place and connected and necessary work has been completed, and prior to installation of sprinkler heads, open control valves and apply full head of water to flush out system.

b. After the system is thoroughly flushed, and prior to backfilling, cap off and pressure test system.

C. Final System Test:

1. When irrigation system is complete and all adjustments have been made, notify the Owner's Representative to arrange final testing of system. A complete test of the system shall be made with all equipment connected and operating. Make any necessary adjustments as required by the Owner's Representative and retest as needed for final approval of system.

D. Manufacturer's Field Service:

1. Equipment manufacturer for controllers and automatic control valves shall provide one half day of field training in the operation and maintenance of the equipment to the Owner.

2. Equipment manufacturer for controllers, automatic control valves, and sprinklers shall inspect the installed system and its operation and certify in writing its proper installation and operation.

3.14 GUARANTEE

B. Submit in writing to the Owner's Representative.

C. It shall be the responsibility of the Contractor to fill and repair all depressions and replace all necessary paving or plating due to the settlement of irrigation trenches for one year following completion and acceptance of the job.

D. The Contractor shall guarantee all materials, equipment, and workmanship furnished by him to be free of all defects of workmanship and materials, and shall agree to replace at his expense at any time within one year after installation is accepted, any and all defective parts that may be found. In cases where emergency repairs are needed, or if the Contractor is not immediately available for repair work, the Owner shall have the option of making repairs at the Contractor's expense.

3.15 CLEAN-UP

A. The Contractor shall keep his work areas in a workmanlike and safe condition and so his rubbish, waste, and debris does not interfere with the work.

B. Upon completion of work in this Section, remove all rubbish, waste and debris from Site.

C. Remove all equipment and implements of service, leave entire area in a neat and clean condition to meet acceptance by the Owner's Representative.

END OF SECTION

SECTION 02900
PLANTING
PART 1 - GENERAL

1.01 SECTION INCLUDES

A. The work included under this Section consists of providing all necessary soil preparation and amending, finish and fine grading, furnishing and planting of all trees, shrubs, and ground cover, application of pre-emergent herbicide, mulching, maintenance, and all other materials, labor, and equipment required to complete the work indicated on the Planting Plans.

1.02 RELATED SECTIONS:

A. Section 02810 - Irrigation System: Provision of automatic irrigation system.

1.03 QUALITY ASSURANCE

A. Alternates: Verify whether Alternates as specified affect the work of this Section.

B. Contractor is to provide the Owner's Representative with copies of all Project material invoices and retain all empty material containers for count.

C. The Contractor shall furnish, without any extra charge, any additional material and labor when required by the compliance on these Specifications and Drawings.

D. The Contractor shall erect and maintain barricades, guards, warning signs, and lights as necessary or required for the protection of the work, the workmen, and public.

E. Any existing buildings, equipment, piping, sewers, sidewalks, landscaping or other Site improvements damaged by the Contractor during the course of his work shall be replaced or repaired by the Contractor in a manner satisfactory to the Engineer and at the Contractor's own expense, and before the final payment is made.

F. Contractor shall obtain and pay all fees, licenses, and permits required for this portion of the Project work.

G. Before making bid, examine the Site carefully, verifying dimensions and other Site conditions in relation to the Plans. The Contractor is responsible for informing himself of all conditions under which work is to be done before submitting his Bid.

H. When conditions detrimental to planting of trees, shrubs, and ground cover are encountered notify Owner's Representative before proceeding with work.

I. Contractor to verify quantities shown in the Consolidated Plant List to assure conformance with Landscape Drawings. Bring any discrepancies to the attention of the Owner's Representative.

J. For standard products, the manufacturer's analysis guarantee will be accepted. For all other materials, analysis will be a recognized laboratory as required by the Owner's Representative.

K. All plants shall be true to type and name in accordance with the current edition of Standardized Plant Names', Second Edition, and of size and caliper as shown in the Plant List.

L. Provide trees, shrubs, and other plants of size, genus, species and variety shown on Project Plant List and complying with recommendations and requirements of ANSI-Z60.1-90 American Standard for Nursery Stock.

M. Plantings shall be performed by personnel familiar with planting procedures and under the supervision of a qualified planting foreman. The planting foreman shall be on the job Site whenever planting is in progress.

N. No extra work shall be done without prior written approval of the Owner's Representative.

O. Contractor shall coordinate his work with that of any other Contractors working in, and adjacent to, the areas included in the Project work, and coordinate with these Contractors in performance of this work.

P. All work shall be in strict accordance with sound horticultural practice and shall include maintenance and watering of all materials installed in this Contract until final acceptance by the Owner's Representative.

Q. Keep the job Site free from accumulations of waste material or rubbish resulting from this work. At the completion of the work, the Contractor shall remove all rubbish tools, and surplus materials, and shall leave the completed project neat and orderly.

1.04 JOB CONDITIONS

A. Proceed with and complete planting work as rapidly as portions of Site become available, working with seasonal limitations.

B. Determine locations of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required.

C. Maintain grade stakes set by others until removal is mutually agreed on by parties concerned.

D. Contractor shall verify the extent that the Project engineered fill extends into the planting areas. Where the engineered fill material is in conflict with sound horticultural practice, the contractor is to confer with the Owner's Representative to ascertain to what extent the engineered fill, in the planting areas, can be removed. The Landscape Contractor will be responsible for the removal of whatever engineered fill that is a problem and is agreed to by the Owner's Representative.

E. Before making bid, examine the Site carefully, verifying dimensions and other Site conditions in relation to the Plans. The Contractor is responsible for informing himself of all conditions under which work is to be done before submitting his bid.

THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title

LANDSCAPE SPECIFICATIONS

Seal

LICENSED LANDSCAPE ARCHITECT
THOMAS H. PHELPS
08/31/26
Renewal Date
STATE OF CALIFORNIA

No.	Date	Revision
1		
2		
3		
4		
5		

Project Mgr.: THP
Drawn By: THP
Scale:
Date:
File Name:

Sheet No.: L5
of _____ sheets

BUILDING PERMIT PCI - 08/02/24

SECTION 02900

PLANTING, contd

PART 2 - PRODUCTS

2.01 TREES, SHRUBS, AND GROUND COVER

A. Plant materials shall be supplied in sizes as indicated in the Plant List. Container stock shall be well established in the container and the roots shall not have grown beyond the limits of the container, nor shall they be root bound. All plants shall have normal or average branching systems and shall be first class representatives of their species in appearance of healthy, vigorous growth. Plants shall be free of pests and disease and disfiguring injury. Trees shall be select and choice material, with symmetrical and full rounded heads appropriate for the species.

B. All plant materials delivered to the Site must conform to the Specifications of Federal, State and County laws, requiring inspection for plant diseases and insect infestations. Any inspection certificates required by law must accompany each shipment when plant materials arrive at the Site.

C. Plants delivered to the Site shall be adequately protected from the sun and wind during delivery and then stockpiled on the Site prior to planting. They shall be watered adequately. Containers shall be free of weeds or grasses.

D. Substitutions are not permitted except on proof that plant specified is not available. Request for substitution must be made in writing to the Landscape Architect. No additional charge shall be made for substitutions except by the written authorization of the Landscape Architect.

E. The Landscape Architect shall be notified in writing, one week prior to planting, to inspect all or major portions of the plant materials to be used in the Project, if requested by owner or Architect.

F. The Landscape Architect shall be the final arbitrator in decisions regarding identification and nomenclature.

G. The Landscape Architect shall have the right to reject plants prior to and during the progress of work for size, conditions of top structure, conditions of root structure, defects or injuries or nonconformity to Specifications.

2.02 SOIL AMENDMENTS

A. After rough grading operations, the contractor is responsible for obtaining a soils report that provides an analysis of the existing soil that states what soil amendments are required for optimum planting growth. The contractor shall incorporate the recommended quantities by thoroughly cultivating all planting areas to a depth of eight (8) inches. Rough finish grade all areas.

B. Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement

C. Broadcast the following soil amendments. Quantities given are per 1,000 square feet of area.

C.A. Nitrogen stabilized and iron fortified compost:per soil analysis recommendations, or 4 cy MINIMUM for bid purposes
C.B. Pelletized fertilizer (21-0-0): 10lbs., or as per soil analysis recommendations
C.C. Soil Sulfur: per soil analysis recommendations
C.D. Gypsum: 100 lbs

D. Cultivate and thoroughly incorporate the amendments into the top eight (8) inches of soil.

E. De-rock area to be planted by using a mechanical rock picker. All rocks larger than 1 inch in diameter are to be removed.

2.03 FERTILIZERS

A. Agriform planting tables, as manufactured by Sierra Chemical. 21 gram size with 20-10-5 analysis.

B. Commercial fertilizer, as manufactured by Best Fertilizer Co. with a 16-6-8 + iron analysis.

2.04 EXISTING TOPSOIL

A. It will be the Landscape Contractor's responsibility to provide all labor and equipment to remove all site topsoil spoils and dig-out as may be required to complete the finish the fine grading work.

2.05 TREE STAKES AND TIES

A. Tree stakes shall be 2 inches diameter x 8 feet long, treated lodge pole stakes, free from knots and splits.

B. Tree ties shall be "Cinch-Ties", length as required, as manufactured by V.I.T. Products, Inc.

2.06 PREEMERGENT HERBICIDE(S)

A. The preemergent herbicide is to be one that has proven successful in the local area, is recommended by a license Pest Control Advisor and has the approval of the Owner's Representative.

2.07 FIR BARK MULCH

A. Install A minimum three inch (3") depth fir bark mulch over the filter fabric.

B. A (3") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting ground covers, or direct seeding applications where mulch is contraindicated on all shrub and ground cover planting areas. Bark mulch shall be wood residual derived and manufactured from Pine, White and/or Red Fir Tree bark. The material shall be equal to that referred to as 'Walk on Bark' in the trade.

C. Organic mulch materials made from recycled or post-consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances

2.08 GRAVEL MULCH

A. Gravel mulch is to be one $\frac{3}{4}$" inch size crushed rock.

B. Place 4-6" size 'river washed' cobble over landscape fabric.

C. place moss rock fieldstone boulders, size and location as per plan. Bury the boulder $\frac{1}{3}$ or to the existing soil line on the rock

D. Provide gravel sample for approval of the Owner's Representative.

E. Gravel is to be placed to a minimum two (2) inch thickness over a weed barrier filter fabric.

2.09 WEED BARRIER FILTER FABRIC

A. Manufactured of polypropylene, 28 mil thickness, and 2.6 ounces per square yard. DeWitt Pro-5, or equal.

B. Secure fabric segments, to soil, with 6"x1"x6" steel 'U' shape pins.
C. Overlap adjacent fabric segments a minimum of six (6) inches and secure with pins at twenty four (24) inches on center.

PART 3 - EXECUTION

3.01 SOIL PREPARATION AND AMENDING

A. Thoroughly cultivate all planting areas to a depth of eight (8) inches.

B. Rough finish grade all areas.

C. Broadcast the following soil amendments. Quantities given are per 1,000 square feet of area.

Nitrogen stabilized and iron fortified compost:4 CY per 1000 sf, or as per soil analysis recommendations
Pelletized fertilizer (21-0-0): per soil analysis recommendations
Soil Sulfur: per soil analysis recommendations

D. Cultivate and thoroughly incorporate the amendments into the top eight (8) inches of soil.

E. De-rock area to be planted by using a mechanical rock picker. All rocks larger than 1 inch in diameter are to be removed.

3.02 FINISH GRADING

A. Fine grade areas to smooth, even surface with loose, uniform texture. Rake and drag areas to remove ridges and fill depressions as required to meet finish grades. Limit fine grading to areas which can be planted immediately after grading.

B. The finish grade of all shrubs and/or ground cover planting areas is to be 2 1/2 inches below the top of all adjacent concrete walks, curbs, and asphalt paving.

C. Remove all debris, exposed rocks, and compacted soil clods 1 inch in diameter or larger, from all planting areas. Use a mechanical rock picker for this. All finish grades shall be subject to the approval of the Engineer.

3.03 PLANTING OF TREES, SHRUBS AND VINES

A. The planting work shall be deferred until earthwork, construction, irrigation, soil preparation and finish grading work has been completed.

B. No planting shall occur during unfavorable weather conditions or when the soil is excessively wet, as determined by the Owner's Representative.

C. Stake or spot all plant locations, as shown on the Planting Plans. Obtain approval of plant locations, by the Owner's Representative or landscape Architect, prior to commencement of planting.

D. Planting Procedure:
D.A. Excavate plant holes to the dimensions indicated on Planting Plans. Refer to Planting Details. Roughen excavation sides and loosen bottom.
D.B. Fill plant excavation with water and allow to percolate completely.
D.C. Add and firm backfill soil to bring the plant soil / root ball to the proper planting elevation. The backfill soil is to consist of the excavated site topsoil with all rocks larger than 1 inch diameter removed from backfill soil. Use unconditioned site topsoil for backfill below the 8 inch depth which has been limed by premixing one (1) cubic yard of site topsoil with organic compost.
D.D. All plant material is to be removed from containers by approved methods. Loosen the bottom and sides of the exposed root ball and unwind or cut any circling roots. Protect root ball from the drying effects of sun and wind.
D.E. Place plant in the center of the excavation and adjust root ball elevation so that top of root ball is one (1) inch above the level of the surrounding soil grade.
D.F. Complete the backfilling of the root ball with light tamping as the backfill soil is placed.
D.G. Add 21 gram size Agriform (20-10-5) planting tablets to the backfill of all plant material. Reference planting details on plan and quantity schedule below.

Plant Container Size	Tablets Required
#1	1
#2	2
#5	3
#15	5
24" box	5

D.H. Construct a water retention basin around each plan, 4" high for trees and 3" high for shrubs. Water thoroughly to settle the backfill soil. Add backfill as required by settling.

3.08 TREE STAKING AND GRASS-FREE AREA
A. All trees are to be staked as per the Tree Staking Details occurring on the Planting Plans.

B. Care is to be exercised to maintain tree stakes in the proper horizontal alignment, and vertically to be set plumb.

3.09 PLANT MATERIAL GUARANTEE
A. The Contractor shall guarantee all plant material from latent defects, disease or death, and injury for a period of twelve (12) months after final acceptance of the total Project by the Owner's Representative.

B. The Contractor shall promptly replace, at no additional cost, plants that are not in a vigorous, healthy, growing condition. Replacement shall be of the same kind and size as originally specified and shall be planted as described on the Planting Plans and in these Specifications.

C. This guarantee does not include plant loss, due to physical damage or neglect during normal maintenance, by others, subsequent to the end of the project contract maintenance period.

3.10 OBSERVATION AND ACCEPTANCE
A. After all plants have been installed, the Owner's Representative will make a preliminary observation.

1.Upon preliminary observation and approval of the work, a ninety (90) day calendar day maintenance period will begin.

2. If any plants or work are not approved, immediate replacement and/or repair will be made and regular maintenance then continued for ninety (90) days after replacement.

B. Final observation will be made at the end of the ninety (90) day maintenance period. Submit written notice requesting this observation at least one week in advance.

1.Plant basins shall be repaired, all plantings given a final watering, and the job cleared of all weeds and debris and presented in a neat and orderly fashion.

2.The work, exclusive of the replacement of plant materials, shall be accepted by the Owner's Representative upon completion of the ninety (90) day maintenance period and upon written approval of the work by the Owner's Representative.

3.Clean paved area by sweeping and/or washing. Remove any defacement or stains caused by work of this Section.

4.Remove construction equipment, excess materials, tools, debris, and rubbish.

5.Repair any existing property damaged or altered due to work of the landscape planting.

3.11 INSTRUCTIONS TO THE OWNER
A. Full and complete typewritten instructions for long term maintenance of the landscaping are to be furnished to the Owner's Representative at least 10 days prior to the end of the Contractor's maintenance period. The Owner may retain final payment if this item is not completed.

3.12 GENERAL CLEAN-UP
A. During the process of the work, the Site shall be kept in a reasonably neat and clean condition, free from the accumulation of cans, surplus materials, and waste materials.

B. Upon completion of the work, remove all equipment, dispose of all waste, refuse, or debris resulting from this work, and leave the premises in a neat and clean condition.

C. All planting areas shall be neatly dressed and finished and all walks, paved areas, curbs, and gutters flushed clean to the satisfaction of the Owner's Representative.

3.13 PLANTING MAINTENANCE

A. Provide all necessary maintenance during specified maintenance period, including but not limited to, watering, weeding, replanting, fertilizing, treatment of diseases and pests, and protection from rodents, and people encroachment.
1.Check all tree ties and adjust if too tight or too loose. Remove all nursery stakes and ties.

2.Provide supplementary deep watering for trees at one month intervals during maintenance period, using a slowly trickling water hose. Fill planting basins, let water soak in, and refill.

3.Replace any plants not in a healthy and thriving condition

4.Arrange watering schedule to avoid wetting of foliage when exposed to hot sunlight.

5.Keep planting basins in good repair and free of weeds.

6.Plants blown over shall be replanted and restaked or replaced if damaged.

7.Protect all plants against damage from any source. Treat or replace all damaged trees during the maintenance period.

8.Re-set any plants where root crowns have settled below adjacent finish grade or where tree trunks are leaning from vertical position.

9.Prune only to remove broken twigs, unbalanced branching conditions or suckers.

10. At conclusion of maintenance period, re-surface planting beds as needed with a fresh layer of mulch to maintain the required depth.

END OF SECTION

CLOSEOUT PROCEDURES

1.1 DESCRIPTION

A. Section Includes: The work includes, but is not necessarily limited to, performing all operations necessary for and properly incidental to closing out the project and assisting in Owner's final inspection as hereinafter specified.

1.2 FINAL COMPLETION

A. When the Contractor considers the work, or a designated portion of the work complete, submit written request to Owner's Representative for inspection. By submittal of request, Contractor certifies that:

1.Contract Documents have been reviewed.

2.Work has been completed in accordance with the Contract Documents and is ready for inspection.

3.Equipment systems have been tested, adjusted, balanced and is fully operational.

B. Submit request a minimum of five (5) working days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time during contract period to complete inspection and any correction.

C. Should Owner's Representative inspection find work incomplete, Owner's Representative will notify Contractor in writing, listing observed deficiencies.

D. Contractor shall remedy listed deficiencies and sent a request for final inspection. At the Owner's option, a re-inspection(s) of the work to identify additional deficiencies, if any, may be required. Owner's costs associated with reinspection(s) are subject to provisions of Article 1.04 of this Section.

E. When Owners confirm work is complete, and close-out submittals as referred to in Article 1.04 of this Section are provided, Owner's Representative will notify Contractor of date of completion in writing.

1.3 REINSPECTIONS

A. Should status of completion of work require reinspection(s) by Owner due to failure of work to comply with Contractor's claim on initial inspection, Owner may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

B. Inspection initiated at the request of the Owner will not be subjected to the provisions of this Article.

1.4 CLOSE-OUT SUBMITTALS

A. Project Record Documents

B. Operation and Maintenance Data

C. Warranties and Guarantees

D. Spare Parts and Maintenance Materials

E. Evidence of Payment and Lien Releases along with a list of all subcontractors which contributed labor or materials to the project.

F. Other data and material as may be required in individual Sections of the Specifications.

1.5 APPLICATION FOR FINAL PAYMENT

A. Submit application for final payment in accordance with provisions of the contract for Construction.

INSPECTION SCHEDULE:

The Landscape Architect shall accomplish the following inspections in concert with the Project Coordinator, and the Landscape Contractor. Call at least 48 hours in advance of the requested inspection:

1. Pre-Landscape Construction Meeting with Landscape Architect, Landscape Contractor and Construction Site Supervisor

2. Landscape Architect inspection:
A. Irrigation System Layout and Coverage Inspection, including:
B. Irrigation Mainline and Lateral Pressure Check Layout inspection or deviation from
C. Irrigation system as per plans
D. Installation inspection of main lines
E. Installation inspection of laterals and non-pressure system trenches
3. Landscape Architect inspection:
A. Plant Inspection and Soil Preparation Inspection, including:
Review/approve amendments
Ensure correct soil preparation
Verify finish grade
Plant material quality
Layout in conformance with Project plans/specification
4. Landscape Architect inspection:
A. Final Landscape Improvements Inspection and approval
B. Commencement of Maintenance Period with letter of approval from the landscape architect. All punch list items from previous inspection must be complete

Requests for progress payments must include approved inspection reports authorized by the Landscape Architect and or the owner's agent

THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are trademarks of symbols and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title
LANDSCAPE SPECIFICATIONS

Seal
LICENSED LANDSCAPE ARCHITECT
THOMAS H. PHELPS
08/31/20
Renewal Date
Idaho
STATE OF CALIFORNIA

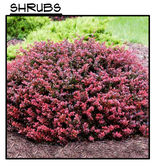
No.	Date	Revision
1		
2		
3		
4		
5		

Project Mgr.:THP
Drawn By: THP
Scale:
Date:
File Name:

Sheet No.:
L6
of _____ sheets

BUILDING PERMIT PCI - 08/02/24

PLANT SCHEDULE

PHOTO	SYMBOL	BOTANICAL NAME	COMMON NAME
TREES			
		ACER RUBRUM 'OCTOBER GLORY' STREET TREE	OCTOBER GLORY RED MAPLE
SHRUBS			
		BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY JAPANESE BARBERRY
		MAHONIA REPENS	CREEPING MAHONIA
		NANDINA DOMESTICA 'GULF STREAM'	GULF STREAM HEAVENLY BAMBOO
		PITTOSPORUM TENUIFOLIUM 'WRINKLED BLUE'	WRINKLED BLUE TAWHIWHI
		PRUNUS CAROLINIANA `COMPACTA`	COMPACT CAROLINA CHERRY LAUREL
		RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN
GRASSES			
		FESTUCA MAIREI	ATLAS FESCUE
		HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS
PERENNIALS			
		ACHILLEA X 'MOONSHINE'	MOONSHINE YARROW
		DIANELLA TASMANICA 'VARIEGATA'	VARIEGATED FLAX LILY
		DIETES VEGETA	AFRICAN IRIS
		LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON CREEPING LILYTURF
		SALVIA GREGGII 'DEEP RED'	DEEP RED AUTUMN SAGE
		TULBAGHIA VIOLACEA	SOCIETY GARLIC
		ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA
STORM WATER MANAGEMENT PLANTINGS			
		CAREX BARBARAE	SANTA BARBARA SEDGE
		JUNCUS PATENS `CARMAN'S GREY`	SPREADING RUSH
VINES			
		FICUS PUMILA	CREEPING FIG
		PARTHENOCISSUS TRICUSPIDATA 'VEITCHII'	BOSTON IVY
MATERIALS			
		2" DEPTH 1-1/2" DRAIN ROCK PLACE OVER LANDSCAPE FABRIC	
		BARK MULCH `WALK-ON` PLACE OVER LANDSCAPE FABRIC	3`` DEPTH

PLANTING NOTES

A. PLACE ROCK OVER LANDSCAPE FABRIC UNDER STAIRWAYS AND UTILITY ACCESS AREAS. INSTALL 'PERMALOC CLEAN LINE' 4" X 4" ALUMINUM EDGING WITH MILL FINISH (MF), BETWEEN TURF GRASS, DECOMPOSED GRANITE AND ADJACENT SHRUB BEDS OR CRUSHED ROCK AREAS. LARGER COBBLE DOES NOT REQUIRE EDGING. STAKE AT EVERY PREFORMED LOOPS WITH 12" STAKES SUPPLIED FROM MANUFACTURER WITH PRODUCT. NOTE THAT ADDITIONAL STAKES WILL BE REQUIRED FROM THE MANUFACTURER.

B. TREES PLANTED WITHIN TEN (5'-0") FEET OF A STREET, SIDEWALK, PAVED TRAIL, OR WALKWAY SHALL BE A DEEP-ROOTED SPECIES OR SHALL BE SEPARATED FROM HARDSCAPES BY A ROOT BARRIER TO PREVENT PHYSICAL DAMAGE TO PUBLIC IMPROVEMENTS.

C. SOIL PREPARATION AND AMENDING:

1) AFTER ROUGH GRADING OPERATIONS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A SOILS REPORT THAT PROVIDES AN ANALYSIS OF THE EXISTING SOIL THAT STATES WHAT SOIL AMENDMENTS ARE REQUIRED FOR OPTIMUM PLANTING GROWTH. THE CONTRACTOR SHALL INCORPORATE THE RECOMMENDED QUANTITIES BY THOROUGHLY CULTIVATING ALL PLANTING AREAS TO A DEPTH OF EIGHT (8) INCHES. ROUGH FINISH GRADE ALL AREAS.

2) PRIOR TO THE PLANTING OF ANY MATERIALS, COMPACTED SOILS SHALL BE TRANSFORMED TO A FRIABLE CONDITION. ON ENGINEERED SLOPES, ONLY AMENDED PLANTING HOLES NEED MEET THIS REQUIREMENT

3) BROADCAST THE FOLLOWING SOIL AMENDMENTS. QUANTITIES GIVEN ARE PER 1,000 SQUARE FEET OF AREA AND ARE FOR BID PURPOSES ONLY. ADJUST AMOUNTS PER THE SOILS LAB ANALYSIS.
- NITROGEN STABILIZED AND IRON FORTIFIED COMPOST: PER SOIL ANALYSIS RECOMMENDATIONS, OR 4 CY MINIMUM FOR BID PURPOSES
- PELLETIZED FERTILIZER (21-0-0): 10LBS., OR AS PER SOIL ANALYSIS RECOMMENDATIONS
- SOIL SULFUR: PER SOIL ANALYSIS RECOMMENDATIONS
- GYPSUM: 100 LBS

4) CULTIVATE AND THOROUGHLY INCORPORATE THE AMENDMENTS INTO THE TOP EIGHT (8) INCHES OF SOIL

5) DE-ROCK AREA TO BE PLANTED BY USING A MECHANICAL ROCK PICKER. ALL ROCKS LARGER THAN 1 INCH IN DIAMETER ARE TO BE REMOVED.

D. FINISH GRADING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR FOLLOWING THE CIVIL ENGINEER RIM ELEVATIONS FOR DRAINS, REFER TO THE CIVIL ENGINEERING PLANS. ALL FINISH GRADING SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND TOWARDS DRAIN LOCATIONS AS INDICATED ON THE CIVIL PLANS. IF ANY DISCREPANCIES ARE PRESENT, CONTACT THE PROJECT SUPERINTENDENT, OR LANDSCAPE ARCHITECT.

E. INSTALL WEED BARRIER FILTER FABRIC OVER DRIP IRRIGATION COMPONENTS, MANUFACTURED OF POLYPROPYLENE, 28 MIL THICKNESS, AND 2.6 OUNCES PER SQUARE YARD. 'DEWITT PRO-5', OR EQUAL. SECURE FABRIC SEGMENTS TO SOIL, WITH 6"X1"X6" STEEL 'U' SHAPE PINS. OVERLAP ADJACENT FABRIC SEGMENTS A MINIMUM OF SIX (6) INCHES AND SECURE WITH PINS AT TWENTY FOUR (24) INCHES ON CENTER.

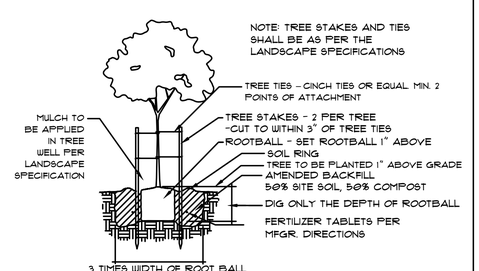
F. INSTALL A MINIMUM THREE INCH (3") DEPTH FIR BARK MULCH OVER THE FILTER FABRIC. A (3") LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT IN TURF AREAS, CREEPING OR ROOTING GROUND COVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED ON ALL SHRUB AND GROUND COVER PLANTING AREAS. BARK MULCH SHALL BE WOOD RESIDUAL DERIVED AND MANUFACTURED FROM PINE, WHITE AND/OR RED FIR TREE BARK. THE MATERIAL SHALL BE EQUAL TO THAT REFERRED TO AS 'WALK ON BARK' IN THE TRADE.

NOTE: ORGANIC MULCH MATERIALS MADE FROM RECYCLED OR POST-CONSUMER SHALL TAKE PRECEDENCE OVER INORGANIC MATERIALS OR VIRGIN FOREST PRODUCTS UNLESS THE RECYCLED POST-CONSUMER ORGANIC PRODUCTS ARE NOT LOCALLY AVAILABLE. ORGANIC MULCHES ARE NOT REQUIRED WHERE PROHIBITED BY LOCAL FUEL MODIFICATION PLAN GUIDELINES OR OTHER APPLICABLE LOCAL ORDINANCES

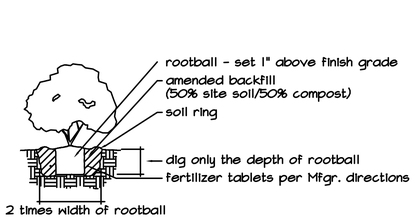
G. A CERTIFICATE OF COMPLETION SHALL BE OBTAINED FROM THE CITY AND THE PROJECT APPLICANT SHALL FILL OUT THE CERTIFICATE TO THE SATISFACTION OF THE CITY UPON COMPLETION OF THE LANDSCAPE PROJECT.

H. THE INSTALLING LANDSCAPE CONTRACTOR SHALL MAINTAIN THE NEW LANDSCAPE AREAS FOR A (90) NINETY DAY PERIOD.

⚠1 I. SECTION 21.26.020 REQUIRES A MINIMUM OF 20% OF THE NET SITE AREA DEVOTED TO LANDSCAPING. THE TOTAL SITE AREA IS 35,591 SF AND THERE IS 8,074 SF OF LANDSCAPED OPEN SPACE (EXCLUSIVE OF THE ROW PARKWAY), WHICH EQUALS 22.7%



TREE PLANTING



SHRUB PLANTING

THOMAS H. PHELPS
LANDSCAPE ARCHITECTURE
IDLA, INC.
California Landscape Architect #4122
ID #LA-16771 * HI #LA-16112
AZ #76633

P.O.BOX 170129
Boise, Idaho 83717
thp@idlainc.net
(208) 906-1300

LATIMER TOWNHOMES
GRANITE RIDGE PROPERTIES
CAMPBELL, CALIFORNIA

These drawings are instruments of service and are the property of Thomas H. Phelps Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Thomas H. Phelps Landscape Architecture.

Sheet Title: PLANT PALETTE

Seal: LICENSED LANDSCAPE ARCHITECT · THOMAS H. PHELPS · 4122 · 08/31/24 · Renewal Date · Date · STATE OF CALIFORNIA

No.	Date	Revision
⚠1	08/02/24	PLAN CHK CMNTS PC1

Project Mgr.: THP
Drawn By: THP
Scale:
Date:
File Name:
Sheet No.: L1
of _____ sheets

BUILDING PERMIT PC1 - 08/02/24