VESTING TENTATIVE MAP LEGEND **PROPOSED DESCRIPTION TRACT MAP # 8104 BOUNDARY** SEQUOIA GROVE RETAINING WALL LANDSCAPE RETAINING WALL RAINWATER TIGHTLINE 123 A STREET SUBDRAIN LINE TIGHTLINE HAYWARD, CALIFORNIA STORM DRAIN LINE SANITARY SEWER LINE WATER LINE GAS LINE STORM DRAIN PRESSURE LINE SANITARY SEWER PRESSURE LINE SET BACK LINE CONCRETE VALLEY GUTTER **EARTHEN SWALE CATCH BASIN** JUNCTION BOX AREA DRAIN CURB INLET STORM DRAIN MANHOLE

75.3 74.5 LANDS OF DA FONSECA SAN BRUNO CARE DING VELEZ SALAZAR RANGAL LOPEZ ARANUS aranas /LEACH KEY MAP CIVIL ENGINEER

ABBREVIATIONS

AGGREGATE BASE

FIRE HYDRANT

FINISHED SURFACE

GAGE OR GAUGE

POLYETHYLENE PIPE

HIGH DENSITY CORRUGATED

GRADE BREAK

HORIZONTAL

HIGH POINT

HUB & TACK

INSIDE DIAMETER

JUNCTION BOX

JOINT TRENCH

LENGTH

LANDING

INVERT ELEVATION

JOINT UTILITY POLE

FLOW LINE

ACC

BUB

CONC

HDPE

HORIZ

HI PT

LNDG

CONST

CONC COR

BW/FG

MOUNTEDATE DAGE	—		-
ASPHALT CONCRETE	MAX	MAXIMUM	
ACCESSIBLE	MH	MANHOLE	
AREA DRAIN	MIN	MINIMUM	
BEGINNING OF CURVE	MON.	MONUMENT	
BEARING & DISTANCE	MRO	METERED RELEASE OUTLET L	
BENCHMARK	(N)	NEW	121737 1/
BUBBLER BOX	ΝΌ.	ITOMOLIT	KEY M
BOTTOM OF WALL/FINISH	NTS	NOT TO SCALE	1" = 30'
GRADE	O.C.	ON CENTER	1 = 30
CATCH BASIN	0/	OVER	
CURB AND GUTTER	(PA)	PLANTING AREA	
CENTER LINE	PED	PEDESTRIAN	
CORRUGATED PLASTIC PIPE	PIV	POST INDICATOR VALVE	
(SMOOTH INTERIOR)	PSS	PUBLIC SERVICES EASEMENT	
CLEANOUT	P	PROPERTY LINE	
CLEANOUT TO GRADE	PP	POWER POLE	
CONCRETE	PUE	PUBLIC UTILITY EASEMENT	
CONSTRUCT or -TION	PVC	POLYVINYL CHLORIDE	
CONCRETE CORNER	R	RADIUS	
CUBIC YARD	RCP	REINFORCED CONCRETE PIPE	
DIAMETER	RIM	RIM ELEVATION	
DROP INLET	RW	RAINWATER	
DUCTILE IRON PIPE	R/W	RIGHT OF WAY	
EACH	s'	SLOPE	
END OF CURVE	S.A.D.	SEE ARCHITECTURAL DRAWING	S
EXISTING GRADE	SAN	SANITARY	
ELEVATIONS	SD	STORM DRAIN	
EDGE OF PAVEMENT	SDMH	STORM DRAIN MANHOLE	
EQUIPMENT	SHT	SHEET	
EACH WAY	S.L.D.	SEE LANDSCAPE DRAWINGS	
EXISTING	SPEC	SPECIFICATION	
FACE OF CURB	SS	SANITARY SEWER	Tromi
FINISHED FLOOR		SANITARY SEWER CLEANOUT	ESTI
FINISHED GRADE	SSMH	SANITARY SEWER MANHOLE	

STA

TEMP

VERT

STRUCT

FIRE HYDRANT

STREET SIGN

SPOT ELEVATION

FLOW DIRECTION

BENCHMARK

CONTOURS

DEMOLISH/REMOVE

TREE TO BE REMOVED

TREE PROTECTION FENCING

LINEAR FEET

SANITARY SEWER MANHOLE

T SEWER MANHULE STREET

STATION STANDARD STRUCTURAL TELEPHONE TOP OF CURB TOP OF WALL TEMPORARY TOP OF PAVEMENT TOP OF WALL/FINISH GRADE

VERTICAL

WATER LINE

WATER METER

GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE VERTICAL CURVE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT VITRIFIED CLAY PIPE IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION I (IF ANY). NOTE ADDITIONAL EARTHWORKS. SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY QUANTITIES. WELDED WIRE FABRIC

CUBIC YARDS

EXPORT

DATE

LAND SURVEYOR

DATE

DATE

WITHIN BUILDING

FOOTPRINT

270

ESTIMATED EARTHWORK QUANTITIES

BUILDING

FOOTPRINT

645

GEOTECHNICAL ENGINEER

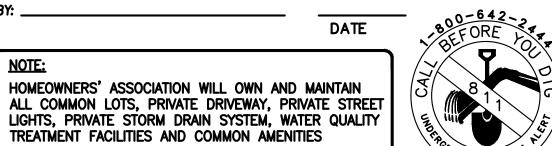
PETER CARLINO

GREGORY F. BRAZE

TREATMENT FACILITIES AND COMMON AMENITIES

OWNER'S STATEMENT

	OWITH S SIMILARITY
TOTAL CUBIC YARDS	I, (AN AUTHORIZED SIGNING AGENT FOR HABITAT FOR HUMANITY EAST BAY/SILICON VALLEY, INC.) AGRE TO THE FILING OF SAID MAP AND AGREE TO COMPLY WITH THE
915	PROVISIONS OF THE CITY OF HAYWARD SUBDIVISION ORDINANCE
0	AND THE STATE MAP ACT AS THEY APPLY TO THE PROCESSING AND APPROVAL OF SAID MAP.
915	AS OWNER:
	BY:



79555

* BUILDING PAD NOTE: ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH

NOTES

ALL DISTANCES AND DIMENSIONS ARE

IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION

IS BASED ON CITY OF HAYWARD

AS-BULIT PLANS..

BUILDING FOOTPRINTS ARE

SHOWN AT GROUND LEVEL.

EASEMENT NOTE

TITLE REPORT PREPARED BY OLD REPUBLIC

TITLE COMPANY DATED MAY 22, 2015

ORDER NO. 1117010856-JM,

EXCEPTION #3: "RIGHTS OF THE PUBLIC,

_COUNTY AND/OR CITY, IN AND TO THAT

PORTION OF SAID LAND LYING WITHIN THE

LINES OF A STREET."

THERE ARE NO OTHER EASEMENTS LISTED

IN SAID REPORT.

FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. TO ESTABLISH PAD aabaya@leabraze.com LEVEL.

SITE BENCHMARK

SURVEY CONTROL POINT

MAG AND SHINER SET IN ASPHALT

ELEVATION = 77.92'

(CITY OF HAYWARD DATUM)

BENCHMARK

CITY OF HAYWARD BENCHMARK

MON (PLATE) NEAR INTERSECTION

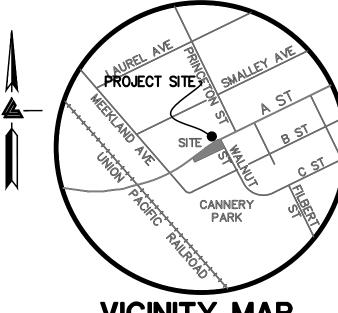
"A" STREET & "WALNUT STREET"

(FORMERLY BURBANK)

5'± N FROM N SIDE ISLAND CURB

ELEVATION = 75.375'

(CITY OF HAYWARD DATUM)



VICINITY MAP

OWNER'S INFORMATION

CITY OF HAYWARD 777 "B" STREET HAYWARD, CA 94541

HABITAT FOR HUMANITY EAST BAY / SILICON VALLEY 2619 BROADWAY OAKLAND, CA 94612 PH. 510 251-6304

LEA & BRAZE ENGINEERING, INC. 2495 INDUSTRIAL PARKWAY WEST HAYWARD, CA 94545 (510) 887-4086

431-0016-088-03

PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. BASE FLOOD ELEVATION FOR SUBJECT SITE IS NOT SHOWN ON FLOOD INSURANCE RATE MAP NO. 06001C0286G, AUGUST 3,

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO: 1. TOPOGRAPHIC SURVEY BY LEA AND BRAZE ENGINEERING, ENTITLED; "TOPOGRAPHIC SURVEY" 123 A STREET HAYWARD, CALIFORNIA

DATED: TBD JOB#: 2230238

2. SITE PLAN BY GEOFFREY HOLTON AND ASSOCIATES ENTITLED: "SITE PLAN - HABITAT FOR HUMANITY EAST BAY/ SILICON VALLEY, INC., SEQUOIA GROVE" "A" STREET & WALNUT STREET HAYWARD, CALIFORNIA

3. CITY OF HAYWARD BASE MAPS FOR STORM DRAIN, SANITARY SEWER AND WATER.

4. SOIL REPORT BY ROCKRIDGE GEOTECHNICAL ENTITLED: "GEOTECHNICAL INVESTIGATION" 123 A STREET HAYWARD, CALIFORNIA DATED: 7-19-12 JOB #: 11-354

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

<u>UTILITIES</u> / SERVICES

CITY OF HAYWARD CITY OF HAYWARD SEWER PACIFIC GAS AND ELECTRIC (PG&E) PACIFIC GAS AND ELECTRIC (PG&E) **ELECTRICITY TELEPHONE** CITY OF HAYWARD FIRE PROTECTION STORM WATER CITY OF HAYWARD

SHEET INDEX

TITLE SHEET LOT LAYOUT PLAN PRELIMINARY GRADING PLAN

PRELIMINARY UTILITY PLAN TM-4SITE SECTIONS STORM WATER CONTROL PLAN

TIVE #810 **4** # ⊞ STII TR

PERMIT REV 2 2023-08-03 VA PERMIT REV 1 2023-06-13 REVISIONS JOB NO: 2230237PF 02-10-23

AS NOTED

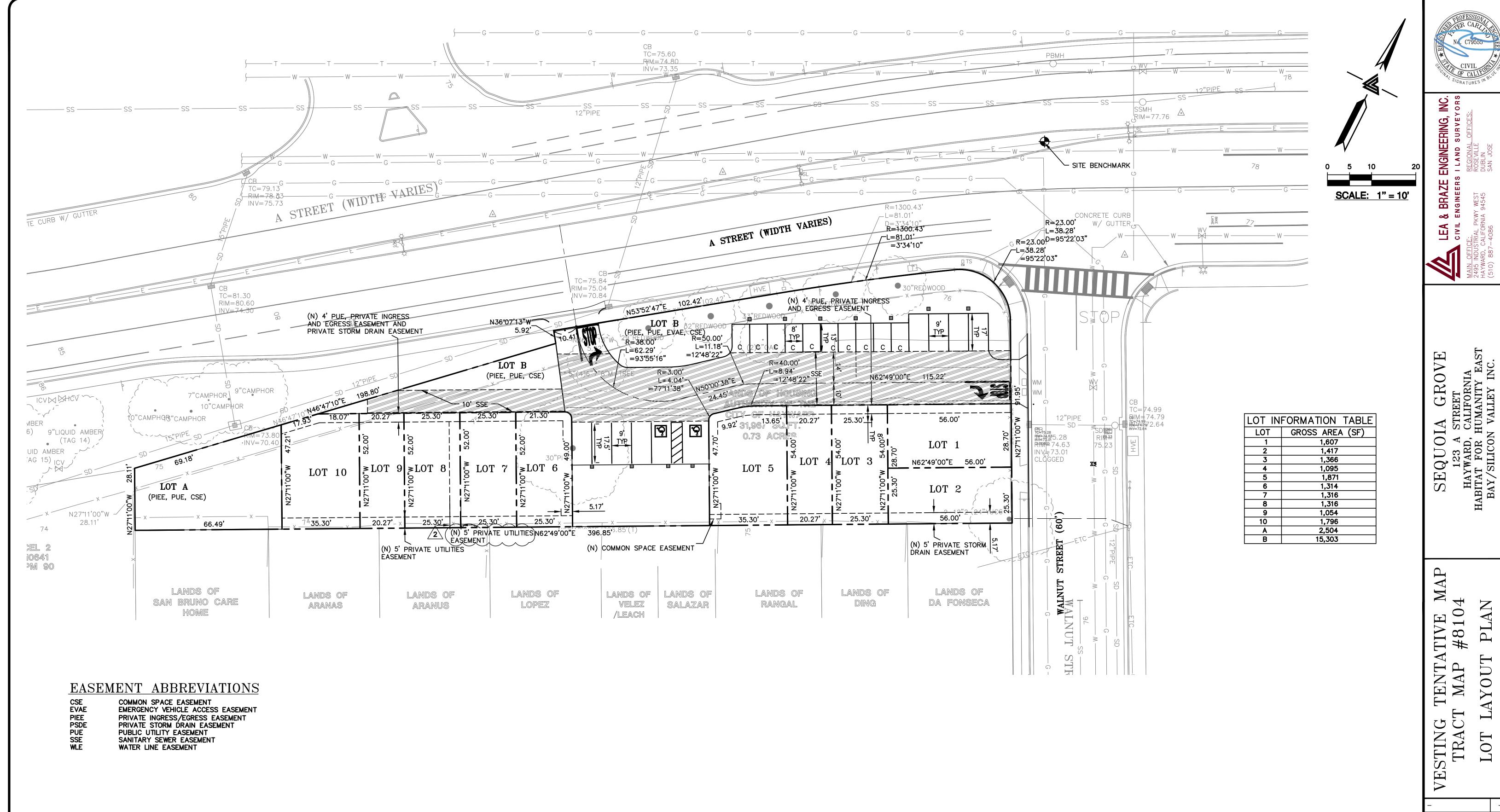
SHEET NO:

01 OF 06 SHEETS

DESIGN BY: PT/VA

CHECKED BY: JH/PC

SCALE:

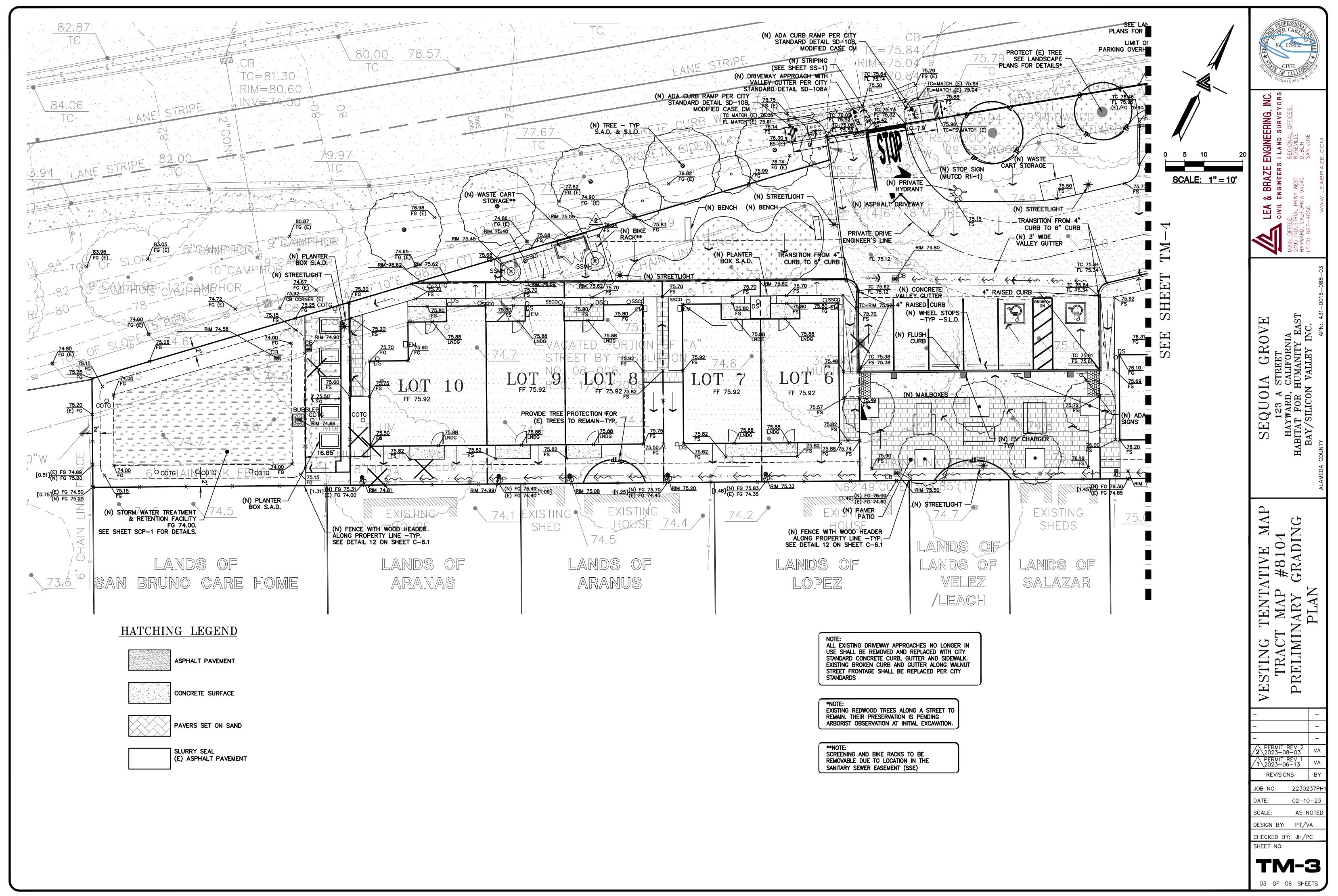


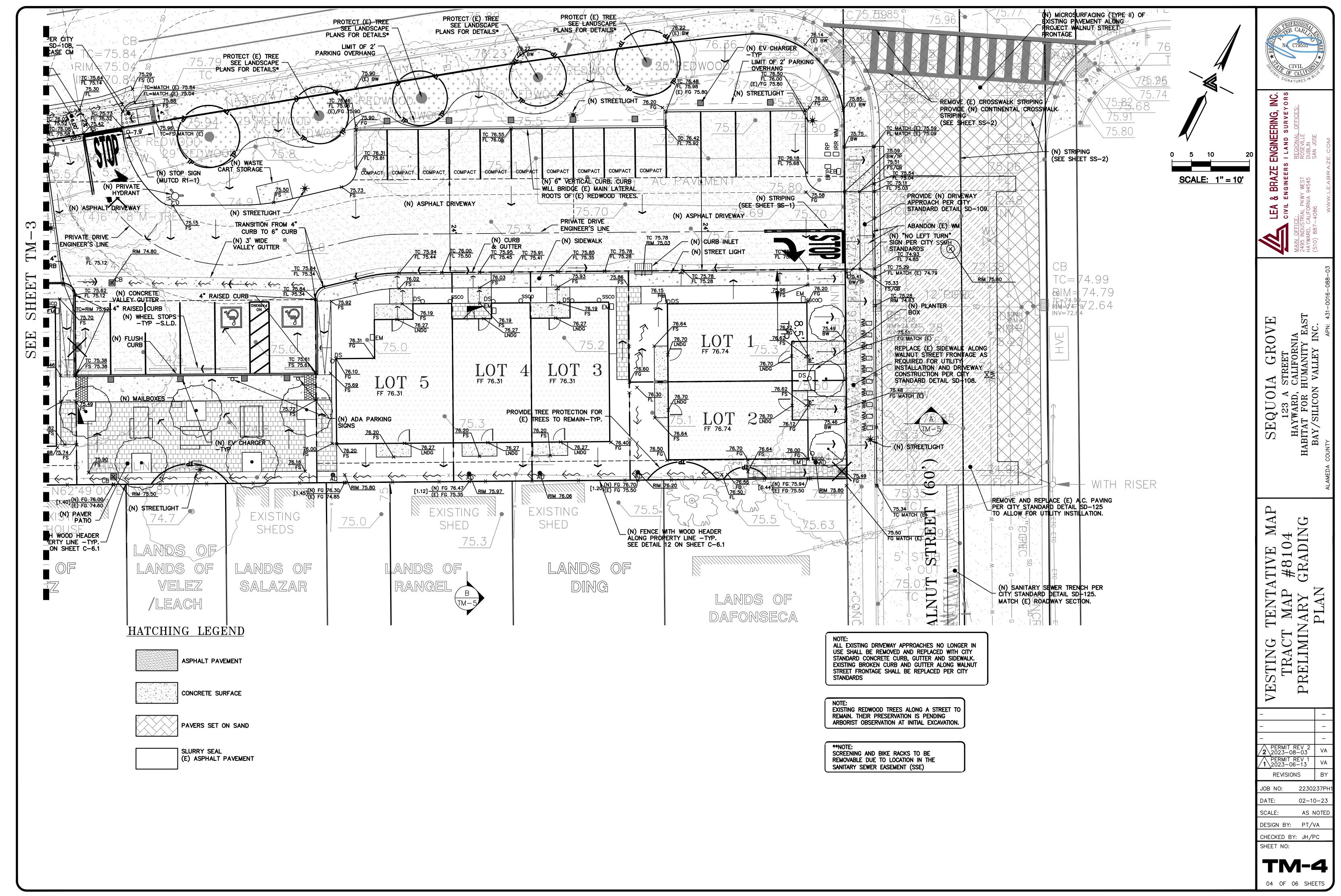
PERMIT REV 2 2023-08-03 VA PERMIT REV 1 2023-06-13 REVISIONS

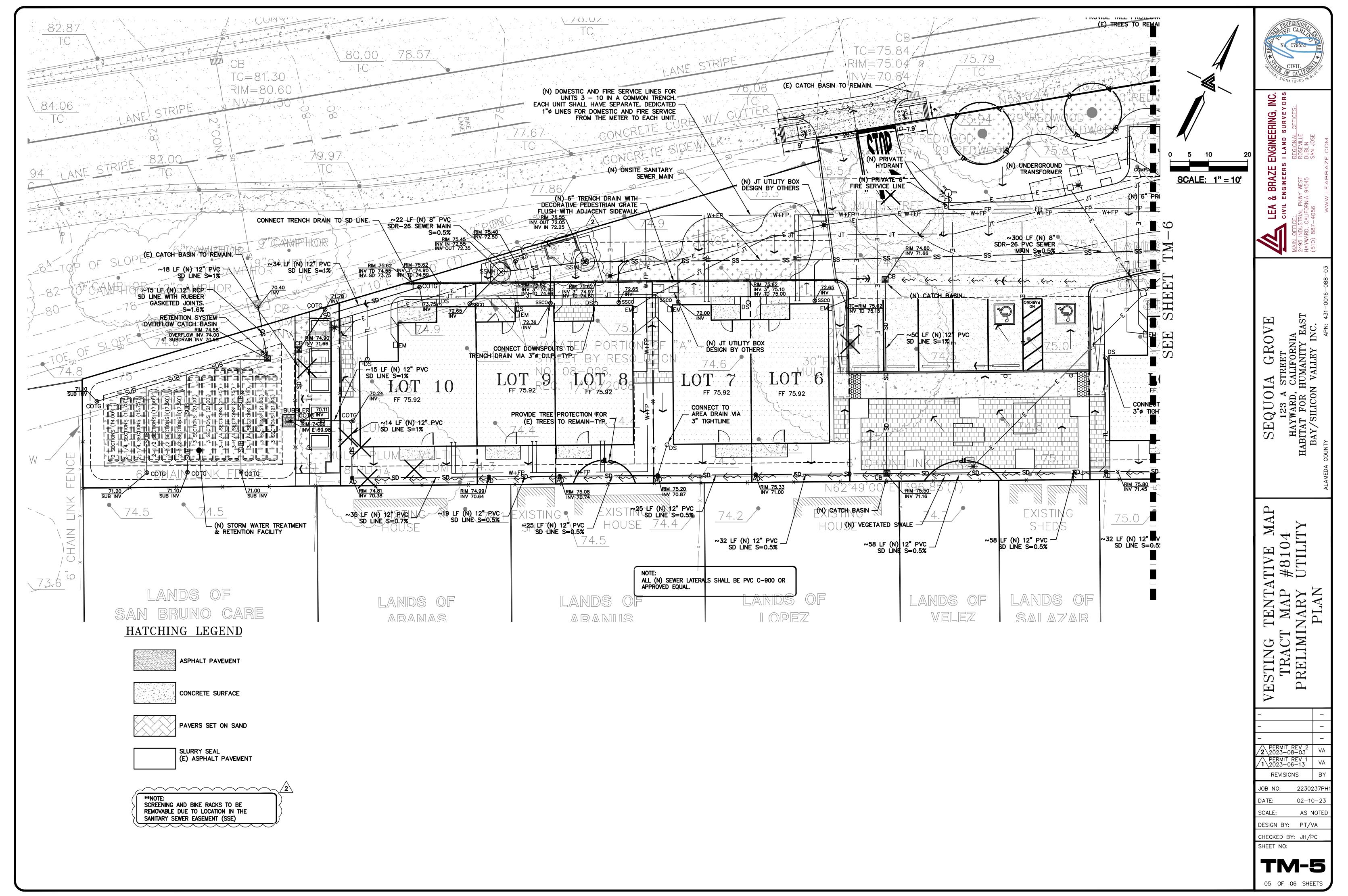
JOB NO: 2230237PH DATE: 02-10-23 SCALE: AS NOTED DESIGN BY: PT/VA

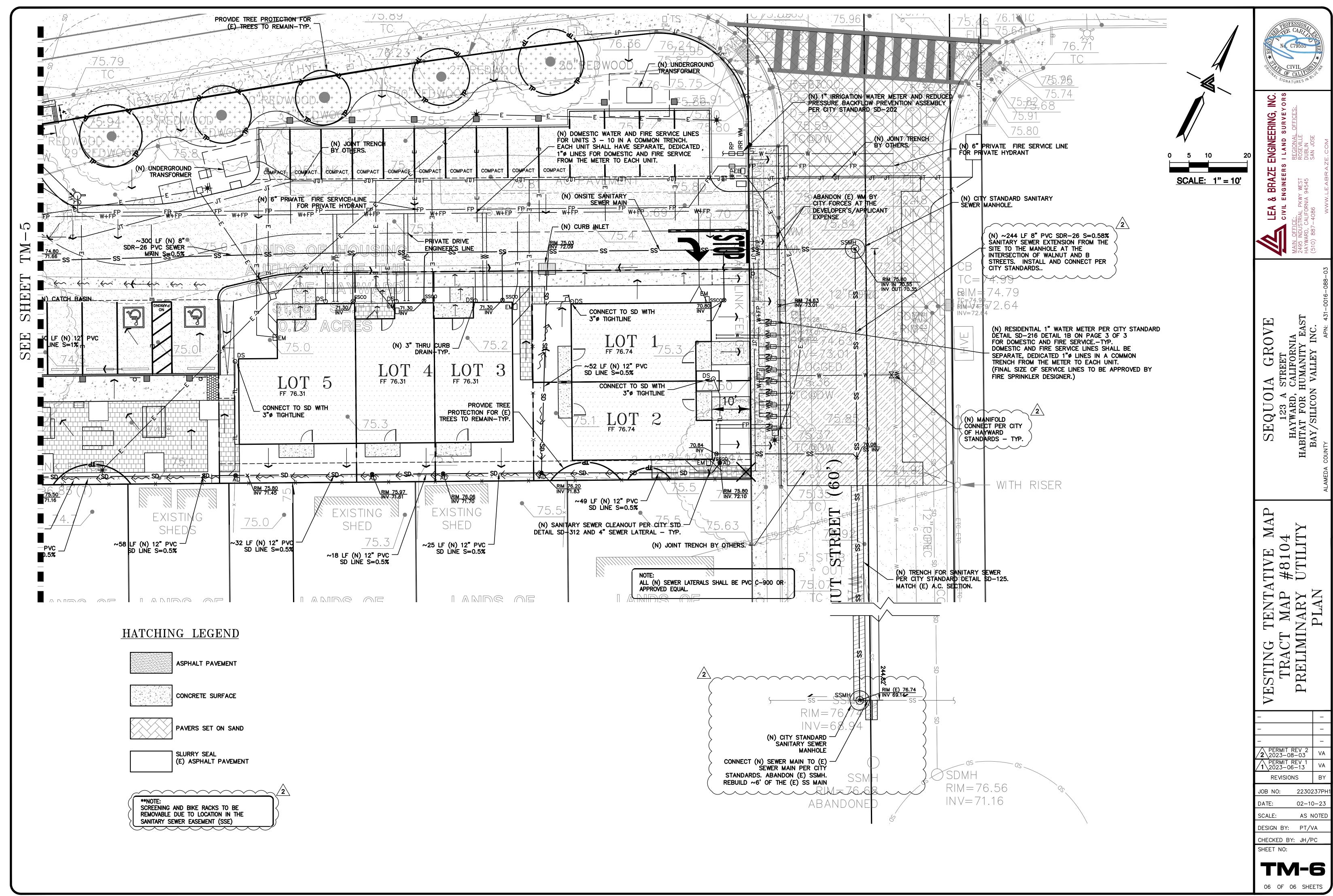
CHECKED BY: JH/PC SHEET NO:

TM-2 02 OF 06 SHEETS

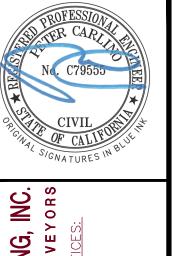












LEA & BRAZE ENGINEERING, INC.

GROVE SEQUOIA

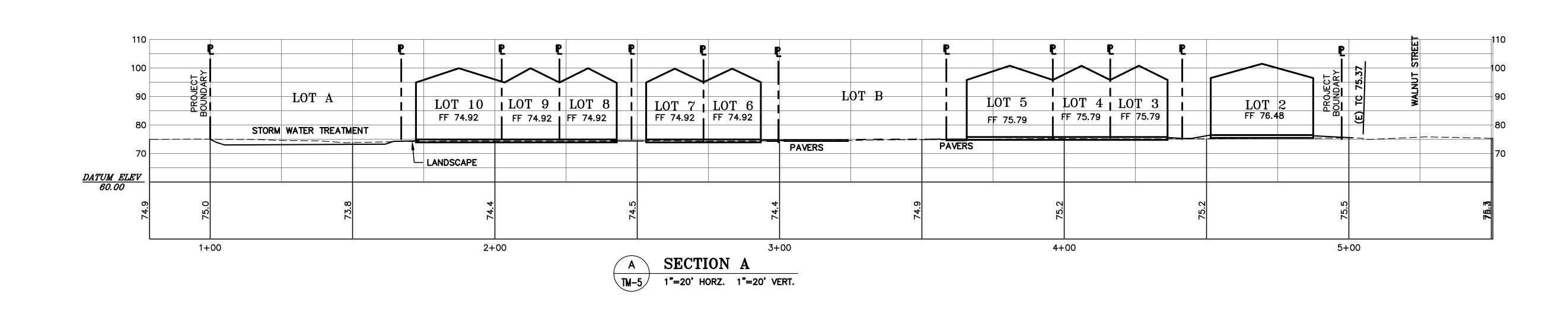
VESTING TENTATIVE MAP
TRACT MAP #8104
PRELIMINARY UTILITY
PLAN

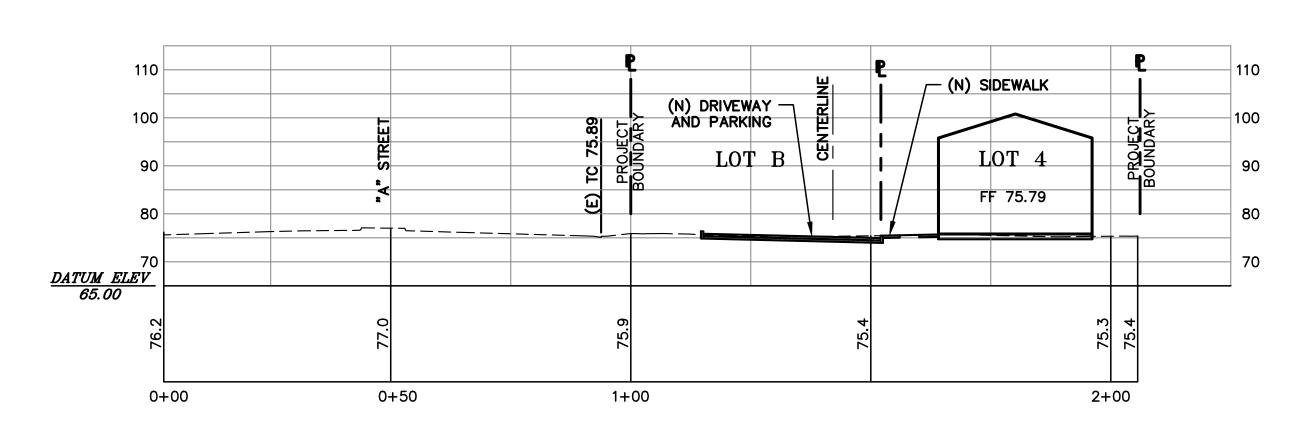
PERMIT REV 2 2023-08-03 VA PERMIT REV 1 2023-06-13 VA REVISIONS

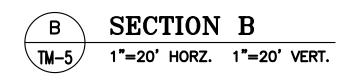
JOB NO: 2230237PH DATE: 02-10-23 SCALE: AS NOTED

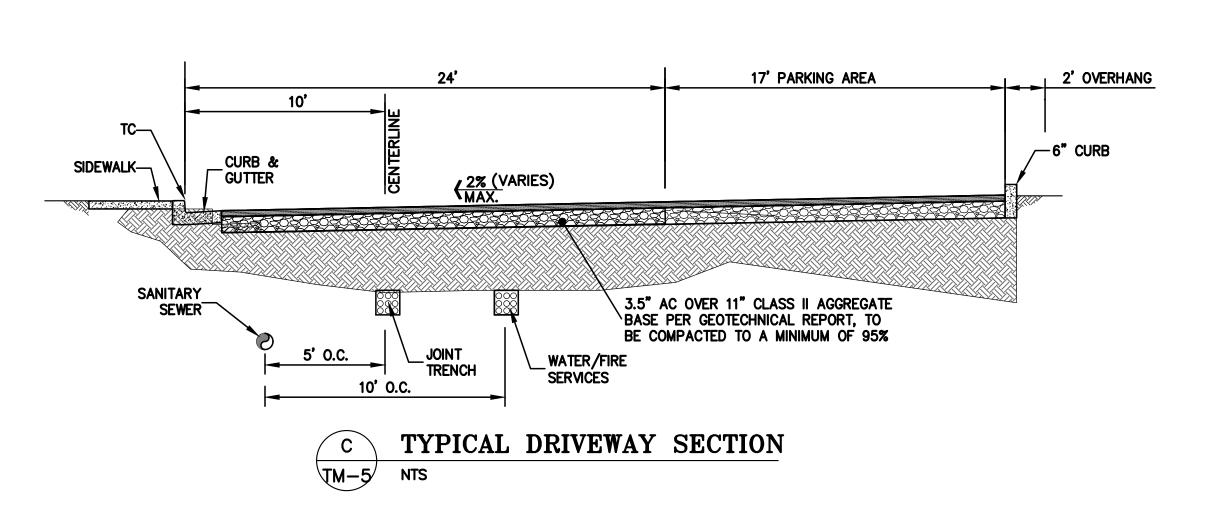
DESIGN BY: PT/VA CHECKED BY: JH/PC SHEET NO:

TM-7 07 OF 06 SHEETS









BRAZE

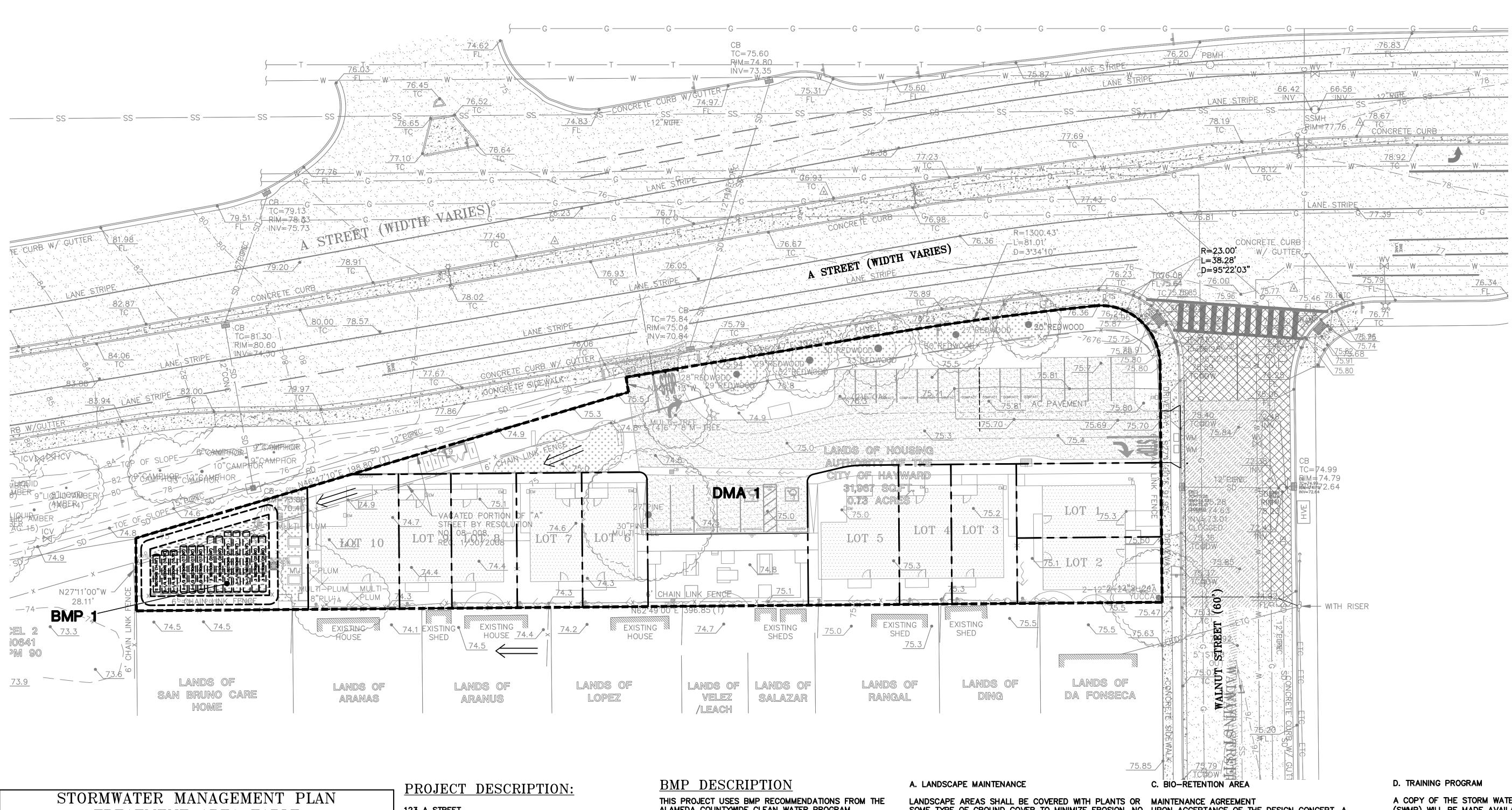
SEQU

1 × 4 F

TIVE #810² UTILI

TEN' MAJ NAR

STII TRA



TREA	ATMENT A	<u>rea tabi</u>	LE
DRAINAGE MANAGEMENT AREAS (DMA)	TOTAL IMPERVIOUS AREA	REQUIRED TREATMENT AREA (4%)	* AVAILABLE TREATMENT ARE
DMA-1 !	19,718 SF	789 SF	1,285 SF

RUNOFF DRAINAGE DIRECTION

AREA DRAIN

CB

DRAINAGE MANAGEMENT AREA

BIORETENTION BMP

123 A STREET HAYWARD, CA 94541

APN: 431-0016-088-03

DESCRIPTION OF FACILITY ACTIVITY:

CONSTRUCT HOUSING AND EXTEND UTILITIES TO SERVE THE RESIDENTS. FRONTAGE IMPROVEMENTS, ROUGH GRADING, DRIVEWAY, AND UTILITY STUBS WILL BE INSTALLED FOR THESE IMPROVEMENTS.

DESCRIPTION OF WATER **BODIES:**

THE PROJECT WILL TIE INTO THE CITY'S EXISTING STORM DRAIN SYSTEM.

IDENTIFICATION OF POTENTIAL POLLUTANTS:

POSSIBLE POLLUTANTS FOR THIS SITE INCLUDE TRASH, SEDIMENTS, NUTRIENTS, DUST, CONSTRUCTION DEBRIS, AUTOMOBILE DEBRIS, AND PESTICIDES. THE CONSTRUCTION OF THE PROJECT AND THE LONG TERM MAINTENANCE SHOULD NOT ADD ANY OF THE FOLLOWING: COPPER, NICKEL, DIAZINON, MERCURY, CHLORIDANE, DDT, DIELDRIN, AND PCB'S.

ALAMEDA COUNTYWIDE CLEAN WATER PROGRAM INCLUDING A BIO-RETENTION AREA.

THE SITE IS APPROXIMATELY 31,984 SF. THE DEVELOPMENT WILL ADD APPROXIMATELY 19,104 SF OF IMPERVIOUS SURFACE. THE SITE WILL RETAIN APPROXIMATELY 40% PERVIOUS SURFACES, INCLUDING LANDSCAPING AREA AND PERVIOUS PAVING MATERIALS.

THE SITE IS COMPRISED OF ONE DRAINAGE MANAGEMENT AREA (DMA). AREA 1 USES A BIO-RETENTION AREA. BIORETENTION AREA SHALL USE A BIORETENTION MIX PER ATTACHMENT L OF THE E.3 TECHNICAL GUIDANCE DATED MAY 14, 2013.

POST CONSTRUCTION BMP MAINTENANCE AND/OR SOURCE **CONTROL**

FUEL, OIL PETROLEUM PRODUCTS, PESTICIDES, AND OTHER STORM DRAINAGE POLLUTANT SPILLS NEED TO BE CONTAINED. OWNERS SHALL USE ABSORBENT MATERIAL ON SMALL SPILLS RATHER THEN HOSING SPILLS DOWN. REMOVE THE ABSORBENT MATERIAL PROMPTLY AND DISPOSE OF PROPERLY, AS REQUIRED BY CITY, STATE AND FEDERAL REGULATIONS.

DRAINAGE INLETS SHALL BE INSPECTED MONTHLY AND KEPT CLEAN OF ANY TRASH THAT MAY HAVE ACCUMULATED. IT IS THE RESPONSIBILITY OF THE PROPERTY MANAGER/OWNER TO HAVE THOSE INSPECTIONS PERFORMED, DOCUMENTED AND ANY REPAIRS MADE.

SOME TYPE OF GROUND COVER TO MINIMIZE EROSION. NO UPON ACCEPTANCE OF THE DESIGN CONCEPT, A AREAS ARE TO BE LEFT AS BARE DIRT THAT COULD ERODE. MOUNDING SLOPES SHALL NOT EXCEED 2 HORIZONTAL TO 1 VERTICAL.

PESTICIDES AND FERTILIZERS SHALL BE STORED AS HAZARDOUS MATERIALS AND IN APPROPRIATE PACKAGING. OVER SPRAYING ONTO PAVED AREAS SHALL BE AVOIDED WHEN APPLYING FERTILIZERS AND PESTICIDES. PESTICIDES AND FERTILIZERS WILL BE PROHIBITED FROM STORAGE OUTSIDE.

THE LANDSCAPE AREAS SHALL BE INSPECTED AND ALL TRASH PICKED UP AND OBSTRUCTIONS TO THE DRAINAGE SLOW-RELEASE FERTILIZER WITH TRACE ELEMENTS. . FLOW REMOVED ON A MONTHLY BASIS MINIMUM. THIS SITE HAS BEEN DESIGNED WITH EFFICIENT IRRIGATION AND DRAINAGE TO REDUCE PESTICIDE USE. PLANTS HAVE AREA. BEEN SELECTED BASED ON SIZE AND ARE SITUATED TO REDUCE MAINTENANCE AND ROUTINE PRUNING.

THE INTEGRATED PEST MANAGEMENT INFORMATION ATTACHED WILL BE PROVIDED TO BUILDING MANAGEMENT.

B. DRAINAGE COLLECTION MANAGEMENT

THE STORM DRAINAGE SYSTEM CONSISTS OF AREA DRAINS, CATCH BASINS, COLLECTION AND DISTRIBUTION PIPING, SWALES, AND CLEAN OUTS. ALL STORM DRAIN INLETS MUST BE LABELED "NO DUMPING-DRAINS TO BAY" USING CITY APPROVED METHODS.

THE STORM DRAINAGE COLLECTION SYSTEM SHALL BE CLEANED YEARLY BY THE PROPERTY MANAGEMENT/OWNER. THE INSPECTION SHALL BE PERFORMED DURING THE DRY SEASON. THIS INCLUDES THE FOLLOWING:

*ALL TRASH AND OBSTRUCTIONS SHALL BE REMOVED FROM AREA DRAINS, BUBBLERS, CLEAN OUTS, AND CATCH BASINS.

MAINTENANCE AGREEMENT WILL BE DEVELOPED REQUIRING CHARGE OF FACILITY MAINTENANCE AND WILL BE THE PROPERTY MANAGER/OWNER TO PROVIDE THE FOLLOWING INFORMATION ON A ROUTINE BASIS. THESE REQUIREMENTS APPLY ONLY TO THE PORTION OF THE BIORETENTION AREA USED FOR STORM WATER TREATMENT.

MAINTENANCE STANDARDS:

*SOILS AND PLANTINGS MUST BE MAINTAINED, INCLUDING ROUTINE PRUNING, MOWING, IRRIGATION, REPLENISHMENT OF MULCH, WEEDING, AND FERTILIZING WITH A

*REMOVE OBSTRUCTIONS AND TRASH FROM BIORETENTION

*ONLY PESTICIDES AND FERTILIZERS THAT ARE ACCEPTED WITHIN THE INTEGRATED PEST MANAGEMENT APPROACH FOR USE IN BIORETENTION AREA SHALL BE USED.

*EROSION AT INFLOW POINTS MUST BE REPAIRED. BIORETENTION AREAS SHALL BE INSPECTED AND MAINTAINED MONTHLY TO REVIEW:

*OBSTRUCTION AND TRASH

*IF PONDED WATER IS OBSERVED, THE SURFACE SOILS SHALL BE REMOVED AND REPLACED AND SUBDRAIN SYSTEM INSPECTED.

*CONDITION OF GRASSES.

A COPY OF THE STORM WATER MANAGEMENT PLANS (SWMP) WILL BE MADE AVAILABLE TO PERSONNEL IN DISTRIBUTED TO THE SUBCONTRACTOR REPRESENTATIVE ENGAGED IN THE MAINTENANCE OR INSTALLATION OF THE BMP'S.

MATERIAL PRESENTED IN THE INTEGRATED PEST MANAGEMENT PROGRAM WILL BE MADE AVAILABLE TO PERSONNEL IN CHARGE OF FACILITY MAINTENANCE AND WILL BE DISTRIBUTED TO THE SUBCONTRACTOR REPRESENTATIVE ENGAGED IN THE MAINTENANCE OR INSTALLATION OF THE BMP'S.

A COPY OF THE YEARLY INSPECTION REPORTS SHALL BE MANAGED BY THE PROPERTY MANAGER/OWNER.

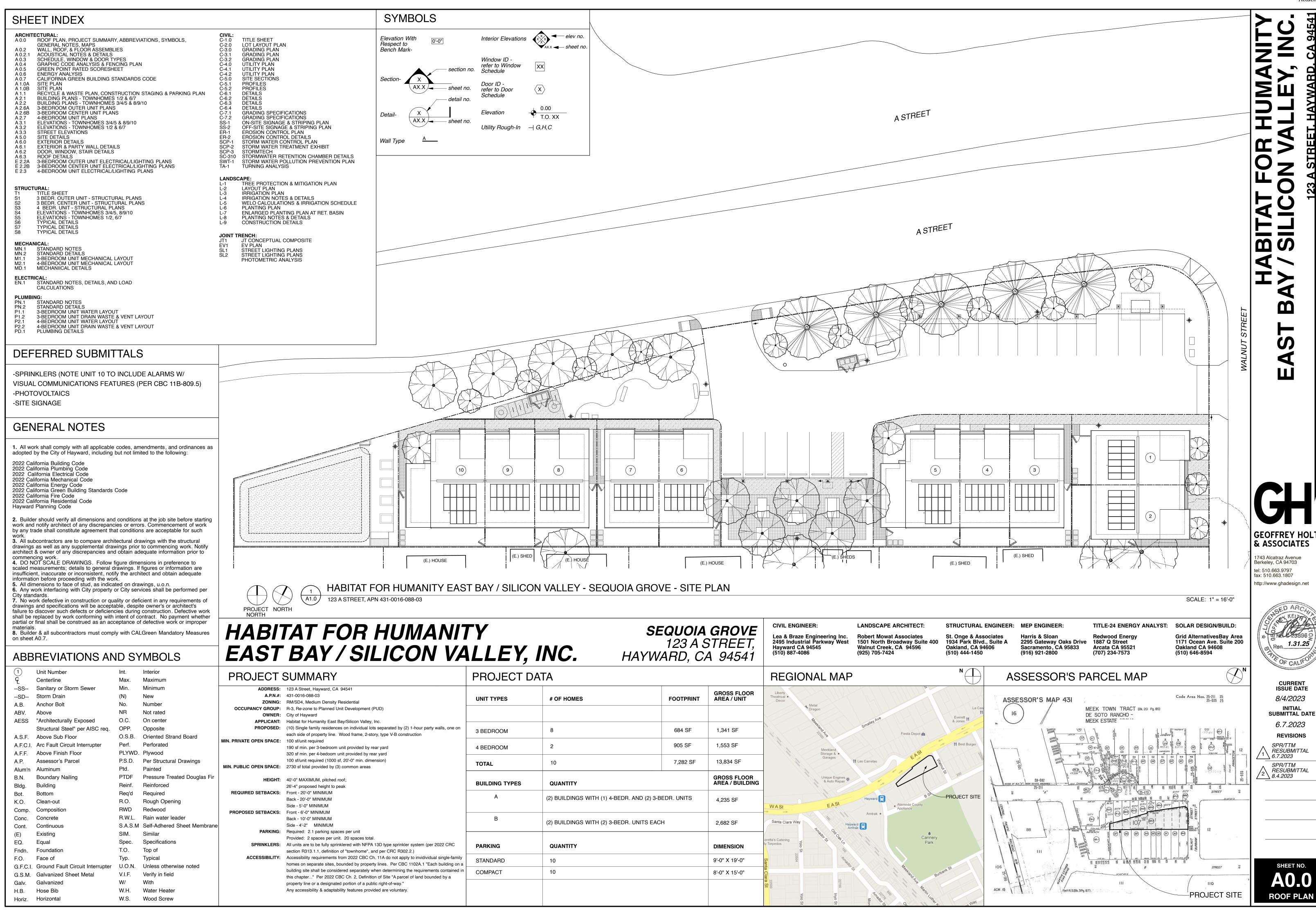
_	_
_	_
_	_
PERMIT REV 2023-08-03	
PERMIT REV 2023-06-13	
REVISIONS	BY
JOB NO: 22	30237PH1
DATE: 02	-10-23
SCALE: A	S NOTED
DESIGN BY: P	T/VA

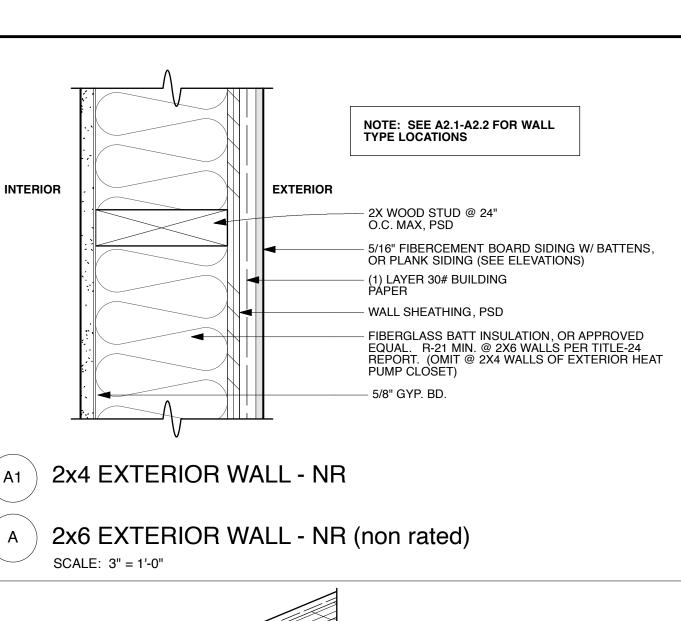
TM-8

08 OF 06 SHEETS

CHECKED BY: JH/PC

SHEET NO:





INTERIOR 'E' ASSEMBLY: 2X4 WOOD STUD @ 24" O.C. MAX. 'E1' ASSEMBLY: 2X6 WOOD STUD @ 24" O.C. MAX.

NOTE: SEE A2.1-A2.2 FOR WALL

TYPE LOCATIONS

FIBERGLASS BATT INSULATION (OR APPROVED EQUAL) @ BATHROOMS ONLY

'E' ASSEMBLY: 5/8" GYP. BD., BOTH SIDES.

'E1' ASSEMBLY: 5/8" GYP. BD., BOTH SIDES.

NOTE: SEE BUILDING PLAN A2.1-A2.2

FOR WALL TYPE LOCATIONS

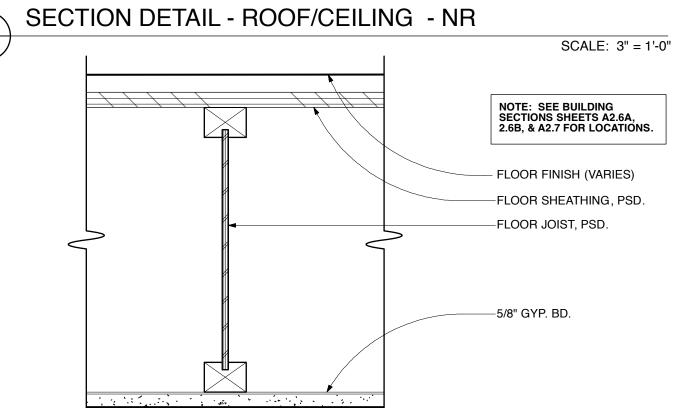
SEE "SOUND CONTROL SPECIFICATIONS" SEC. B, SHEET

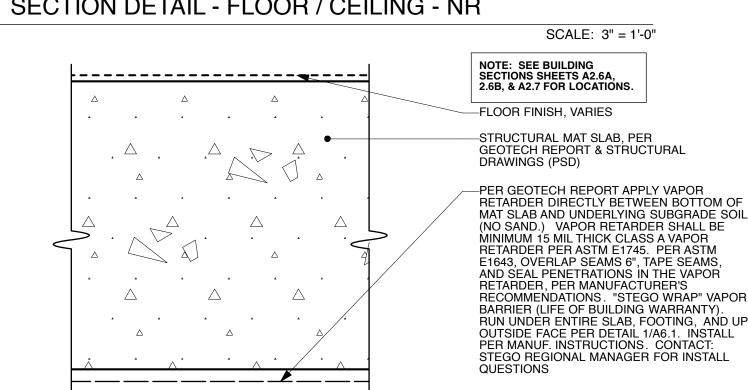
OSB WHERE OCCURS, PSD

(OMIT @ TYPE 'E')

PROPERTY LINE

NOTE: SEE BUILDING SECTIONS SHEETS A2.6A, 2.6B, & A2.7 FOR LOCATIONS. -40 YR. CLASS 'A' ASPHALT SHINGLE, CRRC COOL ROOF (AGED SOLAR REFLECTANCE 0.63, THERMAL EMITTANCE 0.85) -(1) LAYER 30# ROOFING FELT. (2) LAYERS @ ROOF SLOPES OF 3:12 OR LESS. -ROOF SHEATHING (PSD) W/ RADIANT BARRIER, FOIL FACE DOWN. AT 1-HR FIRE WALLS, SUBSTITUTE FIRE-RÉTARDANT-TREATED ROOF SHEATHING FOR A DISTANCE OF 4 FT. (MIN.) WHERE INDICATED, SEE DETAIL 11/A4.2. -UNFACED FIBERGLASS BATT INSULATION, R-13 MIN. PER TITLE-24 REPORT. (INCLUDÉ BAFFLE TO ALLOW ATTIC VENTING @ -TRUSS @ 24" O.C. (2X4 TOP CHORD) -LOOSE FILL CELLULOSE, R-49 MIN. PER TITLE-24 REPORT. APPLIED BTWN & ON TOP OF BOTTOM CHORD OF TRUSS. (INCLUDE BAFFLE TO ALLOW ATTIC VENTING @ EAVES) -TRUSS @ 24" O.C. (2X4 TOP CHORD)





SECTION DETAIL - FLOOR SLAB ON GRADE - NR (non rated) SCALE: 3" = 1'-0"

NOTE: SEE A2.1-A2.2 FOR WALL TYPE LOCATIONS **INTERIOR** (OR INTERIOR) PLUMBING. SEE "SOUND CONTROL SPECIFICATIONS" SEC. F, SHEET A0.2.1. EXTERIOR (OR INTERIOR) WALL FINISH PER ADJACENT WALL TYPE INTERIOR WALLS: FIBERGLASS BATT INSULATION RECOMMENDED ONLY WITHIN STUD BAY CONTAINING PLUMBING EXTERIOR WALLS: FIBERGLASS BATT INSULATION OR APPROVED EQ. (R-21 MIN. - 5/8" GYP. BD. - 2X6 WOOD STUD @ 24" O.C. MAX. PLAN DETAIL - 2x6 INTERIOR WALL - NR PSD. (ALL WALLS W/ PLUMBING TO BE PLAN DETAIL - 2x6 WALL with PLUMBING - NR PLAN DETAIL - 2x4 INTERIOR WALL - NR

1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped. 2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer

plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound. **3. Gypsum Board*** — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

4. **Steel Corner Fasteners** — (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails

5. Batts and Blankets* — (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities. 12. Non-Bearing Wall Partition Intersection — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud

SCALE: 3" = 1'-0"

FIRE RATING:

PENETRATIONS IN 1-HR. FIRE RATED ASSEMBLIES SHOULD BE PROTECTED WITH 1-HR. FIRE RATED CAULK (ASTM E814 OR UL 1479). THIS INCLUDES, BUT IS NOT LIMITED TO CAULK AROUND PLUMBING, OUTLET BOXES, SWITCHING BOXES, LIGHT FIXTURES, CABLE BOXES, DATA BOXES, ETC. SEE A0.2.1 FOR MORE INFORMATION ON ACOUSTICAL & FIREPROOF SEALANTS. PLUMBING PENETRATIONS TO BE CAST IRON, COPPER, OR IRON PIPE. SEALED W/ MIN. 1-HR

NO PLUMBING IN PARTY WALLS TO MAINTAIN ACOUSTICAL SEPARATION AND PER CRC R302.2 FOR FIRE-RATED PARTY WALLS IN TOWNHOUSES.

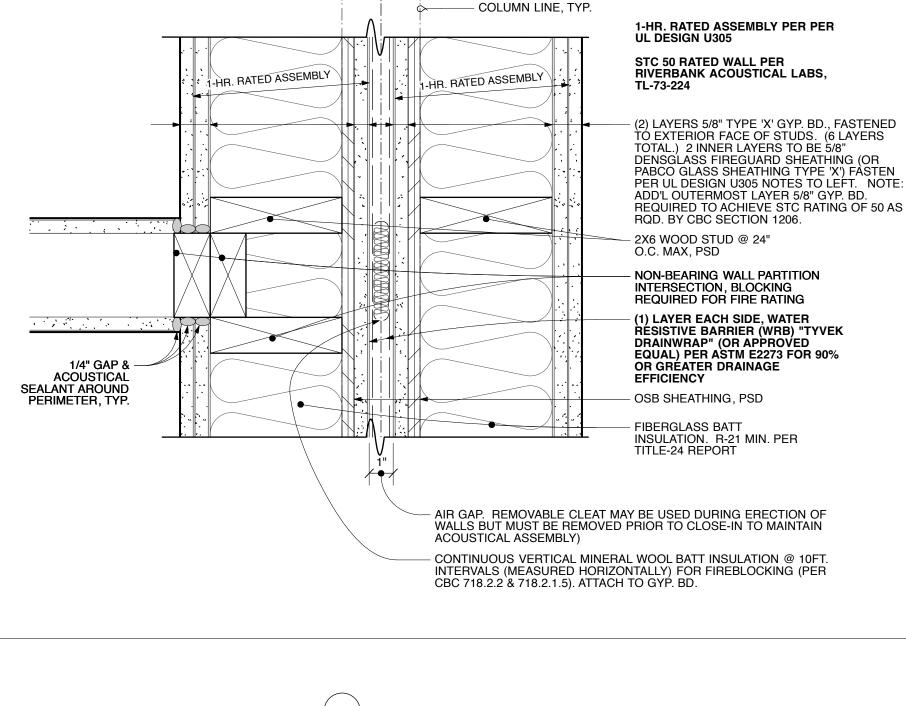
EXCEPTION: SMALL-DIAMETER COPPER CONDENSATE DRAIN LINE MAY RUN FROM HOT WATER HEATER CLOSET IN 3 BEDR. UNITS TO EXTERIOR (SEE PLUMBING DWGS.) FIRE CAULK/SEAL

PLAN DETAIL

(c) (2) 1-HR RATED FIRE WALLS, 50 STC TOTAL

depth shall be at a minimum equal to the depth of the bearing wall.

SCALE: 3" = 1'-0"



SCALE: 3" = 1'-0"

3 1/4" F.O.F.

FIRE RATING:

1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped. 2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

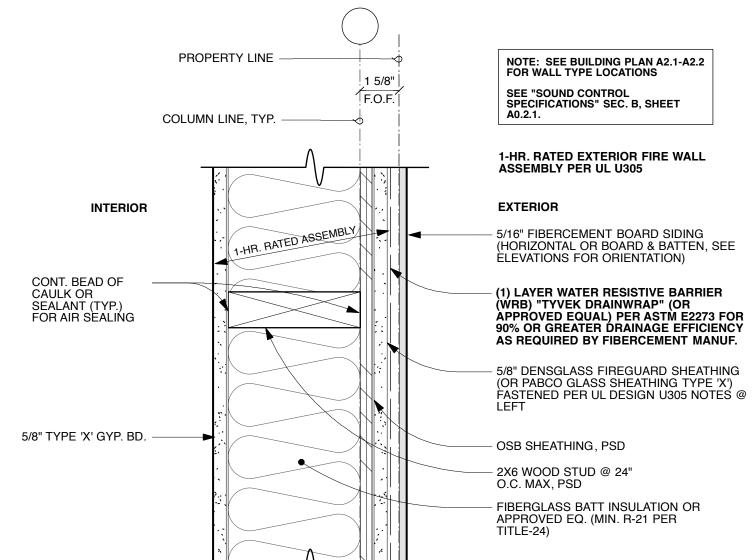
3. Gypsum Board* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. 4. Steel Corner Fasteners — (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high

on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails 5. **Batts and Blankets*** — (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral

wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities. 12. **Non-Bearing Wall Partition Intersection** — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud

PENETRATIONS IN 1-HR. FIRE RATED ASSEMBLIES SHOULD BE PROTECTED WITH 1-HR. FIRE RATED CAULK (ASTM E814 OR UL 1479). THIS INCLUDES, BUT IS NOT LIMITED TO CAULK AROUND PLUMBING, OUTLET BOXES, SWITCHING BOXES, LIGHT FIXTURES, CABLE BOXES, DATA BOXES, ETC. SEE A0.2.1 FOR MORE INFORMATION ON ACOUSTICAL & FIREPROOF SEALANTS.

PLUMBING PENETRATIONS TO BE CAST IRON, COPPER, OR IRON PIPE. SEALED W/ MIN. 1-HR RATED FIRE CAULK.



PLAN DETAIL B 2x6 EXTERIOR WALL - 1 HR. RATED

depth shall be at a minimum equal to the depth of the bearing wall.

SCALE: 3" = 1'-0"

SECTION DETAIL - FLOOR / CEILING - NR

ASSEMBLIES

SUBGRADE PER GEOTECH REPORT (NO

GEOFFREY HOLTON

& ASSOCIATES

1743 Alcatraz Avenue Berkeley, CA 94703 tel: 510.663.9797 fax: 510.663.1807

http://www.ghadesign.net

CURRENT

ISSUE DATE

8.4.2023

INITIAL

SUBMITTAL DATE

6.7.2023

REVISIONS

RESUBMITTAL

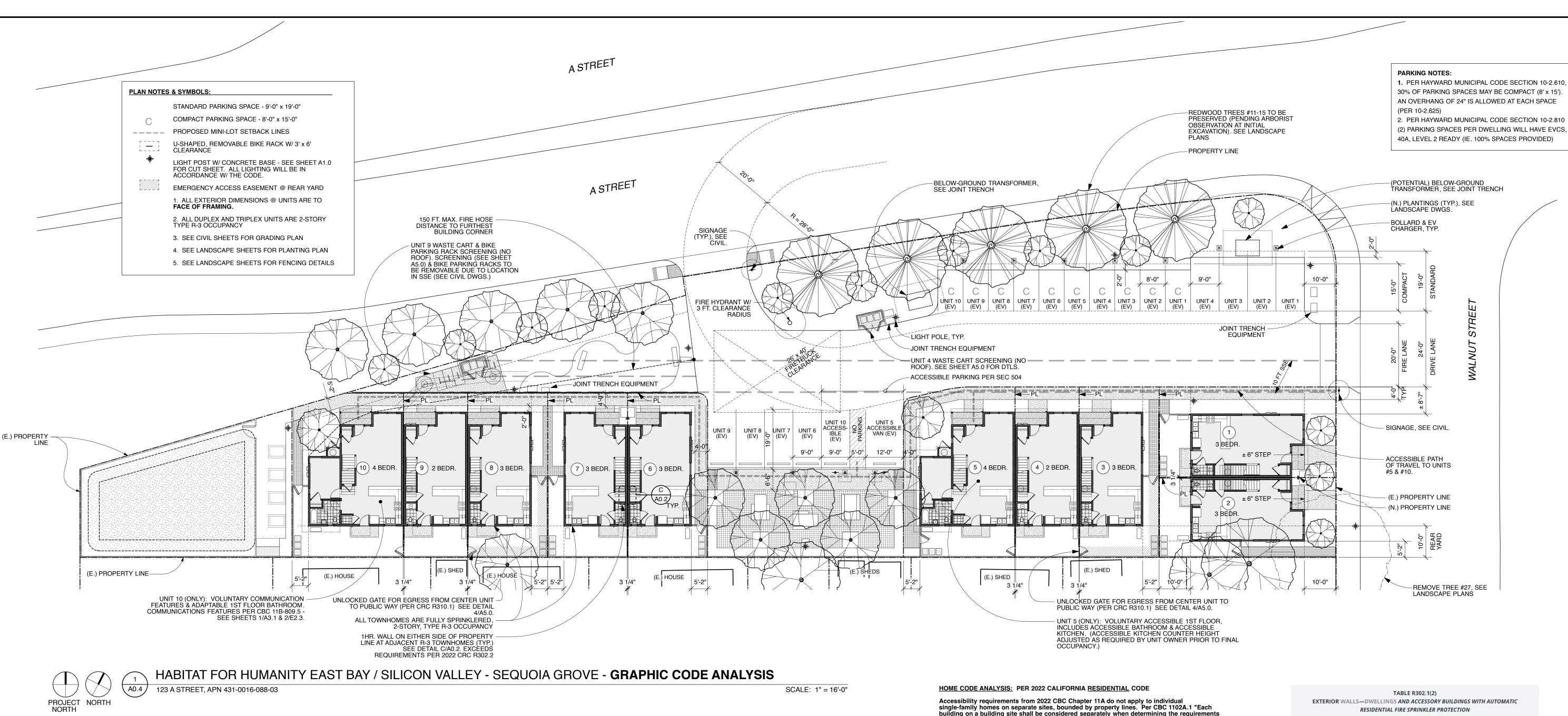
RESUBMITTAL

SPR/TTM

SPR/TTM

1 6.7.2023

¹ \ 8.4.2023



-NO FENCE @ PL

NOTE:
SEE CIVIL DRAWINGS FOR EXACT LOCATIONS OF FENCES & RETAINING WALLS RELATIVE TO THE PERIMETER SITE PROPERTY LINE SEE LANDSCAPE DRAINGS FOR FENCE DETAILS.

WOOD &

FENCE

(N.) 6'-0" HIGH SOLID WOOD

FENCÉ

PROPOSED FENCING PLAN

(N.) 6' HIGH -WOOD & WIRE FENCE

(N.) 6'-0" HIGH SOLID WOOD FENCE

- NO FENCE

NO FENCE @ PL

- NO FENCE

(N.) 6'-0" HIGH SOLID WOOD

(PŔIVACY) FENCE - ENTIRE LENGTH

(N.) 6'-0" HIGH SOLID

WOOD (PRIVACY)

Accessibility requirements from 2022 CBC Chapter 11A do not apply to individual single-family homes on separate sites, bounded by property lines. Per CBC 1102A.1 "Each building on a building site shall be considered separately when determining the requirements contained in this chapter..." Per 2022 CBC Chapter 2, Definition of Site "A parcel of land bounded by a property line or a designated portion of a public right-of-way."

All units are to be fully sprinklered with NFPA 13D type sprinkler system (per 2022 CRC section R313.1.1, definition of "townhome", and per CRC R302.2.)

The 2022 CRC will be used for all building code related to the homes.

CRC R302.1 Exterior Walls

Construction, projections, openings and penetrations of exterior walls of dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section R313 shall comply with Table R302.1(2).

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine 2. Walls of individual dwelling units and their accessory structures located on the same lot.

Refer to table at right, R302.1(1) EXTERIOR WALLS—DWELLINGS AND ACCESSORY BUILDINGS WITH AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION

CRC R302.2 Townhouses

The definition of townhouse will apply to all buildings (per CRC Ch. 2 Definitions.) Therefore a MINIMUM 1hr. fire resistance rated COMMON wall is adequate between adjacent units as long as this wall does not contain plumbing or mechanical equipment.

HOWEVER, (2) 1-HR. RATED WALLS ARE PROVIDED. SEE DETAIL C/A0.2 CRC R302.2.1 Continuity

below the porch roof.

DETAIL C/A0.2

-NO FENCE @ PL

- (N.) 6'-0" HIGH SOLID WOOD (PRIVACY)

SCALE: 1" = 30'-0"

Per this section, the common wall must extend up to the underside of the roof. CRC R302.2.2 Parapets

Per the exception in this section, parapets are not required through the use of a minimum Class C

roof covering AND the roof decking (or sheathing) is of non-combustible materials (or approved fire retardant-treated wood) for a distance of 4 ft. on each side of the common wall or walls. Per #3 in this same section, the common wall must be a min. 1hr. rated above the level of the porch roof to the underside of the of the higher roof deck. The same is true for the common wall

CRC R302.2.4 Structural independence

Per exception 1, the project is not required to separate the foundations of 2 units at the common

Per exception 2, roof structure and wall sheathing may fasten to the common wall Per exception 3, roof coverings do not need to be structurally independent. Asphalt shingles, but

not sheathing, can be laid continuously over the top of the common wall. Per exception 5, for buildings considered townhomes, these homes may share a common 1 hr.

rated wall and therefore do not need to be structurally independent. HOWEVER, (2) STRUCTURALLY INDEPENDANT 1-HR. RATED WALLS ARE PROVIDED. SEE

CRC R310.1 Emergency escape and rescue required. Emergency escape and rescue

openings shall open directly into a public way, or to a yard or court that opens to a public way. AN UNLOCKED GATE BETWEEN REAR YARDS IS SHOWN ON THE SITE PLAN A0.0 & A1.0 PER 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

All subcontractors must comply with CALIFORNIA GREEN BUILDING STANDARDS CODE Mandatory Measures on sheet A0.7.

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING					
Walls	Fire- resistance rated	1 hour—tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the <i>California Building Code</i> with exposure from the outside	0 feet				
	Not fire- resistance rated	0 hours	3 feet ^a				
	Not allowed	NA	< 2 feet				
Projections	Fire- resistance rated	1 hour on the underside, or heavy timber, or fire- retardant-treated wood ^{b, c}	2 feet ^a				
	Not fire- resistance rated	0 hours	3 feet				
Openings in	Not allowed	NA	< 3 feet				
walls	Unlimited	0 hours	3 feet ^a				
D	A.II	Comply with Section R302.4	< 3 feet				
Penetrations	All	None required	3 feet ^a				

For SI: 1 foot = 304.8 mm. NA = Not Applicable.

- a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler system installed in accordance with Section R313, the fire separation distance for exterior walls not fire-resistance rated and for fire-resistance-rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.
- b. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof
- c. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

GEOFFREY HOLTON & ASSOCIATES 1743 Alcatraz Avenue Berkeley, CA 94703 tel: 510.663.9797 fax: 510.663.1807 http://www.ghadesign.net

> SPR/TTM RESUBMITTAL 1 6.7.2023SPR/TTM RESUBMITTAL 2 8.4.2023

CURRENT

ISSUE DATE

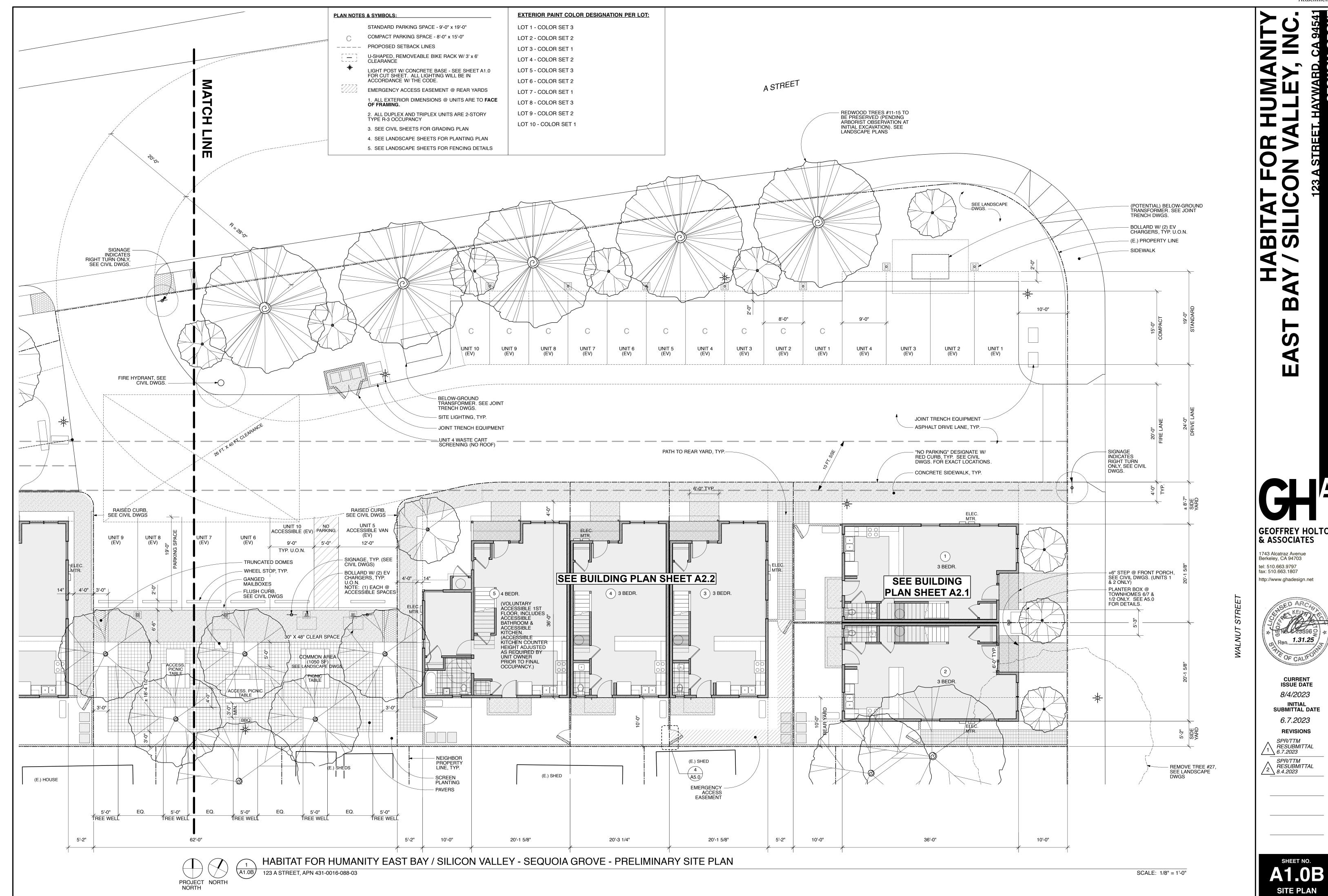
8/4/2023

SUBMITTAL DATE

6.7.2023

REVISIONS

Attachment IV

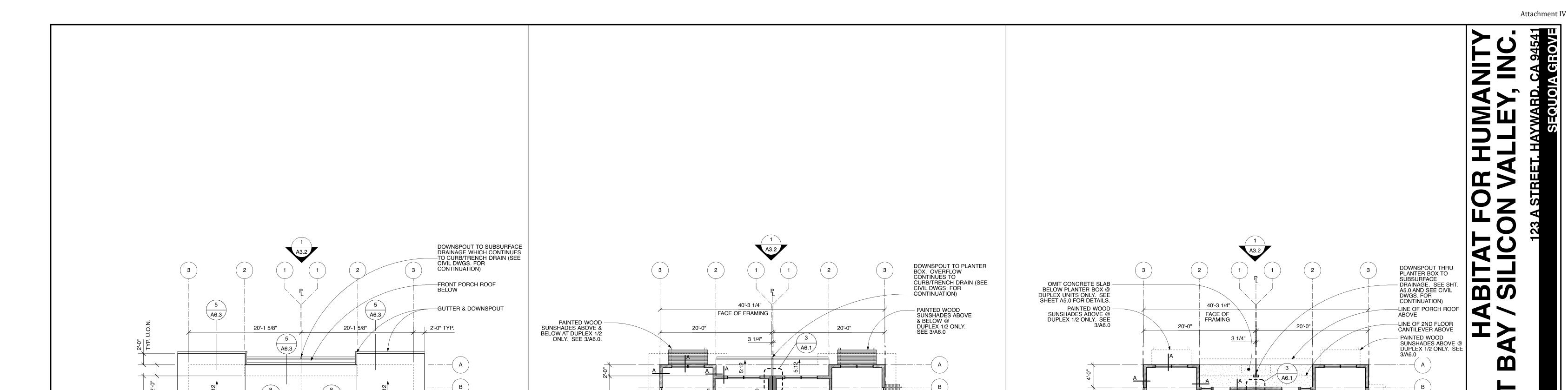


Attachment IV

GEOFFREY HOLTON & ASSOCIATES







3 BEDROOM

UNITS 2 & 6 (SEE A2.6A)

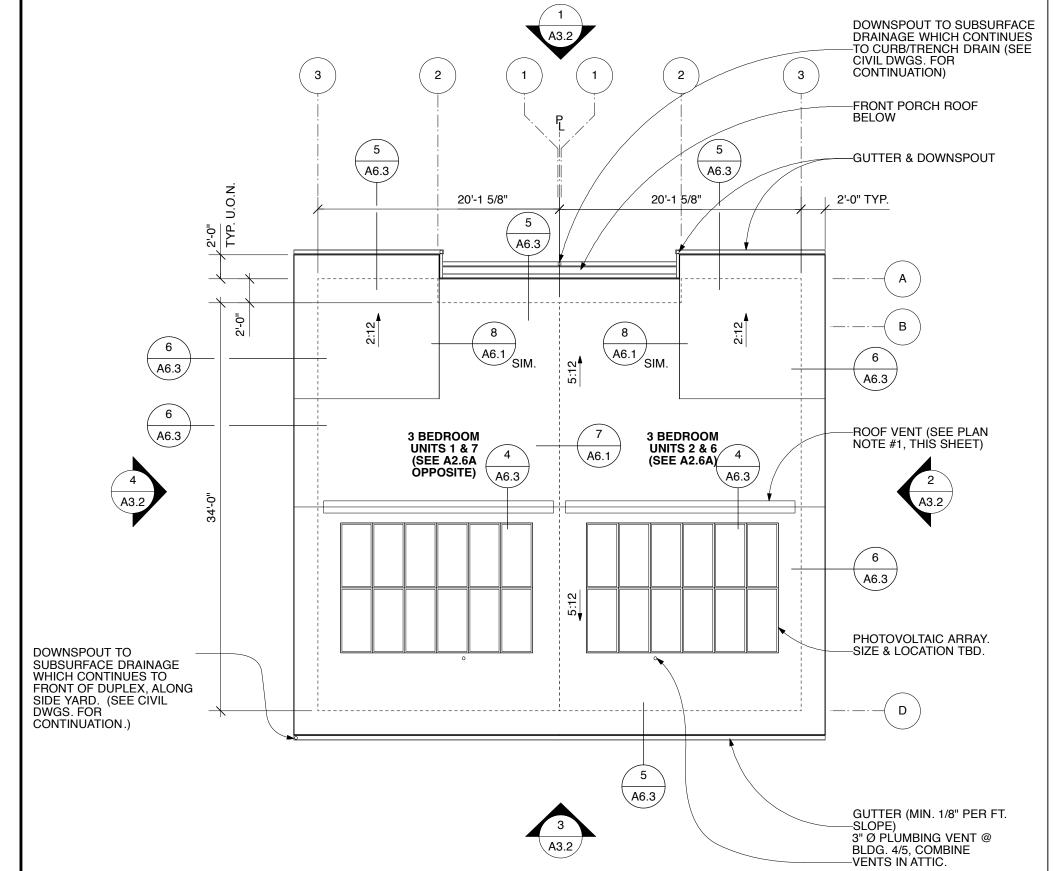
3 BEDROOM

UNITS 1 & 7 (SEE A2.6A

DOWNSPOUT TO

SUBSURFACE DRAINAGE

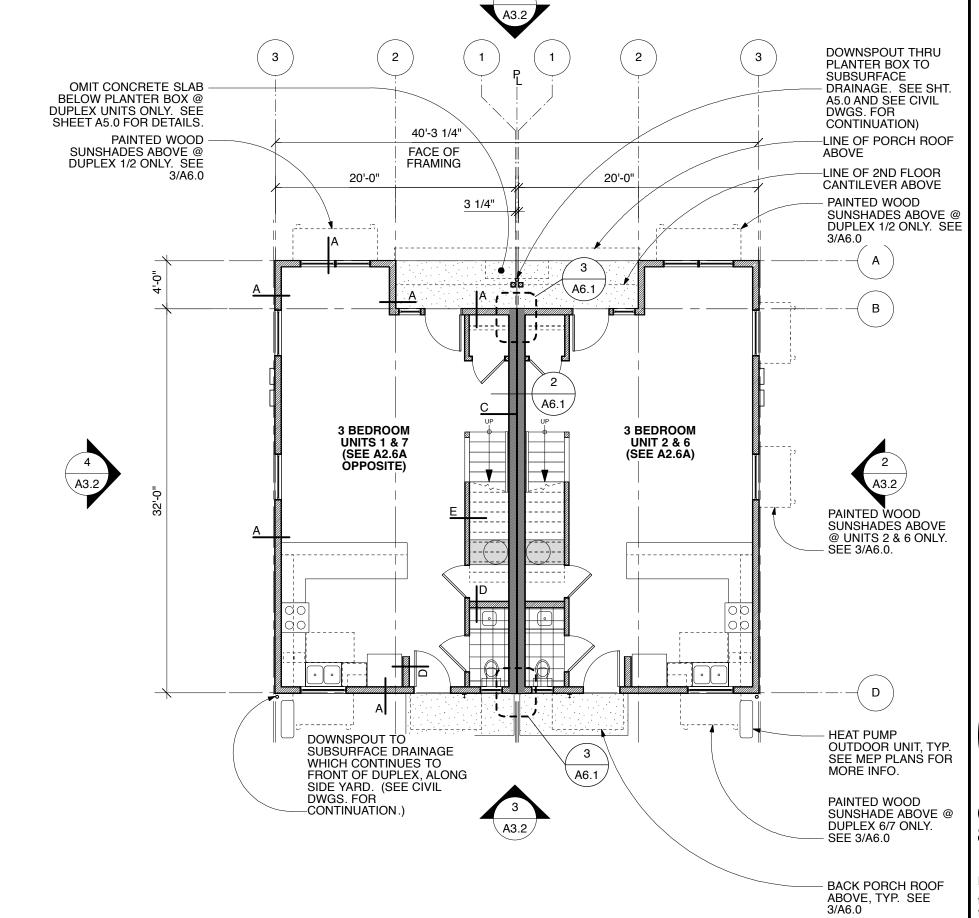
WHICH CONTINUES TO FRONT OF DUPLEX, ALONG



ROOF PLAN - TOWNHOMES 1/2 & 6/7

SIDE YARD. (SEE CIVIL DWGS. FOR -CONTINUATION.) BACK PORCH ROOF BELOW. SEE 3/A6.0 2ND FLOOR PLAN - TOWNHOMES 1/2 & 6/7 SCALE: 1/8" = 1'-0"

\A6.1



1ST FLOOR PLAN - TOWNHOMES 1/2 & 6/7 SCALE: 1/8" = 1'-0"

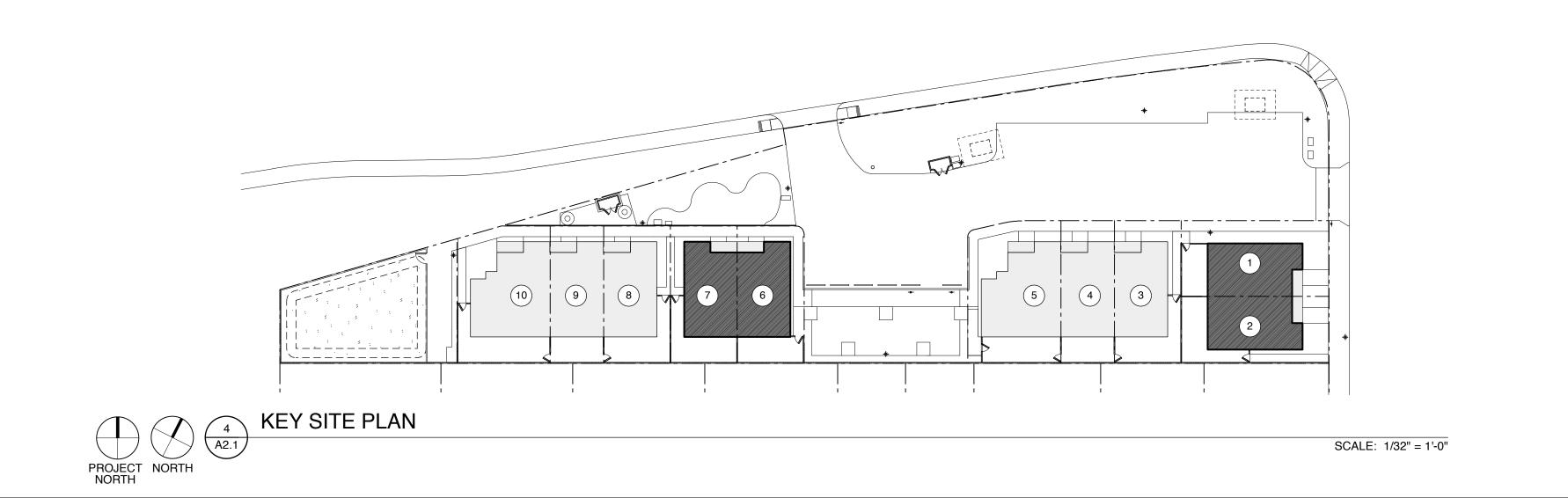
PLAN NOTES & SYMBOLS:

PER 2022 CBC SECTION 1203.2, THE NET FREE VENTILATION AREA (NFVA) SHALL BE NOT LESS THAN 1/300 OF THE AREA OF THE SPACE VENTILATED, WITH 50% OF THE REQUIRED VENTILATION AREA PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FT. ABOVE EAVE OR CORNICE VENTS W/ THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

VENTING AREA OF **3 BEDR. UNIT ATTIC** = 705 SF / 300 = 338 SQ. IN. / 2 =**169 SQ. IN.**REQUIRED AT UPPER AND LOWER PORITION OF ROOF.UPPER: (1) CONTINUOUS ROOF RIDGE VENT @ 12 SQ. IN NFVA / 1 LINEAL FT. = 12 SQ. IN. x 20 FT. = 240 SQ. IN. LOWER: (3) 2" \emptyset HOLES (3.14 SQ. IN.) @ 18 TRUSS BAYS = 169 SQ. IN.

SCALE: 1/8" = 1'-0"

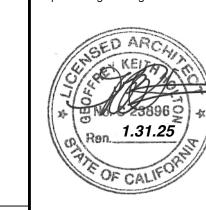
2. ALL DIMENSIONS ARE MEASURED TO FACE OF FRAMING (F.O.F.), UNLESS OTHERWISE NOTED. (U.O.N.)



PAINTED WOOD SUNSHADES ABOVE & BELOW @ UNIT 2 & 6 ONLY

PAINTED WOOD SUNSHADES (BELOW) @ BUILDING 6/7 ONLY. SEE

GEOFFREY HOLTON & ASSOCIATES 1743 Alcatraz Avenue Berkeley, CA 94703 tel: 510.663.9797 fax: 510.663.1807 http://www.ghadesign.net

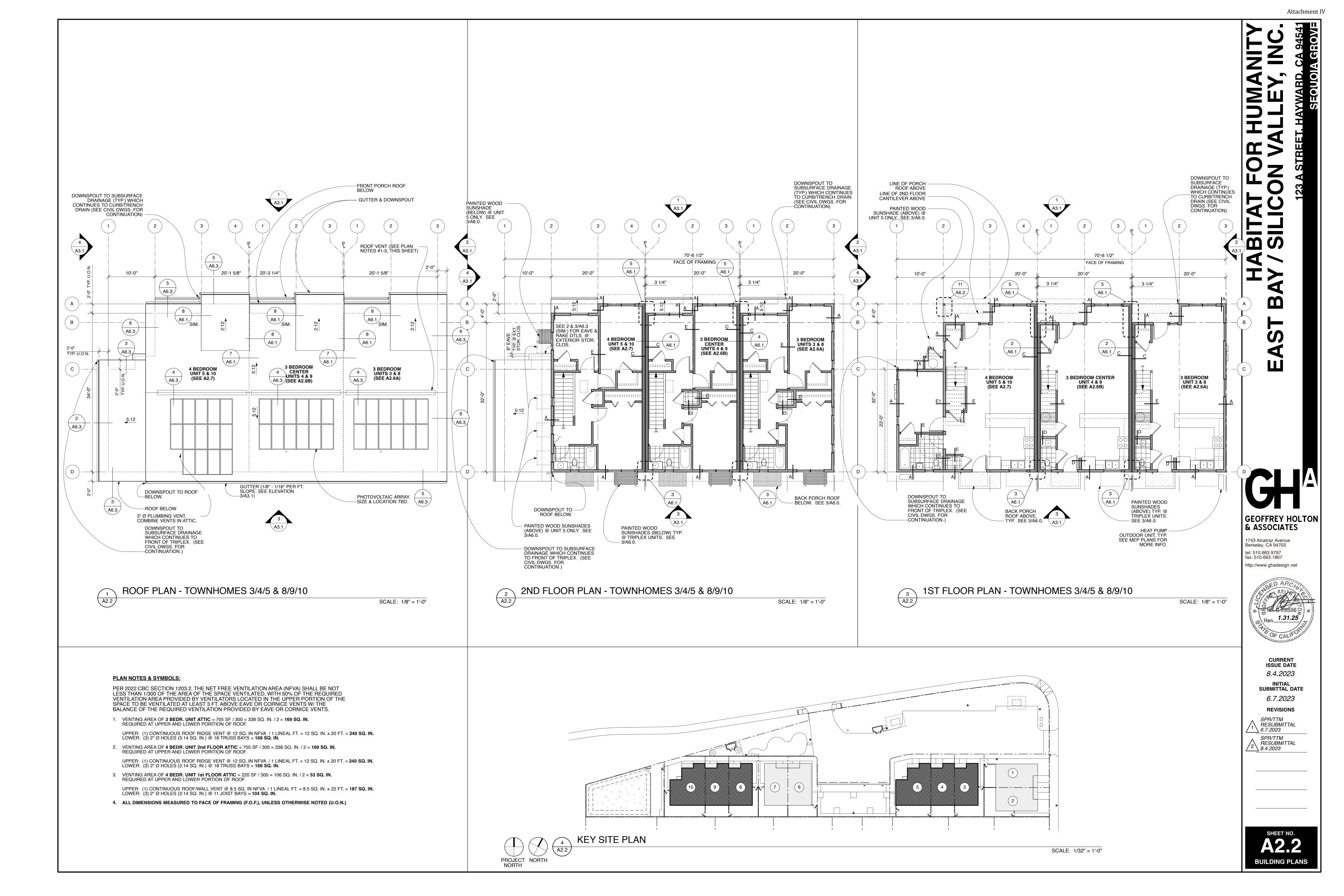


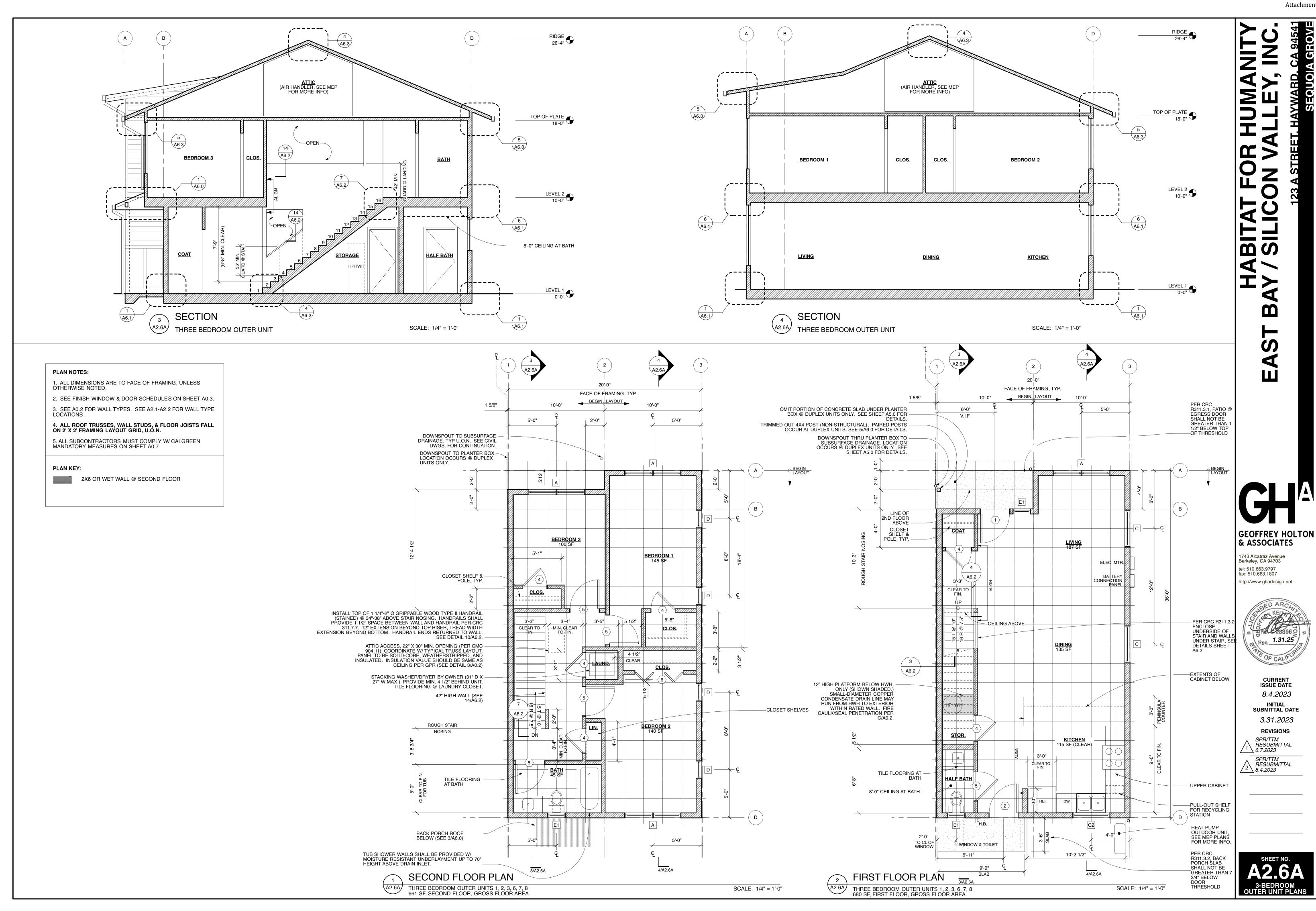
CURRENT ISSUE DATE 8.4.2023 SUBMITTAL DATE 6.7.2023

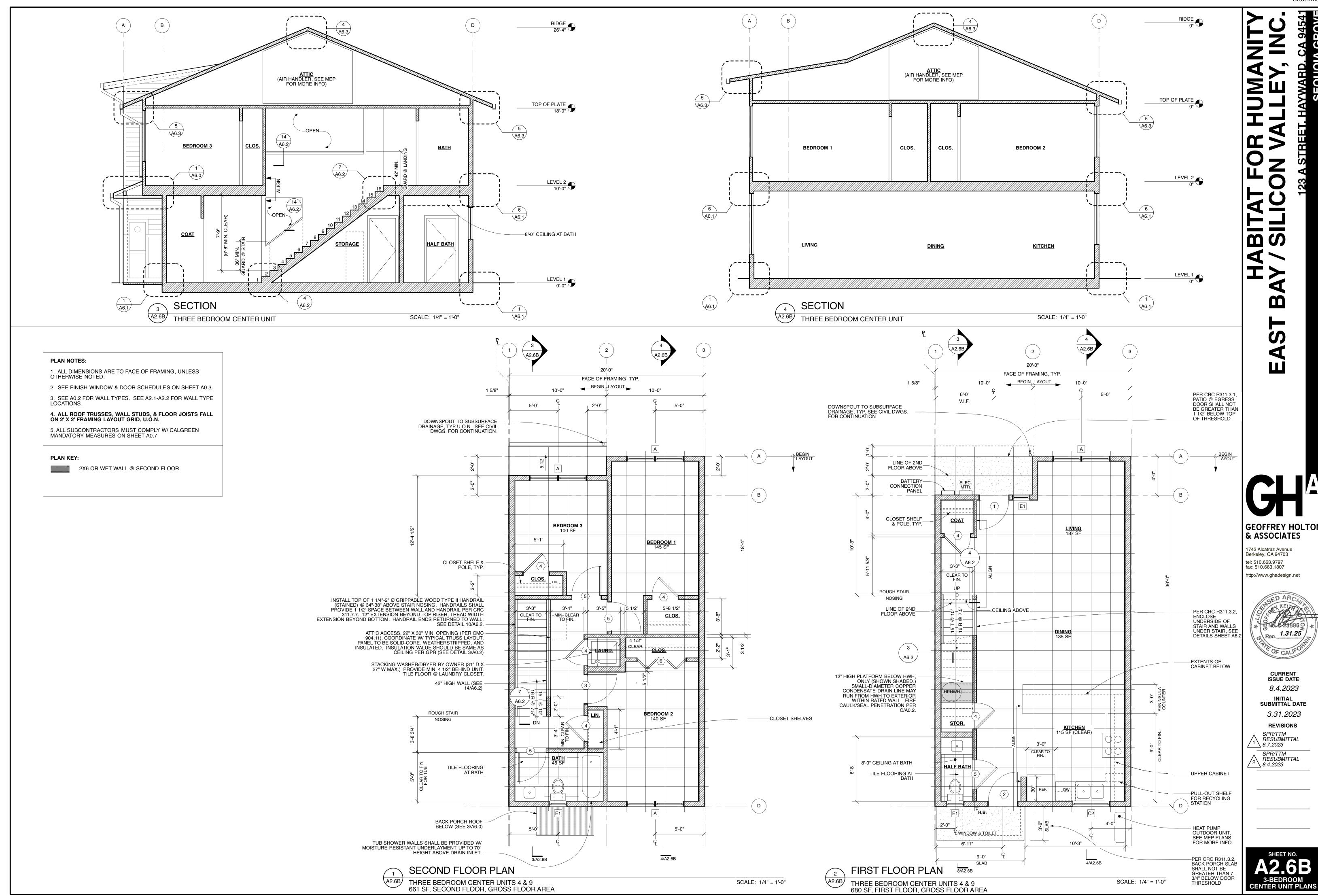
REVISIONS RESUBMITTAL 6.7.2023

SPR/TTM RESUBMITTAL 8.4.2023



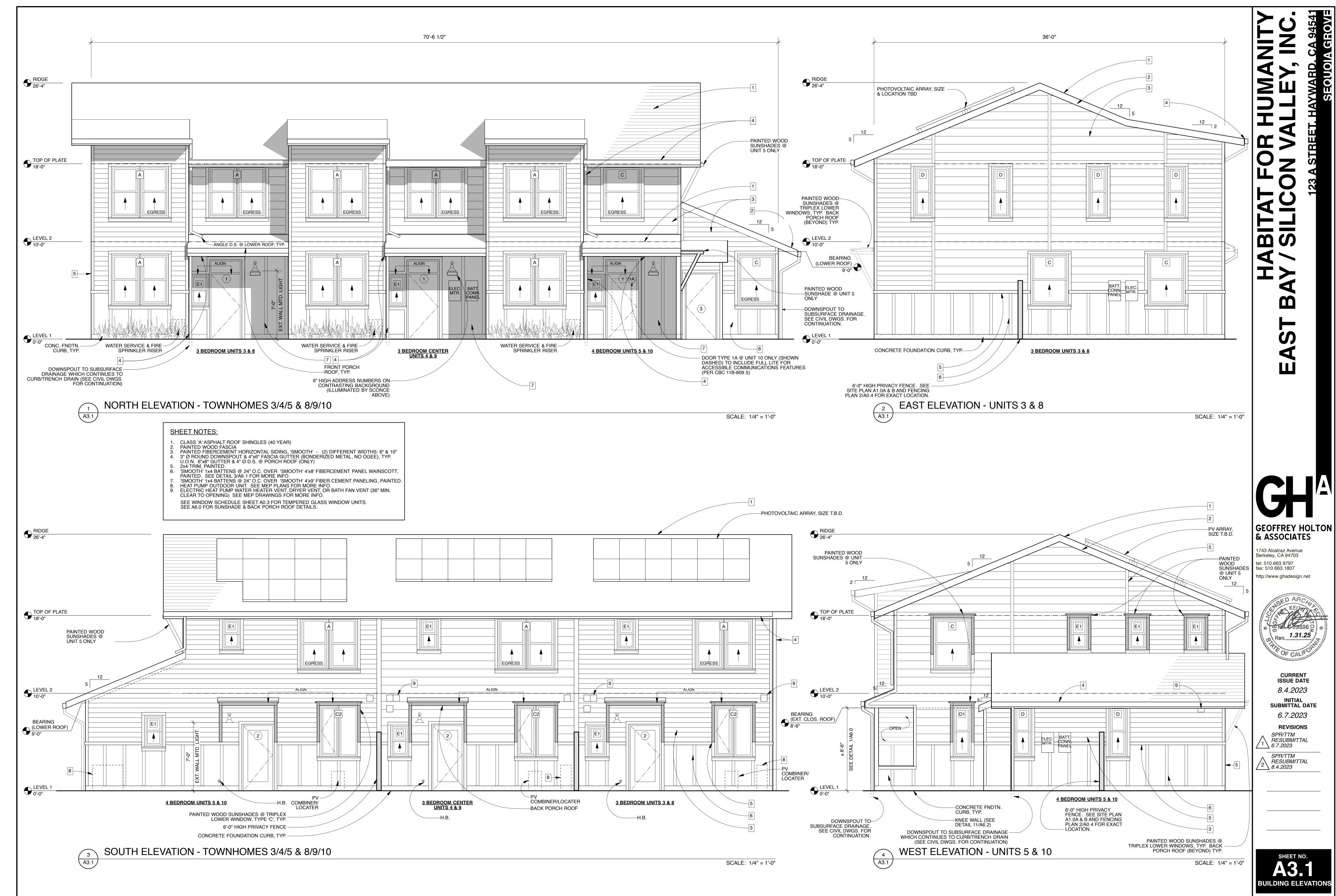






Attachment IV

GEOFFREY HOLTON



GEOFFREY HOLTON

Attachment IV



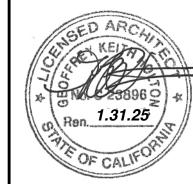
BUILDING ELEVATIONS



GEOFFREY HOLTON & ASSOCIATES

GEOFFREY HOLTON & ASSOCIATES

Attachment IV



ISSUE DATE 8.5.2023 SUBMITTAL DATE 6.7.2023 REVISIONS

RESUBMITTAL 6.7.2023

SHEET NO. SITE DETAILS

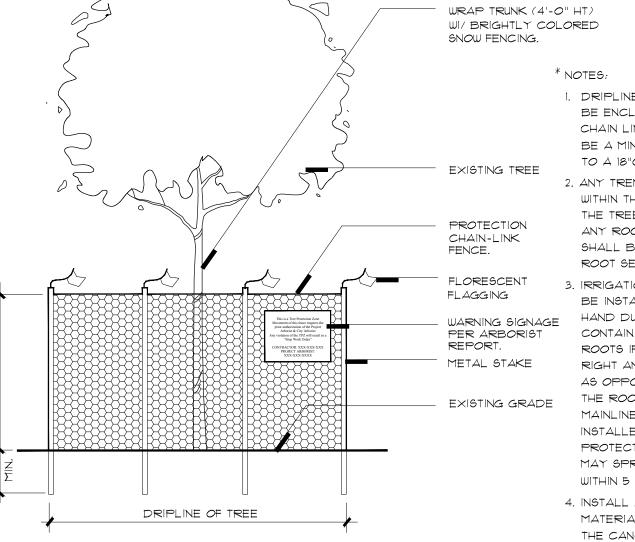
FENCE CONC. FOOTING @ EXISTING TREE #23 SHALL BE LOCATED -CENTERED AROUND THE TREE #23 TO MINIMIZE IMPACT TO THE TREE. CUTS TO THE ROOTS SHALL BE CLEAN AND THE TREATMENT TO THE ROOTS AFTER THE CUTS SHALL BE DONE UNDER THE PROJECT ARBORIST'S RECOMMENDATIONS.

TREE PROTECTION NOTES:

 HAND DIG OR USE AN AIRSPADE TO TRENCH ADJACENT TO REDWOODS #11-15 ALONG THE PROPOSED PERIMETER FOOTING FOR THE DRIVEWAY WHERE WITHIN 12' OF THE TREES. THE TRENCHING SHALL AVOID ANY DAMAGE TO ROOTS OVER 2" IN DIAMETER AND SHALL EXTEND DOWN TO THE DEPTH OF THE PROPOSED FOOTING. DESIGN ADJUSTMENTS, SUCH AS BRIDGING THE ROOTS, TO AVOID DAMAGE TO ROOTS OVER 2" WILL BE NECESSARY TO AVOID SIGNIFICANT DAMAGE TO THE TREES.

A STREET

- ESTABLISH A TREE PROTECTION ZONE (TPZ) AROUND TREES #1-15, 23, 24 AND 26 AS INDICATED ON THE tree INVENTORY MAP USING 6' CHAIN-LINK FENCING ATTACHED TO METAL STAKES DRIVEN FIRMLY INTO THE GROUND
- APPLY A 4" LAYER OF CHIPPED MULCH THROUGHOUT THE TREE PROTECTION ZONE.
- IRRIGATE TREES TO A DEPTH OF 14" THROUGHOUT THEIR DRIPLINES WHERE EXTENDING OVER THE PROJECT PROPERTY 2 WEEKS PRIOR TO GRADING.
- KEEP ALL EQUIPMENT, DEBRIS, SUPPLIES, TRENCHING, GRADING, STOCKPILING, OR ANY OTHER ENCROACHMENTS OUTSIDE OF THE TPZ. ANY DESIRED ADJUSTMENT OR ENCROACHMENT WITHIN THE TPZ SHALL REQUIRE CONSULT WITH AN ARBORIST. ALL PRUNING SHALL BE PERFORMED BY ISA CERTIFIED ARBORISTS OR CERTIFIED TREE
- WORKERS UNDER THE PROJECT ARBORIST'S SUPERVISION. PRUNING TO COMPLY WITH ALL ISA AND ANSI PRUNING STANDARDS AND BEST MANAGEMENT PRACTICES.
- TREES #11-15, 24, AND 26 SHALL BE IRRIGATED WEEKLY TO A DEPTH OF 12-14" THROUGHOUT ALL ACCESSIBLE DRIPLINES, AND AT MINIMUM THE ENTIRE TPZ.
- SINCE TREES #23, 24, 25 AND 2 ARE ALL OFF SITE TREES THAT HANG OVER THE PROJECT, WRITTEN PERMISSION FROM THE TREE OWNERS WILL NEED TO BE GRANTED PRIOR TO ACCESSING THEIR CANOPIES.



1. DRIPLINE OF TREE SHALL BE ENCLOSED WITH A 6'-0" CHAIN LINK FENCE, STAKES TO BE A MINIMUM I" SIZE AND INSTALLED TO A 18" PMINIMUM DEPTH. 2. ANY TRENCHING REQUIRED WITHIN THE DRIPLINE OF THE TREE SHALL BE HAND DUG. ANY ROOTS CUT OVER 2" SHALL BE SEALED WITH BLACK ROOT SEALANT. 3. IRRIGATION LATERAL LINES MAY

BE INSTALLED (12" DEEP) IN HAND DUG TRENCHES IN AREAS CONTAINING SHALLOW ABSORBING ROOTS IF THE TRENCHES ARE AT RIGHT ANGLES TO THE TRUNK AS OPPOSED TO CUTTING ACROSS THE ROOT MASS AREA. MAINLINES (18" DEEP) MUST BE INSTALLED OUTSIDE OF ROOT PROTECTION ZONE. IN NO CASE MAY SPRINKLERS WET THE AREA WITHIN 5 TIMES THE TRUNK DIAMETER. 4. INSTALL 3' LAYER OF ORGANIC MATERIAL COVERING ONE-HALF THE CANOPY RADIUS.

TREE PROTECTION DETAIL

EX. TREES TO BE PRESERVED, SEE

ARBORIST REPORT FOR DETAILS. (TYP.)

SEE BELOW. (TYP.)

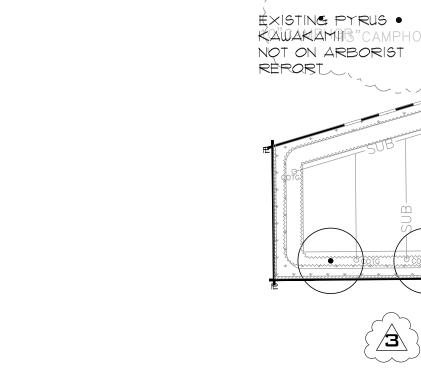
TIW W W

5. FLORESCENT FLAGGING SHALL

TREE PROTECTION DETAIL

425.82 TREE PROTECTION DETAIL

SIGNATURE BLOCK DATE: ND. 2258 MS. MICHELLE KOO | LANDSCAPE ARCHITECT | EXP: XX-XXXX | CITY OF HAYWARD | SIGNATURE 12-31-2019 RENEWAL DATE DATE DATE: MR. SAEED SAEBI | CITY ENGINEER | EXP: XX-XXXX | CITY OF HAYWARD |



MITIGATION GOAL

\$7,850.00

TREE MITIGATION SUMMARY CHART

REQUIRED TREES	REQUIRED TREE QUANTITY / SIZE / INSTALLED UNIT COST	PROPOSED TREE QUANTITY / SIZE / INSTALLED UNIT COST	UNIT COST DIFFERENCE (PROPOSED SIZE - REQUIRED SIZE)	MITIGATION VALUE
PARKING LOT TREES	6 / 15 GALLON / \$300	4 / 36" BOX / \$2,307	\$2,007.00	\$7,428.00
SCREENING TREES	10 / 15 GALLON / \$300	10 / 15 GALLON / \$300	\$0.00	\$0.00
ADDITIONAL TREES FOR MITIGATION	14 / 15 GALLON / \$300	14 / 24" BOX / \$870	\$570.00	\$7,980.00
			TOTAL	\$15,408.00

0n

10-26-15

CITY COMMENTS 08-26-19 UTILITY REV. & REDWOOD REV

03-29-2 A CITY 6-6-23 CITY 8-2-23 $^{\scriptscriptstyle \perp}$ COMMENTS #5

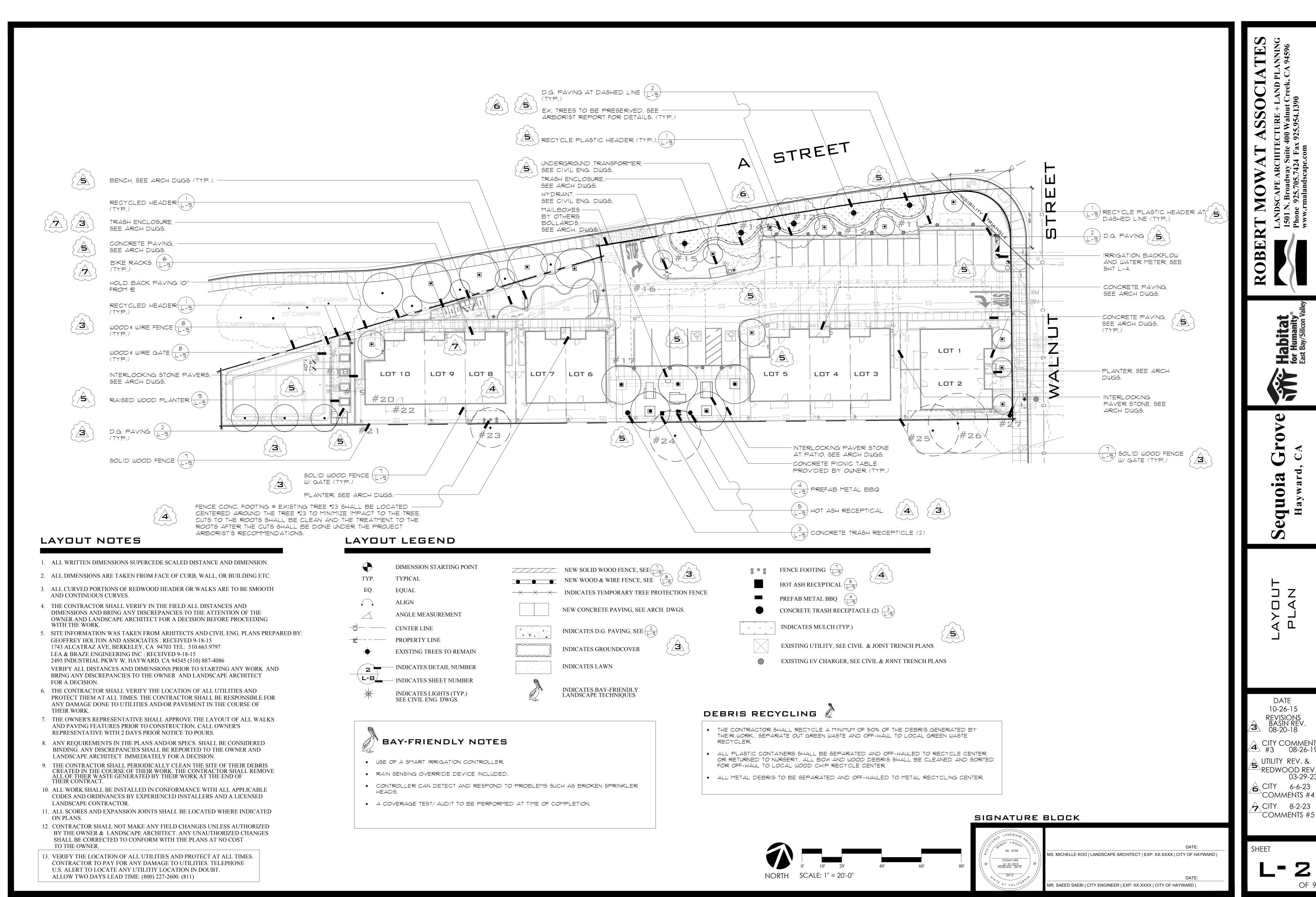
NORTH SCALE: 1" = 20'-0"

NOT TO SCALE

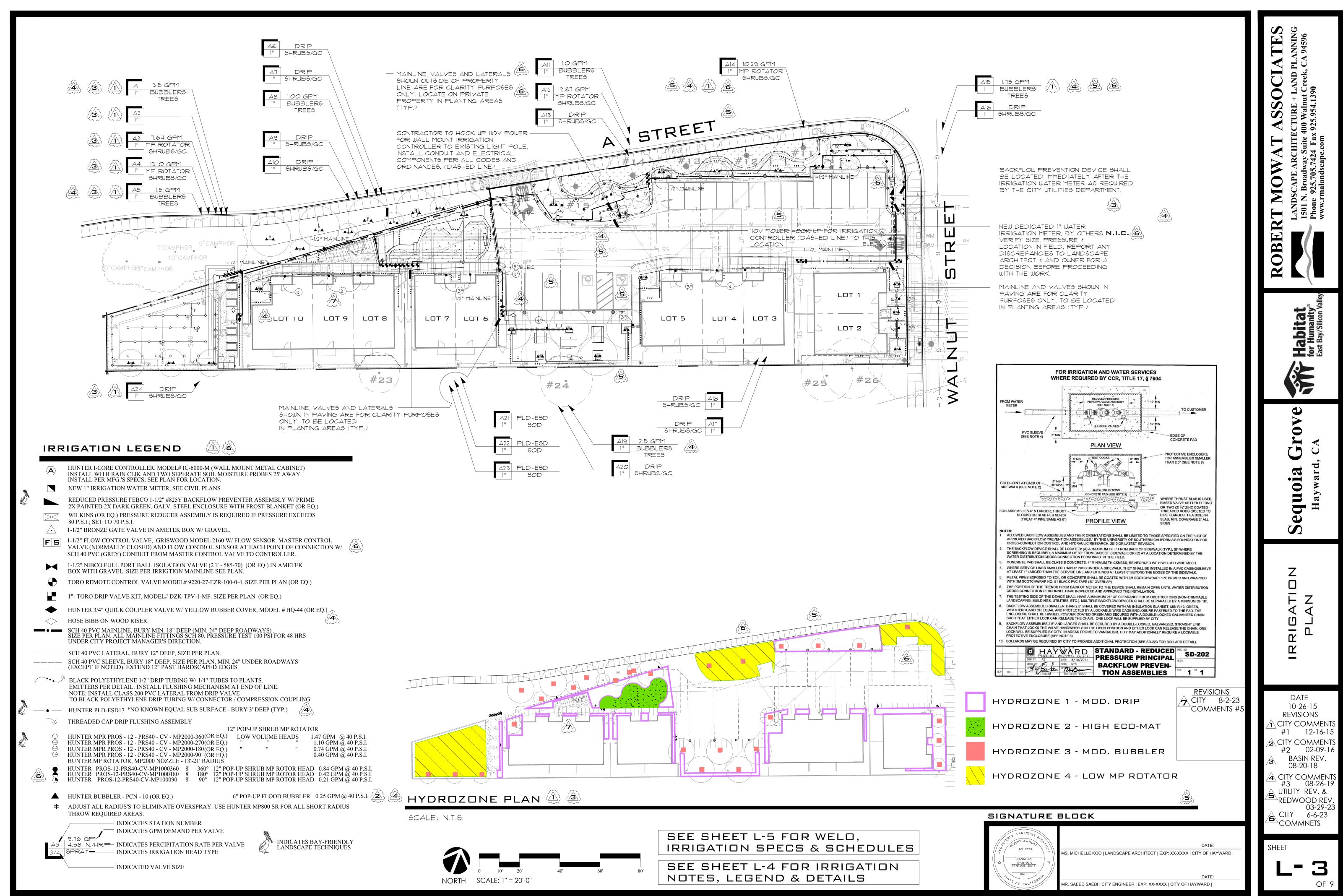
√5\

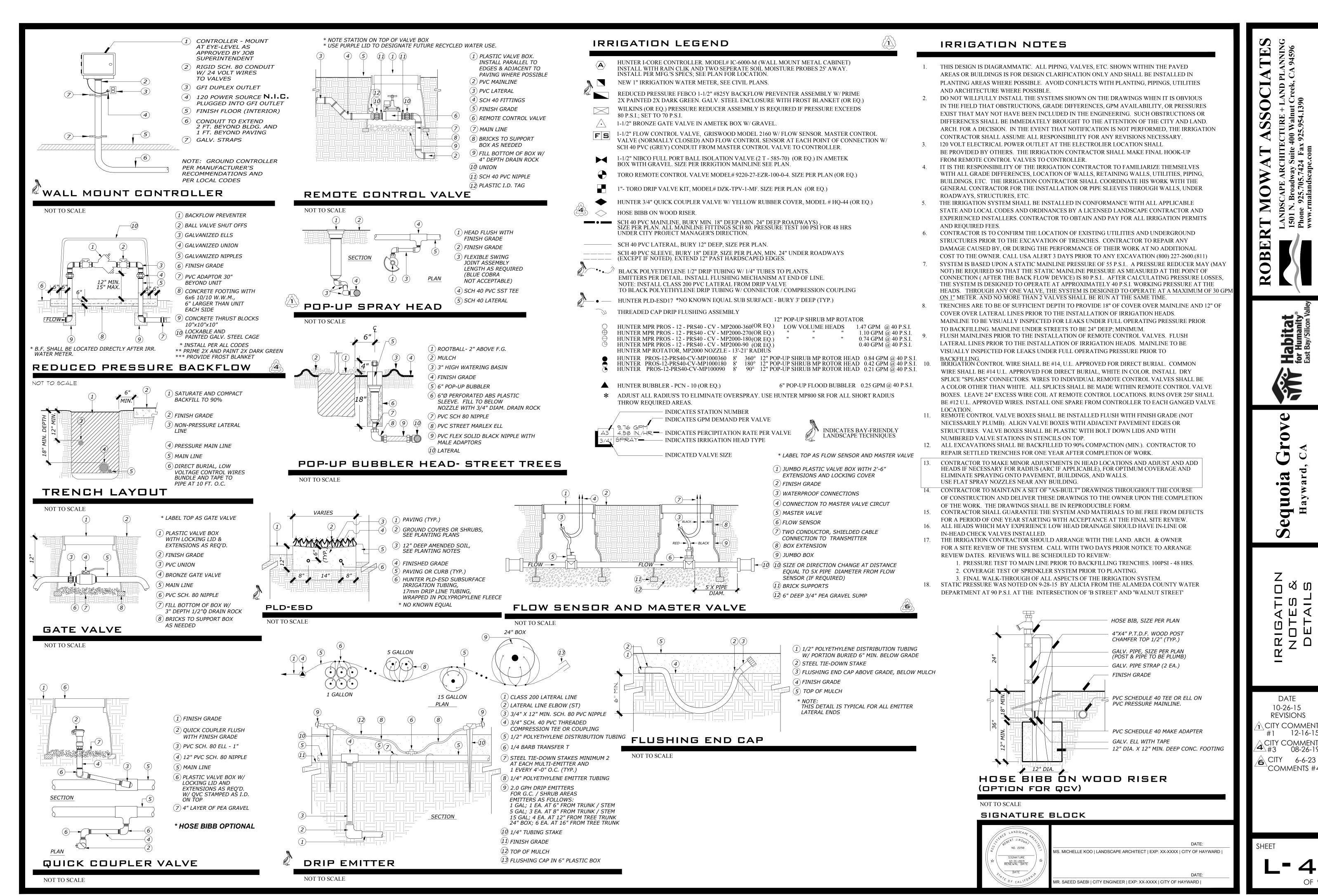
6'-0" HT. CHAIN LINK TEMPORARY PROTECTION

FENCING.



03-29-2





12-16-15

MWELO CALCULATIONS



SYMBOL:	HYDROZONE TYPE:	PLANT FACTOR (PF):	HYDROZONE AREA (HA):	IRRIGATION EFFICANCY (IE):	(PF X HA) IE	
H 1	SHRUBS/GROUNDCOVER MOD WATER USE DRIP	0.4	2,764 SF	.81	1365	
H2	NATIVE CA SOD LOW/MOD WATER USE ECO-MAT	0.04	702 SF	.81	35	
нз	TREES MOD WATER USE BUBBLER	0.5	504 SF	.81	311	
Н4	SHRUBS/GROUNDCOVER LOW WATER USE MP ROTATOR	0.2	3,603 SF	.75	961	

TOTAL:		7,573 SF		2672
ETWU:	44.2 X 0.62 (2672+0)		=	73,223 GAL/YR
	44.2 X 0.62 [(0.45 X			93,403
MAWA:	7573)+(1.045)+0]		=	GAL/YR

MWELO CALCULATION REFERENCE

ETWU: ESTIMATED TOTAL WATER USE (GALLONS PER YEAR) CALCULATION FORMULA: ETo x $0.62 \left(\frac{PF X HA}{IE} + SLA \right)$

- REFERENCE EVAPOTRANSPIRATION (47.0 INCHES PER YEAR IN HAYWARD)
- CONVERSION FACTOR (INCHES PER SQAURE FOOT TO GALLONS PER SQUARE FEET)
- PLANT FACTOR FROM WUCOLS IV, REGION 2
- HYDROZONE AREA [HIGH, MEDIUM AND LOW WATER USE AREAS] (IN SQUARE FEET)
- IRRIGATION EFFICIENCY (MINIMUM 0.70)
- SPECIAL LANDSCAPED AREA (SQUARE FEET)

MAWA: MAXIMUM APPLIED WATER ALLOWANCE (GALLONS PER YEAR)

CALCULATION FORMULA: (ETo) x (0.62) x [(0.55 xLA) + (1.0 - 0.55) X SLA]

- REFERENCED EVAPOTRANSPIRATION (47.0 INCHES PER YEAR IN HAYWARD)
- CONVERSION FACTOR (INCHES PER SQAURE FOOT TO GALLONS PER SQUARE FEET)
- RESIDENTIAL REFERENCE EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF)
- LANDSCAPED AREA INCLUDING SLA (SQUARE FEET) ADDITIONAL WATER ALLOWANCE FOR SLA
- SPECIAL LANDSCAPED AREA (SQUARE FEET)

IRRIGATION SYSTEM

GENERAL

- A.CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUPMENT NECESSARY TO
- FURNISH AND INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN. B. COORDINATE THE INSTALLATION OF ALL IRRIGATION MATERIALS WITH THE CONSTRUCTION
- OF SITE AMENITIES AND PLANTING. C. ALL WORK ON THE IRRIGATION SYSTEM, INCLUDING HYDROSTATIC, COVERAGE, AND
- OPERATIONAL TESTS AND THE BACKFILLING AND COMPACTION OF TRENCHES SHALL BE PERFORMED BEFORE PLANTING OPERATIONS. D. DRAWINGS ARE DIAGRAMMATIC AND SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO
- ACTUAL FIELD CONDITIONS. COSTS INCURRED DUE TO ANY ADJUSTMENT FOR COVERAGE, INCLUDING THOSE REQUESTED BY THE OWNER RELATIVE TO THE LOCATION OF IRRIGATION HEADS AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. E. POINT OF CONNECTION (P.O.C.) AND OPERATING PRESSURE (P.S.I.) SHALL BE AS INDICATED ON
- THE DRAWINGS. CONTRACTOR SHALL VERIFY THE LOCATION AND SIZE OF WATER SOURCE, PSI, AND ELECTRICAL SUPPLY PRIOR TO COMMENCING INSTALLATION. IN CASE OF DISCREPANCY, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER.
- QUALITY ASSURANCE
- A. ALL LOCAL AND STATE LAWS. RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THE IRRIGATION SYSTEM ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. HOWEVER, IF THOSE SPECIFICATIONS CALL FOR OR DESCRIBE MATERIALS, WORKMANSHIP OR CONSTRUCTION OF A BETTER QUALITY, HIGHER STANDARD OR LARGER SIZE THAN IS REQUIRED BY THE ABOVE RULES, REGULATIONS OR REQUIREMENTS, THESE SPECIFICATIONS AND THE DRAWINGS SHALL TAKE PRECEDENCE.
- B. IN THE EVENT ANY EQUIPMENT OR METHODS INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN CONFLICT WITH APPLICABLE REGULATIONS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER IN WRITING PRIOR TO INSTALLATION. IN CASE OF DISCREPANCY,
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER. C. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, AND RELATED OTHER EQUIPMENT, WHICH MAY BE REQUIRED. CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING THE WORK AND INSTALL A COMPLETE IRRIGATION SYSTEM WITHIN THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- D. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF LIABILITY UNDER 11. ISOLATION VALVES THE PROVISIONS FOR GUARANTEES.

MATERIALS LIST

- A. WITHIN FIFTEEN (15) CALENDAR DAYS AFTER AWARD OF CONTRACT AND PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT TO THE OWNER A LIST OF MATERIALS INCLUDING THE MANUFACTURER, DESCRIPTION, MODEL NUMBER AND INSTALLATION DATA. B. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT PRIOR ACCEPTANCE MAY BE REJECTED AND SUCH MATERIALS REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE.
- PRODUCT DELIVERY, STORAGE AND HANDLING CONTRACTOR SHALL EXERCISE CARE IN HANDLING, LOADING, UNLOADING AND STORING OF IRRIGATION MATERIALS AND EQUIPMENT.

PLASTIC PIPE

- A. PLASTIC PIPE, WHERE INDICATED ON THE DRAWINGS, SHALL BE INJECTION MOLDED; RIGID; UNPLASTICIZED POLYVINYL CHLORIDE (PVC); NSF APPROVED; OF HIGH TENSILE STRENGTH, CHEMICAL RESISTANT AND IMPACT STRENGTH; AND DEPENDING ON CLASS AND GRADE, CONFORM TO ASTM 2241 OR ASTM D-1785.
- B. FITTINGS AND COUPLINGS SHALL BE THREADED PVC SCHEDULE 80 CONFORMING TO ASTM D-2464; OR SLIP-FITTING, TAPERED SOCKET, SOLVENT-WELD TYPE, PVC SCHEDULE 40 CONFORMING TO ASTM D-2466 OR PVC SCHEDULE 80 CONFORMING TO ASTM D-2467 OR BELL
- C. SOLVENT CEMENT AND PRIMER FOR RIGID PVC SOLVET-WELD PIPE AND FITTINGS SHALL BE OF COMMERCIAL QUALITY, IAPMO APPROVED, CONFORMING TO ASTM D-2564.

City of HAYWARD MONTHLY IRRIGATION SCHEDULE Project Name: SEQUOIA GROVE Project Address: CORNER OF A STREET AND WALNUT Prepared by: Name ROBERT MOWAT ASSOCIATES License or Certification No. (if applicable) 2258 Address 1501 N, BROADWAY #400 Telephone Number 925-705-7424 WALNUT CREEK, CA 94596 Date Propared 10-21-15

Plant	Irrigation	Flow	Precipita-	n Esta		nent				F	ollowi			Perio	d			
(B)	(C)	(D)	(E)	SPR.	SUM.	FALL	JAN.	FEB.	MAR	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DE
MOD	BUBB	.5		4 4	8/4	4/4	%	%	4/3	5/3	$\frac{6}{3}$	8/3	8/3	8/3	5 3	$\frac{5}{3}$	4/3	0
LOW	MP ROTA.	.45		10/3	15/4	10/3	%	0/0	6/3	9/3	11/3	14/ 3	15 /3	15/ 3	14/3	11/3	6/3	0
LOW	MP ROTA.	.45		10/ 3	15/ 4	10 3	%	%	6/3	9/3	11/3	14/3	15 3	15/3	14/3	11/3	6/3	0
LOW	MP ROTA.	.45		10/3	15 / 4	10 3	%	%	6/3	9/3	11/3	14/3	15/3	15/3	14/3	11/3	6/3	0
LOW	BUBB.	.5		4/4	8/4	4/4	%	0/0	4/3	5/3	6/3	8/3	8/3	8/3	5/3	5/3	4/3	0
MOD.	DRIP	.25		12/4	18/ 5	12/4	0/0	%	4/3	7/3	8/3	12/3	12/	12/3	12/	8/3	4/3	0
	MOD LOW LOW LOW	MOD BUBB LOW MP ROTA. LOW MP ROTA. LOW MP ROTA. LOW BUBB.	MOD BUBB .5 LOW MP ROTA45 LOW MP ROTA45 LOW MP ROTA45 LOW MP ROTA45 LOW BUBB5	Plant Type (B) Irrigation Type (C) Flow Rate (E) MOD BUBB .5 LOW MP ROTA45 LOW MP ROTA45 LOW MP ROTA45 LOW BUBB5	Plant Type	Plant Type Irrigation Type Rate Period (3 h Peri	Plant Type Irrigation Type Rate (B) Rate (E) SPR. SUM. FALL	Plant Type Irrigation Type Rate (B) Rate (E) SPR. SUM. FALL JAN.	Plant Type Irrigation Type Rate (B) Rate (E) SPR. SUM. FALL JAN. FEB. SPR. SUM. FALL JAN. FEB. SUM. FALL JAN. FEB. SPR. SUM. FALL JAN. FEB. SPR. SUM. FALL JAN. FEB. SUM. FALL JAN. FEB. SPR. SU	Plant Type Irrigation Type Rate (B) Period (3 Mos.) SPR. SUM. FALL JAN. FEB. MAR SPR. SUM. SUM. SUM. SUM. SUM. SUM. SUM. SUM	Plant Type	Plant Type	Plant Type (B) Irrigation Type (C) Flow Rate (D) Establishment Period (3 Mos.) (12 M MOD BUBB .5 4 8 4 0 0 4 5 6 8 LOW MP ROTA. .45 10 15 10 0 0 6 9 11 14 LOW MP ROTA. .45 10 15 10 0 0 6 9 11 14 LOW MP ROTA. .45 10 15 10 0 0 6 9 11 14 LOW MP ROTA. .45 10 15 10 0 0 6 9 11 14 LOW BUBB. .5 4 8 4 0 0 6 9 11 14 4 8 4 0 0 0 6 9 11 14 8 4 4 4 <td> Plant Type</td>	Plant Type	Plant Type	Plant Type	Plant Type	Plant Type

Name Andrews and Control of the Andrews and Control of Section 1885 (Andrews Andrews A	MONTHLY IRRIGA	TION SCHEDULE
Project Name:	SEQUOIA GROVE	
Project Address:	CORNER OF A STREET AND	WALNUT
	Name ROBERT MOWAT ASSOCIATES	License or Certification No. (if applicable) 2258
	Address 1501 N. BROADWAY #400	Telephone Number 925-705-7424
	WALNUT CREEK, CA 94596	Date Prepared 10-21-15

City of HAYWARD

rainfall, and climatic conditions. Check irrigation system frequently to minimize run-off and overspray. Schedule valves with sprinklers to irrigate between 9 PM and

This irrigation Schedule should be used as a quide. The landscaping should be

8 AM to reduce water loss from wind and evaporation

A. BRASS PIPE, WHERE INDICATED ON THE DRAWINGS, SHALL BE 86% RED BRASS, AMERICAN

NATIONAL STANDARDS INSTITUTE, SCHEDULE 40 SCREWED PIPE, CONFORMING TO FEDERAL

B. FITTINGS SHALL BE MEDIUM BRASS, SCREWED 125 POUND CLASS, CONFORMING TO FEDERAL

A.GALVANIZED STEEL PIPE, WHERE INDICATED ON THE DRAWINGS, SHALL BE ASA SCHEDULE 40

TWO (2) COATS OF KOPPERS #50 BITUMASTIC, OR APPROVED EQUAL. PIPES MAY BE WRAPPED

A.GATE VALVES AND REMOTE CONTROL VALVES, EXCEPT FOR ANTI-SIPHON VALVE, SHALL BE

VALVE BOXES MANUFACTURED BY BROOKS, FRASER, AMETEK, OR APPROVED EQUAL.

B. VALVE BOX LIDS SHALL BE GREEN IN COLOR. GATE VALVES SHALL BE IDENTIFIED BY

INSTALLED BELOW GRADE AS INDICATED IN THE DETAILS ON THE DRAWINGS, IN LOCKABLE

STAMPING "GV" ON THE VALVE BOX COVER. REMOTE CONTROL VALVES SHALL BE IDENTIFIED

SUFFICIENT DEPTH TO PROVIDE APPROPRIATE CLEARANCE BETWEEN THE COVER AND VALVE.

INDICATED IN THE DETAILS ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S

C. VALVE BOXES SHALL BE SET ON ONE INCH (1") ABOVE FINISH GRADE, WITH VALVES SET AT

A. ISOLATION VALVES (BALL) SHALL BE AS INDICATED IN THE IRRIGATION LEGEND ON THE

B. THE OPERATING UNIT SHALL BE LINE-SIZED AND HAVE ANY ARROW CAST IN THE METAL

C. ISOLATION VALVES SHALL BE DESIGNED TO PERMIT DISMANTLING TO REPLACE SEALING

QUICK COUPLING VALVES SHALL BE AS INDICATED IN THE IRRIGATION LEGEND ON THE

MANUFACTURER'S RECOMMENDATIONS, WITH A MOLDED VINYL OR THERMOPLASTIC

VALVES SHALL BE AS INDICATED IN THE IRRIGATION LEGEND ON THE DRAWINGS, OR

DIRECTLY UNDER THE IRRIGATION HEADS IN ACCORDANCE WITH MANUFACTURER'S

DRAWINGS, OR APPROVED EQUAL. CONTRACTOR SHALL INSTALL QUICK COUPLER VALVES

RUBBER LOCKING YELLOW COVER. COUPLER KEYS AND HOSE ELLS SHALL BE OF THE SAME

WHERE INDICATED ON THE DRAWINGS, AND AS NEEDED FOR FIELD CONDITIONS, ANTI-DRAIN

APPROVED EQUAL. ANTI-DRAIN VALVES SHALL BE LINE-SIZED AND INSTALLED ON THE RISER

COMPONENTS WITHOUT REMOVAL OF THE VALVE BODY FROM THE PIPELINE.

AS INDICATED IN THE DETAILS ON THE DRAWINGS AND IN ACCORDANCE WITH

INDICATING THE DIRECTION OF OPENING. VALVE SHALL CONFORM TO AMERICAN WATER

DRAWINGS, OR APPROVED EQUAL. CONTRACTOR SHALL INSTALL ISOLATION VALVES AS

MILD STEEL SCREWED PIPE. FITTINGS SHALL BE MEDIUM GALVANIZED SCREWED BEADED

B. ALL GALVANIZED PIPE AND FITTINGS INSTALLED BELOW GRADE SHALL BE PAINTED WITH

UVR-PVC PIPE, WHERE INDICATED ON THE DRAWINGS, SHALL BE ULTRA-VIOLET RESISTANT,

BACKFLOW PREVENTION UNIT SHALL BE FACTORY ASSEMBLED AND SHALL BE AS

INDICATED IN THE IRRIGATION LEGEND ON THE DRAWINGS, OR APPROVED EQUAL

CONTRACTOR SHALL INSTALL BACKFLOW PREVENTION UNIT AS INDICATED IN THE

DETAILED ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S

BY STAMPING "RCV" AND STATION NUMBER ON THE VALVE BOX COVER.

BRASS PIPE

7. GALVANIZED PIPE

8. UVR-PVC PIPE

MALLEABLE IRON.

RECOMMENDATION.

RECOMMENDATION.

WORKS STANDARDS

12. QUICK COUPLING VALVES

MANUFACTURER AS THE VALVE.

13. ANTI-DRAIN VALVES

RECOMMENDATIONS.

10. VALVE BOXES

SPECIFICATIONS WW-P-351.

SPECIFICATIONS WW-P-460.

WITH AN APPROVED ASPHALTIC TAPE.

9. BACKFLOW PREVENTION UNIT

SCHEDULE 40 PVC PIPE. FITTINGS SHALL BE UVR-PVC FITTINGS.

monitored regularly and the schedule adjusted as needed for plant growth, local rainfall, and climatic conditions. Check irrigation system frequently to minimize run-off and overspray. Schedule valves with sprinklers to irrigate between 9 PM and

Valve or Station Number	Plant	Irrigation	Flow	Precipita- tion Rate	Initial Plant Establishment Period (3 Mos.)					F	ollowin		e-Year onths)	r Perio	d				
(A)	Type (B)	Type (C)	(D)		SPR.	SUM.	FALL	JAN.	FEB.	MAR	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC
13	MOD.	DRIP	.25		12/4	18 5	12/4	%	0/0	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	%
14	MOD.	BUBB.	.5		5/4	8/5	5/4	%	0/0	5/3	6/3	7/3	7/3	7/3	7/3	7/3	6/3	0/0	0/0
15	MOD.	BUBB.	.5		5/4	8/5	5/4	%	%	5/3	6/3	7/3	7/3	7/3	7/3	7/3	6/3	0/0	0/0
16	MOD.	DRIP	.25		12/4	18 5	12/4	%	0/0	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0/0
17	MOD.	DRIP	.25		12/4	18/5	12/4	%	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0/0
18	MOD.	DRIP	.25		12/4	18/5	12/4	0/0	0/0	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	9/0

G / Run Time (Minutes per Day)

H Days per Week

H Days per Week

14. REMOTE CONTROL VALVES REMOTE CONTROL VALVES SHALL BE SOLENOID ACTIVATED, OF THE TYPE, MANUFACTURER AND SIZE AS INDICATED IN THE IRRIGATION LEGEND ON THE DRAWINGS, OR APPROVED EOUAL. CONTRACTOR SHALL INSTALL REMOTE CONTROL VALVES AS INDICATED IN THE DETAILS ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

15. CONTROLLERS AND WIRING

- CONTROLLER SHALL BE OF THE TYPE AND MANUFACTURER AS INDICATED IN THE IRRIGATION LEGEND ON THE DRAWINGS, OR APPROVED EQUAL. CONTRACTOR SHALL INSTALL CONTROLLER AS INDICATED IN THE DETAILS ON THE DRAWINGS AND IN ACCORDANCE WITH
- MANUFACTURER'S RECOMMENDATIONS. B. CONNECTIONS BETWEEN THE CONTROLLER AND THE REMOTE CONTROL VALVES SHALL BE MADE WITH DIRECT BURIAL SOLID COPPER WIRE. WIRE SHALL BE PVC INSULATED OF SINGLE CONDUCTOR TYPE, UNDERGROUND FEEDER CABLE, U.L. APPROVED.
- C. AS PRACTICAL, PILOT WIRES SHALL BE A DIFFERENT COLOR FOR EACH VALVE. COMMON WIRES SHALL BE WHITE WITH A DIFFERENT COLOR STRIPE FOR EACH AUTOMATIC
- CONTROLLER. D. WIRE SHALL BE BURIED A MINIMUM OF TWENTY-FOUR INCHES (24") IN DEPTH AND WHENEVER POSSIBLE SHALL OCCUPY THE SAME TRENCH AS MAINLINE; BUNDLED AND SECURED TO IRRIGATION PIPELINES AT TEN FOOT (10') INTERVALS WITH PLASTIC ELECTRICAL TAPE
- PROVIDING SUFFICIENT SLACK FOR EXPANSION AND CONTRACTION. E. WIRE FOR SLOPE SYSTEMS SHALL BE INSTALLED IN A UVR PVC SLEEVE LAID ADJACENT TO
- THE ON-GRADE PIPES. F. PROVIDE A SEPARATE GROUND WIRE FOR EACH CONTROLLER.
- G. AN EXPANSION CURL SHALL BE PROVIDED WITHIN THREE FEET (3') OF EACH WIRE CONNECTION AND CHANGE OF DIRECTION, AND AT LEAST EVERY 100 FEET OF WIRE LENGTH
- H. ALL SPLICES SHALL BE MADE WITH SCOTCH-LOK #3576 CONNECTOR SEALING PACKS, RAIN BIRD PEN-TITE, SEARS DS-400 WIRE CONNECTORS, 3M DBY WIRE SEALING PACKS, OR APPROVED EQUAL. USE ONE (1) SPLICE PER CONNECTOR SEALING PACK. WIRE SPLICES SHALL BE LOCATED IN PULL BOXES SET ONE INCH (1") ABOVE FINISH GRADE.
- I. FIELD SPLICES BETWEEN THE CONTROLLER AND REMOTE COTROL VALVES WILL NOT BE
- J. INSTALL A SPARE CONTROL WIRE OF A DIFFERENT COLOR ALONG ENTIRE MAINLINE. LOOP THIRTY-SIX INCHES (36") EXCESS WIRE INTO EACH SINGLE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES.

16. IRRIGATION HEADS

- A. IRRIGATION HEADS SHALL BE OF THE MANUFACTURER, SIZE, TYPE, AND RATE OF PRECIPITATION WITH THE DIAMETER (OR RADIUS) OF THROW, PRESSURE, AND DISCHARGE AS SPECIFIED IN THE IRRIGATION LEGEND ON THE DRAWINGS, OR APPROVED EQUAL, AND INSTALLED AS INDICATED IN THE DETAILS ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- B. RISER UNITS SHALL BE ORIENTED PERPENDICULAR TO THE FINISH GRADE WITH NIPPLES OF THE SAME SIZE AS THE RISER OPENING IN THE IRRIGATION HEAD.
- C. SPACING OF HEADS SHALL NOT EXCEED THE MAXIMUM SHOWN ON THE DRAWINGS AND IN NO CASE EXCEED THE MAXIMUM SPACING RECOMMENDED BY THE MANUFACTURER.

17. INSTALLATION

- A. PIPE SHALL BE CUT SQUARE AND THE ENDS REAMED OUT TO THE FULL INSIDE DIAMETER OF THE PIPE AND THOROUGHLY CLEANED OF DIRT, DUST AND MOISTURE BEFORE INSTALLATION. B. PVC PIPE SHALL BE PROTECTED FROM TOOL DAMAGE DURING ASSEMBLY. PLASTIC PIPE WHICH HAS BEEN NICKED, SCARRED OR DAMAGED SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE
- C. PVC SOLVENT-WELD JOINTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-2855. PIPE SHALL NOT BE EXPOSED TO WATER FOR TWENTY-FOUR (24) HOURS AFTER SOLVENT-WELD JOINTS ARE COMPLETED.

MONTHLY IRRIGATION SCHEDULE

City of HAYWARD

Project Name: SEQUOIA GROVE Project Address: CORNER OF A STREET AND WALNUT Prepared by: Name ROBERT MOWAT ASSOCIATES Licenso or Certification No. (If applicable) 2258 Address 1501 N. BROADWAY #400 Telephone Number 925-705-7424 WALNUT CREEK, CA 94596 Date Propared 10-21-15

Valve or Station	Plant	Irrigation	Flow	Precipita- tion Rate	Est	itial Pla ablishn iod (3 N	nent				F	ollowi		e-Yea onths)		od			
Number (A)	Type (B)	Type (C)	(D)	(E)	SPR.	SUM.	FALL	JAN.	FEB.	MAR	APR	MAY	JUN.	JUL.	AUG	SEP.	OCT.	NOV	DEC
7	MOD.	DRIP	.25		12/4	18/5	12/4	0/0	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0/0
8	MOD.	BUBB.	.5		5/4	8/5	5/4	%	%	5/3	6/3	7/3	7/3	7/3	7/3	7/3	6/3	0/0	0/0
9	MOD.	DRIP	.25	and the second s	12/4	18/ 5	12/4	%	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0
10	MOD.	DRIP	.25		12/4	18/ 5	12/4	%	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0
11	MOD.	DRIP	.25		12/4	18/5	12/4	0/0	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0
12	MOD.	DRIP	.25		12/4	18/5	12/4	0/0	0/0	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	0

City of HAYWARD

H Days per Week

H Days per Week

rainfall, and climatic conditions. Check irrigation system frequently to minimize run-off and overspray. Schedule valves with sprinklers to irrigate between 9 PM and 8 AM to reduce water loss from wind and evaporation.

MONTHLY IRRIGATION SCHEDULE

Project Name: SEQUOIA GROVE Project Address: CORNER OF A STREET AND WALNUT License or Certification No. (if applicable) 2258 Prepared by: Nanie ROBERT MOWAT ASSOCIATES Telephone Number 925-705-7424 Address 1501 N. BROADWAY #400 WALNUT CREEK, CA 94596 Date Prepared 10-21-15

Valve or Station Number (A)	Plant Type (B)	Irrigation Type (C)	Flow Rate (D)	Precipita- tion Rate (E)	Initial Plant Establishment Period (3 Mos.)			Following One-Year Period (12 Months)											
					SPR.	SUM.	FALL	JAN.	FEB.	MAR	APR	MAY	JUN.	JUL.	AUG	SEP.	OCT.	NOV.	DEC
19	MOD.	BUBB.	.5		5/4	8/5	5/4	%	%	5/3	6/3	7/3	7/3	7/3	7/3	7/3	6/3	%	%
20	MOD.	DRIP	.25		12/4	18/ 5	12/4	%	%	4/3	7/3	8/3	12/3	12/3	12/3	12/3	8/3	4/3	%
21	LOW	SUB- DRIP	.10		10/4	15/5	10/4	%	$\frac{2}{2}$	4/3	6/3	9/4	12/4	12 4	12/4	10/4	8/3	4/2	%
22	LOW	SUB- DRIP	.10		10/4	15/5	10/4	%	2/2	4/3	6/3	9/4	12/4	12/4	12/4	10/4	8/3	4/2	0/0
23	LOW	SUB- DRIP	.10		10/4	15/5	10/4	%	2/2	4/3	6/3	9/4	12/4	12/4	12/4	10/4	8/3	4/2	0/0
					/	/	/	/	/	/	/	/	/	/	/	/			/

monitored regularly and the schedule adjusted as needed for plant growth, local infall, and climatic conditions. Check irrigation system frequently to minimize in-off and overspray. Schedule valves with sprinklers to irrigate between 9 PM and 8 AM to reduce water loss from wind and evaporation

D. TRENCHES SHALL BE OF OPEN VERTICAL CONSTRUCTION TO APPROPRIATE DEPTHS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. PVC PIPE SHALL BE LAID ON NATIVE GRADE OR CERTIFIED COMPACTED SUBGRADE, FREE OF ROCKS OR SHARP-EDGED OBJECTS

- AND SNAKED FROM SIDE TO SIDE IN THE TRENCH TO ALLOW FOR EXPANSION AND E. TEFLON TAPE SHALL BE USED ON ALL THREADED PVC TO PVC AND ON ALL THREADED PVC TO
- METAL JOINTS. F. BRASS PIPE AND FITTINGS SHALL BE ASSEMBLED USING TEFLON DOPE, APPLIED TO THE MALE
- THREADS ONLY. G.GALVANIZED PIPE THREADS SHALL BE CUT WITH CLEAN, SHARP DIES, CONFORMING TO
- AMERICAN STANDARDS ASSOCIATION SPECIFICATION. MALE PIPE THREADS SHALL BE COATED WITH A NON-TOXIC, NON-HARDENING, NON-CORROSIVE JOINT COMPOUND.
- H. IRRIGATION LINES AND CONTROL WIRING SHALL BE INSTALLED UNDER PAVING IN SEPARATE PVC SCHEDULE 40 SLEEVES. SLEEVES SHALL BE INSTALLED WITH COVERAGE DEPTHS AS SPECIFIED HEREIN.
- I. PIPING UNDER EXISTING PAVEMENT MAY BE INSTALLED BY JACKING, BORING OR HYDRAULIC DRIVING, EXCEPT THAT NO HYDRAULIC DRIVING WILL BE PERMITTED UNDER ASPHALTIC CONCRETE PAVEMENT. WHERE CUTTING OR BREAKING OF EXISTING PAVEMENT IS NECESSARY, OBTAIN PERMISSION FROM THE OWNER BEFORE CUTTING OR BREAKING PAVEMENT AND THEN MAKE ALL NECESSARY REPAIRS AND REPLACEMENTS TO THE SATISFACTION OF THE OWNER, AND AT NO ADDITIONAL COST TO THE OWNER.
- J. ALL LINES SHALL HAVE A MINIMUM HORIZONTAL CLEARANCE OF SIX INCHES (6") FROM EACH OTHER AND FROM LINES OF OTHER TRADES. PARALLEL LINES SHALL NOT BE INSTALLED DIRECTLY OVER ONE ANOTHER.
- K. PROVIDE THE FOLLOWING MINIMUM COVERAGE (WHERE LINES OCCUR UNDER PAVED AREAS, THESE COVERAGE DEPTHS SHALL BE CONSIDERED BELOW SUBGRADE):

PRESSURE MAINLINE NON - PRESSURE LATERAL LINES CONTROL WIRING

18. ADJUSTING AND TESTING THE SYSTEM

A.CONTRACTOR SHALL FURNISH ALL EQUIPMENT, MATERIALS AND LABOR TO CONDUCT PIPELINE PRESSURE TESTS, COVERAGE TESTS AND OPERATIONAL TEST. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE OWNER PRIOR TO PLANTING OPERATIONS. TRENCHES SHALL NOT BE BACKFILLED UNTIL THE PIPELINE PRESSURE TESTS HAVE BEEN PERFORMED TO THE SATISFACTION OF THE OWNER.

- B. AFTER COMPLETION OF PIPELINE ASSEMBLY, PRIOR TO INSTALLATION OF TERMINAL FITTINGS, INCLUDING BUT NOT LIMITED TO REMOTE CONTROL VALVES AND QUICK COUPLER VALVES, ENTIRE SYSTEM SHALL BE THOROUGHLY FLUSHED TO REMOVE DIRT, SCALE OR OTHER DELETERIOUS MATERIAL
- C. WITH OPEN ENDS CAPPED, PRIOR TO INSTALLING VALVES, PRESSURE TEST SUPPLY LINES FOR TWO (2) HOURS AT 150 PSI. WITH VALVE HEADS INSTALLED, WATER PRESSURE TEST LATERAL LINES FOR ONE (1) HOUR AT 75 PSI. LOAD PVC PIPE WITH A SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING AND WHIPPING UNDER PRESSURE.
- D.CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ALL PORTIONS OF THE WORK
- TWENTY-FOUR (24) HOURS AFTER THE FOLLOWING INSPECTIONS;
- SYSTEM LAYOUT - PRESSURE PIPELINE TESTS
- COVERAGE TESTS
- OPERATIONAL TESTS (PRIOR TO COMMENCING OF PLANTING OPERATIONS)

SIGNATURE BLOCK

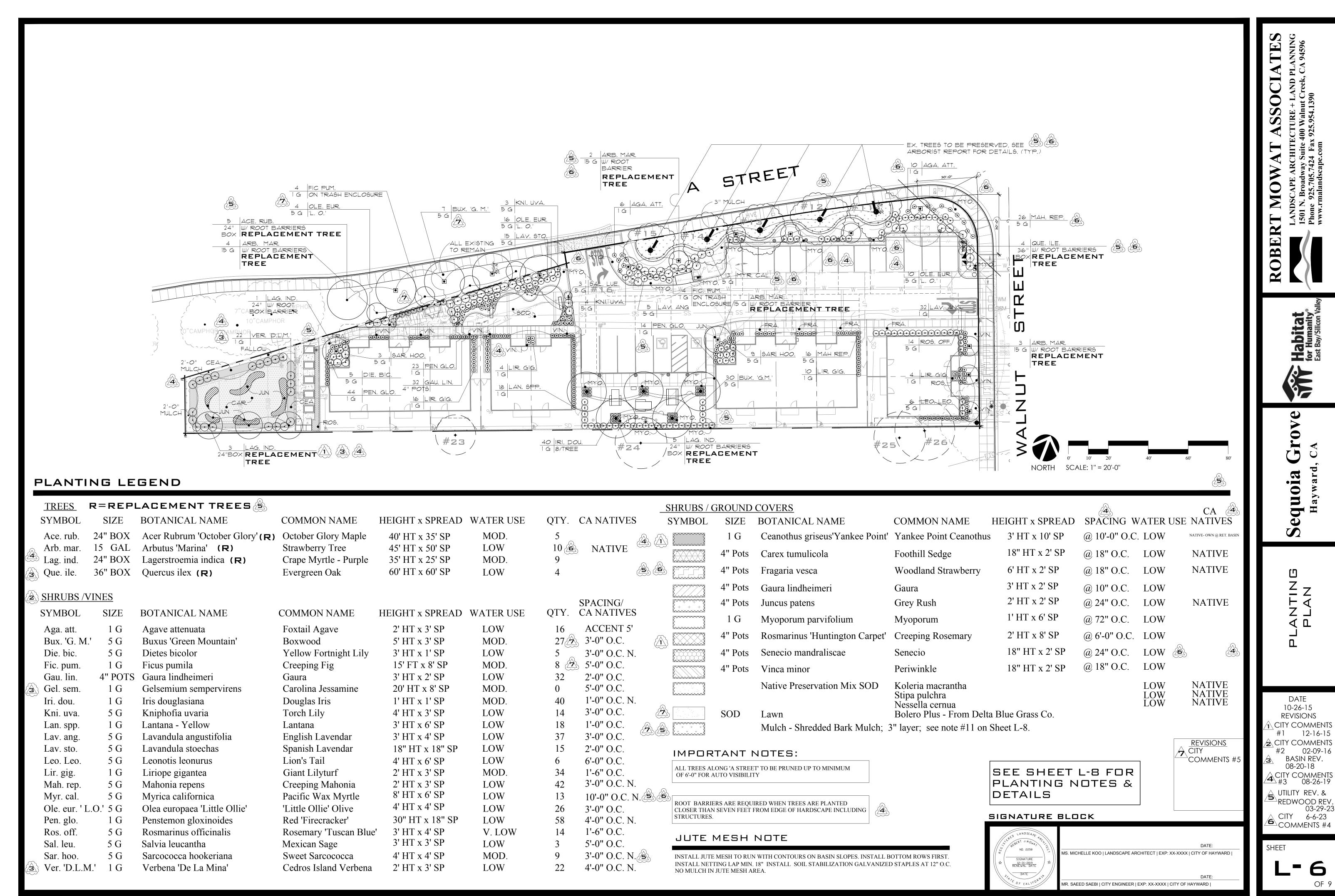


MS. MICHELLE KOO | LANDSCAPE ARCHITECT | EXP: XX-XXXX | CITY OF HAYWARD |

MR. SAEED SAEBI | CITY ENGINEER | EXP: XX-XXXX | CITY OF HAYWARD |

CITY COMMENTS 06-06-2

Habitat for Humanity

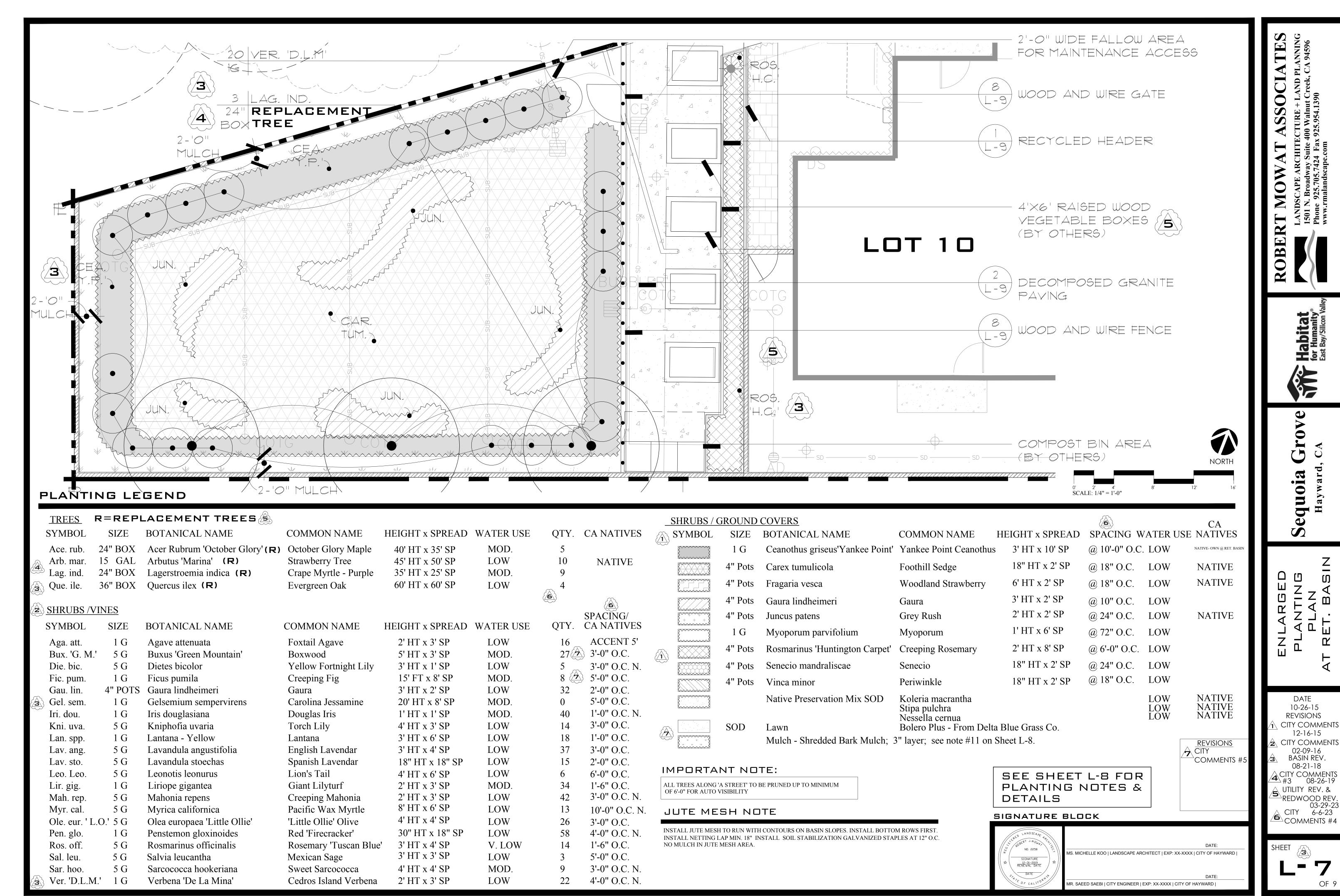


12-16-15

02-09-16

6-6-23

6



03-29-23

GENERAL PLANTING

- - A. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF PLANT MATERIAL AS INDICATED ON THE DRAWINGS AND AS SPECIFIED
 - B. CONTRACTOR SHALL COORDINATE PLANTING WITH OTHER SITE IMPROVEMENTS. UNLESS OTHERWISE SPECIFIED, STRUCTURAL IMPROVEMENTS SHALL BE INSTALLED PRIOR TO
 - C. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND STAKING EXISTING SEWER, WATER AND UTILITY LINES ABOVE OR BELOW GRADE THAT MIGHT BE DAMAGED AS A RESULT OF PLANTING OPERATIONS. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE AND FOR REPLACEMENT OF AFOREMENTIONED UTILITIES.
 - D. ALL WORK ON THE IRRIGATION SYSTEM, INCLUDING HYDROSTATIS, COVERAGE, AND OPERATIONAL TESTS, AND THE BACKFILLING AND COMPACTION OF TRENCHES SHALL BE PERFORMED PRIOR TO PLANTING OPERATIONS.

2. PLANT MATERIAL QUALITY

- A. PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE STATE DEPARTMENT OF AGRICULTURE'S REGULATIONS FOR NURSERY INSPECTIONS, RULES AND GRADING. ALL PLANTS SHALL BE OF NO. 1 GRADE AND HAVE A NORMAL HABIT OF GROWTH, AND SHALL BE SOUND, HEALTHY VIGOROUS AND FREE OF INSECT INFESTATIONS, PLANT DISEASES, SUN SCALDS, FRESH BARK ABRASIONS OR OTHER OBJECTIONABLE DISFIGUREMENTS. ALL PLANTS SHALL HAVE A NORMAL, WELL-DEVELOPED BRANCH SYSTEM AND VIGOROUS AND FIBROUS ROOT SYSTEM WHICH IS NOT ROOT BOUND AND IS FREE OF KINKED OR GIRDLING ROOTS.
- B. NURSERY GROWTH STOCK SHALL BE SELECTED FROM HIGH QUALITY, WELL SHAPED STOCK, GROWTH UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE PROJECT LOCALE. MINIMUM ACCEPTABLE SIZE OF PLANTS AS INDICATED IN THE DRAWINGS SHALL CORRESPOND WITH THAT NORMALLY EXPECTED FOR THE SPECIES AND VARIETY OF
- COMMERCIALLY AVAILABLE NURSERY STOCK. C. WHERE APPLICABLE, CALIPER SHALL BE THE DIAMETER OF THE TRUNK ONE FOOT (1') ABOVE
- THE GROUND SURFACE. D.OVERSIZE PLANTS MAY BE USED IF NOT ROOT BOUND, BUT SHALL NOT INCREASE THE CONTRACT PRICE. UP TO TEN PERCENT (10%) OF UNDERSIZED PLANTS IN ANY ONE (1) VARIETY AND GRADE MAY BE USED; PROVIDED THEY ARE LARGER THAN THE AVERAGE SIZE OF THE
- E. SCIENTIFIC AND COMMON NAMES CONFORM TO CUSTOMARY NURSERY USAGE.
- NEXT SMALLEST GRADE. F. TYPES AND SIZES OF PLANT MATERIALS SHALL BE AS INDICATED ON THE DRAWINGS.
- G.OWNER RESERVES THE RIGHT TO REFUSE OR REJECT ANY UNSUITABLE PLANT MATERIAL. UNSUITABLE PLANTS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE. REPLACEMENT PLANTS SHALL BE THE SAME SPECIES, VARIETY, SIZE

QUANTITIES SHOWN ARE A GUIDE ONLY; CONTRACTOR SHALL VERIFY QUANTITIES BY PLAN

- AND CONDITIONS AS SPECIFIED. H. PRUNING OF PLANT MATERIALS SHALL NOT BE DONE PRIOR DELIVERY. AFTER PLANTING, PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE INJURED TWIGS AND
- BRANCHES, DEAD WOOD AND SUCKERS. I. PLANT MATERIAL IS SUBJECT TO SUBSTITUTION BASED UPON AVAILABILITY. SUBSTITUTED
- MATERIAL SHALL BE APPROVED IN ADVANCE BY THE OWNER. J. SEED SHALL BE FRESH, CLEAN, PURE NEW CROP SEED. SEED SHALL BE DELIVERED TO THE SITE, UNMIXED, IN SEPARATE SEALED CONTAINERS. EACH SEALED CONTAINER SHALL BEAR THE SEED SUPPLIERS TAG INDICATING THE CONTAINER WEIGHT, SEED TYPE, SEED PURITY AND GERMINATION, AND CERTIFICATE OF RELEASE BY A COUNTY AGRICULTURAL COMMISSIONER.
- K.SOD SHALL BE GROWN FROM HIGH QUALITY PROPAGATIVE MATERIAL, FREE FROM WEEDS, DISEASES, AND INSECTS, AND SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR REGULATION FOR NURSERY INSPECTION OF THE APPLICABLE STATE OF THE PROJECT. SOD SHALL BE MACHINE CUT AT A UNIFORM THICKNESS OF FIVE-EIGHTHS OF AN INCH (5/8") (EXCLUDING TOP GROWTH AND THATCH). INDIVIDUAL PIECES SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH WITH AN ALLOWABLE DEVIATION OF TWO PERCENT (2%). BROKEN ROLLS OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A TWENTY - FOUR (24) HOUR PERIOD.

FERTILIZERS

- A.FERTILIZERS SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE STATE AGRICULTURAL CODE AND SHALL BE PACKAGED, FIRST GRADE, COMMERCIAL QUALITY PROJECTS IDENTIFIED AS TO SOURCE, TYPE OF MATERIAL, WEIGHT AND MANUFACTURER'S GUARANTEED ANALYSIS. FERTILIZERS SHALL NOT CONTAIN TOXIC INGREDIENTS IN OUANTITIES HARMFUL TO HUMAN, ANIMAL, OR PLANT LIFE. WHEN REQUESTED, CONTRACTOR SHALL FURNISH THE OWNER WITH CERTIFICATE OF COMPLIANCE STATING THAT THE MATERIAL SUBSTANTIALLY MEETS THE SPECIFICATIONS.
- B. COMMERCIAL FERTILIZER SHALL BE A PELLETED, BEADED, OR GRANULAR PRODUCT HAVING THE CHEMICAL ANALYSIS SPECIFIED HEREIN AND SHALL BE FREE - FLOWING MATERIAL DELIVERED IN ORIGINAL UNOPENED CONTAINERS. USE OF MATERIAL WHICH BECOMES CAKED OR OTHERWISE DAMAGED SHALL NOT BE PERMITTED.
- C. ORGANIC BASE FERTILIZER SHALL BE A HIGHLY CONCENTRATED HUMATE MATERIAL DERIVED FROM DECOMPOSED ANIMAL, FISH AND VEGETABLE MATTER WITH HUMIC ACIDS 13. GUARANTEE AND TRACE MATERIALS MANUFACTURERD AS TRI - C ENTERPRISES, CHINO, CALIFORNIA OR APPROVED EQUAL

4. AMENDMENTS A.COMPOSTED MATERIAL

- 1. APPLY COMPOST AT 4 CU.YRDS/1000 S.F. TO ALL PLANTED AREAS. ROTOTILL TO A DEPTH OF 12" TYPICAL.
 - 2. COMPOST SHALL BE A WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE DERIVED FROM WASTE MATERIALS INCLUDING YARD DEBRIS, WOOD WASTES OR OTHER ORGANIC MATERIALS NOT INCLUDING MANURE OR BIOSOLIDS MEETING THE STANDARDS DEVELOPED BY THE US COMPOSTING COUNCIL (USCC).
 - THE PRODUCT SHALL BE CERTIFIED THROUGH THE USCC SEAL OF TESTING ASSURANCE (STA) PROGRAM (A COMPOST TESTING AND INFORMATION DISCLOSURE PROGRAM).
 - 3. COMPOST QUALITY ANALYSIS BEFORE DELIVERY OF THE COMPOST, THE SUPPLIER SHALL SUBMIT A COPY OF LAB ANALYSIS PERFORMED BY A LABORATORY THAT IS ENROLLED IN THE US COMPOSTING COUNCIL'S COMPOST ANALYSIS PROFICIENCY (CAP) PROGRAM AND USING APPROVED TEST METHODS FOR THE EVALUATION OF COMPOSTING AND COMPOST (TMECC).
- MYCORRHIZAL FUNGHI & TERRA-SORB. PROVIDE MYCORRHIZAL FUNGI WITH LIVE SPORES OF BENEFICIAL ENDO AND ECTOMYCHORRHIZAL FUNGI, MARILYN'S OWN™ MYCO DRENCH -(ENDO ECTO BLEND FOR SOLUTION) http://marilynsown.com/myco-drench; PLUS TERRA-SORB (WATER ABSORBENT GEL) ROOTS TERRA-SORBOR APPROVED EQUAL AS ABOVE AND BIOSTIMULANTS TO ASSIST IN PLANT ESTABLISHMENT
- B. WHEN REQUESTED, CONTRACTOR SHALL FURNISH THE OWNER WITH A DELIVERY RECEIPT AND CERTIFICATE OF COMPLIANCE STATING THAT THE MATERIAL SUBSTANTIALLY MEETS THE SPECIFICATIONS.
- C. OWNER SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO AMENDING OR FERTILIZING PLANTING AREAS FOR INSPECTION DURING WORK.

TOP SOIL

- TOPSOIL SHALL CONSIST OF FERTILE, FRIABLE SOIL OF LOAMY CHARACTER, AND SHALL CONTAIN AN AMOUNT OF ORGANIC MATTER NORMAL TO THE AREA. IT SHALL BE REASONABLE FREE FROM WEEDS, REFUSE, ROOTS, HEAVY OR STIFF CLAY, STONES LARGER THAN TWO INCH (2") IN DIAMETER, STICKES, BRUSH, LITTER AND OTHER DELETERIOUS SUBSTANCES. TOPSOIL MAY BE OBTAINED FROM THE SITE IF APPROVED BY THE OWNER.
- B. WHEN REQUIRED, IMPORTED TOPSOIL SHALL BE SUBJECT TO INSPECTION AND TESTING AT THE SOURCE OF SUPPLY PRIOR TO DELIVERY TO THE PROJECT.

6. MATERIAL DELIVERY AND INSPECTION

- A.PLANT MATERIAL SHALL BE DELIVERED WITH LEGIBLE IDENTIFICATION LABELS. HANDLED AND STORED ADEQUATELY TO MAINTAIN A HEALTHY CONDITION, PROTECTING THEM FROM DRYING OUT, WINDBURN OR ANY OTHER INJURY.
- B. INSPECTION OF PLANT MATERIALS REQUIRED BY CITY / OWNER, COUNTY, STATE OR FEDERAL AUTHORITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHEN REQUESTED, CONTRACTOR SHALL FURNISH COPIES OF SUCH PERMITS OR CERTIFICATES TO CITY / OWNER.

7. SOIL PREPARATION

- A. AREAS TO RECEIVE "SOIL PREPARATION" INCLUDE TURF, GROUNDCOVER FROM ROOTED CUTTINGS AND NON - SLOPE HYDROSEEDED AREAS.
- B. RESULTING SOIL SHALL BE CLEAN, IN A FRIABLE CONDITION AND SUITABLE FOR PLANTING.

8. WEED ABATEMENT OPERATIONS A. THE IRRIGATION SYSTEM AND FINISH GRADE SHALL BE COMPLETED PRIOR TO WEED ABATEMENT OPERATIONS.

B. CONTRACTOR SHALL OPERATE THE IRRIGATION SYSTEM TO KEEP PLANTING AREAS UNIFORMLY MOIST FOR A PERIOD OF THREE (3) WEEKS (21 CONSECUTIVE CALENDAR DAYS). AT THE END OF THE THREE (3) WEEK WATERING PERIOD, CONTRACTOR SHALL HAND REMOVE

9. BACKFILL

- A. BACKFILL SHALL BE AS SPECIFIED; MACHINE MIXED AND APPROVED BY THE OWNER PRIOR TO INCORPORATION IN PLANTING PITS.
- B. THE FOLLOWING AMENDMENTS OR APPROVED EQUAL, SHALL BE INCORPORATED:
- 2 PARTS BY VOLUME ON SITE SOIL PARTS BY VOLUME ORGANIC AMENDMENT COMPOST
- 6 LBS PER CY OF MIX TRI C 6 2 4 SOIL CONDITIONER / FERTILIZER OR TRI - C IRON WITH MICROS (SON - STAIN)
- 1 LB PER CY OF MIX IRON SULFATE 10. INSTALLATION - SHRUBS, VINES, & TREES
- PITS. EXCAVATED PITS SHALL BE AS INDICATED IN THE DETAILS ON THE DRAWINGS. B. CONTAINERS SHALL BE OPENED AND REMOVED SUCH THAT THE ROOTBALL IS NOT INJURED.

A.STAKE PLANT LOCATIONS AND SECURE APPROVAL FROM THE OWNER BEFORE EXCAVATING

C. WATER ALL PLANTING AREAS THOROUGHLY AFTER INSTALLATION OF PLANT MATERIALS. ADDITIONAL BACKFILL SHALL BE ADDED TO FILL VOIDS CAUSED BY WATER SETTLEMENT. D.TREES SHALL BE STAKED AT TIME OF PLANTING AS INDICATED IN THE DETAILS ON THE DRAWINGS.

11. RECYCLED WOOD MULCH

- A. SPREAD MULCH PLACED IN AREAS OUTSIDE OF PLANT BASINS TO A UNIFORM THICKNESS AS SHOWN ON THE DRAWINGS.
- B. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3" OF MULCH AT ALL TIMES OVER SURFACE OF ALL NON-TURF PLANTING AREAS. KEEP MULCH 6" AWAY FROM TREE TRUNKS AND AWAY FROM SHRUB STEMS. MULCH SHALL BE APPLIED SO THAT IT IS BELOW GRADE (CURB, EDGING, ETC.) BY HALF AN INCH. SOME ADDITIONAL GRADING PREPARATION AND GRADING OF AREAS ADJACENT TO SIDEWALKS OR EDGING, ETC. MAY BE REQUIRED TO KEEP THE FINISH GRADE OF THE MULCH AT AN APPROPRIATE LEVEL. MULCH MATERIALS SHALL BE RECOLOGY GROVER ENVIRONMENTAL PRODUCTS DECORATIVE MULCH LOCALLY SOURCED RECYCLED CHIPPED OR SHREDDED GREEN WASTE, WOOD CHIPS FROM PRUNING OPERATIONS, OR CHIPPED LANDSCAPE PRUNINGS. AT A MINIMUM REPLENISH MULCH ONCE PER YEAR IN NOVEMBER.
- C. DECORATIVE MULCH MANUFACTURED BY RECOLOGY GROVER ORNAMENTAL PRODUCTS OR EQUIVALENT RECYCLED WOOD CHIP MULCH. RECYCLED MULCH CHIP SHALL BE MADE FROM KILN DRIED LUMBER AND BE ORGANIC NON-TOXIC DYE COLOR ENHANCED WITH MINERAL PIGMENTS THAT HAVE DEMONSTRATED A COLOR LONGEVITY OF +1 YEAR. COLOR SHALL BE DARK BROWN. ALL PRODUCTS MUST PASS A TWO INCH SCREEN. RECOLOGY GROVER ENVIRONMENTAL PRODUCTS DECORATIVE MULCH MADE FROM RECYCLED WOOD AND ARBOR PRODUCTS.

MULCH SITE: MODESTO, CA 95358 DECORATIVE MULCH MADE FROM RECYCLED WOOD & ARBOR PRODUCTS PHONE: (800) 208-2370

12. INSTALLATION - SOD

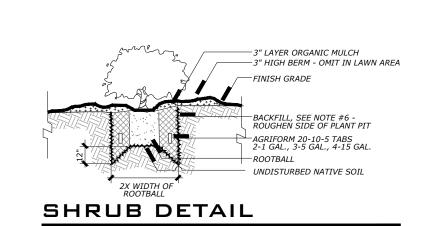
- A. PREPARE SOIL AND PROVIDE WEED ABATEMENT OPERATIONS IN ACCORDANCE WITH THE GENERAL PLANTING SECTION. RAKE, CULTIVATE, FLOAT AND ROLL UNTIL AREAS TO RECEIVE TURF AREA IN A SMOOTH AND UNIFORM CONDITION.
- B. FINISH GRADE FOR TURF AREAS SHALL BE ONE INCH (1") BELOW THE FINISH SURFACE OI WALKS, CURBS, OR RELATED HARDSCAPE.
- C. PRIOR TO SODDING, SOIL SHALL BE MOIST TO MINIMUM DEPTH OF ONE INCH (1"). D. PRIOR TO INSTALLATION, AREA TO BE SODDED SHALL RECEIVE SULPHATE OF AMMONIA AT THE RATE OF ONE (1) POUND PER 200 SOUARE FEET.
- E. SOD SHALL BE LAID AND TAMPED WITH BUTT JOINT IN A STAGGERED "RUNNING BOND"
- F. AFTER INSTALLATION, SOD SHALL BE ROLLED WITH A 200 POUND WATER FILLED LAWN ROLLER. G. SOD SHALL BE AS INDICATED ON THE DRAWINGS.

OF RE-PLANTING.

- A.CONTRACTOR SHALL GUARANTEE PLANT MATERIAL THROUGH ONE (1) FULL YEAR AFTER THE DATE OF ACCEPTANCE OF THE WORK. B. REPLACEMENT PLANT MATERIAL SHALL BE OF THE SAME SPECIES, VARIETTY, & SIZE AS ORIGINALLY PLANTED AND SHALL BE GUARANTEED FOR ONE (1) FULL YEAR FROM THE DATE
- C. COST INCURRED DUE TO REPLACEMENT OF DEAD OR DYING PLANT MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TREE STAKE, SEE PLANTING DETAILS RUBBER AND WIRE FASTENERS WITH WOOL CROSS PIECES, SEE PLANTING DETAILS FOR SIZE, QUANTITY, & REQUIREMENTS CONC. CURB OR CONC. PAVING , SEE PLAN - 3" LAYER ORGANIC MULCH — ROOTBALL 2" ABOVE FINISH GRADE CONC. PAVING OR CONC. CURB, SEE PLAN 24" DEEP CONTINUOUS ROOT BARRIER INSTALL ROOT BARRIER ON TREES PLANTED ROOT SOLUTIONS MDL. RS-24 OR EQUAL.

ROOT BARRIER DETAIL NOT TO SCALE 426.63 ROOT BARRIER DETAIL



426.64 SHRUB PLANTING

PLANTING NOTES

- 1. ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR OR BY OWNER AND PERSONNEL FAMILIAR WITH THE WORK AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN.
- 2. PLANT MATERIAL LOCATIONS ARE DIAGRAMMATIC AND SUBJECT TO CHANGE IN THE FIELD AS DIRECTED BY THE LANDSCAPE ARCHITECT AND CITY SUPERVISOR. LOCATE PLANT MATERIALS TO SCREEN UTILITIES, IRRIGATION DEVICES, ETC. AS MUCH AS POSSIBLE YET ALLOWACCESS TO THEM.
- 3. ALL TREES SHALL BE STAKED AS SHOWN IN THE DETAILS.
- 4. THE OWNER RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS AND DELETIONS IN THE PLANTING SCHEME AS NECESSARY WHILE WORK IS IN PROGRESS. SUCH CASES ARE TO BE ACCOMPANIED BY EQUITABLE ADJUSTMENTS IN THE CONTRACT PRICE IF/WHEN NECESSARY.
- 5. THE PLANT COUNT IS FOR THE CONTRACTOR'S CONVENIENCE. IN CASE OF A DISCREPANCY, THE PLAN SHALL GOVERN.
- 6. AMEND THE TOPSOIL AS PER THE RECOMMENDATIONS OF THE PLANS.
- 7. ANY REQUIREMENTS IN THE PLANS SHALL BE CONSIDERED BINDING. IN CASE OF DISCREPANCIES THE OWNER AND LAND. ARCH. SHALL BE IMMEDIATELY NOTIFIED FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- 8. THERE SHALL BE REGULAR SITE VISITS BY THE LANDSCAPE ARCHITECT AND THE OWNER THROUGHOUT CONSTRUCTION AND A FINAL SITE REVIEW.
 - TO INSPECT PLANTS ON ARRIVAL FROM NURSERY
 - 2. AT TIME OF PLANTING
 - 3. A FINAL SITE REVIEW

10. LOCATE ALL UTILITIES BEFORE PROCEEDING WITH THE WORK. COORDINATE ALL DIGGING AND TRENCHING PRIOR TO BEGINNING WORK WITH THE PROJECT SUPERVISOR FIRST.

ORDINANCES. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS.

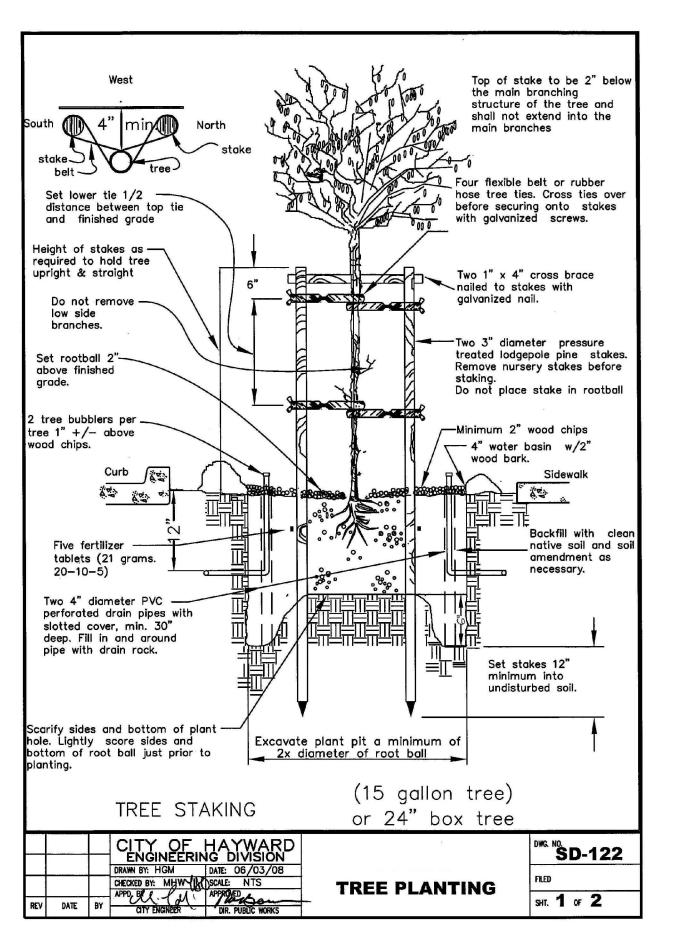
11. ALL PLANT PITS SHALL BE FREE FROM ROCKS AND DEBRIS GREATER THAN 2" IN

9. ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH ALL LOCAL CODES AND

- 12. CONTRACTOR TO PROVIDE MAINTENANCE DURING CONSTRUCTION AND FOR A PERIOD OF 3 MONTHS FOLLOWING THE OWNER'S ACCEPTANCE OF THE COMPLETION OF THE FINAL PUNCH LIST AS PART OF THEIR BID. ALL FERTILIZING, MOWING, CLEAN-UP AND ASSOCITED LANDSCAPE PRACTICES SHALL BE INCLUDED. THE 60 DAY MAINTENANCE PERIOD DOES NOT END UNTIL FINAL ACCEPTANCE BY THE OWNER.
- 13. CONTRACTOR TO SUBMIT UNIT PRICES FOR THE POSSIBLE ADDITION OF PLANTS TO THE PROJECT, UNLESS INSTALLED BY OWNER, SUBMIT UNIT PRICES FOR 24" BOX TREE, 15 GALLON TREES, 5 GALLON SHRUBS, 1 GALLON SHRUBS, LAWN AND GROUND COVER AT SQ. FT. PRICES.
- 14. ALL USED TREE BOXES SHALL BE DELIVERED TO A LOCAL GREEN WASTE RECYCLING TO BE "CHIPPED" INTO GREEN WASTE. ALL PLASTIC CANS TO BE RETURNED TO THE NURSERY.

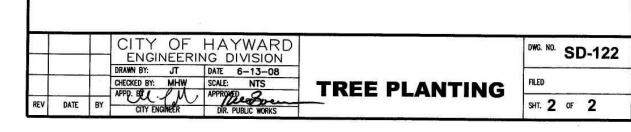


- 16. APPLY 3" OF ORGANIC COMPOST MULCH FOR A TOTAL OF A MINIMUM OF 3" OF MULCH FOR ALL PLANTING AREAS ON TOP OF CARDBOARD TO CONCEAL DRIP LINES. DO NOT BURY ROOT CROWNS OF PLANTS. FINAL MULCH GRADE SHALL BE INSTALLED 1" BELOW ANY PAVED SURFACE OR CURB.
- 17. VERIFY THE LOCATION OF ALL UTILITIES AND PROTECT AT ALL TIMES. CONTRACTOR TO PAY FOR ANY DAMAGE TO UTILITIES. TELEPHONE U.S. ALERT TO LOCATE ANY UTILITY LOCATION IN DOUBT. ALLOW TWO DAYS LEAD TIME. (800) 227-2600

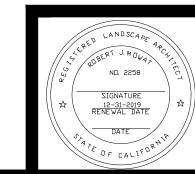


STREET TREE PLANTING SPECIFICATIONS

- Tree shall be healthy, disease and insect-free, well rooted, and properly trained with a straight trunk that can stand upright without support. Tree shall exhibit a central leader, or a main branch that can be trained as a central leader. Branches shall be well-developed and shall be evenly and radially distributed around the trunk. Root ball shall not exhibit
- Tree shall comply with federal and state laws requiring inspection for plant diseases and pest infestation. Clearance from the county agricultural commissioner, as required by law, shall be obtained before planting trees delivered from outside the county.
- 3. Prior to planting tree, determine the location of existing or future underground utilities. Locate tree a minimum of 5 feet from lateral service lines and driveways. Locate tree a minimum of 15 feet from a light pole, and a minimum of 30 feet from the face of a traffic signal, or as otherwise
- 4. Tree pit shall be tested for proper drainage prior to planting tree. Fill pit with water; if water remains after a 24-hour period, auger by 3-foot deep holes at the bottom of the tree pit. Backfill with drain rock.
- 5. Set tree in an upright and plumb position. As much as possible, tree shall be positioned such that dominant branches are parallel to the roadway and are oriented away from potential conflicts.
- 6. If required by the City, a pressure-compensating bubbler, or drip emitters, shall be provided to each tree.
- Depending on the planter strip width, or the tree well size and the tree species being planted, a 24" deep root-barrier may be required by the City to be placed between the root—ball and the curb and/or sidewalk. Length of strip barrier or size of the box barrier will be specified by the City.
- 8. Stakes are to be removed when the tree diameter meets or exceeds the diameter of the stake.



SIGNATURE BLOCK



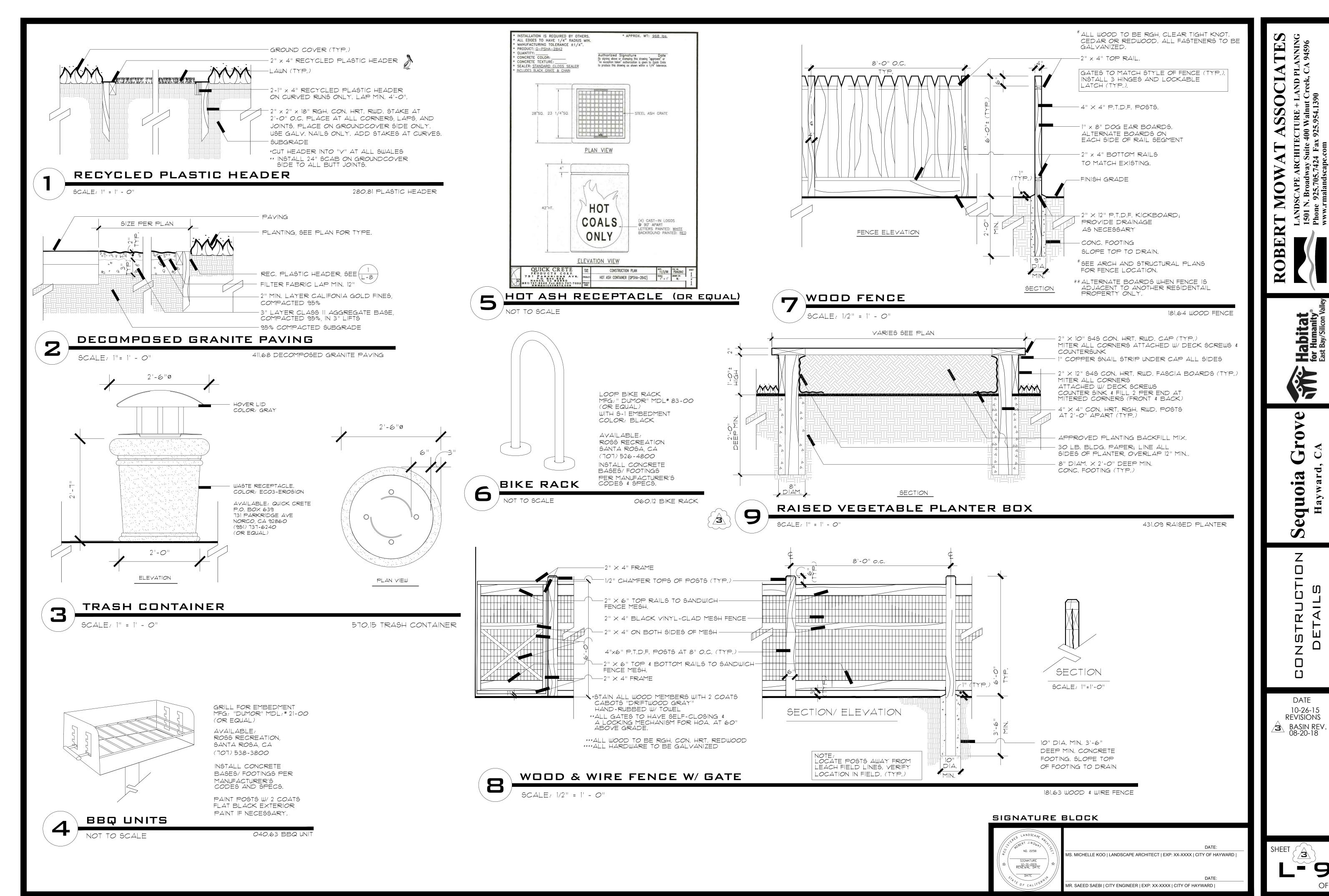
IS. MICHELLE KOO | LANDSCAPE ARCHITECT | EXP: XX-XXXX | CITY OF HAYWARD |

IR. SAEED SAEBI | CITY ENGINEER | EXP: XX-XXXX | CITY OF HAYWARD |

08-26-1

PRINT DATE: 8-2-2023

ard



PRINT DATE: 8-2-2023

9