GENERAL NOTES:

1.	OWNER/DEVELOPER:	MEADOW CREEK GROUP, INC. 1500 WILLOW PASS COURT CONCORD, CA 94520 KERRI WATT PHONE: (925) 605-9304
2.	ENGINEER:	CARLSON, BARBEE & GIBSON, INC. 2633 CAMINO RAMON, SUITE 350 SAN RAMON, CA 94583 ANGELO OBERTELLO, R.C.E. NO. 64345 PHONE: (925) 866-0322
3.	APN:	052-140-013, 052-140-014, 052-140-015, & 052-140-016
4.	EXISTING ZONING:	PD
5.	PROPOSED ZONING:	R-25
6.	EXISTING GENERAL PLAN LAND USE:	MIXED USE
7.	PROPOSED GENERAL PLAN:	HIGH DENSITY RESIDENTIAL
8.	EXISTING USE:	VACANT
9.	FEMA FLOOD ZONE:	ZONE X: AREA OF MINIMAL FLOOD HAZARD. FLOOD INSURANCE RATE MAP NO. 06013C0351F & 06013C0332F BOTH DATED JUNE 16, 2009.
10.	NUMBER OF PARCELS:	17
11.	NUMBER OF LOTS:	19 159 TOTAL RESIDENTIAL CONDOMINIUM UNITS
12.	NET & GROSS SITE AREA:	7.93 AC (NET), 10.35 AC (GROSS)
13.	LOT COVERAGE:	26.9% (TOTAL FOOTPRINT/NET LOT AREA)
14.	PROPOSED DENSITY:	20.05 DWELLING UNITS/ACRE (NET)

15. ALL ON-SITE UTILITIES TO BE PRIVATELY OWNED & MAINTAINED.

16. UTILITY PROVIDERS:
    SEWER: CITY OF ANTIOCH
    WATER: CITY OF ANTIOCH
    ELECTRIC: PACIFIC GAS & ELECTRIC (PG&E)
    TELEPHONE: AT&T
    CABLE TV: COMCAST
    GARBAGE: ALLIED WASTE

17. FIRE PROTECTION DISTRICT: CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

16. THE PROPOSED SITE CONSISTS OF 19 BUILDINGS CONTAINING 159 UNITS. IN ADDITION, THE SITE CONTAINS ASSOCIATED PARKING, PRIVATE STREETS, ALLEYS, COMMON SPACES, AND STORM WATER QUALITY BASINS.

17. THERE ARE NO EXISTING RESIDENTIAL UNITS ON-SITE.

18. THE SITE IS NOT LOCATED IN A VERY HIGH FIRE HAZARD ZONE, DOES NOT CONTAIN WETLANDS, IS NOT LISTED AS A HAZARD WASTE SITE OR A SPECIAL FLOOD HAZARD AREA, DOES NOT CONTAIN A DELINEATED EARTHQUAKE FAULT ZONE, NOR CONTAIN A STREAM OR OTHER RESOURCE THAT MAY BE SUBJECT TO A STREAMBED ALTERATION AGREEMENT.

19. THE SITE DOES NOT CONTAIN HISTORIC AND/OR CULTURAL RESOURCES.

20. THE SITE DOES NOT CONTAIN ANY SPECIES OF SPECIAL CONCERN.

21. ALL ON-SITE STREETS TO BE PRIVATELY OWNED AND MAINTAINED BY HOA.

22. ALL ON-SITE COMMON AREAS TO BE PRIVATELY OWNED AND MAINTAINED BY HOA.

23. PURSUANT TO CHAPTER 3, ARTICLE 4, SECTION 66456.1 OF THE SUBDIVISION MAP ACT, THE DEVELOPER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS.

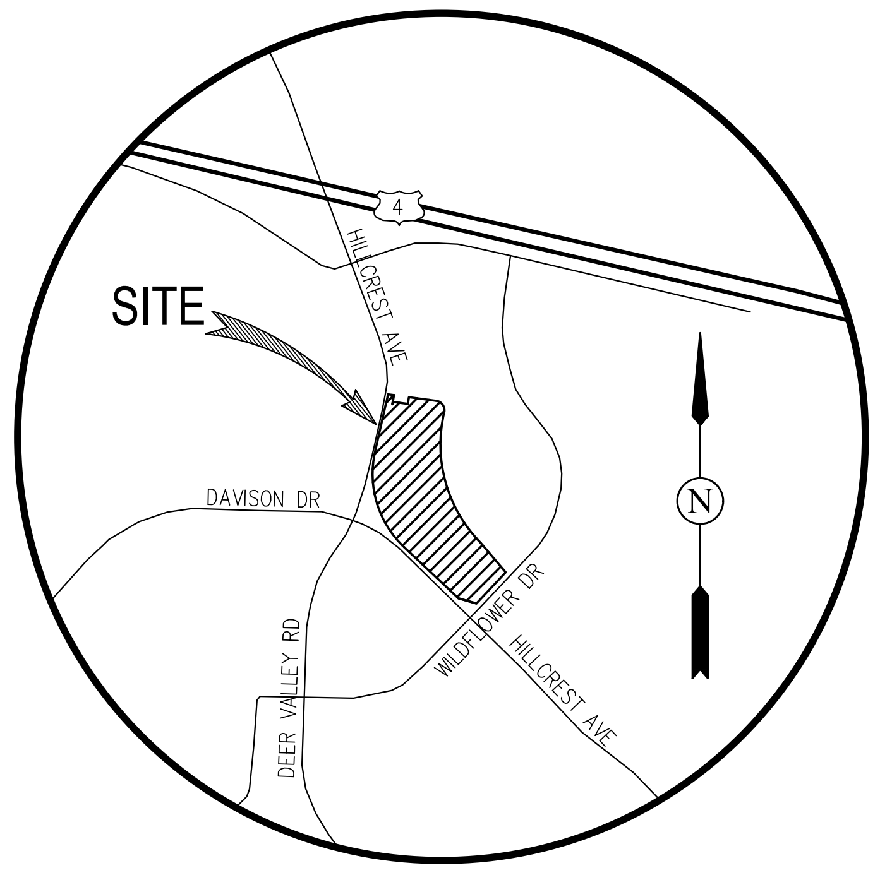
24. THIS SUBDIVISION IS A CONDOMINIUM PROJECT AS DEFINED IN SECTION 1350 ET. SEQ. OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND FILED PURSUANT TO THE SUBDIVISION MAP ACT.

25. THE SITE CONTAINS THE FOLLOWING RECORDED EASEMENTS:
    - WATERLINE EASEMENT IN FAVOR OF U.S.A. PER 2135 OR 114
    - WATERLINE EASEMENT IN FAVOR OF U.S.A. PER 2574 OR 137
    - WATERLINE EASEMENT IN FAVOR OF CROWN-ZELLERBACH CORPORATION PER 2579 OR 222
    - WATERLINE EASEMENT IN FAVOR OF CROWN-ZELLERBACH CORPORATION PER 2574 OR 428
    - INGRESS, EGRESS, & DRIVEWAY EASEMENT PER 99-25529
    - EMERGENCY VEHICLE ACCESS EASEMENT & PUBLIC UTILITY EASEMENT PER SUBDIVISION 9427 FINAL MAP

26.	BASIS OF BEARINGS:	THE BASIS OF BEARING FOR THIS SURVEY IS DETERMINED BY FOUND MONUMENTS ON HILLCREST AVENUE, THE BEARING BEING N12°48'01"E PER PARCEL MAP SUBDIVISION MS 357-301-20 (216 PM 28).
27.	BENCHMARK:	CONTRA COSTA COUNTY BENCHMARK: BM # 3220 SET BRASS TAG AND CONCRETE FASTENER IN THE CONCRETE FOOTING OF THE MOST SOUTHERLY LEG OF PG&E TOWER, 120 FEET NORTHEAST OF THE CENTERLINE OF HILLCREST AVENUE 0.8 MILE SOUTHEAST ALONG HILLCREST AVENUE FROM THE INTERSECTION OF TREGALLAS ROAD. EL: 92.995 FEET (NGVD 29)

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES
2	EXISTING CONDITIONS
3	PRELIMINARY SITE PLAN
4	PRELIMINARY SITE PLAN
5	STREET SECTIONS & DETAILS
6	PRELIMINARY GRADING PLAN
7	PRELIMINARY GRADING PLAN
8	GRADING SECTIONS
9	PRELIMINARY UTILITY PLAN
10	PRELIMINARY UTILITY PLAN
11	PRELIMINARY STORMWATER CONTROL PLAN
12	STORMWATER DETAILS
13	FIRE ACCESS PLAN
14	SIGNING & STRIPING PLAN
15	WASTE COLLECTION PLAN
16	WASTE COLLECTION PLAN
17	BIKE CIRCULATION PLAN



VICINITY MAP
NOT TO SCALE

LEGEND

━ ━ ━ ━	PROPERTY BOUNDARY
— — — —	ADJACENT PARCEL LINE
———	PROPOSED LOT LINE
AC	ACRE
EX	EXISTING
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PVAE	PRIVATE VEHICLE ACCESS EASEMENT
R/W	RIGHT OF WAY

VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH   CONTRA COSTA COUNTY   CALIFORNIA

SCALE: 1"=50'   DATE: FEBRUARY 2, 2024

0 50 100 150

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SHEET NO.
1
OF 17 SHEETS

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LEGEND

━ ━ ━	SUBDIVISION BOUNDARY
━━━	LOT PARCEL BOUNDARY
- - - - -	LOT LINE
— — —	RIGHT OF WAY
- - - - -	EASEMENT
───	CURB

DEMOLITION MEASURES

① DEMOLISH & REMOVE EXISTING STORM DRAIN FACILITIES
② DEMOLISH & REMOVE EXISTING FIELD INLET
③ DEMOLISH & REMOVE EXISTING STORM DRAIN MANHOLE
④ DEMOLISH & REMOVE EXISTING CURB & GUTTER
⑤ REMOVE & REPLACE EXISTING CURB RAMP/SIDEWALK
⑥ DEMOLISH & REMOVE EXISTING SANITARY SEWER FACILITIES
⑦ DEMOLISH & REMOVE EXISTING SANITARY SEWER MANHOLE

PRESERVATION MEASURES

A PRESERVE AND PROTECT EXISTING CURB RAMP
B PRESERVE AND PROTECT EXISTING CURB & GUTTER
C PRESERVE AND PROTECT EXISTING FIRE HYDRANT
D PRESERVE AND PROTECT EXISTING STREET LIGHT
E PRESERVE AND PROTECT IN PLACE EXISTING STORM DRAIN FACILITIES
F PRESERVE AND PROTECT IN PLACE EXISTING SANITARY SEWER FACILITIES
G PRESERVE AND PROTECT EXISTING JOINT TRENCH FACILITIES
H PRESERVE AND PROTECT EXISTING WATER FACILITIES
I PRESERVE AND PROTECT EXISTING STORMWATER BASIN

NOTES:

1. EXISTING VEGETATION TO BE REMOVED UNLESS OTHERWISE NOTED.
2. EXISTING UTILITIES TO REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
3. REFER TO JOINT TRENCH PLAN AND STREET LIGHT PLANS FOR ADDITIONAL INFORMATION.
4. CONTRACTOR SHALL SEQUENCE THE DEMOLITION ACTIVITIES AS NECESSARY TO MAINTAIN ROADS OPEN AND UTILITY SERVICE TO EXISTING CONDOS.

EXISTING CONDITIONS

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA
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LEGEND

- SUBDIVISION BOUNDARY
- ADJACENT PARCEL LINE
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- BUILDING OVERHANG
- BIORETENTION AREA
- PROPOSED SIDEWALK/PATHWAY
- PROPOSED PAVEMENT
- EXISTING PAVEMENT TO REMAIN
- TE TRASH ENCLOSURE SEE SHEET 15 FOR DETAIL

ABBREVIATIONS

AC	ACRES
BLDG	BUILDING
CL	CENTERLINE
D/W	DRIVEWAY
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FS	FIRE SERVICE
GB	GRADE BREAK
HP	HIGH POINT
INV	INVERT
JT	JOINT TRENCH
LF	LINEAR FEET
LL	LOT LINE
LP	LOW POINT
LS	LANDSCAPE
PAD	BUILDING PAD ELEVATION
PUE	PUBLIC UTILITY EASEMENT
PVAE	PRIVATE VEHICLE ACCESS EASEMENT
RP	REDUCED PRESSURE ASSEMBLY
R/W	RIGHT OF WAY
SF	SQUARE FEET
S/W	SIDEWALK
TC	TOP OF CURB
TRC	TOP OF ROLLED CURB
TSM	TOP OF SOIL MIX
TVC	TOP OF VERTICAL CURB
TYP	TYPICAL
WS	WATER SERVICE

UNIT COUNT

	TOTAL
BACK-TO-BACK BUILDINGS	96
TOWNHOMES	63
TOTAL	159

OPEN SPACE SUMMARY

	REQUIRED	PROVIDED
OPEN SPACE (AMC 9-5.706)	200 SF/UNIT	385 SF/UNIT
*TOTAL SF	31,800 SF	61,276 SF
PRIVATE (60 SF/UNIT MIN)	9,540 SF	16,022 SF
COMMON:		
CENTRAL OPEN AREA – PARCEL K		18,239 SF
PASSIVE PARK		3,312 SF
OPEN PLAY AREA – PARCEL J		15,694 SF
COMMON BETWEEN BLDG 9 & 10		4,297 SF
COMMON BETWEEN BLDG 13 & 14		3,712 SF
TOTAL SF		45,254 SF
**LANDSCAPING (AMC 9-5.708)	25% OF SITE (1.6 AC)	32% OF SITE (2.8 AC)

NOTES:
1. *OPEN SPACE TOTAL DOES NOT INCLUDE BIORETENTION AREA
2. **LANDSCAPING TOTAL INCLUDES BIORETENTION AREA

PARKING SUMMARY

	PROVIDED
GUEST PARKING	20
SURPLUS SHARED PARKING *(SEE NOTE 3)*	57
ACCESSIBLE PARKING	2
ELECTRIC VEHICLE PARKING	3

NOTES:

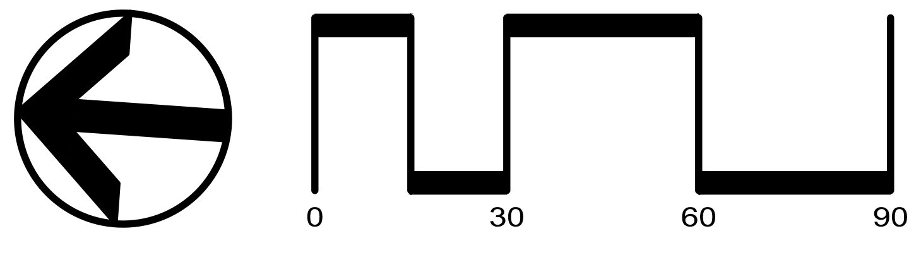
1. EV PARKING STALLS ARE CALCULATED PER CALIFORNIA GREEN BUILDING CODE 2022 SECTION 4.106.4.2 (10% OF TOTAL PARKING SPACES).
2. ACCESSIBLE PARKING STALLS ARE CALCULATED PER 2022 CALIFORNIA BUILDING CODE SECTION 1109A.5 (5% OF TOTAL PARKING SPACES).
3. THE PARKING SPACES ON THE WEST SIDE OF WILDFLOWER STATION PLACE ARE TO BE SHARED AMONGST THE TOWNHOMES.

PRELIMINARY SITE PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024



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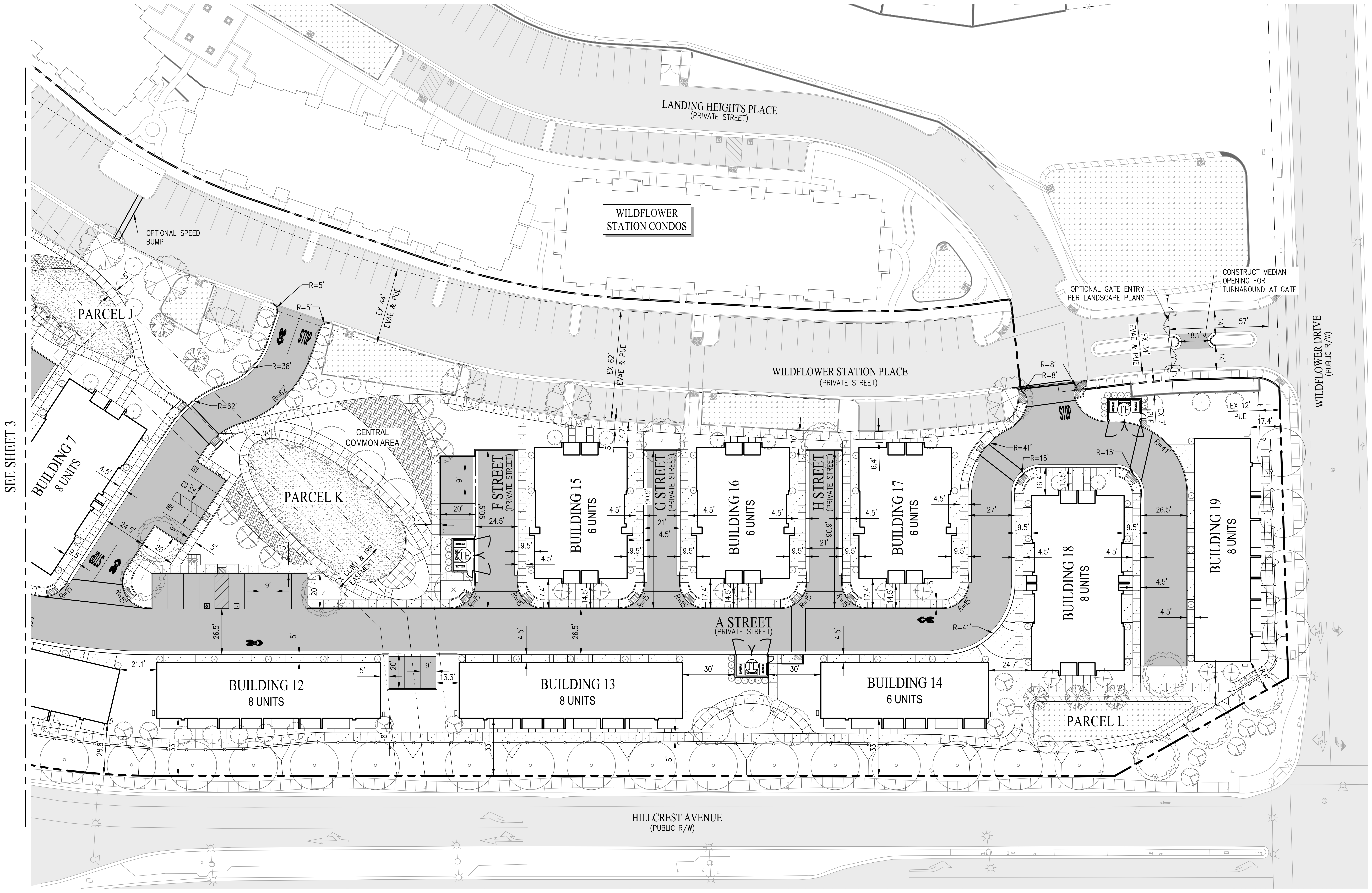

PRELIMINARY SITE PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024

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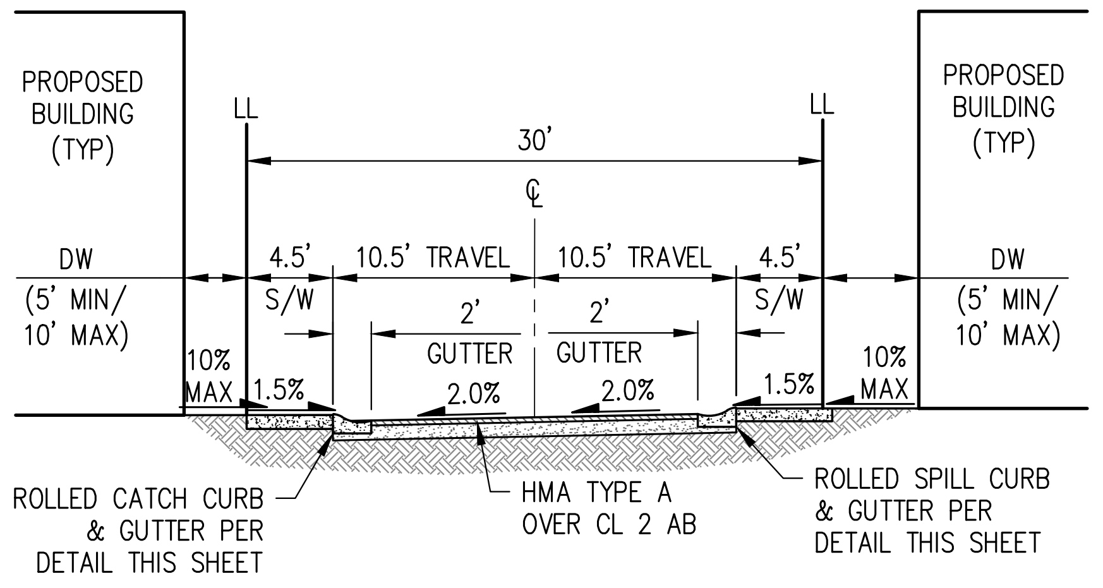
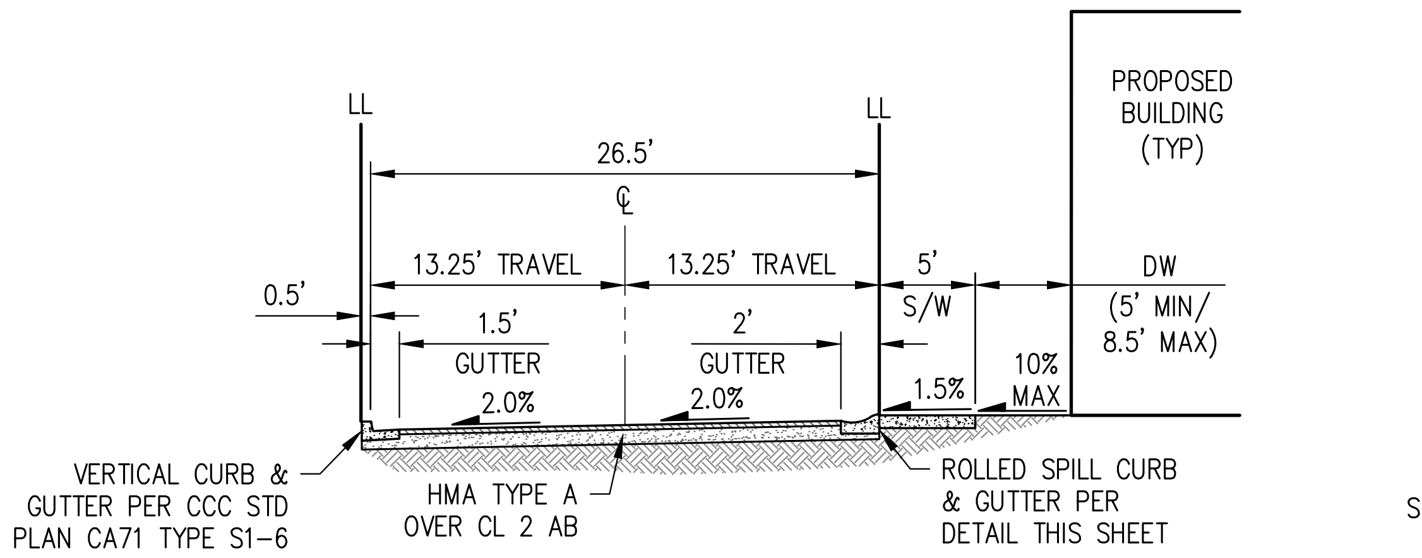
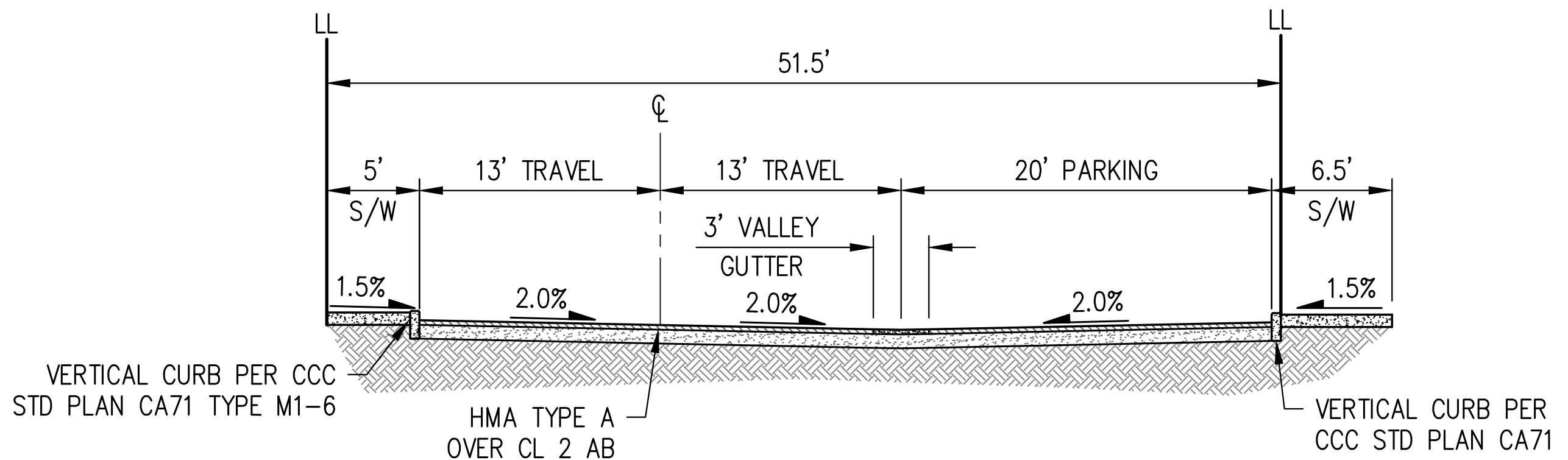


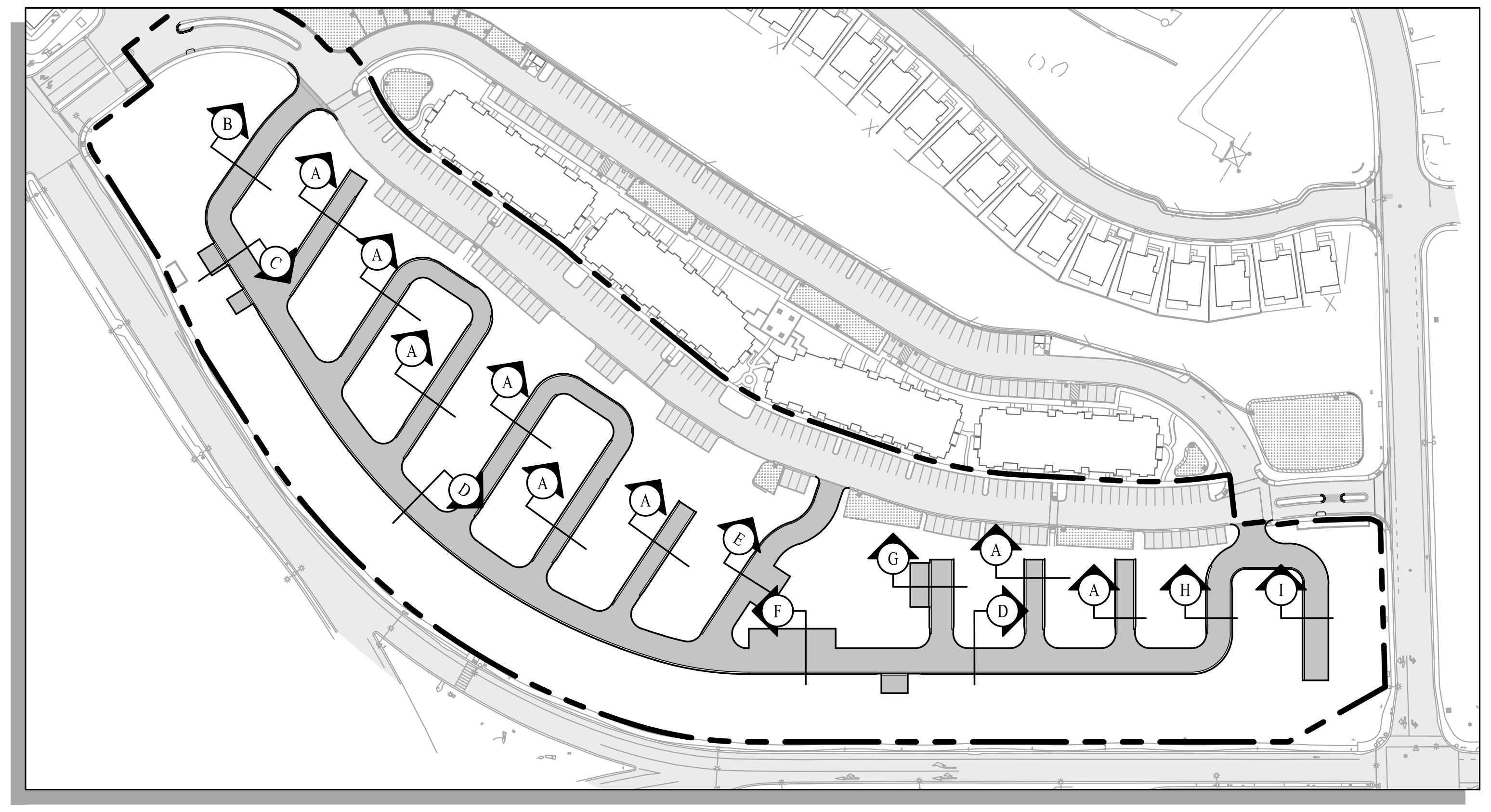
A TYPICAL 21' ALLEY
(ROLLED CURB & GUTTER AND ROLLED CURB & GUTTER)



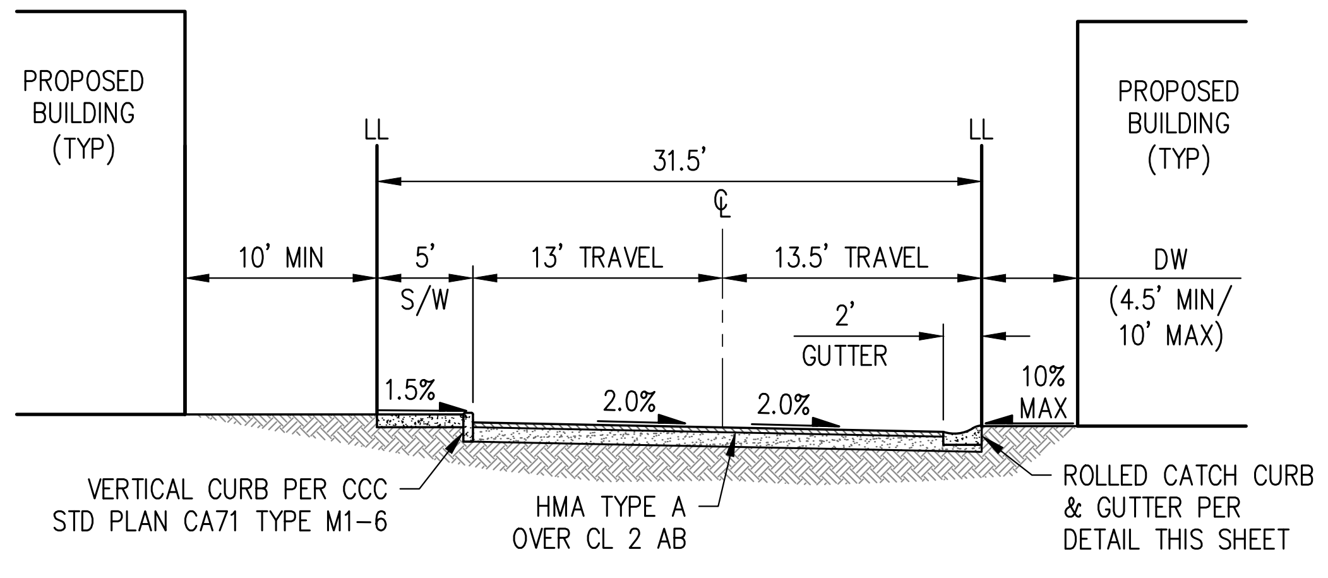
B TYPICAL 26.5' STREET
(VERTICAL CURB & GUTTER AND ROLLED CURB & GUTTER)



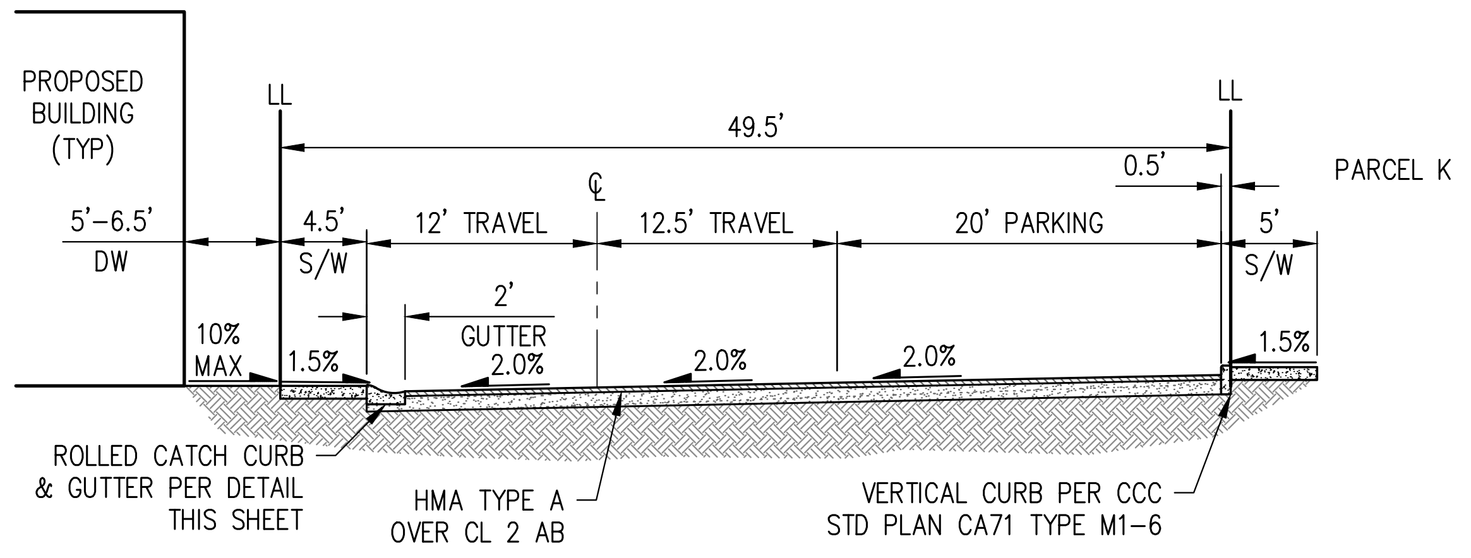
C TYPICAL 26' STREET WITH PARKING
(VERTICAL CURB AND VALLEY GUTTER)



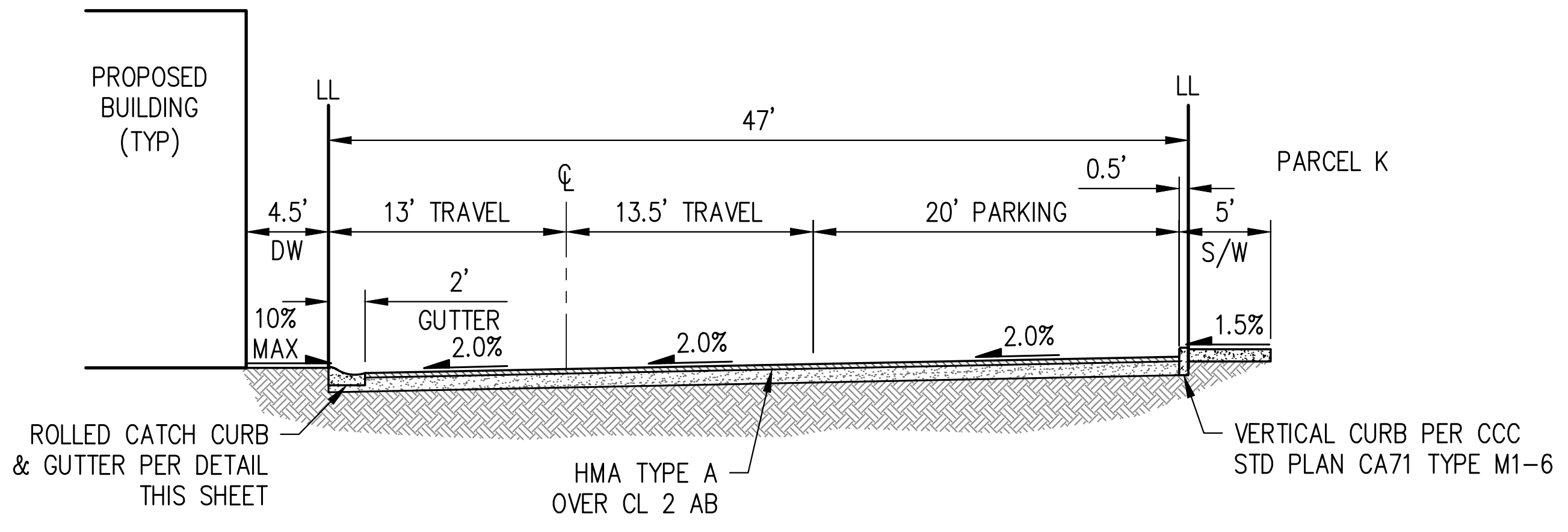
STREET KEY MAP
NOT TO SCALE



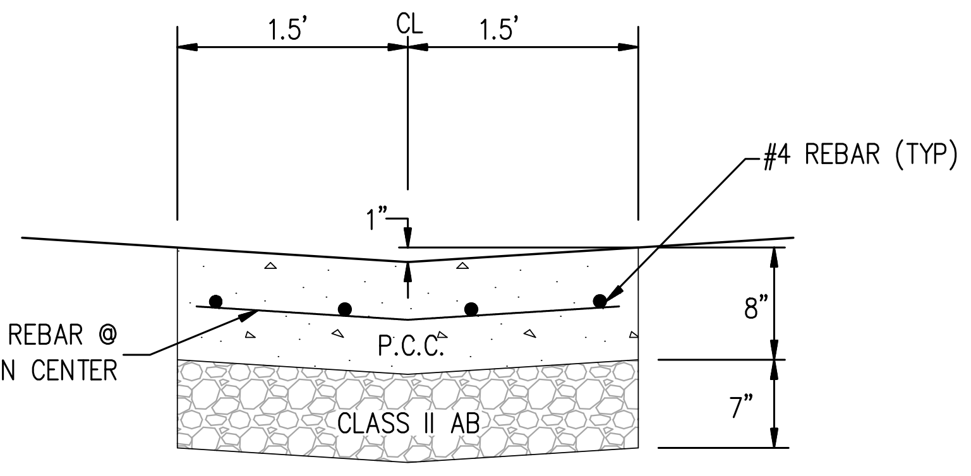
D TYPICAL 26.5' STREET
(ROLLED CURB & GUTTER AND VERTICAL CURB)



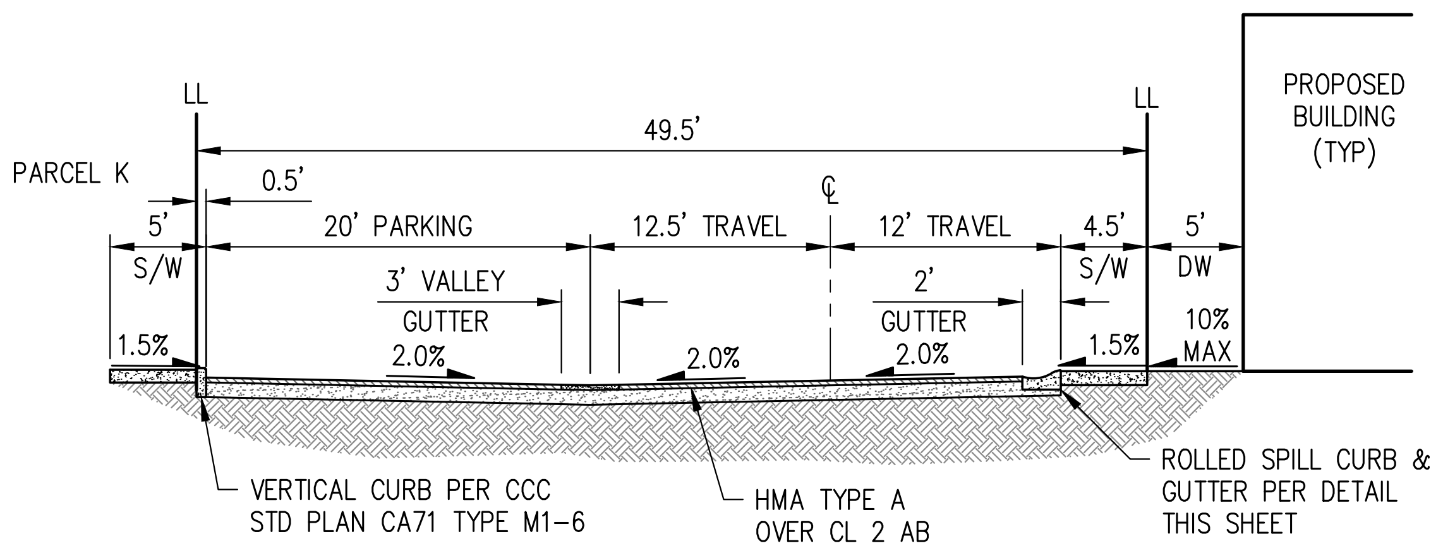
E TYPICAL 24.5' STREET WITH PARKING
(ROLLED CURB & GUTTER AND VERTICAL CURB)



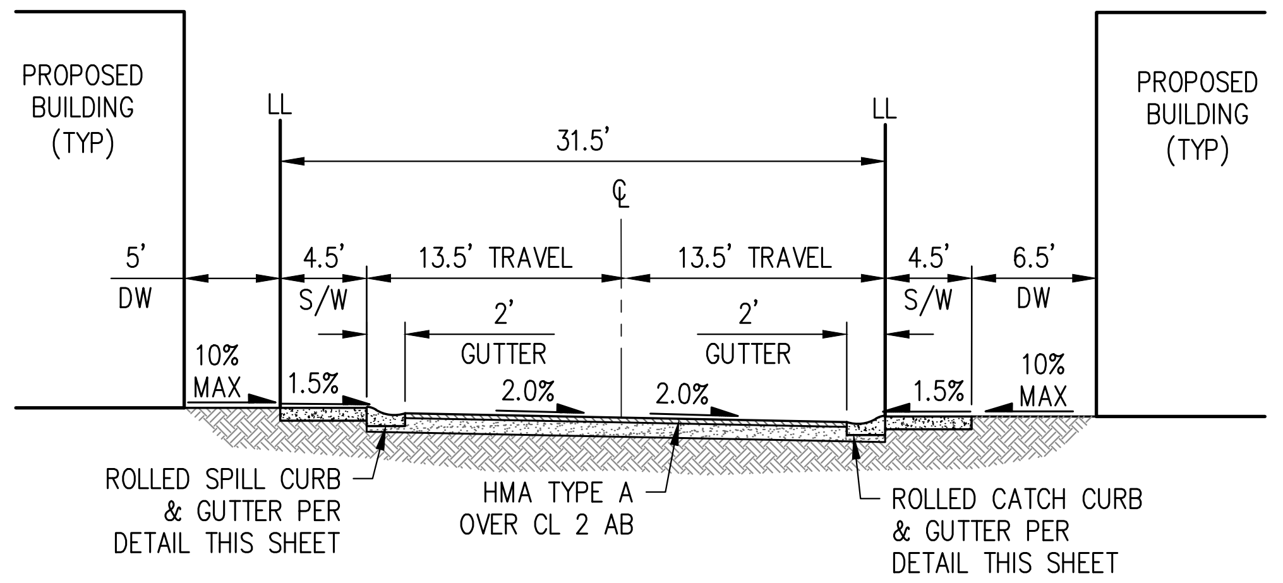
F TYPICAL 26.5' STREET WITH PARKING
(ROLLED CURB & GUTTER AND VERTICAL CURB)



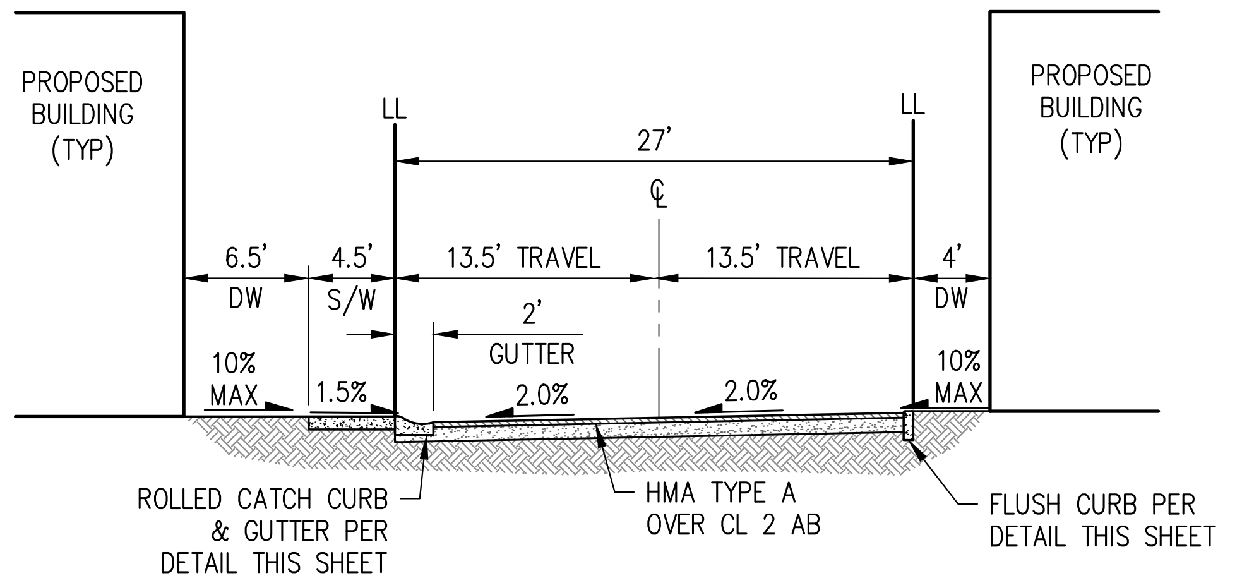
3' VALLEY GUTTER DETAIL
NOT TO SCALE



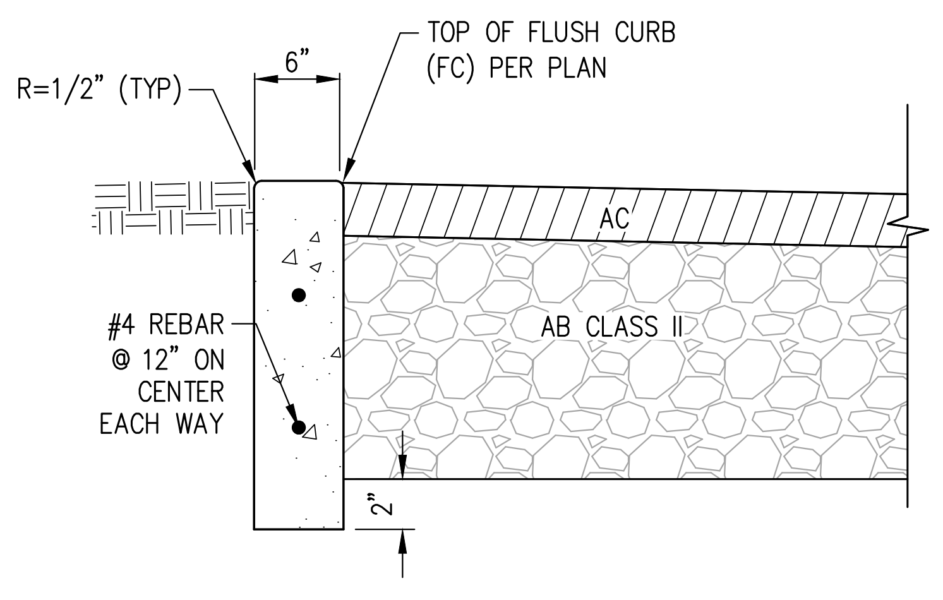
G TYPICAL 24.5' STREET WITH PARKING
(ROLLED CURB & GUTTER AND VERTICAL CURB)



H TYPICAL 27' STREET
(ROLLED CURB & GUTTER AND ROLLED CURB & GUTTER)



I TYPICAL 26.5' STREET
(ROLLED CURB & GUTTER AND FLUSH CURB)



FLUSH CURB DETAIL
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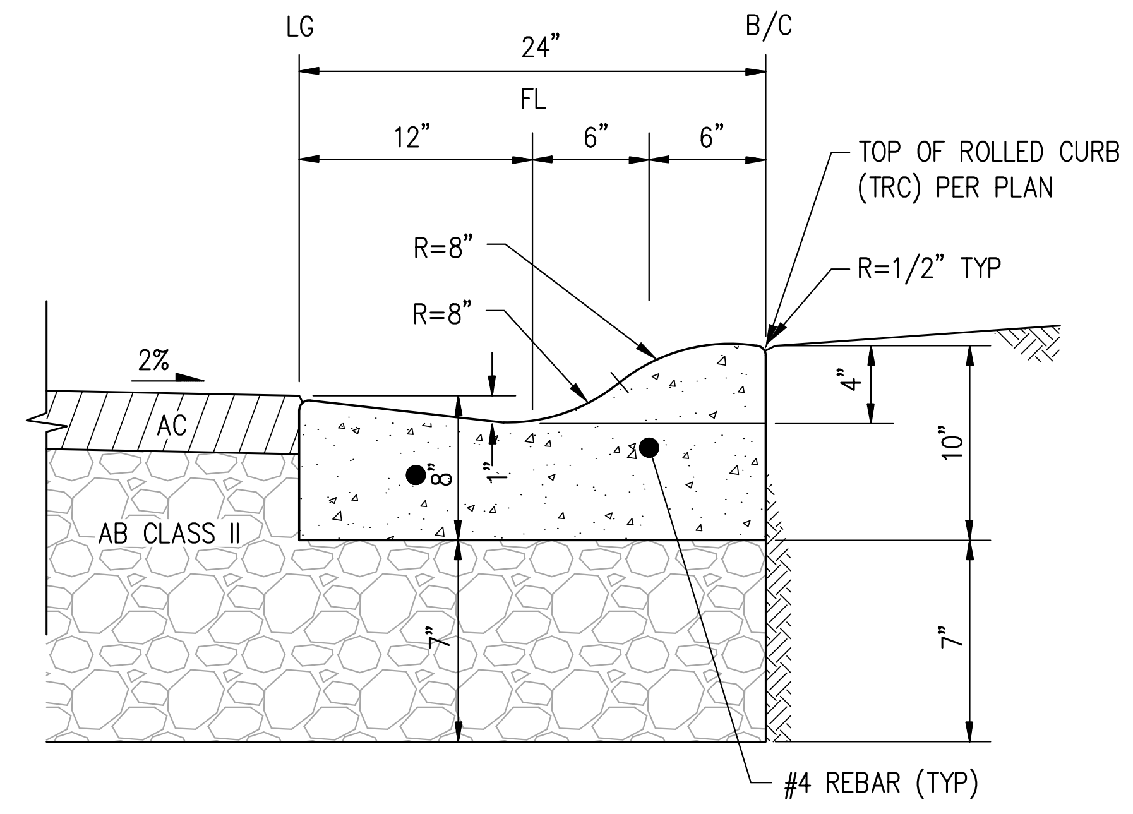
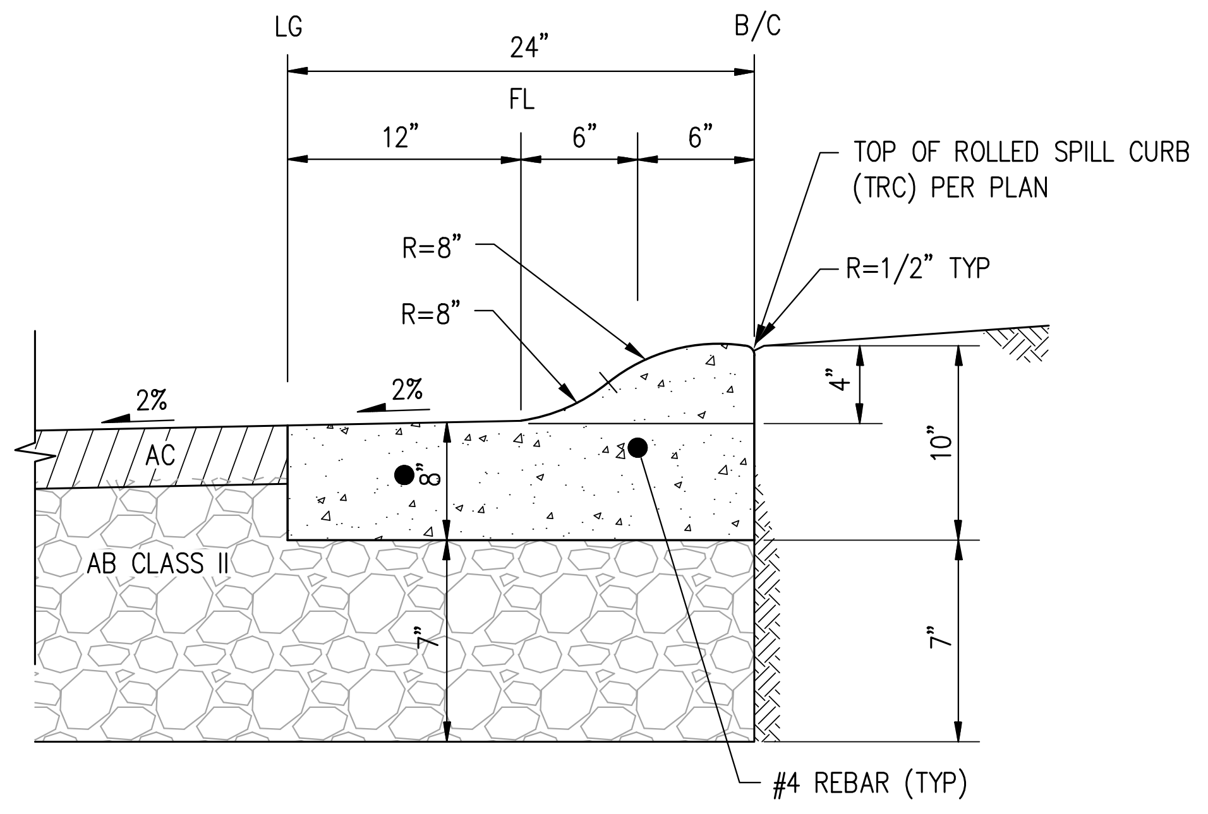


ROLLED CATCH CURB DETAIL
NOT TO SCALE



ROLLED SPILL CURB DETAIL
NOT TO SCALE

STREET SECTIONS & DETAILS

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024

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5
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LEGEND

— — — —	EXISTING ADJACENT PROPERTY LINE
▬ ▬ ▬	PROPOSED PROJECT BOUNDARY
15" SD	PROPOSED STORM DRAIN
4" SDFM	STORM DRAIN FORCE MAIN
EX 24"SD	EXISTING STORM DRAIN
▩	PROPOSED PAVEMENT
▨	EXISTING PAVEMENT TO REMAIN
░	PROPOSED SIDEWALK/DRIVEWAY
*	ACCESSIBLE UNIT
■ ■ ■ ■	ADA PATH OF TRAVEL
BW	BOTTOM OF WALL
EG	EXISTING GROUND
FG	FINISHED GROUND
TW	TOP OF WALL

EARTHWORK SUMMARY	
CUT	3,650 CY±
FILL	11,150 CY±
NET (FILL)	7,500 CY±

NOTES:

1. DRIVEWAY APRON SLOPES ASSUMED TO BE 2–10%
2. GARAGE SLOPES ASSUMED TO BE 1–2%
3. FINISHED FLOOR TO BACK OF GARAGE STEP ASSUMED TO BE 0–12"
4. FINISHED FLOOR TO PORCH STEP ASSUMED TO BE 0–6"
5. PORCH SLOPE ASSUMED TO BE 2%
6. HANDRAIL NEEDED AT ALL EXTERIOR STEPS EXCEEDING 1 RISER
7. HANDRAIL EXTENSION ASSUMED 1' BEYOND TOP AND BOTTOM RISER
8. PATHWAY GRADING ASSUMED NOT TO EXCEED 4.5%

PRELIMINARY GRADING PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024

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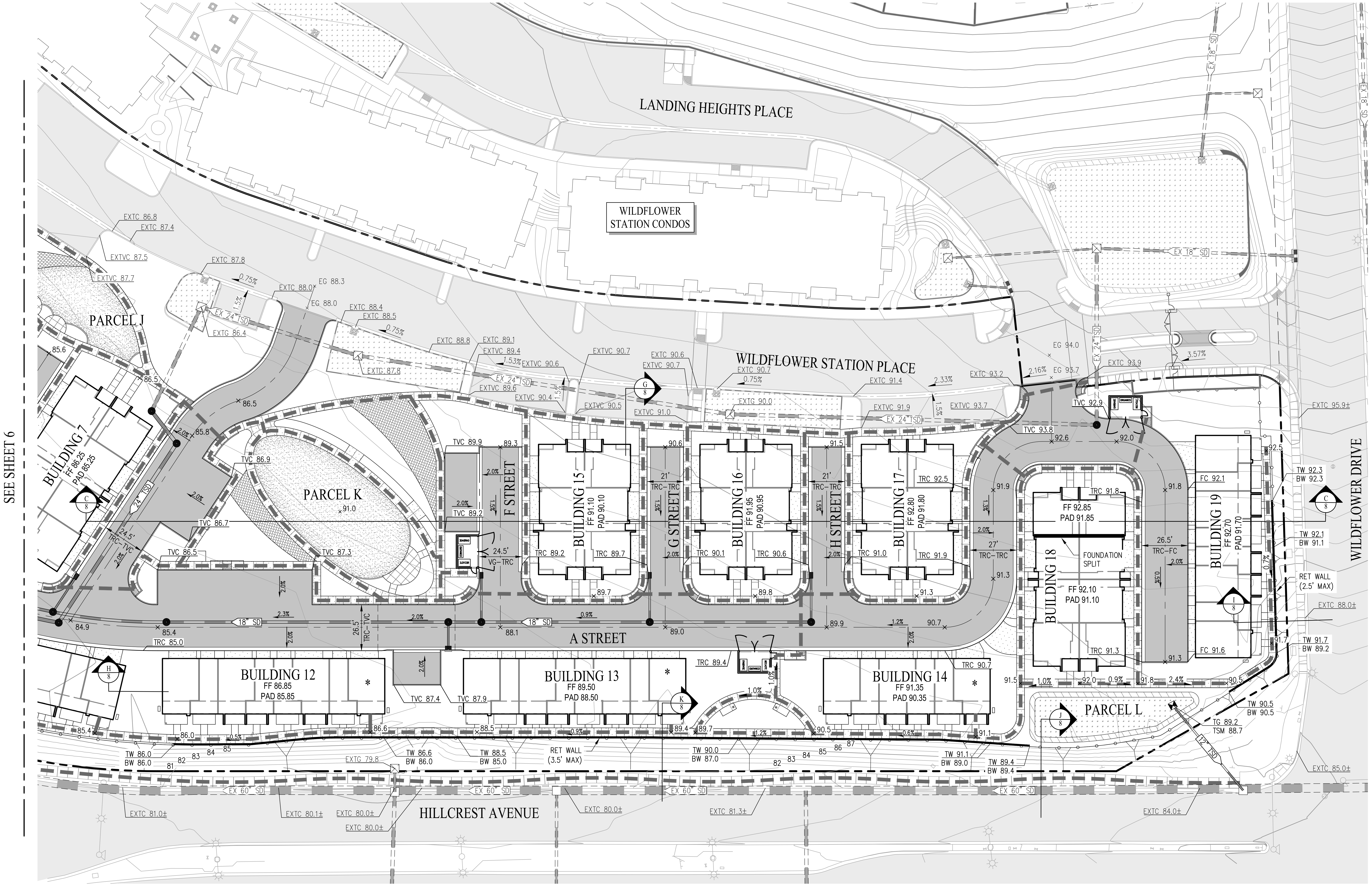
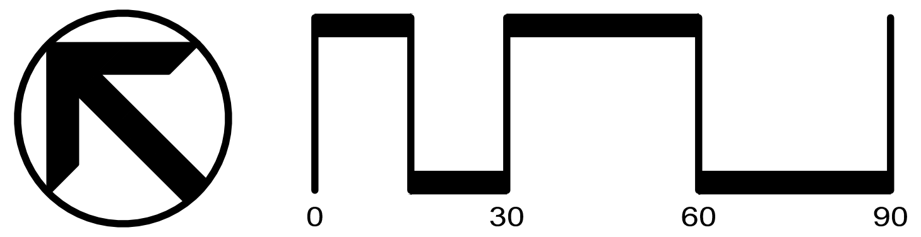


PRELIMINARY GRADING PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024



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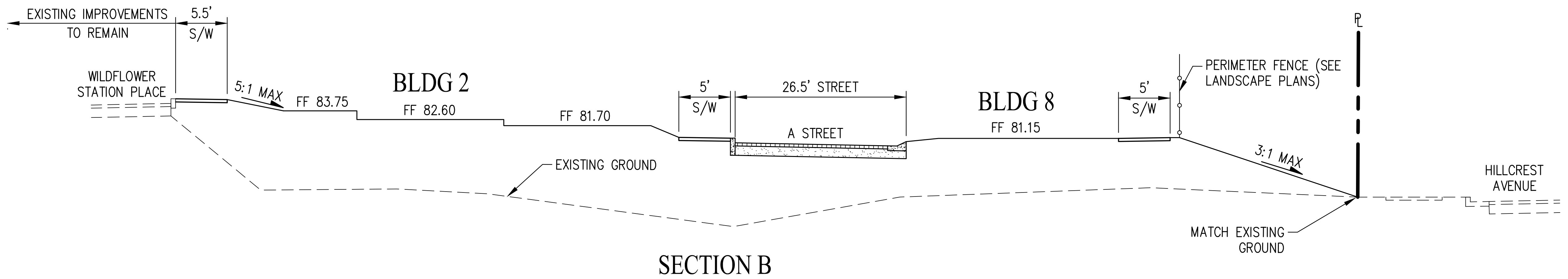
SECTION A

NOT TO SCALE



SECTION B

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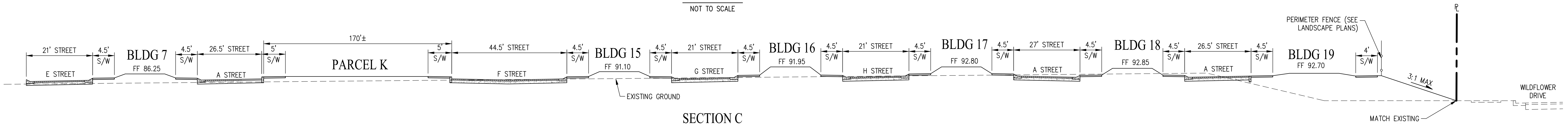

SECTION C

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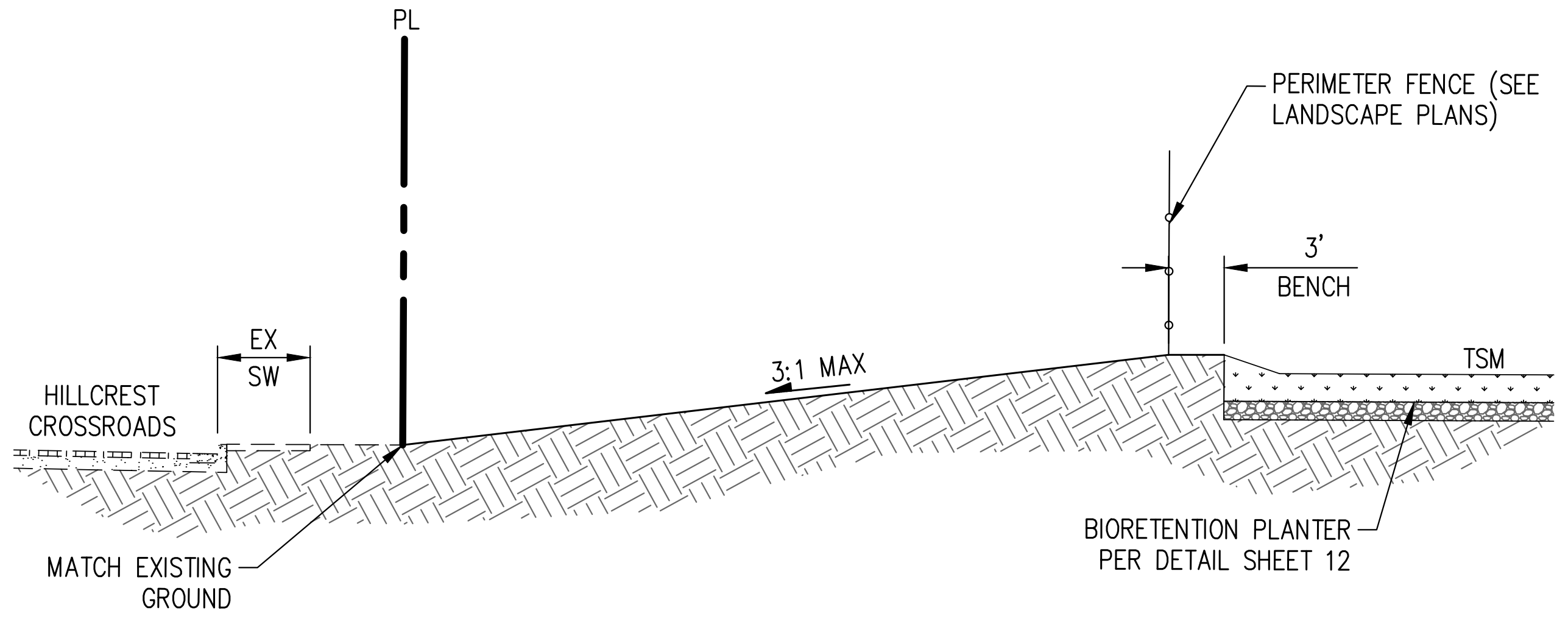
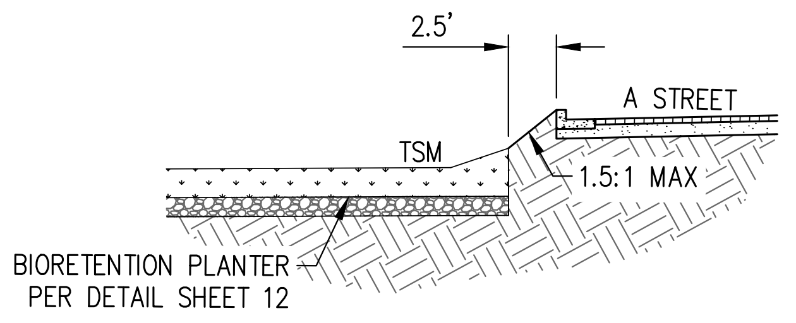


SECTION D

NOT TO SCALE



SECTION E

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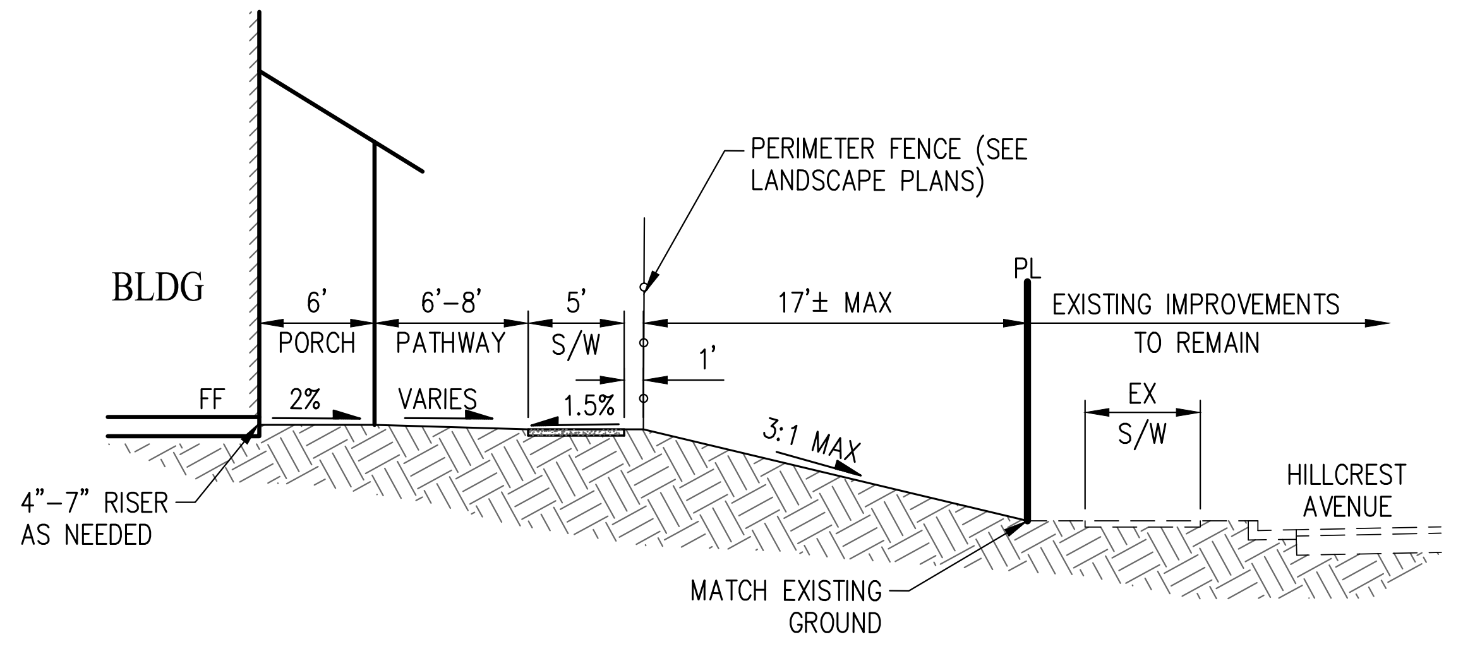

SECTION F

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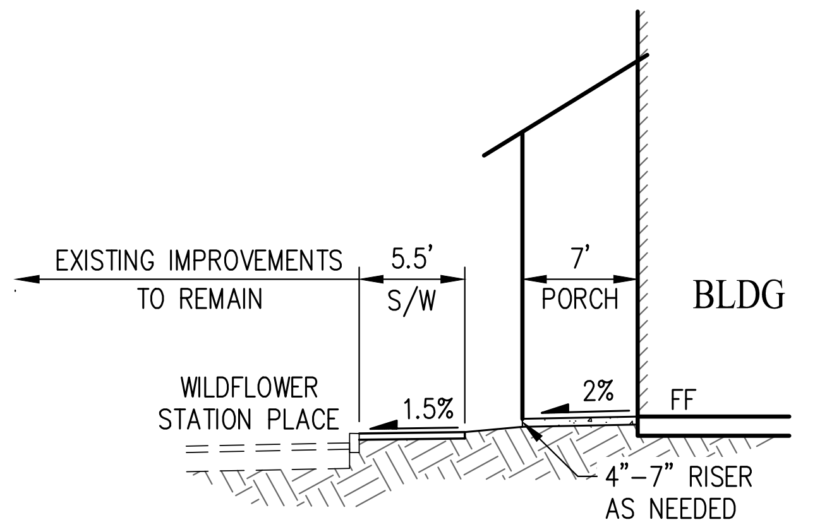

SECTION G

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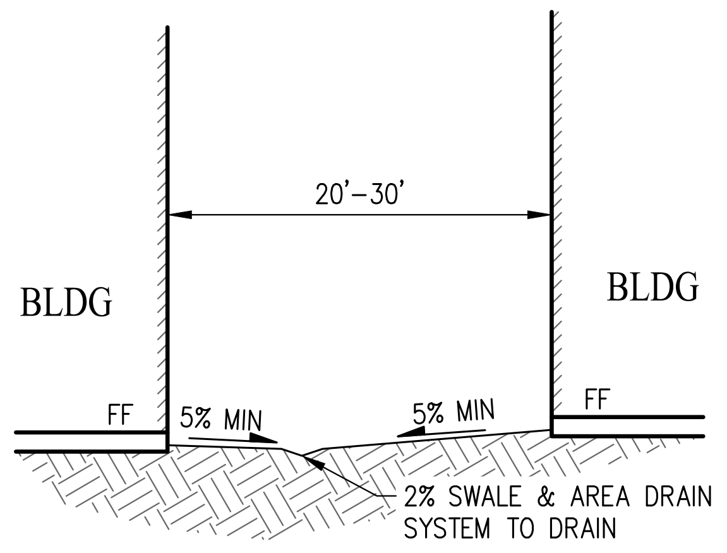
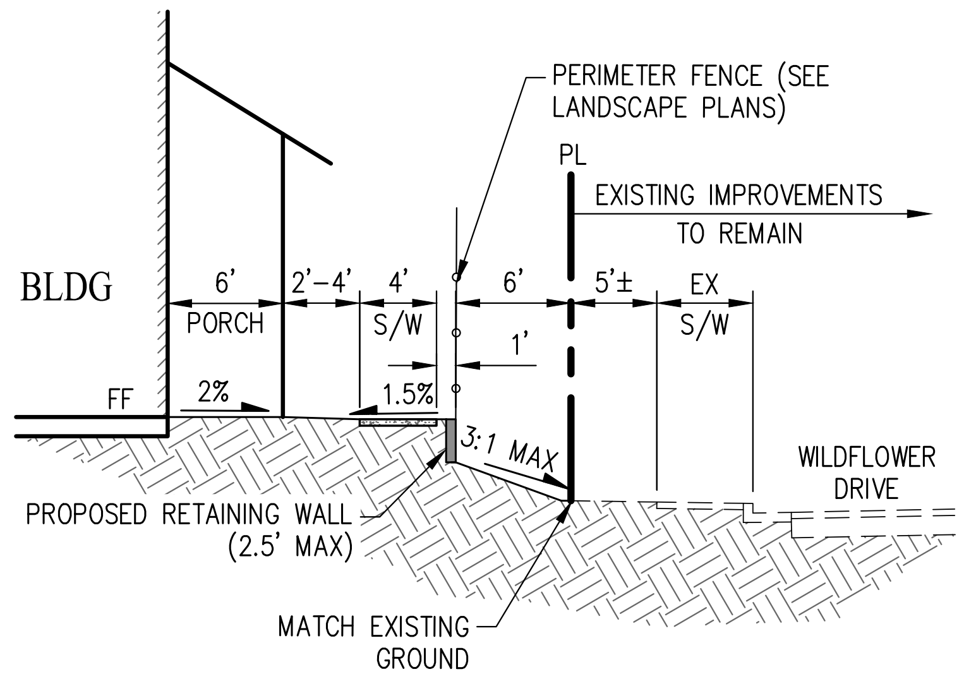


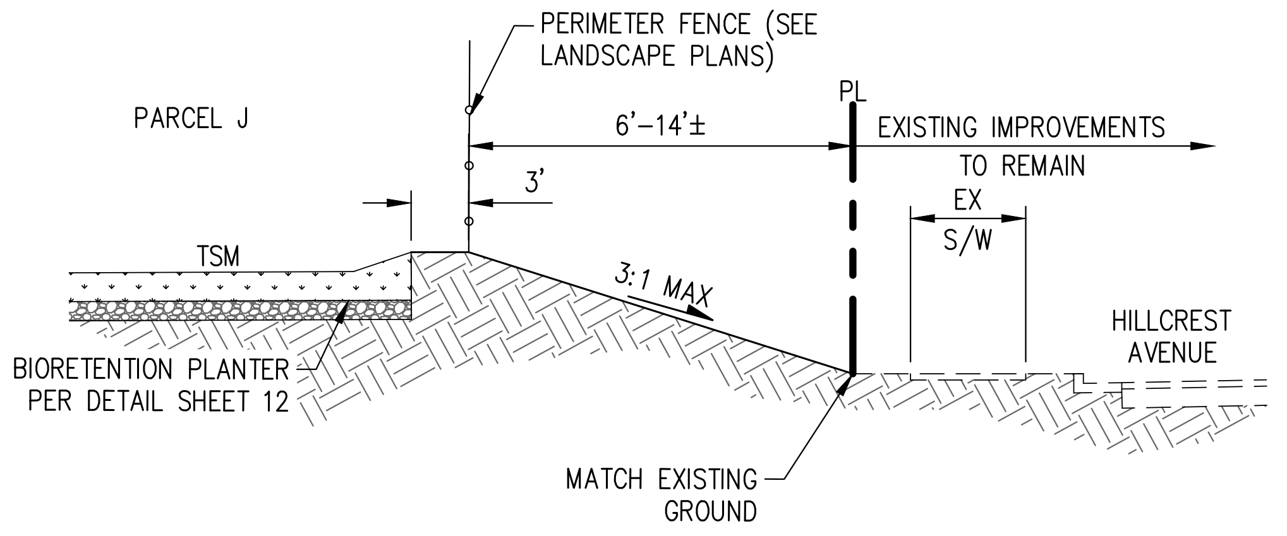
SECTION H

NOT TO SCALE



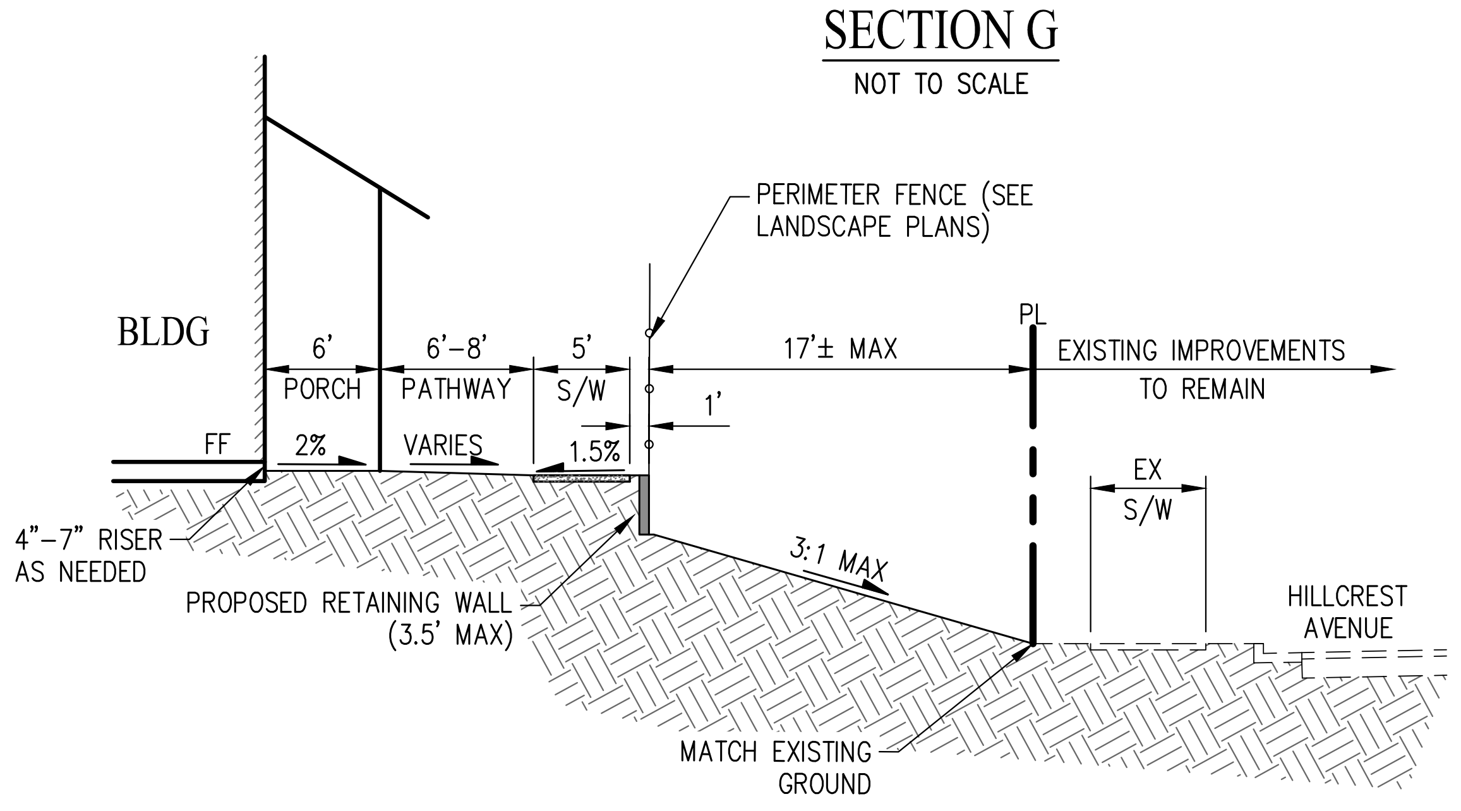
SECTION I

NOT TO SCALE



SECTION J

NOT TO SCALE



SECTION K

NOT TO SCALE

GRADING SECTIONS

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: NTS DATE: FEBRUARY 2, 2024

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SHEET NO.
8
OF 17 SHEETS

F:\2659-000\ACAD\TM\TM06-TM08.DWG

LEGEND

EXISTING	PROPOSED	
EX SD	SD	STORM DRAIN LINE
EX TSD	TSD	TREATED STORM DRAIN LINE
	SDFM	STORM DRAIN FORCE MAIN LINE
EX SS	SS	SANITARY SEWER LINE
EX W	W	WATER LINE
EX FS	FW	FIRE SERVICE LINE
EX JT	JT	JOINT TRENCH
EX GAS		GAS PIPE
●	●	MANHOLE
	■	CATCH BASIN
	⊠	FIELD INLET
	◎	STORM DRAIN LOW FLOW PUMP
☊	▲	FIRE HYDRANT
	▲	TRANSFORMER

NOTES:

1. ALL ON-SITE UTILITIES TO BE PRIVATE.

PRELIMINARY UTILITY PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024

0 30 60 90

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SHEET NO.
9
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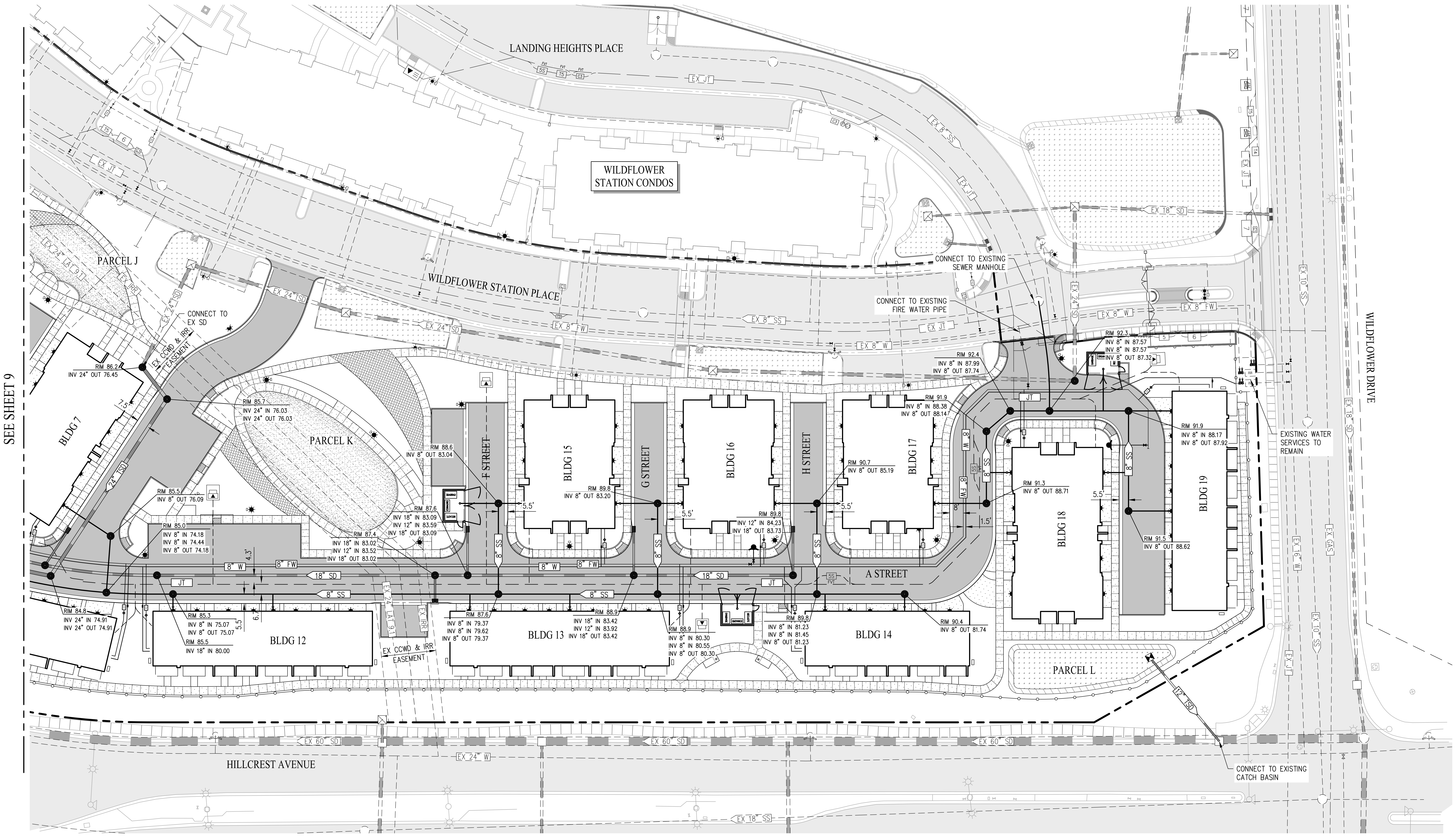

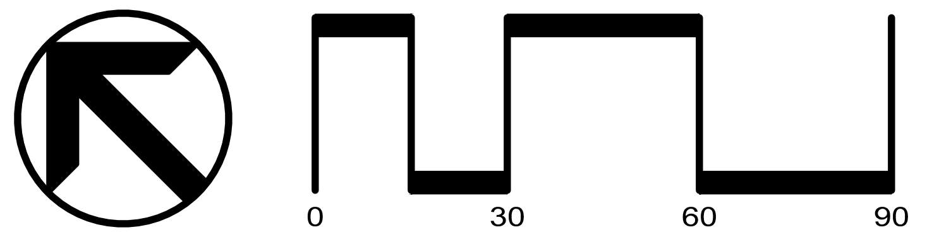

PRELIMINARY UTILITY PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=30' DATE: FEBRUARY 2, 2024

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SHEET NO.
10
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LEGEND

🟥 DMA BOUNDARY

🟩 PROPOSED BIORETENTION

SD PROPOSED STORM DRAIN LINE

TSD PROPOSED TREATED STORM DRAIN LINE

EX SD EXISTING STORM DRAIN LINE

PRELIMINARY STORMWATER CONTROL PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=50' DATE: FEBRUARY 2, 2024

0 50 100 150

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SHEET NO.
11
OF 17 SHEETS

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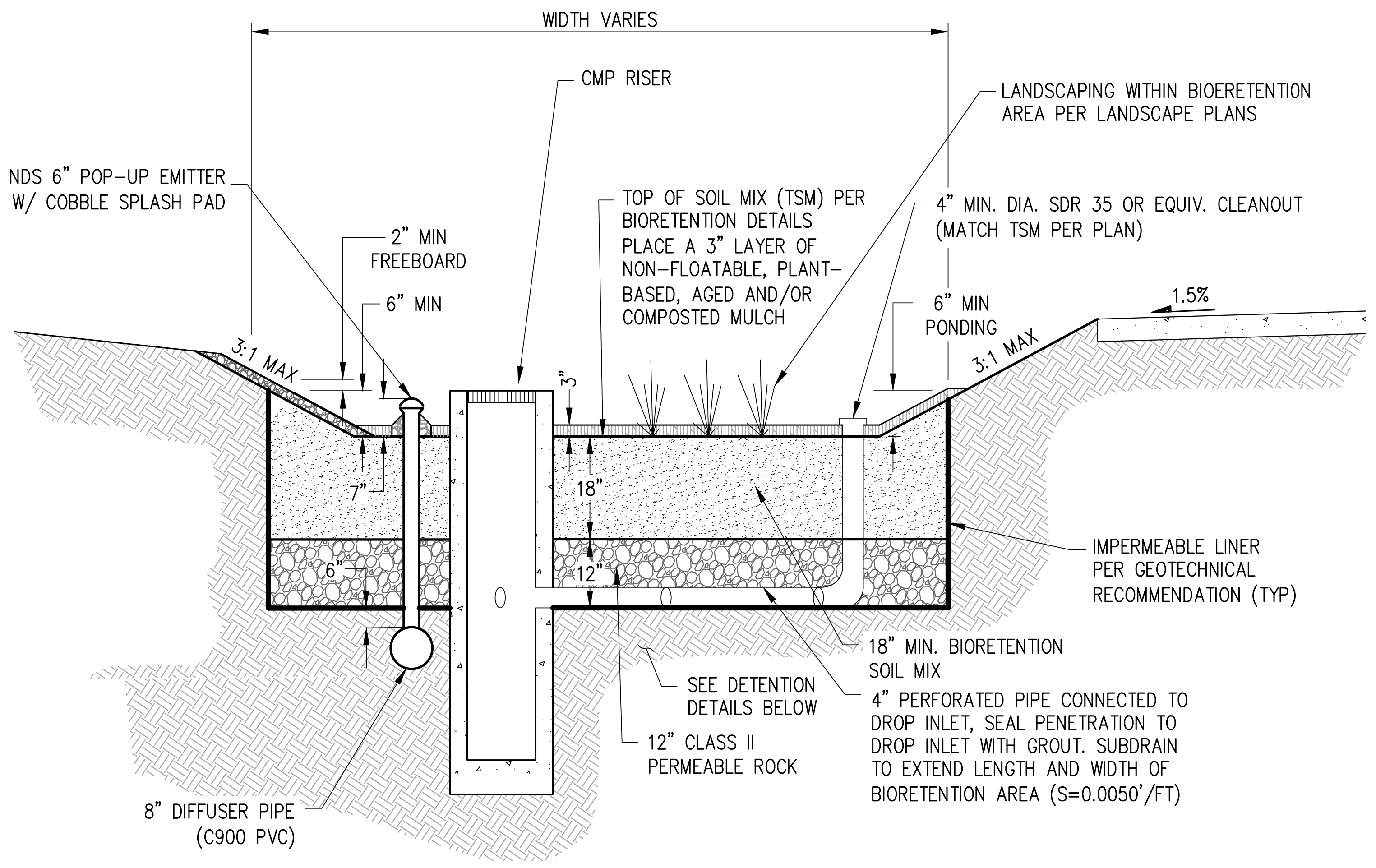
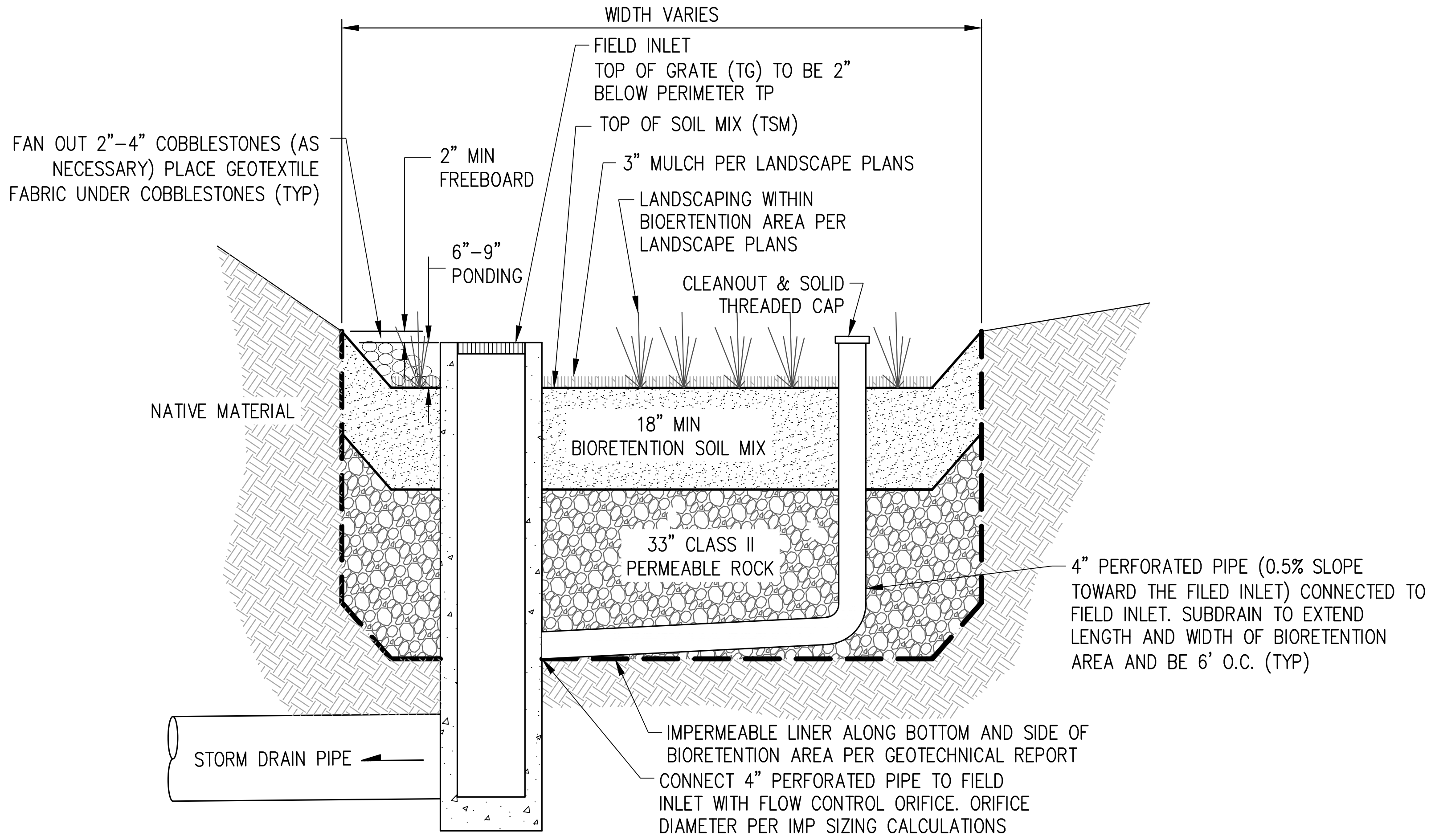
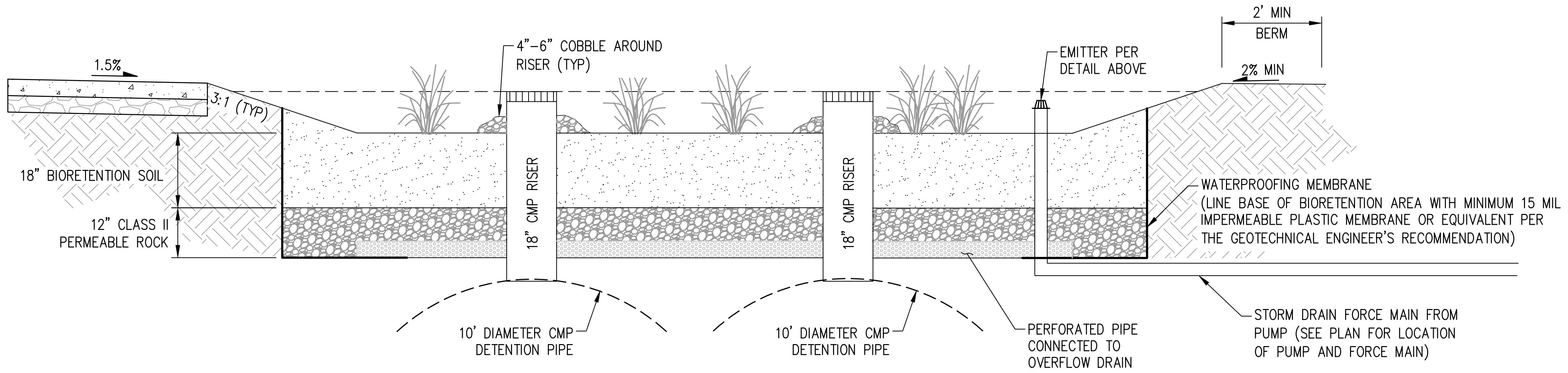


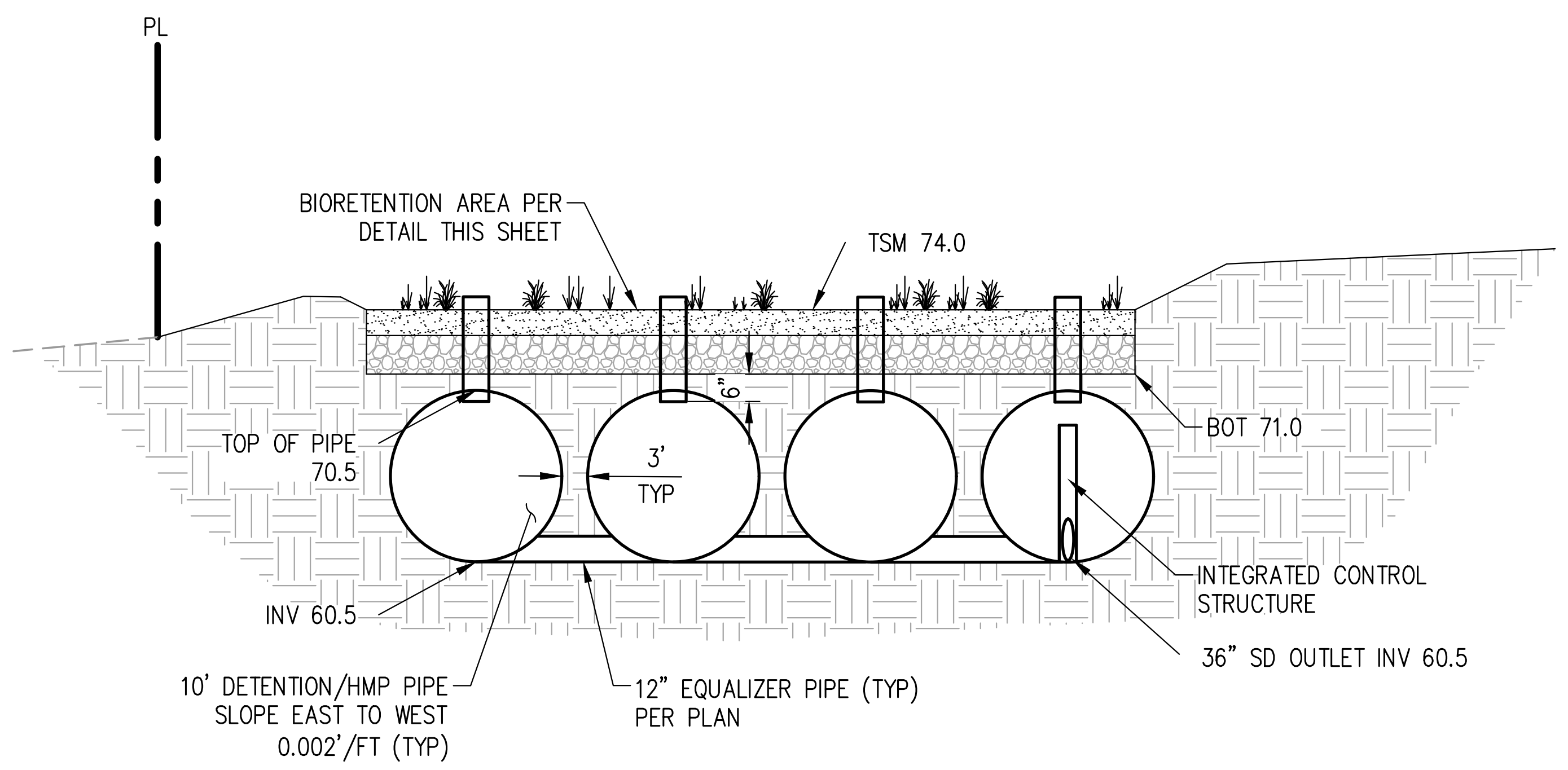
BIORETENTION AREA
(IMP 1)
NOT TO SCALE



BIORETENTION AREA IN LANDSCAPE AREA
(IMP 2)
NOT TO SCALE



BIORETENTION AREA
(IMP 1)
NOT TO SCALE



DETENTION BELOW BIORETENTION AREA
(IMP 1)
NOT TO SCALE

Project Name: Wildflower Townhomes
Project Type: Treatment and Flow Control
APN: 052-0140-013 Thru 16
Drainage Area: 398,146
Mean Annual Precipitation: 13.6

IV. Areas Draining to IMPs

IMP Name: IMP1
IMP Type: Bioretention + Vault
Soil Group: IMP1

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor
DMA 1A	112,910	Conventional Roof	1.00	112,910
DMA 1B	168,268	Concrete or Asphalt	1.00	168,268
DMA 1C	76,168	Landscape	0.50	38,084
			Total	319,262

IMP Sizing

	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
Area	0.040	1.000	12,770	12,826
Volume	0.152	1.242	60,272	60,868
			Maximum Underdrain Flow (cfs)	0.29
			Orifice Diameter (in)	2.48

IMP Name: IMP2
IMP Type: Bioretention Facility
Soil Group: IMP2

DMA Name	Area (sq ft)	Post Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor
DMA 2A	10,950	Conventional Roof	1.00	10,950
DMA 2B	8,100	Concrete or Asphalt	1.00	8,100
DMA 2C	7,233	Landscape	0.50	3,617
			Total	22,667

IMP Sizing

	IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
Area	0.060	1.242	1,689	1,691
Surface Volume	0.050	1.242	1,408	1,410
Subsurface Volume	0.066	1.242	1,858	1,861
			Maximum Underdrain	0.02

IMP CALCULATOR OUTPUT
NOT TO SCALE

STORMWATER DETAILS

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA
SCALE: NTS DATE: FEBRUARY 2, 2024

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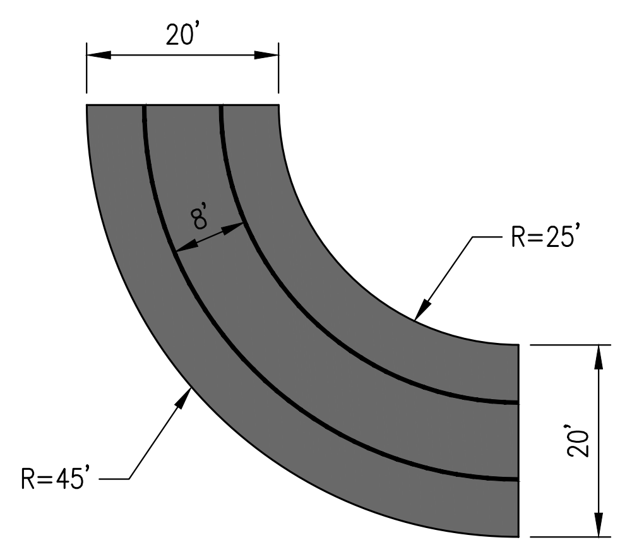
SHEET NO.
12
OF 17 SHEETS

LEGEND

— — —	EXISTING RIGHT OF WAY
▬ ‒ ‒ ▬	PROPOSED PROJECT BOUNDARY
– – – –	BUILDING OVERHANG
▩	PROPOSED PAVEMENT
□	EXISTING PAVEMENT TO REMAIN
▨	PROPOSED SIDEWALK
🟥	26' FIRE LANE
○	EXISTING FIRE HYDRANT
●	PROPOSED FIRE HYDRANT
○	PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
▬ ▬ ▬ ▬	RED CURB PAINTED WITH THE WORDS "NO PARKING – FIRE LANE"

NOTES:

1. BUILDING EAVE HEIGHT IS PER THE ARCHITECTURAL DRAWINGS AND NOTED HERE IN. FOR BUILDINGS WITH THE EAVE HEIGHT GREATER THAT 30', AN AERIAL FIRE APPARATUS ACCESS ROAD IS LOCATED NOT LESS THAN 15 FEET AND NOT GREATER THAN 30 FEET FROM EACH BUILDING AND IS POSITIONED PARALLEL TO ONE SIDE OF EACH BUILDING PER THE CA FIRE CODE. REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAILED INFORMATION.
2. ACCESS ROADWAYS OF LESS THAN 28' UNOBSTRUCTED WIDTH SHALL HAVE SIGNS POSTED OR RED CURBS PAINTED WITH THE WORDS "NO PARKING – FIRE LANE" CLEARLY MARKED.
3. LADDER PADS ARE TO BE CLEAR OF OBSTRUCTIONS AND LOCATED WITH FINAL BUILDING PERMIT PLANS AND SITE CONSTRUCTION DOCUMENTS.



CCCFPD FIRE ACCESS TURNING TEMPLATE

NOT TO SCALE

FIRE ACCESS PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=50' DATE: FEBRUARY 2, 2024

0 50 100 150

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SHEET NO.
13
OF 17 SHEETS

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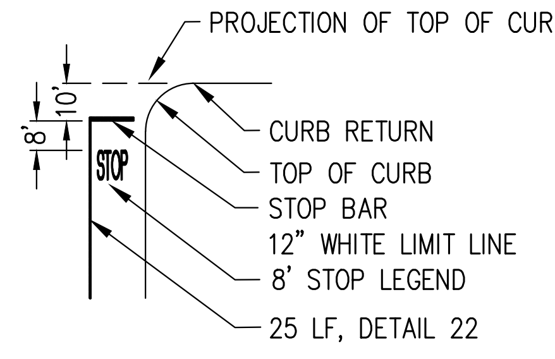
LEGEND

R1-1	STOP SIGN
R26 (CA)	NO PARKING ANYTIME SIGN
R99C (CA)	ACCESSIBLE PARKING ONLY – MINIMUM FINE $250 SIGN
SNS	STREET NAME SIGN PER COUNTY STANDARD.
22	DETAIL 22 – DOUBLE YELLOW STRIPE PER CALTRANS STD. PLANS
4W	4" WHITE STRIPE
12W	12" WHITE STRIPE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
▬ ▬ ▬ ▬	RED CURB PAINTED WITH THE WORDS "NO PARKING – FIRE LANE"
▪	FIRE HYDRANT MARKER
	BIKE LANE SHARROW PAVEMENT MARKINGS PER CALIFORNIA MUTCD

STRIPING NOTES

1. ALL STRIPING, PAVEMENT MARKING, AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE CALTRANS CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND MOST CURRENT STANDARD DETAILS AND SPECIFICATIONS.

2. ALL DETAIL NUMBERS REFER TO CALTRANS STANDARD PLANS STRIPING DETAILS.



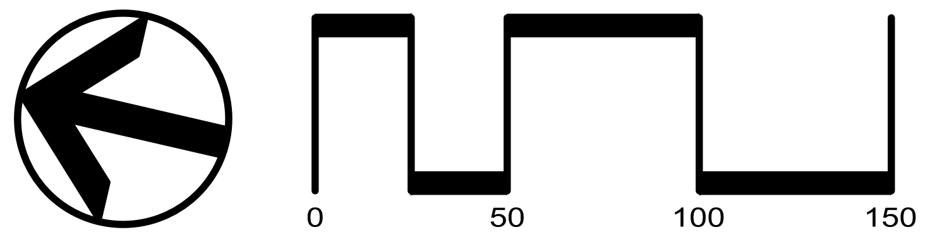
STRIPING DETAIL

SIGNING & STRIPING PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=50' DATE: FEBRUARY 2, 2024



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SHEET NO.
14
OF 17 SHEETS

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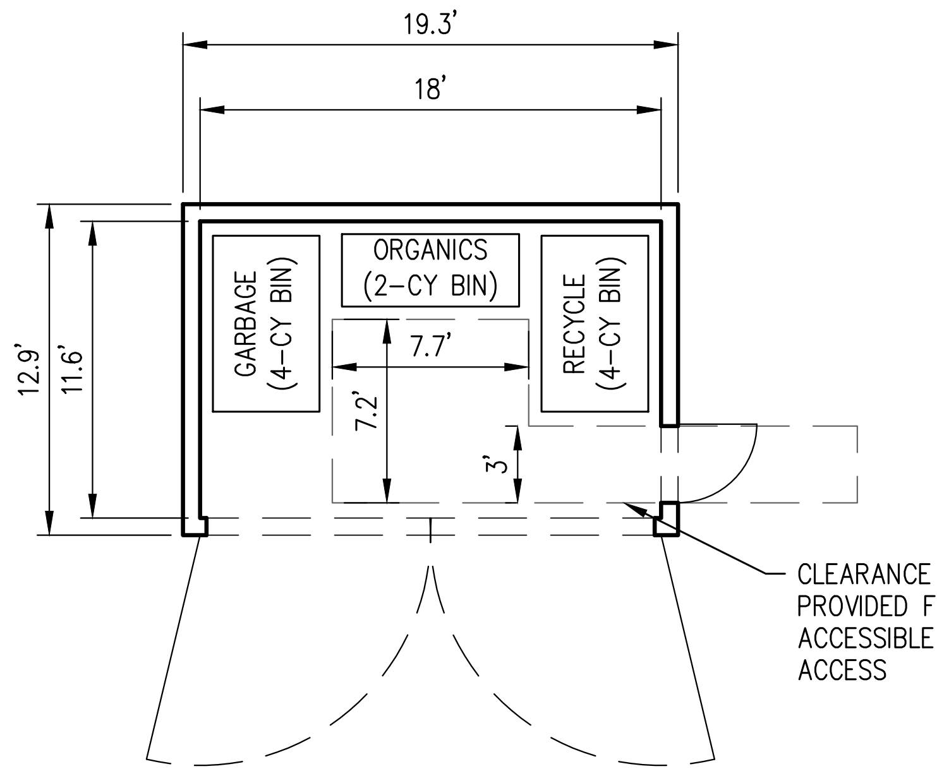
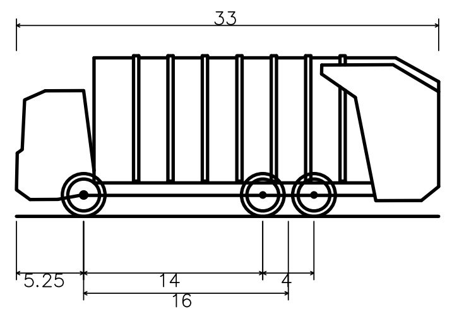
LEGEND

▬ ▬ ▬	SUBDIVISION BOUNDARY
— — —	ADJACENT PARCEL LINE
- - - -	PROPOSED EASEMENT
———	PROPOSED LOT LINE
- - - -	BUILDING OVERHANG
⬚	30' TRASH ENCLOSURE OFFSET
▨	BIORETENTION AREA
⛆	PROPOSED SIDEWALK/PATHWAY
▩	PROPOSED PAVEMENT
□	EXISTING PAVEMENT TO REMAIN

REFUSE, RECYCLABLES, & GREEN WASTE COLLECTION ENCLOSURE



1. ASSUME 6 NEEDED FOR SITE
2. UNITS WILL **NOT** HAVE INDIVIDUAL TOTES WITHIN PRIVATE GARAGES



REPUBLIC SERVICES GARBAGE TRUCK	
Overall Length	33.000ft
Overall Width	9.000ft
Overall Body Height	12.538ft
Min Body Ground Clearance	1.227ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	37.500ft

NOTE

THE TRUCK TURNING MOVEMENTS ON THE PLAN SHOW THE TRUCK WHEEL MAY BE WITHIN THE GUTTER (REPRESENTED BY THE LINE NEXT TO THE GREY HATCH), BUT THE TRUCK WILL NOT BE DRIVING OVER THE CURB.

WASTE COLLECTION PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=30' DATE: FEBRUARY 2, 2024

0 30 60 90

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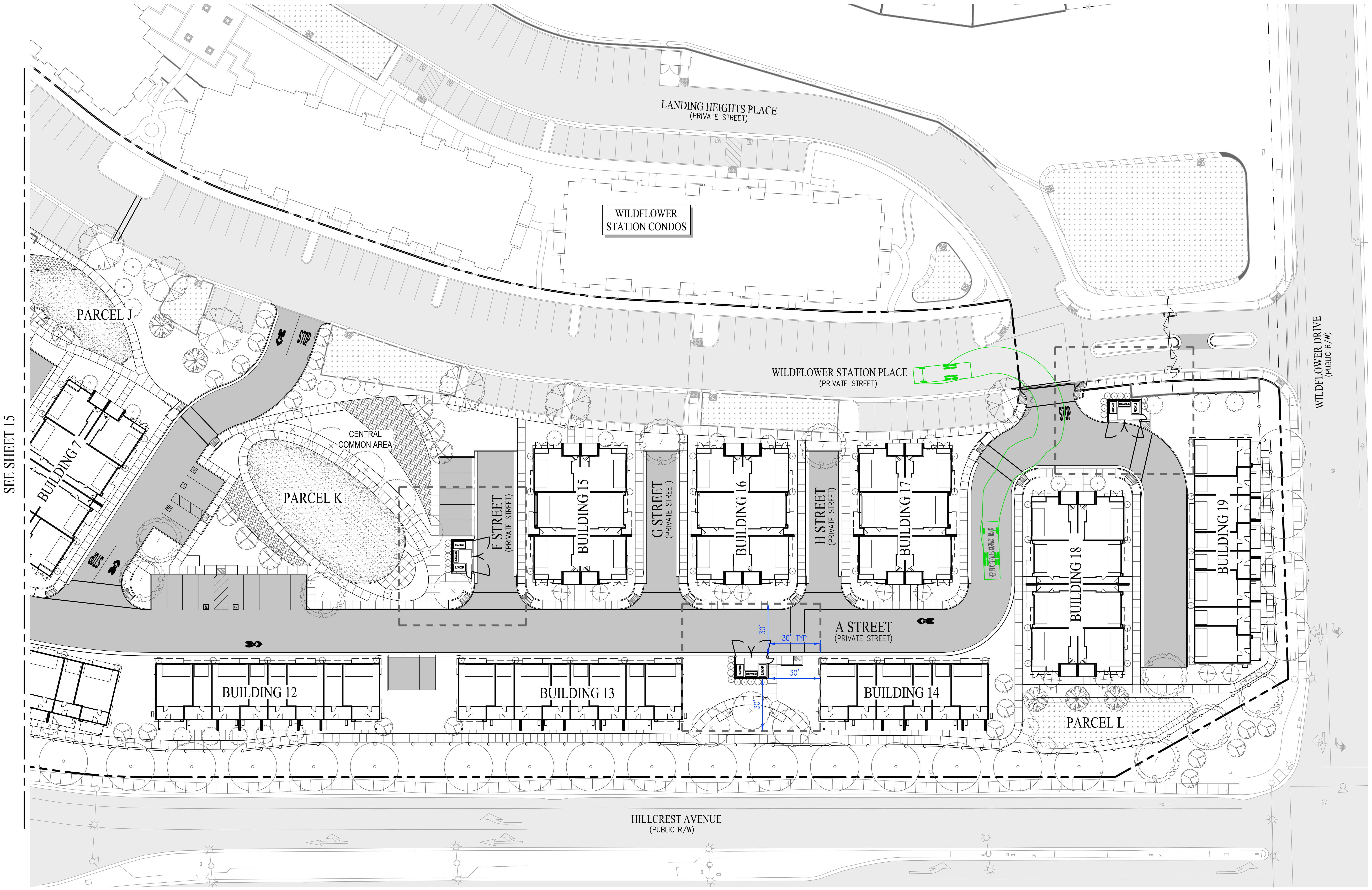
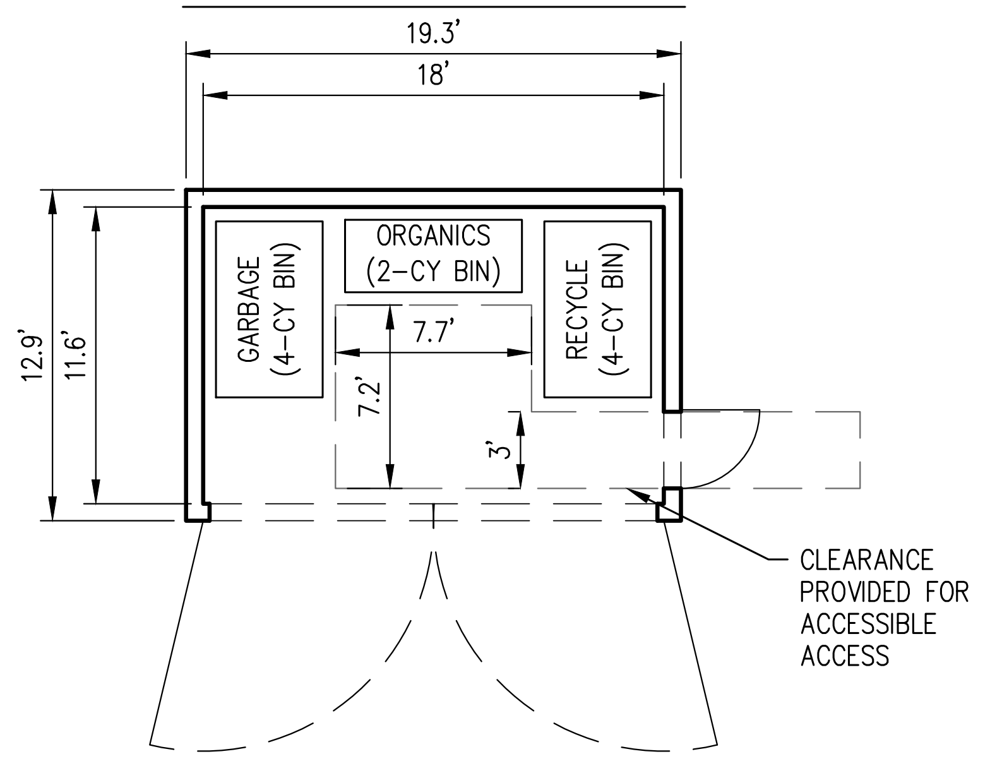
SHEET NO.
15
OF 17 SHEETS

F:\2659-000\ACAD\TM\TM15-TM16.DWG



REFUSE, RECYCLABLES, & GREEN
WASTE COLLECTION ENCLOSURE



1. ASSUME 6 NEEDED FOR SITE
2. UNITS WILL **NOT** HAVE INDIVIDUAL TOTES WITHIN PRIVATE GARAGES

WASTE COLLECTION PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1"=30' DATE: FEBRUARY 2, 2024

0 30 60 90

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SHEET NO.
16
OF 17 SHEETS

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LEGEND

- - - - CLASS III SHARED BIKE LANE

● GUEST BICYCLE PARKING
(SEE LANDSCAPE PLANS FOR TYPE & QUANTITY)

BIKE CIRCULATION PLAN

WILDFLOWER STATION - SUBDIVISION 9601

CITY OF ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

SCALE: 1"=50' DATE: FEBRUARY 2, 2024

0 50 100 150

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SHEET NO.
17
OF 17 SHEETS

F:\2659-000\ACAD\TM\TM17.DWG

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CONTRA COSTA COUNTY CALIFORNIA

VICINITY MAP
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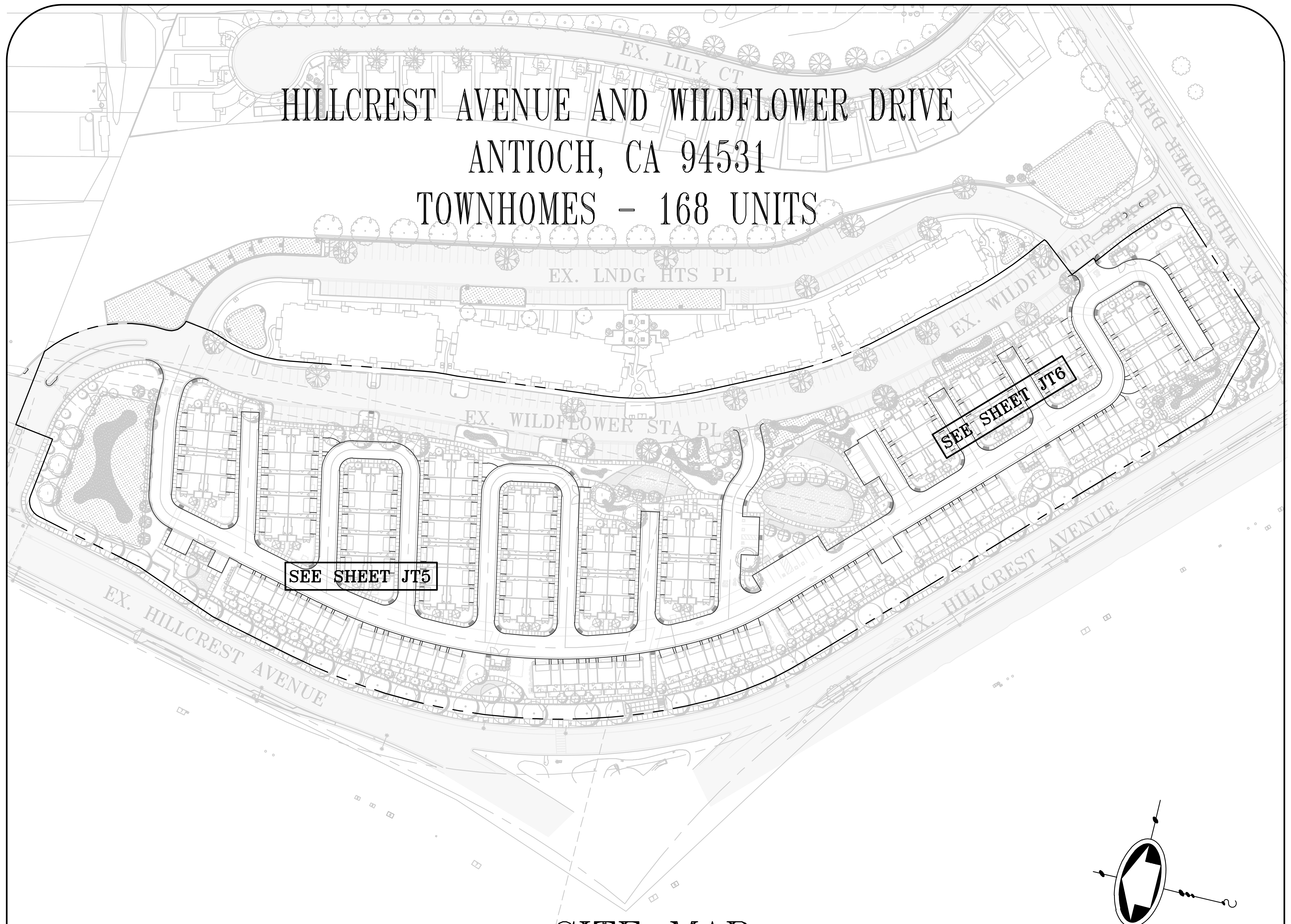


SITE MAP
NOT TO SCALE

LEGEND

JT	PROPOSED JOINT TRENCH
JTX	PROPOSED JOINT TRENCH CROSSING
SVC	PROPOSED JOINT TRENCH SERVICE
EX JT	EXISTING JOINT TRENCH
EX GAS	EXISTING GAS
EX FO	EXISTING FIBER OPTIC
ESL	EXISTING STREET LIGHT CONDUIT
ECUG	EXISTING UNDERGROUND CATV LINES
EEUG	EXISTING UNDERGROUND ELECTRIC LINES
EUUG	EXISTING UNDERGROUND UTILITY LINES
ETUG	EXISTING UNDERGROUND TELEPHONE LINES
EUOH	EXISTING OVERHEAD UTILITY LINES
ECOH	EXISTING OVERHEAD CATV LINES
ETOH	EXISTING OVERHEAD TELEPHONE LINES
EEOH	EXISTING OVERHEAD ELECTRIC LINES
CUG	PROPOSED UNDERGROUND CATV LINES
EUG	PROPOSED UNDERGROUND ELECTRIC LINES
TUG	PROPOSED UNDERGROUND TELEPHONE LINES
▭	EXISTING PRIMARY SPLICE BOX
□	EXISTING SECONDARY SPLICE BOX
▲	PG&E 3ø, PAD MOUNT TRANSFORMER CONCRETE PAD SIZE: 90" x 106"
5S	PG&E SECONDARY SPLICE BOX, 3' x 5' x 3'6"
✱	EXISTING ELECTROLIER, SINGLE ARM
✱ ✱	EXISTING ELECTROLIER, DOUBLE ARM

SHEET INDEX

SHEET NO.	DESCRIPTION
JT1	JOINT TRENCH COMPOSITE TITLE SHEET
JT2	JOINT TRENCH GENERAL NOTES AND DETAILS
JT3	JOINT TRENCH DETAILS
JT4	JOINT TRENCH SECTIONS AND DETAILS
JT5 - JT6	JOINT TRENCH COMPOSITE PLAN
SL1-SL2	STREET LIGHTING GENERAL NOTES AND DETAILS
SL3 - SL4	STREET LIGHTING SITE PLAN
P1 - P6	PHOTO EXHIBIT SHEET

X L.F. OF JOINT TRENCH AND X STREET LIGHTS
SHALL BE INSTALLED WITH THIS JOINT TRENCH PLAN SET

19 NEW TOWNHOME BUILDINGS (168 UNITS)

1 NEW SERVICE COMPLETION (ELECTRIC, TELEPHONE, AND CATV)

TARRAR UTILITY REP.:	KARA PEDERSEN	JOB NO.	223027	PHONE NO.	(925) 240-2595
DEVELOPER:	DENOVA HOMES	JOB NO.	223027	PHONE NO.	(925) 605-9304
PG&E ELECTRIC COORDINATOR:	JASON BARRETT	JOB NO.	-	PHONE NO.	(925)459-2177
PG&E GAS COORDINATOR:	-	JOB NO.		PHONE NO.	
TELEPHONE REP.:	KEVIN BLUTH	JOB NO.	-	PHONE NO.	(925) 271-1510
CABLE T.V. REP.:	KURTIS FAULTNER	JOB NO.	-	PHONE NO.	(925) 337-2853

FILES STATUS

DESCRIPTION:	BY:	DATE:	STATUS:
CIVIL PLANS (ELECTRONIC FILE)	CBG	02-08-2023	R
ARCHITECTURAL PLANS (ELECTRONIC FILE)	SDG	02-08-2023	R
LANDSCAPE PLANS (ELECTRONIC FILE)	VANDERTOOLEN ASSOCIATES	02-08-2023	R
GAS DESIGN	-	-	-
ELECTRIC DESIGN	BROWN ELECTRIC ESTIMATING	XX-XX-XXXX	XXXX
TELEPHONE INTENT REPLY	AT&T	XX-XX-XXXX	XXXX
CATV INTENT REPLY	COMCAST	XX-XX-XXXX	XXXX
STREET LIGHT PLANS – PUBLIC	-	-	-
STREET LIGHT PLANS – PRIVATE	TARRAR UTILITY CONSULTANT	-	-
SOILS REPORT	XXXX	XX-XX-XXXX	XXXX

A = APPROVED • **ANS** = APPROVED NOT SIGNED • **NA** = NOT APPROVED• **F** = FIRST SUBMITTAL • **SS** = SECOND SUBMITTAL • **R** = RECEIVED

TARRAR UTILITY CONSULTANTS
APPROVED FOR SUBMITTAL
KARA PEDERSEN
QUALIFIED APPLICANT DESIGN ENGINEER

DESIGN CHANGE COMPONENT

ANY CHANGES TO THIS DESIGN
MUST BE APPROVED BY

-

PG&E GAS ADE

COMPOSITE DRAWING BY DEVELOPER

Estimate # ________

Approved ________ Gas ADE ________ Date

Approved ________ Electric ADE ________ Date

PG & E is not responsible for the accuracy of the specifications shown on this drawing.

SUBSTRUCTURE VERIFICATION STAMP

DEVELOPER NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR READJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR JOB SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES AND BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED ________

DATE: ________

COMPOSITE DRAWING BY DEVELOPER

Approved ________ Telephone representative ________ Date

Approved ________ CATV representative ________ Date

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com

TARRAR UTILITY CONSULTANTS

- Planning
- Design
- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH COMPOSITE TITLE SHEET
DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 2/5/2024
SCALE: NOT TO SCALE
DRAWN: KK
CHECKED: KT
JOB NO.: 223027
PRELIMINARY
NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
ZABIHULLAH ZACA
C 59346
Exp. 06/30/23
CIVIL
STATE OF CALIFORNIA

SHEET
JT1
OF
JT6
SHEETS

PROJECT NOTES:

1. FIELD ADJUST SERVICES TO MINIMIZE INTERFERENCE WITH EXISTING FACILITIES (TYPICAL).
2. CONTRACTOR SHALL PERFORM ALL TRENCHING, EXCAVATING, BACKFILLING AND OTHER WORK AS SHOWN OR NOTED ON PLANS, AND AS SPECIFIED ON UTILITY BID DOCUMENTS.
3. FIELD ADJUST SPLICE BOXES TO KEEP CLEAR OF SIDEWALK, DRIVEWAYS AND EXISTING FACILITIES (TYPICAL).
4. A 3 FOOT LEVEL WORKING AREA MUST BE MAINTAINED AROUND ALL ELECTRIC ENCLOSURES. PRIOR TO ENERGIZING THE SYSTEM, THE ELECTRIC UTILITY COMPANY INSPECTOR WILL DETERMINE IF RETAINING WALLS ARE REQUIRED TO MEET MINIMUM CLEARANCE BETWEEN ENCLOSURES AND THE TOPS OR TOES OF SLOPES. IF RETAINING WALLS ARE REQUIRED, THE DEVELOPER AND/OR CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE CITY/COUNTY BUILDING DEPARTMENT PRIOR TO WALL CONSTRUCTION.
5. TRANSITION TO VAULTS FROM TRENCH NOT SHOWN, SEE TRANSITION DETAIL SHEET **JT3** (TYPICAL).
6. CONTRACTOR SHALL PLACE ALL UTILITY SPLICE BOXES, ENCLOSURES & CONDUIT IN PROPER RELATIONSHIP TO FINAL GRADE (SHOWN SCHEMATICALLY).
7. ALL PG&E, TELEPHONE, CABLE T.V. AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3' SEPARATION FROM SEWER, WATER LATERALS AND DRIVEWAYS.
8. CONTRACTOR SHALL COORDINATE ALL CONNECTIONS BETWEEN PROPOSED AND EXISTING FACILITIES AS DIRECTED BY THE RESPECTIVE UTILITY COMPANY INSPECTOR. UTILITY COMPANY PERSONNEL SHALL MAKE ALL "HOT TIE-INS"; THE CONTRACTOR IS PROHIBITED FROM WORKING IN ANY ENERGIZED FACILITIES.
9. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE STREET EXCAVATION AND ENCROACHMENT PERMIT(S) FROM THE CITY/COUNTY PRIOR TO STARTING WORK IN THE PUBLIC STREET AREA.
10. FIELD LOCATE JOINT TRENCH FACILITIES TO KEEP CLEAR OF SERVICE LATERALS. SERVICE LATERALS TO BE ROUTED TO AVOID SPLICE BOX (ADDITIONAL P.U.E MAY BE REQUIRED).
11. RESPECTIVE UTILITY COMPANY TO OBTAIN CITY APPROVAL OF ALL ABOVE GROUND EQUIPMENT.
12. UNLESS OTHERWISE SHOWN ON THE PLANS, NATURAL BENDS SHALL BE USED FOR ALL CONDUIT EXCEPT STREET LIGHT CONDUIT.
13. INCIDENTAL TRENCHING TO SPLICE BOXES NOT SHOWN (TYPICAL). CONTRACTOR TO PROVIDE ADDITIONAL TRENCHING AS REQUIRED FOR CONDUIT ROUTING TO SPLICE BOXES AND CABINETS (TYPICAL).
14. ALL CONDUITS SHALL ENTER OR EXIT PERPENDICULAR TO BOX WALLS.
15. ALL CONDUITS MUST BE MANDREL TESTED AND APPROVED.
16. OFFSET SPLICE BOXES TO ROUTE TELEPHONE/FIBER OPTIC CONDUIT AS NEEDED (TYPICAL).
17. PULL ROPES SHALL BE PLACED IN ALL EMPTY CONDUITS AS REQUIRED BY EACH UTILITY COMPANY.
18. ALL PG&E SPLICE BOXES ADJACENT TO TRANSFORMER SHALL BE 26" IN DEPTH (TYPICAL).
19. ALL CONDUITS NOT ENTERING SPLICE BOXES OR ENCLOSURES SHALL BE CAPPED.
20. COORDINATE TIE-IN WITH UTILITY COMPANY AS REQUIRED.
21. THE STREET LIGHT SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" AND LIGHT SCHEDULE AS SHOWN ON THESE PLANS.
22. ALL EXISTING DUCTS TO BE USED IN THESE PLANS SHALL BE "VERIFIED" BY PULLING A MANDREL THROUGH THE ENTIRE EXISTING LENGTH PRIOR TO CONNECTION.
23. EDGE OF SPLICE BOXES & PEDESTALS SHALL BE 5' FROM EDGE OF FIRE HYDRANT AND 3' FROM STREET LIGHT (TYPICAL). CONTRACTOR TO AVOID DISTURBING FIRE HYDRANT THRUST BLOCK.
24. ALL UTILITY SUBSTRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" SHOWN ON THESE PLANS
25. MAINTAIN 3' CLEARANCE AND LEVEL AREA AROUND PRIMARY SPLICE BOXES & XFMRS.
26. DUE TO UNCERTAINTIES OF THE EXACT LOCATION OF EXISTING FACILITIES, FIELD LOCATION OF PROPOSED FACILITIES MAY BE REQUIRED. CONFIRM WITH VARIOUS UTILITIES FOR EXACT PLACEMENT.
27. FOR CLARITY – BOXES/PEDESTALS ARE SHOWN AT LARGER SIZE THAN ACTUAL. FIELD ADJUST TO KEEP CLEAR OF DRIVEWAYS (TYPICAL).
28. ALL SERVICE FACILITIES SHALL BE EXTENDED TO EITHER THE PROPERTY LINE OR TO POSITION SHOWN ON THE PLANS, AND THEN CAPPED, BURIED AND LOCATION STAKED.
29. THESE PLANS WERE PREPARED UTILIZING PLANS RECEIVED FROM R-PN1 (R-PN2).

ABBREVIATION LIST

B/C	BACK OF CURB	H.P.S.	HIGH PRESSURE SODIUM	RT	RETAINING WALL
B/W	BACK OF WALK	IRR.	IRRIGATION CONTROLLER	R/W	RIGHT OF WAY
BTU	BRITISH TERM UNITS	J.T.	JOINT TRENCH	SCH.	SCHEDULE
CB	CATCH BASIN	KV	KILO-VOLTS	SD	STORM DRAIN
℄	CENTERLINE	LE	LANDSCAPE EASEMENT	SHT.	SHEET
CAT.	CATALOG	LF	LINEAR FOOT/FEET	S/W	SIDE WALK
C OR CATV	CABLE TELEVISION	MH	MANHOLE	SS	SANITARY SEWER
CFH	CUBIC FEET PER HOUR	MIN.	MINIMUM	SSE	SANITARY SEWER EASEMENT
C.I.P.	CAPITOL IMPROVEMENT PROJECT	MPOE	MINIMUM POINT OF ENTRY	ST. LT.-S/L	STREET LIGHT
CL	CENTER LINE	N.T.S.	NOT TO SCALE	SUBD'V	SUBDIVISION
CU	COPPER	O.D.	OUTER DIAMETER	Sqft.	SQUARE FOOTAGE
E	ELECTRIC	O.H.	OVER HEAD	T	TELEPHONE
EP	EDGE OF PAVEMENT	PIEUE	PRIVATE INGRESS, EGRESS, AND UTILITY EASEMENT	TUC	TARRAR UTILITY CONSULTANTS
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	PL	PROPERTY LINE	TYP.	TYPICAL
EX.	EXISTING	P.S.	POWER SUPPLY	T/S	TRAFFIC SIGNAL
F/C	FACE OF CURB	PROJ.	PROJECT	U.G.	UNDERGROUND
FH	FIRE HYDRANT	PSDE	PRIVATE STORM DRAIN EASEMENT	U.O.N.	UNLESS OTHERWISE NOTED
FUT.	FUTURE	PSE	PUBLIC SERVICE EASEMENT	V	VOLT
F.O.	FIBER OPTIC	PVAW	PRIVATE VEHICLE ACCESS WAY	W	WATT
G	GAS	P.V.C.	POLY VINYL CHLORIDE	WT	WATER
GALV.	GALVANIZE	PwlE	PUBLIC WATER LINE EASEMENT	W/	WITH
G.E.	GENERAL ELECTRIC	PWR	POWER	W/O	WITHOUT
GRD.	GROUND	PUE	PUBLIC UTILITY EASEMENT	WLE	WATER LINE EASEMENT
H.O.A.	HOME OWNERS ASSOCIATION			XFMR	TRANSFORMER

JOINT TRENCH AND UTILITY BOX LOCATION

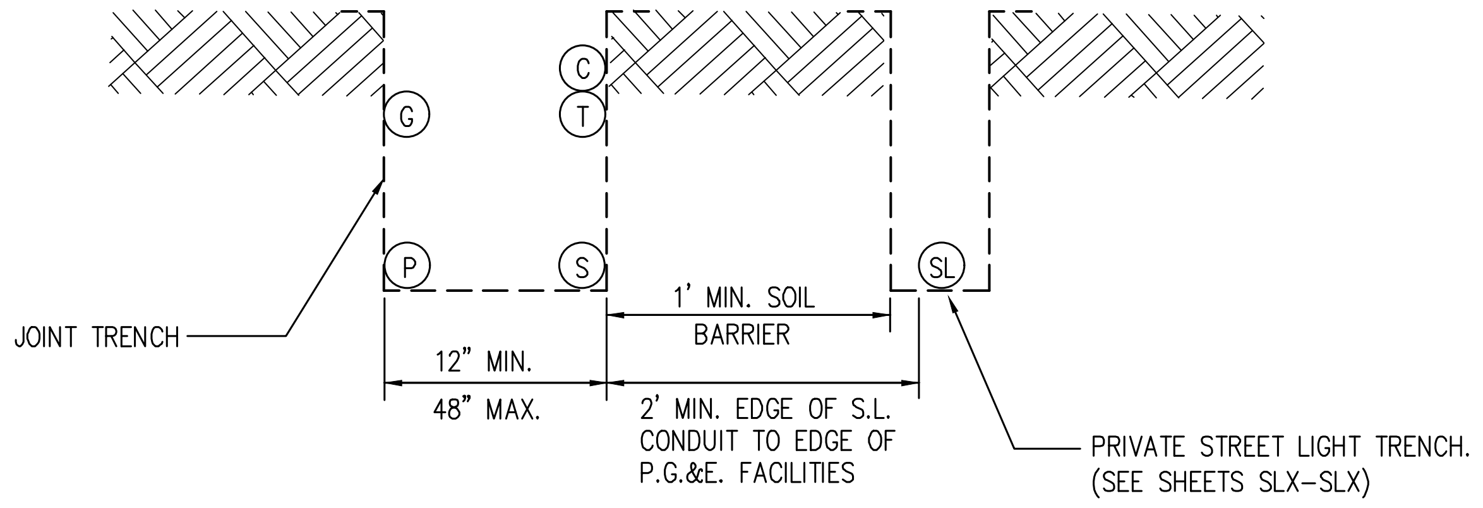
THIS AREA RESERVED FOR STREET SECTION TO BE PLACED AT A LATER TIME

JOINT TRENCH STREET SECTIONS

NOT TO SCALE
NOTE: SEE PLANS FOR CONFIGURATIONS AND ARRANGEMENTS.
* UNLESS OTHERWISE SHOWN

WITHIN ROADWAY SECTION
(95% RELATIVE COMPACTION FOR THE TOP 6"
BELOW ROAD SUBGRADE AND 90% BELOW THAT)

PRIVATE STREET LIGHT TRENCH LOCATION ADJACENT TO JOINT TRENCH



DETAIL X
N.T.S. JTX

PRIVATE STREET LIGHT TRENCH LOCATION ADJACENT TO JOINT TRENCH

NOT TO SCALE

GENERAL NOTES:

1. ALL JOINT TRENCH CONSTRUCTION WORK SHALL BE IN ACCORDANCE WITH PG&E UTILITY OPERATIONS UO STANDARD S5453.
2. ALL WORK SHALL BE SUBJECT TO THE INSPECTION AND SATISFACTION OF ALL PARTICIPATING UTILITIES AND CITY INSPECTORS.
3. BACKFILL SELECTION SHALL BE SUBJECT TO THE APPROVAL OF THE RESPECTIVE UTILITY COMPANIES, THE SOILS ENGINEER AND THE CITY AND/OR COUNTY WHERE THE PROJECT IS LOCATED. CONSULT PARTICIPATING UTILITIES, SOILS ENGINEER, AND THE CITY FOR APPROVED BACKFILL MATERIAL. COMPACTION TO MEET LOCAL AGENCIES REQUIREMENTS.
4. THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION S5453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE PAVEMENT AND/OR SIDEWALK WHERE REMOVED OR DAMAGED AS A RESULT OF ITS OPERATION (UNLESS OTHERWISE NOTED). REPLACEMENT OF PAVEMENT AND/OR SIDEWALK TO BE PER CITY SPECIFICATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND NOTIFY ALL PARTICIPATING UTILITY INSTALLATIONS.
7. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
8. **IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE AND/OR PRECISE LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION. TARRAR UTILITY CONSULTANTS MAKES NO WARRANTY WHATSOEVER THAT THE EXISTING UNDERGROUND UTILITIES AND/OR STRUCTURES DEPICTED ON THE PLANS HAVE BEEN ACCURATELY LOCATED OR THAT THERE ARE NO OTHER UNDERGROUND UTILITIES AND STRUCTURES IN ADDITION TO WHAT HAS BEEN SHOWN. CALL U.S.A. A MINIMUM OF 48 HOURS PRIOR TO STARTING CONSTRUCTION. FOR CALIFORNIA NORTH, (KERN COUNTY AND NORTHERLY, AND NEVADA) CALL (800)227-2600. FOR CALIFORNIA SOUTH, (SAN BERNARDINO COUNTY AND SOUTHERLY) CALL (800)422-4133.**
9. CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY AND CITY LAWS AND ORDINANCES AND WITH THE REGULATIONS OF THE DEPARTMENT OF INDUSTRIAL RELATIONS, O.S.H.A. AND ANY OTHER GOVERNMENTAL AGENCY RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL.
10. THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED TO BE COMPLEMENTARY TO EACH OTHER. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE DRAWINGS, SHALL BE OF LIKE EFFECT AS IF SHOWN ON OR MENTIONED IN BOTH. IF DISCREPANCY IS FOUND, NOTIFY TARRAR UTILITY CONSULTANTS PRIOR TO STARTING WORK.
11. TRENCH AND CONDUIT LAYOUTS ARE SHOWN SCHEMATICALLY.
12. TRENCHING OR SUBSTRUCTURE EXCAVATION MAY NECESSITATE OPERATION OVER, UNDER, OR ADJACENT TO OTHER UNDERGROUND UTILITIES (STORM, SEWER, WATER, ETC...). THE CONTRACTOR IS RESPONSIBLE TO LOCATE, PROSPECT, EXPOSE AND PROTECT ALL ADJACENT OR CROSSING UNDERGROUND UTILITIES. THIS WORK TO PROTECT THOSE UTILITIES IS NOT CONSIDERED AS EXTRA WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW IMPROVEMENT PLANS, IN CONJUNCTION WITH THIS PLAN, AND BID THE WORK ACCORDINGLY.
13. THE QUANTITIES SHOWN ON THESE PLANS ARE ONLY ESTIMATES OF WHAT WILL ACTUALLY BE REQUIRED FOR THE CONSTRUCTION OF THE OVERALL PROJECT. FINAL QUANTITIES MAY VARY ACCORDING TO CHANGES, ADDITIONS, DELETIONS OR OMISSIONS ON THE ORIGINAL PLAN.
14. VERIFY ALL SUBSTRUCTURE EXCAVATION DIMENSIONS WITH SUPPLIER(S) BEFORE BIDDING.
15. TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHOULD REVIEW THE PROJECT SITE PRIOR TO SUBMITTING ITS BID.
16. THE CONTRACTOR IS REQUIRED TO EXCAVATE BELL HOLE(S) AT TIE-IN LOCATIONS AS DIRECTED BY PARTICIPATING UTILITY.
17. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.
18. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AS-BUILT DRAWINGS AFTER INSTALLATION OF PG&E'S GAS AND ELECTRIC SYSTEMS (PRIOR TO "HOT TIE-INS").
19. THE CITY INSPECTOR SHALL BE NOTIFIED TWO WORKING DAYS PRIOR TO COMMENCEMENT OF WORK. COORDINATE WITH THE INSPECTOR ANY SERVICES TO BE ABANDONED.
20. THE CONTRACTOR IS TO VERIFY THE RIGHT OF WAY, PUBLIC UTILITY EASEMENT AND/OR PUBLIC SERVICE EASEMENT ACQUISITION WITH THE APPLICANT PRIOR TO CONSTRUCTION WITHIN AREAS OF QUESTION.
21. PG&E'S GENERAL TERM AND CONDITIONS FOR GAS AND ELECTRIC EXTENSION AND SERVICE CONSTRUCTION BY "APPLICANT" (EFFECTIVE 07/1/95) TO BE UTILIZED FOR ALL TRENCHING, BACKFILLING, AND INSTALLATION WORK.
22. IN THE EVENT OF DISPUTES OR DISAGREEMENT OVER ANY INSTALLATIONS, DESIGNS, PLANS OR DRAWINGS, THE SPECIFICATIONS AND REQUIREMENTS OF THE INDIVIDUAL UTILITY COMPANIES AND THEIR INSPECTORS SHALL TAKE PRECEDENCE. IN CASE OF DISCREPANCIES WITHIN THE DRAWINGS AND SPECIFICATIONS HEREIN, THE CONTRACTOR SHALL CONSULT TARRAR UTILITY CONSULTANTS FOR INTERPRETATION BEFORE WORK IS STARTED.
23. TARRAR UTILITY CONSULTANTS HEREIN, ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE QUALITY, QUANTITY OR TIMING OF WORK TO BE PERFORMED BY THE CONTRACTOR, UTILITY COMPANY CONSTRUCTION CREWS, OR OTHER SUB-CONTRACTOR OF DEVELOPER.
24. ALL TRENCHING, BACKFILLING AND INSTALLATION WORK IS TO BE IN ACCORDANCE WITH THE STANDARD PRACTICES AND SPECIFICATIONS OF EACH UTILITY COMPANY PARTICIPATING IN THE UTILITY TRENCHES WITHIN THE PROJECT.
25. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POINTS OF ACCESS THAT ARE AGREEABLE TO ADJACENT LAND USES AND TENANTS AT ALL TIMES.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASCERTAINING WHAT INSPECTIONS WILL BE REQUIRED FOR APPROVAL OF THE WORK AND FOR COORDINATING ALL SUCH INSPECTIONS. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS PRIOR NOTICE TO THE CITY, SOILS ENGINEER, UTILITY COMPANIES OR ANY OTHER INDIVIDUALS OR PUBLIC AGENCIES, THAT THE WORK IS READY FOR INSPECTION.
27. THE CONTRACTOR SHALL NOTIFY DEVELOPER 48 HOURS PRIOR TO THE NEED FOR SURVEY STAKING. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF ALL CONSTRUCTION STAKING SET BY THE DEVELOPER'S SURVEYORS AND WILL BE BACK CHARGED FOR ANY RE-STAKING THAT IS REQUIRED. ANY EXTRA CONSTRUCTION STAKING NECESSITATED SOLELY BY THE CONTRACTOR'S NEGLIGENCE WILL BE CHARGED TO AND PAID FOR BY THE CONTRACTOR.
28. ALL TRANSFORMERS AND TRANSFORMER PADS ARE TO BE INSTALLED PER PG&E SPECIFICATIONS. PROTECTIVE BOLLARDS ARE TO BE PLACED WHERE NEEDED.
29. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
30. KEEP ALL BOXES AND PEDESTALS WITHIN PUBLIC UTILITY EASEMENTS OR RIGHT OF WAY. AS SHOWN.
31. ALL SAND BACKFILL MUST HAVE TESTING OF PH LEVEL AS WELL AS SAND EQUIVALENT. SEE **CITY OF ANTIOCH** REQUIREMENTS.
32. THE PROPOSED CONSTRUCTION OPERATION MAY TAKE PLACE AT OR NEAR FENCE LINES, PROPERTY LINES AND PROPERTY IMPROVEMENTS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING THESE AREAS AND FOR MAINTAINING THESE AREAS AND FACILITIES AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
33. THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE SITE CONDITION AND SHALL DEFEND AND HOLD THE DEVELOPER AND TARRAR UTILITY CONSULTANTS HARMLESS FROM ANY ALLEGED CLAIMS OR LIABILITIES, EXCEPT THOSE ARISING FROM SOLE NEGLIGENCE OF THE DEVELOPER OR TARRAR UTILITY CONSULTANTS.
34. THE APPROXIMATE LOCATIONS OF ALL EXISTING UTILITY COMPANY UNDERGROUND LINES, POLES BOXES, ETC., WERE OBTAINED FROM A REVIEW OF AVAILABLE UTILITY COMPANY RECORDS, REPRESENTATIONS OF UTILITY COMPANY PERSONAL, OR FIELD OBSERVATIONS. NEITHER THE DEVELOPER NOR TARRAR UTILITY CONSULTANTS ASSUME ANY RESPONSIBILITY FOR VARIANCES BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR FOR ANY ADDITIONAL TRENCHING, BOX EXCAVATIONS, MATERIALS, ETC., THAT MAY BE REQUIRED TO COMPLETE THIS PROJECT IN THE EVENT AN EXISTING TIE-IN POINT SUBSTRUCTURE IS EITHER NON-EXISTING OR IS NOT SHOWN ON THE PLANS IN ITS ACTUAL FIELD POSITION. IT IS THE CONTRACTOR'S OBLIGATION AND RESPONSIBILITY TO SAFELY LOCATE ALL EXISTING UNDERGROUND FACILITIES BY SURFACE MARKING AND/OR HAND EXCAVATION PRIOR TO STARTING CONSTRUCTION.
35. "DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE TO OBTAIN A **CITY OF ANTIOCH** ENCROACHMENT PERMIT FOR ALL WORK DONE IN THE PUBLIC RIGHT OF WAY. DEVELOPER AND/OR CONTRACTOR IS ALSO RESPONSIBLE TO PROVIDE JOINT TRENCH PLANS TO THE **CITY OF ANTIOCH** AT THE TIME OF APPLICATION FOR THE ENCROACHMENT PERMIT."

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(925) 240-7013 fax
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- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH GENERAL NOTES AND DETAILS
DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

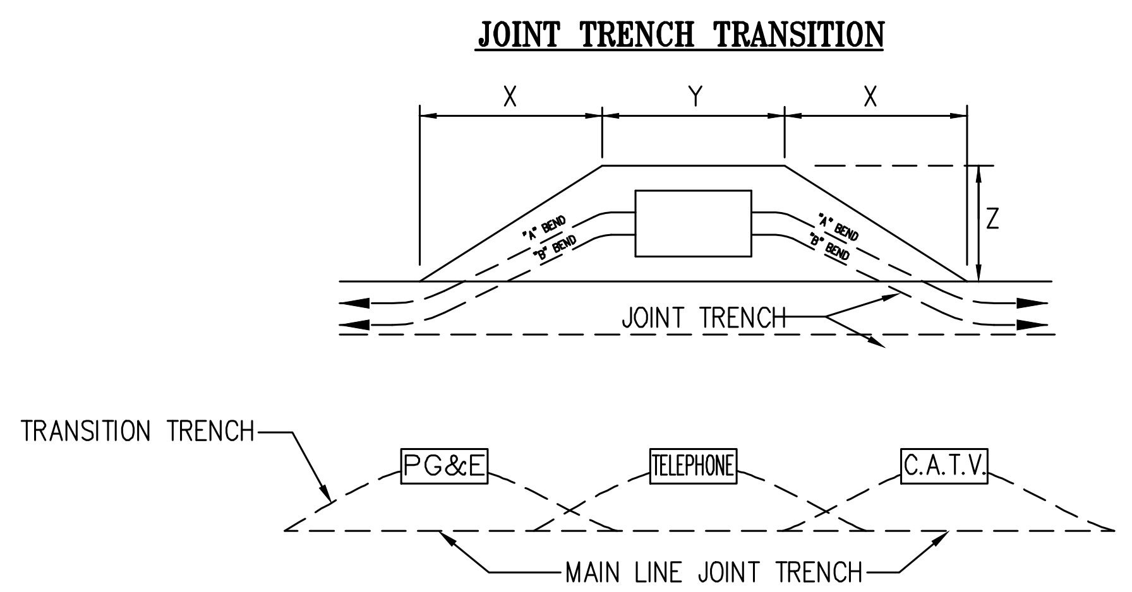
DATE: FEBRUARY 2024
DATE LAST WORKED ON: 2/5/2024
SCALE: NOT TO SCALE
DRAWN: KK
CHECKED: KT
JOB NO.: 223027
PRELIMINARY
NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811
CALL BEFORE YOU DIG
U S A
UNDERGROUND SERVICE ALERT

ZABIHULLAH ZACA
C 59346
Exp. 06/30/23
CIVIL

SHEET
JT2
OF
JT6
SHEETS

JOINT TRENCH TRANSITION



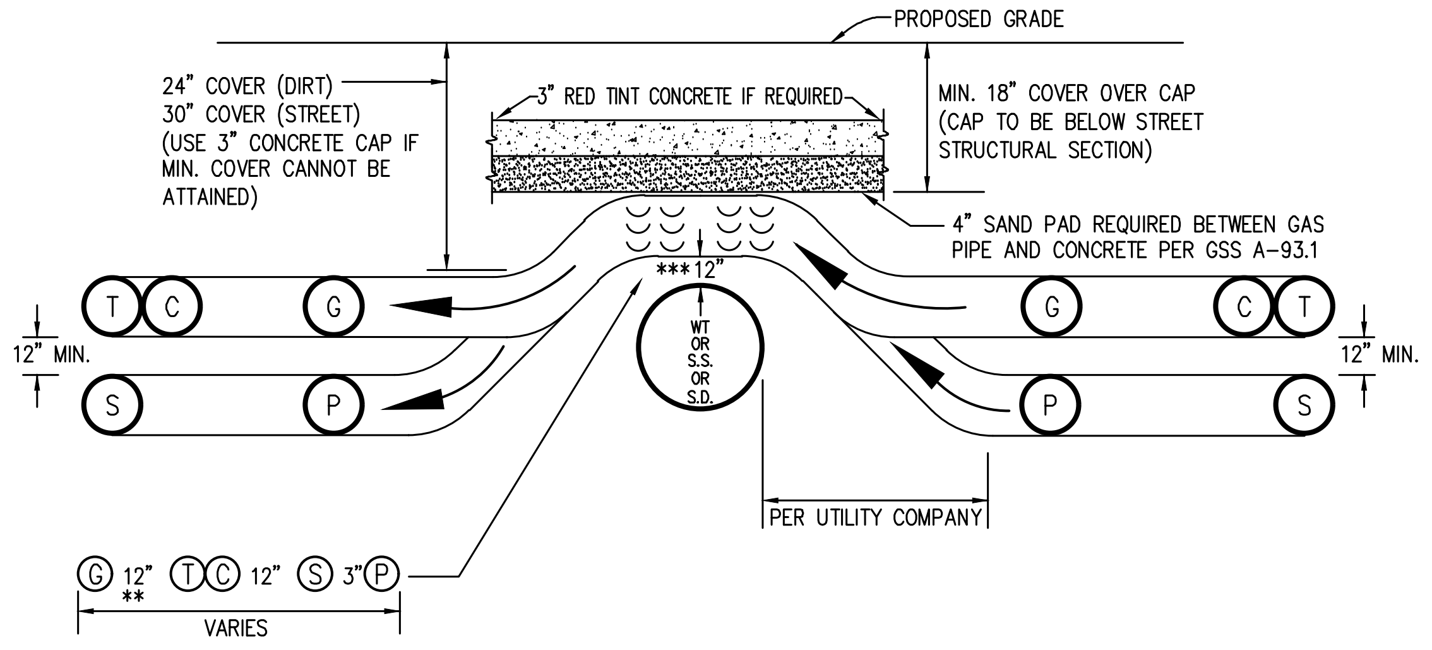
		DISTANCE (when conduit enters box)			
BEND	PRIMARY BOX SIZE	"X"	"Y"	"Z"	NOTES
"A"	3' x 5'	24'	7'	5'	BEND IS 60' RADIUS WITH AN ANGLE OF 10 DEG. USE 2-5 COUPLINGS WITH 1-5' CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	24'	11'	7'	
"B"	3' x 5'	32'	7'	5'	BEND IS 30' RADIUS WITH AN ANGLE OF 15 DEG. USE 3-5 COUPLINGS WITH 2-2 1/2' CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	32'	11'	7'	

NOTE:

1. CONTRACTOR TO EXCAVATE TRANSITIONS FROM MAIN-LINE TRENCH TO VAULTS AS REQUIRED BY EACH UTILITY.
2. TRANSITIONS NOT SHOWN ON COMPOSITE DRAWING FOR CLARITY.
3. CONTRACTOR TO INCLUDE COST OF TRANSITIONS IN VAULT EXCAVATION COST.

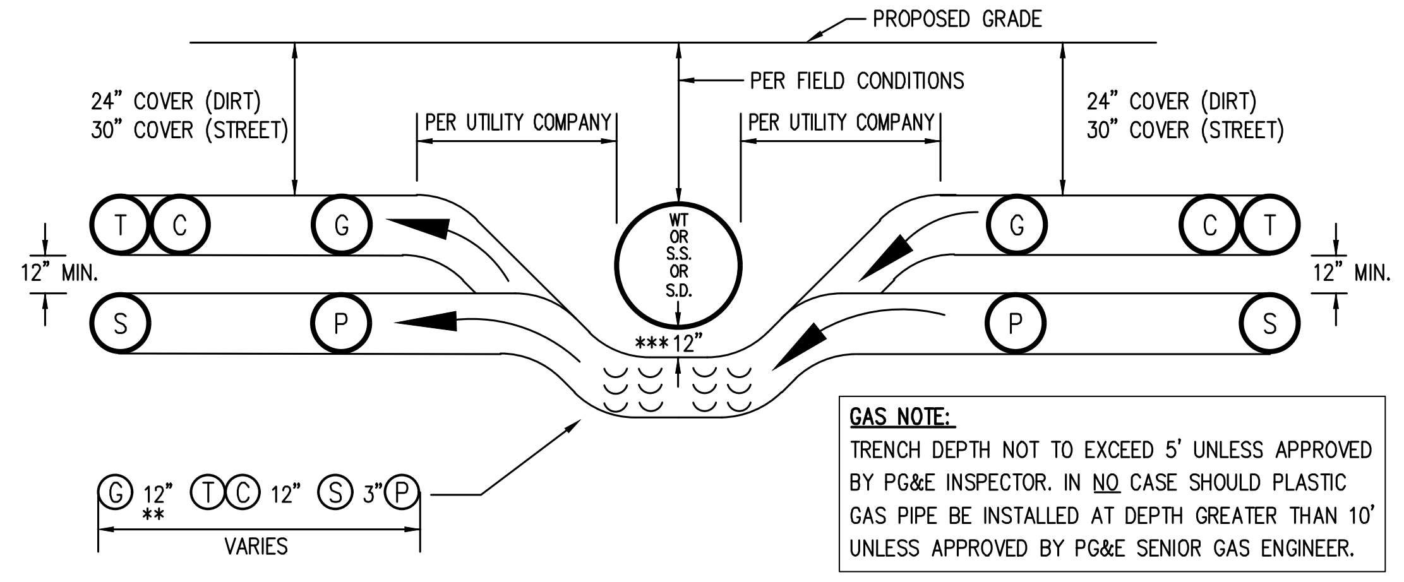
DETAIL 1 N.T.S. JT3

TYPICAL PRIMARY BOX EXCAVATION USING CONDUIT



JOINT TRENCH OVER WATER, SANITARY SEWER OR STORM DRAIN

CHOICE 1 (PREFERRED METHOD)



GAS NOTE:
TRENCH DEPTH NOT TO EXCEED 5' UNLESS APPROVED BY PG&E INSPECTOR. IN NO CASE SHOULD PLASTIC GAS PIPE BE INSTALLED AT DEPTH GREATER THAN 10' UNLESS APPROVED BY PG&E SENIOR GAS ENGINEER.

JOINT TRENCH UNDER WATER, SANITARY SEWER OR STORM DRAIN

CHOICE 2 (OPTIONAL METHOD)

* SEE MINIMUM COVER & CLEARANCE CHART

** WITH MUTUAL AGREEMENT, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMINCATION DUCTS (TELEPHONE & CATV).

*** 6" MINIMUM REQUIRED BY PG&E-ADDITIONAL CLEARANCE MAYBE REQUIRED BY CITY OR COUNTY

DETAIL 2 N.T.S. JT3

OVER UNDER DETAILS

CONSTRUCTION LABOR AND MATERIAL RESPONSIBILITY

PUBLIC UTILITY SYSTEM (JOINT TRENCH)

	P.G.&E. ELECTRIC	P.G.&E. GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TRENCHING:					
EXCAVATE, BACKFILL AND COMPACT	○	○	○	○	●
GAS MATERIAL:					
FURNISH	⊗	⊗	⊗	⊗	⊗
INSTALL	⊗	⊗	⊗	⊗	⊗
ELECTRIC CABLE:					
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
ELECTRIC CONDUIT:					
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
ELECTRIC SPLICE BOXES:					
EXCAVATE	○	○	○	○	●
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
ELECTRIC TFMR. ENCLS.:					
EXCAVATE	○	○	○	○	●
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
ELECTRIC EQUIP. ENCLS.:					
EXCAVATE	○	○	○	○	●
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
ELECTRIC TFMR. PADS:					
GRADE	⊗	⊗	⊗	⊗	⊗
FURNISH	⊗	⊗	⊗	⊗	⊗
INSTALL	⊗	⊗	⊗	⊗	⊗
ELECTRIC SWITCH PADS:					
GRADE	⊗	⊗	⊗	⊗	⊗
FURNISH	⊗	⊗	⊗	⊗	⊗
INSTALL	⊗	⊗	⊗	⊗	⊗
TELEPHONE CONDUIT:					
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
TELEPHONE CABLE:					
FURNISH	○	○	●	○	○
INSTALL	○	○	●	○	○
TELEPHONE SPLICE BOX:					
EXCAVATE	○	○	○	○	●
FURNISH	○	○	○	○	●
INSTALL	○	○	○	○	●
TELEPHONE INTER. PADS:					
GRADE	⊗	⊗	⊗	⊗	⊗
FURNISH	⊗	⊗	⊗	⊗	⊗
INSTALL	⊗	⊗	⊗	⊗	⊗
C.A.T.V. CONDUITS:					
FURNISH	○	○	○	●	○
INSTALL	○	○	○	●	○
C.A.T.V. SPLICE BOXES:					
EXCAVATE	○	○	○	○	●
FURNISH	○	○	○	●	○
INSTALL	○	○	○	●	○

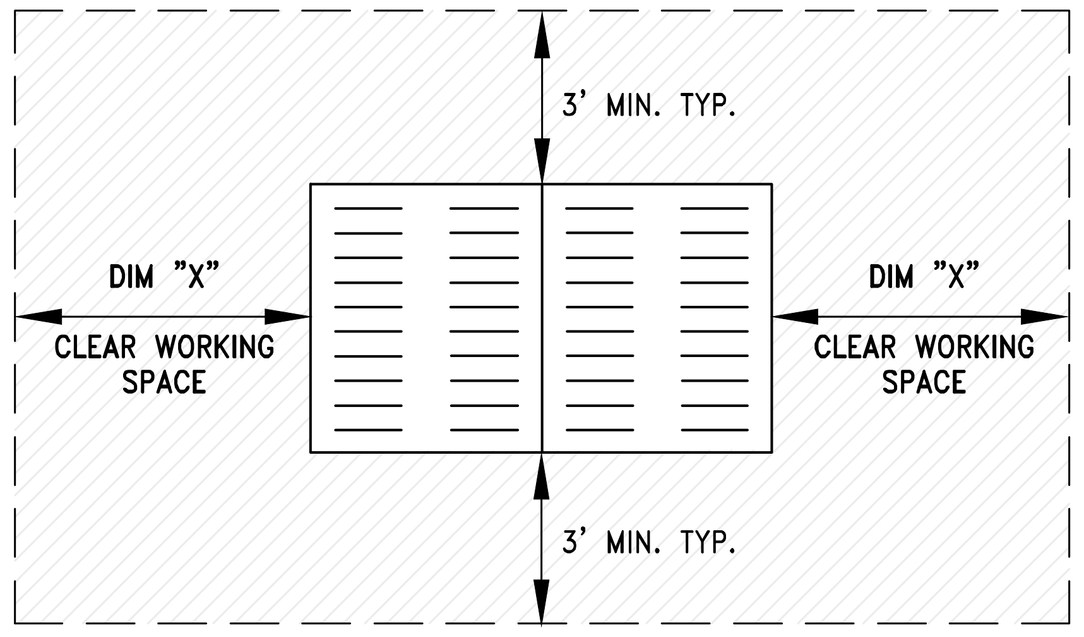
STREET LIGHTING SYSTEM

	P.G.&E.	CONTRACTOR
WIRE:		
FURNISH	○	●
INSTALL	○	●
CONDUIT:		
FURNISH	○	●
INSTALL	○	●
BASES:		
FURNISH	○	●
INSTALL	○	●
LUMINAIRES:		
FURNISH	○	●
INSTALL	○	●
SPLICE BOXES:		
FURNISH	○	●
INSTALL	○	●
EXCAVATE	○	●
POLES & ARMS:		
FURNISH	○	●
INSTALL	○	●

SCHEDULE: LS2A
INSTALL IN JOINT TRENCH: NO/YES
INSTALL IN SEPARATE TRENCH: YES/NO
CONDUIT SIZE: 1 1/2"
CONDUIT TYPE: SCH. 40
WIRE SIZE: #8 TYPE: CU

ADDITIONAL NOTES:
DEVELOPER TO SUPPLY AND INSTALL GAS & ELECTRIC FACILITIES UNDER THE COMPETITIVE BIDDING PROVISIONS OF PG&E GREEN BOOK RULES 15, 16 AND 20.

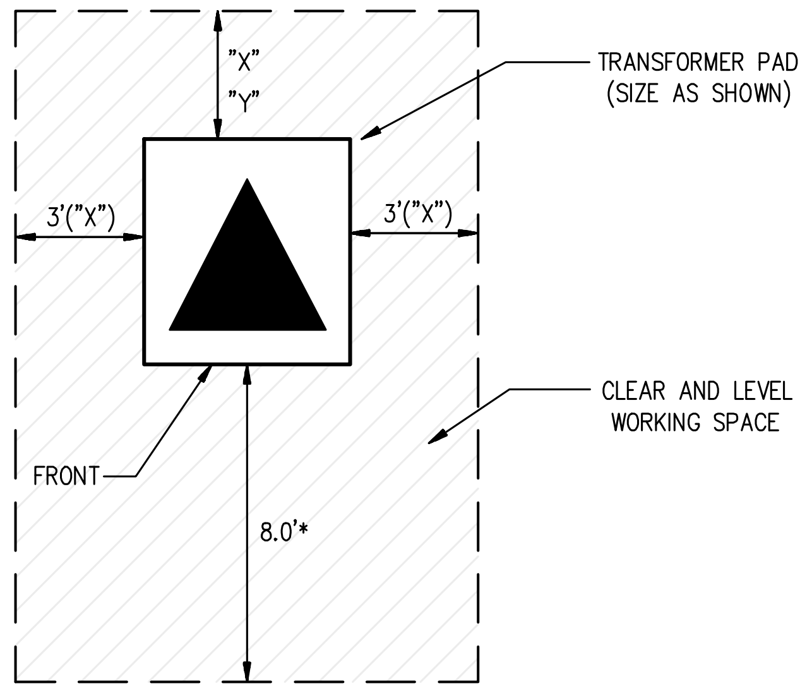
● DESIGNATES THE WORK TO BE PERFORMED BY THE CONTRACTOR AND EACH UTILITY COMPANY.



DIM "X"
3' MIN. 3'0" x 5'0" ENCLOSURES
4' MIN. 4' x 6'6" x 5'0" ENCLOSURES
5' MIN. 4'6" x 8'6" x 6'0" ENCLOSURES
(OR EASEMENT REQUIRED)

DETAIL 3 N.T.S. JT3

PG&E ENCLOSURE CLEARANCES



"X"= 3' MIN. CLEARANCE FROM COMBUSTIBLE WALL

"Y"= 2' MIN. CLEARANCE FROM NON-COMBUSTIBLE WALL

* MINIMUM 9' (COMMERCIAL/HIGH DENSITY) FROM FACE OF CURB

* MINIMUM 3' (RESIDENTIAL/LOW DENSITY) FROM FACE OF CURB

** MINIMUM 4' FROM ANY DOORWAY

DETAIL 4 N.T.S. JT3

PG&E PAD MOUNT TRANSFORMER DETAIL

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- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH DETAILS
DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 2/5/2024
SCALE: NOT TO SCALE
DRAWN: KK
CHECKED: KT
JOB NO.: 223027
PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

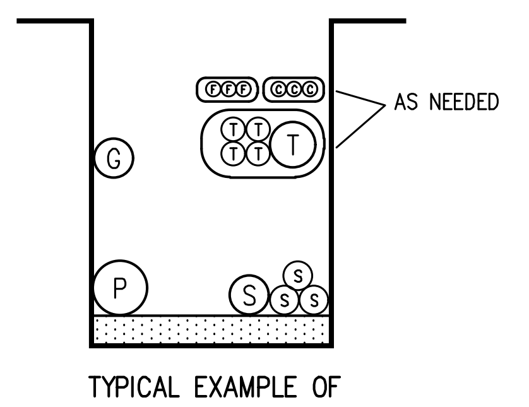
811 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT

ZABIHULLAH ZACA C 59346 Exp. 06/30/23

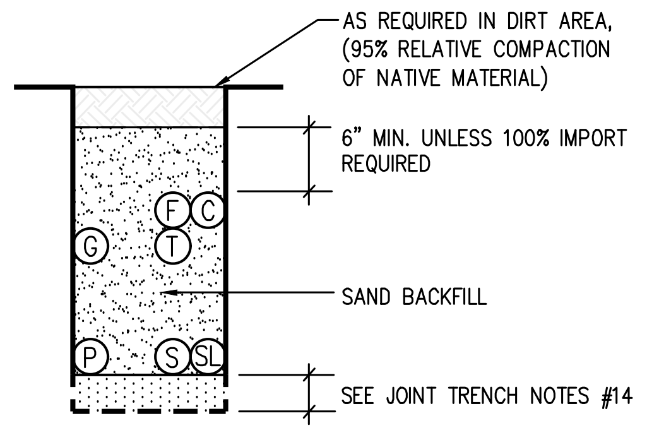
SHEET JT3 OF JT6 SHEETS

JOINT TRENCH MINIMUM COVER AND CLEARANCES
MINIMUM SEPARATION FROM

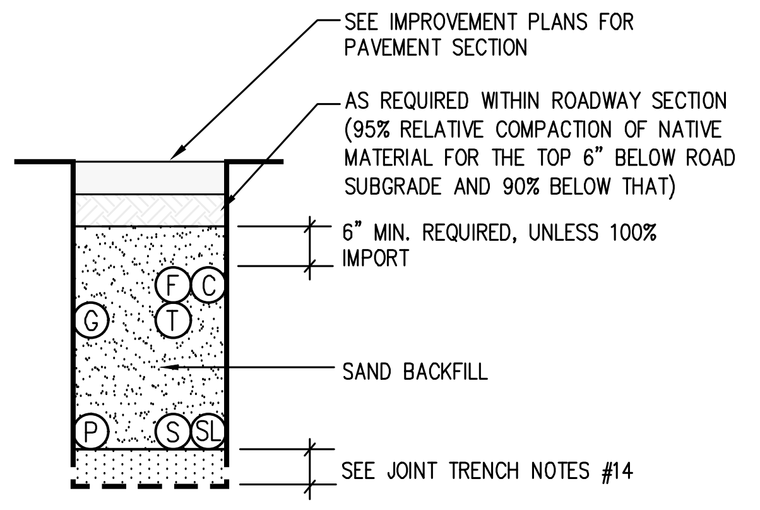
	UTILITY	G	T	TD	C	S	P	SL	SLP	F	FE	MINIMUM COVER
G	(GAS)*	–	12"	12"	12"	6"	12"	12"	6"	12"	12"	24"; 30" IN STREET
T	(TELEPHONE) DUCT	12"	–	1"	1"	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
TD	(TELEPHONE) DIRECT BURY	12"	1"	–	1"	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
C	(CABLE T.V.)	12"	1"	1"	–	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
S	(ELECT. SECONDARY)	6"	12"	12"	12"	1.5"	3"	12"	1.5"	12"	12"	24"; 30" IN STREET
P	(ELECT. PRIMARY)	12"	12"	12"	12"	3"	3"	3"	3"	12"	12"	36"; 36" IN STREET
SL	(PUBLIC AND PRIVATE–STREET LIGHT)**	12"	12"	12"	12"	12"	12"	–	12"	12"	12"	24"; 30" IN STREET
SLP	(P.G.E.–STREET LIGHT)	6"	12"	12"	12"	1.5"	3"	12"	1.5"	12"	12"	24"; 30" IN STREET
FE	(FOREIGN ELECTRIC SOURCES, NON PG&E)	12"	12"	12"	12"	12"	12"	12"	12"	12"	–	24"; 30" IN STREET
F	(FIBER OPTIC)	12"	1"	1"	1"	12"	12"	12"	12"	–	12"	24"; 30" IN STREET



TYPICAL EXAMPLE OF STACKING FACILITIES IN JOINT TRENCH



TRENCH IN DIRT AREA



TRENCH IN STREET AREA

LEGEND

○	MEETS UTILITY TRENCH ALLOTMENT
●	EXCEEDS UTILITY TRENCH ALLOTMENT
Ⓖ	GAS
Ⓟ	ELECTRIC PRIMARY
Ⓢ	ELECTRIC SECONDARY
Ⓣ	TELEPHONE (DUCT OR DIRECT BURY)
Ⓒ	CATV
(SL)	STREET LIGHT (PUBLIC OR PRIVATE)
(SLP)	STREET LIGHT (PG&E)
(FE)	FOREIGN ELECTRIC
Ⓕ	FIBER OPTIC

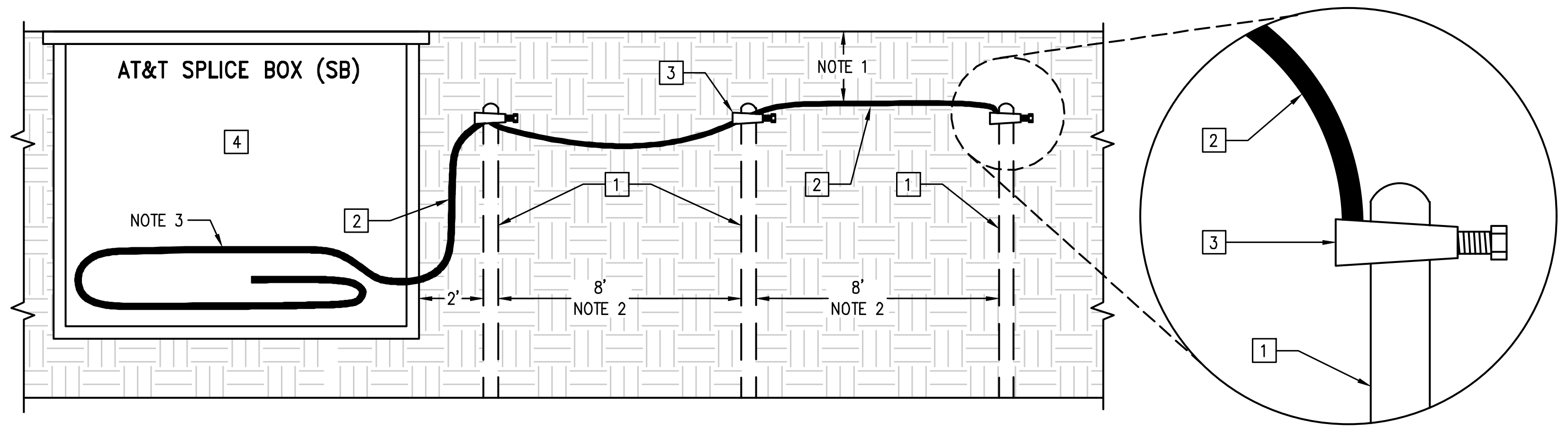
JOINT TRENCH NOTES:

1. TRENCH COVER & CLEARANCES SHOWN ARE MINIMUMS ONLY AND MAY REQUIRE ALTERATIONS TO SUIT FIELD CONDITIONS.
2. IT IS RECOMMENDED THAT ALL FACILITIES ARE TO BE A MINIMUM OF 12" BELOW SUB–BASE DISTURBANCE.
3. * WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED, SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
4. * WHERE 6" GAS MAIN IS LOCATED IN THE JOINT TRENCH A 18" MINIMUM SEPARATION FROM GAS MAIN TO ALL UTILITIES WILL BE REQUIRED.
5. ** WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, STREET LIGHT SEPARATION MAY BE REDUCED TO 0" BETWEEN STREET LIGHT AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
6. TRENCH CONFIGURATIONS SHOWN ARE FOR INSTALLATION WHERE EACH OCCUPANT IS UTILIZING HIS ENTIRE SPACE ALLOCATION. OTHER CONFIGURATIONS OR REDUCED DIMENSIONS MAY BE USED, PROVIDED THAT MINIMUM COVER AND CLEARANCES ARE MAINTAINED.
7. THE CONTRACTOR IS TO ADJUST TRENCH DEPTHS AT ALL JOINT TRENCH LATERAL CROSSINGS TO MAINTAIN REQUIRED CLEARANCES BETWEEN ALL PARTICIPATING UTILITIES.
8. TRENCH SECTIONS ARE SHOWN SCHEMATICALLY AND INDICATE AREAS OF OCCUPANCY ONLY; THEY DO NOT REFLECT SIZE OR QUANTITY OF FACILITIES TO BE INSTALLED.
9. TRENCH FOOTAGES PER SECTION ARE APPROXIMATE. SECTIONS ARE DESIGNED TO ACCOMMODATE ALL REQUIRED FACILITIES AS INDICATED ON EACH TRENCH PARTICIPANT'S CONSTRUCTION DRAWINGS.
10. THE CONTRACTOR SHALL VERIFY TRENCH FOOTAGES FOR ACCURACY PRIOR TO EXCAVATION AND TAKE NECESSARY PRECAUTION CROSSING WATER AND SEWER FACILITIES.
11. THE CONTRACTOR SHALL REFER TO THE COMPOSITE, CONDUIT, AND/OR EACH RESPECTIVE UTILITY INSTALLATION PLAN FOR THE NECESSARY CONDUIT CABLE AND/OR PIPE TO BE INSTALLED IN THIS PROJECT.
12. TYPE "M2" TRENCH SHALL BE INSTALLED AFTER CURB AND GUTTER INSTALLATION. CONTRACTOR SHALL COORDINATE ADDITIONAL MOVE–INS NECESSARY TO COMPLETE THE SERVICES TO THE DWELLING UNITS WITH THE DEVELOPER, ALL AGENCIES AND THE UTILITY COMPANIES. THE COST OF THESE MOVE–INS SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR TRENCHING.
13. THE AVERAGE TRENCH DEPTHS SHOWN ARE BASED ON THE MINIMUM UTILITY COMPANY REQUIREMENTS FOR DEPTH AND SEPARATION. CONTRACTOR SHALL ADJUST TRENCH WIDTH & DEPTH AS REQUIRED TO ADEQUATELY CLEAR EXISTING UNDERGROUND FACILITIES AND MAINTAIN MINIMUM UTILITY CLEARANCES. ALL TRENCHES OVER 60" DEEP MUST COMPLY WITH OSHA REQUIREMENTS. (SEE THE JOINT TRENCH MINIMUM COVER AND CLEARANCE TABLE)
14. CONTRACTOR SHALL USE SAND BEDDING AND SHADING AS REQUIRED BY THE UTILITY COMPANIES. THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION S5453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
15. ALL TRENCHING AND BACKFILLING TO BE DONE IN ACCORDANCE WITH THE **CITY OF ANTIOCH** ENGINEERING STANDARDS AND SPECIFICATIONS.
16. ALL PG&E, TELEPHONE, CABLE, AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3' SEPARATION FROM SEWER AND WATER LATERALS AND DRIVEWAYS. ALL UTILITY VAULTS, BOXES, PEDESTALS, ETC. MUST MAINTAIN A 5' MINIMUM CLEARANCE FROM FIRE HYDRANTS, AND 3' MINIMUM FROM STREETLIGHTS.

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X		X	X			X			X	
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X				X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															
FIBER OPTCS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY



LEGEND

1. 8' LENGTH x 5/8" DIAMETER GROUND ROD POLES
2. BARE CONTINUOUS SOLID NUMBER 6 AWG. WIRE
3. GROUND CLAMP
4. TELEPHONE SPLICE BOX

NOTES

1. MINIMUM DEPTH = 12 INCHES
2. GROUND BEDS MAY BE PLACED IN ANY CONFIGURATION AS LONG AS THE 8 FOOT SEPARATION BETWEEN GROUND RODS IS MAINTAINED AND THE 2 FOOT SEPARATION FROM THE SB WALL IS NOT ENCROACHED UPON.
3. BARE #6 GROUND WIRE TO ENTER THROUGH SIDEWALL OR BOTTOM OF SB AND WRAP SB ONCE.

DETAIL 1 / N.T.S. JT4 **AT&T AERIAL AND BURIED GROUND BED DESIGN**

THIS AREA RESERVED FOR JOINT TRENCH SECTIONS
TO BE PLACED AT A LATER TIME

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com

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- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH SECTIONS AND DETAILS
DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

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Exp. 06/30/23
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SHEET JT4
OF JT6 SHEETS

TARRAR UTILITY CONSULTANTS
APPROVED FOR SUBMITTAL
KARA PEDERSEN
QUALIFIED APPLICANT DESIGN ENGINEER

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X		X	X			X			X	
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X				X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY

CAUTION !! CAUTION !! CAUTION !!
EX. JOINT TRENCH AND EX. GAS AND ALL OTHER UTILITY LOCATIONS ARE SHOWN BASED UPON INFORMATION PROVIDED BY OTHERS AND FIELD OBSERVATION. JOINT TRENCH CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING FACILITIES PRIOR OF ANY JOINT TRENCH CONSTRUCTION. POTHOLE IF NECESSARY. CONTACT U.S.A. DIG ALERT 2 WORKING DAYS IN ADVANCE.

CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING AROUND ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.

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JOINT TRENCH COMPOSITE PLAN

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 2/5/2024
SCALE: 1" = 20'
DRAWN: KK
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JOB NO.: 223027
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NOT FOR CONSTRUCTION
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SHEET
JT5
OF
JT6
SHEETS

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X		X	X			X			X	
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X				X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY

CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING AROUND ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.

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TARRAR UTILITY CONSULTANTS
APPROVED FOR SUBMITTAL
KARA PEDERSEN
QUALIFIED APPLICANT DESIGN ENGINEER

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SCALE: 1" = 20'

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JOINT TRENCH COMPOSITE PLAN

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

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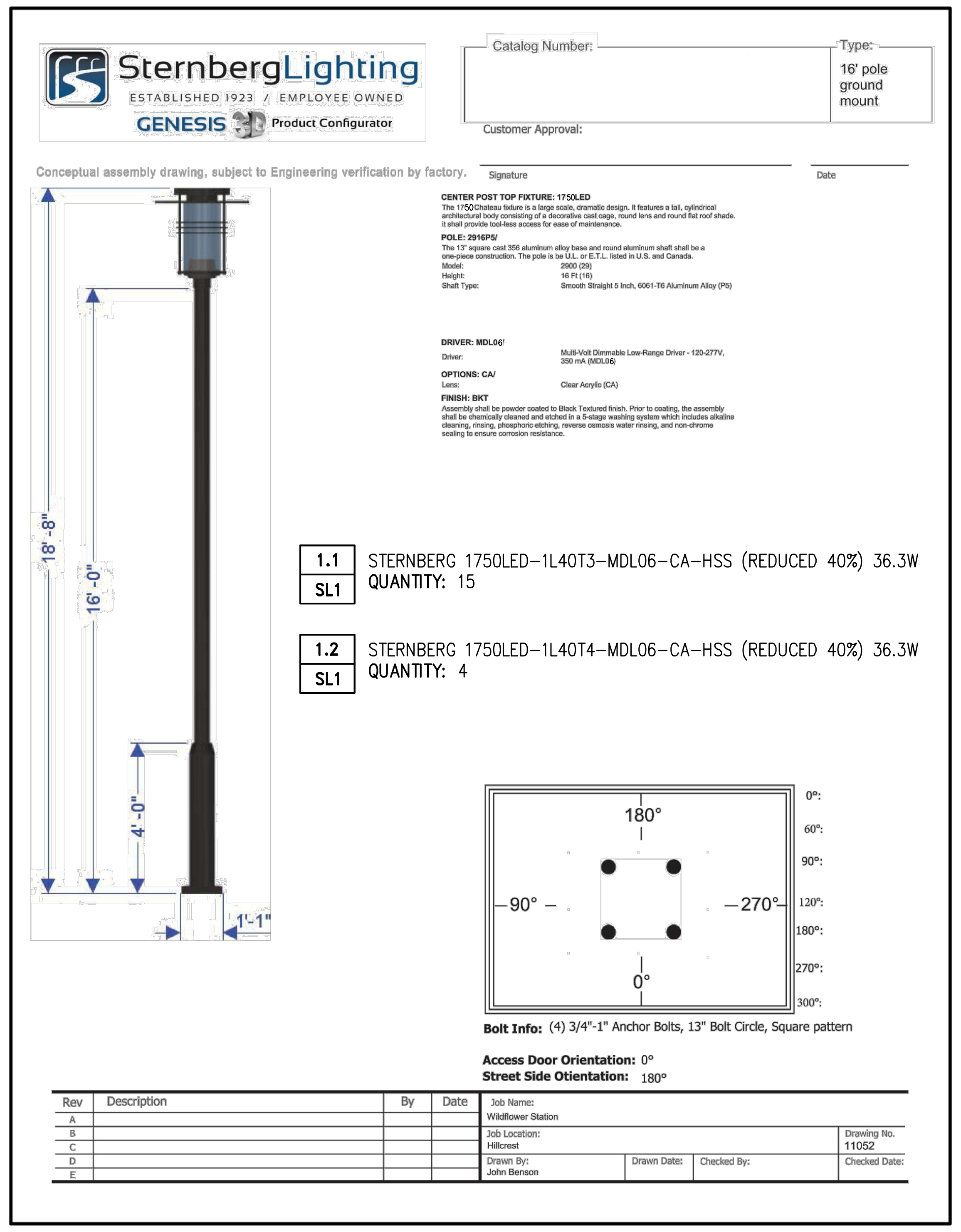
SHEET JT6
OF JT6 SHEETS

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CONTRA COSTA COUNTY CALIFORNIA



Catalog Number:

Type: 16' pole ground mount

Customer Approval:

Signature

Date

Conceptual assembly drawing, subject to Engineering verification by factory.

CENTER POST TOP FIXTURE: 1750LED
The 1750 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. it shall provide tool-less access for ease of maintenance.

POLE: 2916P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	16 Ft (16)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

DRIVER: MDL06/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL06)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

1.1 / SL1 — STERNBERG 1750LED–1L40T3–MDL06–CA–HSS (REDUCED 40%) 36.3W
QUANTITY: 15

1.2 / SL1 — STERNBERG 1750LED–1L40T4–MDL06–CA–HSS (REDUCED 40%) 36.3W
QUANTITY: 4

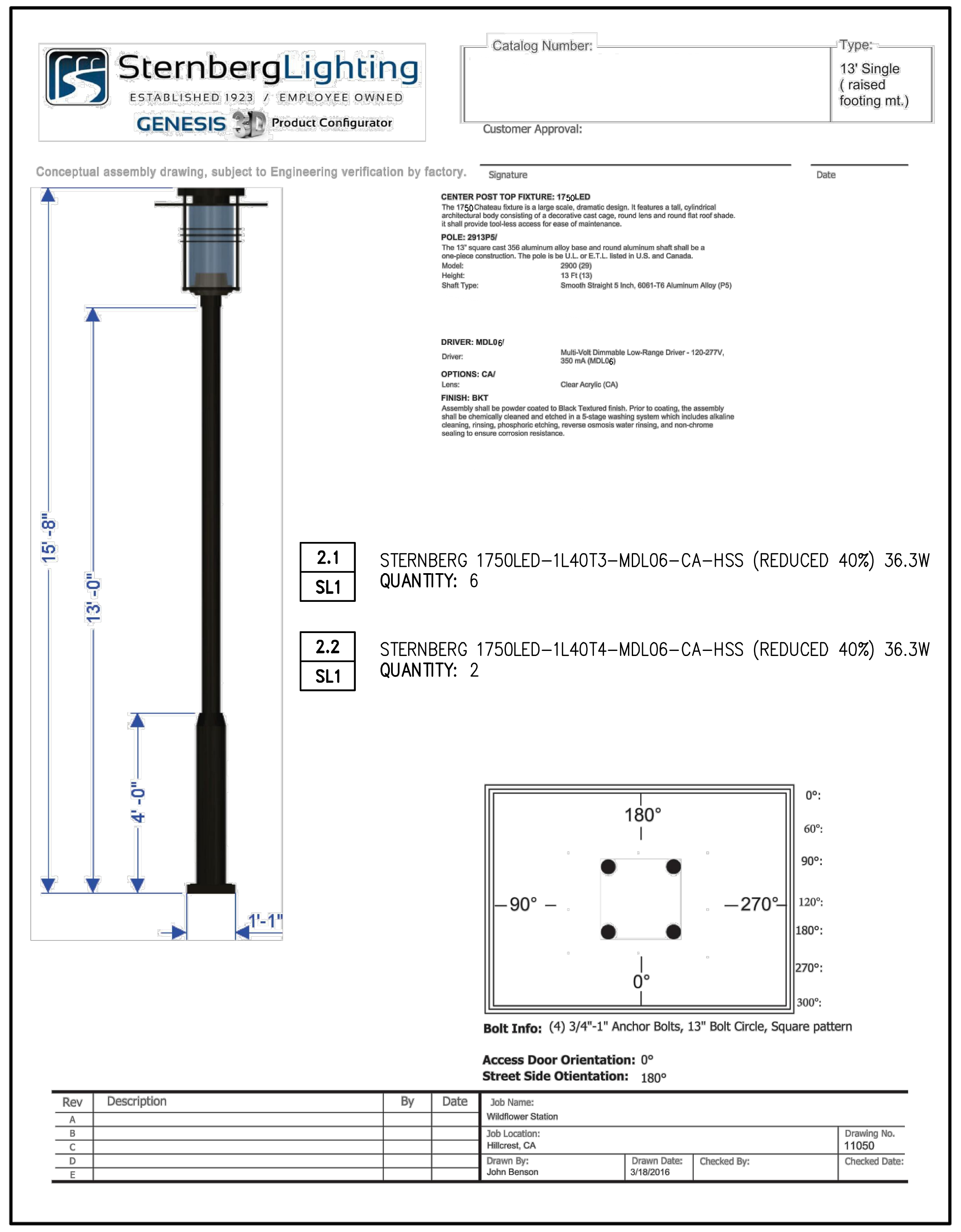
Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name: Wildflower Station
Job Location: Hillcrest
Drawing No. 11052
Drawn By: John Benson
Drawn Date:
Checked By:
Checked Date:

1 / SL1 PRIVATE POST TOP ELECTROLIER DETAIL
NOT TO SCALE



Catalog Number:

Type: 13' Single (raised footing mt.)

Customer Approval:

Signature

Date

Conceptual assembly drawing, subject to Engineering verification by factory.

CENTER POST TOP FIXTURE: 1750LED
The 1750 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. it shall provide tool-less access for ease of maintenance.

POLE: 2913P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	13 Ft (13)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

DRIVER: MDL06/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL06)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

2.1 / SL1 — STERNBERG 1750LED–1L40T3–MDL06–CA–HSS (REDUCED 40%) 36.3W
QUANTITY: 6

2.2 / SL1 — STERNBERG 1750LED–1L40T4–MDL06–CA–HSS (REDUCED 40%) 36.3W
QUANTITY: 2

Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name: Wildflower Station
Job Location: Hillcrest, CA
Drawing No. 11050
Drawn By: John Benson
Drawn Date: 3/18/2016
Checked By:
Checked Date:

2 / SL1 PRIVATE POST TOP ELECTROLIER DETAIL
NOT TO SCALE

LEGEND

—— ESL ——	EXISTING STREET LIGHT CONDUIT
—— SL ——	PROPOSED STREET LIGHT CONDUIT
X'(XX"S.L. COND.)	STREET LIGHTING CONDUIT LABEL, X' INDICATES CONDUIT LENGTH, (XX"S.L. COND.) INDICATES CONDUIT SIZE
X'(XX)	STREET LIGHTING WIRE LABEL, X' INDICATES WIRE LENGTH, (XX) INDICATES WIRE TYPE.
(2W)	2–#8 CU. WIRE (SEE NOTE 15)
(3W)	3–#8 CU. WIRE (SEE NOTE 15)
(3WG)	2–#8 CU. WIRE & 1–#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
(4WG)	3–#8 CU. WIRE & 1–#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
•—✲	EXISTING TRAFFIC SIGNAL
☐	STREET LIGHTING PULL BOX STATE TYPE #3 1/2, 10" x 17" x 12"
☒	STREET LIGHTING GROUND BOX STATE TYPE #5, 13" x 24" x 12"
✹	PROPOSED PRIVATE STREET LIGHT, SINGLE POST TOP
✹	PROPOSED EXTERIOR LIGHT, WALL MOUNT (BY OTHERS)
✹	EXISTING PRIVATE STREET LIGHT, SINGLE POST TOP
✹•✹	EXISTING PRIVATE STREET LIGHT, TWIN POST TOP
•—✹	EXISTING STREET LIGHT, SINGLE ARM
ⓧ	CIRCUIT NUMBER/PHASE (SEE ELECTRIC SOURCE DETAILS)
(XXXX)	POLE NUMBER
POS ▷	STREET LIGHT POINT OF SERVICE
F/C	FACE OF CURB

CONSTRUCTION LABOR AND MATERIAL RESPONSIBILITY
STREET LIGHTING SYSTEM (PRIVATE)

	P.G.&E.	CONTRACTOR
WIRE:		
FURNISH	○	●
INSTALL	○	●
CONDUIT:		
FURNISH	○	●
INSTALL	○	●
BASES:		
FURNISH	○	●
INSTALL	○	●
LUMINAIRES:		
FURNISH	○	●
INSTALL	○	●
SPLICE BOXES:		
FURNISH	○	●
INSTALL	○	●
EXCAVATE	○	●
POLES & ARMS:		
FURNISH	○	●
INSTALL	○	●

SCHEDULE: LS3
INSTALL IN JOINT TRENCH: NO
INSTALL IN SEPARATE TRENCH: YES
CONDUIT SIZE: 2"
CONDUIT TYPE: SCH. 40
WIRE SIZE: VARIES TYPE: CU

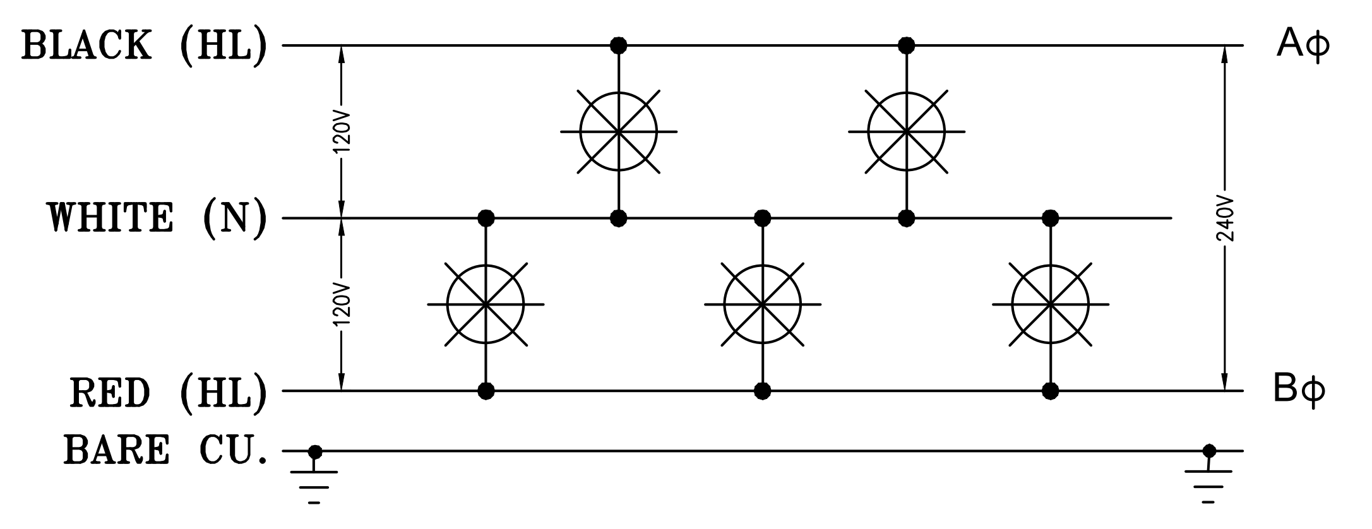
ADDITIONAL NOTES:
–PRIVATE LIGHTS TO BE MAINTAINED BY H.O.A (HOMEOWNER ASSOCIATION) UPON TRACT ACCEPTANCE.

STREET LIGHTING NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL FULLY CONFORM WITH THE NATIONAL ELECTRIC CODE AND STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF ANTIOCH.
2. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE UNDERGROUND SERVICE FROM THE LUMINAIRE TO H.O.A. SERVICE POINT AND TERMINATE CONDUIT AND WIRES AT BOX AS DIRECTED BY THE CITY.
3. KEEP STREET LIGHTS A MINIMUM OF 3 FEET AWAY FROM THE EDGE OF DRIVEWAYS, SEWER AND WATER LATERALS AND 5 FEET AWAY FROM FIRE HYDRANTS & CATCH BASINS.
4. TWO OR MORE STREET LIGHTS ON THE SAME CIRCUIT SHALL BE WIRED TO BALANCE THE LOAD. (SEE WIRING DIAGRAM), UNLESS OTHERWISE NOTED.
5. CONDUIT AND FITTINGS: ALL CONDUIT AND FITTINGS SHALL BE U.L. APPROVED SCHEDULE 40 P.V.C., USE MINIMUM 2" SCH. 40 P.V.C. CONDUIT AND FITTINGS BELOW GRADE, UNLESS OTHERWISE NOTED OR REQUIRED. MINIMUM RADIUS BENDS SHALL BE 18". FOR ABOVE GROUND INSTALLATION USE METALLIC RIGID STEEL CONDUIT. PROVIDE PULL WIRE IN EMPTY CONDUITS. ALL CROSSINGS TO BE PERPENDICULAR TO STREET.
6. CONDUIT DEPTH: 24" UNDER SIDEWALK: 24" UNDER PLANTER STRIP: 30" UNDER PAVEMENT.
7. CABLE: CABLE SHALL BE U.L. A.W.G. NO. 8, 7–STRAND SOFT COPPER, TYPE THW OR THWN WITH MINIMUM OF 3/64" (40 MIL) POLYVINYL CHLORIDE INSULATION, UNLESS OTHERWISE NOTED. U.L. LISTED 600 VOLT, NO. 10 IN POLE MAY BE USED (40 MIL INSULATION).
8. SPLICE BOXES: SPLICE BOXES SHALL BE NO. 3–1/2 STATE TYPE WITH LID AND BRASS HOLD DOWN BOLTS, UNLESS OTHERWISE NOTED. LIDS TO BE INSCRIBED 'STREET LIGHTING'. SPLICE BOXES SHALL NOT BE MORE THAN 200 FEET APART ON LONG RUNS. SPLICE BOXES TO BE SET ON A CONCRETE FOOTING WHEN SUBJECT TO TRAFFIC LOAD.
9. FUSES: EACH POLE SHALL BE FUSED WITH WATERPROOF IN–LINE FUSE HOLDERS AT EACH ADJACENT BOX WITH 5 AMP FUSE. FOR DUPLEX LIGHTS, EACH LUMINAIRE SHALL BE FUSED SEPARATELY.
10. SPLICING: ALL SPLICES SHALL BE MADE IN HAND HOLES OR SPLICE BOXES ONLY. SPLICES SHALL BE MADE WITH "STACK –ON" CRIMP JOINTS, "SCOTCH LOCK" FASTENERS, OR APPROVED EQUAL. ON SPLICES MADE BELOW GRADE, WRAP WITH MOISTURE PROOF INSULATION THICKNESS.
11. POLE NUMBERS: OBTAIN AND PLACE POLE NUMBERS ON ALL STREET LIGHT STANDARDS AS REQUIRED. COORDINATE WITH PG&E AND/OR CITY FOR THEIR REQUIREMENTS.
12. TRENCH: CONDUIT CANNOT BE PLACED IN JOINT TRENCH. THE CONDUIT LAYOUT IS SHOWN SCHEMATICALLY. SEE COMPOSITE DRAWING FOR TRENCH AND BOX LOCATIONS. ANY INCIDENTAL TRENCHING NOT PROVIDED BY TRENCHING AGENT IS CONTRACTOR'S RESPONSIBILITY.
13. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
14. TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. CONTRACTOR SHOULD REVIEW PROJECT SITE PRIOR TO SUBMITTING ITS BID.
15. CONTRACTOR TO CONSULT WITH LOCAL AGENCIES FOR THEIR CIRCUIT GROUNDING REQUIREMENTS. IF GROUND WIRE IS REQUIRED IN CONDUIT, INSTALL ACCORDINGLY.
16. LEGEND SYMBOLS ARE SHOWN IN STREET AREA FOR CLARITY. INSTALL BEHIND CURB AND/OR SIDEWALK PER THE CITY SPECIFICATIONS KEEP CLEAR OF DRIVEWAYS AND PATHWAYS (TYPICAL).
17. CENTERLINE OF STREET LIGHTS SHALL BE LOCATED ON THE LOT LINE UNLESS OTHERWISE NOTED ON THESE PLANS.
18. ANY CHANGES OR MODIFICATIONS TO PROPOSED STREET LIGHT LOCATIONS SHALL BE APPROVED, IN WRITING, BY THE CITY PRIOR TO INSTALLATION.
19. SET ALL STREET LIGHTS TO ULTIMATE FINISHED GRADE. CONSULT WITH CITY FOR PROPER PHYSICAL PROTECTION AND/OR SIGNING AND STRIPING ADJACENT TO ANY STREET LIGHTS INSTALLED IN THEIR ULTIMATE LOCATIONS THAT ARE NOT PROTECTED BY A VERTICAL CURB. BERM AND COMPACT EARTH TO FINISHED GRADE A MINIMUM OF 5' AROUND STREET LIGHT BASES AT THESE LOCATIONS.
20. CONTACT U.S.A. (2) FULL WORKING DAYS PRIOR TO STARTING WORK IF EXISTING UTILITIES CONFLICT WITH POLE LOCATION, FIELD ADJUST TO CLEAR EXISTING UTILITIES A MINIMUM OF 3'–0".
21. STREET LIGHT CONDUIT BENDS SHALL HAVE A MINIMUM 18" RADIUS. UNLESS OTHERWISE SHOWN ON THE PLANS, NO BEND SHALL BE INSTALLED IN THE STREET LIGHT SYSTEM WITHOUT PRIOR APPROVAL OF THE CITY INSPECTOR.
22. ALL BOXES ARE TO BE INSTALLED WITHIN THE R/W AND/OR P.U.E. AREA.

VOLTAGE DROP CALCULATIONS

LOCATION	DISTANCE	LOAD		VOLTAGE 120/240	WIRE SIZE	% VOLTAGE DROP	CIRCUIT #
		WATT	VOLT/AMP				



120/240 VOLT WIRING DIAGRAM
SEE GENERAL NOTE #4
NOT TO SCALE

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Brentwood, CA 94513
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(925) 240-7013 fax
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- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

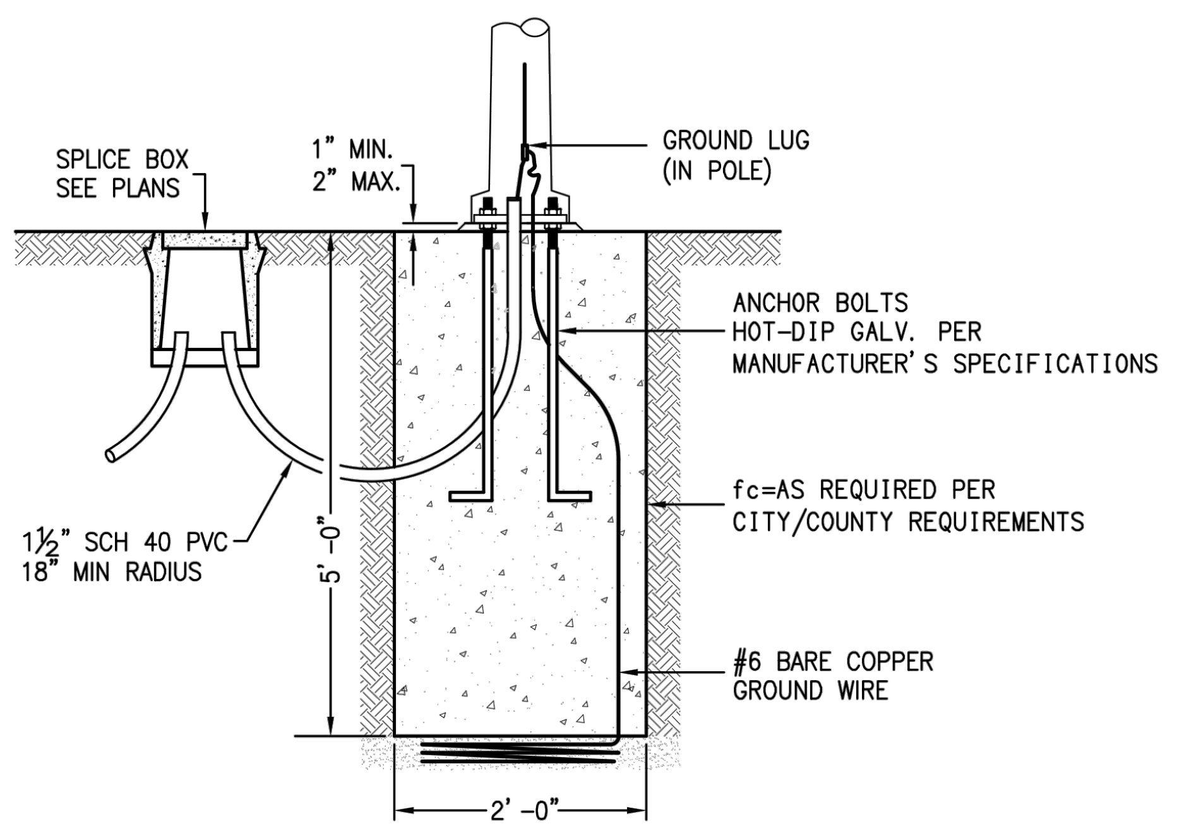
STREET LIGHTING GENERAL NOTES AND DETAILS
DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 4/11/2023
SCALE: NOT TO SCALE
DRAWN: SM
CHECKED: KT
JOB NO.: 223027
PRELIMINARY
NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811
CALL BEFORE YOU DIG
U S A
UNDERGROUND SERVICE ALERT

SHEET SL1 OF SL4 SHEETS

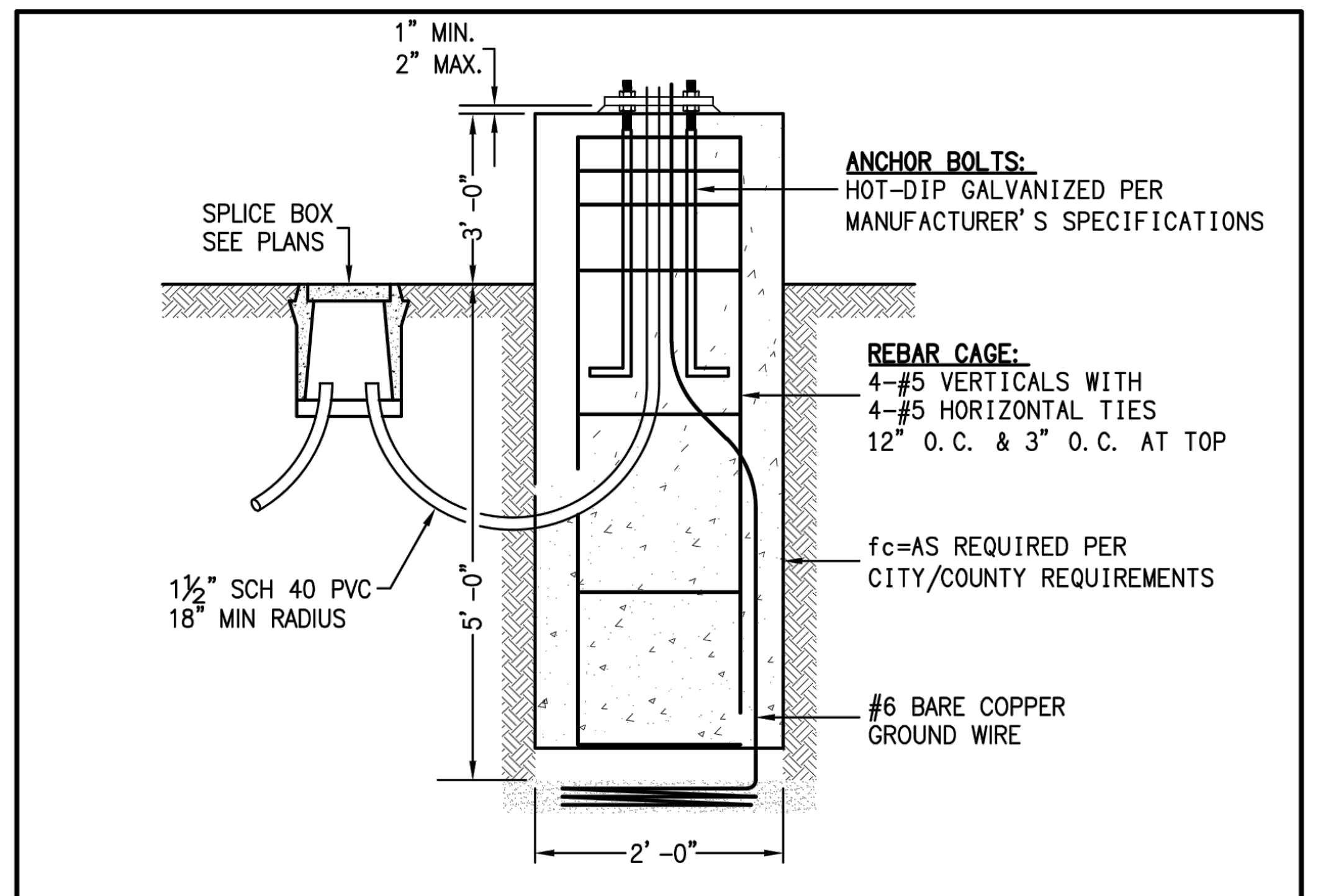


FOUNDATION DETAIL

NOT TO SCALE

1 | SL2 **FOUNDATION DETAIL**

NOT TO SCALE

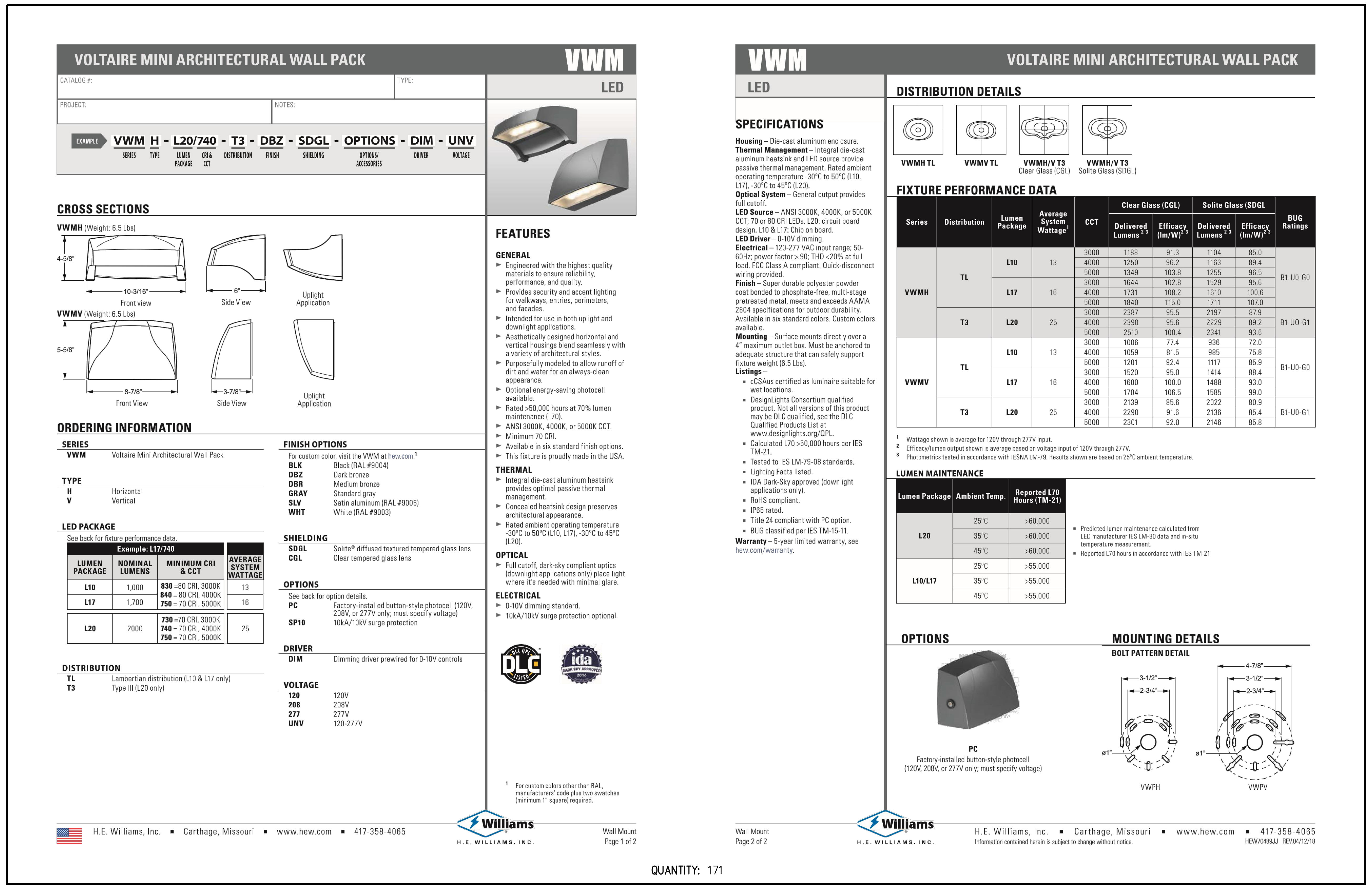


DECORATIVE RAISED FOUNDATION DETAIL

NOT TO SCALE

2 | SL2 **DECORATIVE RAISED FOUNDATION DETAIL**

NOT TO SCALE



VOLTAIRE MINI ARCHITECTURAL WALL PACK

VWM

LED

CATALOG #:
TYPE:
PROJECT:
NOTES:

EXAMPLE VWM H - L20/740 - T3 - DBZ - SDGL - OPTIONS - DIM - UNV

SERIES · TYPE · LUMEN PACKAGE · CRI & CCT · DISTRIBUTION · FINISH · SHIELDING · OPTIONS/ ACCESSORIES · DRIVER · VOLTAGE

CROSS SECTIONS

VWMH (Weight: 6.5 Lbs)

VWMV (Weight: 6.5 Lbs)

ORDERING INFORMATION

SERIES

VWM	Voltaire Mini Architectural Wall Pack

TYPE

H	Horizontal
V	Vertical

LED PACKAGE

See back for fixture performance data.

Example: L17/740			
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	AVERAGE SYSTEM WATTAGE
L10	1,000	**830** =80 CRI, 3000K **840** = 80 CRI, 4000K **750** = 70 CRI, 5000K	13
L17	1,700		16
L20	2000	**730** =70 CRI, 3000K **740** = 70 CRI, 4000K **750** = 70 CRI, 5000K	25

DISTRIBUTION

TL	Lambertian distribution (L10 & L17 only)
T3	Type III (L20 only)

FINISH OPTIONS

For custom color, visit the VWM at hew.com.[1]

BLK	Black (RAL #9004)
DBZ	Dark bronze
DBR	Medium bronze
GRAY	Standard gray
SLV	Satin aluminum (RAL #9006)
WHT	White (RAL #9003)

SHIELDING

SDGL	Solite® diffused textured tempered glass lens
CGL	Clear tempered glass lens

OPTIONS

See back for option details.

PC	Factory-installed button-style photocell (120V, 208V, or 277V only; must specify voltage)
SP10	10kA/10kV surge protection

DRIVER

DIM	Dimming driver prewired for 0-10V controls

VOLTAGE

120	120V
208	208V
277	277V
UNV	120-277V

FEATURES

GENERAL

- Engineered with the highest quality materials to ensure reliability, performance, and quality.
- Provides security and accent lighting for walkways, entries, perimeters, and facades.
- Intended for use in both uplight and downlight applications.
- Aesthetically designed horizontal and vertical housings blend seamlessly with a variety of architectural styles.
- Purposefully modeled to allow runoff of dirt and water for an always-clean appearance.
- Optional energy-saving photocell available.
- Rated >50,000 hours at 70% lumen maintenance (L70).
- ANSI 3000K, 4000K, or 5000K CCT.
- Minimum 70 CRI.
- Available in six standard finish options.
- This fixture is proudly made in the USA.

THERMAL

- Integral die-cast aluminum heatsink provides optimal passive thermal management.
- Concealed heatsink design preserves architectural appearance.
- Rated ambient operating temperature -30°C to 50°C (L10, L17), -30°C to 45°C (L20).

OPTICAL

- Full cutoff, dark-sky compliant optics (downlight applications only) place light where it's needed with minimal glare.

ELECTRICAL

- 0-10V dimming standard.
- 10kA/10kV surge protection optional.

DLC QPL LISTED · ida DARK SKY APPROVED 2016

[1] For custom colors other than RAL, manufacturers' code plus two swatches (minimum 1" square) required.

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065

Williams H.E. WILLIAMS, INC.

Wall Mount
Page 1 of 2

VWM

LED

VOLTAIRE MINI ARCHITECTURAL WALL PACK

SPECIFICATIONS

Housing – Die-cast aluminum enclosure.
Thermal Management – Integral die-cast aluminum heatsink and LED source provide passive thermal management. Rated ambient operating temperature -30°C to 50°C (L10, L17), -30°C to 45°C (L20).
Optical System – General output provides full cutoff.
LED Source – ANSI 3000K, 4000K, or 5000K CCT; 70 or 80 CRI LEDs. L20: circuit board design. L10 & L17: Chip on board.
LED Driver – 0-10V dimming.
Electrical – 120-277 VAC input range; 50-60Hz; power factor >.90; THD <20% at full load. FCC Class A compliant. Quick-disconnect wiring provided.
Finish – Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability. Available in six standard colors. Custom colors available.
Mounting – Surface mounts directly over a 4" maximum outlet box. Must be anchored to adequate structure that can safely support fixture weight (6.5 Lbs).
Listings –

- cCSAus certified as luminaire suitable for wet locations.
- DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
- Calculated L70 >50,000 hours per IES TM-21.
- Tested to IES LM-79-08 standards.
- Lighting Facts listed.
- IDA Dark-Sky approved (downlight applications only).
- RoHS compliant.
- IP65 rated.
- Title 24 compliant with PC option.
- BUG classified per IES TM-15-11.

Warranty – 5-year limited warranty, see hew.com/warranty.

DISTRIBUTION DETAILS

FIXTURE PERFORMANCE DATA

Series	Distribution	Lumen Package	Average System Wattage[1]	CCT	Clear Glass (CGL) Delivered Lumens[2 3]	Clear Glass (CGL) Efficacy (lm/W)[2 3]	Solite Glass (SDGL) Delivered Lumens[2 3]	Solite Glass (SDGL) Efficacy (lm/W)[2 3]	BUG Ratings
VWMH	TL	L10	13	3000	1188	91.3	1104	85.0	B1-U0-G0
				4000	1250	96.2	1163	89.4	
				5000	1349	103.8	1255	96.5	
		L17	16	3000	1644	102.8	1529	95.6	
				4000	1731	108.2	1610	100.6	
				5000	1840	115.0	1711	107.0	
	T3	L20	25	3000	2387	95.5	2197	87.9	B1-U0-G1
				4000	2390	95.6	2229	89.2	
				5000	2510	100.4	2341	93.6	
VWMV	TL	L10	13	3000	1006	77.4	936	72.0	B1-U0-G0
				4000	1059	81.5	985	75.8	
				5000	1201	92.4	1117	85.9	
		L17	16	3000	1520	95.0	1414	88.4	
				4000	1600	100.0	1488	93.0	
				5000	1704	106.5	1585	99.0	
	T3	L20	25	3000	2139	85.6	2022	80.9	B1-U0-G1
				4000	2290	91.6	2136	85.4	
				5000	2301	92.0	2146	85.8	

[1] Wattage shown is average for 120V through 277V input.
[2] Efficacy/lumen output shown is average based on voltage input of 120V through 277V.
[3] Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.

LUMEN MAINTENANCE

Lumen Package	Ambient Temp.	Reported L70 Hours (TM-21)
L20	25°C	>60,000
	35°C	>60,000
	45°C	>60,000
L10/L17	25°C	>55,000
	35°C	>55,000
	45°C	>55,000

- Predicted lumen maintenance calculated from LED manufacturer IES LM-80 data and in-situ temperature measurement.
- Reported L70 hours in accordance with IES TM-21

OPTIONS

PC
Factory-installed button-style photocell
(120V, 208V, or 277V only; must specify voltage)

MOUNTING DETAILS

BOLT PATTERN DETAIL

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Information contained herein is subject to change without notice.
HEW70489JJ REV.04/12/18

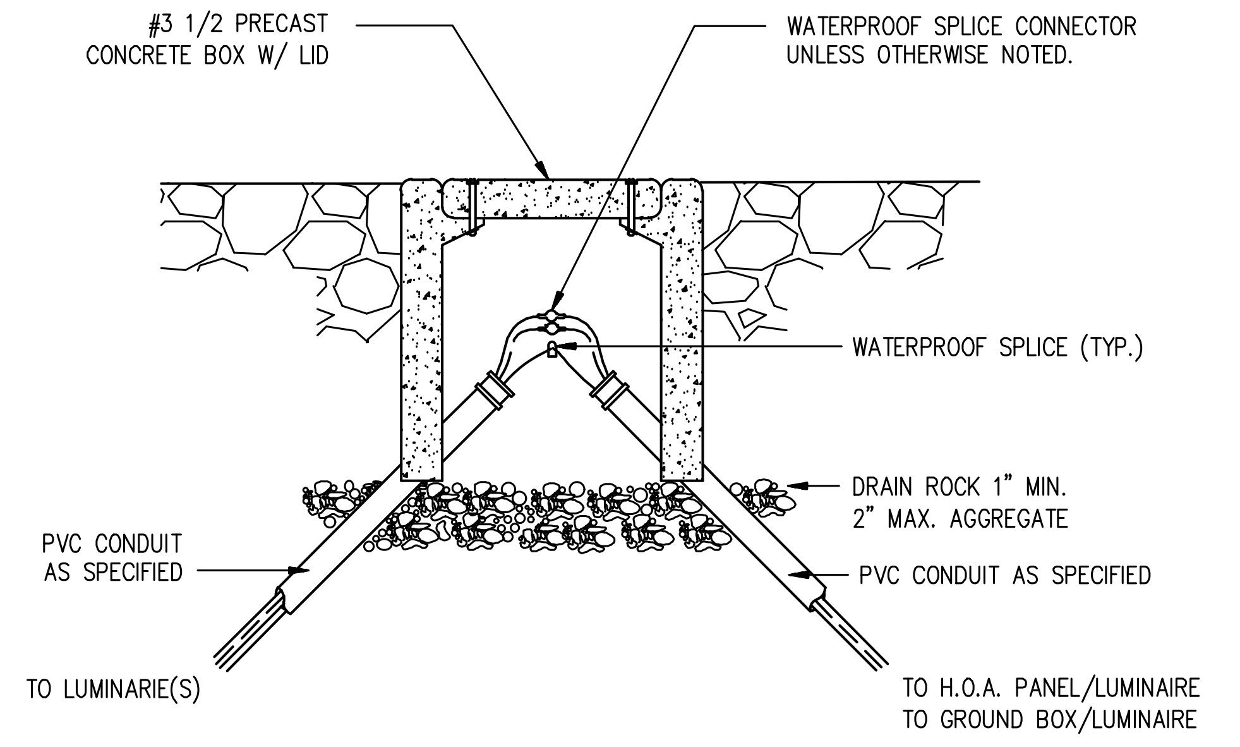
Williams H.E. WILLIAMS, INC.

Wall Mount
Page 2 of 2

QUANTITY: 171

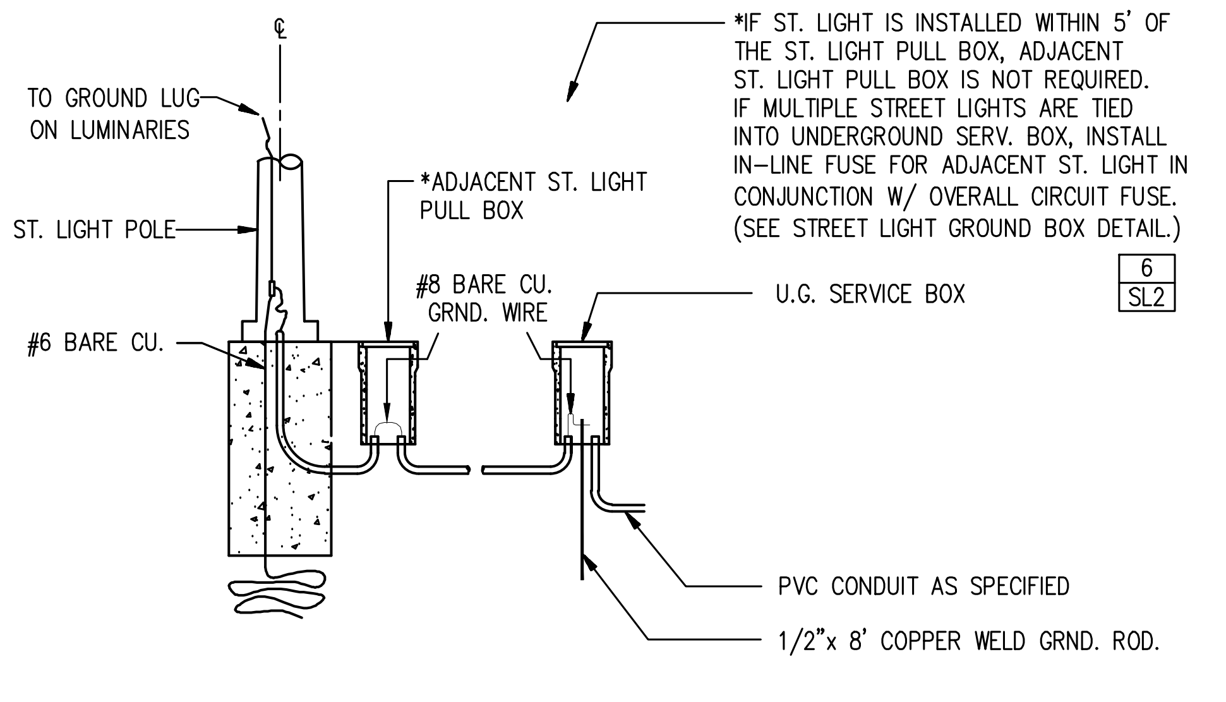
3 | SL2 **EXTERIOR LIGHT, WALL MOUNT DETAIL**

NOT TO SCALE



4 | SL2 **STREET LIGHTING PULL BOX DETAIL**

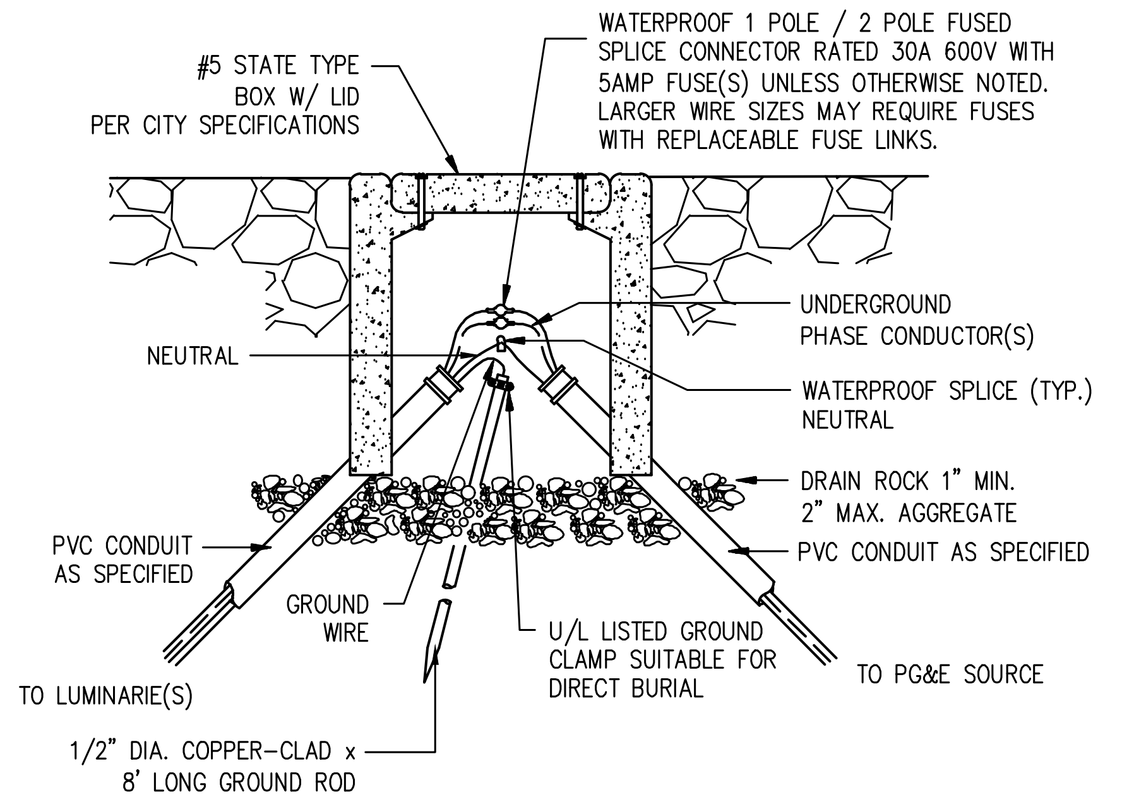
NOT TO SCALE



*IF ST. LIGHT IS INSTALLED WITHIN 5' OF THE ST. LIGHT PULL BOX, ADJACENT ST. LIGHT PULL BOX IS NOT REQUIRED. IF MULTIPLE STREET LIGHTS ARE TIED INTO UNDERGROUND SERV. BOX, INSTALL IN-LINE FUSE FOR ADJACENT ST. LIGHT IN CONJUNCTION W/ OVERALL CIRCUIT FUSE. (SEE STREET LIGHT GROUND BOX DETAIL.)

5 | SL2 **STREET LIGHTING GROUNDING DETAIL**

NOT TO SCALE



WATERPROOF 1 POLE / 2 POLE FUSED SPLICE CONNECTOR RATED 30A 600V WITH 5AMP FUSE(S) UNLESS OTHERWISE NOTED. LARGER WIRE SIZES MAY REQUIRE FUSES WITH REPLACEABLE FUSE LINKS.

6 | SL2 **STREET LIGHT GROUND BOX DETAIL**

NOT TO SCALE

813 First Street
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(925) 240-7013 fax
www.tarrar.com

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- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

STREET LIGHTING GENERAL NOTES AND DETAILS

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 4/11/2023
SCALE: NOT TO SCALE
DRAWN: SM
CHECKED: KT
JOB NO.: 223027
PRELIMINARY
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811 CALL BEFORE YOU DIG U S A UNDERGROUND SERVICE ALERT

SHEET SL2 OF SL4 SHEETS

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- M.E.P. Design
- Cost Analysis
- Due Diligence

STREET LIGHTING SITE PLAN

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024
DATE LAST WORKED ON: 1/29/2024
SCALE: 1" = 20'
DRAWN: SM
CHECKED: KT
JOB NO.: 223027
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- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

STREET LIGHTING SITE PLAN

DENOVA HOMES
WILDFLOWER TOWNHOMES 2
ANTIOCH CALIFORNIA

NO.	REVISIONS	BY	DATE

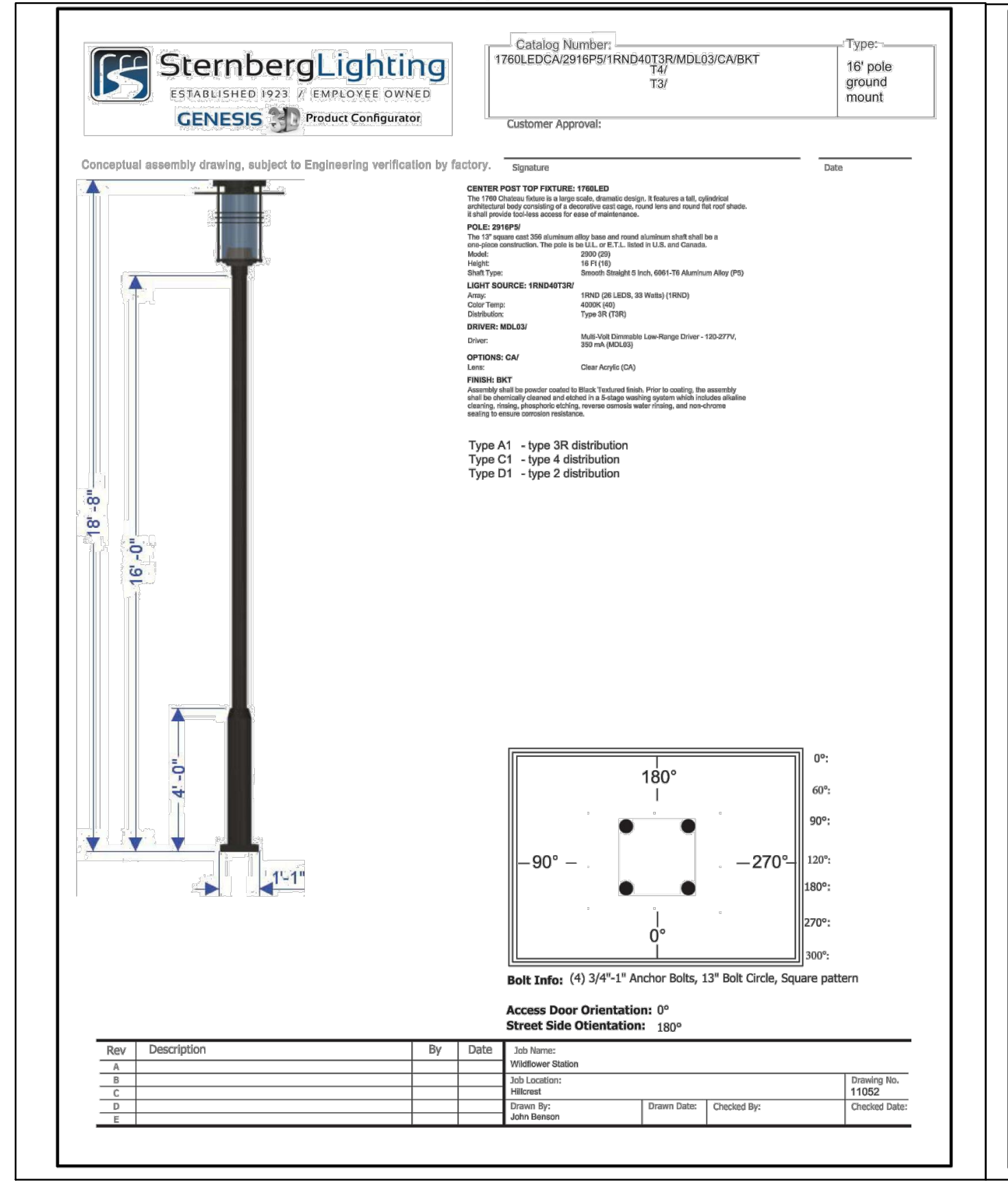
DATE: FEBRUARY 2024
DATE LAST WORKED ON: 1/29/2024
SCALE: 1" = 20'
DRAWN: SM
CHECKED: KT
JOB NO.: 223027

PRELIMINARY
NOT FOR CONSTRUCTION

INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG U S A UNDERGROUND SERVICE ALERT

SHEET SL4 OF SL4 SHEETS



SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED
GENESIS 3D Product Configurator

Catalog Number:
1760LEDCA/2916P5/1RND40T3R/MDL03/CA/BKT
T4/
T3/

Type:
16' pole ground mount

Customer Approval:

Conceptual assembly drawing, subject to Engineering verification by factory.

Signature

Date

CENTER POST TOP FIXTURE: 1760LED
The 1760 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. It shall provide tool-less access for ease of maintenance.

POLE: 2916P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	16 Ft (16)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

LIGHT SOURCE: 1RND40T3R/

Array:	1RND (26 LEDS, 33 Watts) (1RND)
Color Temp:	4000K (40)
Distribution:	Type 3R (T3R)

DRIVER: MDL03/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL03)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

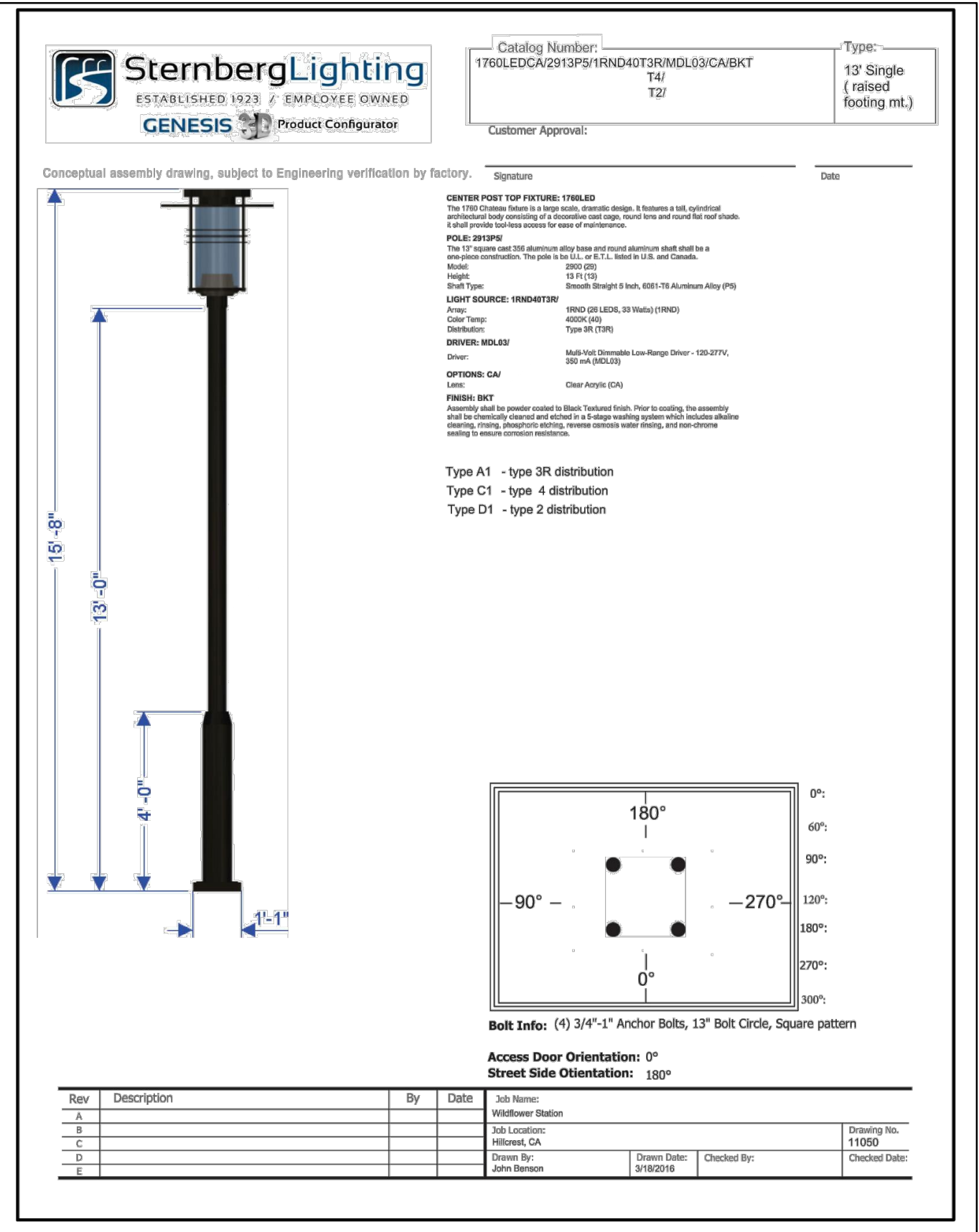
Type A1 - type 3R distribution
Type C1 - type 4 distribution
Type D1 - type 2 distribution

Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name:
Wildflower Station
Job Location:
Hillcrest
Drawing No.
11052
Drawn By:
John Benson
Drawn Date:
Checked By:
Checked Date:



SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED
GENESIS 3D Product Configurator

Catalog Number:
1760LEDCA/2913P5/1RND40T3R/MDL03/CA/BKT
T4/
T2/

Type:
13' Single (raised footing mt.)

Customer Approval:

Conceptual assembly drawing, subject to Engineering verification by factory.

Signature

Date

CENTER POST TOP FIXTURE: 1760LED
The 1760 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. It shall provide tool-less access for ease of maintenance.

POLE: 2913P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	13 Ft (13)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

LIGHT SOURCE: 1RND40T3R/

Array:	1RND (26 LEDS, 33 Watts) (1RND)
Color Temp:	4000K (40)
Distribution:	Type 3R (T3R)

DRIVER: MDL03/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL03)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Type A1 - type 3R distribution
Type C1 - type 4 distribution
Type D1 - type 2 distribution

Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name:
Wildflower Station
Job Location:
Hillcrest, CA
Drawing No.
11050
Drawn By:
John Benson
Drawn Date:
3/18/2016
Checked By:
Checked Date:

Calculation Summary

Project: WILDFLOWER 2 TOWNHOMES - ANTIOCH

Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
TYPICAL MAIN ENTRY DRIVES AND PARKING AREAS	Illuminance	Fc	0.55	2.49	0.07	7.86	35.57

Luminaire Schedule - LED

Project: WILDFLOWER 2 TOWNHOMES - ANTIOCH

Symbol	Qty	Label	Arrangement	LLF	Luminaire Lumens	Luminaire Watts	Description	Filename
⊛	22	A1	SINGLE	0.540	3656	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T3-MDL06-CA-HSS.IES
⊙	5	C1	SINGLE	0.540	3756	36.4	STERNBERG 1750LED-1L40T4-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T4-MDL06-CA-HSS.IES
◗	161	WM	Single	0.900	1163	13	WILLIAMS VWMH-L10-840-TL-xxx-SDGL @ 8'	VWMH-L10-840-TL-XXX-SDGL.ies

Luminaire Schedule - LED

Project: EXISTING

Symbol	Qty	Label	Arrangement	LLF	Luminaire Lumens	Luminaire Watts	Description	Filename
⊛	21	A1	SINGLE	0.540	3656	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T3-MDL06-CA-HSS.IES
⊛—⊛	3	B1	BACK-BACK	0.540	4260	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA - 16' POLE TWIN (REDUCED 40%)	1750LED-1L40T3-MDL06-CA.IES
⊙	5	C1	SINGLE	0.540	3756	36.4	STERNBERG 1750LED-1L40T4-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T4-MDL06-CA-HSS.IES
▭	11	D1	SINGLE	0.900	3955	32.4	PHILIPS DAYBRITE FSX440L840-UNV-X @ 7.75'	FSX440L840-UNV.ies

ALL VALUES SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE

* *

PHOTOMETRIC DATA USED AS INPUT FOR THESE CALCULATIONS
IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED
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* *

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Associated Lighting Representatives, Inc.

ASSOCIATED LIGHTING REPRESENTATIVES, INC
7777 PARDEE LANE
P.O. BOX 2265
OAKLAND, CA 94621
PHONE: (510) 638-0158 - FAX (510) 638-2908

REPORT FOR: TARRAR UTILITY CONSULTANTS
BY: APPLICATIONS ENGINEERING; RAMON ZAPATA
SALES REPRESENTATIVE: ALR; TIM HALEY

Lighting Analysts
Illumination engineering software
www.agi32.com

AGI32 VERSION 20.1
AGI (C) 2021 LIGHTING ANALYSTS, INC.
10268 W. CENTENNIAL ROAD, SUITE 202
LITTLETON, CO 80127

PROJECT DESCRIPTION

WILDFLOWER 2 TOWNHOMES
.

DRAWING NO. / INPUT FILE
21801HAL-R2.DWG / 21801HAL-R2.A32

SCALE	SHEET	DATE	REV
1" = 30'	1 OF 2	02.01.2024	2

SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED
GENESIS 3D Product Configurator

Catalog Number: 1760LEDCA/2916P5/1RND40T3R/MDL03/CA/BKT
T4/
T3/

Type: 16' pole ground mount

Customer Approval:

Conceptual assembly drawing, subject to Engineering verification by factory.

Signature

Date

CENTER POST TOP FIXTURE: 1760LED
The 1760 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. it shall provide tool-less access for ease of maintenance.

POLE: 2916P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	16 Ft (16)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

LIGHT SOURCE: 1RND40T3R/

Array:	1RND (26 LEDS, 33 Watts) (1RND)
Color Temp:	4000K (40)
Distribution:	Type 3R (T3R)

DRIVER: MDL03/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL03)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Type A1 - type 3R distribution
Type C1 - type 4 distribution
Type D1 - type 2 distribution

18' -8"
16' -0"
4' -0"
1'-1"
180°
-90°
-270°
0°
0°:
60°:
90°:
120°:
180°:
270°:
300°:

Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name: Wildflower Station			
Job Location: Hillcrest			Drawing No. 11052
Drawn By: John Benson	Drawn Date:	Checked By:	Checked Date:

SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED
GENESIS 3D Product Configurator

Catalog Number: 1760LEDCA/2913P5/1RND40T3R/MDL03/CA/BKT
T4/
T2/

Type: 13' Single (raised footing mt.)

Customer Approval:

Conceptual assembly drawing, subject to Engineering verification by factory.

Signature

Date

CENTER POST TOP FIXTURE: 1760LED
The 1760 Chateau fixture is a large scale, dramatic design. It features a tall, cylindrical architectural body consisting of a decorative cast cage, round lens and round flat roof shade. it shall provide tool-less access for ease of maintenance.

POLE: 2913P5/
The 13" square cast 356 aluminum alloy base and round aluminum shaft shall be a one-piece construction. The pole is be U.L. or E.T.L. listed in U.S. and Canada.

Model:	2900 (29)
Height:	13 Ft (13)
Shaft Type:	Smooth Straight 5 Inch, 6061-T6 Aluminum Alloy (P5)

LIGHT SOURCE: 1RND40T3R/

Array:	1RND (26 LEDS, 33 Watts) (1RND)
Color Temp:	4000K (40)
Distribution:	Type 3R (T3R)

DRIVER: MDL03/

Driver:	Multi-Volt Dimmable Low-Range Driver - 120-277V, 350 mA (MDL03)

OPTIONS: CA/

Lens:	Clear Acrylic (CA)

FINISH: BKT
Assembly shall be powder coated to Black Textured finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Type A1 - type 3R distribution
Type C1 - type 4 distribution
Type D1 - type 2 distribution

15' -8"
13' -0"
4' -0"
1'-1"
180°
-90°
-270°
0°
0°:
60°:
90°:
120°:
180°:
270°:
300°:

Bolt Info: (4) 3/4"-1" Anchor Bolts, 13" Bolt Circle, Square pattern

Access Door Orientation: 0°
Street Side Otientation: 180°

Rev	Description	By	Date
A			
B			
C			
D			
E			

Job Name: Wildflower Station			
Job Location: Hillcrest, CA			Drawing No. 11050
Drawn By: John Benson	Drawn Date: 3/18/2016	Checked By:	Checked Date:

Calculation Summary

Project: WILDFLOWER 2 TOWNHOMES - ANTIOCH

Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
TYPICAL MAIN ENTRY DRIVES AND PARKING AREAS	Illuminance	Fc	0.55	2.49	0.07	7.86	35.57

Luminaire Schedule - LED

Project: EXISTING

Symbol	Qty	Label	Arrangement	LLF	Luminaire Lumens	Luminaire Watts	Description	Filename
⊜〉	21	A1	SINGLE	0.540	3656	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T3-MDL06-CA-HSS.IES
⊜—⊜	3	B1	BACK-BACK	0.540	4260	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA - 16' POLE TWIN (REDUCED 40%)	1750LED-1L40T3-MDL06-CA.IES
⊙〉	5	C1	SINGLE	0.540	3756	36.4	STERNBERG 1750LED-1L40T4-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T4-MDL06-CA-HSS.IES
▭	11	D1	SINGLE	0.900	3955	32.4	PHILIPS DAYBRITE FSX440L840-UNV-X @ 7.75'	FSX440L840-UNV.ies

Luminaire Schedule - LED

Project: WILDFLOWER 2 TOWNHOMES - ANTIOCH

Symbol	Qty	Label	Arrangement	LLF	Luminaire Lumens	Luminaire Watts	Description	Filename
⊜〉	22	A1	SINGLE	0.540	3656	36.3	STERNBERG 1750LED-1L40T3-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T3-MDL06-CA-HSS.IES
⊙〉	5	C1	SINGLE	0.540	3756	36.4	STERNBERG 1750LED-1L40T4-MDL06-CA-HSS - 16' POLE (REDUCED 40%)	1750LED-1L40T4-MDL06-CA-HSS.IES
◗	161	WM	Single	0.900	1163	13	WILLIAMS VWMH-L10-840-TL-xxx-SDGL @ 8'	VWMH-L10-840-TL-XXX-SDGL.ies

ALL VALUES SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE

* *

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PROJECT DESCRIPTION

WILDFLOWER 2 TOWNHOMES

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21801HAL-R2.DWG / 21801HAL-R2.A32

SCALE	SHEET	DATE	REV
1" = 30'	2 OF 2	02.01.2024	2

WILDFLOWER TOWNHOMES

ANTIOCH, CA | FEBRUARY 2, 2024

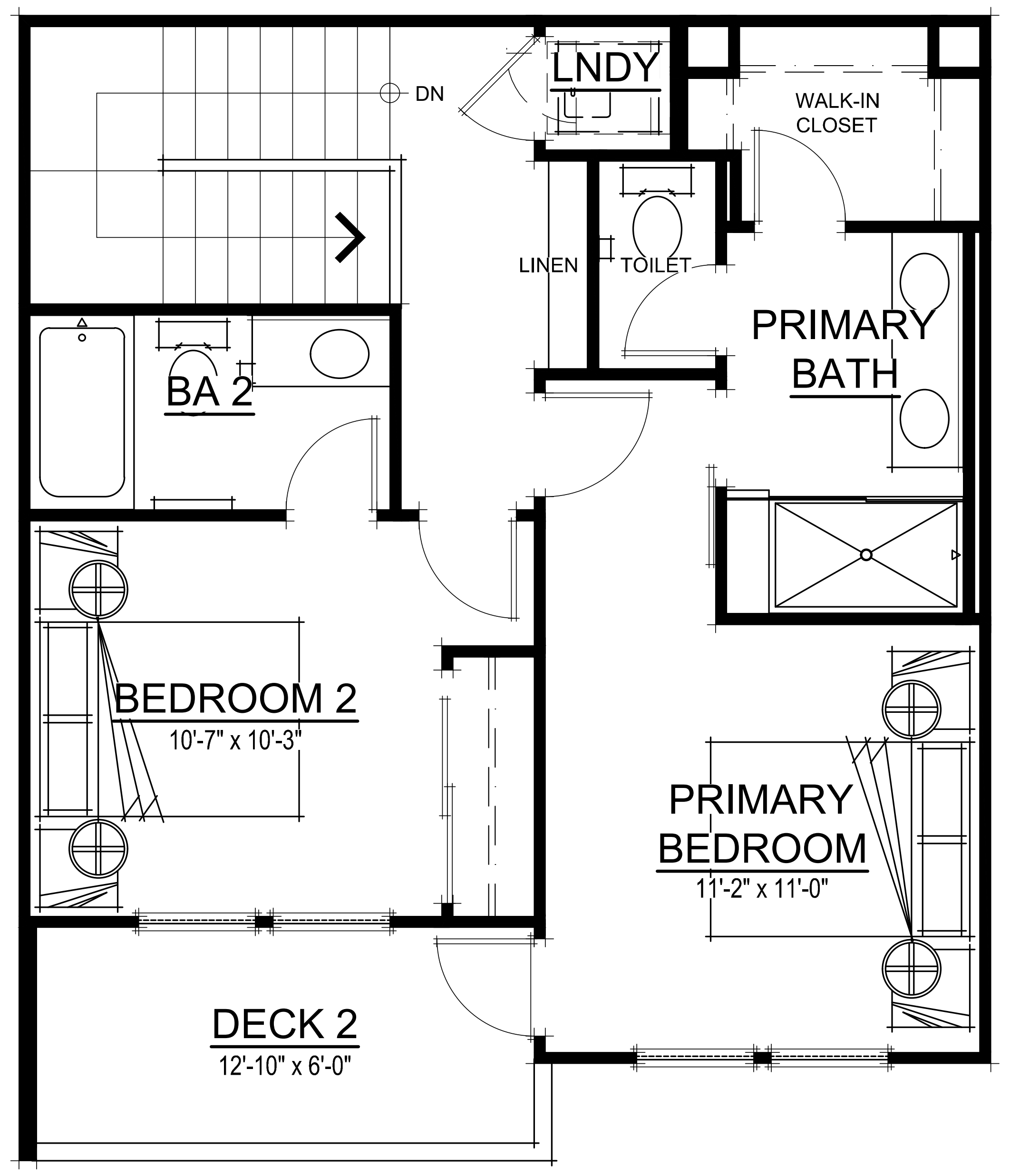
307.071

Wildflower Townhomes
Antioch, CA
February 02, 2024

COVER SHEET
A000

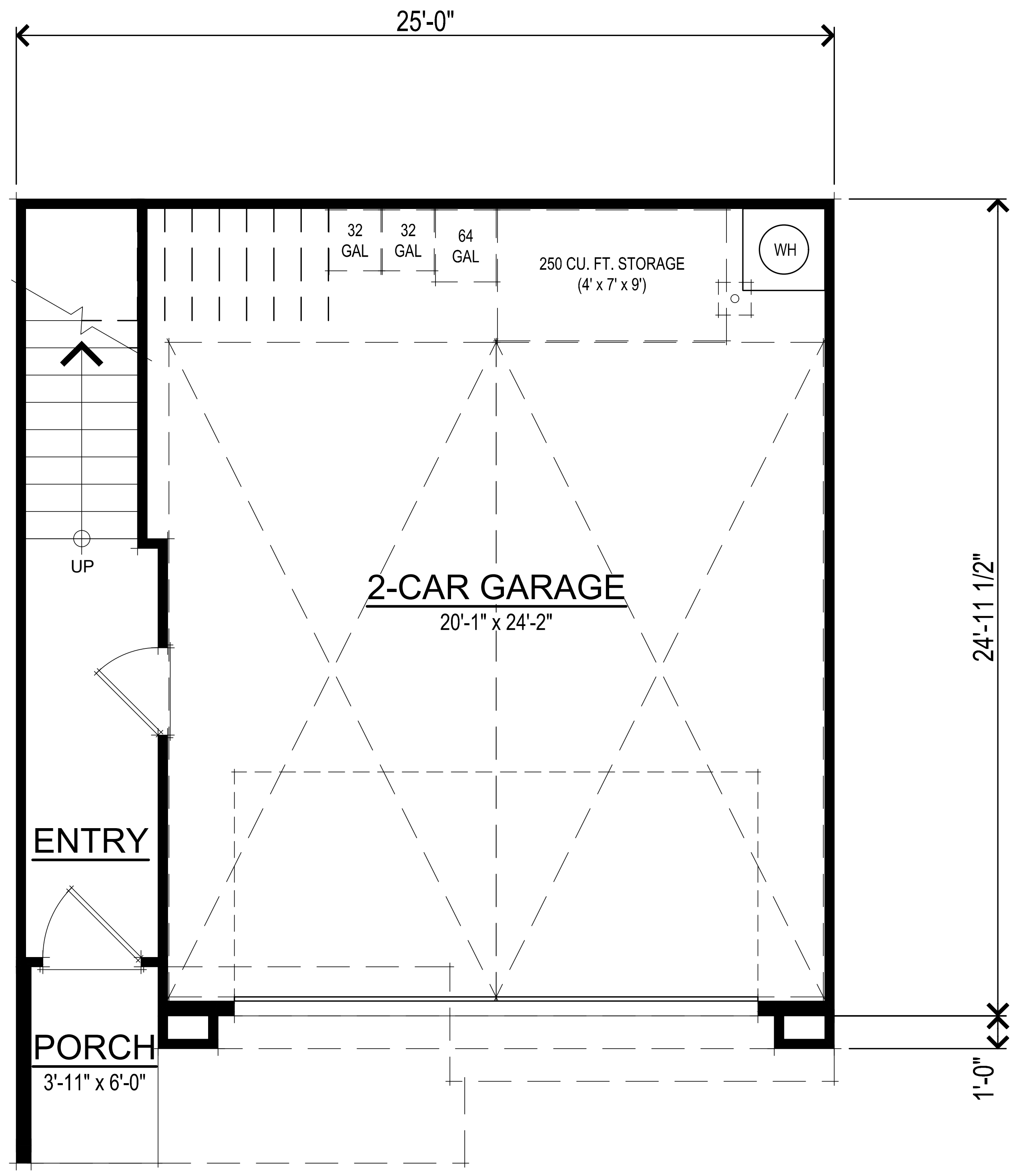
DENOVA HOMES
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

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



THIRD FLOOR PLAN

SECOND FLOOR PLAN

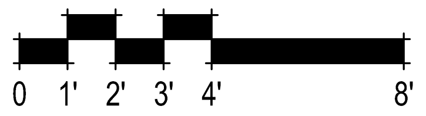


FIRST FLOOR PLAN

SQUARE FOOTAGES	
FIRST FLOOR	103 SQ. FT.
SECOND FLOOR	631 SQ. FT.
THIRD FLOOR	559 SQ. FT.
TOTAL LIVING	1293 SQ. FT.
2-CAR GARAGE	517 SQ. FT.
DECK 1	81 SQ. FT.
DECK 2	81 SQ. FT.

BACK TO BACK TOWNHOMES

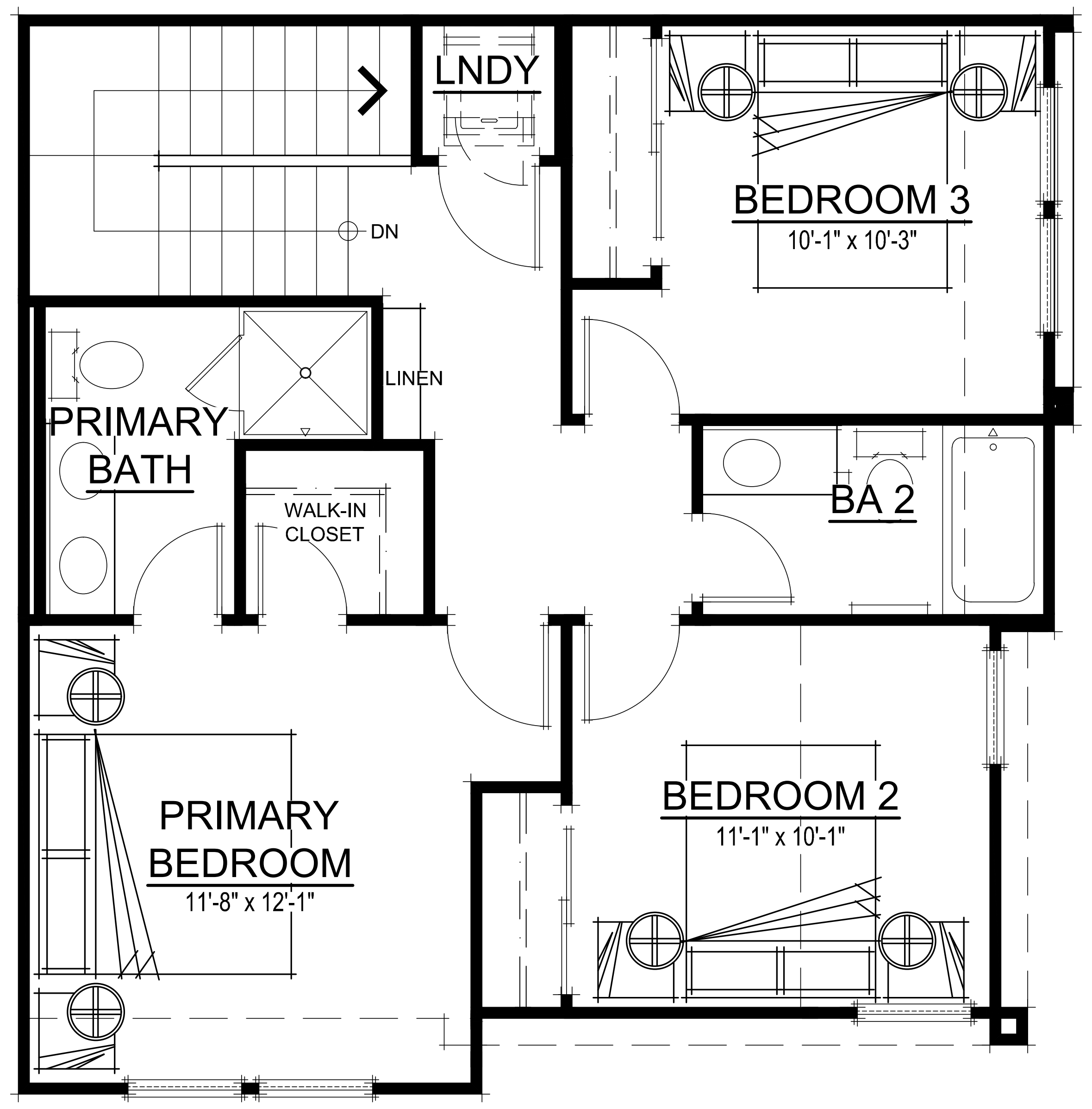
307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024



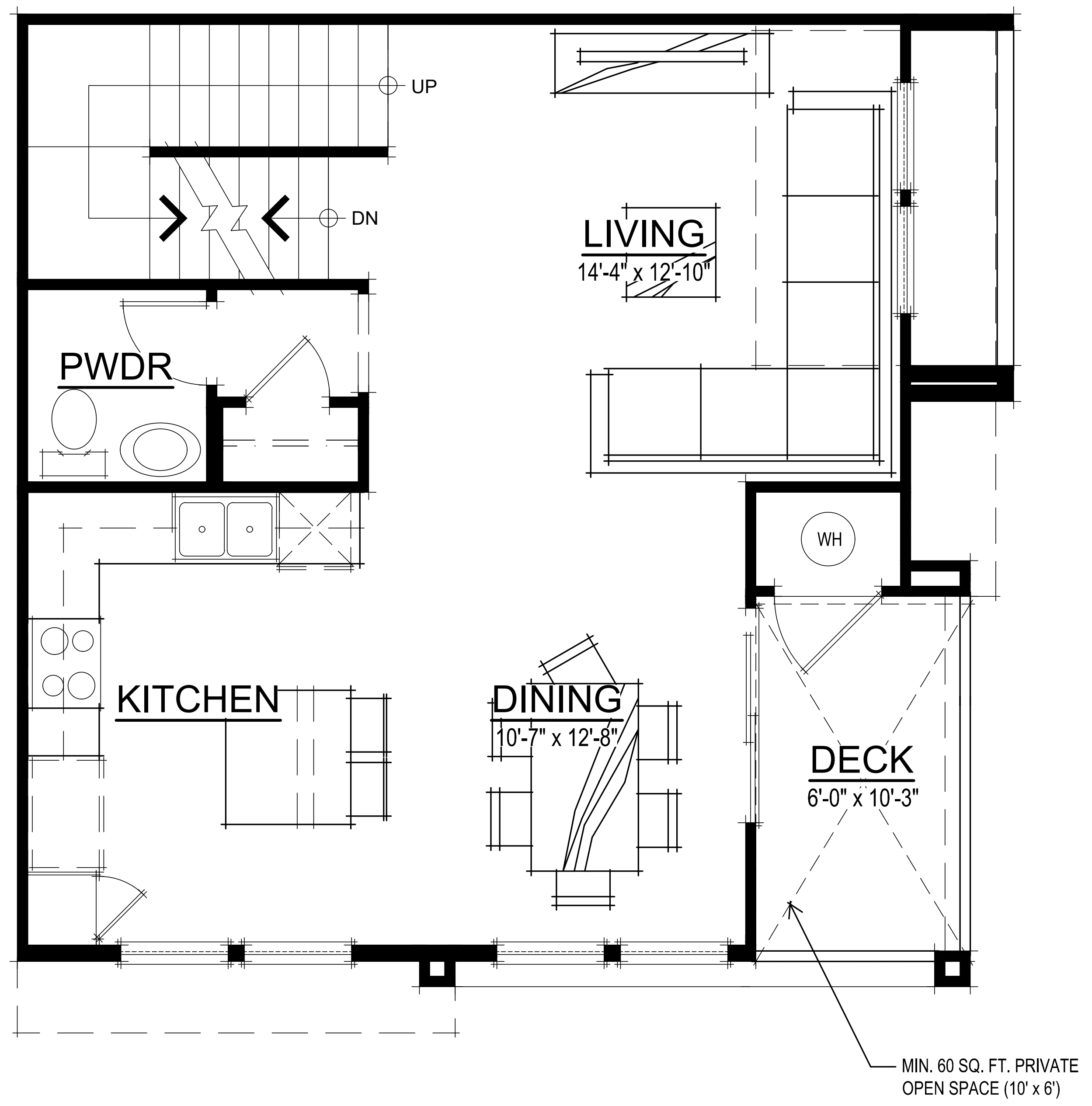
UNIT BB1 FLOOR PLANS
A001

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

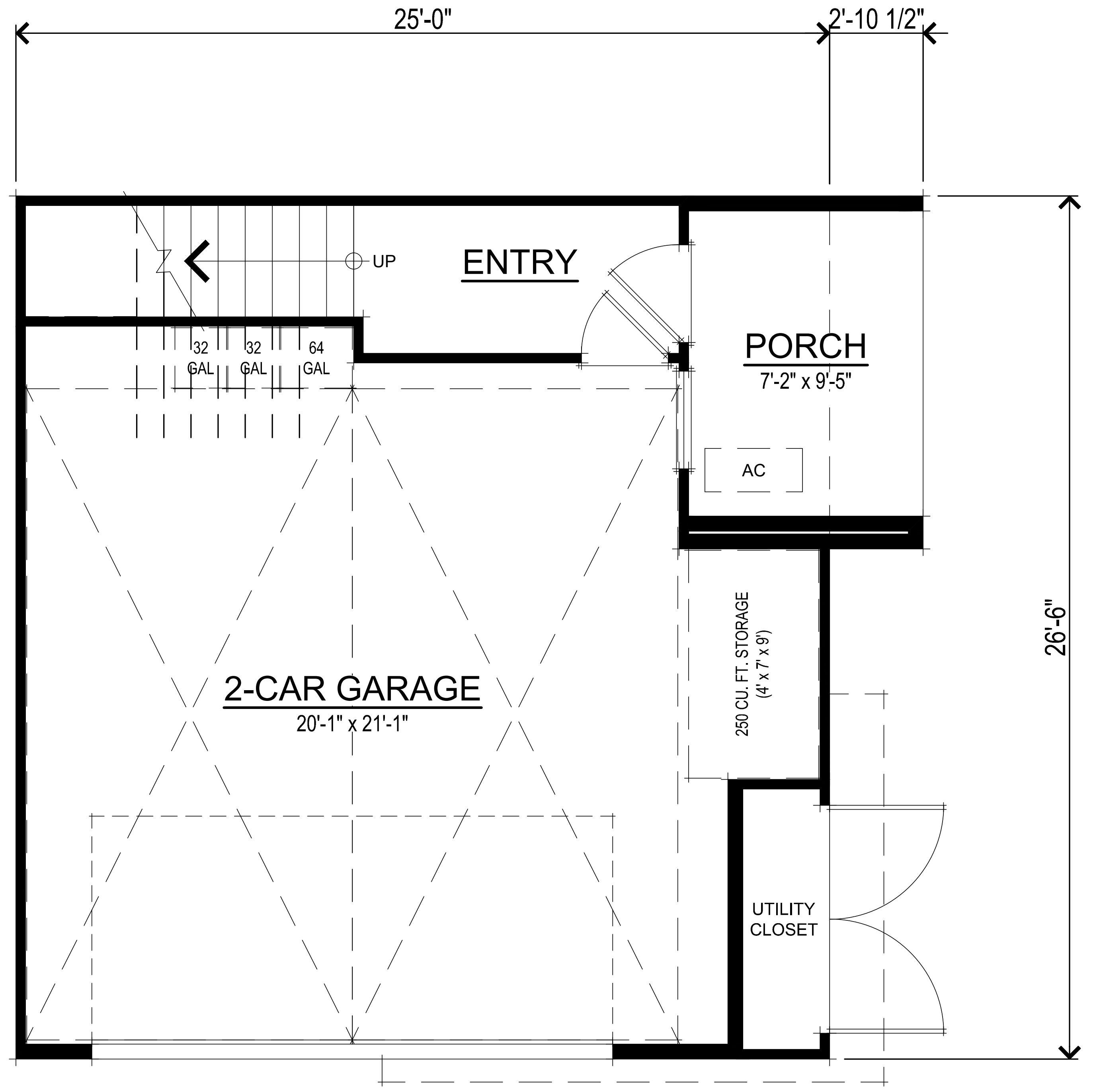
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com
SDG architects



THIRD FLOOR PLAN



SECOND FLOOR PLAN

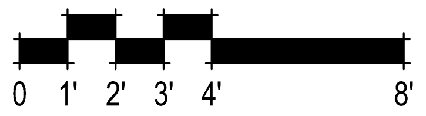


FIRST FLOOR PLAN

SQUARE FOOTAGES	
FIRST FLOOR	95 SQ. FT.
SECOND FLOOR	620 SQ. FT.
THIRD FLOOR	666 SQ. FT.
TOTAL LIVING	1381 SQ. FT.
2-CAR GARAGE	502 SQ. FT.
DECK	61 SQ. FT.

BACK TO BACK TOWNHOMES

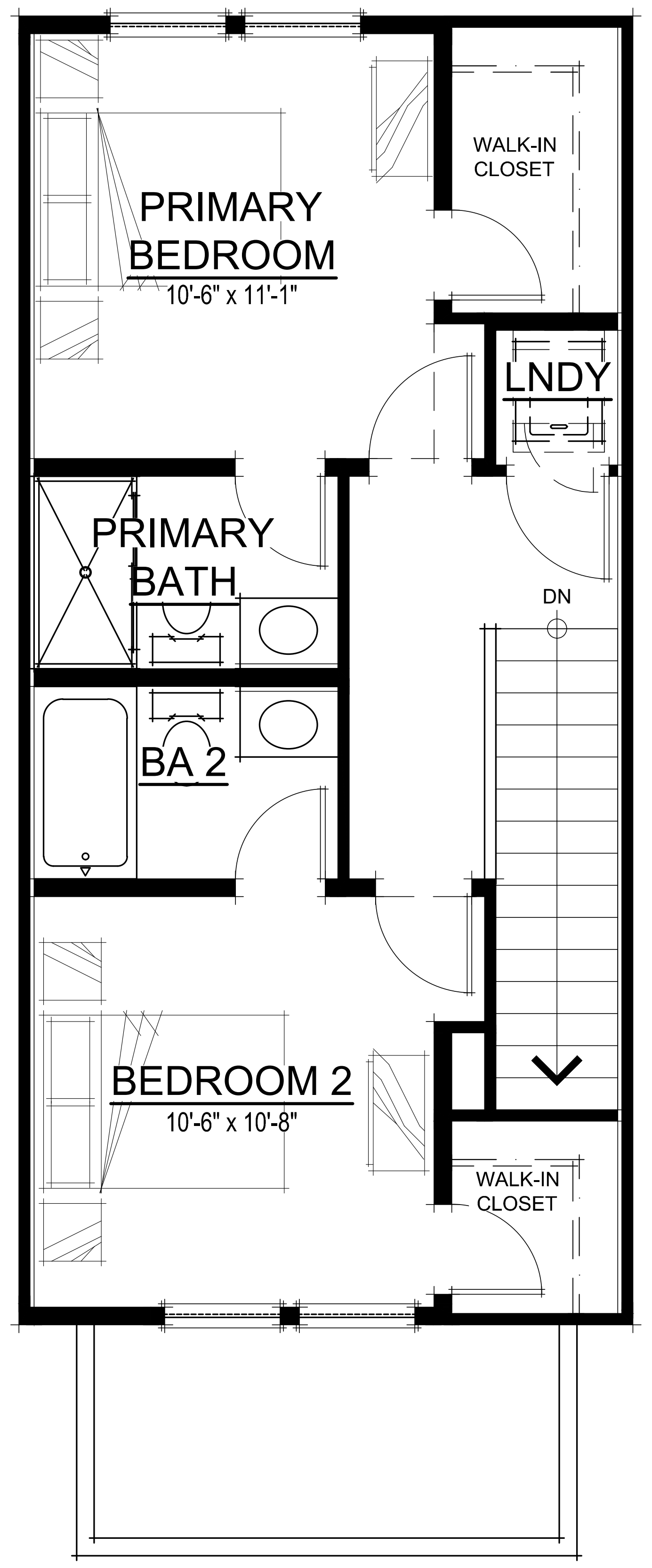
307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024



UNIT BB2 FLOOR PLANS
A002

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

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



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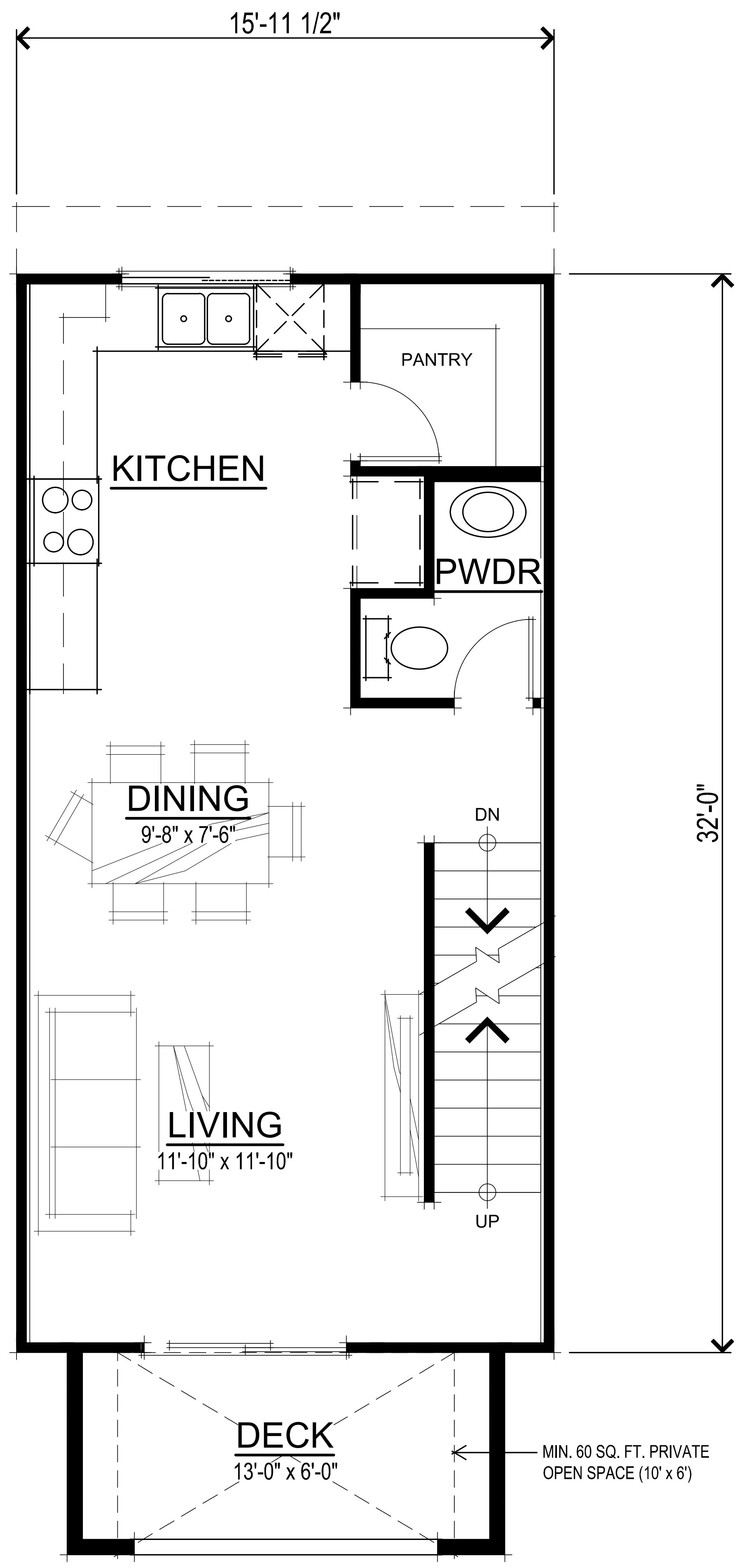
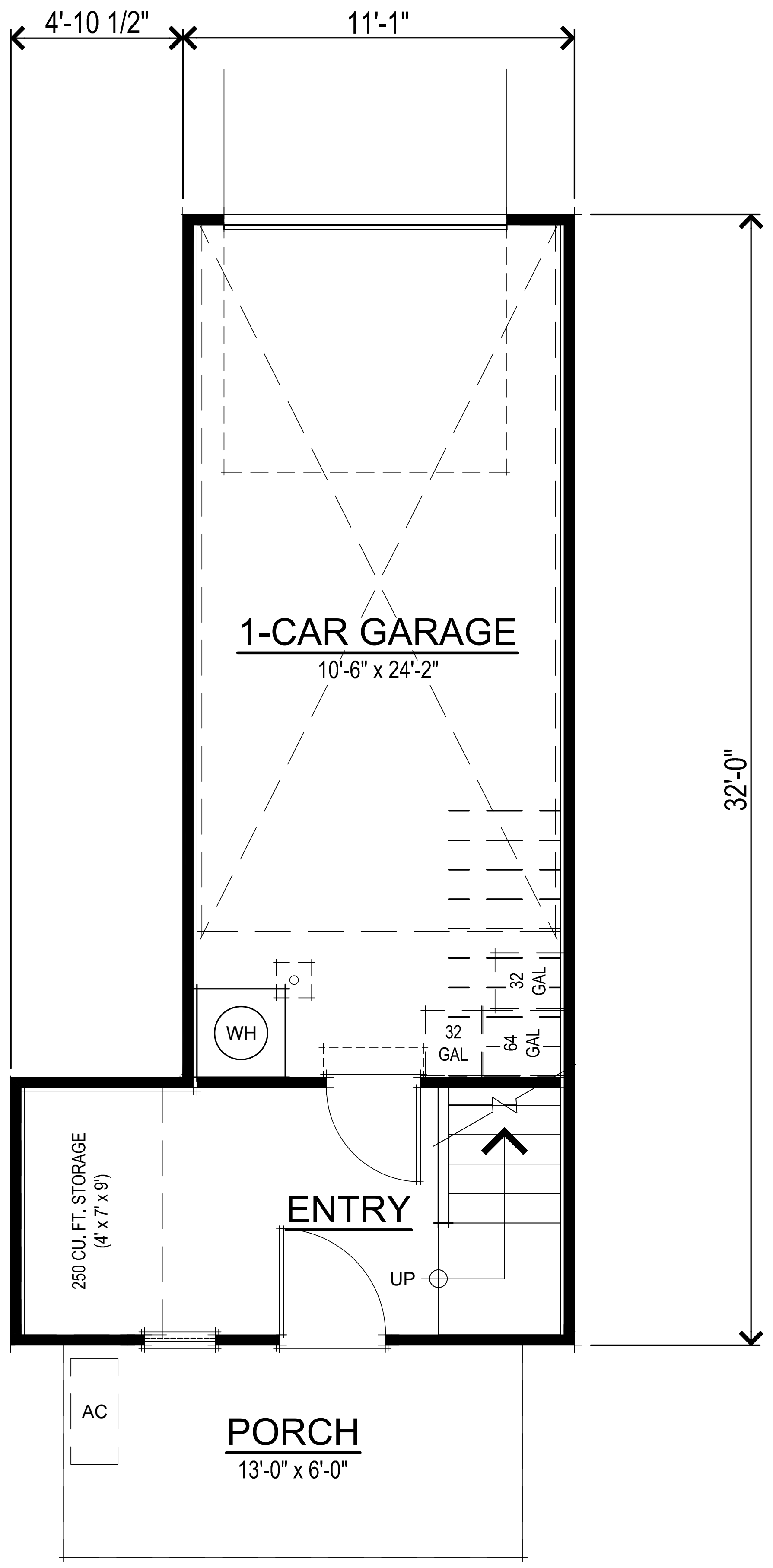


SECOND FLOOR PLAN



FIRST FLOOR PLAN
w/ 1-CAR GARAGE

SQUARE FOOTAGES	
FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	513 SQ. FT.
THIRD FLOOR	500 SQ. FT.
TOTAL LIVING	1135 SQ. FT.
DECK	78 SQ. FT.

GARAGE SQUARE FOOTAGES	
1-CAR GARAGE	273 SQ. FT.

0 1' 2' 3' 4' 8'

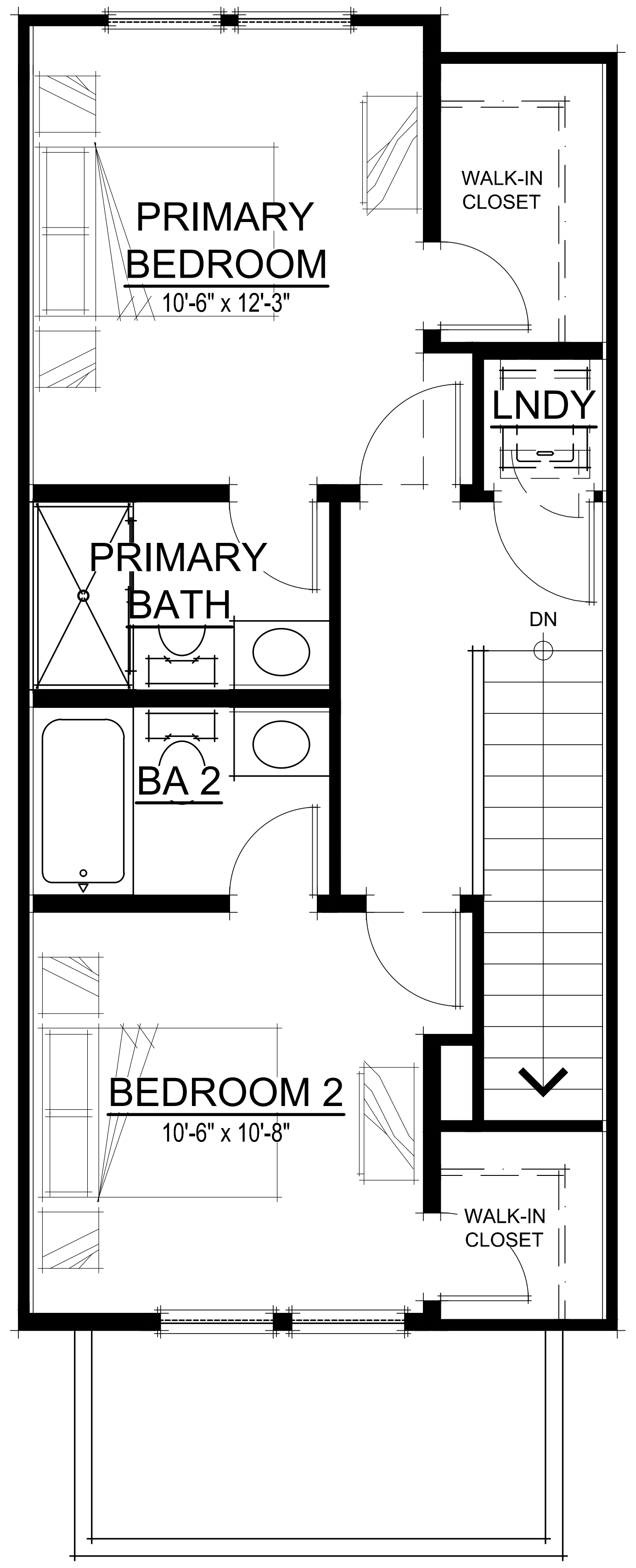
307.071 Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

UNIT RT1 FLOOR PLANS
A003

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

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



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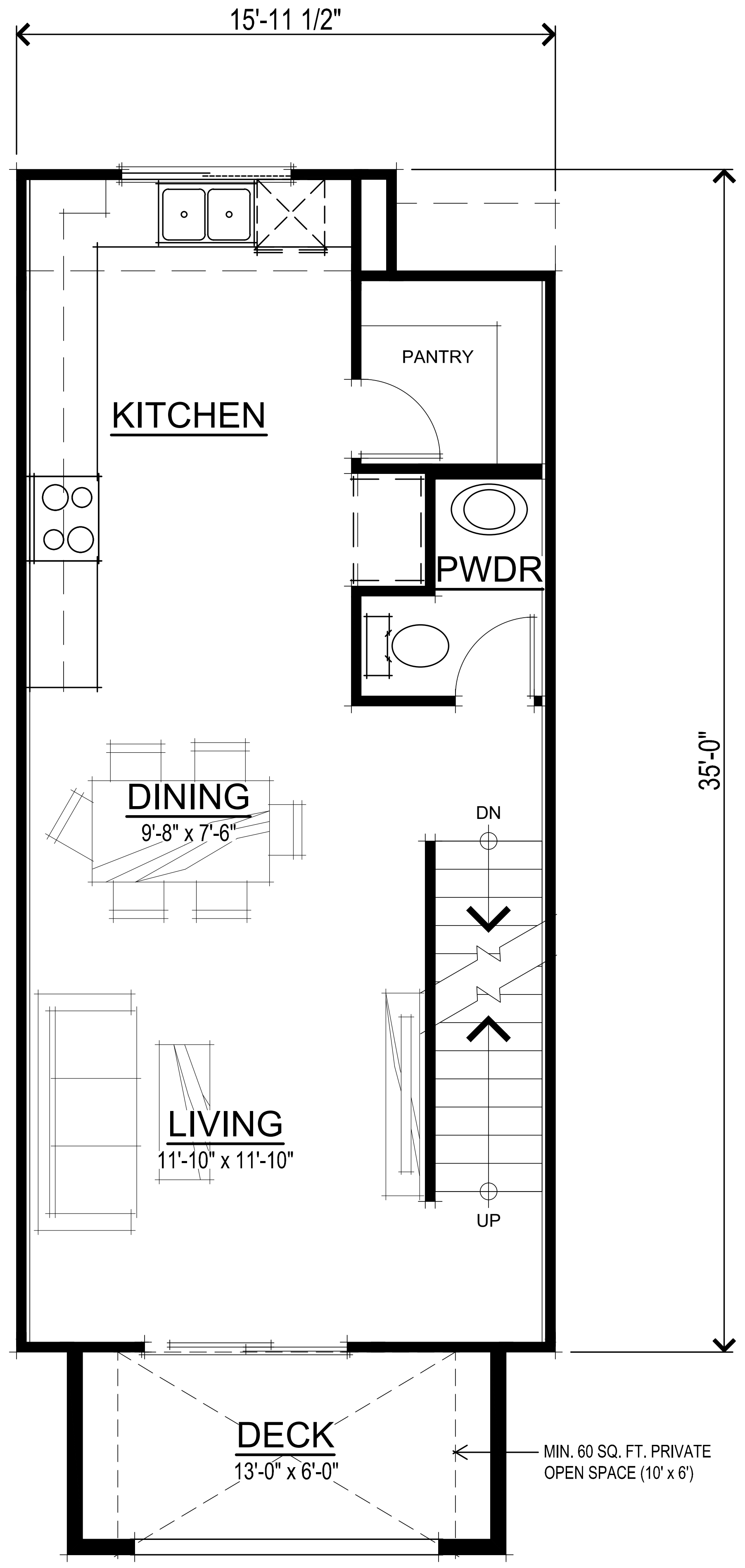

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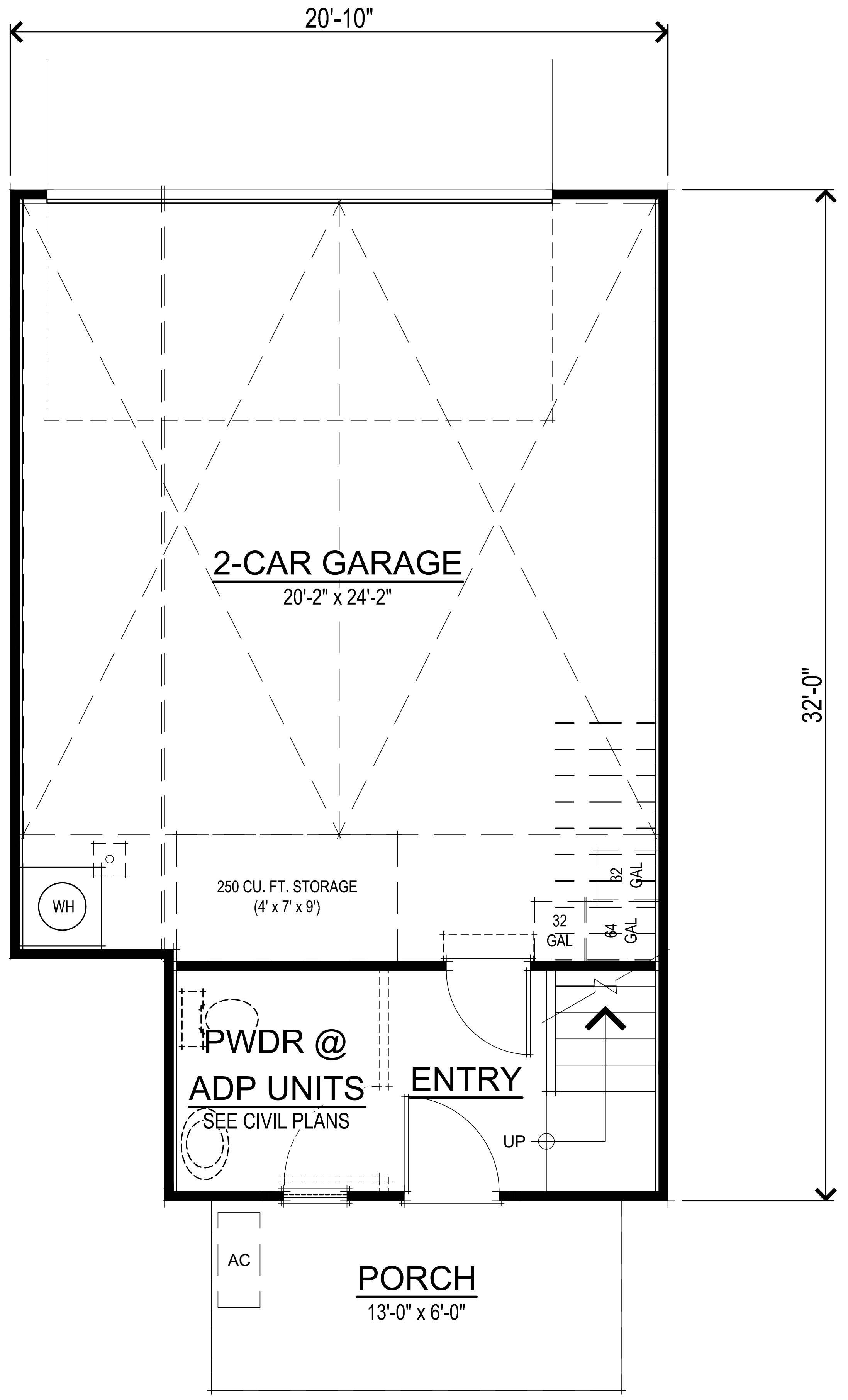
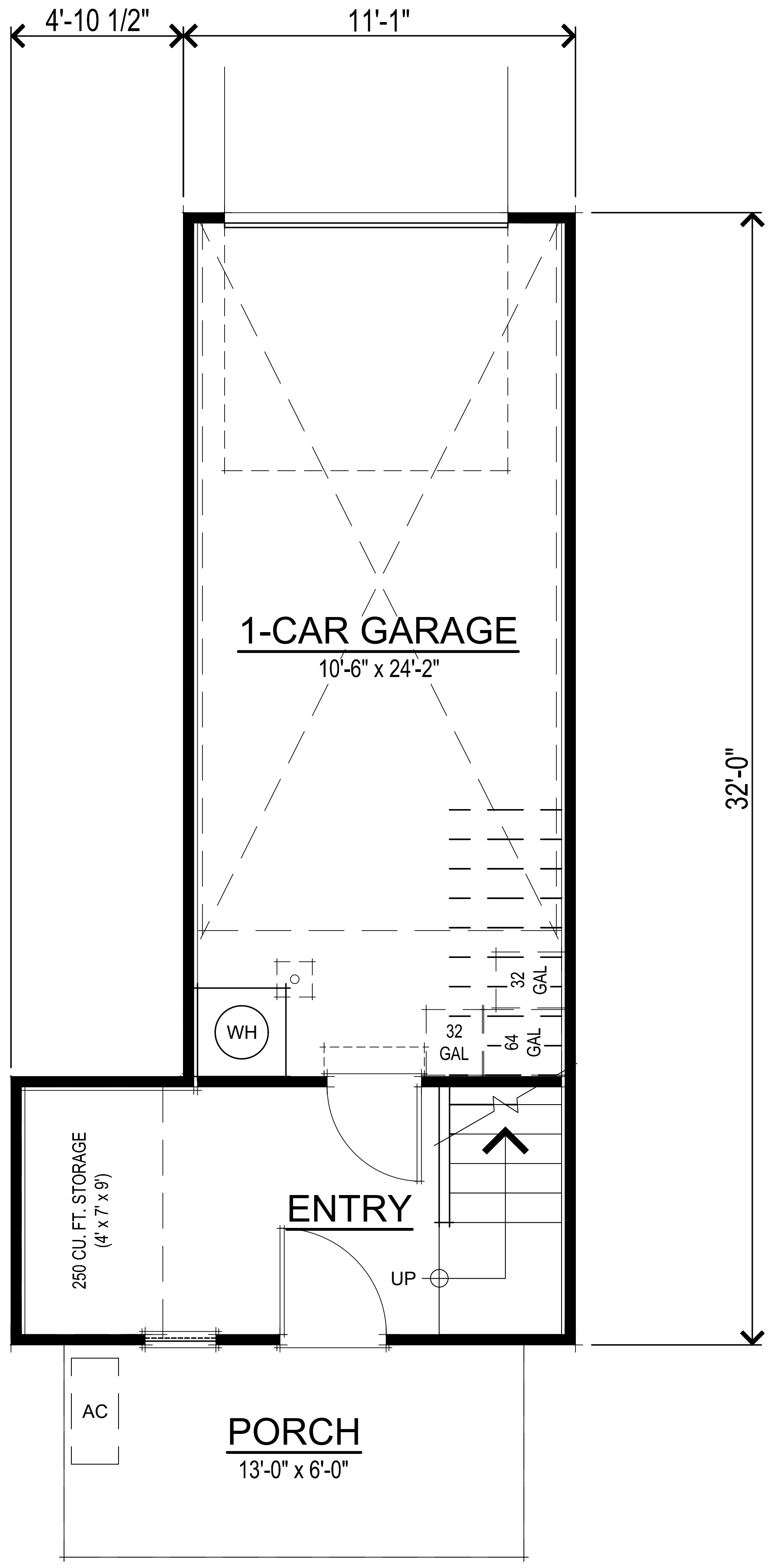
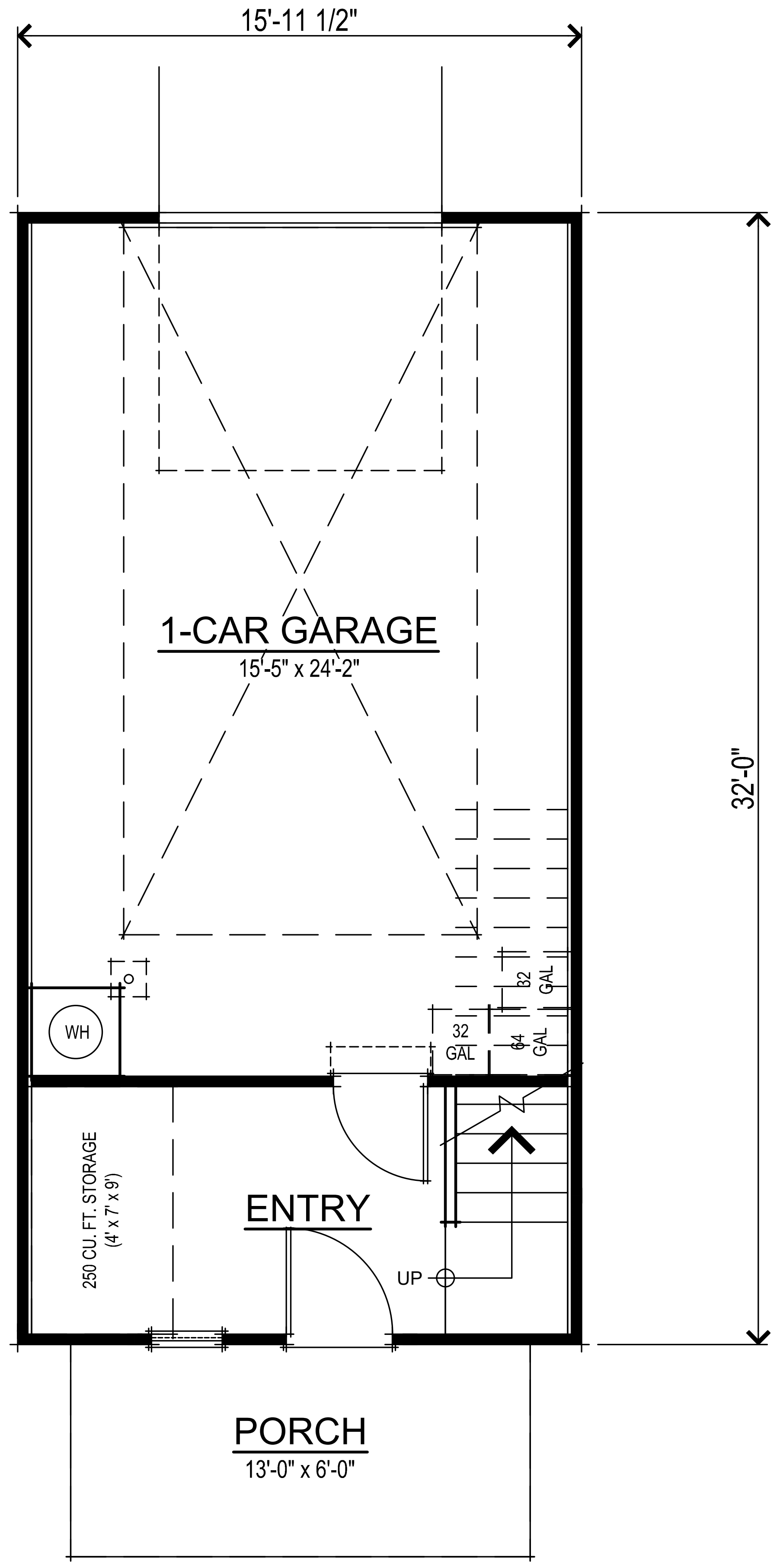


FIRST FLOOR PLAN
w/ 2-CAR GARAGE



FIRST FLOOR PLAN
w/ 1-CAR GARAGE



FIRST FLOOR PLAN
w/ 1-CAR PLUS GARAGE

SQUARE FOOTAGES		GARAGE SQUARE FOOTAGES	
FIRST FLOOR	122 SQ. FT.	1-CAR PLUS GARAGE	392 SQ. FT.
SECOND FLOOR	544 SQ. FT.	1-CAR GARAGE	273 SQ. FT.
THIRD FLOOR	512 SQ. FT.	2-CAR GARAGE	511 SQ. FT.
TOTAL LIVING	1178 SQ. FT.		
DECK	78 SQ. FT.		

0 1' 2' 3' 4' 8'

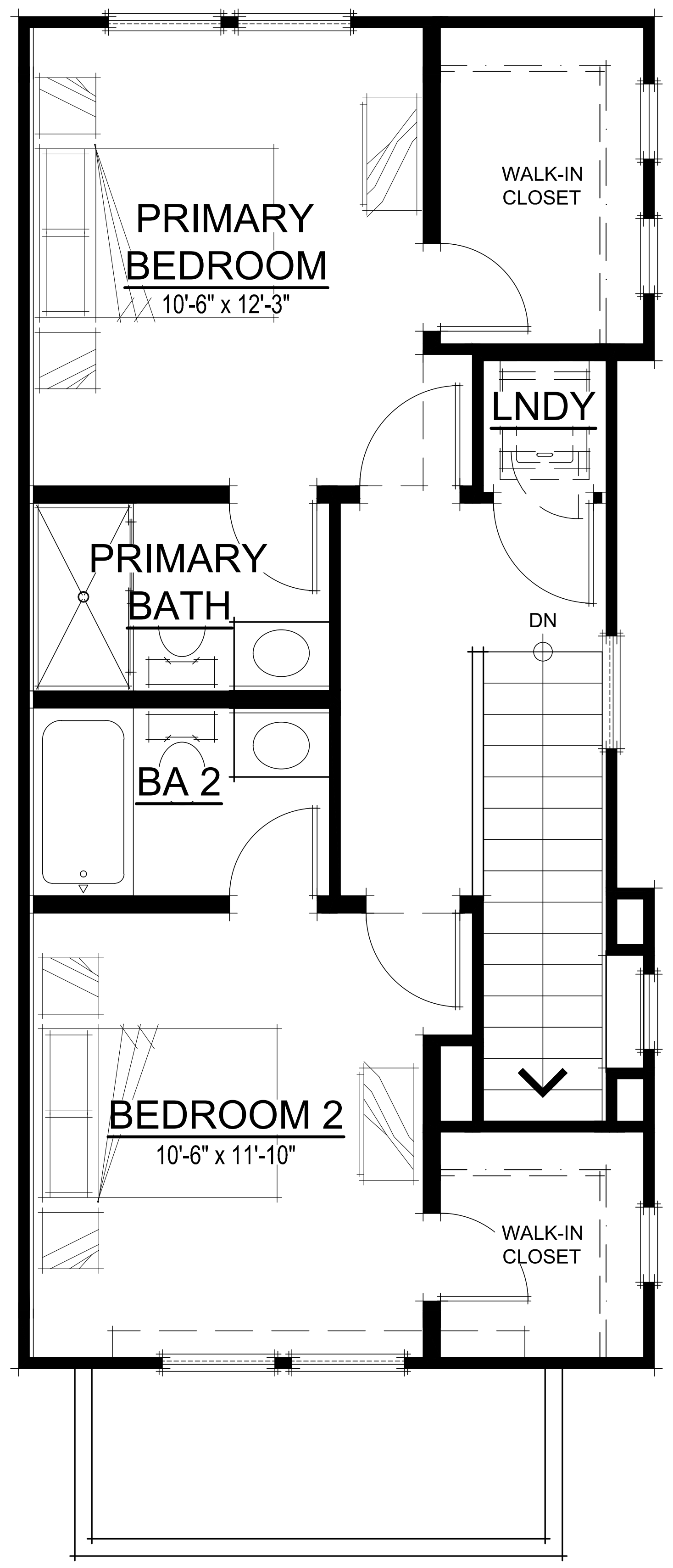
307.071 Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

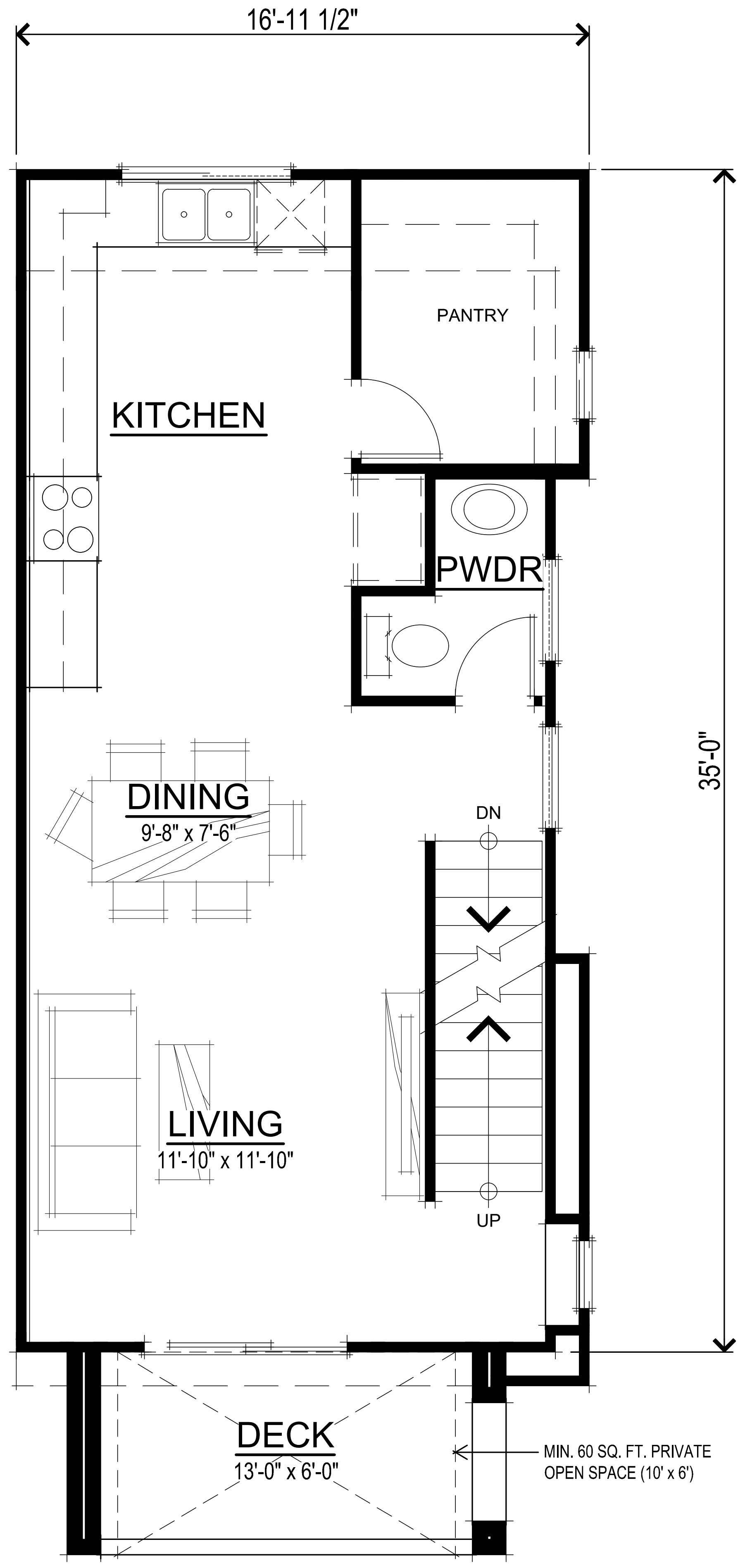
UNIT RT2 FLOOR PLANS
A004

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

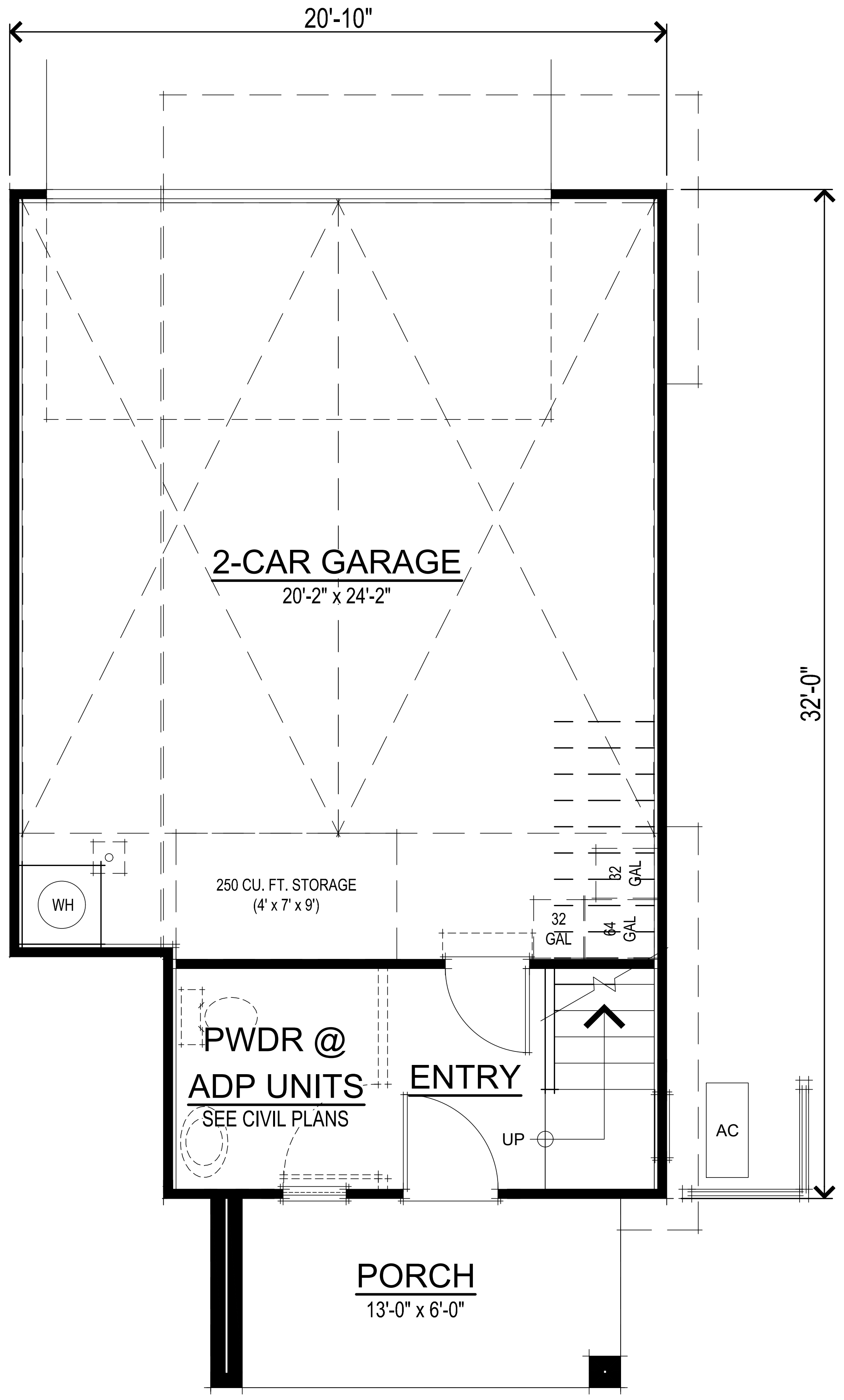
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

SQUARE FOOTAGES		GARAGE SQUARE FOOTAGES	
FIRST FLOOR	122 SQ. FT.	1-CAR PLUS GARAGE	392 SQ. FT.
SECOND FLOOR	569 SQ. FT.	2-CAR GARAGE	511 SQ. FT.
THIRD FLOOR	547 SQ. FT.		
TOTAL LIVING	1238 SQ. FT.		
DECK	78 SQ. FT.		

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

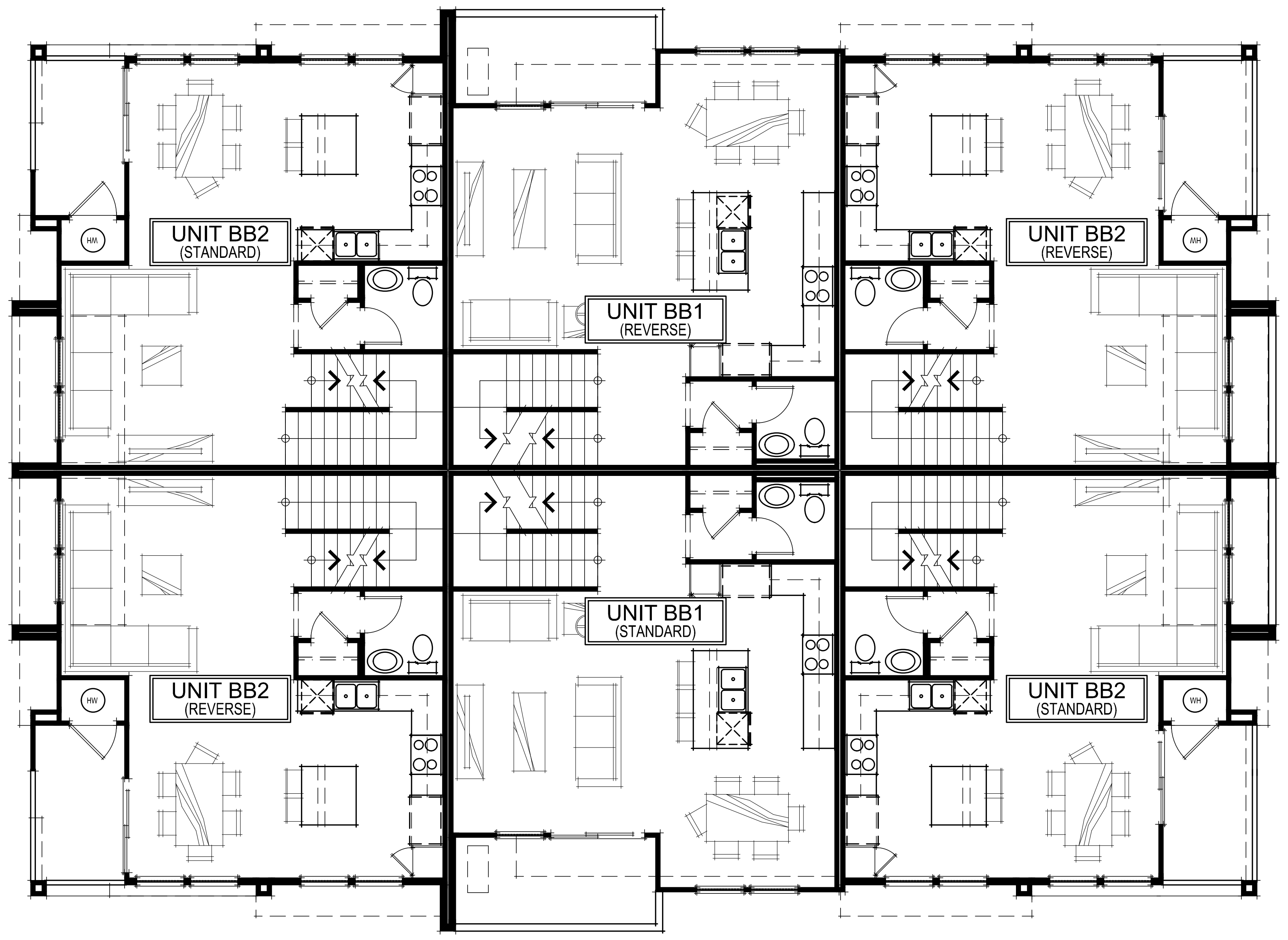
ROW TOWNHOMES

0 1' 2' 3' 4' 8'

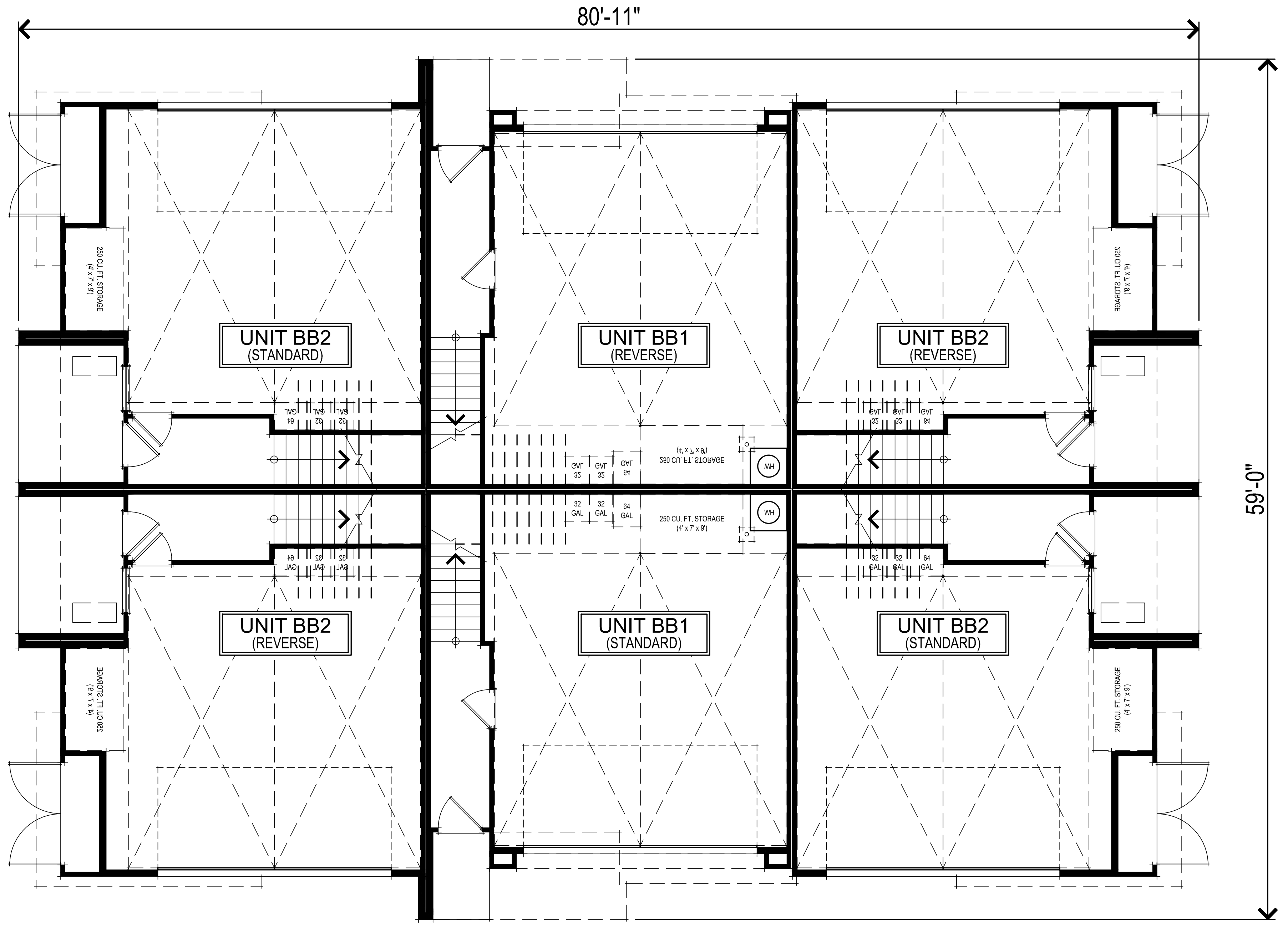
UNIT RT3 FLOOR PLANS
A005

DENOVA HOMES
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

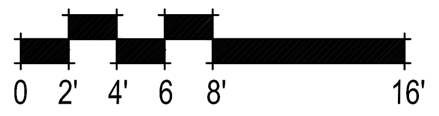
SDG Architects, Inc.
3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



SECOND FLOOR PLAN



FIRST FLOOR PLAN



307.071

Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

6 UNIT B2B BLDG FIRST & SECOND FLOOR PLANS
A006

DeNova Homes
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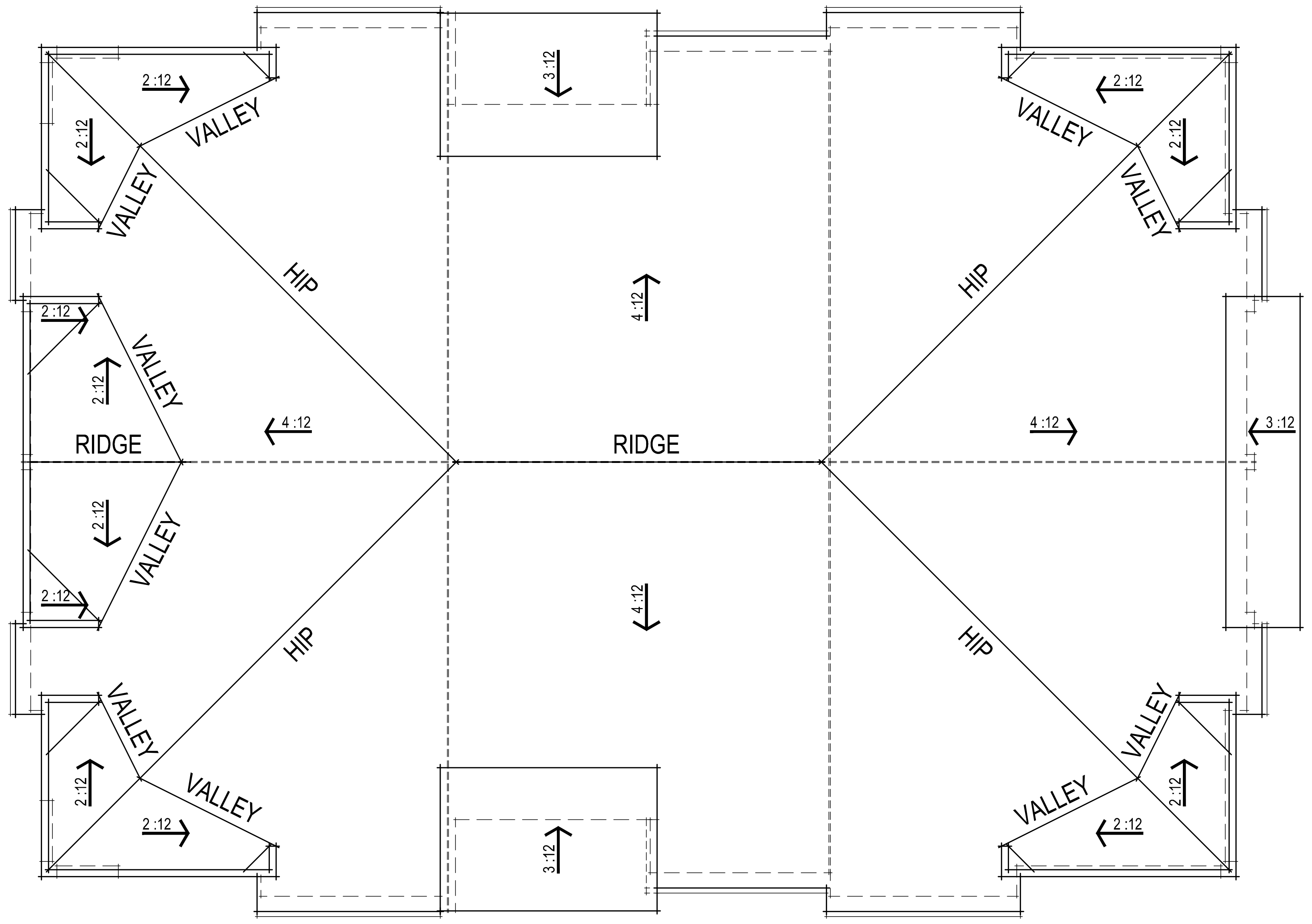
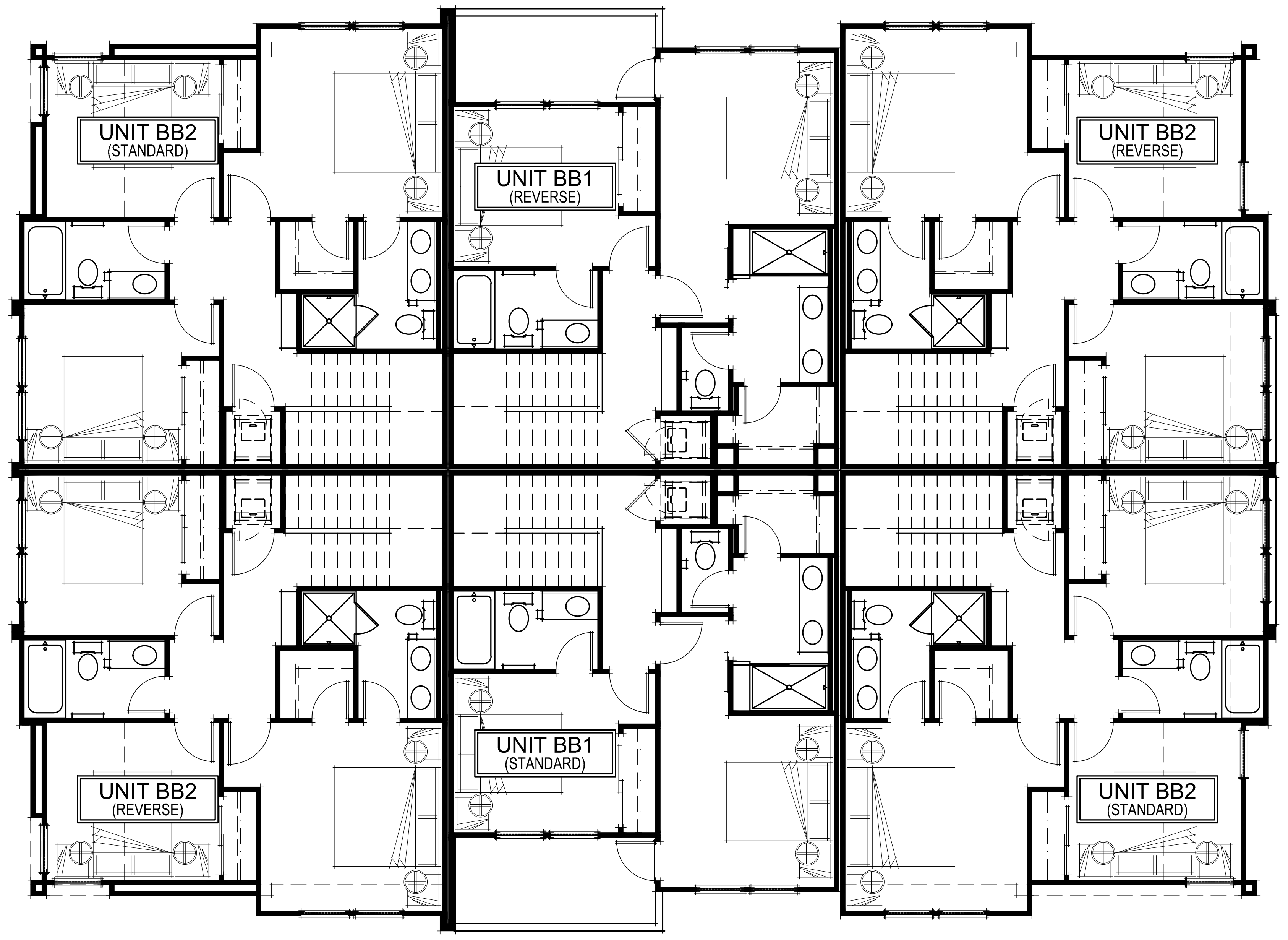
925.685.0110

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'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

6 UNIT B2B BLDG THIRD FLOOR & ROOF PLANS
A007

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

SDG Architects, Inc.
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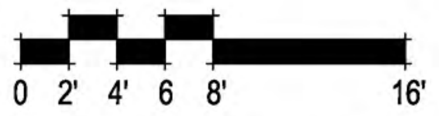
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com

REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

FRONT ELEVATION



307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

6 UNIT B2B BLDG ELEVATIONS
A008

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
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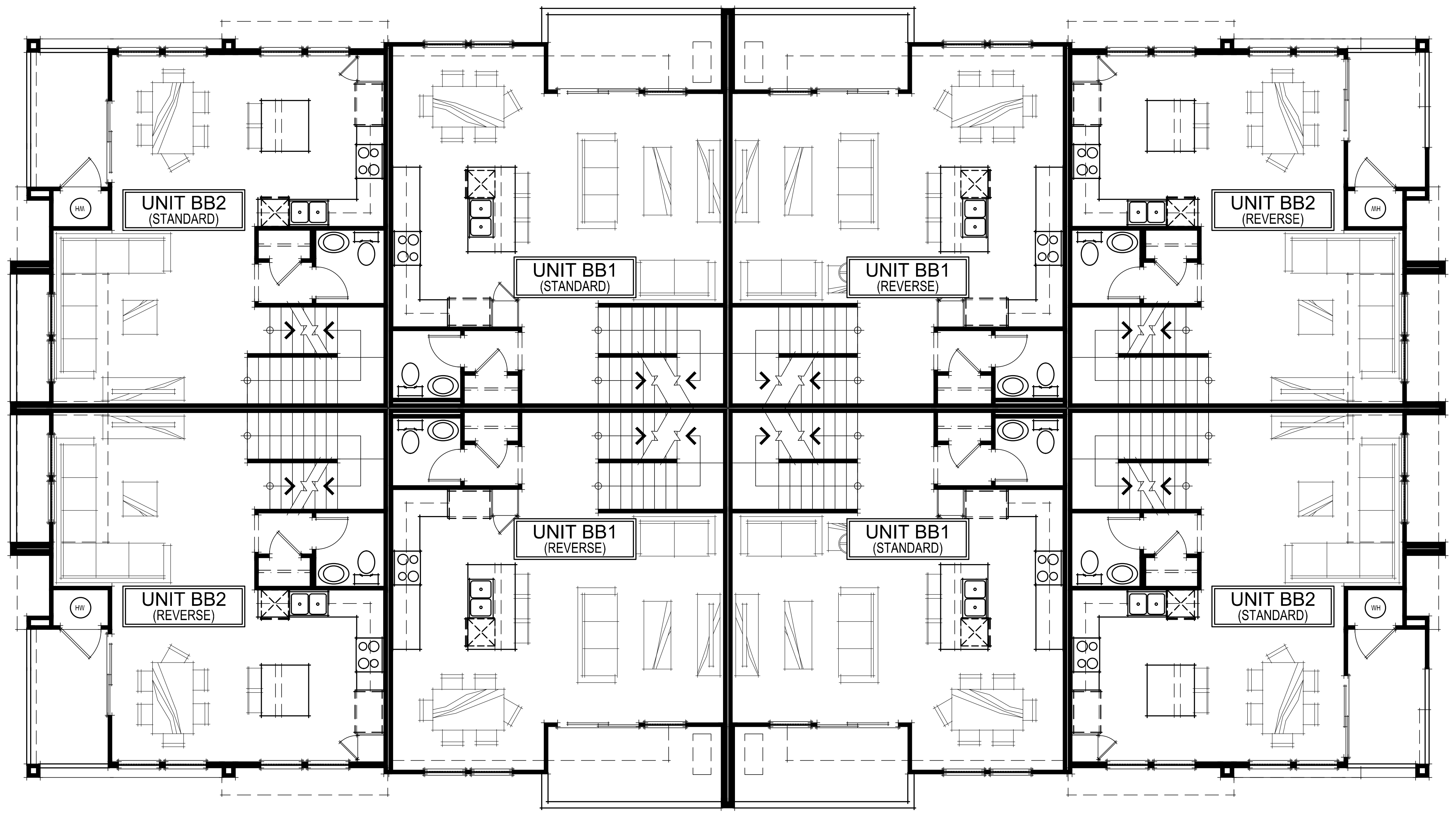
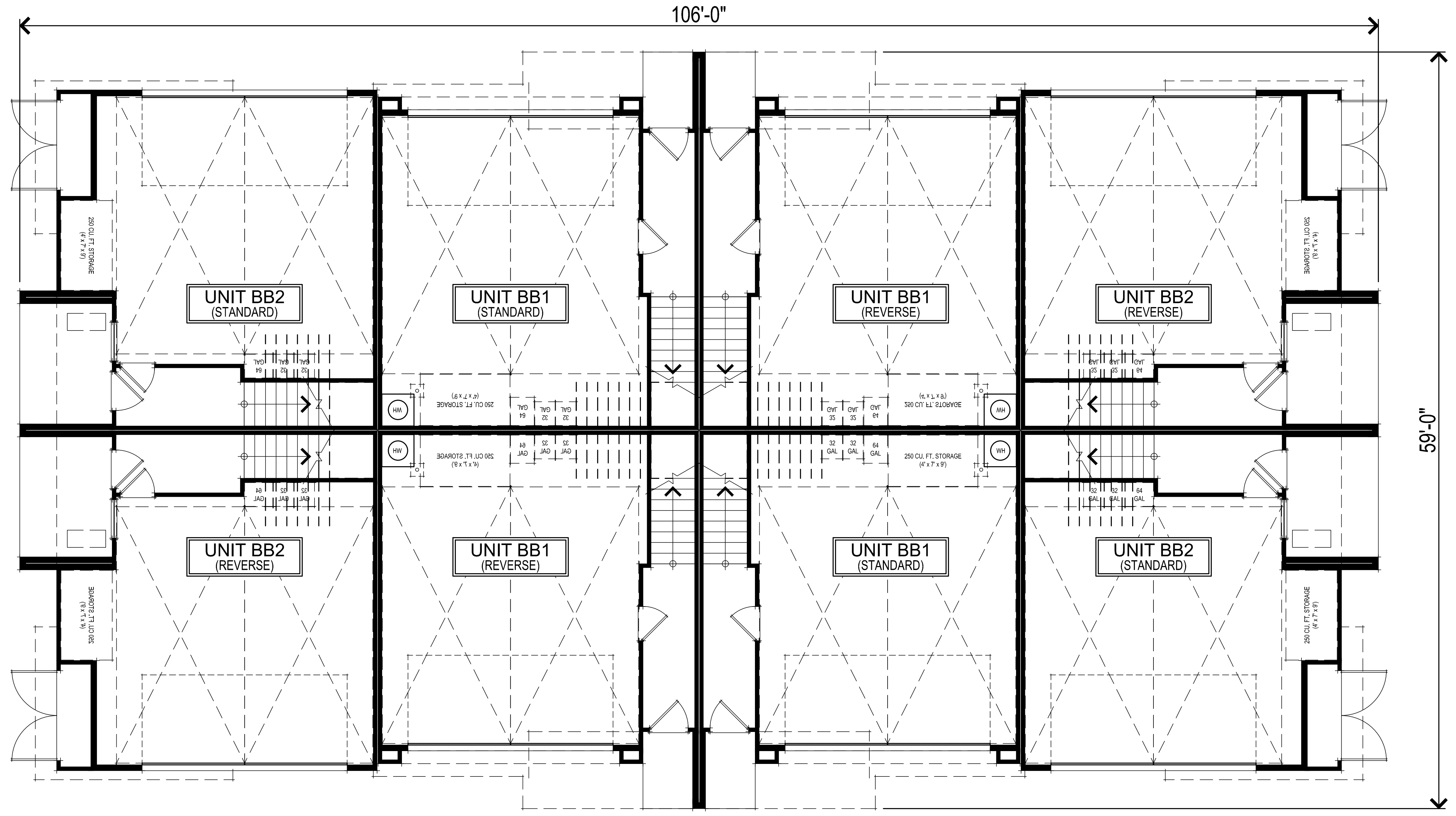
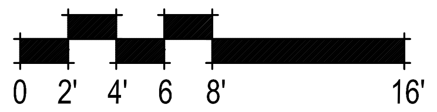


SECOND FLOOR PLAN



FIRST FLOOR PLAN



307.071 **Wildflower Townhomes**
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

8 UNIT B2B BLDG FIRST & SECOND FLOOR PLANS
A009

DENOVA HOMES
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

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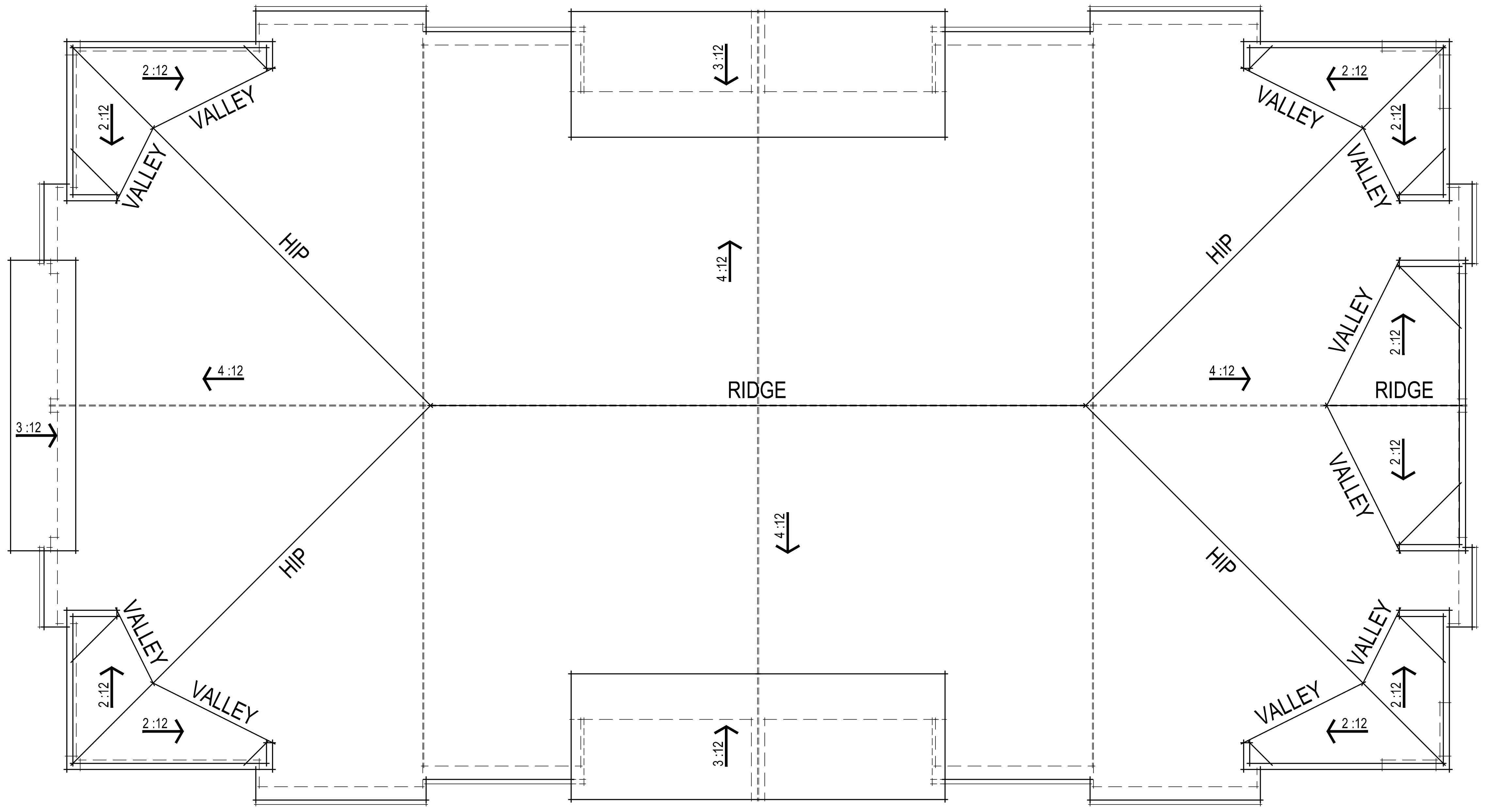
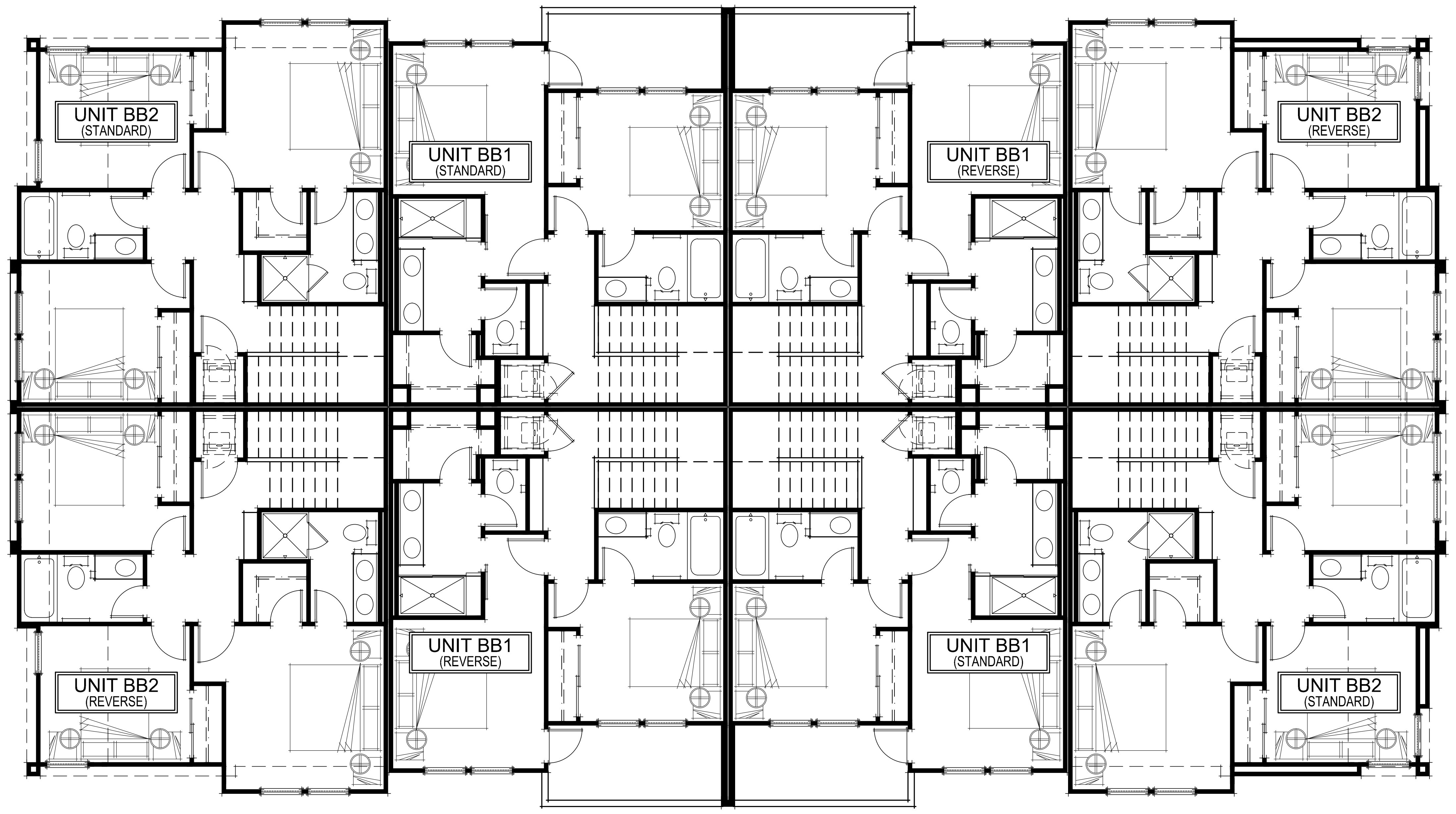
Brentwood, CA 94513
925.634.7000 | sdgarchitectsinc.com



ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

8 UNIT B2B BLDG THIRD FLOOR & ROOF PLANS
A010

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REAR ELEVATION

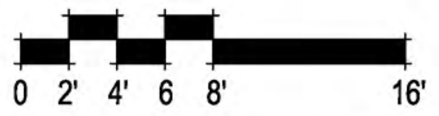
LEFT ELEVATION

RIGHT ELEVATION

FRONT ELEVATION

307.071 **Wildflower Townhomes**
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES



8 UNIT B2B BLDG ELEVATIONS
A011

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3361 Walnut Blvd. Suite 120
Brentwood, CA 94513
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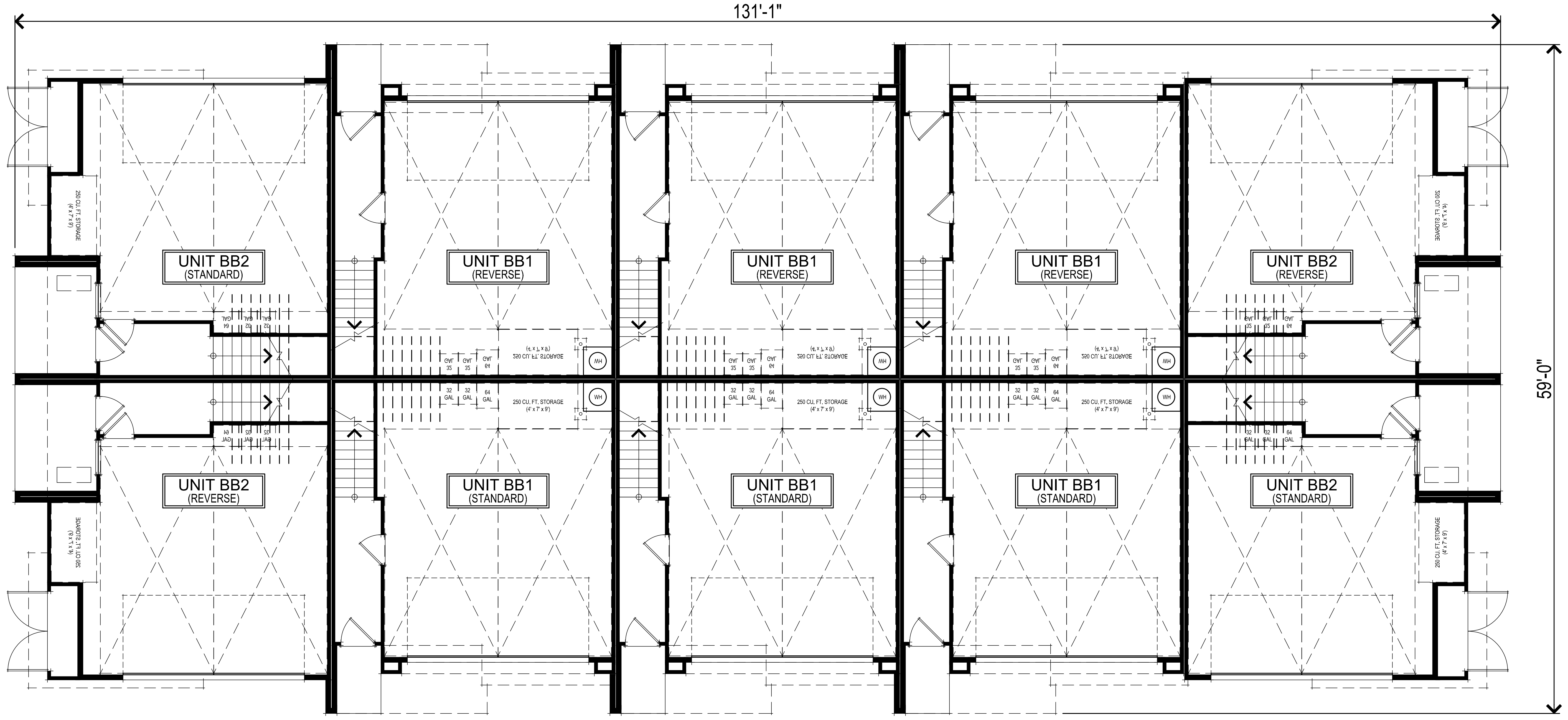
SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071 Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

10 UNIT B2B BLDG FIRST & SECOND FLOOR PLANS
A012

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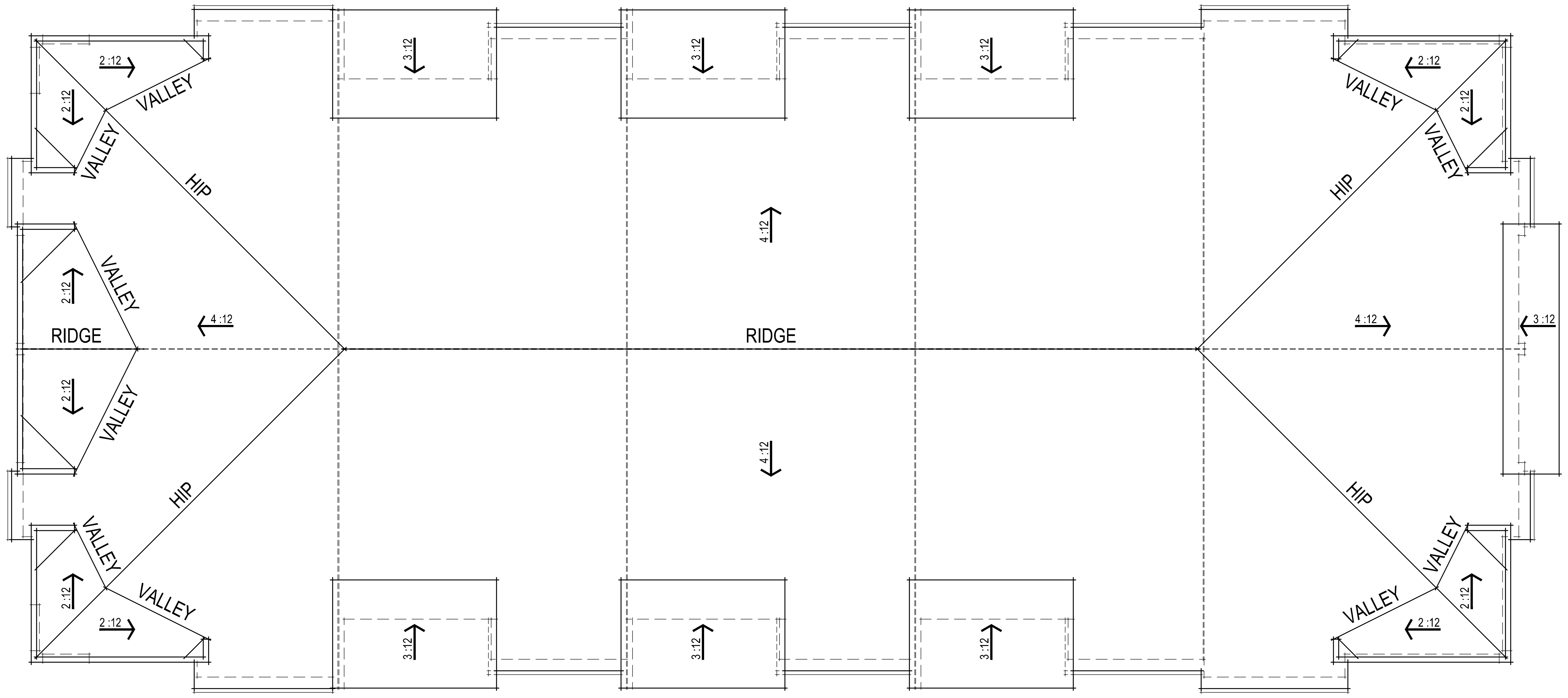
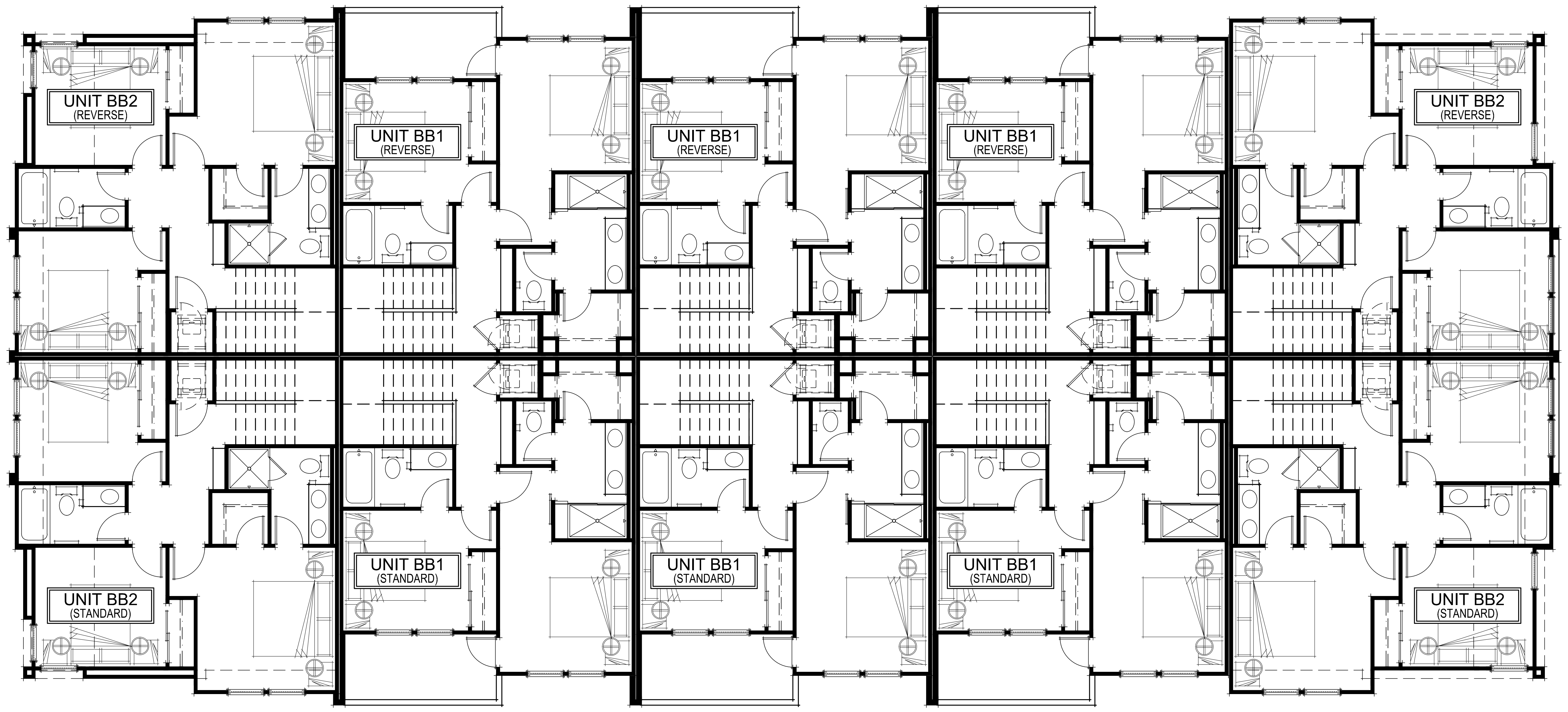


ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

10 UNIT B2B BLDG THIRD FLOOR & ROOF PLANS
A013

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REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

FRONT ELEVATION

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

10 UNIT B2B BLDG ELEVATIONS
A014

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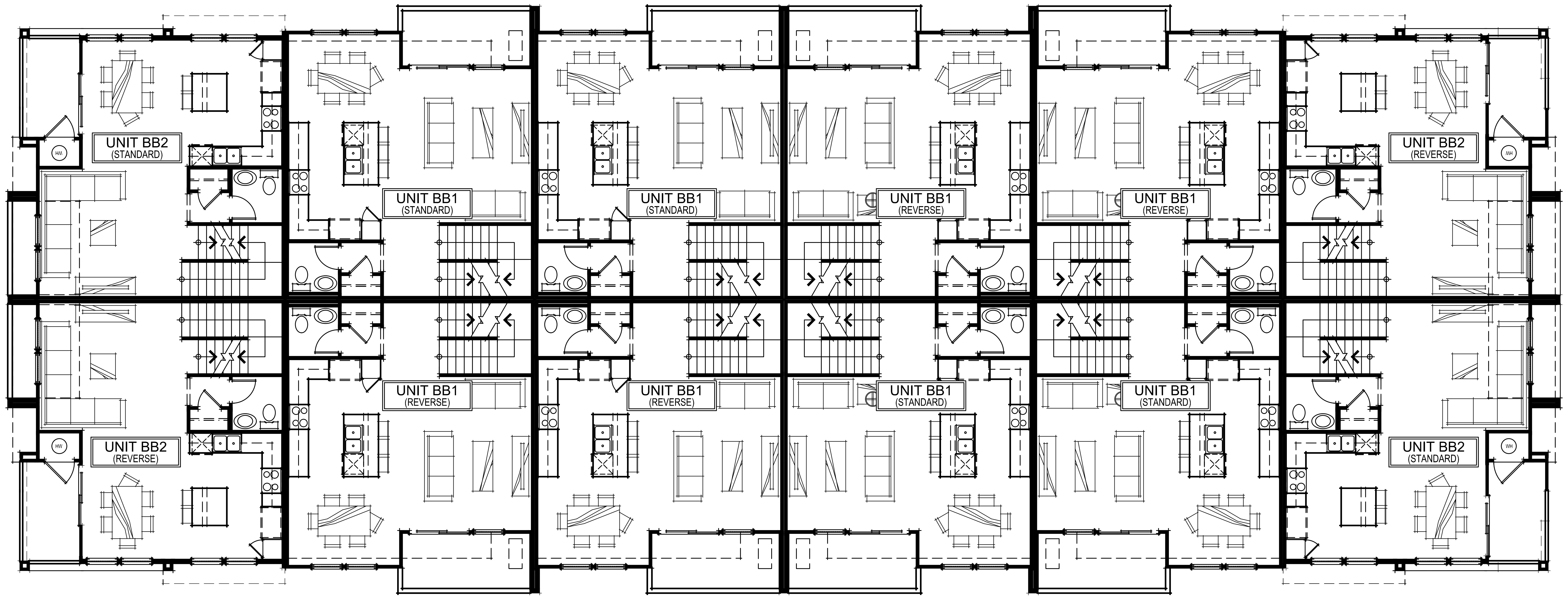
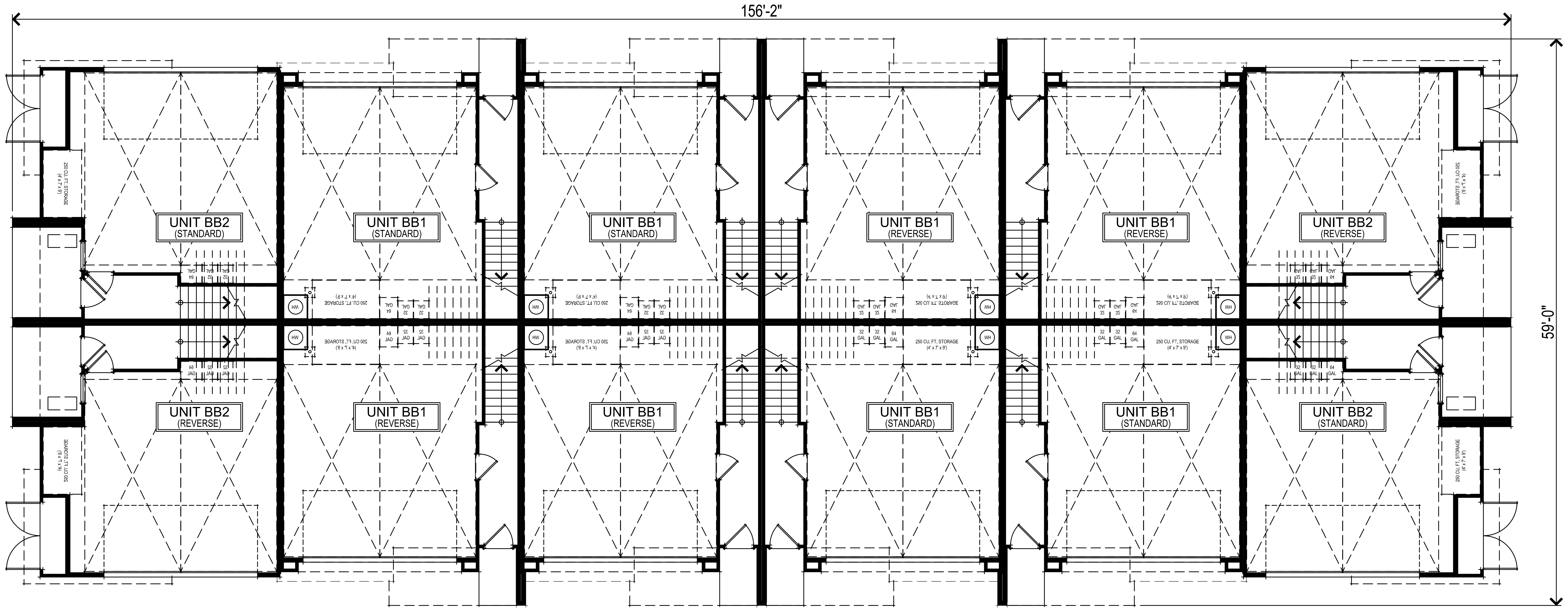


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

12 UNIT B2B BLDG FIRST & SECOND FLOOR PLANS
A015

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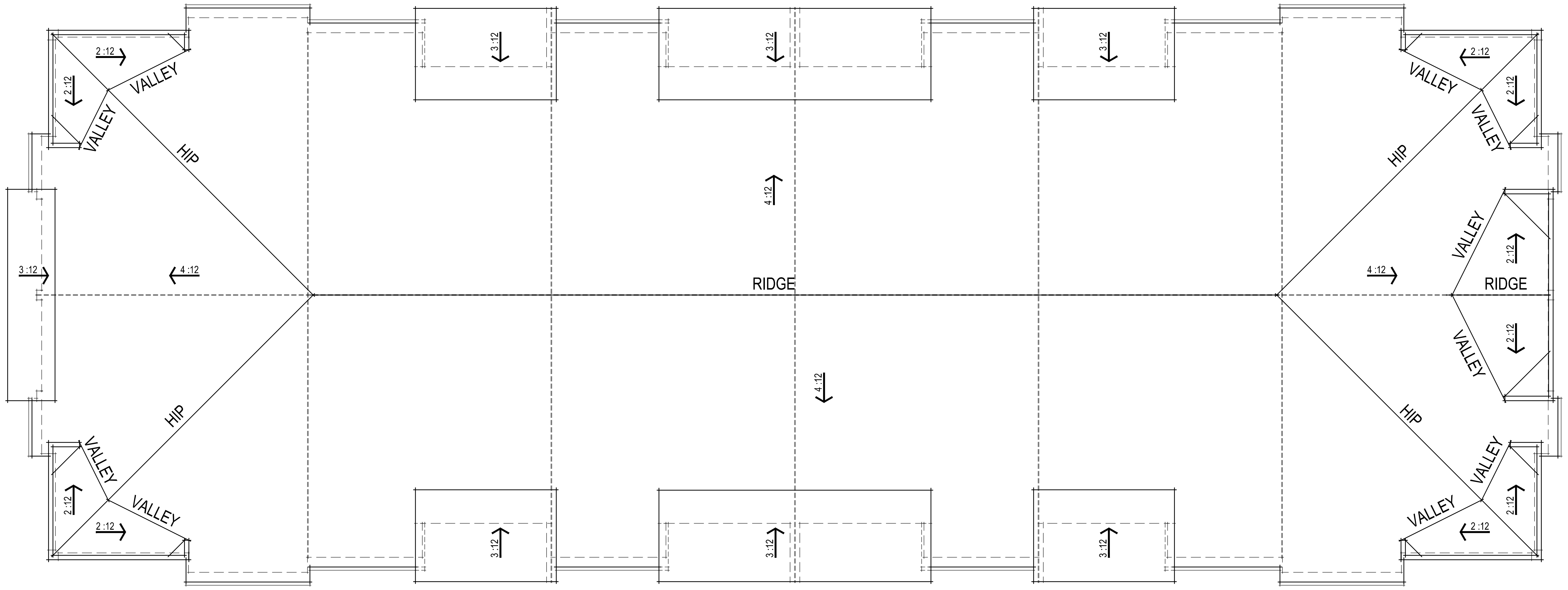
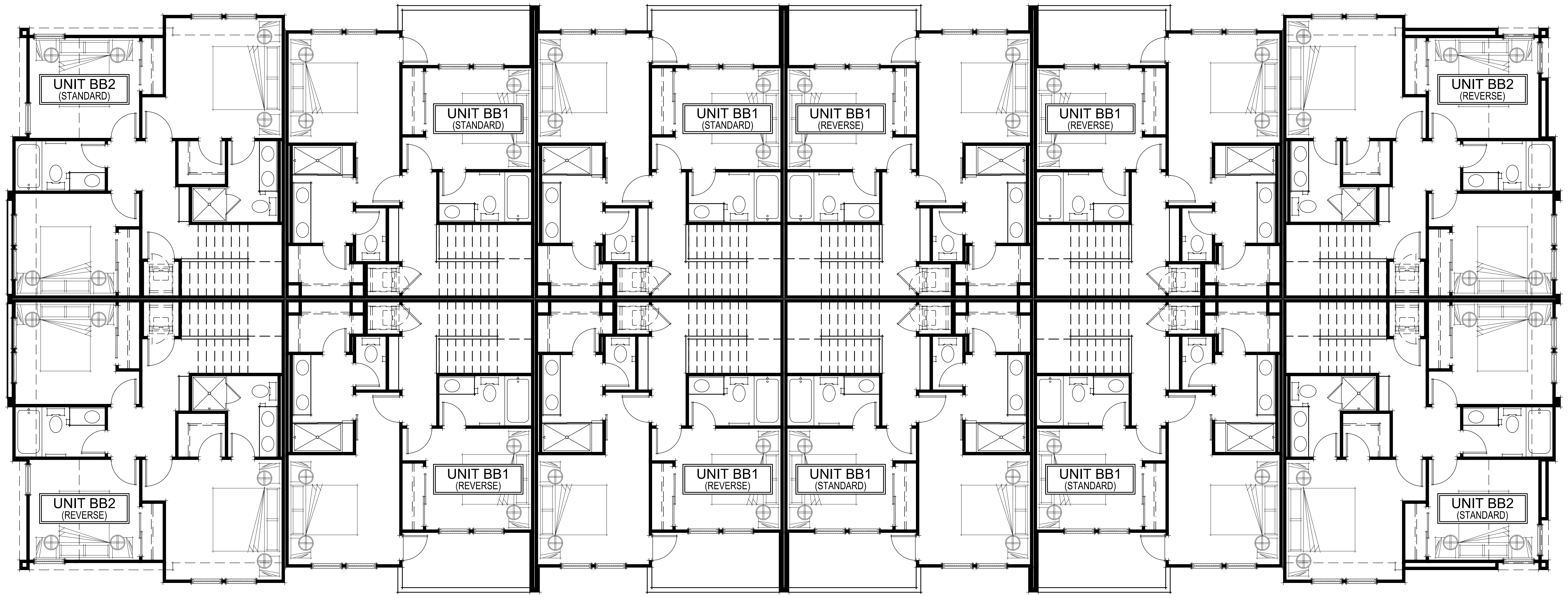


ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6 8' 16'

307.071 **Wildflower Townhomes**
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

12 UNIT B2B BLDG THIRD FLOOR & ROOF PLANS
A016

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LIGHTING PER
PHOTOMETRICS

REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

COMP. SHINGLE
ROOFING

STUCCO FINISH

HARDI LAP SIDING

STUCCO FINISH

FRONT ELEVATION

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

12 UNIT B2B BLDG ELEVATIONS
A017

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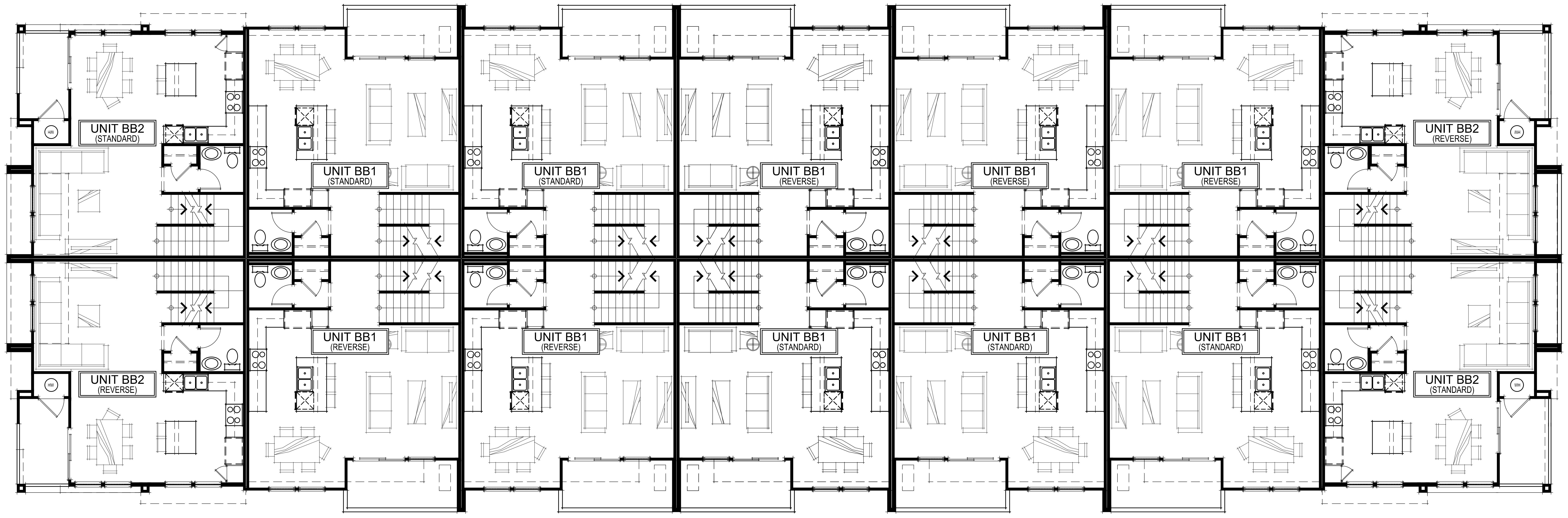
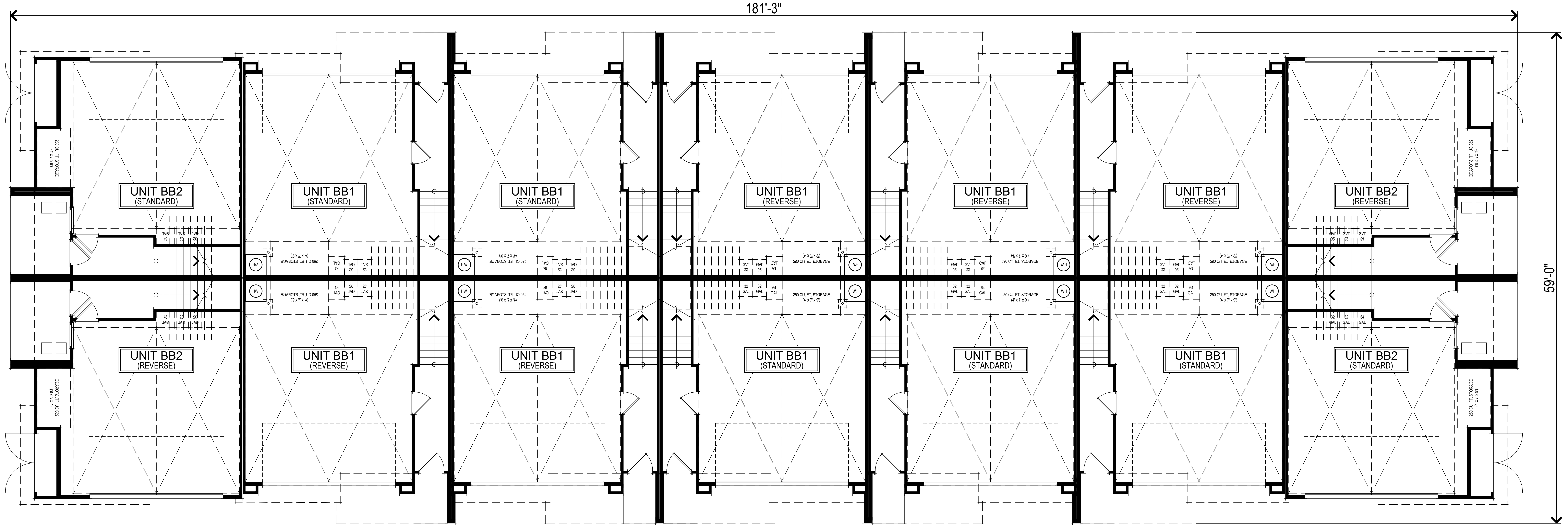


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

14 UNIT B2B BLDG FIRST & SECOND FLOOR PLANS
A018

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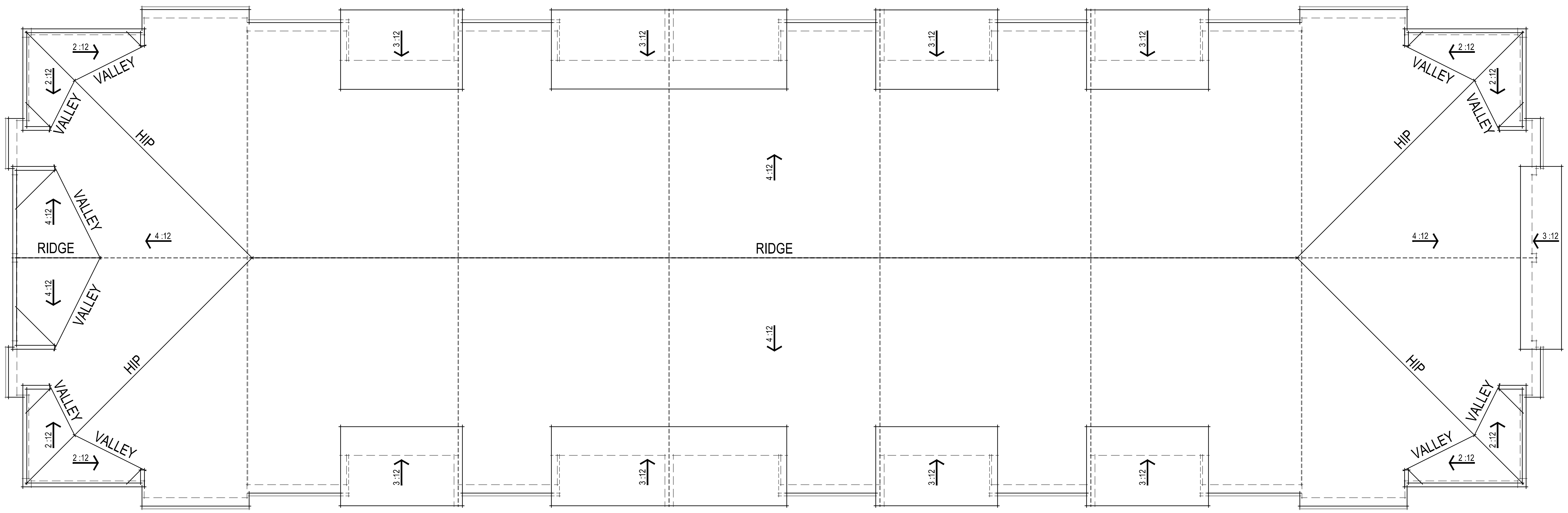
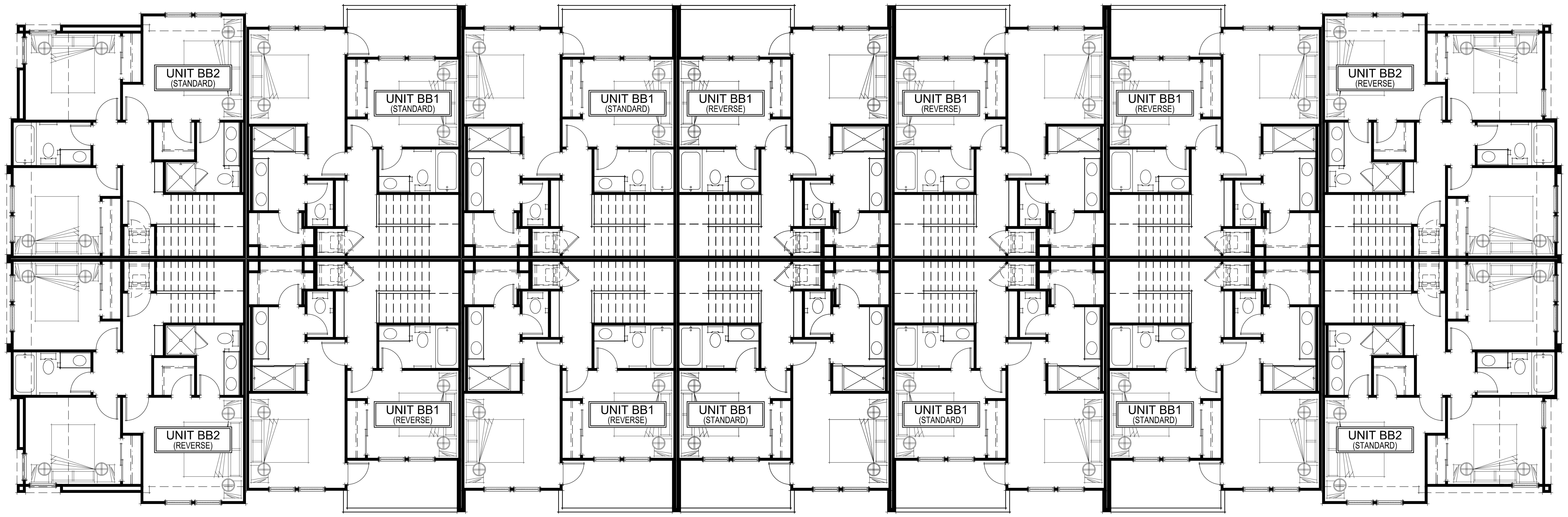


ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

14 UNIT B2B BLDG THIRD FLOOR & ROOF PLANS
A019

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LIGHTING PER
PHOTOMETRICS

REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

COMP. SHINGLE
ROOFING

STUCCO FINISH

HARDI LAP SIDING

STUCCO FINISH

FRONT ELEVATION

0 2' 4' 6 8' 16'

14 UNIT B2B BLDG ELEVATIONS

A020

BACK TO BACK TOWNHOMES

307.071

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Antioch, CA
February 02, 2024

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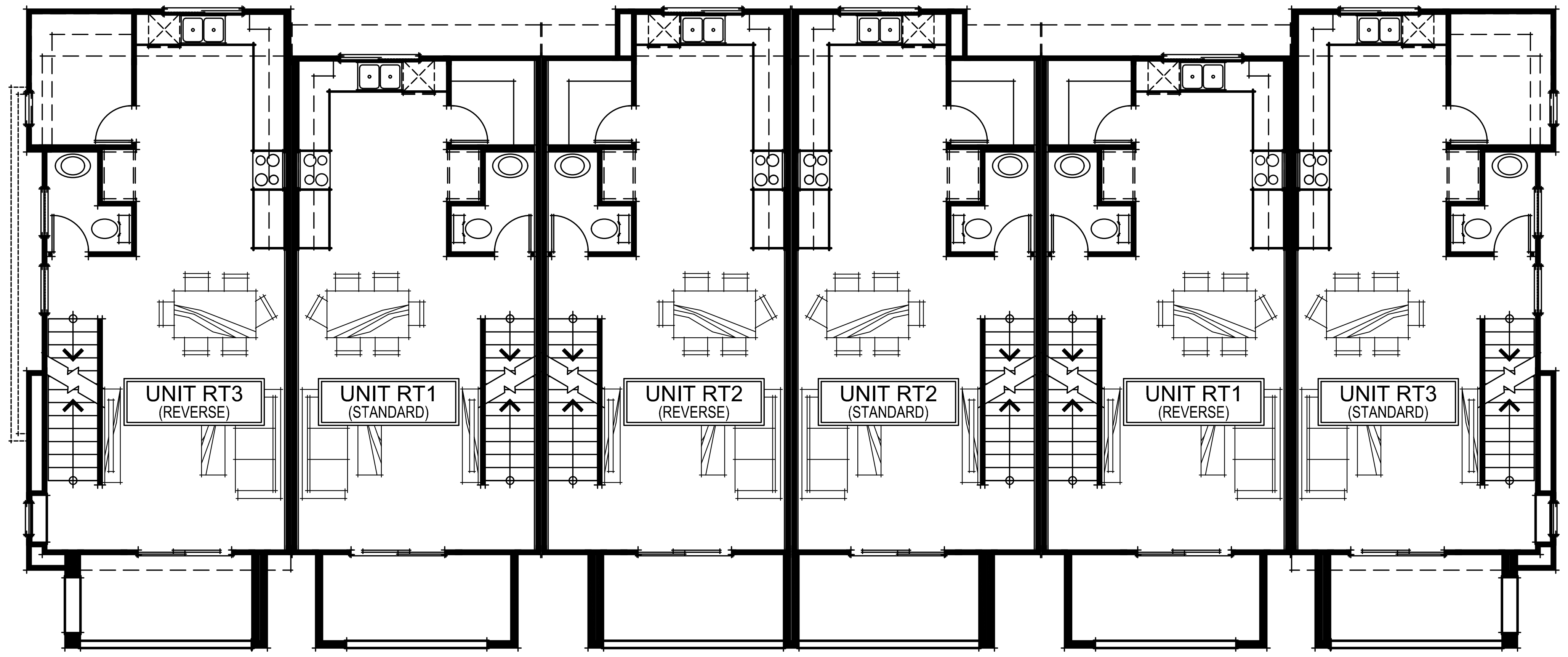
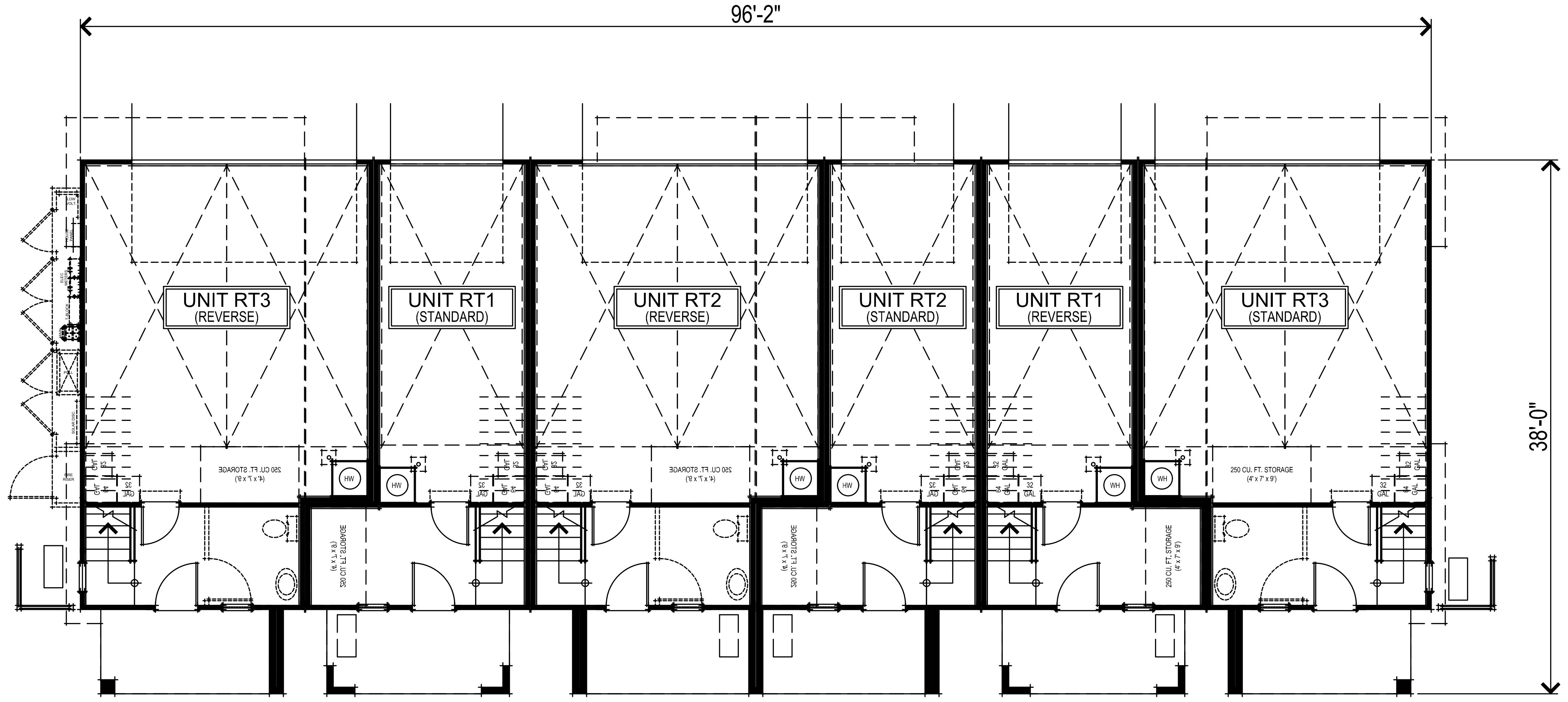


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071 Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

6 UNIT RT BLDG FIRST & SECOND FLOOR PLANS
A021

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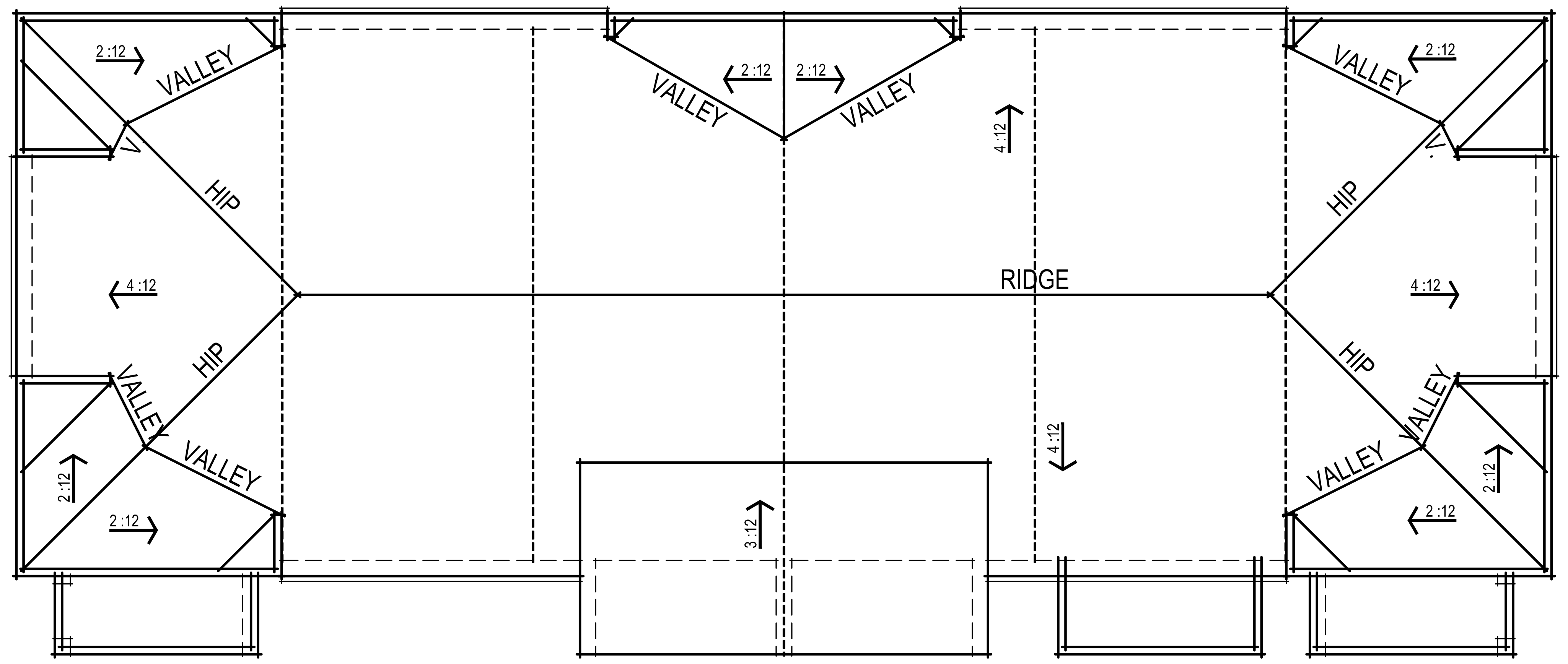
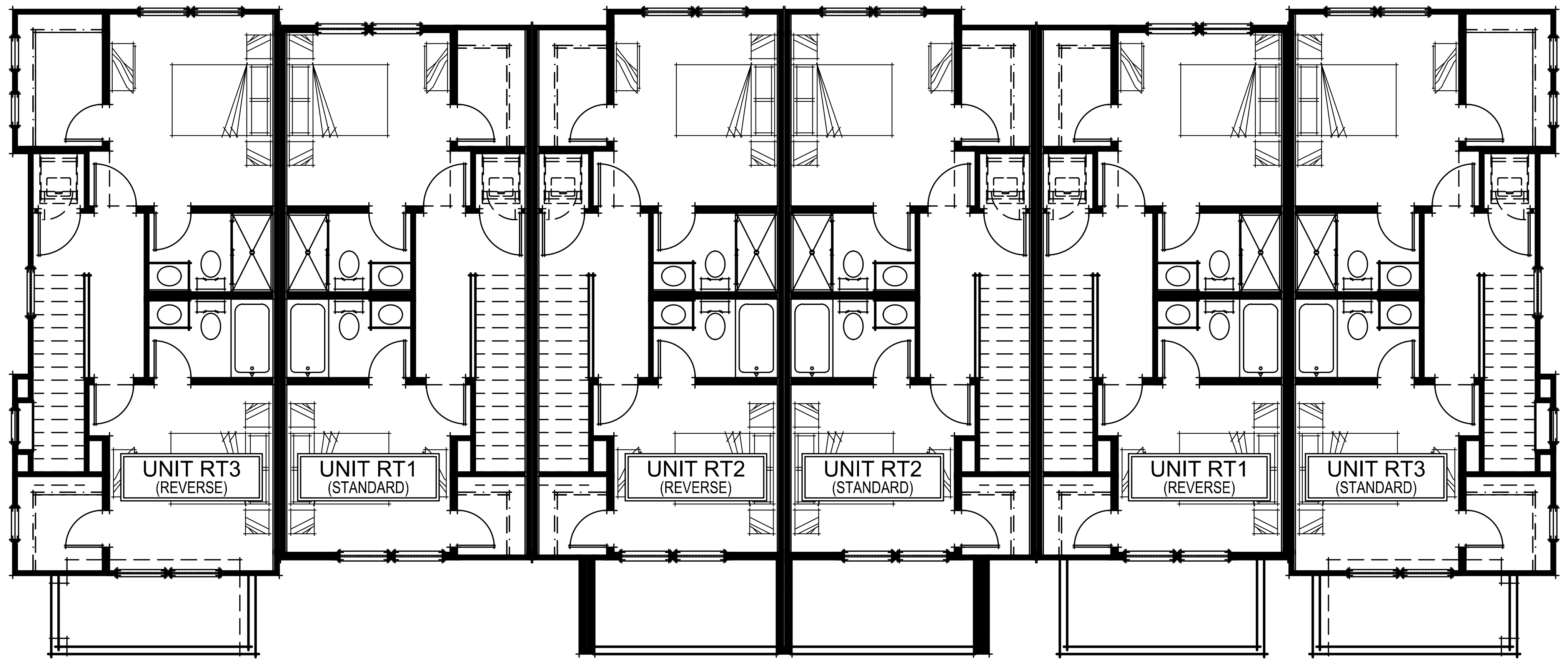
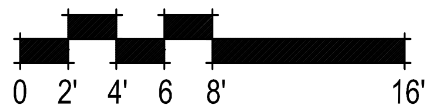


ROOF PLAN



THIRD FLOOR PLAN



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Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

6 UNIT RT BLDG THIRD FLOOR & ROOF PLANS
A022

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SDG architects

LIGHTING PER
PHOTOMETRICS

REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

COMP. SHINGLE
ROOFING

HARDI LAP SIDING

STUCCO FINISH

FRONT ELEVATION

ROW TOWNHOMES

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

0 2' 4' 6 8' 16'

6 UNIT RT BLDG ELEVATIONS
A023

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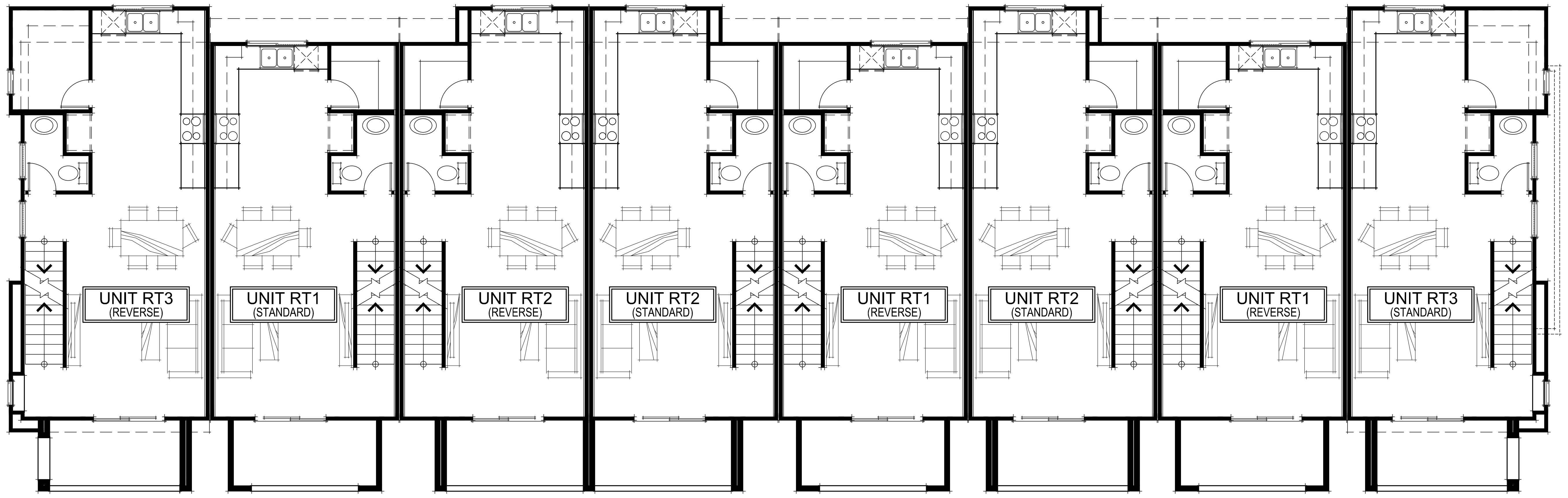
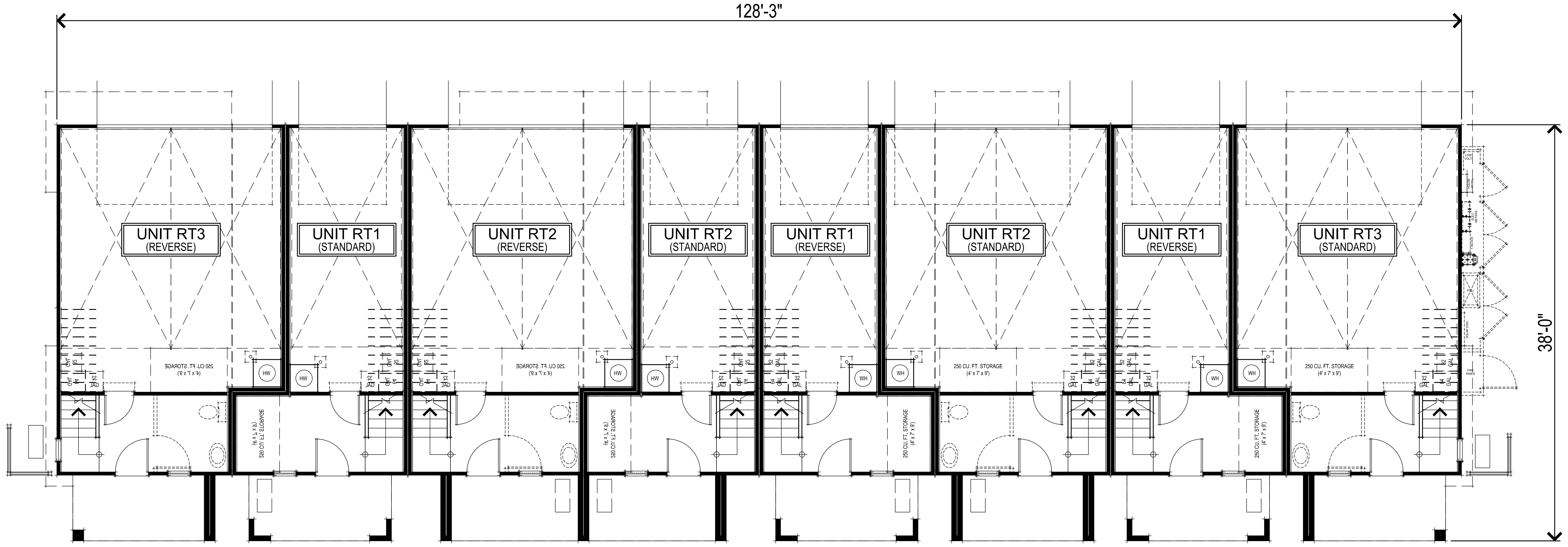


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

8 UNIT RT BLDG FIRST & SECOND FLOOR PLANS
A024

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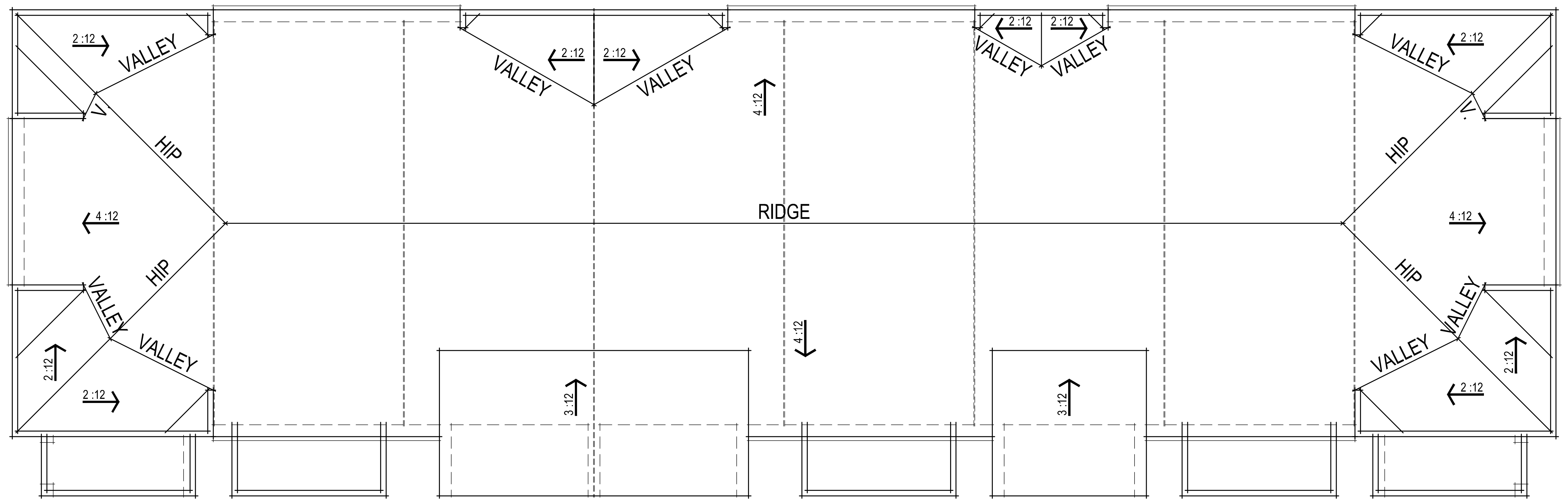
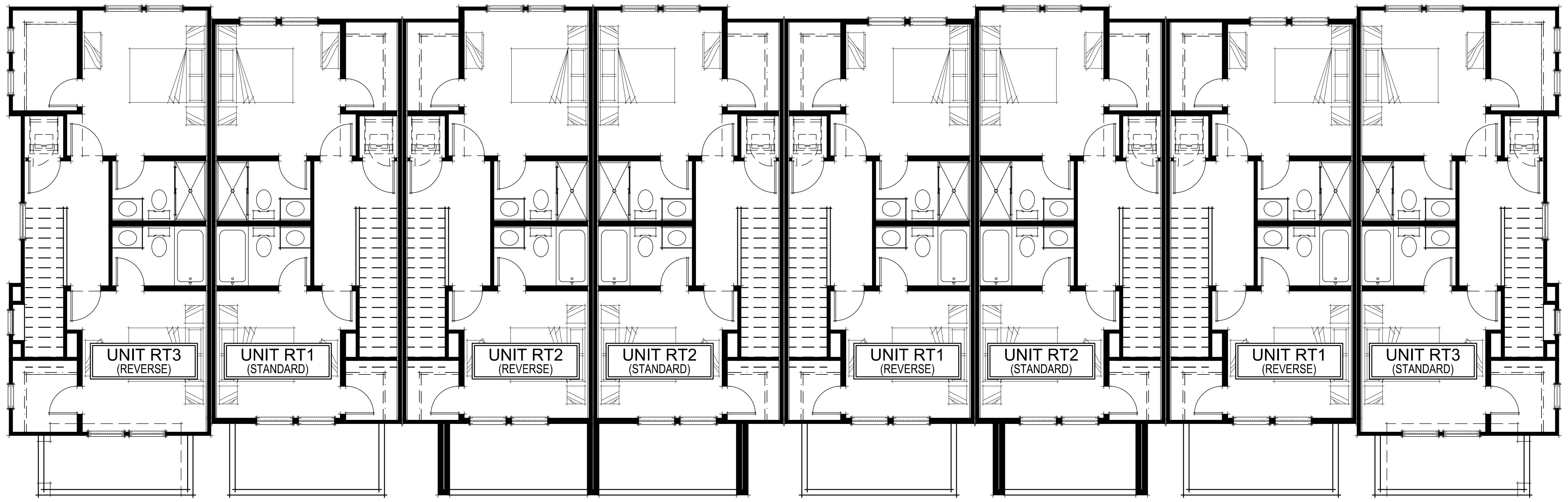


ROOF PLAN



THIRD FLOOR PLAN

0 2' 4' 6 8' 16'

307.071 **Wildflower Townhomes**
Antioch, CA
February 02, 2024

ROW TOWNHOMES

8 UNIT RT BLDG THIRD FLOOR & ROOF PLANS
A025

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Brentwood, CA 94513
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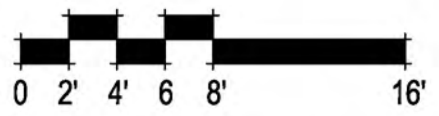
REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

FRONT ELEVATION



307.071 **Wildflower Townhomes**
Antioch, CA
February 02, 2024

ROW TOWNHOMES

8 UNIT RT BLDG ELEVATIONS
A026

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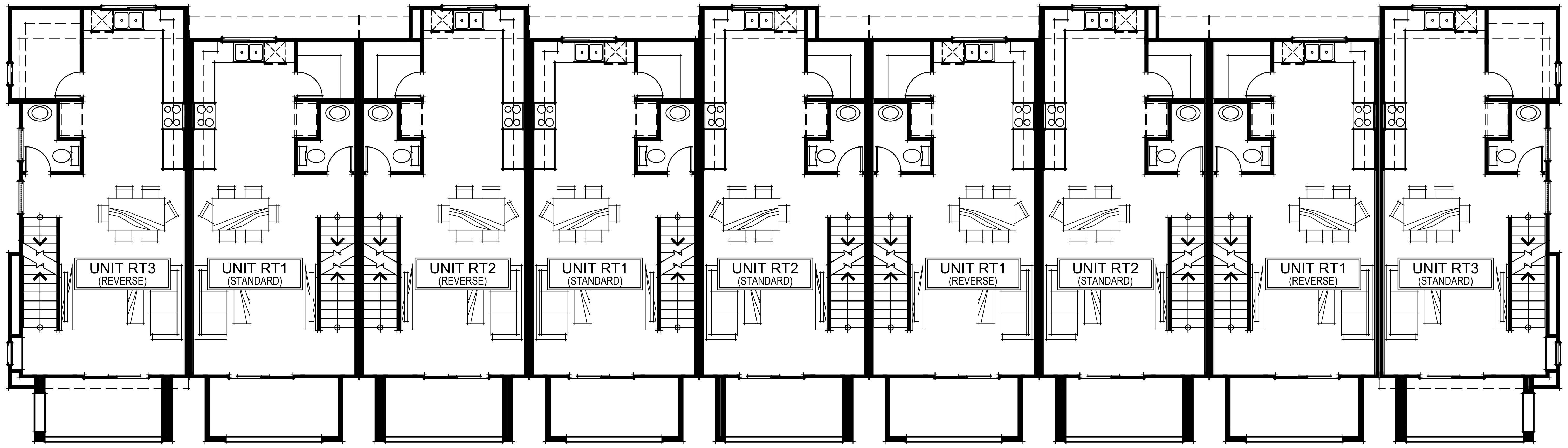
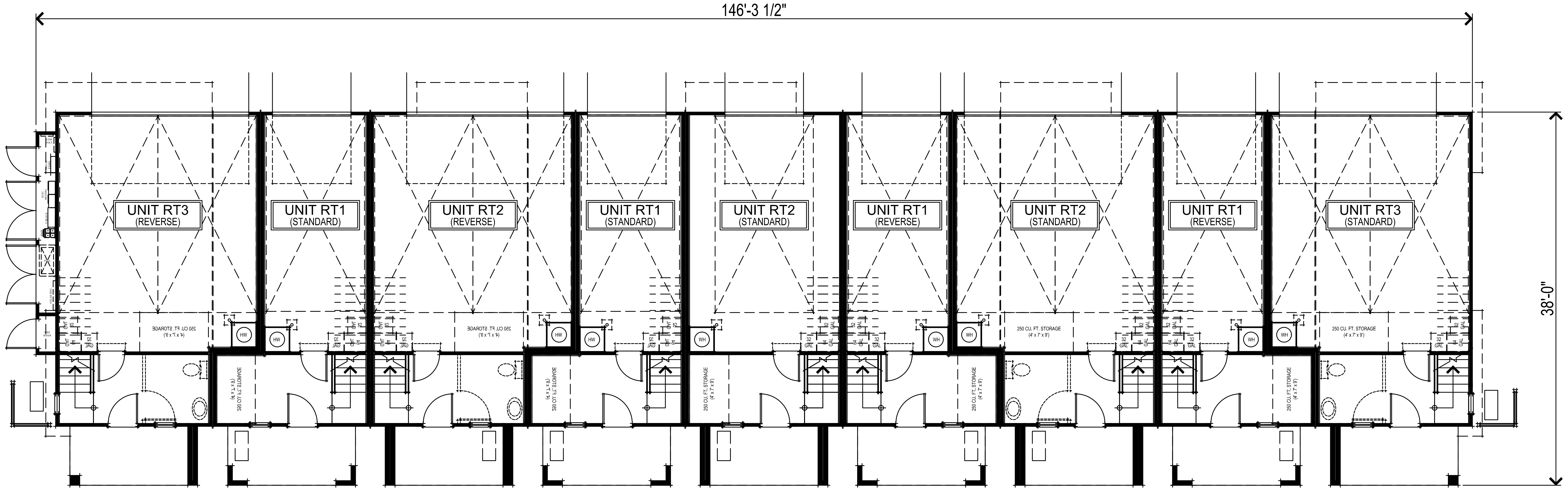


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

9 UNIT RT BLDG FIRST & SECOND FLOOR PLANS
A027

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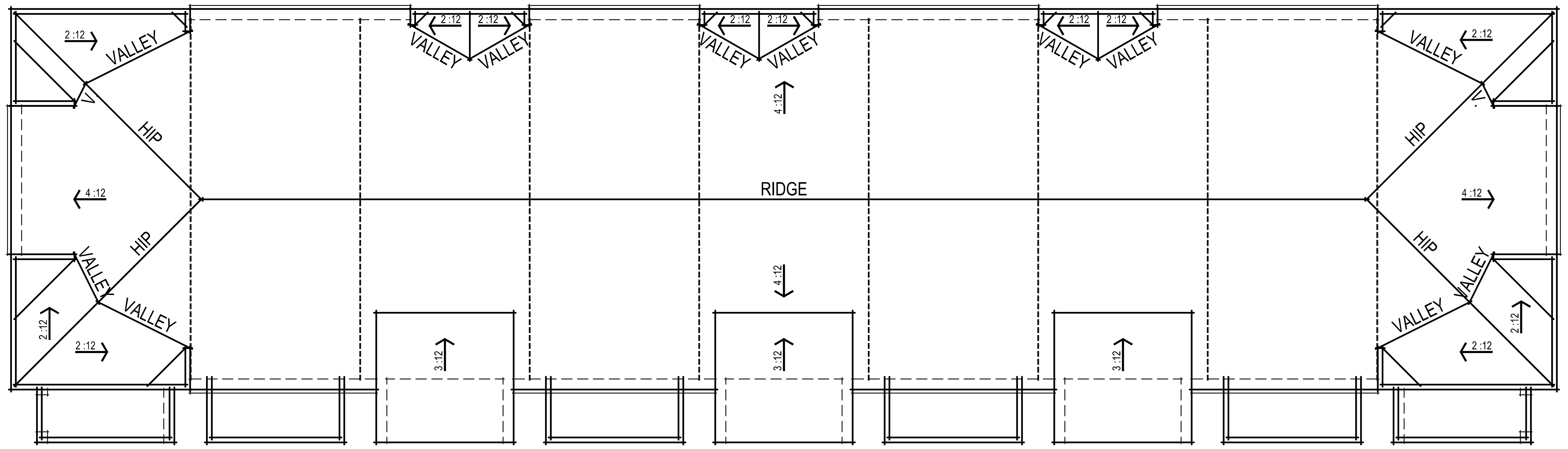
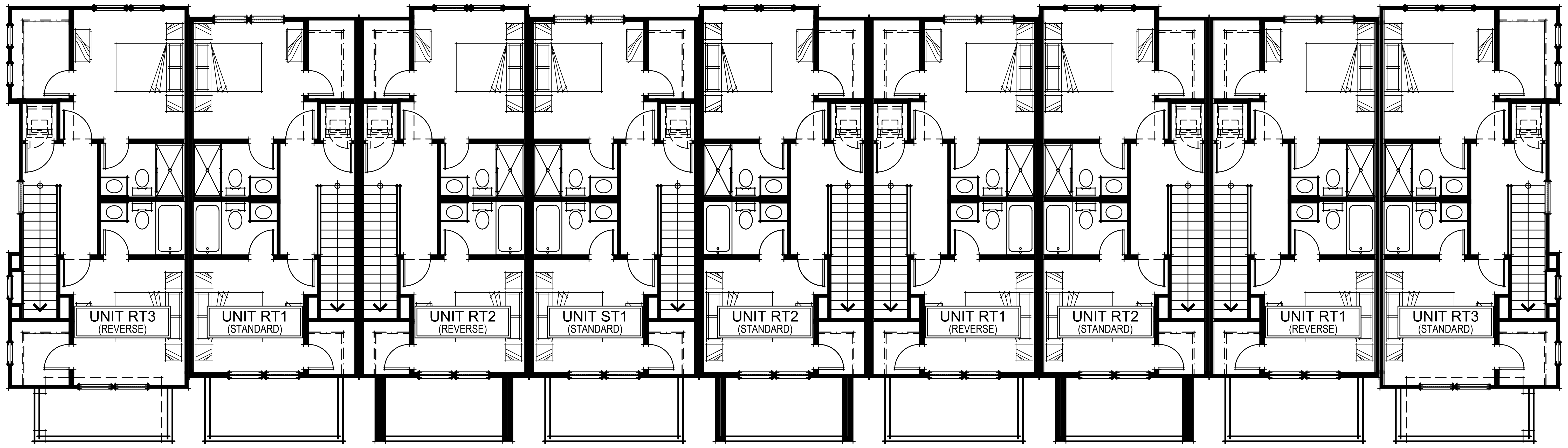


SECOND FLOOR PLAN



FIRST FLOOR PLAN

0 2' 4' 6 8' 16'

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

9 UNIT RT BLDG THIRD FLOOR & ROOF PLANS
A028

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Brentwood, CA 94513
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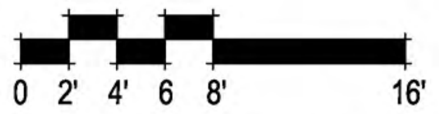
REAR ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

FRONT ELEVATION



307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

ROW TOWNHOMES

9 UNIT RT BLDG ELEVATIONS
A029

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architects

COLOR SCHEME 1

Roofing
CertainTeed - Weathered Wood

Stucco 1
SW 7632 Modern Gray (283-C1)

Stucco 2
SW 7008 Alabaster (255-C2)

Siding 1
SW 7075 Web Grey (235-C5)

Siding 2
SW 7593 Rustic Red (275-C6)

Entry Door
SW 7069 Iron Ore (251-C7)

Accent Stucco
SW 7026 Griffin (241-C6)

Garage Door
SW 7026 Griffin (241-C6)

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

COLOR SCHEME 2

Roofing
CertainTeed - Weathered Wood

Stucco 1
SW 7632 Modern Gray (283-C1)

Stucco 2
SW 7008 Alabaster (255-C2)

Siding 1
SW 7075 Web Grey (235-C5)

Siding 2
SW 7728 Green Sprout (298-C4)

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

Accent Stucco
SW 6400 Lucent Yellow (143-C1)

Garage Door
SW 7026 Griffin (241-C6)

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

COLOR SCHEMES
A030

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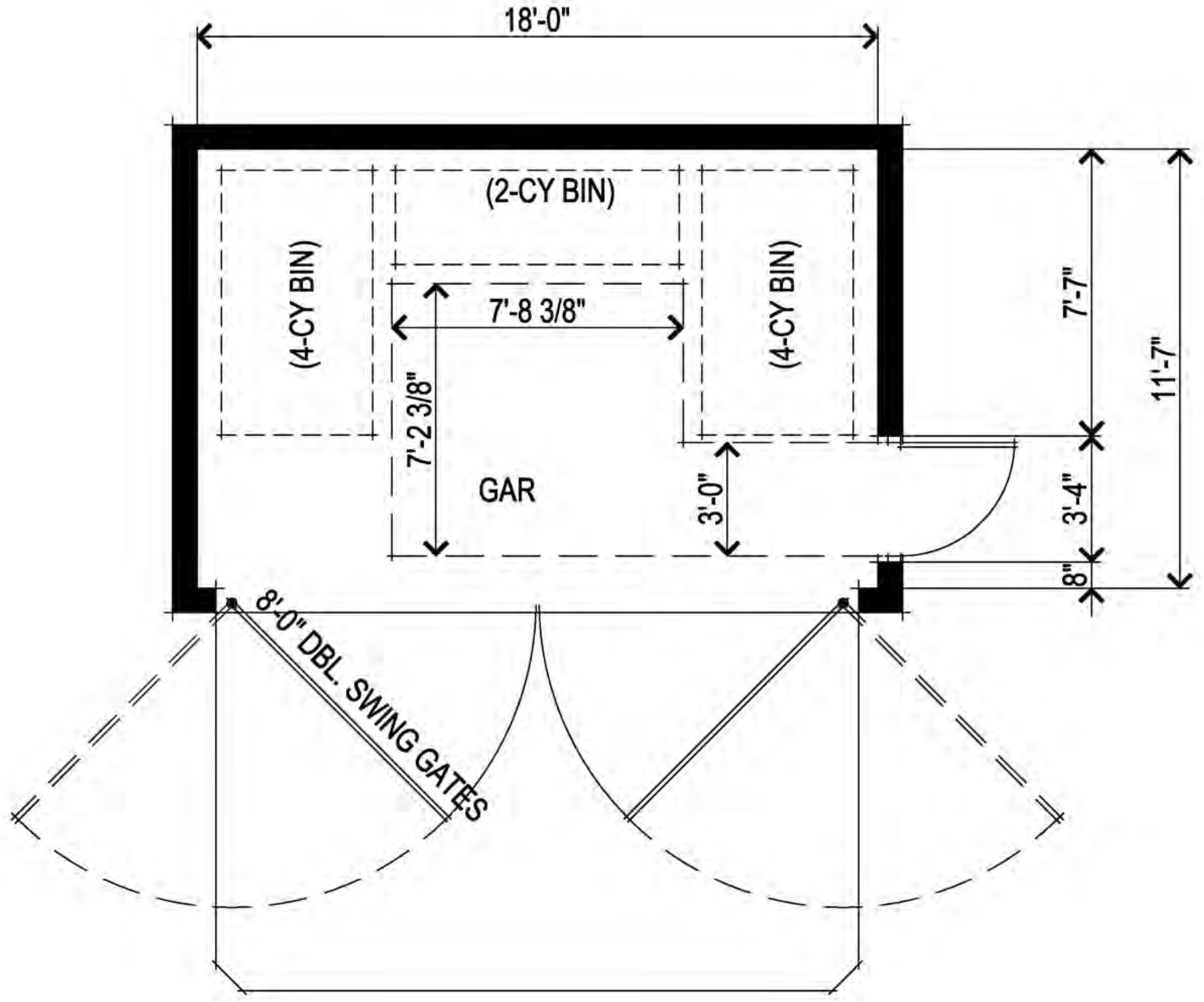
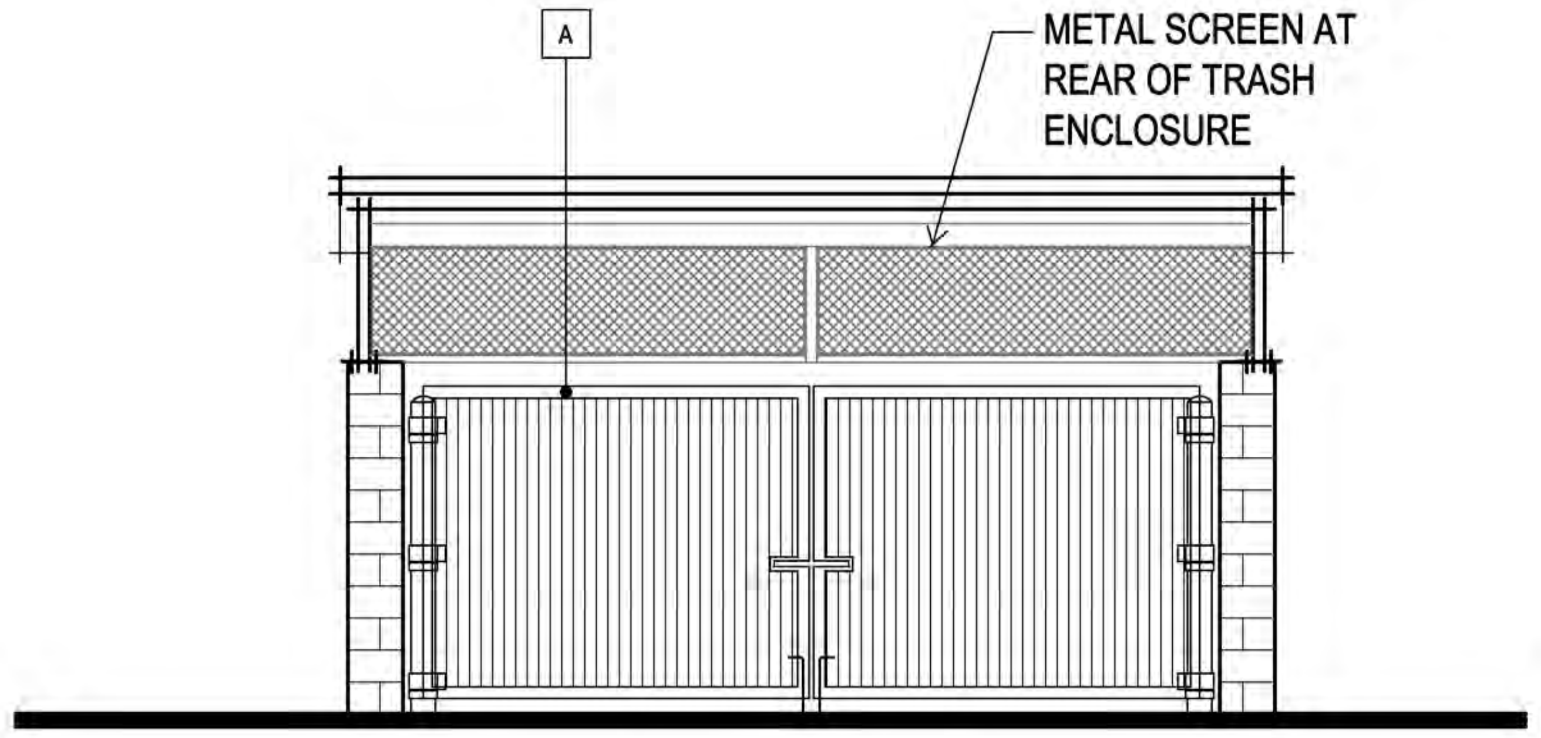
SW 7048 URBANE BRONZE


CALSTONE - AB CLASSIC STONE: TAN

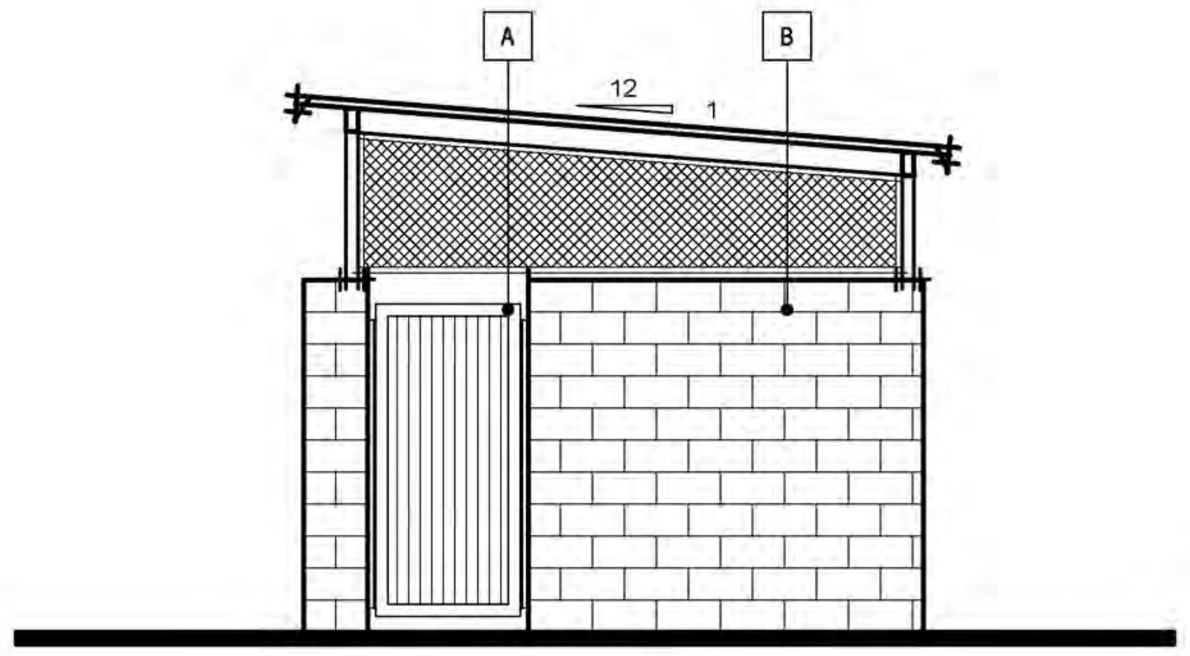
EXTERIOR FINISH KEY NOTES	
A	SHERWIN-WILLIAMS: 7048 URBANE BRONZE
B	CALSTONE-AB CLASSIC STONE: TAN



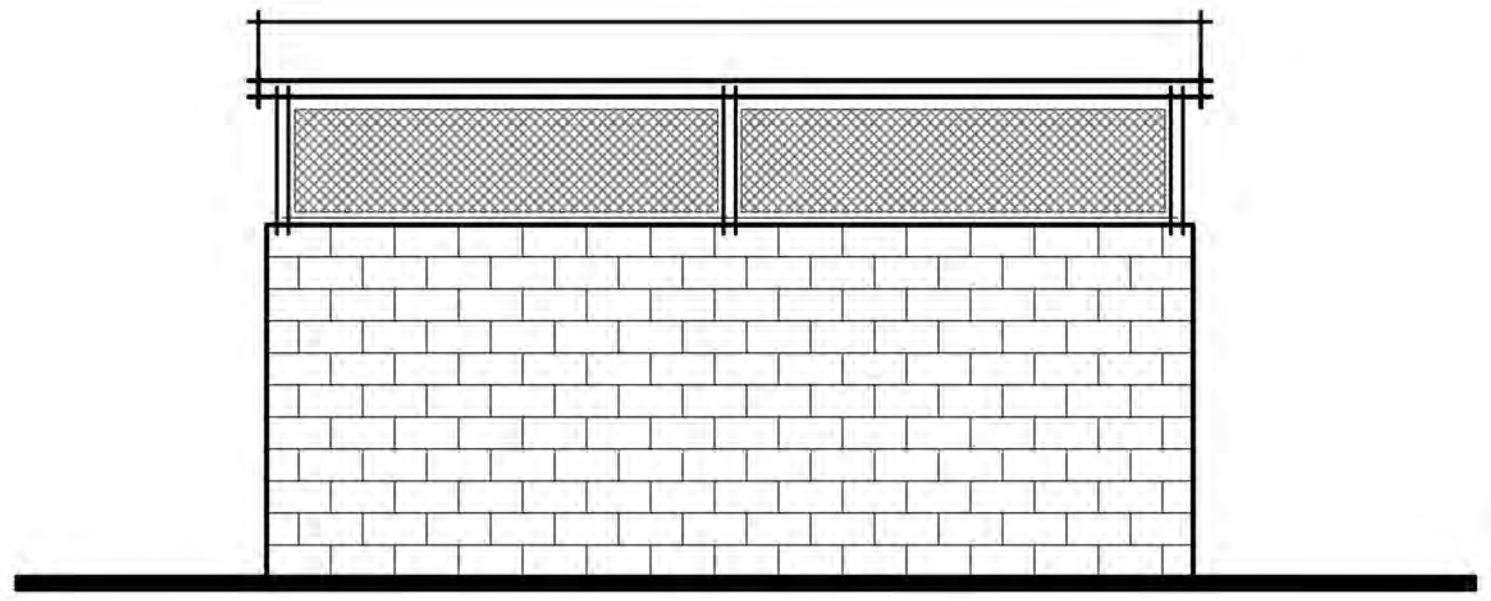
TRASH ENCLOSURE
FLOOR PLAN



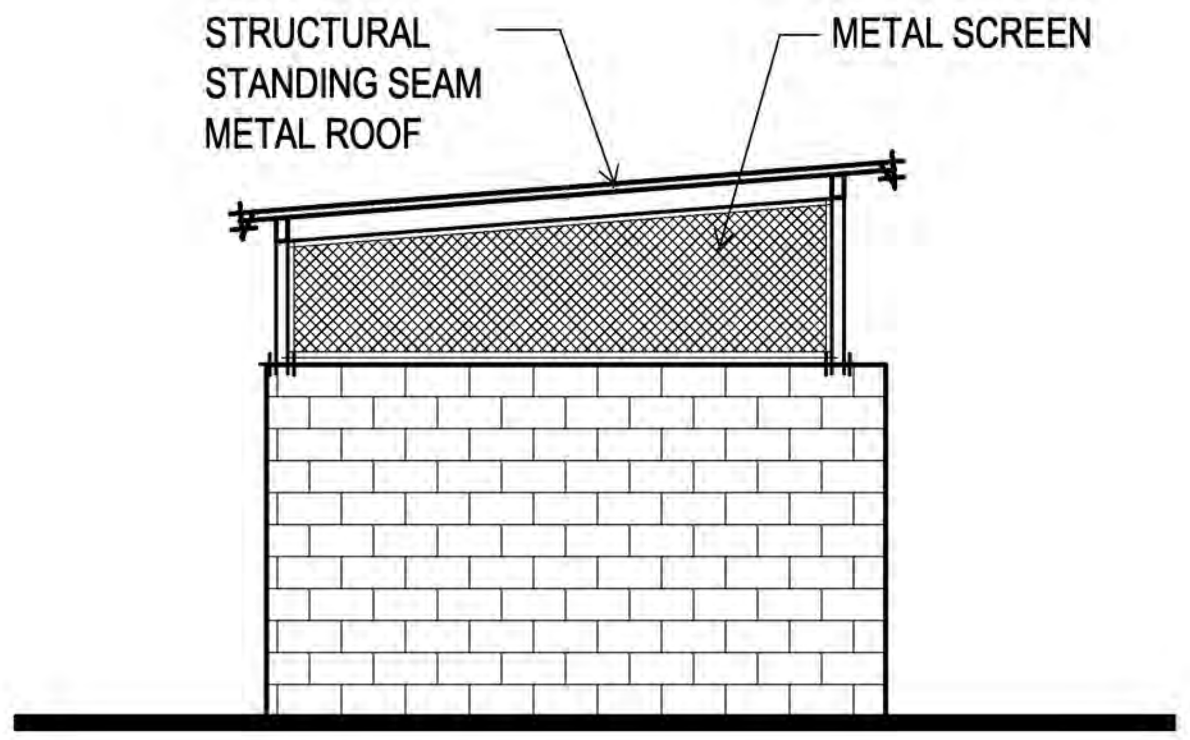
TYPICAL
FRONT ELEVATION



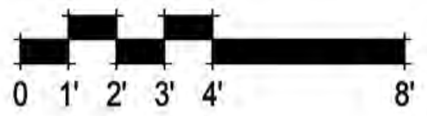
TYPICAL
RIGHT ELEVATION



TYPICAL
REAR ELEVATION



TYPICAL
LEFT ELEVATION



307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

BACK TO BACK TOWNHOMES

TRASH ENCLOSURE PLAN & ELEVATIONS
A031

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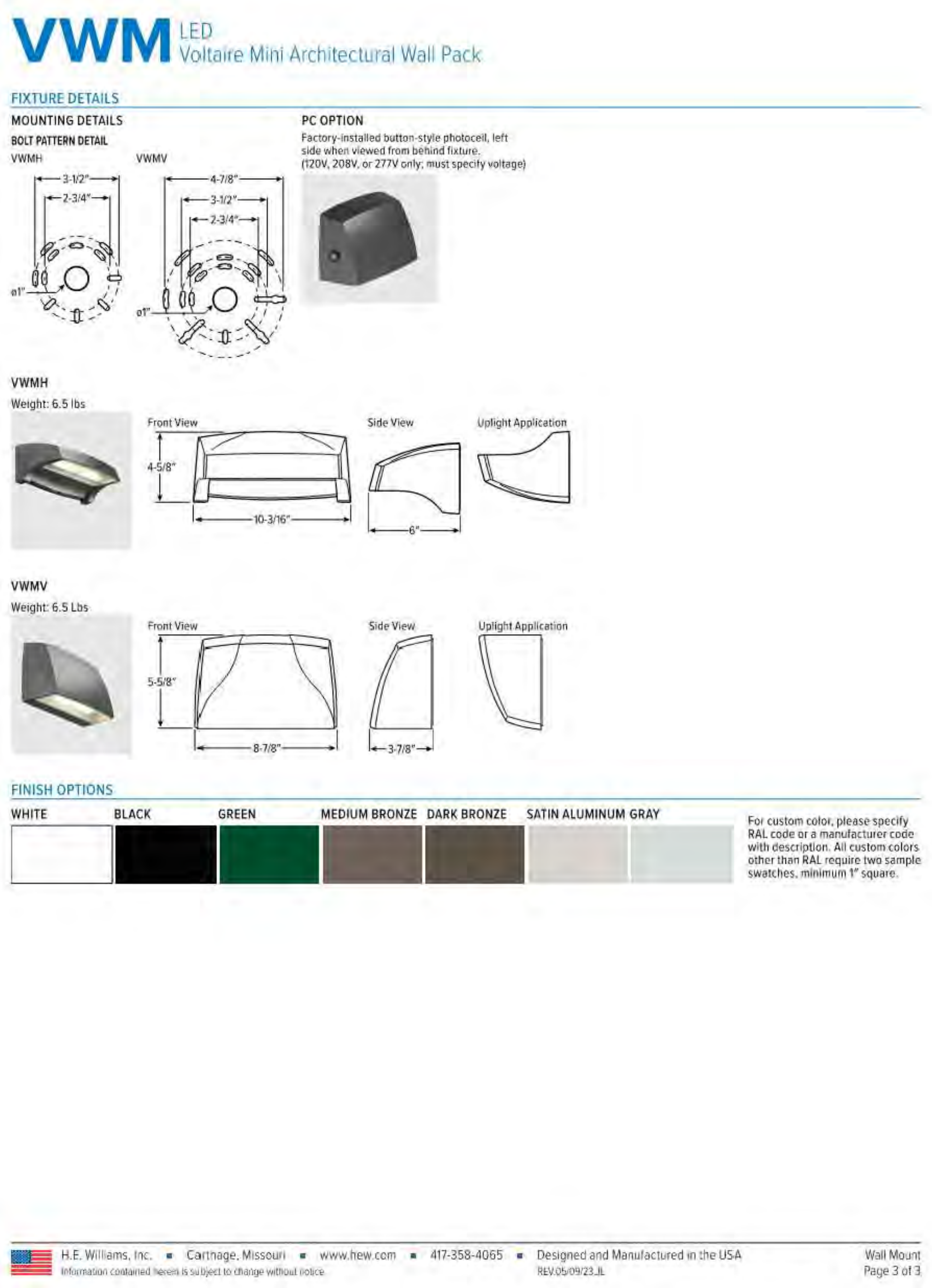

VWM LED
Voltaire Mini Architectural Wall Pack

FIXTURE DETAILS

MOUNTING DETAILS

BOLT PATTERN DETAIL

PC OPTION

Factory-installed button-style photocell, left side when viewed from behind fixture. (120V, 208V, or 277V only; must specify voltage)

VWMH

Weight: 6.5 lbs

VWMV

Weight: 6.5 Lbs

FINISH OPTIONS

WHITE	BLACK	GREEN	MEDIUM BRONZE	DARK BRONZE	SATIN ALUMINUM	GRAY
⬜	⬛	🟩	🟫	🟫	⬜	⬜

For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice
REV.05/09/23.JL
Wall Mount
Page 3 of 3

VWM LED
Voltaire Mini Architectural Wall Pack

Williams

VWMH Front view
Weight: 6.5 Lbs.

CATALOG #:

TYPE:

PROJECT:

FEATURES

- Designed to illuminate sidewalks, entryways, perimeters or facades
- Intended for use in both uplight and downlight applications
- Savings of up to 80% energy compared to HID systems
- Blends seamlessly with a variety of architectural styles
- Available on QuickShip
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Die-cast aluminum enclosure.
- THERMAL MANAGEMENT – Integral die-cast aluminum heatsink and LED source provide passive thermal management. Rated ambient operating temperature -30°C to 50°C (L10, L17), -30°C to 45°C (L20).
- OPTICAL SYSTEM – General output provides full cutoff.
- LED SOURCE – ANSI 3000K, 4000K, or 5000K CCT; 70 or 80 CRI LEDs. L20: circuit board design. L10 & L17: Chip on board.
- LED DRIVER – 0-10V dimming.
- ELECTRICAL – 120-277 VAC input range; 50-60Hz; power factor >.90; THD <20% at full load. FCC Class A compliant. Quick-disconnect wiring provided. Calculated L70 >50,000 hours per IES TM-21.
- FINISH – Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability.
- MOUNTING – Surface mounts directly over a 4" maximum outlet box. Must be anchored to adequate structure that can safely support fixture weight (6.5 Lbs).
- LISTINGS –
  - cCSAus certified as luminaire suitable for wet locations.
  - IDA Dark-Sky approved (downlight applications only).
  - RoHS compliant.
  - IP65 rated.
  - Title 24 compliant with PC option.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: VWM H - L20/740 - T3 - DBZ - SDGL - OPTIONS - DIM - UNV

ORDERING INFO

SERIES	TYPE [1]	LUMENS [2]	CRI/CCT	DISTRIBUTION [3]
VWM	H Horizontal V Vertical	70 CRI L17 1,700lm [4] L20 2,000lm 80 CRI L10 1,000lm L17 1,700lm	70 CRI 730 3000K 740 4000K 750 5000K 80CRI 830 3000K 840 4000K	TL Lambertian distribution [5] T3 Type III [6]

FINISH OPTIONS [7]

BLK	Black (RAL #9004)
DBZ	Dark bronze
DBR	Medium bronze
GRAY	Standard gray
SLV	Satin aluminum (RAL #9006)
WHT	White (RAL #9003)

SHIELDING

SDGL	Micro-prismatic tempered glass lens
CGL	Clear tempered glass lens

OPTIONS

PC	Button-style photocell [8]
SP10	10kA/10kV surge protection
TP	Tamper-resistant Torx head screws [9]

CONTROL

DIM	Dimming driver prewired for 0-10V low voltage applications

VOLTAGE

120	120V
208	208V
277	277V
UNV	120-277V

ACCESSORIES

TPTX-25 TOOL	Tamper-resistant tool for Torx head screws. [10]

QUICKSHIP

VWMH-L10/840-TL-DBZ-CGL-QS-DIM-UNV
VWMH-L17/840-TL-DBZ-CGL-QS-DIM-UNV

NOTES

[1] See page 3 for FIXTURE DETAILS.
[2] Lumen output based on 5000 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
[3] See page 2 for DISTRIBUTION DETAILS.
[4] Available with 750 CRI/CCT only.
[5] L10 & L17 only.
[6] L20 only.
[7] See page 3 for FINISH OPTIONS.
[8] Factory-installed. 120V, 208V, or 277V only; must specify voltage. See page 3 for FIXTURE DETAILS. Left side when viewed from behind fixture.
[9] TP screws have silver finish only. Safety screws providing added support to the lens are not tamper-resistant (lens is sealed to the fixture via adhesion). Requires a tamper-resistant tool, see Accessories.
[10] Tamper-resistant tool must be ordered separately. Please specify quantity required per project.

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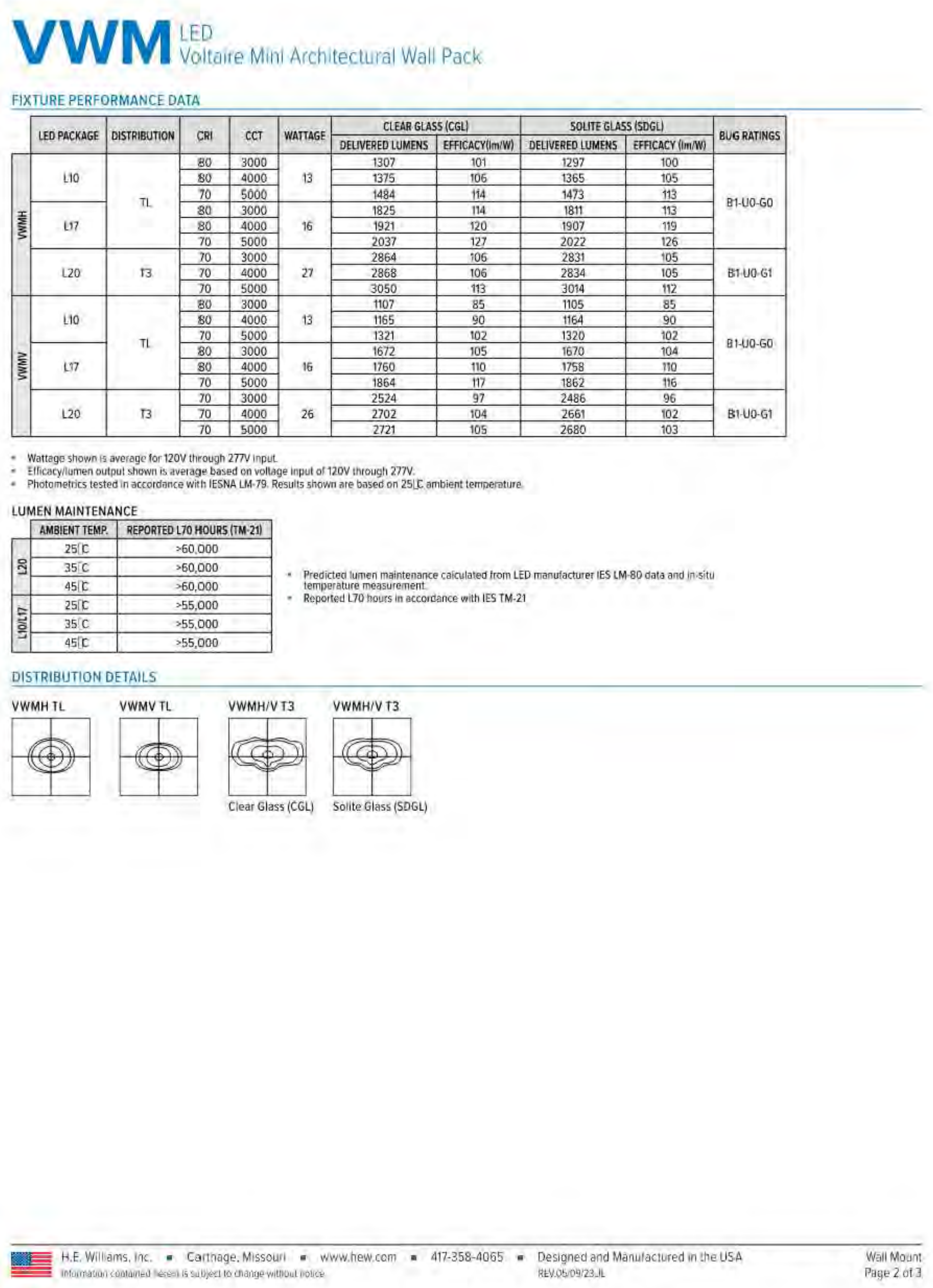
Wall Mount
Page 1 of 3



VWM LED
Voltaire Mini Architectural Wall Pack

FIXTURE PERFORMANCE DATA

	LED PACKAGE	DISTRIBUTION	CRI	CCT	WATTAGE	CLEAR GLASS (CGL)		SOLITE GLASS (SDGL)		BUG RATINGS
						DELIVERED LUMENS	EFFICACY(lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	
VWMH	L10	TL	80	3000	13	1307	101	1297	100	B1-U0-G0
			80	4000		1375	106	1365	105	
			70	5000		1484	114	1473	113	
	L17		80	3000	16	1825	114	1811	113	
			80	4000		1921	120	1907	119	
			70	5000		2037	127	2022	126	
	L20	T3	70	3000	27	2864	106	2831	105	B1-U0-G1
			70	4000		2868	106	2834	105	
			70	5000		3050	113	3014	112	
VWMV	L10	TL	80	3000	13	1107	85	1105	85	B1-U0-G0
			80	4000		1165	90	1164	90	
			70	5000		1321	102	1320	102	
	L17		80	3000	16	1672	105	1670	104	
			80	4000		1760	110	1758	110	
			70	5000		1864	117	1862	116	
	L20	T3	70	3000	26	2524	97	2486	96	B1-U0-G1
			70	4000		2702	104	2661	102	
			70	5000		2721	105	2680	103	

- Wattage shown is average for 120V through 277V input.
- Efficacy/lumen output shown is average based on voltage input of 120V through 277V.
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.

LUMEN MAINTENANCE

	AMBIENT TEMP.	REPORTED L70 HOURS (TM-21)
L20	25°C	>60,000
	35°C	>60,000
	45°C	>60,000
L10/L17	25°C	>55,000
	35°C	>55,000
	45°C	>55,000

- Predicted lumen maintenance calculated from LED manufacturer IES LM-80 data and in-situ temperature measurement.
- Reported L70 hours in accordance with IES TM-21

DISTRIBUTION DETAILS

Clear Glass (CGL)
Solite Glass (SDGL)

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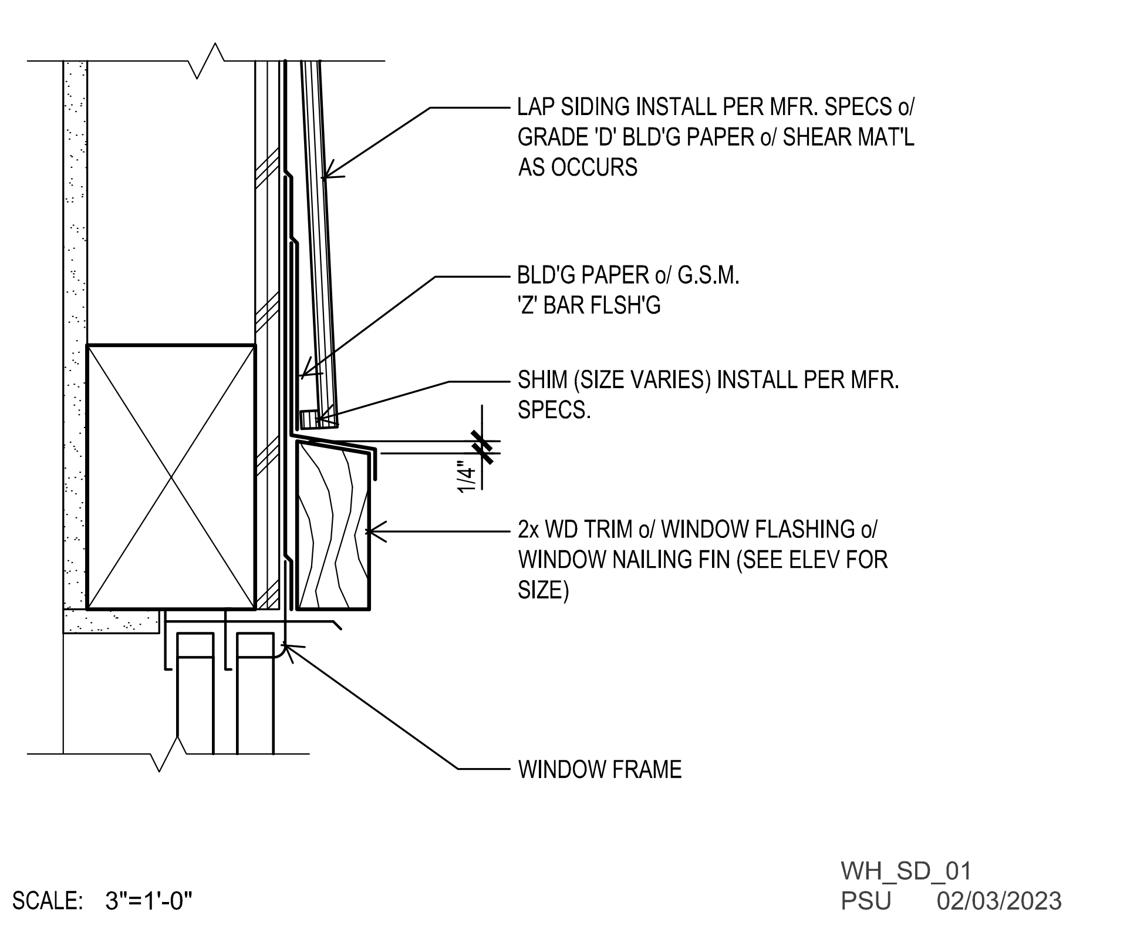
Wall Mount
Page 2 of 3



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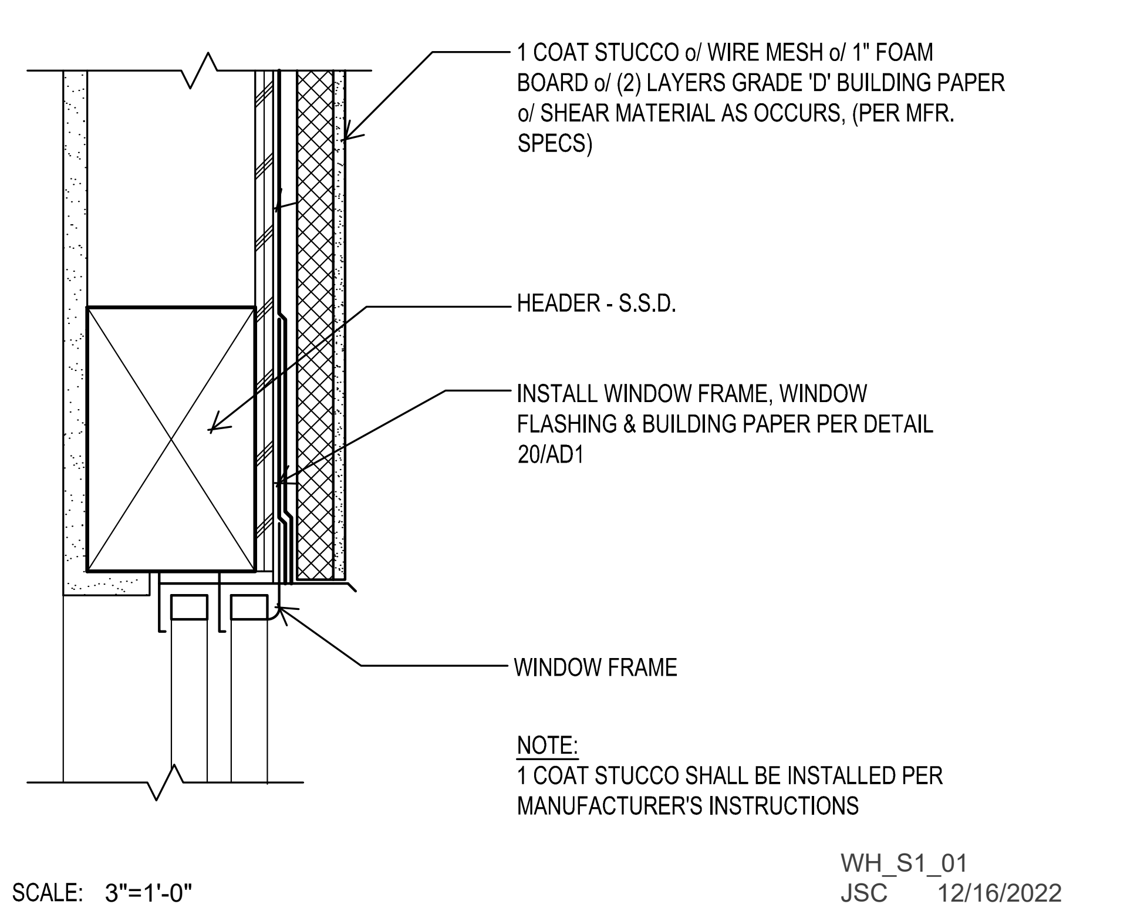
WH_SD_01
PSU 02/03/2023

WINDOW HEAD w/ WD TRIM

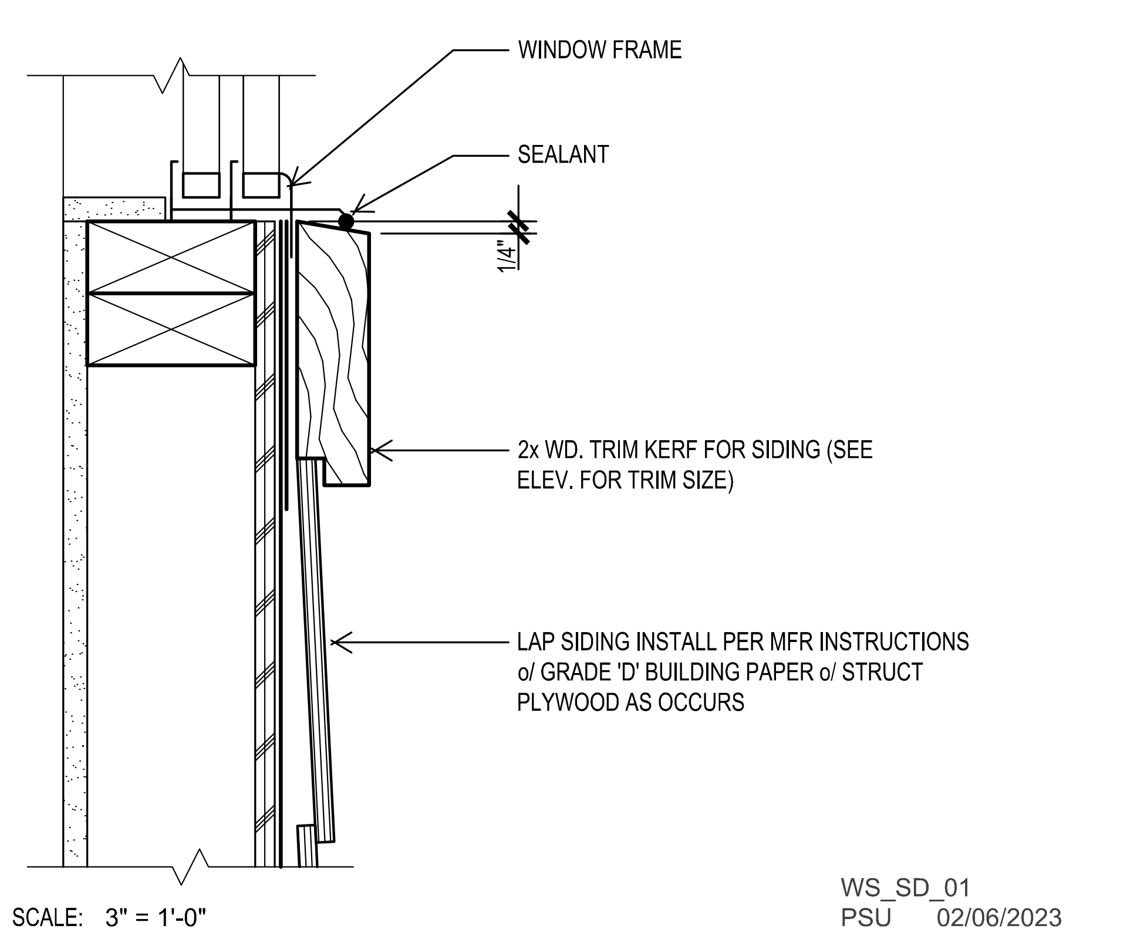


NOTE:
1 COAT STUCCO SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS

SCALE: 3"=1'-0"

WH_S1_01
JSC 12/16/2022

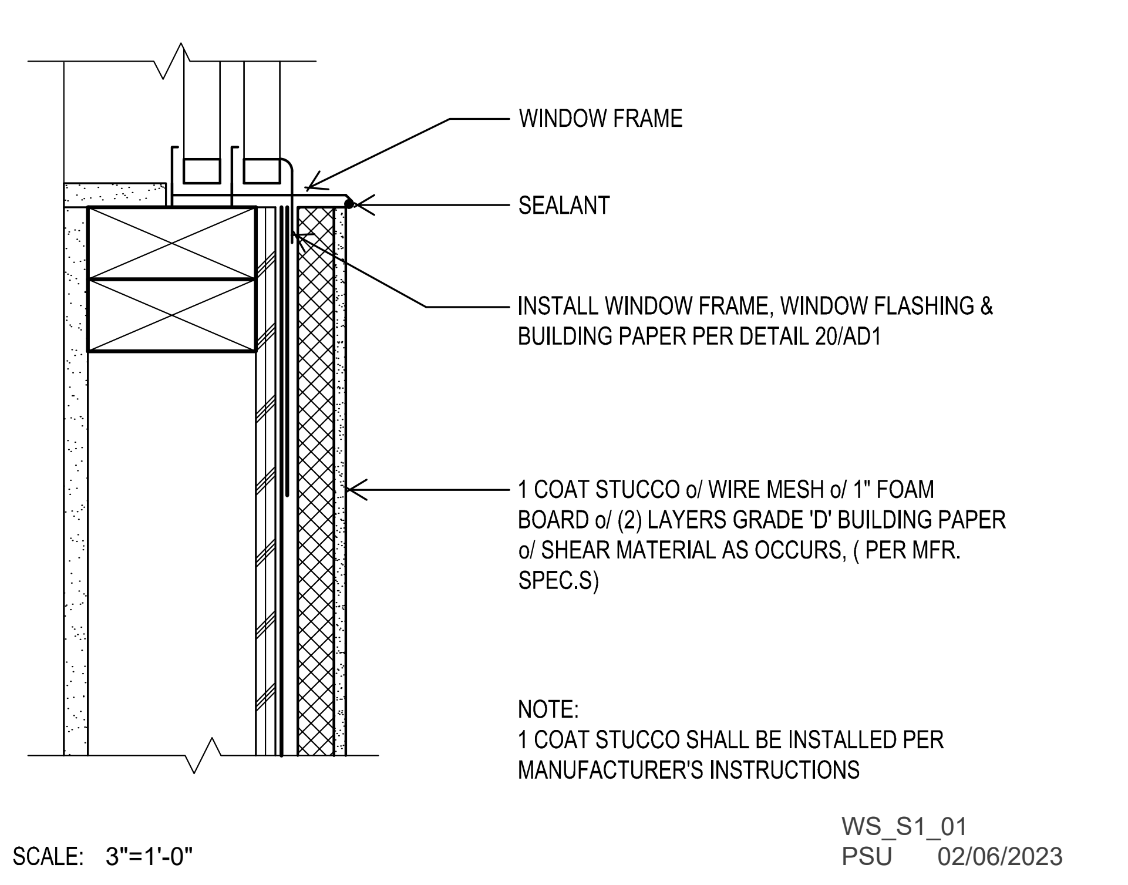
WINDOW HEAD w/o TRIM



SCALE: 3" = 1'-0"

WS_SD_01
PSU 02/06/2023

WINDOW SILL w/ WD TRIM



NOTE:
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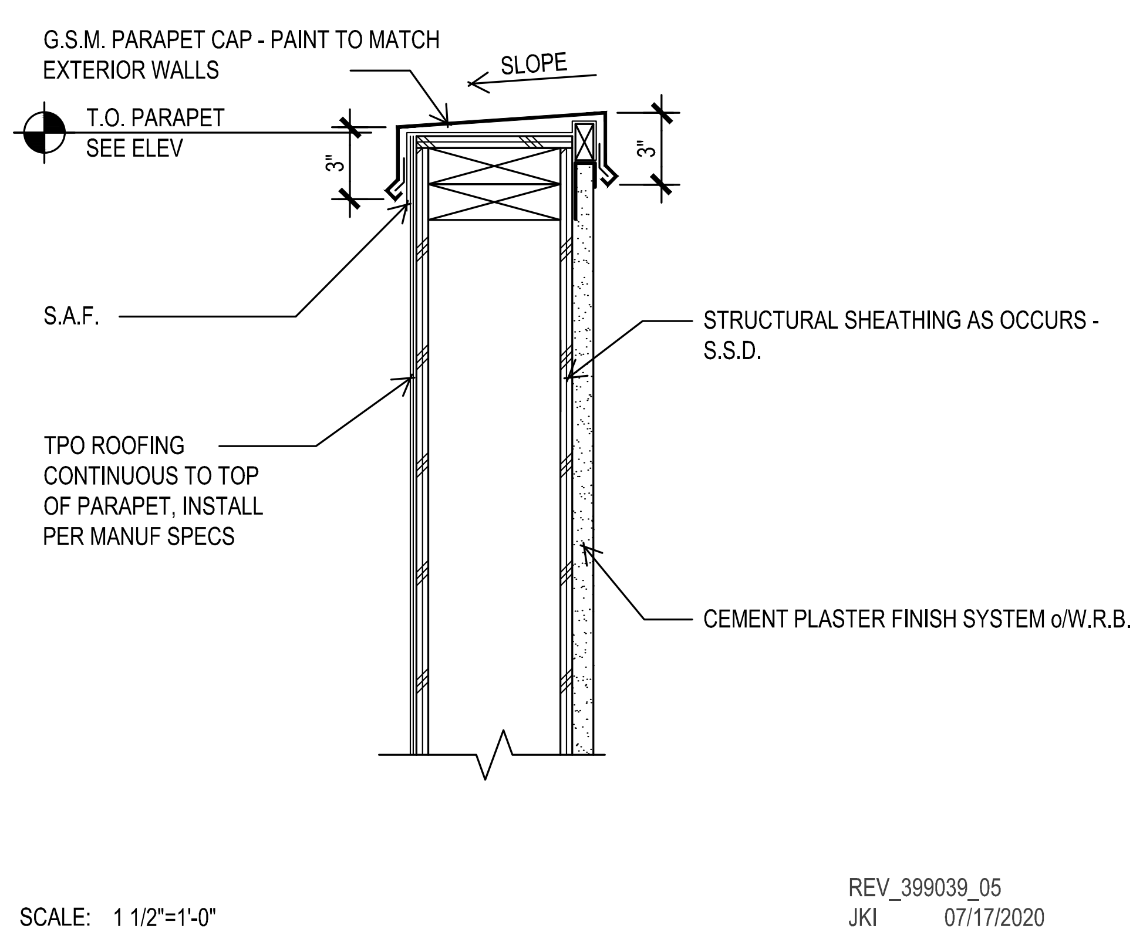
SCALE: 3"=1'-0"

WS_S1_01
PSU 02/06/2023

WINDOW SILL w/o TRIM



SCALE: 1 1/2"=1'-0"

REV_399039_05
JKI 07/17/2020

PARAPET

307.071
Wildflower Townhomes
Antioch, CA
February 02, 2024

TYPICAL DETAILS
A032

DeNova Homes
1500 Willow Pass Ct., Concord, CA 94520
925.685.0110

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

MWELO STATEMENT OF COMPLIANCE

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

PHILIP A. VANDERTOOLEN, PRESIDENT
VANDERTOOLEN ASSOCIATES, INC.
CA LICENSE # 2798

PROPOSED TREE LEGEND

BOTANICAL NAME	COMMON NAME
ACER R. 'ARMSTRONG'	ARMSTRONG MAPLE
CARPINUS B. 'FRANS FONTAINE'	HORNBEAM
CERCIS OCCIDENTALIS	WESTERN REDBUD
CORNUS KOUSA 'SATOMI'	DOGWOOD
GINKGO B. 'AUTUMN GOLD'	MAIDENHAIR TREE
LAGERSTROEMIA I. 'MUSKOGEE'	CRAPE MYRTLE
LAURUS 'SARATOGA'	SARATOGA SWEET BAY
PISTACIA C. 'KEITH DAVEY'	CHINESE PISTACHE
PLATANUS A. 'COLUMBIA'	LONDON PLANE TREE
PODOCARPUS M. 'MAKI'	SHRUBBY YEW PINE
PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM
QUERCUS ILEX	HOLLY OAK
ZELKOVA S. 'MUSASHINO'	SAWLEAF ZELKOVA

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
3. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.
4. TREES, SHRUBS AND GROUNDCOVERS SHALL BE PROTECTED FROM VEHICULAR ENCROACHMENT BY CURBS PER CITY ODS 3.3.1.G.
5. PROPOSED TREES SHALL BE INSTALLED SECURELY WITH DOUBLE STAKING PER CITY ODS 3.3.1.I.
6. TREES, SHRUBS AND GROUNDCOVERS SHALL NOT INTERFERE WITH SITE LIGHTING OR RESTRICT EMERGENCY ACCESS TO FIRE HYDRANTS OR FIRE ALARM BOXES PER CITY ODS 3.3.1.H.
7. UTILITY METERS, TRANSFORMERS AND OTHER SERVICES ELEMENTS SHALL BE SCREENED WITH PLANT MATERIAL WHERE POSSIBLE PER EAST LONE OAK SPECIFIC PLAN.
8. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
9. TREES AND LARGE SHRUBS SHALL NOT BE LOCATED UNDER OVERHEAD LINES OR ON UNDERGROUND UTILITIES. TREES AND LARGE SHRUBS SHALL BE LOCATED:
    a. 6' MINIMUM FROM EDGE OF DRIVEWAY, WATER METER, GAS METER AND SEWER LATERALS.
    b. 20' MINIMUM FROM BEGINNING OF CURB RETURNS AT INTERSECTIONS.
    c. 15' MINIMUM FROM UTILITY POLES AND STREETLIGHTS.
    d. 8' MINIMUM FROM FIRE HYDRANTS, SPRINKLER AND STANDPIPE CONNECTIONS.
    PER CITY ODS 3.3.1.H
10. TREES PLANTED WITHIN 10' OF PAVEMENT SHALL HAVE ROOT BARRIER INSTALLED PER CITY ODS 3.3.1.I.

OPEN SPACE CHART

	REQUIRED	PROVIDED
OPEN SPACE (AMC 9-5.706):	200 SF/UNIT	385 SF/UNIT
*TOTAL SF	31,800 SF	61,276 SF
PRIVATE (60 SF/UNIT MIN.)	9,540 SF	16,022 SF
COMMON:		
CENTRAL OPEN AREA - PARCEL K		18,239 SF
PASSIVE PARK		3,312 SF
OPEN PLAY AREA - PARCEL J		15,694 SF
COMMON BETWEEN BLDG 9 & 10		4,297 SF
COMMON BETWEEN BLDG 13 & 14		3,712 SF
TOTAL SF		45,254 SF
**LANDSCAPING (AMC 9-5.708):	25% OF SITE (1.6 AC)	32% OF SITE (2.8 AC)

*OPEN SPACE TOTAL DOES NOT INCLUDE BIORETENTION AREA.
**LANDSCAPING TOTAL INCLUDES BIORETENTION AREA.

NOTES:

- SEE SHEET L-9 FOR COMPLETE PLANT PALETTE INCLUDING PROPOSED TREES, SHRUBS, GROUNDCOVERS, GRASSES, BIORETENTION PLANTING, AND TURF. COMPLETE PLANT PALETTE IDENTIFIES BOTANICAL NAME, COMMON NAME, WATER USE, SPECIES NATIVE OR ADAPTIVE, CONTAINER SIZE, AND HEIGHT AND WIDTH OF PROPOSED PLANT MATERIAL.
- LANDSCAPED AREAS SHALL INCORPORATE PLANTINGS UTILIZING THREE-TIER SYSTEM: (1) GRASSES AND GROUNDCOVERS, (2) SHRUBS AND VINES, AND (3) TREES PER CITY OF ANTIOCH ODS 3.3.1.C.

DeNova Homes
Building a Better Community.
1500 WILLOW PASS COURT
CONCORD, CALIFORNIA 94520
(925)685-0110

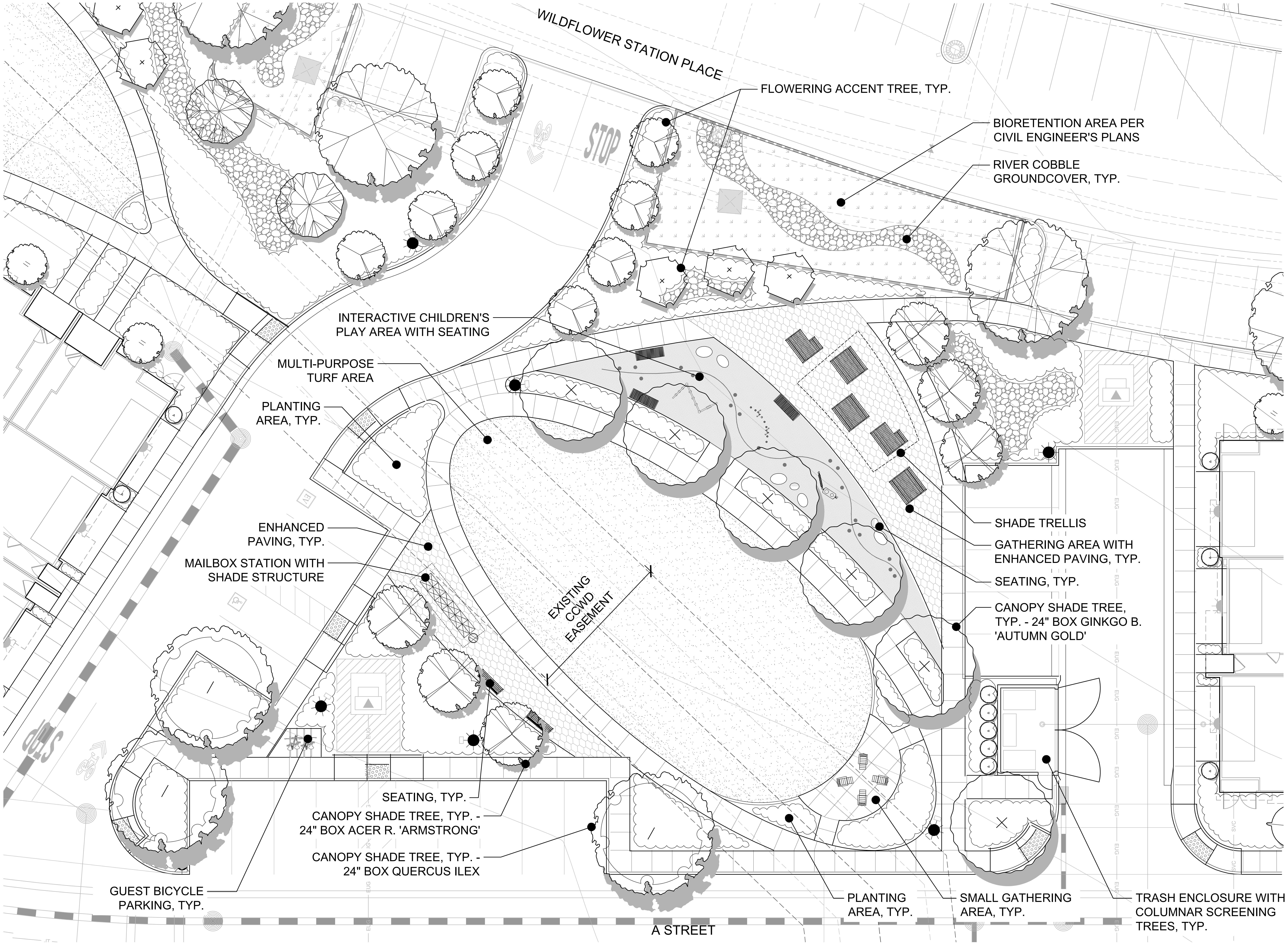
WILDFLOWER STATION
Antioch, California

OVERALL LANDSCAPE PLAN
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596
tel: 925.274.1305
www.vandertoolen.com

0' 25' 50' 100'
SCALE: 1" = 50'-0"
NORTH

L-1
Project No. 00523



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CERCIS OCCIDENTALIS	WESTERN REDBUD
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GINKGO B. 'AUTUMN GOLD'	MAIDENHAIR TREE
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LAURUS 'SARATOGA'	SARATOGA SWEET BAY
PISTACIA C. 'KEITH DAVEY'	CHINESE PISTACHE
PLATANUS A. 'COLUMBIA'	LONDON PLANE TREE
PODOCARPUS M. 'MAKI'	SHRUBBY YEW PINE
PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM
QUERCUS ILEX	HOLLY OAK
ZELKOVA S. 'MUSASHINO'	SAWLEAF ZELKOVA

NOTES:

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WILDFLOWER STATION
Antioch, California

ENLARGEMENT - CENTRAL COMMON AREA (PARCEL K)
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

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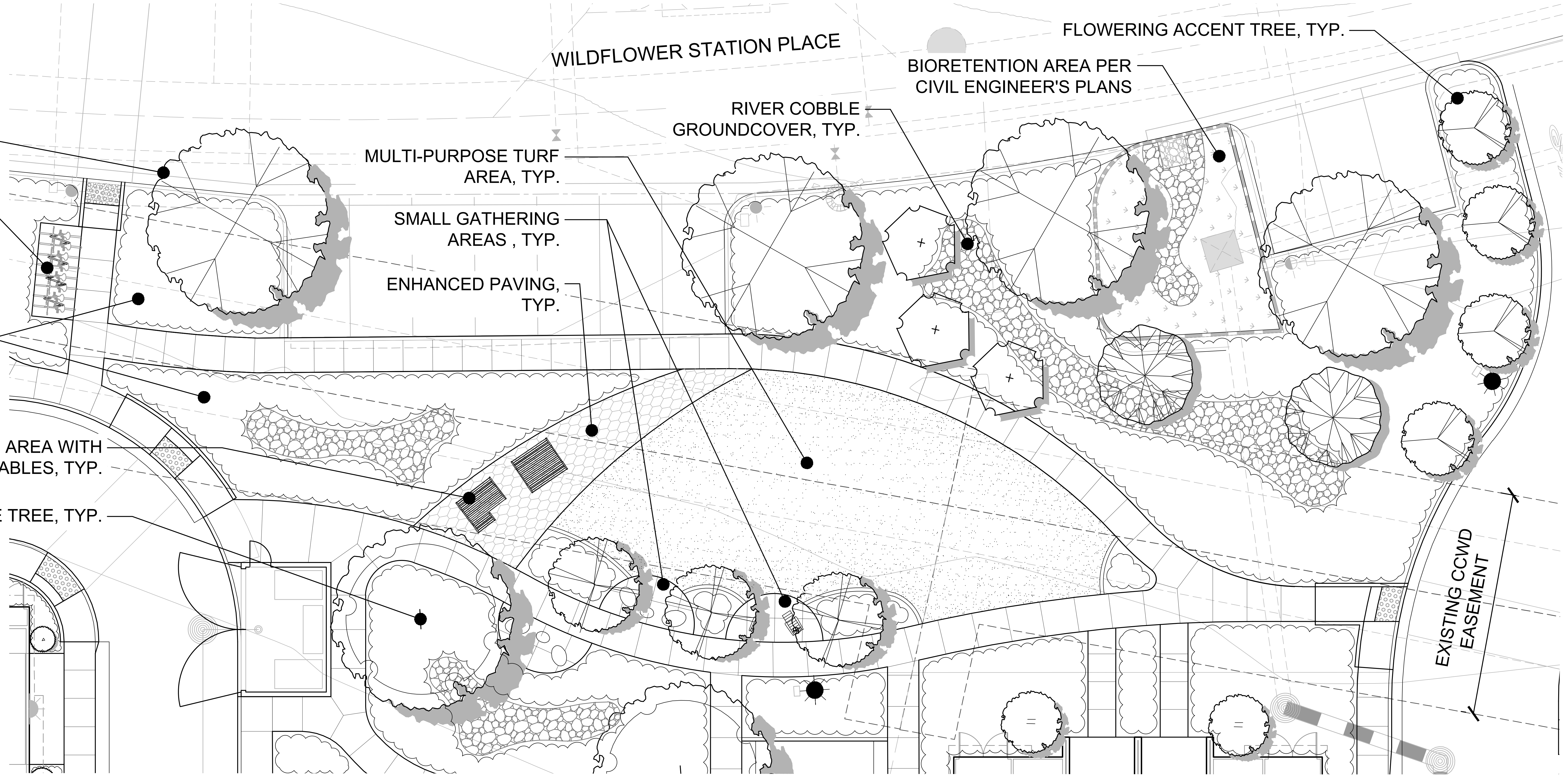
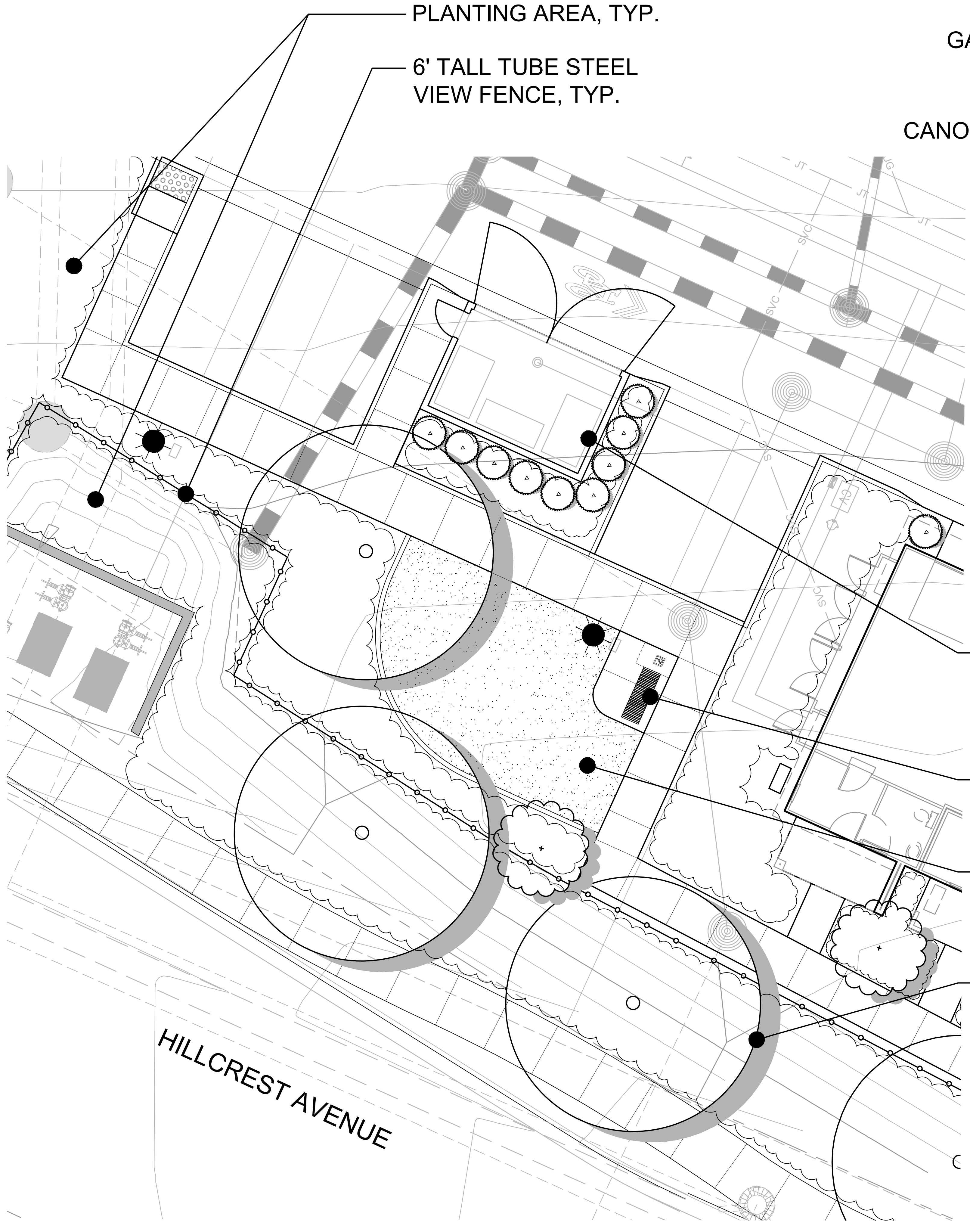
Walnut Creek, CA 94596
tel: 925.274.1305
www.vandertoolen.com

0' 5' 10' 20'
SCALE: 1" = 10'-0"
NORTH

L-2
Project No. 00523



NORTHERN COMMON AREA - PARCEL J



PASSIVE PARK

NOTES:

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PROPOSED TREE LEGEND

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WILDFLOWER STATION
Antioch, California

ENLARGEMENT - COMMON AREAS
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

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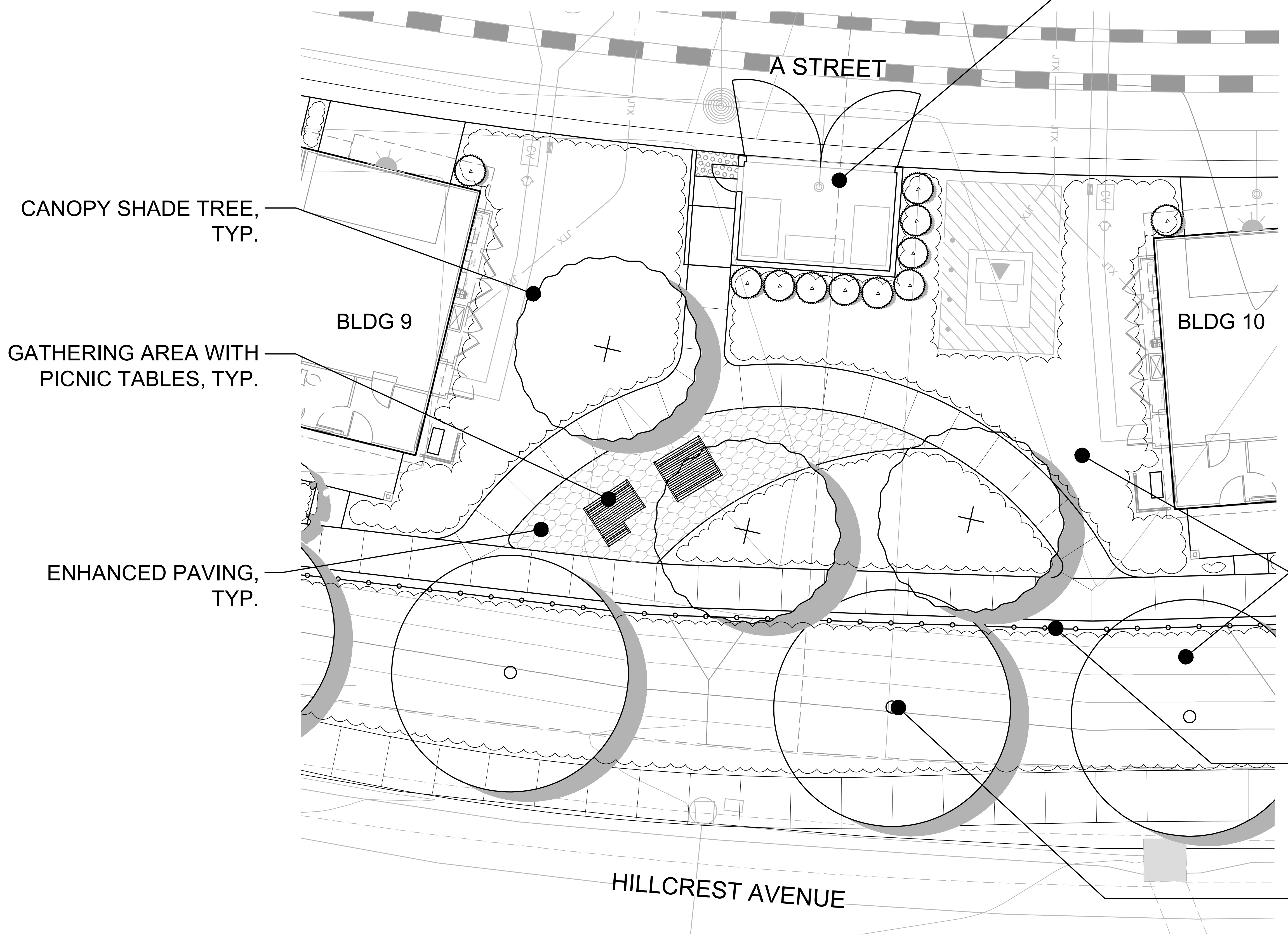
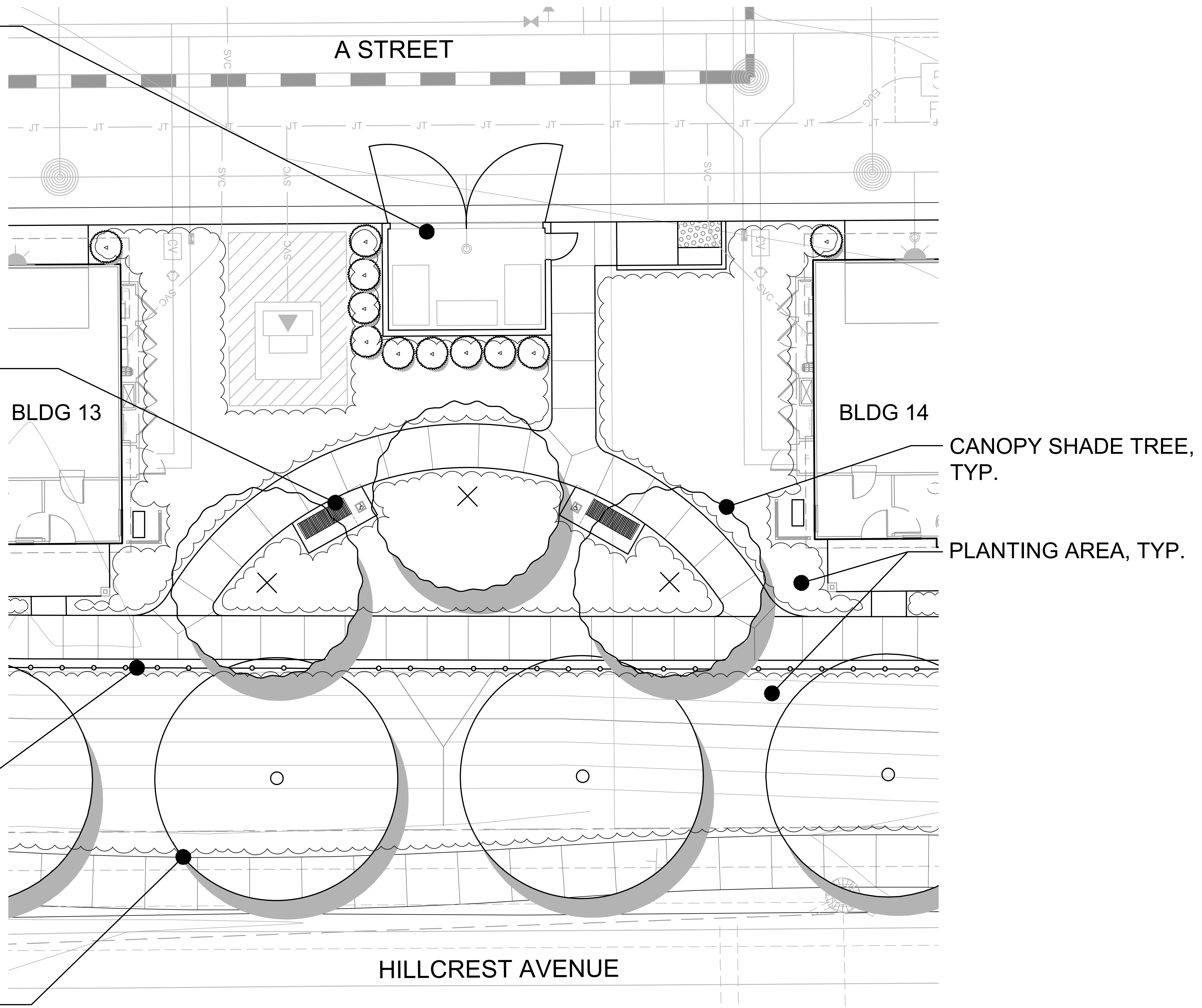
www.vandertoolen.com

0' 5' 10' 20'
SCALE: 1" = 10'-0"
NORTH

L-3
Project No. 00523



COMMON AREA BETWEEN BUILDING 9 & 10



COMMON AREA BETWEEN BUILDING 13 & 14

PROPOSED TREE LEGEND

BOTANICAL NAME	COMMON NAME
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CERCIS OCCIDENTALIS	WESTERN REDBUD
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Antioch, California

ENLARGEMENT - COMMON AREAS
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FEBRUARY 2024

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0' 5' 10' 20'
SCALE: 1" = 10'-0"

L-4
Project No. 00523

TYPICAL TOWNHOMES

TYPICAL BACK-TO-BACK

PROPOSED TREE LEGEND

BOTANICAL NAME	COMMON NAME
ACER R. 'ARMSTRONG'	ARMSTRONG MAPLE
CARPINUS B. 'FRANS FONTAINE'	HORNBEAM
CERCIS OCCIDENTALIS	WESTERN REDBUD
CORNUS KOUSA 'SATOMI'	DOGWOOD
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WILDFLOWER STATION
Antioch, California

ENLARGEMENTS - TOWNHOMES & BACK-TO-BACK
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

vanderToolen Associates
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Suite 100
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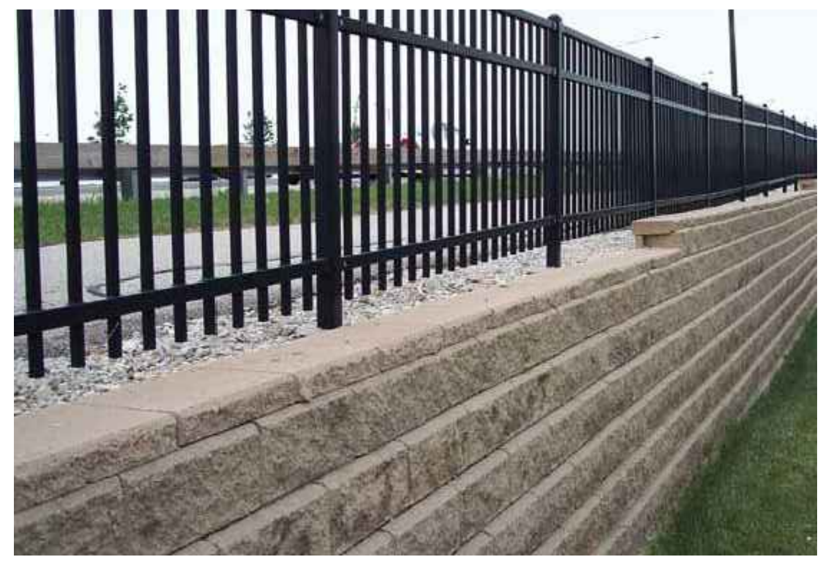
www.vandertoolen.com

0' 5' 10' 20'
SCALE: 1" = 10'-0"
NORTH


6' TUBE STEEL VIEW FENCE


6' TUBE STEEL PEDESTRIAN GATE


6' TUBE STEEL VEHICULAR GATES


TUBE STEEL FENCE ON CMU BLOCK RETAINING WALL.
REFER TO CIVIL ENGINEER'S PLANS FOR WALL HEIGHT.

FENCE LEGEND

🟥	6' TALL TUBE STEEL VIEW FENCE
🟦	TUBE STEEL FENCE ON RETAINING WALL

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CONCORD, CALIFORNIA 94520
(925)685-0110

WILDFLOWER STATION

Antioch, California

OVERALL FENCE PLAN
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

0' 25' 50' 100'
SCALE: 1" = 50'-0"
NORTH

L-6
Project No. 00523

MWELO STATEMENT OF COMPLIANCE

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

PHILIP A. VANDERTOOLEN, PRESIDENT
VANDERTOOLEN ASSOCIATES, INC.
CA LICENSE # 2798

IRRIGATION NOTES

1. IRRIGATION ZONES: ALL LANDSCAPED AREAS HAVE AN IRRIGATION ZONE DESIGNATION OF "SHRUBS / GROUNDCOVERS/ TREES' OR 'TURF." NO IRRIGATION ZONES FOR ANNUALS AND TURFED SLOPES EXCEEDING 10% ARE PROPOSED.

2. DEPTH OF IRRIGATION LINES: ALL ON-GRADE LATERAL LINES SHALL BE BURIED TO A DEPTH OF 18" MIN. ALL ON-GRADE MAINLINES SHALL BE BURIED TO A DEPTH OF 24" MIN.

3. BACKFLOW PREVENTER: BACKFLOW PREVENTER SHALL BE A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (FEBCO 825Y OR EQUAL) TYPE AS APPROVED BY WATER PURVEYOR.

4. IRRIGATION SPRINKLER TYPES: ALL SPRINKLERS SHALL UTILIZE MATCHED PRECIPITATION, PRESSURE COMPENSATING NOZZLES FOR MAXIMUM UNIFORMITY OF DISTRIBUTION. IRRIGATION SYSTEMS TO BE INSPECTED PERIODICALLY FOR BROKEN OR DEFICIENT EQUIPMENT.

5. IRRIGATION CONTROLLERS: CONTROLLER SHALL BE AN AUTOMATIC ET (EVAPOTRANSPIRATION) WITH MULTIPLE PROGRAMMING CAPABILITY. CONTROLLER TO BE REPROGRAMMED SEASONALLY TO MINIMIZE RUNOFF OR OVER WATERING. MOISTURE SENSING DEVICES SHALL BE UTILIZED TO CONTROL IRRIGATION CYCLES ACCORDING TO SPECIFIC IRRIGATION REQUIREMENTS.

6. CLASS OF IRRIGATION PIPE: ALL MAINLINE SHALL BE PVC 315 FOR DIAMETERS 2" OR LARGER & PVC SCHEDULE 40 FOR DIAMETERS LESS THAN 2". ALL LATERAL LINE SHALL BE CLASS 200 PVC.

7. IRRIGATION EMITTERS: ALL SHRUB/ GROUNDCOVER AREAS SHALL BE IRRIGATED USING DRIP IRRIGATION SYSTEM. ALL TREE AREAS SHALL BE IRRIGATED USING BUBBLER IRRIGATION SYSTEM.

IRRIGATION CONCEPT STATEMENT

THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE OF CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (TITLE 23 - DIVISION 2-CHAPTER 2.7) AND THE CITY OF ANTIOCH WATER EFFICIENT LANDSCAPE STANDARDS.

THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.

THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.

PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.

HYDROZONE LEGEND

🟥	TREES, SHRUBS & GROUNDCOVERS - DRIP IRR SOUTH/ WEST EXPOSURE
🟦	TREES, SHRUBS & GROUNDCOVERS - DRIP IRR NORTH/ EAST EXPOSURE
🟩	TURF & BIO DETENTION AREAS - MP ROTATOR SPRAY

Water Efficient Landscape Worksheet

Adapted from California Code of Regulations Title 23, Division 2, Chapter 2.7. Model Water Efficient Landscape Ordinance

Use drop down menus or type in values in white cells only. Results appear in Yellow or Red highlighted cells below.

Site Information

Site Name → *Wildflower Station*
Site Type → Residential   Allowed ETAF: 0.55
Annual Eto (inches/yr) → 55.43

Hydrozone or Planting Description (a)	Plant Factor (PF)		Irrigation Method (b)	Irrigation Efficiency (IE) (c)	ETAF (PF/IE)	Landscape Area (sqft.)	ETAF x Area	*Estimated Total Water Use (gal./yr.)
Regular Landscape Areas								
Low/Mod. Water Use Shrubs	0.4	Mod./Ave.	Drip	0.81	0.5	95,427	47,124	1,619,507
Low/Mod. Water Use Trees	0.4	Mod./Ave.	Bubbler	0.81	0.5	2,667	1,317	45,262
Turf	0.7	High	Overhead Spray	0.75	0.9	6,821	6,366	218,787
Bioretention	0.4	Mod./Ave.	Overhead Spray	0.75	0.5	20,376	10,867	373,469
					SUBTOTAL →	**125,291**	**65,675**	**2,257,025**
Special Landscape Areas								
1					1		0	0
2					1	0	0	0
3					1	0	0	0
					SUBTOTAL →	**0**	**0**	**0**
							****Estimated Total Water Use (ETWU) →**	**2,257,025**
							Maximum Allowed Water Allowance (MAWA) →	**2,368,204**

(a) Hydrozone #/Planting Description
1.) Front Lawn
2.) low water use planting
3.) medium water use

(b) Irrigation Method
Overhead Spray
Drip
Bubbler

(c) Irrigation Efficiency
0.75 for spray head
0.81 for drip

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

(**) MAWA (Annual Gallons Allowed)=

(Eto) x (0.62) x [(ETAF x LA) + ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas		
	Total ETAF x Area	65,675
	Total Area	125,291
	Average ETAF	0.52
All Landscape Areas		
	Total ETAF x Area	65,675
	Total Area	125,291
	Sitewide ETAF	0.52

Notes:

Average ETAF (ET adjustment Factor) for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Calculator developed to meet code effective Dec. 1, 2015
This calculator is for estimating purposes only.

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WILDFLOWER STATION
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HYDROZONE PLAN
CONCEPTUAL LANDSCAPE PLAN
FEBRUARY 2024

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0' 25' 50' 100'
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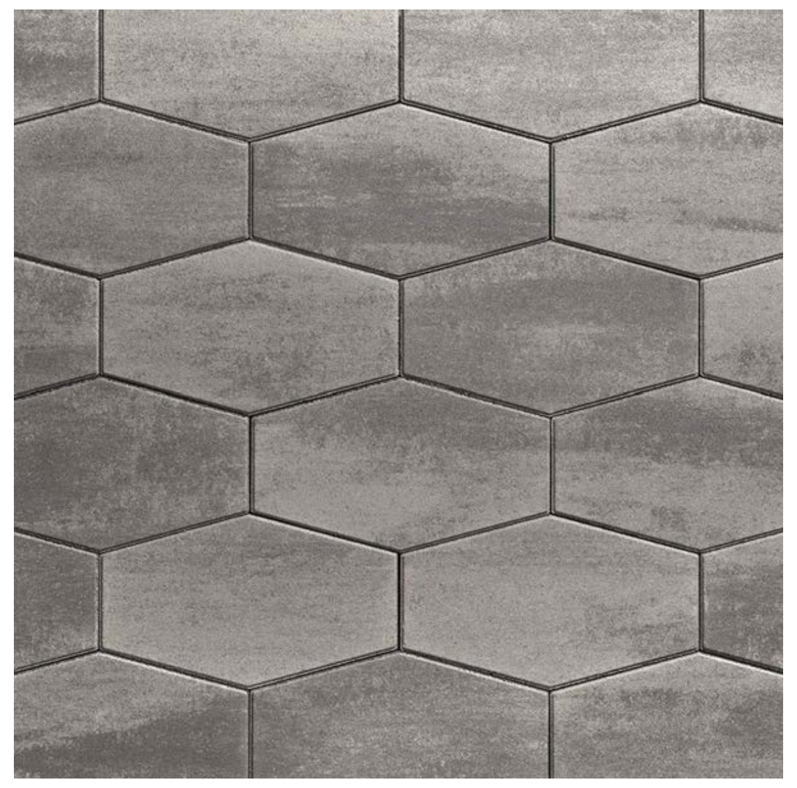
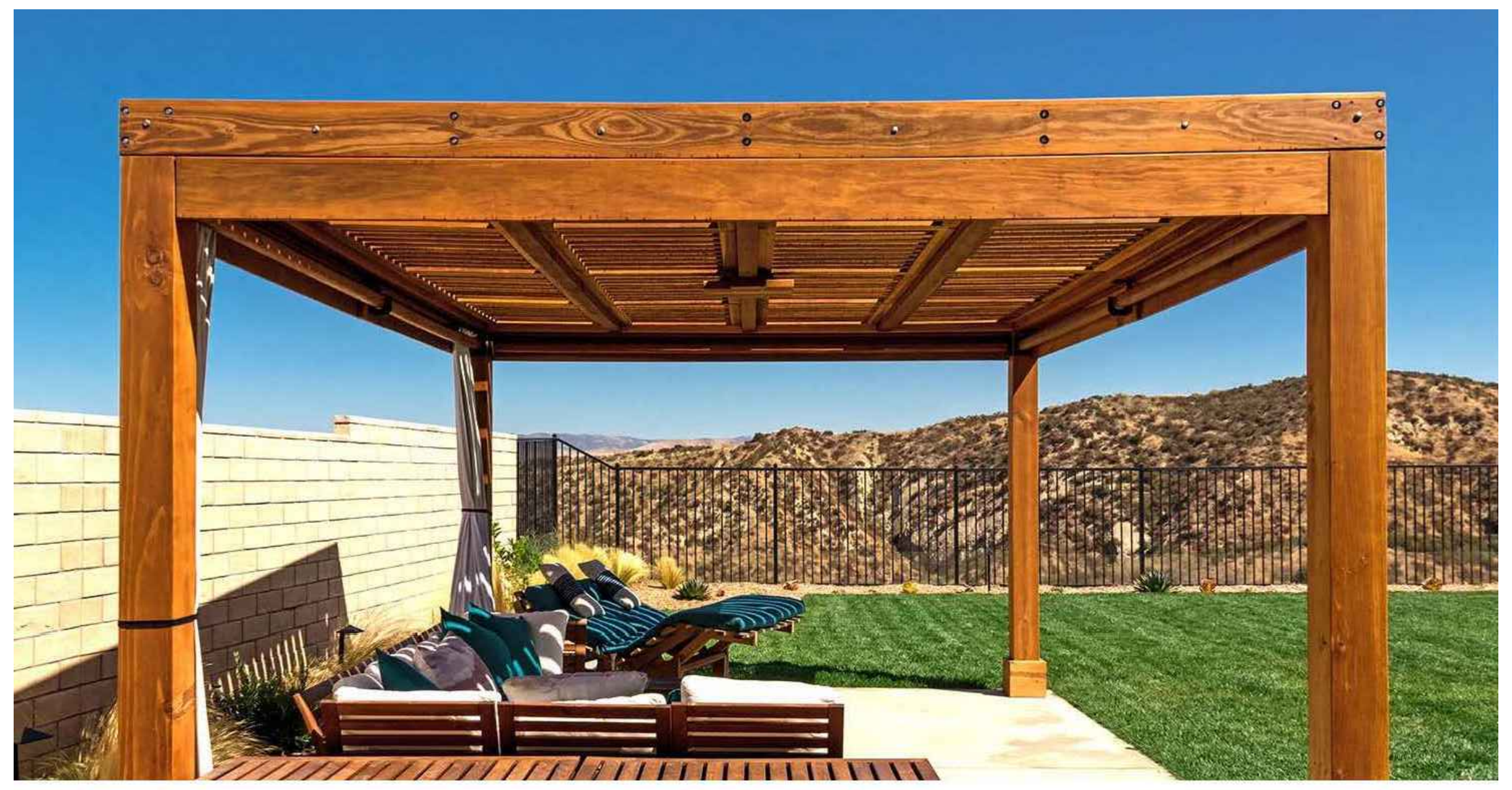
NORTH

L-7
Project No. 00523



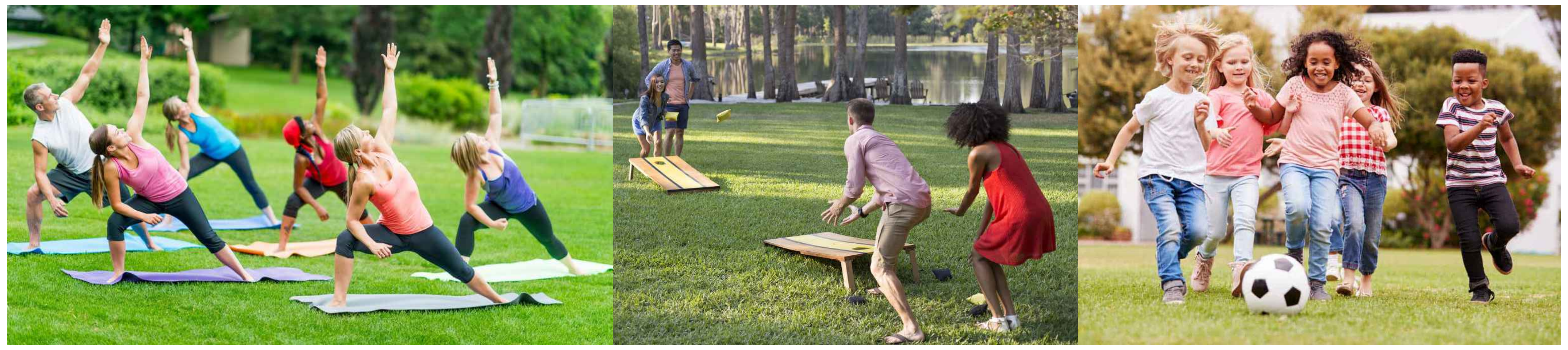
A DECORATIVE PAVING



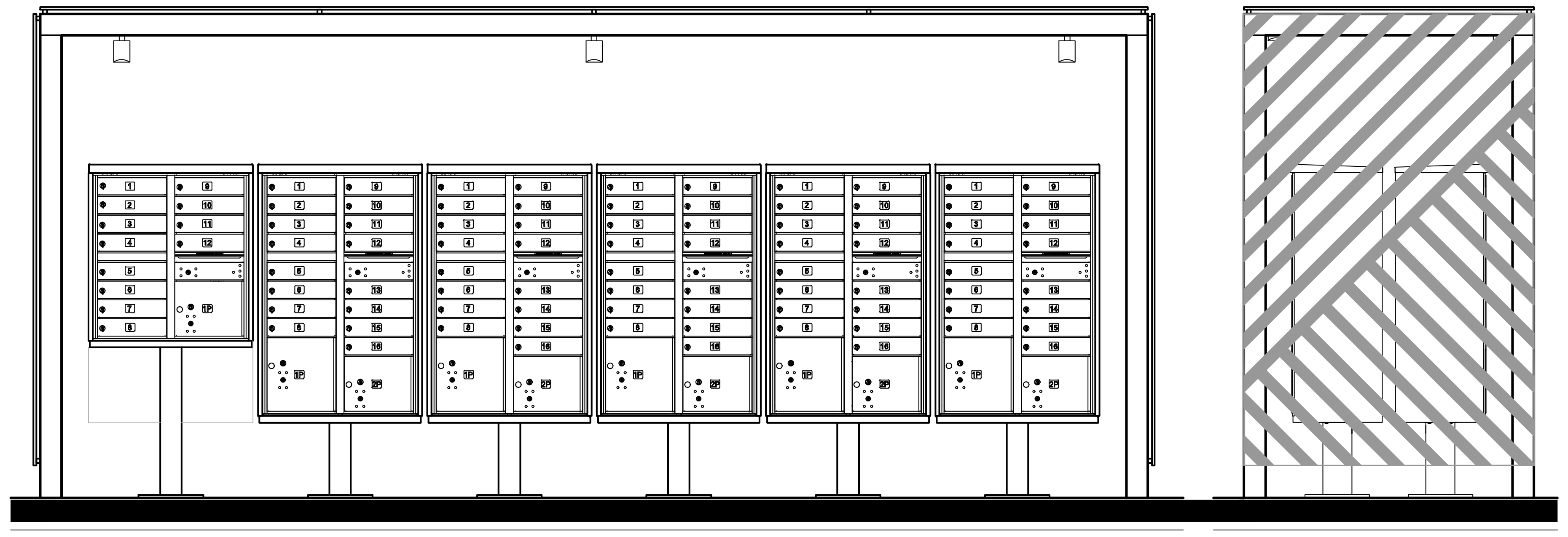
B SHADE TRELLIS

C CHILDREN'S PLAY AREA

NOTE: NO CLIMBING STRUCTURES



D MULTIPURPOSE TURF AREA



FRONT/BACK ELEVATION

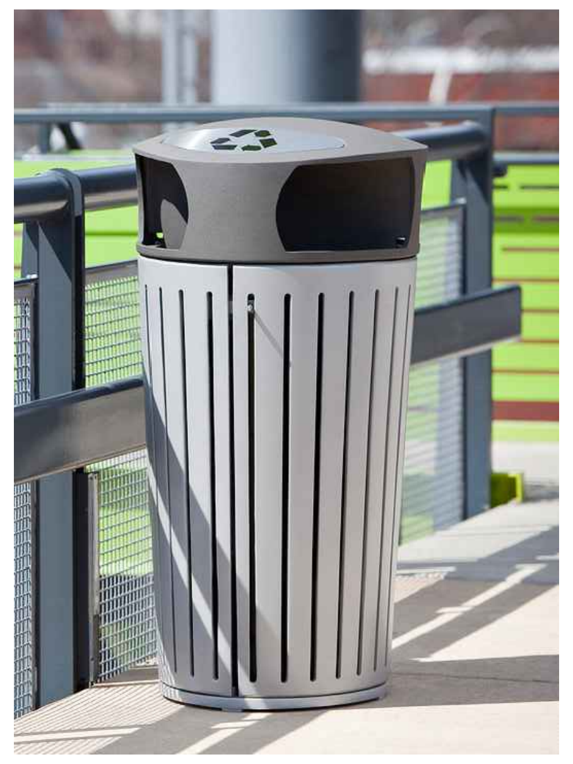
SIDE ELEVATION

E CLUSTER MAILBOX

F BIKE RACK

G SEATING

H PICNIC TABLE



I TRASH & RECYCLING RECEPTACLE

NOTE: THE PROPOSED SITE AMENITY DESIGNS ARE CONCEPTUAL. SIMILARLY THEMED DESIGN, COLORS & MATERIALS MAY BE SELECTED BASED UPON PRODUCT AVAILABILITY AT TIME OF INSTALLATION.

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WILDFLOWER STATION
Antioch, California

HARDSCAPE AND SITE FURNISHINGS IMAGERY
CONCEPTUAL PHASE
FEBRUARY 2024

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VTA

L-8

Project No. 00523

TREES


ACER R. 'ARMSTRONG'


CARPINUS B. 'FRANS FONTAINE'


CERCIS OCCIDENTALIS


CORNUS KOUSA 'SATOMI'


GINKGO B. 'AUTUMN GOLD'


LAGERSTROEMIA I. 'MUSKOGEE'


LAURUS 'SARATOGA'


PISTACIA C. 'KEITH DAVEY'


PLATANUS A. 'COLUMBIA'


PRUNUS C. 'KRAUTER VESUVIUS'


QUERCUS ILEX


ZELKOVA S. 'MUSASHINO'

SHRUBS


CALLISTEMON V. 'LITTLE JOHN'


CISTUS SPP.


DIETES SPP.


DODONAEA V. 'PURPUREA'


GALVEZIA S. 'FIRECRACKER'


LOROPETALUM C. 'RAZZLEBERRI'


NANDINA DOMESTICA


PHORMIUM SPP.


PITTOSPORUM TOBIRA


RHAPHIOLEPIS INDICA


SALVIA SPP.


TEUCRIUM F. 'COMPACTUM'

ACCENT SHRUBS & GROUNDCOVERS


ACHILLEA SPP.


ANIGOZANTHOS 'KANGA RED'


ERIGERON KARVINSKIANUS


LIRIOPE SPICATA


MYOPORUM PARVIFOLIUM


PENSTEMON H. 'MARGARITA BOP'

GRASSES/BIORETENTION


BOUTELOUA G. 'BLONDE AMBITION'


CALAMAGROSTIS X A. 'KARL FOERSTER'


CHONDROPETALUM TECTORUM


ELYMUS C. 'CANYON PRINCE'


MUHLENBERGIA RIGENS

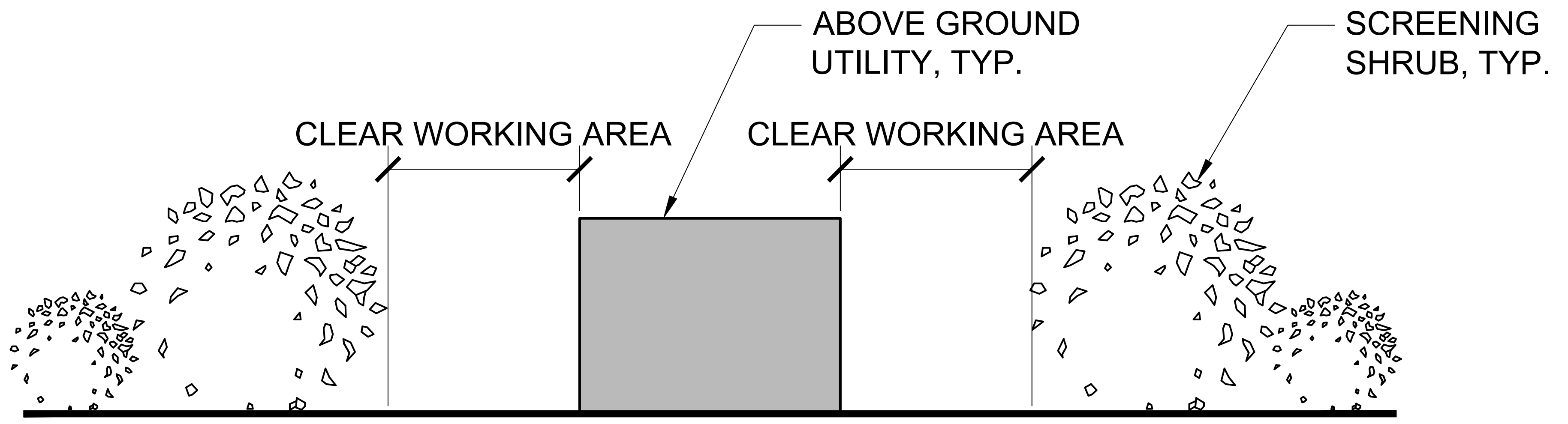

BIORETENTION SOD

PROPOSED PLANT PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE	NATIVE/ ADAPTIVE	SIZE	H X W
	TREES (TIER 3)					
	ACER R. 'ARMSTRONG'	ARMSTRONG MAPLE	M	A	24" BOX	45' X 15'
	CARPINUS B. 'FRANS FONTAINE'	HORNBEAM	M	A	15 GAL	35' X 12'
	CERCIS OCCIDENTALIS	WESTERN REDBUD	VL	N	15 GAL	15' X 15'
	CORNUS KOUSA 'SATOMI'	DOGWOOD	M	A	15 GAL	20' X 15'
	GINKGO B. 'AUTUMN GOLD'	MAIDENHAIR TREE	L	A	15 GAL	30' X 30'
	LAGERSTROEMIA I. 'MUSKOGEE'	CRAPE MYRTLE	L	A	24" BOX	20' X 12'
	LAURUS 'SARATOGA'	SARATOGA SWEET BAY	L	A	15 GAL	30' X 25'
	PISTACIA C. 'KEITH DAVEY'	CHINESE PISTACHE	L	A	24" BOX	50' X 50'
	PLATANUS A. 'COLUMBIA'	LONDON PLANE TREE	M	A	24" BOX	75' X 35'
	PODOCARPUS M. 'MAKI'	SHRUBBY YEW PINE	M	A	15 GAL	10' X 3'
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	M	A	15 GAL	18' X 12'
	QUERCUS ILEX	HOLLY OAK	L	A	24" BOX	50' X 50'
	ZELKOVA S. 'MUSASHINO'	SAWLEAF ZELKOVA	M	A	15 GAL	40' X 15'
	SHRUBS (TIER 2)					
	CALLISTEMON VIMINALIS 'LITTLE JOHN'	DWARF BOTTLEBRUSH	L	A	5 GAL	3' X 3'
	CISTUS SPP.	ROCKROSE	L	A	5 GAL	4' X 4'
	DIETES SPP.	FORTNIGHT LILY	L	A	5 GAL	3' X 3'
	DODONAEA V. 'PURPUREA'	HOPSEED BUSH	L	A	5 GAL	12' X 10'
	GALVEZIA SPECIOSA 'FIRECRACKER'	ISLAND SNAPDRAGON	L	N	5 GAL	2' X 3'
	GREVILLEA X 'NOELLI'	GREVILLEA	L	A	5 GAL	4' X 4'
	LIGUSTRUM JAPONICUM 'TEXANUM'	WAXLEAF PRIVET	L	A	5 GAL	9' X 5'
	LOROPETALUM C. 'RAZZLEBERRI'	CHINESE FRINGE FLOWER	M	A	5 GAL	5' X 4'
	NANDINA DOMESTICA	HEAVENLY BAMBOO	L	A	5 GAL	6' X 3'
	PHORMIUM SPP.	NEW ZEALAND FLAX	L	A	5 GAL	3' X 3'
	PITTOSPORUM TOBIRA	TOBIRA	L	A	5 GAL	5' X 5'
	RHAMNUS CALIFORNICA 'EVE CASE'	COFFEE BERRY	L	N	5 GAL	6' X 6'
	RHAPHIOLEPIS INDICA	INDIA HAWTHORN	M	A	5 GAL	4' X 4'
	SALVIA SPP.	SAGE	L	A	5 GAL	3' X 3'
	SOLLYA HETEROPHYLLA	AUSTRALIAN BLUEBELL CREEPER	L	A	5 GAL	4' X 4'
	TEUCRIUM FRUTICANS 'COMPACTUM'	BUSH GERMANDER	L	A	5 GAL	2' X 2'
	VERBENA LILACINA 'DE LA MINA'	CEDROS ISLAND VERBENA	L	A	5 GAL	2' X 3'
	WESTRINGIA FRUTICOSA	COASTAL ROSEMARY	L	A	5 GAL	5' X 8'
	ACCENT SHRUBS & GROUNDCOVERS (TIER 1)					
	ACHILLEA SPP.	YARROW	L	N	5 GAL	24" X 24"
	ANIGOZANTHOS 'KANGA RED'	KANGAROO PAW	L	A	5 GAL	24" X 24"
	ERIGERON KARVINSKIANUS	SANTA BARBARA DAISY	L	A	5 GAL	12" X 36"
	LIRIOPE SPICATA	CREEPING LILY TURF	M	A	5 GAL	12" X 12"
	MYOPORUM PARVIFOLIUM	MYOPORUM	L	A	5 GAL	12" X 96"
	NEPETA FAASSENII 'WALKER'S LOW'	CATMINT	L	A	5 GAL	12" X 24"
	PENSTEMON H. 'MARGARITA BOP'	PENSTEMON	L	N	5 GAL	24" X 24"
	SCAEVOLA 'MAUVE CLUSTERS'	SCAEVOLA	L	A	5 GAL	6" X 48"
	GRASSES (TIER 1)					
	BOUTELOUA G. 'BLONDE AMBITION'	BLUE GRAMA	L	N	5 GAL	2' X 2'
	CALAMAGROSTIS X A. 'KARL FOERSTER'	FEATHER REED GRASS	L	A	5 GAL	3' X 2'
	CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	L	A	5 GAL	3' X 3'
	FESTUCA MAIREI	ATLAS FESCUE	L	A	5 GAL	2' X 3'
	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	L	A	5 GAL	2' X 3'
	BIORETENTION (TIER 1)					
	CAREX TUMULICOLA	BERKELEY SEDGE	I	N	5 GAL	1' X 2'
	ELYMUS C. 'CANYON PRINCE'	WILD RYE GRASS	L	N	5 GAL	2' X 3'
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	L	N	5 GAL	2' X 2'
	MUHLENBERGIA RIGENS	DEER GRASS	L	N	5 GAL	4' X 4'
	BIOFILTRATION SOD	AVAILABLE AT DELTA BLUEGRASS (800) 637-8873	L	N	SOD	N/A
	TURF (TIER 1)					
	RHIZOMATOUS TALL FESCUE (RTF)	SELF-HEALING TURF	H	A	SOD	N/A

NOTES:

1. LANDSCAPE WILL UTILIZE LOW WATER USE PLANT MATERIALS, HYDRO ZONING AND EMPLOY WATER EFFICIENT LOW VOLUME DRIP AND SPRAY IRRIGATION AND SMART CONTROLLERS, SEE L-7 FOR HYDROZONE PLAN AND WATER USE CALCULATIONS.
2. LANDSCAPED AREAS SHALL INCORPORATE PLANTINGS UTILIZING THREE-TIER SYSTEM: (1) GRASSES AND GROUNDCOVERS, (2) SHRUBS AND VINES, AND (3) TREES PER CITY OF ANTIOCH ODS 3.3.1.C.
3. NOT ALL PLANT MATERIAL MAY BE AVAILABLE IN 5 GALLON CONTAINER SIZE. IF PROPOSED PLANT IS UNAVAILABLE IN 5 GALLON CONTAINER SIZE, 1 GALLON, 2 GALLON, OR 3 GALLON SUBSTITUTION MAY BE ACCEPTED. ALL SUBSTITUTIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT OR OWNER.



SCREEN PLANTING FOR UTILITIES

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