

PROJECT STATEMENT

THE PURPOSE OF THIS PROJECT IS TO OBTAIN DESIGN REVIEW APPROVAL FOR A PROPOSED MULTI-FAMILY DEVELOPMENT AT 1514 WASHINGTON ST, CALISTOGA, CA.

SURVEY NOTES

1. THE TOPOGRAPHY IS BASED ON A FIELD SURVEY OF FEBRUARY, 2018 PERFORMED BY LESQUIRE ENGINEERS, INC.
2. THIS SURVEY IS ON AN ASSUMED DATUM.
3. SITE BENCHMARK DESCRIPTION: "CONTROL POINT #899 PK NAIL ELEVATION = 98.32 (ASSUMED)"
4. MADRONE ENGINEERING ASSUMES NO LIABILITY, REAL OR ALLEGED, REGARDING THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS.
5. CONTRACTOR SHALL PROTECT EXISTING SURVEY MONUMENTS OR REPLACE THEM AT HIS OWN EXPENSE.

ESTIMATED EARTHWORK QUANTITIES

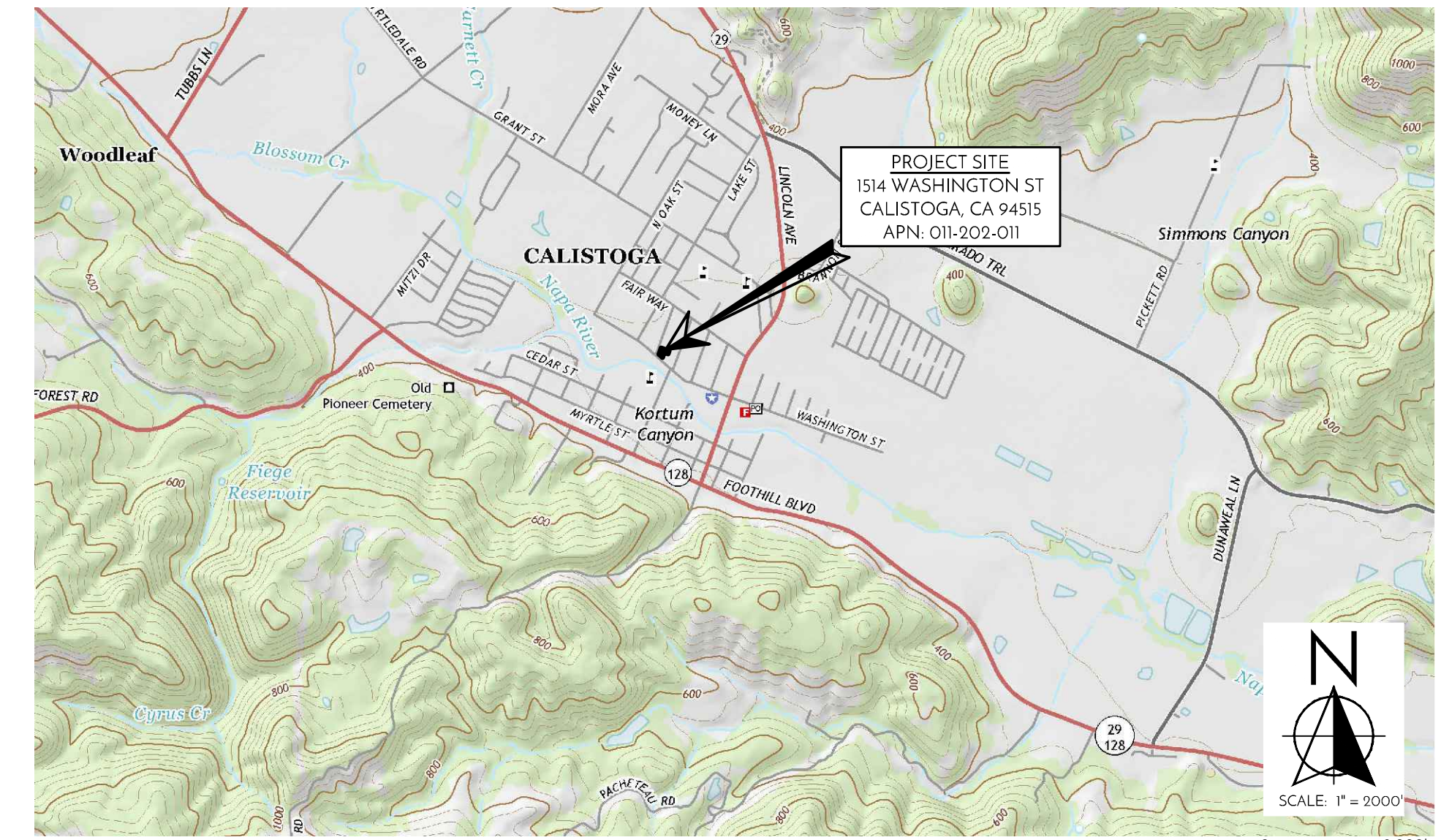
1. THE EARTHWORK QUANTITIES LISTED BELOW ARE ESTIMATES ONLY AND MAY VARY DUE TO SOIL TYPE, COMPACTION AND BULKING FACTORS, GRADING PRACTICES, AND COMPACTION VALUES.
2. THE UNADJUSTED QUANTITIES HAVE BEEN DERIVED USING A VOLUMETRIC ANALYSIS BETWEEN THE EXISTING AND PROPOSED FINISHED GRADE ELEVATIONS.
3. THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE WHEN DEVELOPING ADJUSTED QUANTITY ESTIMATES:
 - QUANTITIES FROM UTILITY TRENCHES, FOUNDATION TRENCHES, AND STORMWATER DETENTION BASINS HAVE NOT BEEN ESTIMATED.
 - QUANTITIES RELATED TO OVEREXCAVATION AND RECOMPACTION HAVE NOT BEEN ESTIMATED.
4. CONTRACTOR SHALL WORK WITH THE PROJECT GEOTECHNICAL ENGINEER TO DETERMINE IF COMPACTION AND BULKING FACTORS ARE APPLICABLE FOR THE PROPOSED GRADING ACTIVITIES. THESE FACTORS HAVE THE POTENTIAL TO SIGNIFICANTLY ALTER THE CUT & FILL QUANTITIES IDENTIFIED IN THIS ANALYSIS.
5. SEE THE TABLE BELOW FOR THE ESTIMATED EARTHWORK QUANTITIES FOR THE PROJECT.

ESTIMATED PROJECT EARTHWORK		
	UNADJUSTED QUANTITIES (CY)	ADJUSTED QUANTITIES (CY)
CUT	N/A	65
FILL	N/A	65
ESTIMATED NET EARTHWORK		BALANCED

THE APPROXIMATE AREA OF DISTURBED SOIL IS 9,000 SF (0.21 AC).

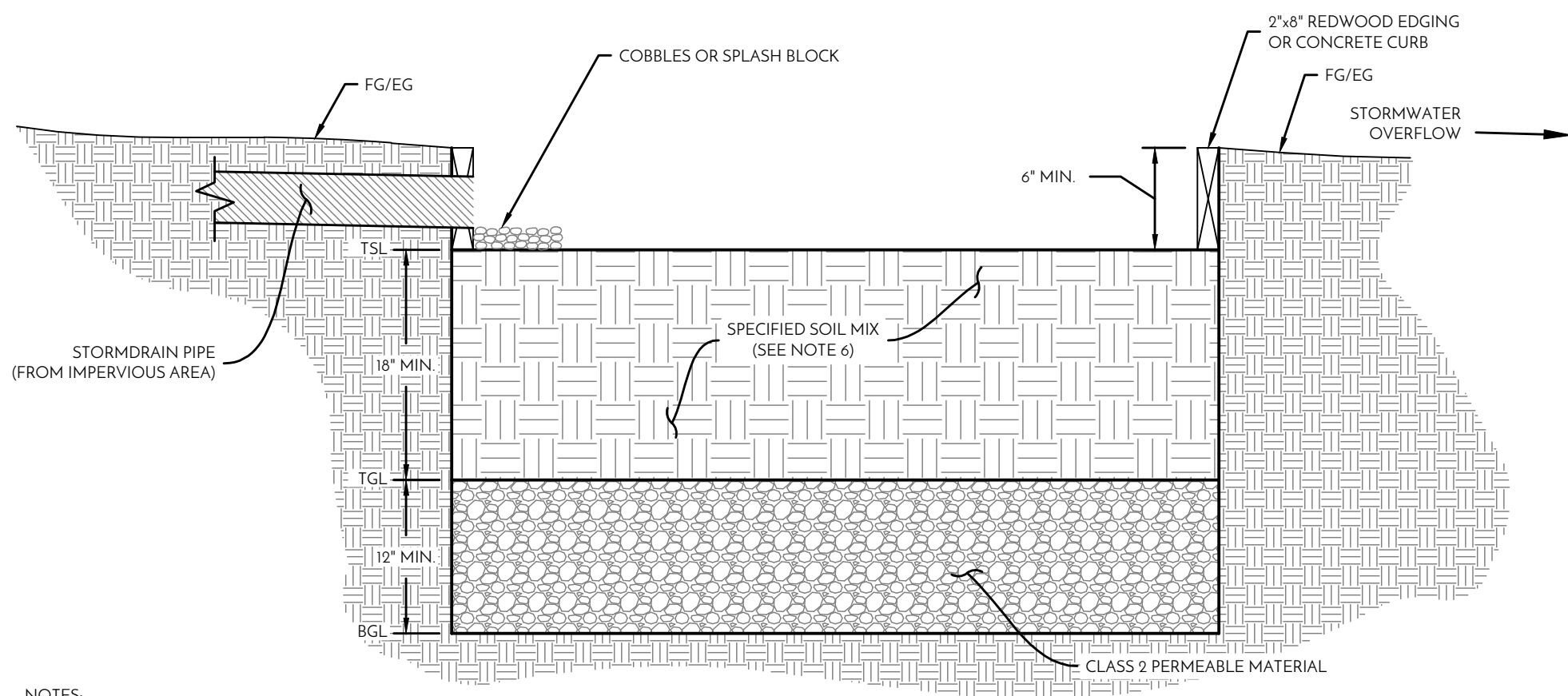
CIVIL IMPROVEMENT PLANS FOR:
MULTI-FAMILY HOUSING

1514 WASHINGTON ST
CALISTOGA, CA, 94515



VICINITY MAP

MAP FROM USGS 7.5 MIN SERIES MAP NAME: CALISTOGA



NOTES:

1. FACILITIES LOCATED WITHIN 10 FEET OF STRUCTURES SHALL INCORPORATE AN IMPERVIOUS CUTOFF WALL.
2. FACILITIES LOCATED IN AREAS OF HIGH GROUNDWATER, HIGHLY INFILTRATIVE SOILS, OR WHERE CONNECTION OF THE UNDERDRAIN TO A SURFACE DRAIN OR SUBSURFACE STORM DRAIN ARE INFEASIBLE MAY OMIT THE UNDERDRAIN.
3. NO LINER, NO FILTER FABRIC, NO LANDSCAPE CLOTH.
4. MAINTAIN BGL, TGL, TSL AT LEVEL ELEVATIONS AS SPECIFIED ON THE PLANS.
5. CLASS 2 PERMEABLE LAYER MAY EXTEND BELOW AND UNDERNEATH DROP INLET.
6. REQUIRED SOIL MIX: 60% 70# FINE SAND, 30%-40% COMPOST (VOLUME BASIS). SOIL SHALL BE CAPABLE OF ACHIEVING A LONG-TERM, IN-PLACE INFILTRATION RATE OF AT LEAST 5 INCHES PER HOUR. SOIL SHALL ALSO SUPPORT VIGOROUS PLANT GROWTH.

1 BIORETENTION FACILITY
NO SUBDRAIN

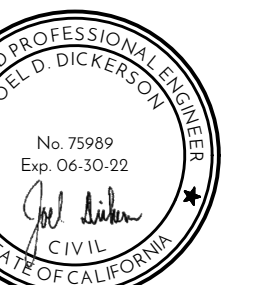
NOT TO SCALE

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madrone
ENGINEERING
1485 Main Street, Suite 302
St. Helena, California 94574
Tel: 707.501.6580

CIVIL IMPROVEMENT PLANS
COVER SHEET

MULTI-FAMILY HOUSING
1514 WASHINGTON ST
CALISTOGA, CA 94515
APN: 011-202-011
PROJECT: 18-024

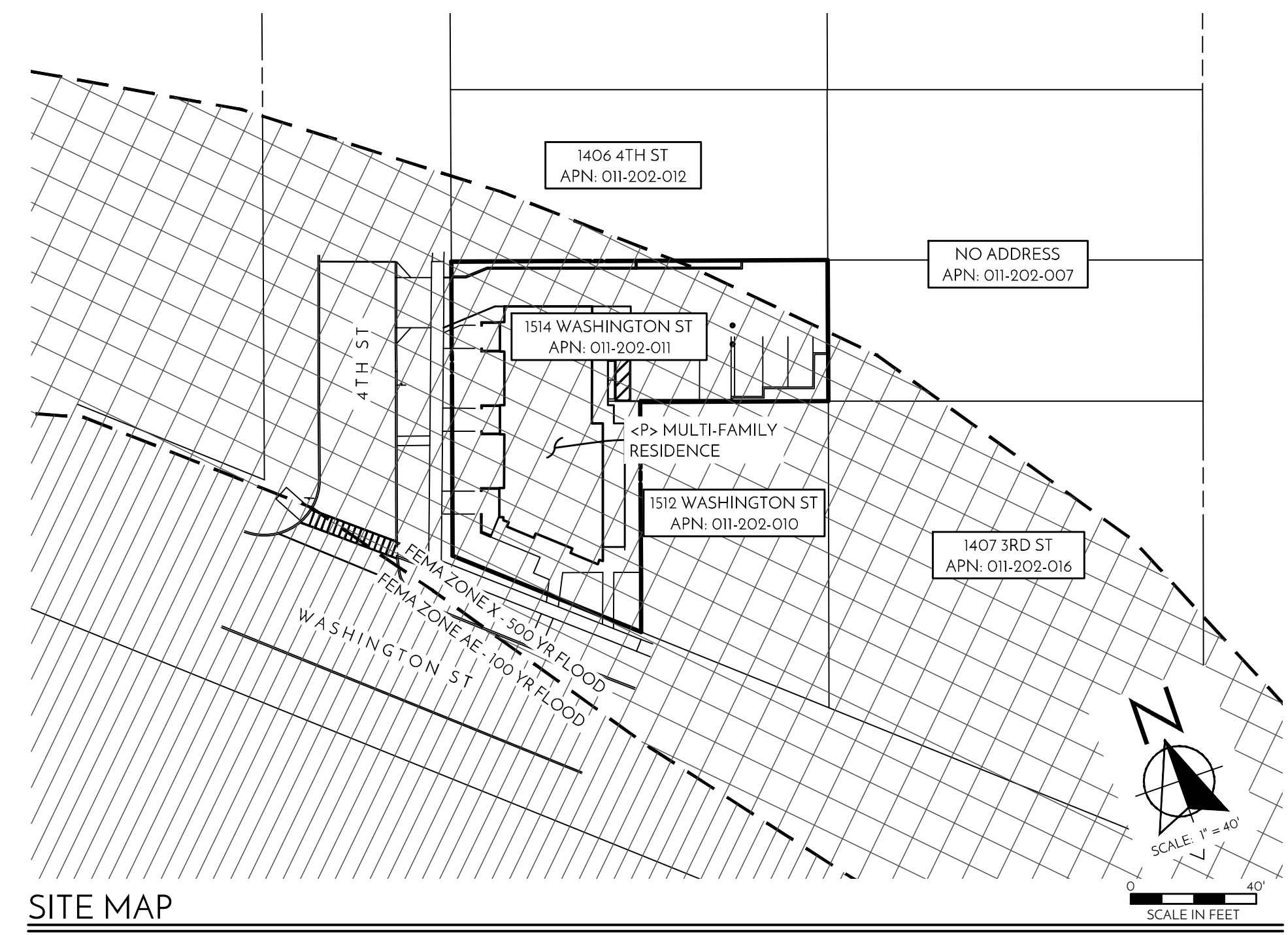


EVERY PERSON PLANNING TO DIG CALL USA AT 811 PRIOR TO EXCAVATION

DATE: 08/25/20 ISSUE: DESIGN REVIEW
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SHEET:

C1.0



SITE MAP

SHEET INDEX

- C1.0 COVER SHEET
- C2.0 HARDSCAPE PLAN
- C2.1 GRADING PLAN
- C3.0 UTILITY PLAN

PROJECT INFORMATION

OWNER: DMITRI LAKTIONOV
1349 TARAVAL ST
SAN FRANCISCO, CALIFORNIA 94116

ARCHITECT: DAVID KESLER
4739 25TH ST
SAN FRANCISCO, CA 94114
(510) 710-7910

SITE ADDRESS: 1514 WASHINGTON ST
CALISTOGA, CA 94515

ASSESSOR PARCEL #: 011-202-011
PARCEL SIZE: +0.21 ACRES
CITY ZONING: R-3

SURVEYOR: LESQUIRE ENGINEERS, INC
5468 SKYLANE BLVD
SANTA ROSA, CA 95403
JOHN PAWSON, P.L.S.
707/575-3427

CIVIL ENGINEER: MADRONE ENGINEERING
1485 MAIN STREET, SUITE 302
ST. HELENA, CA 94574
JOEL DICKERSON, P.E.
707/302-6280

REVISIONS

NO CHANGES THIS SHEET

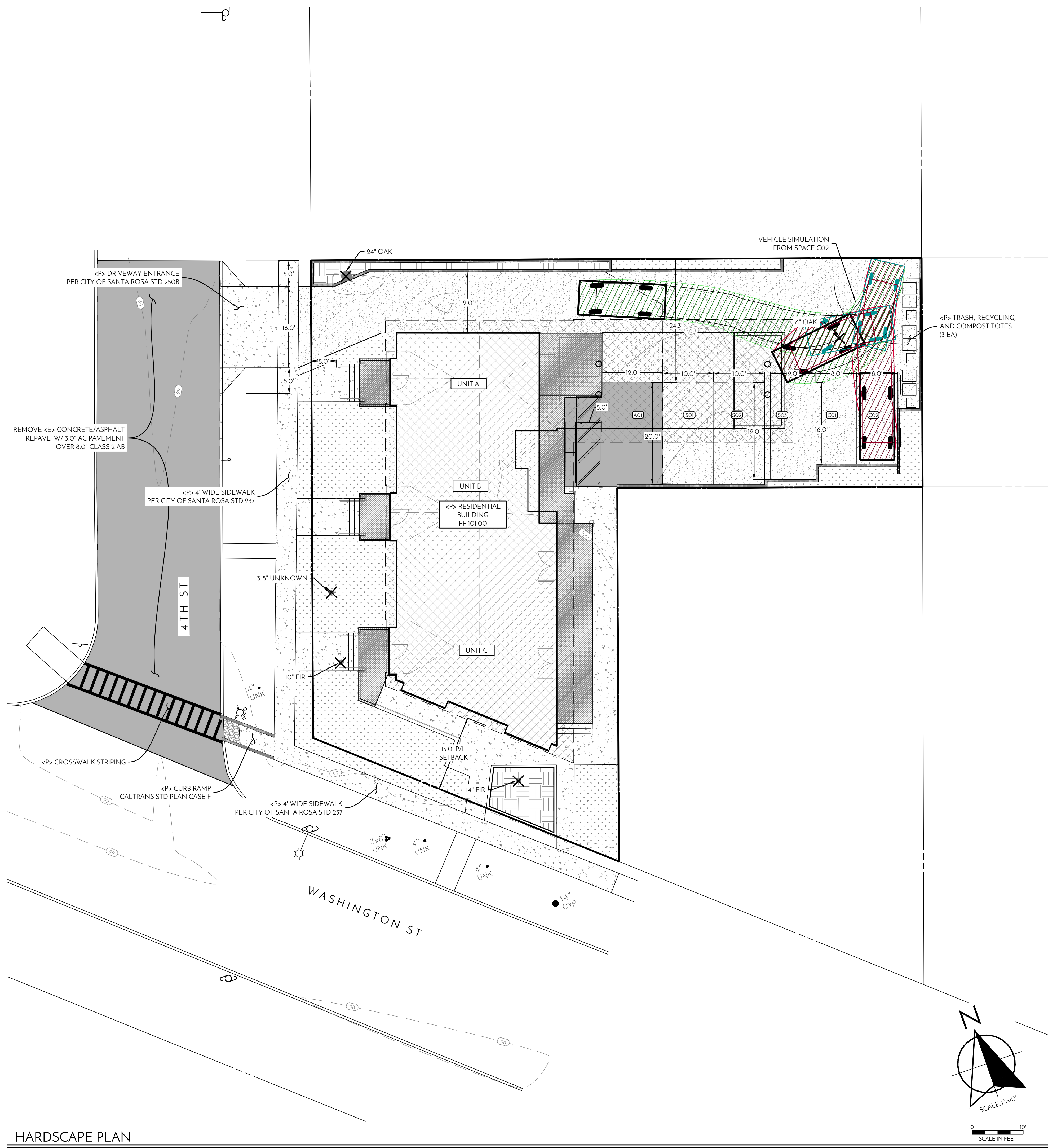
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ABBREVIATIONS

AB	AGGREGATE BASE	FH	FIRE HYDRANT	R	RADIUS
AC	ASPHALT CONCRETE	FRM	FLOOD RESISTANCE RATE MAP	RT	RIGHT
AD	AREA DRAIN	FL	FLOW LINE	ROW	RIGHT OF WAY
BC	BEGIN CURVE	FM	FORCE MAIN	RWL	RAIN WATER LEADER
BFE	BASE FLOOD ELEVATION PER FIRM	FS	FINISHED SURFACE GRADE	RCP	REINFORCED CONCRETE PIPE
BM	BENCHMARK	GR	GRAVEL	S	SOUTH
BCR	BEGIN CURB RETURN	HP	HIGH POINT	SAD	SEE ARCHITECTURAL DRAWINGS
BVC	BEGIN VERTICAL CURVE	IRW	INVERT	SD	STORM DRAIN
BS	BOTTOM OF STAIRS	IP	IRON PIPE	SOP	SUBDRAIN PIPE
BSW	BACK OF SIDEWALK	IRR	IRRIGATION	SED	SEE ELECTRICAL DRAWINGS
CB	CATCH BASIN	JP	JOINT POLE	SLD	SEE LANDSCAPE DRAWINGS
C&G	CURB AND GUTTER	LF	LINEAL FEET/FOOT	SLV	SLEEVE
CMU	CONCRETE MASONRY UNIT	LP	LOW POINT	SMD	SEE MECHANICAL DRAWINGS
CP	CONCRETE PIPE	MH	MANHOLE	SPD	SEE PLUMBING DRAWINGS
C	CENTERLINE	MON	MONUMENT	SS	SANITARY SEWER
COMM	COMMUNICATION	(N)	NORTH	SSCO	SANITARY SEWER CLEAN OUT
CV	CHECK VALVE	+N	NEW	SSMH	SANITARY SEWER MANHOLE
CW	COLD WATER	OC	ON CENTER	STA	STATION
DCV	DOUBLE CHECK VALVE	OG	ORIGINAL GROUND	STD	STANDARD
DG	DECOMPOSED GRANITE	OH	OVERHEAD	SW	SIDEWALK
DIP	DUCTILE IRON PIPE	OH	OVERHEAD LINE	TC	TOP OF CURB
DS	DOWNSPOUT	+P	PROPOSED	TFC	TOP FACE OF CURB
DW	DOMESTIC WASTE	PCC	PORTLAND CEMENT CONCRETE	TOC	TOP OF CONCRETE
DWG	DRAWING	PD	PRESSURE DISTRIBUTION	TS	TOP OF STAIRS
EC	END OF CURVE	PG&E	PACIFIC GAS AND ELECTRIC	TW	TOP OF WALL
EG	EXISTING GROUND	PI	POINT OF INTERSECTION	TYP	TYPICAL
EA	EXISTING	PV	POST INDICATOR VALVE	UG	UNDERGROUND
-E+	END CURB RETURN	P/L	PROPERTY LINE	VC	VERTICAL CURVE
EG	EXISTING GROUND	PRC	POINT OF REVERSE CURVE	VG	VALLEY GUTTER
EGR	EDGE OF GRAVEL	PSI	POUNDS PER SQUARE INCH	(W)	WEST
EPA	EDGE OF PAVEMENT	PUE	PUBLIC UTILITY EASEMENT	WM	WATER METER
EVC	END VERTICAL CURVE	PVC	POLYVINYL CHLORIDE	W/S	WATER SERVICE
FDC	FIRE DEPT CONNECTION	PVI	POINT OF VERTICAL INTERSECTION	WV	WATER VALVE
FG	FINISHED GRADE	PW	PROCESS WASTE		

SYMBOL LEGEND

	UTILITY POLE		SEWER MANHOLE/RISER WITH ID #
	SIGN		STORM DRAIN MANHOLE WITH ID #
	WELL		WATER VALVE
	STREET LIGHT		WATER METER & DCV
	TREE		FDC/PV WITH CHECK VALVE
	TREE TO BE REMOVED		FIRE HYDRANT WITH GATE VALVE
	SANITARY SEWER		CLEANOUT
	GAS LINE		PROPOSED CONTOUR
	WATER LINE		SOLID STORM DRAIN
	EXISTING CONTOUR		PERFORATED STORM DRAIN
	TOP/TOE BANK		GRADE SWALE
	GRADEBREAK		OVERLAND RELEASE ROUTE
	PROPERTY LINE		
	CENTERLINE		



HARDSCAPE LEGEND

TYPE OF IMPERVIOUS SURFACE	AREA DESCRIPTIONS	AREA (SF)	TYPICAL SECTION	PERVIOUS/ IMPERVIOUS	
[Cross-hatch pattern]	BUILDINGS, GARAGES, CARPORTS, OTHER STRUCTURES WITH ROOFS	3,640	N/A	IMPERVIOUS	
[Diagonal lines]	WOOD DECK	1,400	N/A	PERVIOUS	
[Dotted pattern]	CONCRETE	0	N/A	IMPERVIOUS	
[Dotted pattern]	SIDEWALKS AND PATHS	620	4" CONC OVER 4" CL 2 AB	IMPERVIOUS	
[Dotted pattern]	PARKING/DRIVEWAY	ASPHALT CONCRETE	400	2.5" AC OVER 6.0" CL 2 AB	IMPERVIOUS
[Dotted pattern]		GRAVEL	3,180	10.0" CL 2 AB	PERVIOUS
[Dotted pattern]	OFF-SITE IMPERVIOUS IMPROVEMENTS	ASPHALT/CONCRETE	3,360	N/A	IMPERVIOUS
[Dotted pattern]	OTHER PERVIOUS SURFACE	DECOMPOSED GRANITE	0	N/A	PERVIOUS
[Dotted pattern]		PLANTING	960	N/A	PERVIOUS
[Dotted pattern]		LAWN	0	N/A	PERVIOUS
[Dotted pattern]		BIORETENTION	225	N/A	PERVIOUS
	TOTAL	13,985			

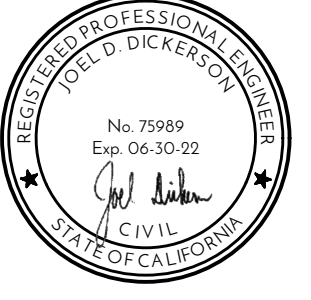
TOTAL NEW/RECONSTRUCTED IMPERVIOUS AREA: 4,540 SF (0.10 AC)
 TOTAL DISTURBED SOIL AREA: ~9,000 SF (0.21 AC)

CONSIDERATION OF DOCUMENTS: ALL SUBMITTALS SHALL BE THE PROPERTY OF MADRONE ENGINEERING. ANY CHANGES TO THE ORIGINAL DESIGN SHALL BE THE PROPERTY OF MADRONE ENGINEERING. UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS SHALL BE THE USER'S SOLE RESPONSIBILITY. MADRONE ENGINEERING SHALL BE THE USER'S SOLE AGENT FOR ALL INFORMATION RELATIVE TO THE PROJECT.



CIVIL IMPROVEMENT PLANS
 HARDSCAPE PLAN

MULTI-FAMILY HOUSING
 1514 WASHINGTON ST
 CALISTOGA, CA 94515
 APN: 011-202-011
 PROJECT: 18-004



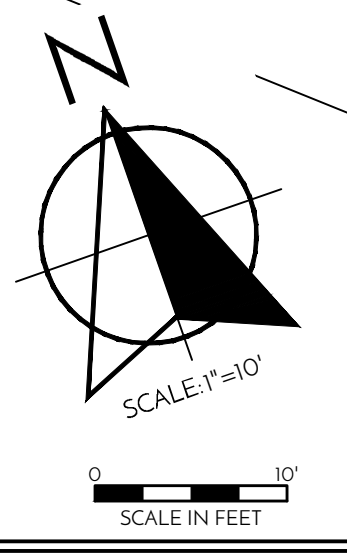
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FOR MORE INFORMATION SEE WWW.USANORTH.ORG

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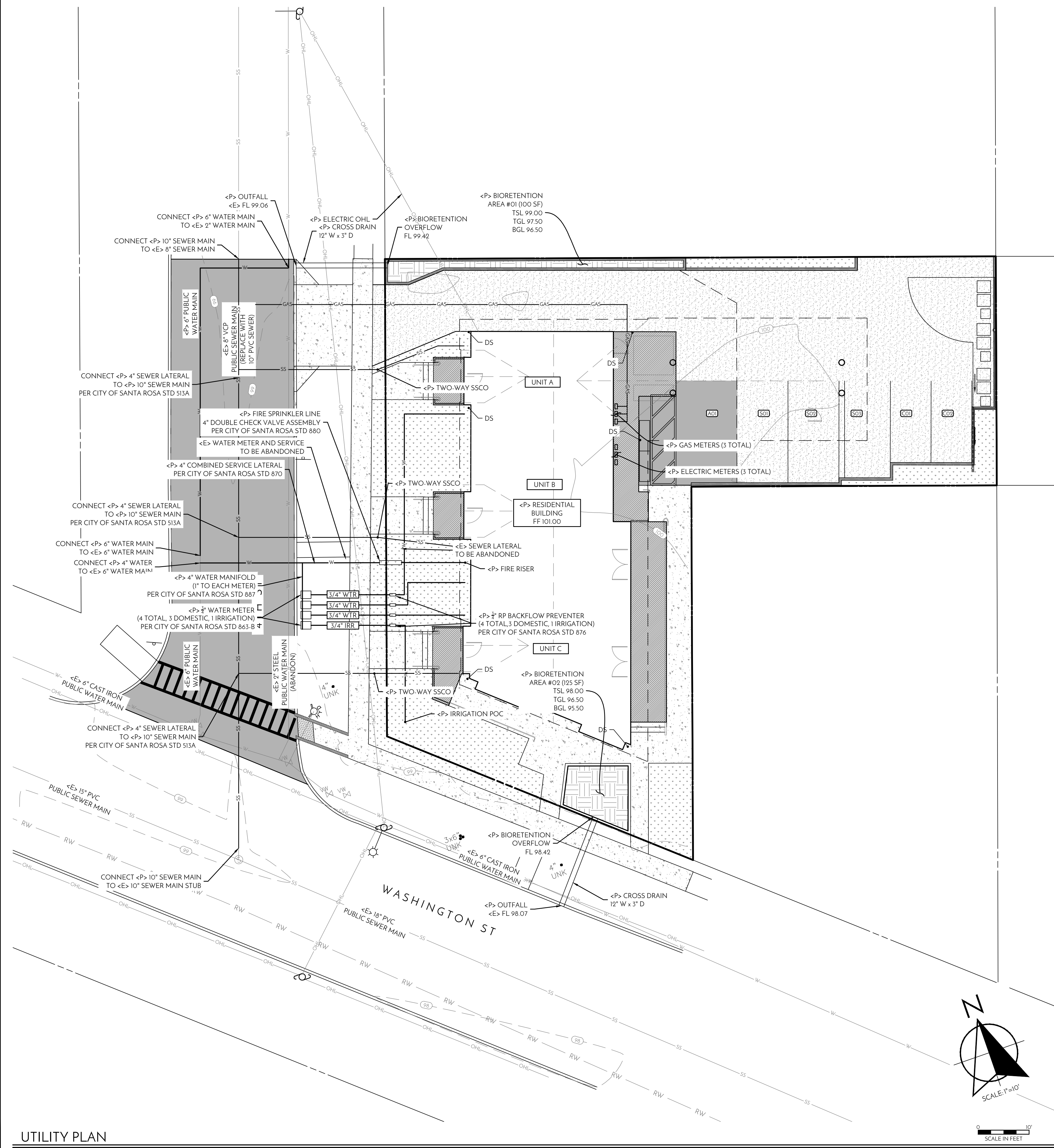
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REVISIONS
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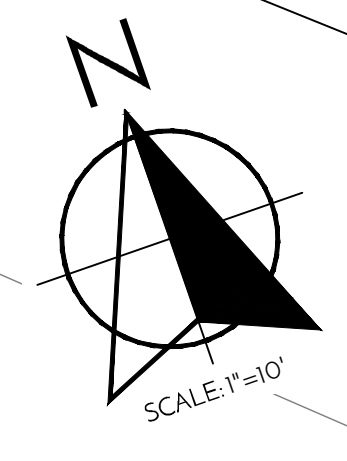
- EXISTING UTILITY NOTES**
- ALIGNMENT AND LOCATION OF EXISTING UTILITY LINES HAVE BEEN APPROXIMATED BASED ON THE SURVEY.
 - UTILITY CONTRACTOR WILL VERIFY THE EXACT LOCATION OF EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION OF NEW UTILITY INFRASTRUCTURE. UTILITY CONTRACTOR WILL REPLACE DAMAGED UTILITIES IN KIND AND TYPE.
- JOINT TRENCH NOTES**
- JOINT TRENCHES SHOWN ON THESE ARE PLANS ARE TO PROVIDE GUIDANCE REGARDING MAINLINE UTILITY RUNS THROUGH THE SITE.
 - MINOR UTILITY RUNS SHALL BE COORDINATED WITH THE SITE CONTRACTOR DURING CONSTRUCTION AND BASED ON DESIGN/BUILD INFORMATION PROVIDED BY MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS IF ANY.
- STORM DRAIN SYSTEM NOTES**
- PROPOSED STORM DRAIN PIPING SHALL OUTLET ON THE PARCEL AS SHOWN ON THESE PLANS.
 - DOWNSPOUTS SHALL OUTLET TO THE SURFACE A MINIMUM DISTANCE OF 5 FEET AWAY FROM BUILDING FOUNDATIONS OR STRUCTURES.
 - STORMWATER SHALL BE DIRECTED TO BIORETENTION FACILITIES AS SHOWN ON THESE PLANS AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE BASMAA POST-CONSTRUCTION MANUAL.

UTILITY SYMBOL LEGEND

- LIGHT DUTY PULL BOX* CHRISTY CONCRETE OR CARSON HDPE (OR APPROVED EQUAL)
- MEDIUM DUTY PULL BOX* FIBRELYTE (OR APPROVED EQUAL)
- HEAVY DUTY PULL BOX - TRAFFIC RATED* CHRISTY CONCRETE + STEEL (OR APPROVED EQUAL)
- SANITARY SEWER CLEANOUT
- CHECK VALVE

* PULL BOXES SHALL BE SIZED APPROPRIATELY FOR ALL CONDUIT, PIPE, VALVES, OR OTHER EQUIPMENT THAT PASSES INTO/THROUGH THE BOX.

- REVISIONS**
- NO CHANGES THIS SHEET



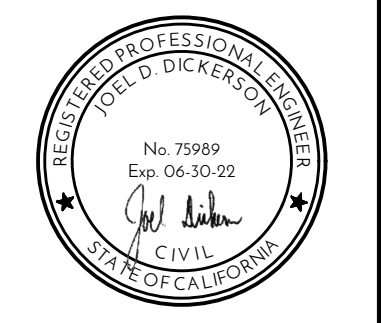
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CONSIDERATION OF DOCUMENTS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SANTA ROSA AND THE CALIFORNIA DEPARTMENT OF WATER RESOURCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CALIFORNIA DEPARTMENT OF WATER RESOURCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CALIFORNIA DEPARTMENT OF WATER RESOURCES.



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