ATTACHMENT A

VICINITY MAP

PLANNING DATA

PROJECT ADDRESS:		962 RIVERSIDE DRIVE LOS ALTOS, CA 94024
A.P.N.:		189-42-027
ZONING DISTRICT:		R1-10
LOT AREA:		11,647 SQFT. (0.2676 ACRES)
MAXIMUM LOT COVERAGE:	30% (2-STORY)	3,494.10 SQFT.
MAXIMUM FLOOR AREA:	3,850 + 10%(11,647-11,000) =	3,914.70 SQFT.
HGT. LIMIT		27'-0"

SETBACKS (FIRST STORY):

- FRONT:	25 FEET
- REAR:	25 FEET
- INT. SIDE:	10 FEET
- EXT. SIDE:	20 FEET

NEW FLOOR AREA:	
- 1ST FLOOR AREA:	2,065.9 SQ. FT.
- 2ND FLOOR AREA:	1,237.1 SQ. FT.
- GARAGE AREA:	450.3 SQ. FT.
- TOTAL FLOOR AREA:	3,913.3 SQ. FT.
- BASEMENT AREA:	1233.8 SQ. FT.
NEW LOT COVERAGE AREA:	
- 1ST FLOOR:	2,065.9 SQ. FT.
- GARAGE:	450.3 SQ. FT.
- FRONT COVERED PATIO:	99.1 SQ. FT.
- REAR COVERED PATIO:	256.5 SQ. FT.
- TOTAL LOT COVERAGE:	2,872.4 SQ. FT. (24.6%)
- LIGHT WELL #1:	265.6 SQ. FT.
- LIGHT WELL #2:	28.1 SQ. FT.
- 2ND FLR. DECK:	90.2 SQ. FT.

ZONING COMPLIANCE

	Existing	Proposed	Allowed/Required
LOT COVERAGE: *Land area covered by all structures that are over 6 feet in height.*	3,269.0 sq ft 28 %	2,872.4 sq ft 24.6%	3,494.10 sq.ft. 30%
FLOOR AREA: *Measured to the outside surfaces of exterior walls*	3,187.0 sq ft 27.3 %	3,913.9 sq ft 33.6%	3,914.70 sq.ft.
SETBACKS:			
Front	26'-0½" feet	32'-7" feet	25 feet
Rear	21'-3½" feet	35'-6½" feet	25 feet
Right side (1st/2nd)	10'-4½" feet/ n/a feet	13'-7.5" ft / 22'-0" feet	10 feet/ 7.5 feet
Left side (1st/2nd)	17'-11" feet/ n/a feet	20'-5" ft / 24'-3" feet	20 feet/ 7.5 feet
HEIGHT:	+/- 20'-0" feet	26'-10" feet	27 feet

SQUARE FOOTAGE BREAKDOWN

	Existing	Change in	Total Proposed
HABITABLE LIVING AREA: *Includes habitable basement areas*	2,767.0 sq ft	1,930.4 sq ft	4,697.4 sq ft
NON-HABITABLE AREA: *Does not include covered porches or open structures*	420.0 sq ft	30.3 sq ft	450.3 sq ft

LOT CALCULATIONS

NET LOT AREA:	11,647 SQUARE FEET
FRONT YARD HARDSCAPE AREA: *Hardscape area in the front yard shall not exceed 50%*	999.00 SQ.FT. (37.7% of front yard area)
LANDSCAPING BREAKDOWN:	Total hardscape area (existing and proposed): 5,757.6 sq ft Existing softscape (undisturbed) area: 6,274 sq ft New softscape area: (-384.6) sq ft *Sum of all three should equal the site's net lot area* 11,647 sq ft

BUILDING CODE DATA

OCCUPANCY: R-3: SINGLE FAMILY RESIDENCE
U: ATTACHED GARAGE.

CONSTRUCTION TYPE: V-B

BUILDING CODES: ALL APPLICABLE ADOPTED ORDINANCES FOR THE CITY OF LOS ALTOS, COUNTY OF SANTA CLARA, AND THE STATE OF CALIFORNIA BUILDING STANDARDS CODE
2021 CALIFORNIA BUILDING CODE (T-24 PART 2)
2021 CALIFORNIA RESIDENTIAL BUILDING CODE (T-24 PART 2.5)
2021 CALIFORNIA ELECTRICAL CODE (T-24 PART 3)
2021 CALIFORNIA MECHANICAL CODE (T-24 PART 4)
2021 CALIFORNIA PLUMBING CODE (T-24 PART 5)
2021 CALIFORNIA ENERGY CODE (T-24 PART 6)
2021 CALIFORNIA FIRE CODE (T-24 PART 9)
2021 CALIFORNIA GREEN BUILDING CODE (T-24 PART 11)

GENERAL NOTES

EXAMINATION OF SITE

THE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS AND THE STRUCTURES TO DETERMINE THE EXISTING CONDITIONS.
NO EXTRA COMPENSATION WILL BE ALLOWED FOR THE CONTRACTOR'S FAILURE TO DISCOVER CONDITIONS THAT EFFECT THE WORK.

LIMITATION OF THE WORK

THE LIMITS OF THE WORK ARE ESTABLISHED BY THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TRADESMEN WITHIN THESE LIMITS.

DEMOLITION WORK

DEMOLISH AND REMOVE ALL ITEMS SHOWN ON THE SITE PLAN SURVEY & DEMOLITION PLAN. THE OWNER SHALL NOTIFY THE CONTRACTOR OF ALL ITEMS TO BE SALVAGED PRIOR TO COMMENCING THE DEMOLITION.

MEASUREMENTS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS IN THE FIELD PRIOR TO COMMENCING THE WORK. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY AND ALL DISCREPANCIES AT (408) 772-3502. ALL DIMENSIONS ARE GIVEN TO THE FACE OF STUDS UNLESS OTHERWISE NOTED. DO NOT SCALE THE DRAWINGS -- ALL DIMENSIONS SHALL TAKE PRECEDENCE. CALL THE ARCHITECT WITH QUESTIONS.

RULES AND REGULATIONS

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND SHALL BE PER INDUSTRY STANDARDS. SEE BUILDING CODE DATA ON THIS SHEET FOR FURTHER INFORMATION.

OWNERSHIP OF DRAWINGS

THESE DRAWINGS ARE THE PROPERTY OF HERITAGE ARCHITECTURE --DAVID V HERNANDEZ, ARCHITECT. THE DRAWINGS SHALL NOT BE USED FOR ANY OTHER PURPOSE EXCEPT AS APPROVED BY THE ARCHITECT.

ADDITIONAL INFORMATION

SEE SITE PLAN , FLOOR PLANS, MECHANICAL & ELECTRICAL PLANS, CIVIL, LANDSCAPE, ENERGY COMPLIANCE, ETC., FOR ADDITIONAL INFORMATION AND NOTES. SEE GENERAL NOTES AND INSTRUCTIONS ON SHEETS FOR FURTHER INFORMATION.

DEFERRAL OF SUBMITTAL ITEMS

THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. (CBC 1063.4.2).

FRONT YARD LANDSCAPING

PRIOR TO THE FINAL INSPECTION, ALL LANDSCAPING IN THE FRONT YARD SHALL BE MAINTAINED OR NEW LANDSCAPING INSTALLED, SHALL BE INSTALLED AS REQUIRED BY THE PLANNING DIVISION.

MAIN HOUSE FIRE SPRINKLER SYSTEM:

NO FIRE SPRINKLER SYSTEM CURRENTLY EXISTS. FUTURE REMODELING WILL TRIGGER A "SAFETY SCORE" REQUIRING A WHOLE HOUSE SPRINKLER SYSTEM.

ADU/GARAGE FIRE SPRINKLER SYSTEM:

A FIRE SPRINKLER SYSTEM CURRENTLY EXISTS AND WATER SERVICE HAS BEEN UPGRADED PER PREVIOUS ADU/GARAGE PERMIT.

A/C UNIT MANUFACTURER'S SPECIFICATIONS:

PRIOR TO PERMIT ISSUANCE, THE BUILDER MST PROVIDE THE MANUFACTURER'S A/C SPECIFICATION FOR THE 16 SEER REQUIREMENT.

SCOPE OF WORK

1. DEMOLITION OF AN (E) SINGLE STORY RESIDENCE.
2. CONSTRUCTION OF A NEW 2-STORY SINGLE FAMILY RESIDENCE WITH A PARTIAL BASEMENT AND BASEMENT PATIO LIGHTWELL.
3. AT-GRADE ENTERTAINMENT PATIOS AT THE REAR YARD W/ BLT.-IN BBQ.

DEFERRED ITEMS

1. NFPA 13D FIRE SPRINKLER SYSTEM DESIGN AND LAYOUT.
2. SINGLE LINE DIAGRAMS (GAS, WATER, SEWER) SHALL BE PROVIDED BY BUILDER FOR REVIEW AND APPROVAL.

ABBREVIATIONS

ϕ	DIAMETER	(OH)	OVERHEAD
A.F.F.	ABOVE FINISH FLOOR	O.H.	OVERHANG
BRG. PL.	BEARING PLATE	P & S	POLE AND SHELF
℄	CENTERLINE	R	RADIUS
C.O.	CLEAN-OUT	R/F	REFRIGERATOR/FREEZER
CKTP.	COOKTOP	S	SINK
°	DEGREE	S.B.	SETBACK
D	DRYER	SD	STORM DRAIN
D.H.	DOUBLE HEADER	S.S.D.	SEE STRUCTURAL DWGS.
D.O.	DOUBLE OVEN	ST	STOVE
DN	DOWN	#	SQUARE FEET
DS	DOWNSPOUT	T.B.D.	TO BE DETERMINED
DW	DISHWASHER	T.O. PL.	TOP OF PLATE
(E)	EXISTING	T.O. SLAB	TOP OF SLAB
F	FURNACE	T.O. SUBFLR	TOP OF SUBFLOOR
F.O.S.	FACE OF STUD	T.O. WALL	TOP OF WALL
GSM	GALVANIZED SHEET MTL.	T.P.H.	TOILET PAPER HOLDER
J.T.	JOINT TRENCH	V.I.F.	VERIFY IN FIELD
M.C.	MEDICINE CABINET	W	WASHER
(N)	NEW	W.H.	WINDOW HEAD
N.T.S.	NOT TO SCALE	WH	WATER HEATER

PROJECT CONTACT LIST

OWNER: MANGESH & RAJASHREE PIMPALKHARE
962 RIVERSIDE DRIVE, LOS ALTOS, CA, 94024
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E: RAJASHREEP@GMAIL.COM
C: (415) 254-5641
E: MPIMPALKHARE@GMAIL.COM

ARCHITECT: HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
P.O. BOX 8033
SAN JOSE, CA 95155
C: (408) 772-3502
E: DVHERNANDEZ@PACBELL.NET
W: HTTPS://WWW.HOUZZ.COM/PRO/DVHERNANDEZ

CIVIL ENGINEER: LEA & BRAZE CIVIL ENGINEERING, INC.
2495 INDUSTRIAL PKWY. WEST
HAYWARD, CA. 94545
O: (510) 887-4086 X192
E: ZAL1@LEABRAZE.COM
W: WWW.LEABRAZE.COM

LANDSCAPE ARCHT: TODD KALBFELD
2345 TULIP ROAD, SAN JOSE, CA, 95128
C: (408) 605-9513
E: TKALBFELD@SBCGLOBAL.NET
F: (408) 247-6636

FIRE DEPARTMENT NOTES

1. REQUIRED FIRE FLOW: THE MINIMUM REQUIRED FIRE FLOW FOR THIS PROJECT IS 1,000 GALLONS PER MINUTE (GPM) AT 20 PSI RESIDUAL PRESSURE. THIS FIRE FLOW ASSUMES INSTALLATION OF AUTOMATIC FIRE SPRINKLERS PER CFC [903.3.1.3].
2. FIRE SPRINKLERS REQUIRED: AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION'S (NFPA) STANDARD 13D IN ALL NEW ONE AND TWO FAMILY DWELLINGS.
3. ADDRESS IDENTIFICATION: NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, ADDRESS NUMBERS SHALL BE PROVIDED IN ADDITIONAL APPROVED LOCATIONS TO FACILITATE EMERGENCY RESPONSE. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MINIMUM OF 6 INCHES (101.6 MM) HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH (12.7 MM). WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. ADDRESS NUMBERS SHALL BE MAINTAINED. CFC SEC. 505.1.
4. WATER SUPPLY REQUIREMENTS: POTABLE WATER SUPPLIES SHALL BE PROTECTED FROM CONTAMINATION CAUSED BY FIRE PROTECTION WATER SUPPLIES. IT IS THE RESPONSIBILITY OF THE APPLICANT AND ANY CONTRACTORS AND SUBCONTRACTORS TO CONTACT THE WATER PURVEYOR SUPPLYING THE SITE OF SUCH PROJECT, AND TO COMPLY WITH THE REQUIREMENTS OF THAT PURVEYOR. SUCH REQUIREMENTS SHALL BE INCORPORATED INTO THE DESIGN OF ANY WATER-BASED FIRE PROTECTION SYSTEMS, AND/OR FIRE SUPPRESSION WATER SUPPLY SYSTEMS OR STORAGE CONTAINERS THAT MAY BE PHYSICALLY CONNECTED IN ANY MANNER TO AN APPLIANCE CAPABLE OF CAUSING CONTAMINATION OF THE POTABLE WATER SUPPLY OF THE PURVEYOR OF RECORD. FINAL APPROVAL OF THE SYSTEM(S) UNDER CONSIDERATION WILL NOT BE GRANTED BY THIS OFFICE UNTIL COMPLIANCE WITH THE REQUIREMENTS OF THE WATER PURVEYOR OF RECORD ARE DOCUMENTED BY THAT PURVEYOR AS HAVING BEEN MET BY THE APPLICANT(S). 2022 CFC SEC. 903.3.5 AND HEALTH AND SAFETY CODE 13114.7.
5. CONSTRUCTION SITE FIRE SAFETY: ALL CONSTRUCTION SITES MUST COMPLY WITH APPLICABLE PROVISIONS OF THE CFC CHAPTER 33 AND OUR STANDARD DETAIL AND SPECIFICATION SI-7. PROVIDE APPROPRIATE NOTATIONS ON SUBSEQUENT PLAN SUBMITTALS, AS APPROPRIATE TO THE PROJECT. CFC CHP. 33.

SHEET INDEX

FRONT ELEVATION

THE PIMPALKHARE RESIDENCE

962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

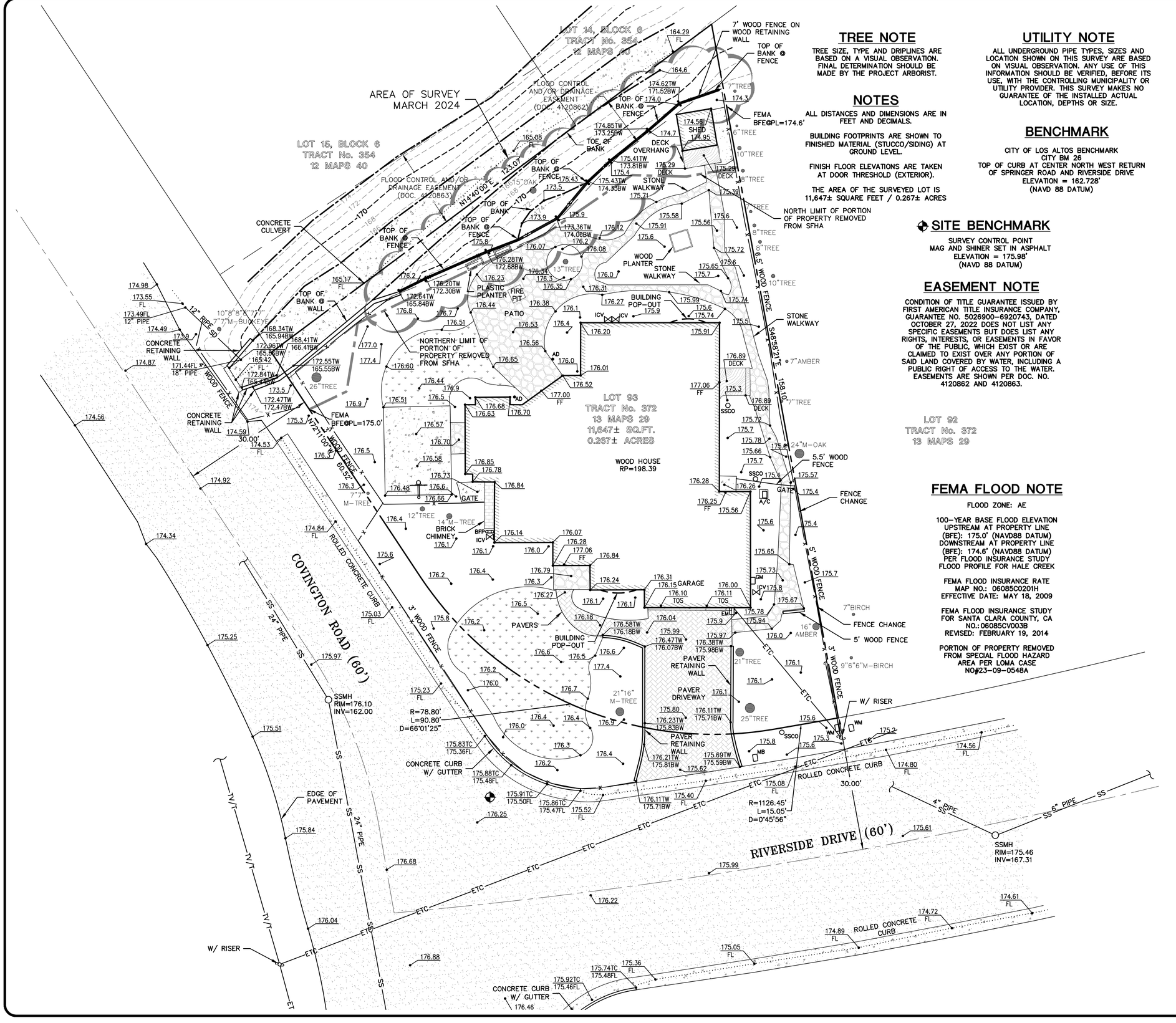
HERITAGE ARCHITECTURE
LICENSED ARCHITECT DAVID VARGAS HERNANDEZ C-24801 3/31/25 RENEWAL DATE STATE OF CALIFORNIA
SIGNATURE

HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
P.O. BOX 8033, San Jose, California 95155
C: (408) 772-3502 VM: (408) 298-0998
E-mail: dvhernandez@pacbell.net

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN: DVH
SCALE: NO SCALE
JOB NO. 2022.01
DATE: 06/26/2024

T



TREE NOTE

TREE SIZE, TYPE AND DRIPLINES ARE BASED ON A VISUAL OBSERVATION. FINAL DETERMINATION SHOULD BE MADE BY THE PROJECT ARBORIST.

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS.

BUILDING FOOTPRINTS ARE SHOWN TO FINISHED MATERIAL (STUCCO/SIDING) AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR).

THE AREA OF THE SURVEYED LOT IS 11,647± SQUARE FEET / 0.267± ACRES

SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 175.98'
(NAVD 88 DATUM)

EASEMENT NOTE

CONDITION OF TITLE GUARANTEE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, GUARANTEE NO. 5026900-6920743, DATED OCTOBER 27, 2022 DOES NOT LIST ANY SPECIFIC EASEMENTS BUT DOES LIST ANY RIGHTS, INTERESTS, OR EASEMENTS IN FAVOR OF THE PUBLIC, WHICH EXIST OR ARE CLAIMED TO EXIST OVER ANY PORTION OF SAID LAND COVERED BY WATER, INCLUDING A PUBLIC RIGHT OF ACCESS TO THE WATER. EASEMENTS ARE SHOWN PER DOC. NO. 4120862 AND 4120863.

FEMA FLOOD NOTE

FLOOD ZONE: AE

100-YEAR BASE FLOOD ELEVATION
UPSTREAM AT PROPERTY LINE
(BFE): 175.0' (NAVD88 DATUM)
DOWNSTREAM AT PROPERTY LINE
(BFE): 174.6' (NAVD88 DATUM)
PER FLOOD INSURANCE STUDY
FLOOD PROFILE FOR HALE CREEK

FEMA FLOOD INSURANCE RATE MAP NO.: 06085C0201H
EFFECTIVE DATE: MAY 18, 2009

FEMA FLOOD INSURANCE STUDY FOR SANTA CLARA COUNTY, CA NO.: 06085CV003B
REVISED: FEBRUARY 19, 2014

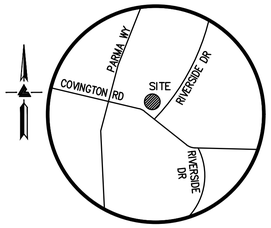
PORTION OF PROPERTY REMOVED FROM SPECIAL FLOOD HAZARD AREA PER LOMA CASE NO#23-09-0548A

UTILITY NOTE

ALL UNDERGROUND PIPE TYPES, SIZES AND LOCATION SHOWN ON THIS SURVEY ARE BASED ON VISUAL OBSERVATION. ANY USE OF THIS INFORMATION SHOULD BE VERIFIED, BEFORE ITS USE, WITH THE CONTROLLING MUNICIPALITY OR UTILITY PROVIDER. THIS SURVEY MAKES NO GUARANTEE OF THE INSTALLED ACTUAL LOCATION, DEPTHS OR SIZE.

BENCHMARK

CITY OF LOS ALTOS BENCHMARK
CITY BM 26
TOP OF CURB AT CENTER NORTH WEST RETURN OF SPRINGER ROAD AND RIVERSIDE DRIVE
ELEVATION = 162.728'
(NAVD 88 DATUM)



VICINITY MAP

NO SCALE

LEGEND AND NOTES

- BOUNDARY LINE
- FEMA BASE FLOOD ELEVATION (BFE)
- BUILDING OVERHANG LINE
- TV/T — CABLE TV/TELEPHONE OVERHEAD LINE
- ETC — ELECTRICAL/TELEPHONE/ CABLE TV OVERHEAD LINE
- EASEMENT
- x — FENCE LINE
- FLOW LINE
- SS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE
- A/C — AIR CONDITIONING UNIT
- AD — AREA DRAIN
- BFP — BACK FLOW PREVENTER
- BASKETBALL HOOP
- BENCHMARK
- BW — BOTTOM RETAINING WALL
- CO — CLEAN-OUT BOX
- EM — ELECTRICAL METER
- FF — FINISH FLOOR
- FL — FLOW LINE
- GM — GAS METER
- GUY ANCHOR
- INV — INVERT
- ICV — IRRIGATION CONTROL VALVE
- JOINT POLE
- M- — MULTI-TRUNK TREE
- RP — ROOF PEAK
- SSCO — SANITARY SEWER CLEAN-OUT
- SSMH — SANITARY SEWER MAINTENANCE HOLE
- SFHA — FEMA SPECIAL FLOOD HAZARD AREA
- TC — TOP OF CURB
- TW — TOP OF RETAINING WALL
- WM — WATER METER
- XXX.XX — SPOTGRADE
- ASPHALT
- BRICK
- CONCRETE
- LAWN
- STONE
- WOOD

0 5 10 20

SCALE: 1" = 10'

LICENSED LAND SURVEYOR
GREGORY F. BRAZE
No. 7623
STATE OF CALIFORNIA

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
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PLEASANTON
SAN JOSE
SAN LUIS OBISPO
WWW.LEABRAZE.COM

962 RIVERSIDE DRIVE
LOS ALTOS
CALIFORNIA

APN:189-42-027

SANTA CLARA COUNTY

TOPOGRAPHIC SURVEY

–	–
–	–
–	–
TOP OF BANK 3-15-24	DB
BFE LINEWORK 2-03-23	PCW
JOB NO:	2221958
DATE:	1-4-23
SCALE:	1"=10'
BNDY BY:	RM
FIELD BY:	AO
DRAWN BY:	SM
SHEET NO:	SU1

1 OF 1 SHEETS

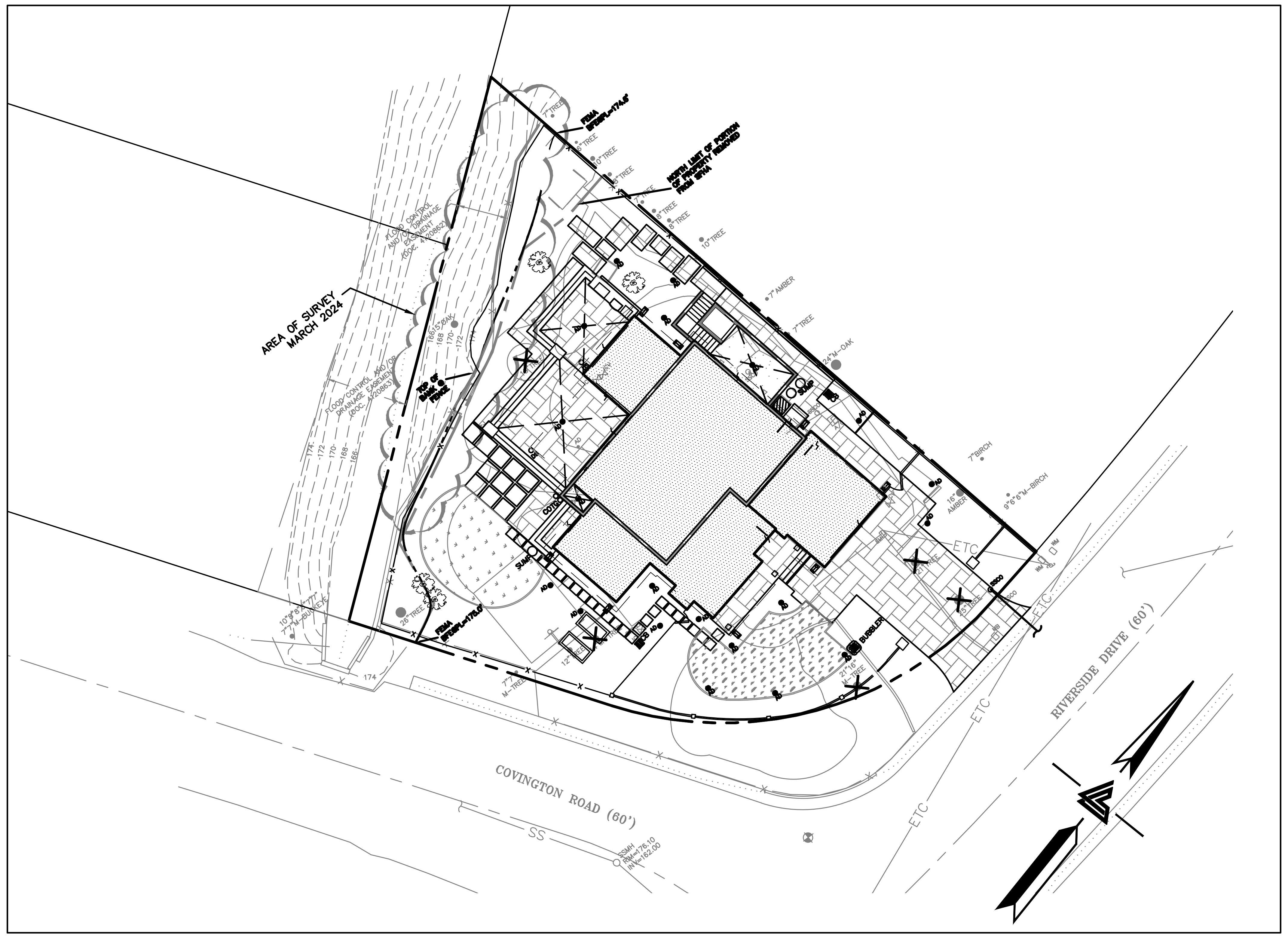
PRELIMINARY GRADING & DRAINAGE PLANS
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BOUNDARY
		PROPERTY LINE
		RETAINING WALL
		LANDSCAPE RETAINING WALL
	RW RW	RAINWATER TIGHTLINE
	SUB	SUBDRAIN LINE
	TL	TIGHTLINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
P	SDP	STORM DRAIN PRESSURE LINE
P	SSP	SANITARY SEWER PRESSURE LINE
JT	JT	JOINT TRENCH
		SET BACK LINE
		CONCRETE VALLEY GUTTER
		EARTHEN SWALE
CB	CB	CATCH BASIN
JB	JB	JUNCTION BOX
AD	AD	AREA DRAIN
		CURB INLET
SDMH	SDMH	STORM DRAIN MANHOLE
		FIRE HYDRANT
SSMH	SSMH	SANITARY SEWER MANHOLE
		STREET SIGN
222.57 INV	222.57 INV	SPOT ELEVATION
←	←	FLOW DIRECTION
	D	DEMOLISH/REMOVE
		BENCHMARK
200	200	CONTOURS
	XX" TREE	TREE TO BE REMOVED
	TP	TREE PROTECTION FENCING

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ACC	ACCESSIBLE
AD	AREA DRAIN
BC	BEGINNING OF CURVE
B & D	BEARING & DISTANCE
BM	BENCHMARK
BUB	BUBBLER BOX
BW/FG	BOTTOM OF WALL/FINISH GRADE
CB	CATCH BASIN
C & G	CURB AND GUTTER
℄	CENTER LINE
CPP	CORRUGATED PLASTIC PIPE (SMOOTH INTERIOR)
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CONC	CONCRETE
CONST	CONSTRUCT or –TION
CONC COR	CONCRETE CORNER
CY	CUBIC YARD
D	DIAMETER
DI	DROP INLET
DIP	DUCTILE IRON PIPE
EA	EACH
EC	END OF CURVE
EG	EXISTING GRADE
EL	ELEVATIONS
EP	EDGE OF PAVEMENT
EQ	EQUIPMENT
EW	EACH WAY
(E)	EXISTING
FC	FACE OF CURB
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FS	FINISHED SURFACE
G	GAS
GA	GAGE OR GAUGE
GB	GRADE BREAK
HDPE	HIGH DENSITY CORRUGATED POLYETHYLENE PIPE
HORIZ	HORIZONTAL
HI PT	HIGH POINT
H&T	HUB & TACK
ID	INSIDE DIAMETER
INV	INVERT ELEVATION
JB	JUNCTION BOX
JT	JOINT TRENCH
JP	JOINT UTILITY POLE
L	LENGTH
LNDG	LANDING
LF	LINEAR FEET
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MON.	MONUMENT
MRO	METERED RELEASE OUTLET
(N)	NEW
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O/	OVER
(PA)	PLANTING AREA
PED	PEDESTRIAN
PIV	POST INDICATOR VALVE
PSS	PUBLIC SERVICES EASEMENT
⅊	PROPERTY LINE
PP	POWER POLE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RIM	RIM ELEVATION
RW	RAINWATER
R/W	RIGHT OF WAY
S	SLOPE
S.A.D.	SEE ARCHITECTURAL DRAWINGS
SAN	SANITARY
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SHT	SHEET
S.L.D.	SEE LANDSCAPE DRAWINGS
SPEC	SPECIFICATION
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
ST.	STREET
STA	STATION
STD	STANDARD
STRUCT	STRUCTURAL
T	TELEPHONE
TC	TOP OF CURB
TOW	TOP OF WALL
TEMP	TEMPORARY
TP	TOP OF PAVEMENT
TW/FG	TOP OF WALL/FINISH GRADE
TYP	TYPICAL
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
W/	WITH
W, WL	WATER LINE
WM	WATER METER
WWF	WELDED WIRE FABRIC

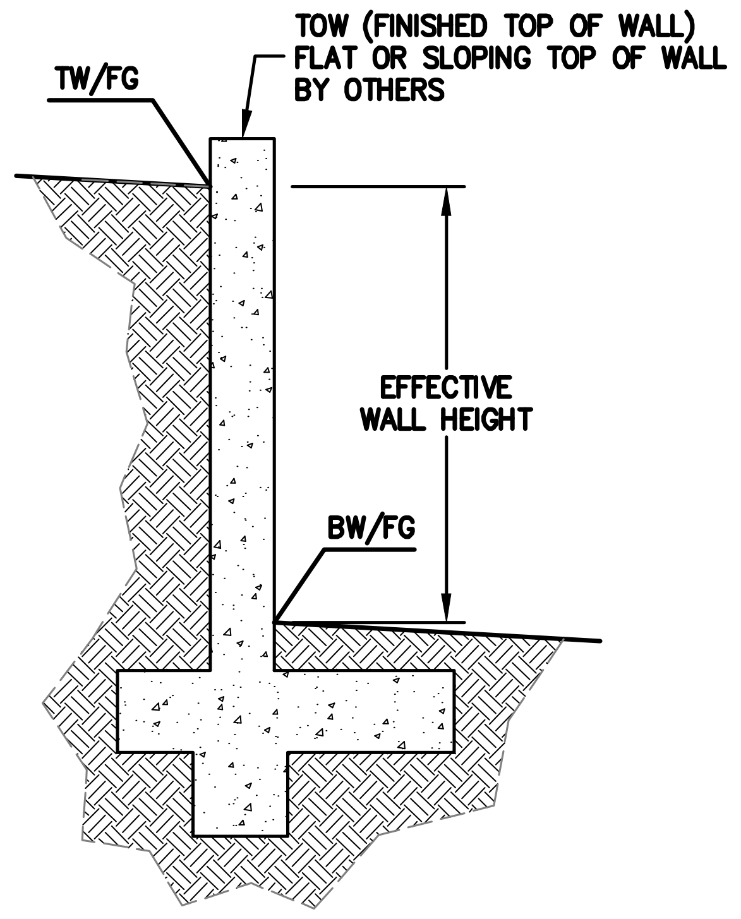


RETAINING WALL NOTES

1. TW/FG REPRESENTS FINISHED EARTHEN GRADE OR PAVEMENT ELEVATION AT TOP OF WALL, NOT ACTUAL TOP OF WALL MATERIAL. BW/FG REPRESENTS FINISH EARTHEN GRADE OR PAVEMENT ELEVATION AT BOTTOM OF WALL NOT INCLUDING FILL FOUNDATION. GRADES INDICATED ON THESE PLANS REFER TO THE FINISHED GRADES ADJACENT TO THE RETAINING WALL, NOT INCLUDING FOOTING, FREEBOARD, ETC.
2. DIMENSIONS SHOWN IN BRACKETS SHOWN AS [X.X'] DENOTE THE EFFECTIVE WALL HEIGHT ONLY. THE ACTUAL WALL HEIGHT AND DEPTH MAY DIFFER DUE TO CONSTRUCTION REQUIREMENTS.
3. REFER TO SPECIFIC WALL CONSTRUCTION DETAIL FOR STRUCTURAL ELEMENTS, FREEBOARD, AND EMBEDMENT.
4. REFER TO ARCHITECTURAL, LANDSCAPE ARCHITECTURE, AND/OR STRUCTURAL PLANS FOR DETAILS, WALL ELEVATIONS, SUBDRAINAGE, WATERPROOFING, FINISHES, COLORS, STEEL REINFORCING, MATERIALS, ETC. PROVIDE CLIPS OR OTHER MEANS OF SECURING FINISH MATERIALS AS NECESSARY (WET SET INTO THE WALL).
5. ALL RETAINING WALLS SHOULD HAVE A BACK-OF-WALL SUB-SURFACE DRAINAGE SYSTEM INCLUDING WEEPHOLES TO PREVENT HYDROSTATIC PRESSURE.
6. SEE DETAIL SHEET FOR SPECIFIC INFORMATION.
7. PROVIDE GUARDRAIL (WHERE APPLICABLE AND DESIGNED BY OTHERS) AS REQUIRED FOR GRADE SEPARATION OF 30 INCHES OR MORE MEASURED 5' HORIZONTALLY FROM FACE OF WALL, PER CBC.

KEY MAP

1" = XX'



ESTIMATED EARTHWORK QUANTITIES

CUBIC YARDS	WITHIN BUILDING FOOTPRINT	OUTSIDE BUILDING FOOTPRINT	TOTAL CUBIC YARDS
CUT	630	0	630
FILL	210	20	230
EXPORT			400

NOTE:

GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (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.

INSPECTIONS REQUIRED

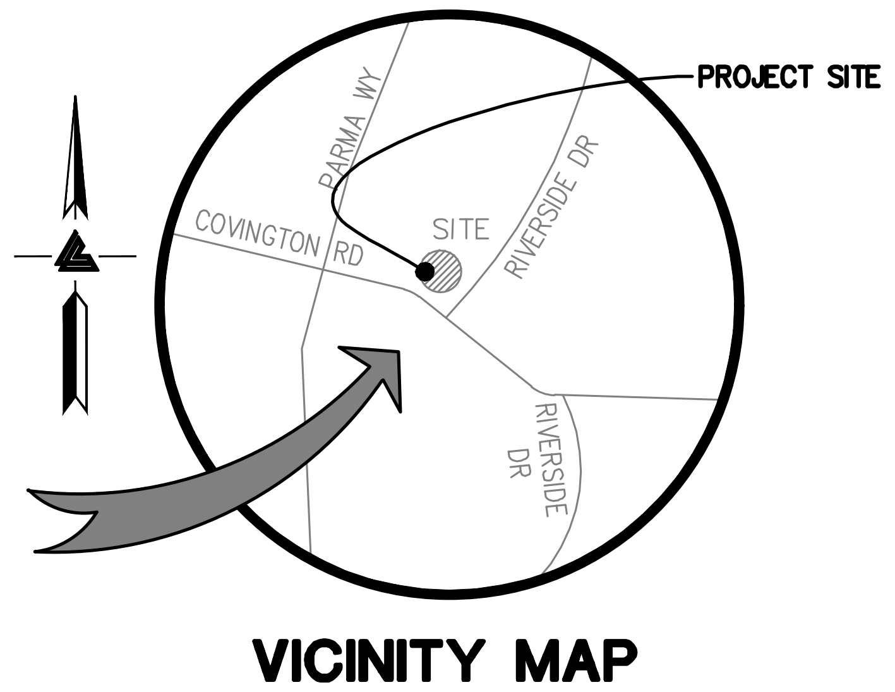
LEA & BRAZE ENGINEERING, INC. TO INSPECT ALL STORM DRAINAGE AS IT IS INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT LEA & BRAZE ENGINEERING, INC. PRIOR TO START OF CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING, AND TO CALL AT LEAST 48 HOURS IN ADVANCE OF ANY INSPECTIONS. PIPES ARE TO REMAIN UNCOVERED UNTIL AN INSPECTION OCCURS.

POINT OF CONTACT:
JIM TOBY
LEA & BRAZE ENGINEERING, INC.
(510)715-6028 jtoby@leabraze.com

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

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

CALL BEFORE YOU DIG 1-800-642-2444 811 UNDERGROUND SERVICE ALERT



VICINITY MAP

NTS

OWNER'S INFORMATION

OWNER:
RAJASHREE PIMPALKHARE
962 RIVERSIDE DRIVE
LOS ALTOS, CA

APN: 189-42-027

REFERENCES

THIS **GRADING AND DRAINAGE** PLAN IS SUPPLEMENTAL TO:

1. TOPOGRAPHIC SURVEY BY LEA&BRAZE ENGINEERING, INC., ENTITLED;
"TOPOGRAPHIC SURVEY"
962 RIVERSIDE DRIVE
LOS ALTOS, CA
DATED: 04-03-2023
JOB# 2221958 SU

2. SITE PLAN BY HERITAGE ARCHITECTURE ENTITLED:
"PIMPALKHARE RESIDENCE"
962 RIVERSIDE DRIVE
LOS ALTOS, CA

3. SOIL REPORT BY SILICON VALLEY SOIL ENGINEERING.
ENTITLED:
"GEOTECHNICAL INVESTIGATION"
962 RIVERSIDE DRIVE
LOS ALTOS, CA
JOB# SV2479
DATE: NOVEMBER 2022

4. LANDSCAPE PLAN BY TODD KALBFELD LANDSCAPE DESIGN,
ENTITLED
"SINGLE FAMILY RESIDENCE"
962 RIVERSIDE DRIVE
LOS ALTOS, CA

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

NOTES

CONTRACTOR SHALL OBTAIN THE PROPER PERMITS PRIOR TO ANY GRADING.

A SEPARATE PERMIT IS REQUIRED FOR ANY & ALL WORK WITHIN THE CITY RIGHT-OF-WAY. THE CONTRACTOR(S) SHALL OBTAIN AN APPROVED STREET WORK (ENCROACHMENT PERMIT) PERMIT FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO THE COMMENCEMENT OF THIS WORK WITHIN THE CITY RIGHT-OF-WAY.

ALL GRADED SLOPES SHALL BE PLANTED WITH FAST GROWING, DEEP ROOTED GROUND COVER TO REDUCE THE EROSION DURING HEAVY RAINS.

REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION, INCLUDING BUT NOT LIMITED TO: ADDITIONAL UTILITY SERVICES, DIMENSION CONTROL, DEMOLITION, DETAILS, TREE PROTECTION MEASURES, AND LANDSCAPING.

CONTRACTOR SHALL NOTIFY THE OWNER AND/OR MAINTENANCE STAFF IN WRITING OF THE NEED OF PERIODIC MAINTENANCE OF THE DRAINAGE SYSTEM AND STRUCTURES.

SHEET INDEX

JAMES TOBY
No. 63127
CIVIL
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189-42-027

TITLE SHEET

REVISIONS	BY
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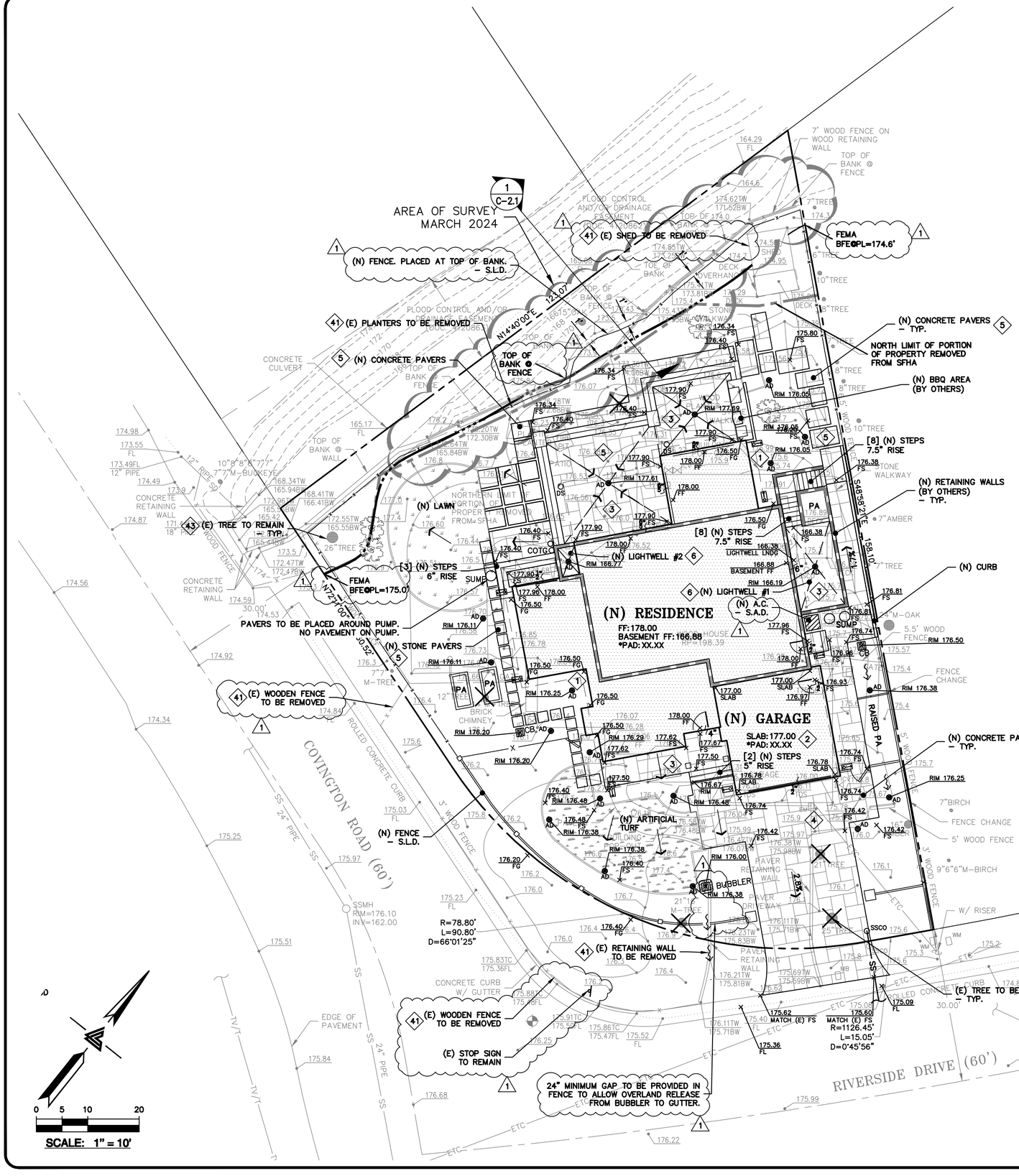
–	–
1 PLAN CHECK #1 03-18-24	ZA

JOB NO:	2221914
DATE:	12-13-23
SCALE:	AS NOTED
DESIGN BY:	ZA
CHECKED BY:	JT
SHEET NO:	C-1.0

1 OF 10 SHEETS



FLATWORK KEYNOTES 1 TO 6

1. FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.4 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.12.1.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS.
2. SLOPE GARAGE SLAB 1% MINIMUM (1/8" PER FOOT) FROM BACK TO FRONT TO ALLOW FOR ADEQUATE DRAINAGE. MAINTAIN 1/2 TO 1 LIP BETWEEN GARAGE SLAB AND DRIVEWAY. SEE PLANS FOR SPECIFIC DROP
3. PROVIDE 2% SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 1804.4. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.
4. INSTALL (N) CONCRETE PAVER DRIVEWAY. SEE DETAIL 1 ON SHEET C-4.0.
5. (N) CONCRETE PAVER PATIOS/WALKWAYS. SEE DETAIL 2 ON SHEET C-4.0.
6. (N) CONCRETE PATIOS IN LIGHTWELL AREA. SEE LANDSCAPE AND STRUCTURAL PLAN FOR PAVEMENT SPECIFICATIONS.

DEMOLITION KEYNOTES 41 TO 43

41. DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N) CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED DEMOLITION PERMITS.
42. REMOVE (E) TREE. CONTRACTOR SHALL OBTAIN THE PROPER TREE REMOVAL PERMITS AS REQUIRED.
43. PROVIDE TREE PROTECTION AROUND TREES TO REMAIN. SEE DETAIL 6 ON SHEET ER-2.

FEMA FLOOD NOTE

FLOOD ZONE: AE

100-YEAR BASE FLOOD ELEVATION UPSTREAM AT PROPERTY LINE (BFE): 175.0' (NAVD88 DATUM)
DOWNSTREAM AT PROPERTY LINE (BFE): 174.6' (NAVD88 DATUM)
PER FLOOD INSURANCE STUDY
FLOOD PROFILE FOR HALE CREEK

FEMA FLOOD INSURANCE RATE MAP NO.: 06085C0201H
EFFECTIVE DATE: MAY 18, 2009

FEMA FLOOD INSURANCE STUDY FOR SANTA CLARA COUNTY, CA NO.:06085CV003B
REVISED: FEBRUARY 19, 2014

PORTION OF PROPERTY REMOVED FROM SPECIAL FLOOD HAZARD AREA PER LOMA CASE NO#23-09-0548A

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

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

REGISTERED PROFESSIONAL ENGINEER JAMES TOBY No. 63127 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE: 2495 INDUSTRIAL PKWY WEST HAYWARD, CALIFORNIA 94545 (510) 887-4086
REGIONAL OFFICES: ROSEVILLE DUBLIN SAN JOSE
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
APN: 189-42-027
SANTA CLARA COUNTY

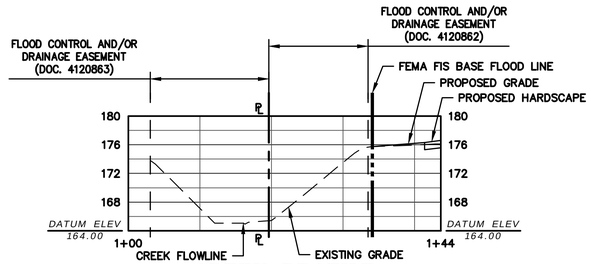
GRADING & DRAINAGE PLAN

1 PLAN CHECK #1 03-18-24	ZA
REVISIONS	BY
JOB NO:	2221914
DATE:	12-13-23
SCALE:	AS NOTED
DESIGN BY:	ZA
CHECKED BY:	JT

SHEET NO: **C-2.0**

2 OF 10 SHEETS

1-800-642-2444 CALL BEFORE YOU DIG 811 UNDERGROUND SERVICE ALERT



CREEK PROFILE

SCALE: 1" = 10' HORIZ & VERT

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
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STATE OF CALIFORNIA
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PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA

APN: 189-42-027

SANTA CLARA COUNTY

SITE PROFILE

REVISIONS	BY
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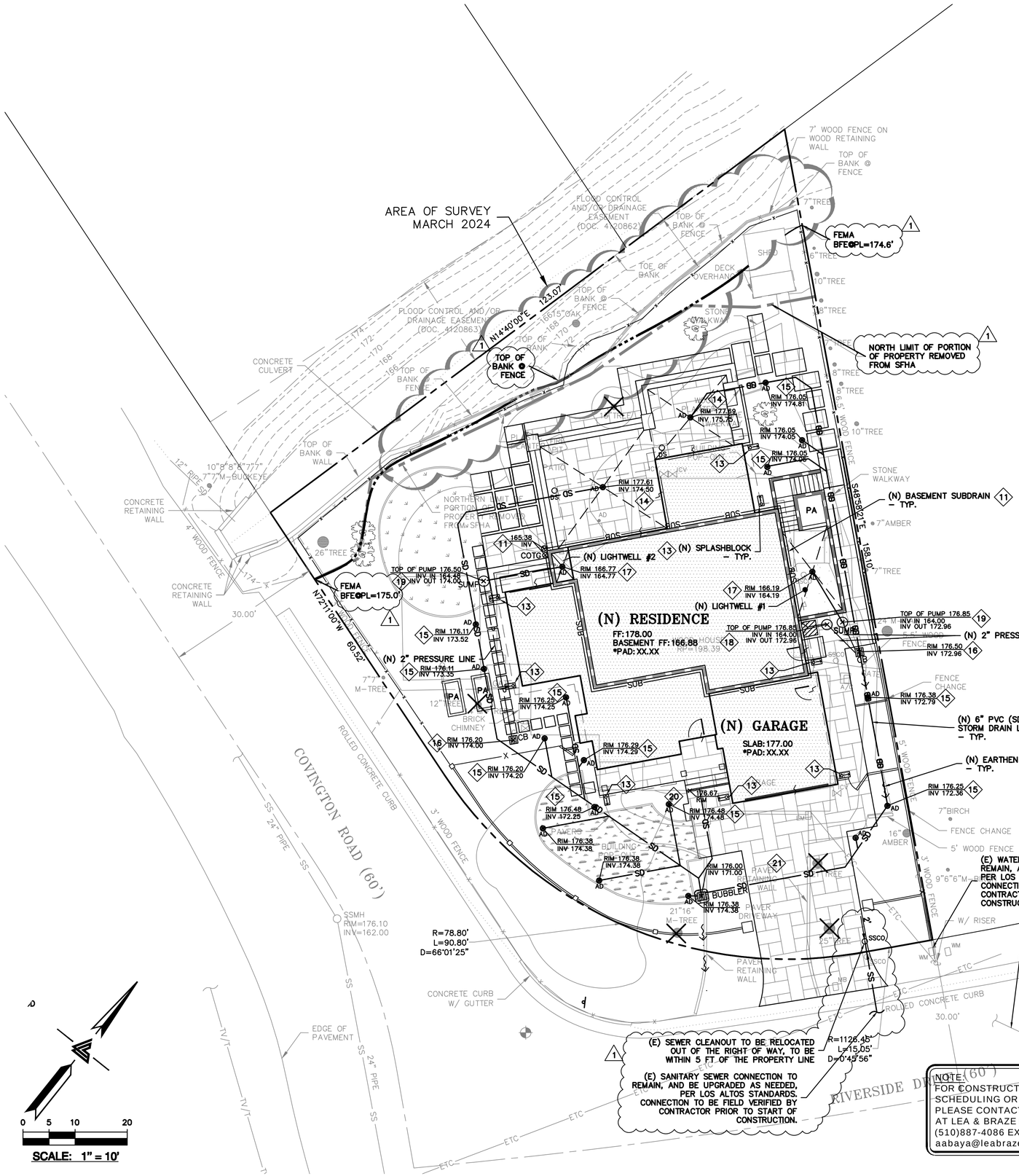
1 PLAN CHECK #1 03-18-24	ZA

JOB NO: 2221914
DATE: 12-13-23
SCALE: AS NOTED
DESIGN BY: ZA
CHECKED BY: JT
SHEET NO:

C-2.1

XX OF 10 SHEETS



STORM DRAIN KEYNOTES 10 TO 21

10. INSTALL (N) ON-SITE STORM DRAIN SYSTEM. USE MINIMUM 6" PVC (SDR 35) OR HDPE (ADS N-12 W/ SMOOTH INTERIOR WALLS). MAINTAIN 24 MINIMUM COVER AND SLOPED AT 1% MINIMUM AT ALL TIMES UNLESS OTHERWISE NOTED. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS.
11. INSTALL (N) SUBDRAIN. USE PERFORATED 4" PVC (SDR-35) WITH HOLES DOWN AND SLOPED AT 1% MINIMUM SURROUND WITH 3/4" DRAIN ROCK WRAPPED IN FILTER FABRIC (MIRAFI 140N). MIRADRAIN OR OTHER LEA & BRAZE PREAPPROVED DRAINAGE SYSTEM MAY ALSO BE USED. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS. PROVIDE CLEANOUT TO GRADE AT MAJOR CHANGES IN DIRECTION AND AT 100' MAXIMUM INTERVALS. SUBDRAIN SHALL REMAIN A DEDICATED SEPARATE SYSTEM UNTIL IT CONNECTS TO STORM DRAIN SYSTEM OR OUTFALL AS SHOWN. SEE DETAIL 3 ON SHEET C-4.0.
12. CONSTRUCT (N) EARTHEN SWALE SLOPED AT 1% MINIMUM TOWARDS POSITIVE OUTFALL. SEE DETAIL 4 ON SHEET C-4.0.
13. DIRECT DOWNSPOUTS TO 24" LONG PRECAST CONCRETE SPLASHBLOCKS OR OTHER HARD SURFACE. DIRECT AWAY FROM ANY STRUCTURE AND TOWARDS POSITIVE DRAINAGE. SEE DETAIL 5 ON SHEET C-4.0.
14. INSTALL (N) 4" DIAMETER BRASS AREA DRAIN (AD) IN HARDSCAPE AREAS (NDS PART 906 PB). SEE DETAIL 6 ON C-4.0.
15. INSTALL (N) 4" DIAMETER HEAVY DUTY PLASTIC BLACK GRATE IN LANDSCAPE OR PLANTER AREAS (NDS PART 78 OR 90 FOR 6" DIAMETER HEAVY DUTY PLASTIC BLACK GRATE). SEE DETAIL 7 ON C-4.0.
16. INSTALL (N) CHRISTY V-12 CATCH BASIN W/ CONCRETE BOTTOM FLUSH W/ LOWEST OUTGOING INVERT. PLACE BOX ON 6" CLASS 2 AGGREGATE BASE MATERIAL. SEE DETAIL 8 ON SHEET C-4.0.
17. INSTALL (N) LIGHTWELL OVERFLOW DRAIN. SEE DETAIL 9 ON SHEET C-4.0.
18. INSTALL (N) SUMP PUMP FOR SUBDRAIN SYSTEM. SEE DETAIL 1 ON SHEET C-4.1.
19. INSTALL (N) SUMP PUMP FOR LIGHTWELL DRAINAGE. SEE DETAIL 2 ON SHEET C-4.1 FOR LIGTHWELL 1. SEE DETAIL 3 ON SHEET C-4.1 FOR LIGHTWELL 2.
20. (N) SLOT DRAINS SHALL BE ZURN Z888-6 OR APPROVED EQUAL. CONNECT TO NEAREST STORM DRAIN LINE. USE 6" PVC (SDR-35) OR HDPE (ADS N-12 W/ SMOOTH INTERIOR WALLS). SEE DETAIL 5 ON SHEET C-4.1.
21. INSTALL (N) BUBBLER. SEE DETAIL 4 ON SHEET C-4.1.

REGISTERED PROFESSIONAL ENGINEER JAMES TOBY No. 63127 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

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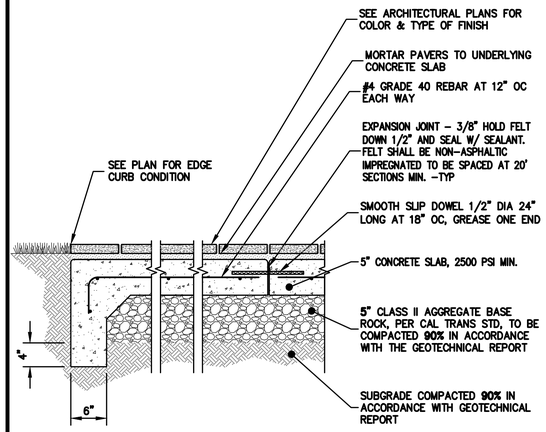
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
APN: 189-42-027
SANTA CLARA COUNTY

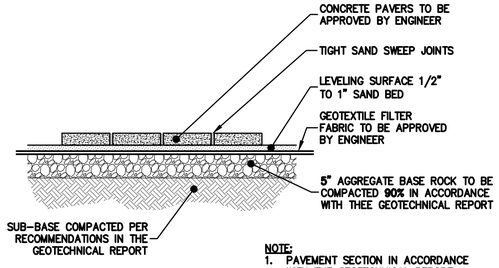
UTILITY PLAN

1 PLAN CHECK #1 03-18-24	ZA
REVISIONS	BY
JOB NO:	2221914
DATE:	12-13-23
SCALE:	AS NOTED
DESIGN BY:	ZA
CHECKED BY:	JT
SHEET NO:	C-3.0

4 OF 10 SHEETS

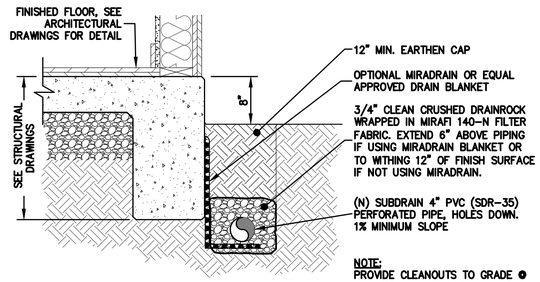


1 C–4.0 **PAVERS/TILE OVER CONCRETE**
NTS



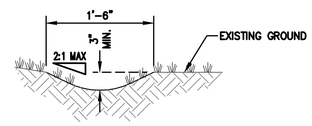
NOTE:
1. PAVEMENT SECTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
2. SUBGRADE TO BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

2 C–4.0 **PAVER DETAIL**
NTS

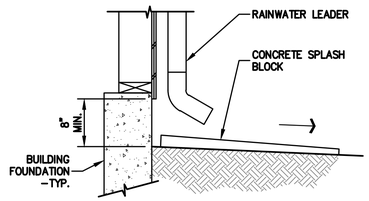


NOTE:
PROVIDE CLEANOUTS TO GRADE @ ALTERNATING BENDS OR EVERY 100 LF OF PIPE RUN. CONNECT TO SUBDRAIN VIA WYE CONNECTION. DO NOT USE 90° BENDS. USE 90° SWEEP OR TWO 45° BENDS TO ALLOW FOR EASY CLEANOUT ACCESS.

3 C–4.0 **SLAB FOUNDATION SUBDRAIN**
NTS



4 C–4.0 **EARTHEN SWALE DETAIL**
NTS



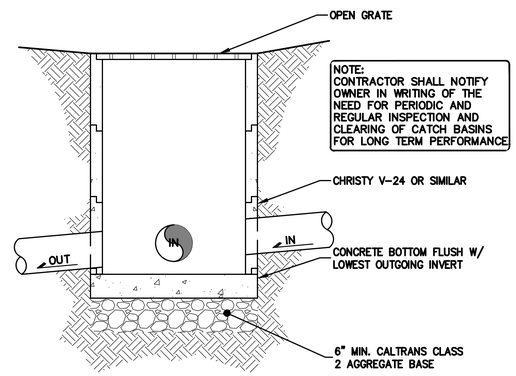
5 C–4.0 **SPLASHBLOCK AT RAIN WATER LEADER**
NTS

NOTE:
GLUED FITTINGS MAY BE SUBSTITUTED FOR GASKETED FITTINGS AT THE OPTION OF THE INSTALLATION CONTRACTOR.

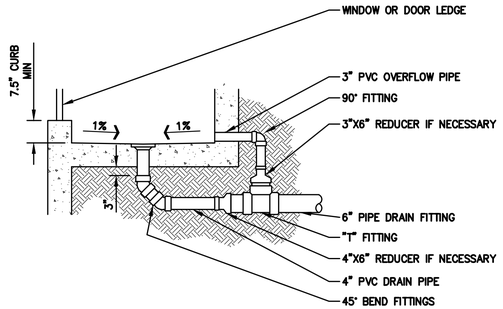
6 C–4.0 **FLATWORK DRAIN**
NTS

NOTE:
GLUED FITTINGS MAY BE SUBSTITUTED FOR GASKETED FITTINGS AT THE OPTION OF THE INSTALLATION CONTRACTOR.

7 C–4.0 **AREA DRAIN**
NTS



8 C–4.0 **CATCH BASIN**
NTS



NOTES:
1. SLOPE INTERIOR SLAB OF LIGHTWELL @ 1% MIN IN ALL DIRECTIONS TO DIRECT FLOW TOWARDS INLET.
2. MAINTAIN 6" MIN FROM BOTTOM OF SILL/DOOR TO BOTTOM OF LIGHTWELL.
3. INSTALL "NEENAH R–4344" GRATE AND 3" PVC OUT GOING PIPE IN LIGHTWELLS NOT INTENDED TO HAVE FOOT TRAFFIC.
4. INSTALL 4" METAL GRATE AND 4" PVC OUTGOING PIPE IN AREAS INTENDED TO HAVE FOOT TRAFFIC.
5. INSTALL 3" PVC OVERFLOW PIPE AS SHOWN.
6. CONTRACTOR SHALL SUBMIT TO THE OWNER IN WRITING THE NEED FOR PERIODIC MAINTENANCE AND REMOVAL OF DEBRIS.
7. REFER TO STRUCTURAL PLAN FOR WALL CONSTRUCTION DETAIL.

9 C–4.0 **LIGHTWELL OVERFLOW DETAIL**
NTS

REGISTERED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA
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PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189–42–027

DETAILS

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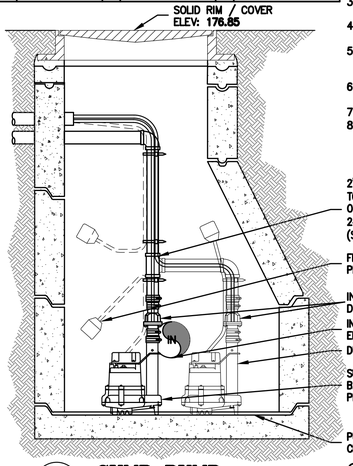
1 PLAN CHECK #1 03–18–24	ZA
REVISIONS	BY
JOB NO:	2221914
DATE:	12–13–23
SCALE:	NTS
DESIGN BY:	ZA
CHECKED BY:	JT

SHEET NO:
C-4.0
5 OF 10 SHEETS

PUMP PURPOSE: **BASEMENT SUBDRAIN LIFT**

SPECIFICATION		QUANTITY		CONTAINMENT
X	ZOELLER 53	SIMPLEX (SINGLE)	X	CHRISTY V-24
	ZOELLER 153	X DUPLEX (DOUBLE)		30" HDPE
				CONCRETE MANHOLE



PUMP NOTES:
1. SUBSURFACE DRAINAGE SYSTEMS (IF APPLICABLE) AND SURFACE STORM DRAIN SYSTEMS (IF APPLICABLE) SHALL REMAIN DEDICATED SEPARATE SYSTEMS AND SHALL NOT CONNECT TO EACH OTHER.
2. SIMPLEX PUMPS MAY BE CONTROLLED BY PIGGYBACK FLOAT SWITCH OR VIA HARD WIRE TO CONTROL PANEL.
3. DUPLEX PUMPS SHALL BE HARD WIRED TO ALTERNATING CONTROL PANEL AND OPERATE VIA FLOAT SWITCHES.
4. RAIL SYSTEM SHALL BE UTILIZED FOR PUMPS DEEPER THAN 5' BELOW GROUND SURFACE.
5. ALL PUMPS SHALL HAVE AUDIBLE HIGH WATER LEVEL ALARM IN LOCATION TO ALERT OWNER OR CONNECTED TO BUILDING SECURITY SYSTEM.
6. ALL WIRING SHALL BE PER APPLICABLE CODE AND SHALL BE LOCATED PER CONTRACTOR / ELECTRICIAN.
7. HDPE SHALL HAVE SOLID LID BOLTED DOWN.
8. CONCRETE MANHOLE SHALL BE 36"ø WITH 24" EXCENTRIC TOP. STEPS SET INTEGRAL WITH RINGS ON ALL MANHOLES OVER 60" DEEP.

2" HDPE (SDR-11) OR PVC (SCH 40) DISCHARGE LINE TO OUTLET PER PLANS. PROVIDE MINIMUM 24" COVER OVER DISCHARGE LINE. FOR BURIAL DEPTH LESS THAN 24", USE GALVANIZED STEEL PIPE OR PROVIDE 4" PVC (SDR-35) PROTECTIVE SLEEVE.

FLOAT SWITCH:
PER MANUFACTURER

INSTALL CHECK VALVE AT DISCHARGE LINE - TYP.

INVERT IN
ELEV: 164.00

DUPLEX PUMP (IF APPLICABLE PER CHART ABOVE)

SUBMERSABLE SUMP PUMP PER SPECIFICATION ABOVE. BACKFLOW PREVENTION CHECK VALVE SHALL BE PROVIDED ON DISCHARGE LINE

PUMP SYSTEM CONTAINMENT PER CHART ABOVE WITH SOLID BOTTOM

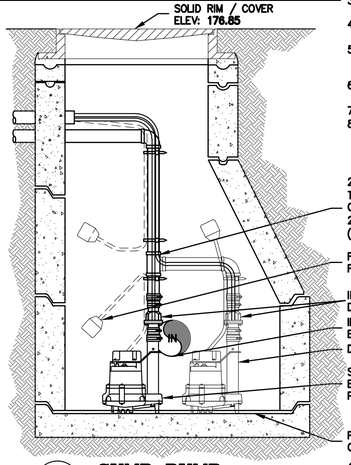
NOTE: BACK-UP POWER IS RECOMMENDED. NOTIFY ENGINEER IF OMITTED FROM PROPOSED PROJECT.

NOTE: PUMP DESIGN IS TO BE FINALIZED DURING THE PERMIT PHASE.

1 C-4.1 **SUMP PUMP**
NTS

PUMP PURPOSE: **LIGHTWELL 1 STORM DRAIN LIFT**

SPECIFICATION		QUANTITY		CONTAINMENT
X	ZOELLER 53	SIMPLEX (SINGLE)		CHRISTY V-24
	ZOELLER 153	X DUPLEX (DOUBLE)		30" HDPE
			X	CONCRETE MANHOLE



PUMP NOTES:
1. SUBSURFACE DRAINAGE SYSTEMS (IF APPLICABLE) AND SURFACE STORM DRAIN SYSTEMS (IF APPLICABLE) SHALL REMAIN DEDICATED SEPARATE SYSTEMS AND SHALL NOT CONNECT TO EACH OTHER.
2. SIMPLEX PUMPS MAY BE CONTROLLED BY PIGGYBACK FLOAT SWITCH OR VIA HARD WIRE TO CONTROL PANEL.
3. DUPLEX PUMPS SHALL BE HARD WIRED TO ALTERNATING CONTROL PANEL AND OPERATE VIA FLOAT SWITCHES.
4. RAIL SYSTEM SHALL BE UTILIZED FOR PUMPS DEEPER THAN 5' BELOW GROUND SURFACE.
5. ALL PUMPS SHALL HAVE AUDIBLE HIGH WATER LEVEL ALARM IN LOCATION TO ALERT OWNER OR CONNECTED TO BUILDING SECURITY SYSTEM.
6. ALL WIRING SHALL BE PER APPLICABLE CODE AND SHALL BE LOCATED PER CONTRACTOR / ELECTRICIAN.
7. HDPE SHALL HAVE SOLID LID BOLTED DOWN.
8. CONCRETE MANHOLE SHALL BE 36"ø WITH 24" EXCENTRIC TOP. STEPS SET INTEGRAL WITH RINGS ON ALL MANHOLES OVER 60" DEEP.

2" HDPE (SDR-11) OR PVC (SCH 40) DISCHARGE LINE TO OUTLET PER PLANS. PROVIDE MINIMUM 24" COVER OVER DISCHARGE LINE. FOR BURIAL DEPTH LESS THAN 24", USE GALVANIZED STEEL PIPE OR PROVIDE 4" PVC (SDR-35) PROTECTIVE SLEEVE.

FLOAT SWITCH:
PER MANUFACTURER

INSTALL CHECK VALVE AT DISCHARGE LINE - TYP.

INVERT IN
ELEV: **164.00**

DUPLEX PUMP (IF APPLICABLE PER CHART ABOVE)

SUBMERSABLE SUMP PUMP PER SPECIFICATION ABOVE. BACKFLOW PREVENTION CHECK VALVE SHALL BE PROVIDED ON DISCHARGE LINE

PUMP SYSTEM CONTAINMENT PER CHART ABOVE WITH SOLID BOTTOM

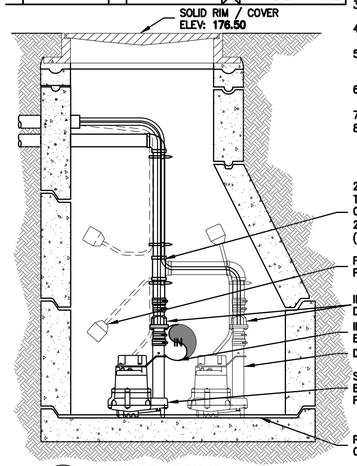
NOTE: BACK-UP POWER IS RECOMMENDED. NOTIFY ENGINEER IF OMITTED FROM PROPOSED PROJECT.

NOTE: PUMP DESIGN IS TO BE FINALIZED DURING THE PERMIT PHASE.

2 C-4.1 **SUMP PUMP**
NTS

PUMP PURPOSE: **LIGHTWELL 2 STORM DRAIN LIFT**

SPECIFICATION		QUANTITY		CONTAINMENT
X	ZOELLER 53	SIMPLEX (SINGLE)		CHRISTY V-24
	ZOELLER 153	X DUPLEX (DOUBLE)		30" HDPE
			X	CONCRETE MANHOLE



PUMP NOTES:
1. SUBSURFACE DRAINAGE SYSTEMS (IF APPLICABLE) AND SURFACE STORM DRAIN SYSTEMS (IF APPLICABLE) SHALL REMAIN DEDICATED SEPARATE SYSTEMS AND SHALL NOT CONNECT TO EACH OTHER.
2. SIMPLEX PUMPS MAY BE CONTROLLED BY PIGGYBACK FLOAT SWITCH OR VIA HARD WIRE TO CONTROL PANEL.
3. DUPLEX PUMPS SHALL BE HARD WIRED TO ALTERNATING CONTROL PANEL AND OPERATE VIA FLOAT SWITCHES.
4. RAIL SYSTEM SHALL BE UTILIZED FOR PUMPS DEEPER THAN 5' BELOW GROUND SURFACE.
5. ALL PUMPS SHALL HAVE AUDIBLE HIGH WATER LEVEL ALARM IN LOCATION TO ALERT OWNER OR CONNECTED TO BUILDING SECURITY SYSTEM.
6. ALL WIRING SHALL BE PER APPLICABLE CODE AND SHALL BE LOCATED PER CONTRACTOR / ELECTRICIAN.
7. HDPE SHALL HAVE SOLID LID BOLTED DOWN.
8. CONCRETE MANHOLE SHALL BE 36"ø WITH 24" EXCENTRIC TOP. STEPS SET INTEGRAL WITH RINGS ON ALL MANHOLES OVER 60" DEEP.

2" HDPE (SDR-11) OR PVC (SCH 40) DISCHARGE LINE TO OUTLET PER PLANS. PROVIDE MINIMUM 24" COVER OVER DISCHARGE LINE. FOR BURIAL DEPTH LESS THAN 24", USE GALVANIZED STEEL PIPE OR PROVIDE 4" PVC (SDR-35) PROTECTIVE SLEEVE.

FLOAT SWITCH:
PER MANUFACTURER

INSTALL CHECK VALVE AT DISCHARGE LINE - TYP.

INVERT IN
ELEV: **164.48**

DUPLEX PUMP (IF APPLICABLE PER CHART ABOVE)

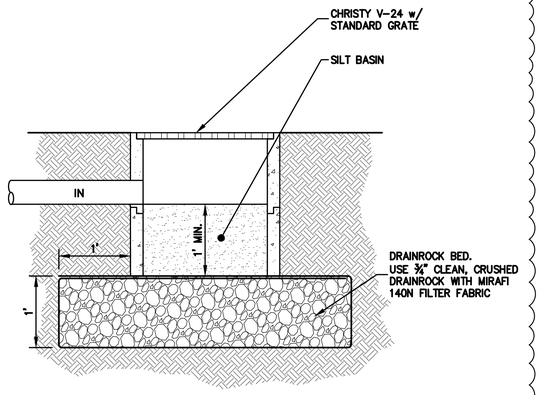
SUBMERSABLE SUMP PUMP PER SPECIFICATION ABOVE. BACKFLOW PREVENTION CHECK VALVE SHALL BE PROVIDED ON DISCHARGE LINE

PUMP SYSTEM CONTAINMENT PER CHART ABOVE WITH SOLID BOTTOM

NOTE: BACK-UP POWER IS RECOMMENDED. NOTIFY ENGINEER IF OMITTED FROM PROPOSED PROJECT.

NOTE: PUMP DESIGN IS TO BE FINALIZED DURING THE PERMIT PHASE.

3 C-4.1 **SUMP PUMP**
NTS



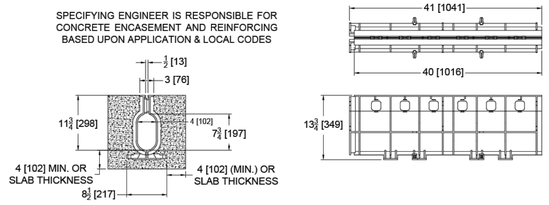
4 C-4.1 **BUBBLER BOX**
NTS

ZURN **Z888-6**
SLOTTED DRAINAGE SYSTEM FOR
6 [152] PIPE OR EQUIVALENT

SPECIFICATION SHEET
TAG _____

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice

SPECIFYING ENGINEER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION & LOCAL CODES



ENGINEERING SPECIFICATION: Zurn Z888-6
Slot drain shall be 40 [1016] long, 4 [102] wide, and 11-3/4 [298] invert, with 1/2 [13] slot opening (ADA compliant). Drain shall be made of (HDPE) High Density Polyethylene, and is UV-10 stabilized. Drain shall have rebar clips molded onto bedding feet and/or bedding feet shall be used for positioning and anchoring purposes. Overlap connection shall be interlocked.

5 C-4.1 **SLOT DRAIN**
NTS

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189-42-027

DETAILS

-	-
-	-
-	-
-	-
1 PLAN CHECK #1 03-18-24	ZA
REVISIONS	BY

JOB NO:	2221914
DATE:	12-13-23
SCALE:	NTS
DESIGN BY:	ZA
CHECKED BY:	JT
SHEET NO:	C-4.1

6 OF 10 SHEETS

GENERAL NOTES

ALL GENERAL NOTES, SHEET NOTES, AND LEGEND NOTES FOUND IN THESE DOCUMENTS SHALL APPLY TYPICALLY THROUGHOUT. IF INCONSISTENCIES ARE FOUND IN THE VARIOUS NOTATIONS, NOTIFY THE ENGINEER IMMEDIATELY IN WRITING REQUESTING CLARIFICATION.

THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION, GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

STORMWATER POLLUTION PREVENTION NOTES

1) STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.

2) CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.

3) USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.

4) AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.

5) DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.

6) PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.

7) PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT PRACTICAL.

8) LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.

9) LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.

10) AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

1

A. THE PHRASE "NO DUMPING – DRAINS TO HALE CREEK" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.

B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.

C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.

D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.

E. STORING, HANDLING, AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.

F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

GRADING & DRAINAGE NOTES:

1. SCOPE OF WORK

THESE SPECIFICATIONS AND APPLICABLE PLANS PERTAIN TO AND INCLUDE ALL SITE GRADING AND EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL, STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION, RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.

2. GENERAL

A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS, THE SOILS REPORT BY SILICON VALLEY SOIL ENGINEERING; AND THE CITY OF LOS ALTOS.

B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TEST AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.

3. CLEARING AND GRUBBING

A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.

B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.

D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:

(1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.

(2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.

(3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

4. SITE PREPARATION AND STRIPPING

A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.

B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION, THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS, STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE OF RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT UNIFORM SOIL COMPACTION. THE GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION, THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.

5. EXCAVATION

A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER, UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL. RESULTING GROUND LINE SHALL BE SCARIFIED, MOISTURE-CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.

B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

6. PLACING, SPREADING AND COMPACTING FILL MATERIAL

A. FILL MATERIALS

THE MATERIALS PROPOSED FOR USE AS COMPACTED FILL SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL; HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. ANY IMPORTED MATERIAL SHALL BE APPROVED FOR USE BY THE SOILS ENGINEER, IN WRITING, BEFORE BEING IMPORTED TO THE SITE AND SHALL POSSESS SUFFICIENT FINES TO PROVIDE A COMPETENT SOIL MATRIX AND SHALL BE FREE OF VEGETATIVE AND ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.

B. FILL CONSTRUCTION

THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT OF THE FILL.

THE APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS NO THICKER THAN 8" IN LOOSE THICKNESS. LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. WHEN THE MOISTURE CONTENT OF THE FILL IS BELOW THAT SPECIFIED, WATER SHALL BE ADDED UNTIL THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS ABOVE THAT SPECIFIED, THE FILL MATERIAL SHALL BE AERATED BY BLADING OR OTHER SATISFACTORY METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.

AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED, IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.

THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS. NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.

COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.

7. CUT OR FILL SLOPES

ALL CONSTRUCTED SLOPES, BOTH CUT AND FILL, SHALL BE NO STEEPER THAN 2 TO 1 (HORIZONTAL TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS FILL EXISTING ON THE SLOPES SHALL BE BLADED OFF TO CREATE THE FINISHED SLOPE EMBANKMENT. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND THEN BE PLANTED WITH EROSION CONTROL SLOPE PLANTING. THE SOILS ENGINEER SHALL REVIEW ALL CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE TIME OF THEIR DETECTION.

8. SEASONAL LIMITS AND DRAINAGE CONTROL

FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS INTERRUPTED FOR ANY REASON THE FILL OPERATIONS SHALL NOT BE RESUMED UNTIL FIELD TEST PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.

9. DUST CONTROL

THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

10. INDEMNITY

THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE ENGINEER, THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

11. SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

12. GUARANTEE

NEITHER THE FINAL PAYMENT, NOR THE PROVISIONS IN THE CONTRACT, NOR PARTIAL, NOR ENTIRE USE OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.

THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THERE FROM WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

13. TRENCH BACKFILL

EITHER THE ON-SITE INORGANIC SOIL OR APPROVED IMPORTED SOIL MAY BE USED AS TRENCH BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS AND BE COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 90% RELATIVE COMPACTION. IMPORTED SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% RELATIVE COMPACTION. WATER JETTING ASSOCIATED WITH COMPACTION USING VIBRATORY EQUIPMENT WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THE PIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND BACKFILL.

14. EROSION CONTROL

A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE COUNTY GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.

B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.

C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIFTEENTH UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.

D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE SOILS ENGINEER.

E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.

F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.

G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT, SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.

H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.

I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING PROPORTIONS:

FIBER, 2000 LBS/ACRE
SEED, 200 LBS/ACRE (SEE NOTE J, BELOW)
FERTILIZER (11-8-4), 500 LBS/ACRE
WATER, AS REQUIRED FOR APPLICATION

J. SEED MIX SHALL BE PER CALTRANS STANDARDS.

K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND WEED SEED.

L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.

M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL, PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.

N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE COUNTY ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.

O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4-HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.

P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE COUNTY ENGINEER MAY REQUIRE SPRAY APPLICATION OF WATER OR OTHER MAINTENANCE ACTIVITIES TO ASSURE THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.

15. CLEANUP

THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

NOTE:
THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

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PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189-42-027

GRADING SPECIFICATIONS

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1 PLAN CHECK #1 03-18-24	ZA
REVISIONS	BY

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PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL NOTES:

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT–LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS LONGER.
10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
14. EROSION CONTROL MEASURES SHALL BE ON–SITE FROM SEPTEMBER 15TH THRU APRIL 15TH.
15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM **OCTOBER 15 THROUGH APRIL 15,** WHICHEVER IS GREATER.
16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN SYSTEMS.
18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT–OF–WAY.
20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT–OF–WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT–OF–WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND

EROSION CONTROL NOTES CONTINUED:

24. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM,
25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
26. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO SEPTEMBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS,TO PUBLIC OWNED FACILITIES.

EROSION CONTROL MEASURES:

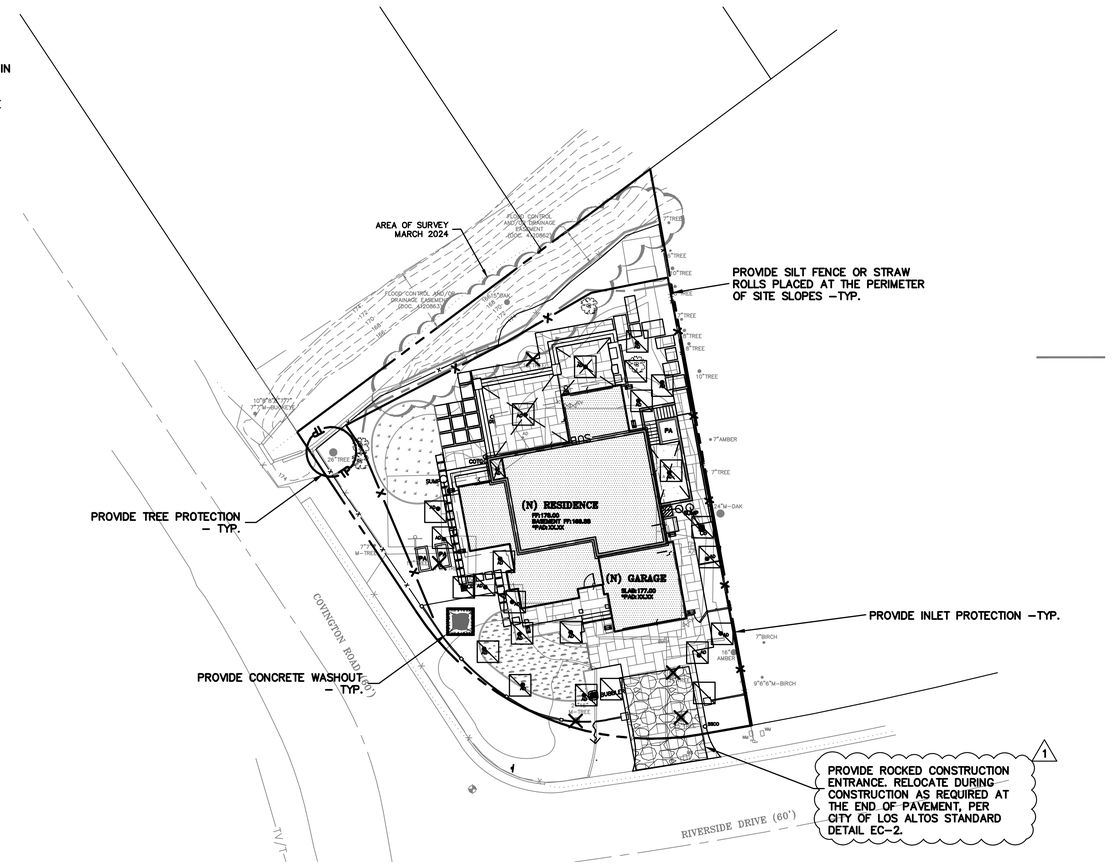
1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE–STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

REFERENCES:

1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   - A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   - B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   - C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   - D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
   - E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   - F. RILLS AND GULLIES MUST BE REPAIRED.
2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION



EROSION CONTROL LEGEND

- GRAVEL BAG
- INLET PROTECTION
- STRAW ROLL (SR)
- SILT FENCE (X)
- CONCRETE WASHOUT
- CONSTRUCTION ENTRANCE
- TREE PROTECTION

NOTE:
SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. –TYP

INSTALLATION NOTE:
EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION.

REGISTERED PROFESSIONAL ENGINEER JAMES TOBY No. 63127 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
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APN: 189–42–027
SANTA CLARA COUNTY

EROSION CONTROL PLAN

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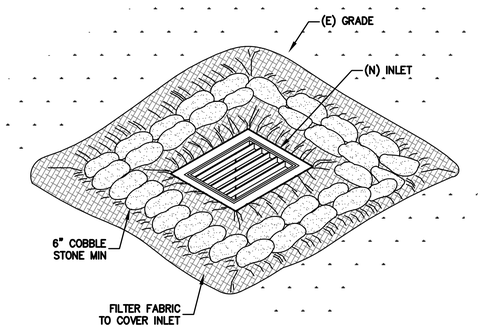
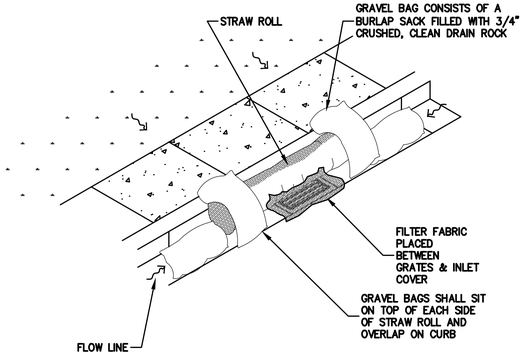
1 PLAN CHECK #1 03–18–24	ZA
REVISIONS	BY

JOB NO:	2221914
DATE:	12–13–23
SCALE:	AS NOTED
DESIGN BY:	ZA
CHECKED BY:	JT
SHEET NO:	ER–1

8 OF 10 SHEETS



1 ER-2 **INLET PROTECTION**
NTS



2 ER-2 **STREET INLET PROTECTION**
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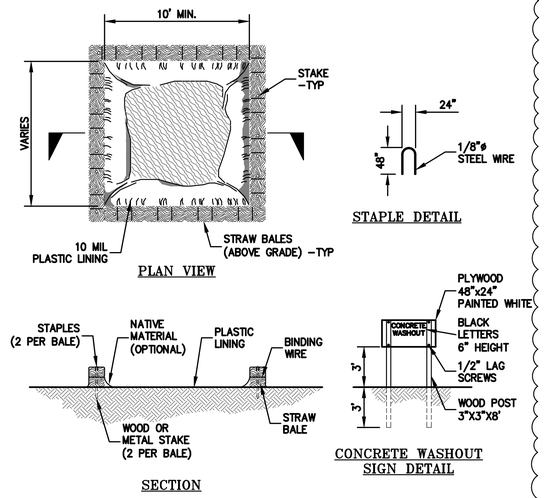
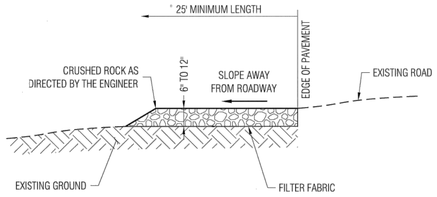


3 ER-2 **CONCRETE WASHOUT**
NTS

NOTES:
ACTUAL LAYOUT DETERMINED IN FIELD.

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



NOTES:
1. PROVIDE A FANNED STABILIZED CONSTRUCTION ENTRANCE TO ACCOMODATE THE TURNING RADIUS OF CONSTRUCTION EQUIPMENT ON AND OFF THE PUBLIC STREET

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE ALONG NEW DRIVEWAY CORRIDOR FOR THE FULL PROPOSED WIDTH

Approved: City Engineer — Date 1/4/10

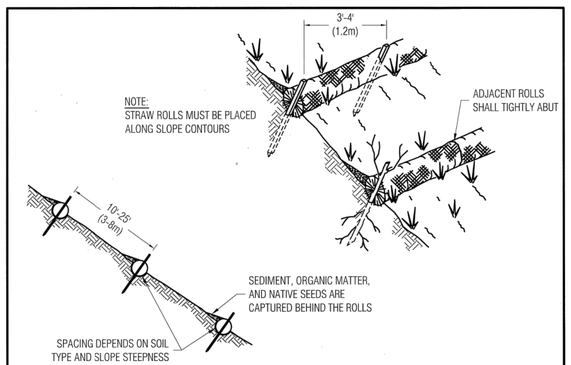
CITY OF LOS ALTOS, CALIFORNIA — INCORPORATED DECEMBER 1952

REVISION	
Description	Date

ENGINEERING DIVISION

STABILIZED CONSTRUCTION SITE ENTRANCE — **EC-2**

STANDARD DETAILS MAY 2010



NOTES:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" (75-125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL

2. VERTICAL SPACING FOR SLOPE INSTALLATIONS
1:1 SLOPES = 10 FEET APART
2:1 SLOPES = 20 FEET APART
3:1 SLOPES = 30 FEET APART
4:1 SLOPES = 40 FEET APART
<4:1 SLOPE = ONE ROW AT LOW POINT

3. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT TO RUN OFF-SITE AND CAN BE PERMANENTLY STABILIZED

Approved: City Engineer — Date 1/4/10

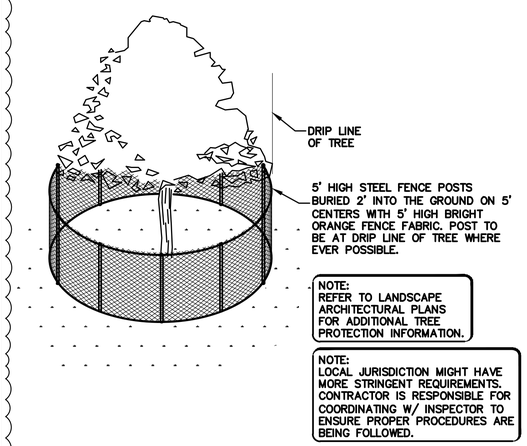
CITY OF LOS ALTOS, CALIFORNIA — INCORPORATED DECEMBER 1952

REVISION	
Description	Date

ENGINEERING DIVISION

STRAW ROLLS — **EC-4**

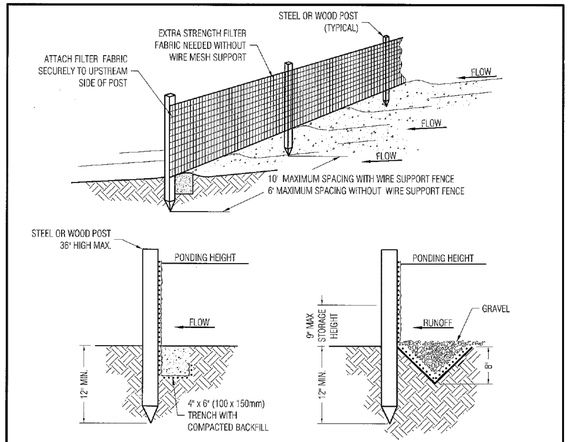
STANDARD DETAILS MAY 2010



NOTE:
REFER TO LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL TREE PROTECTION INFORMATION.

NOTE:
LOCAL JURISDICTION MIGHT HAVE MORE STRINGENT REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING W/ INSPECTOR TO ENSURE PROPER PROCEDURES ARE BEING FOLLOWED.

6 ER-2 **EXISTING TREE PROTECTION DETAIL**
NTS



STANDARD DETAIL TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL TRENCH WITH GRAVEL

NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHERE NECESSARY

2. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT TO RUN OFF-SITE AND CAN BE PERMANENTLY STABILIZED

3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY

Approved: City Engineer — Date 1/4/10

CITY OF LOS ALTOS, CALIFORNIA — INCORPORATED DECEMBER 1952

REVISION	
Description	Date

ENGINEERING DIVISION

SILT FENCE — **EC-3**

STANDARD DETAILS MAY 2010

REGISTERED PROFESSIONAL ENGINEER — JAMES TOBY — No. 63127 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS I LAND SURVEYORS
MAIN OFFICE: 2495 INDUSTRIAL PKWY WEST HAYWARD, CALIFORNIA 94545 (510) 887-4086
REGIONAL OFFICES: ROSEVILLE DUBLIN SAN JOSE
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189-42-027

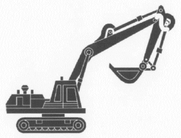
EROSION CONTROL DETAILS

1	PLAN CHECK #1 03-18-24 ZA
REVISIONS	BY
JOB NO:	2221914
DATE:	12-13-23
SCALE:	AS NOTED
DESIGN BY:	ZA
CHECKED BY:	JT
SHEET NO:	ER-2

9 OF 10 SHEETS

Heavy Equipment Operation

Best Management Practices for the Construction Industry



Best Management Practices for the

- Vehicle and equipment operators
- Site supervisors
- General contractors
- Home builders
- Developers

Doing the Job Right

Site Planning and Preventive Vehicle Maintenance

- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site where cleanup is easier.
- ☐ If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and properly dispose as hazardous waste (recycle whenever possible).
- ☐ Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning.
- ☐ Cover exposed fifth wheel hitches and other oily or greasy equipment during rain events.

Storm water Pollution from Heavy Equipment on Construction Sites

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible

Spill Cleanup

- ☐ Clean up spills immediately when they happen.
- ☐ Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent materials.
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ☐ Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report significant spills to the appropriate local spill response agencies immediately.
- ☐ If the spill poses a significant hazard to human health and safety, property or the environment, you must also report it to the State Office of Emergency Services

Roadwork and Paving

Best Management Practices for the Construction Industry

Best Management Practices for the

- Road crews
- Driveway/sidewalk/parking lot construction crews
- Seal coat contractors
- Operators of grading equipment, paving machines, dump trucks, concrete mixers
- Construction inspectors
- General contractors
- Home builders
- Developers

Doing The Job Right

General Business Practices

- ☐ Develop and implement erosion/sediment control plans for roadway embankments.
- ☐ Schedule excavation and grading work during dry weather.
- ☐ Check for and repair leaking equipment.
- ☐ Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
- ☐ When refueling or when vehicle/equipment maintenance must be done on site, designate a location away from storm drains and creeks.
- ☐ Do not use diesel oil to lubricate equipment parts or clean equipment.
- ☐ Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly.

During Construction

- ☐ Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater runoff.
- ☐ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff.

Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

- ☐ Never wash excess material from exposed- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- ☐ Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
- ☐ Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
- ☐ Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags), or dig up, remove, and properly dispose of contaminated soil.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
- ☐ Avoid over-application by water trucks for dust control.

Asphalt/Concrete Removal

- ☐ Avoid creating excess dust when breaking asphalt or concrete.
- ☐ After breaking up old pavement, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.
- ☐ When making saw cuts, use as little water as possible. Shovel or vacuum saw-cut slurry and remove from the site. Cover or protect storm drain inlets during saw-cutting. Sweep up, and properly dispose of, all residues.
- ☐ Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

Fresh Concrete and Mortar Application

Best Management Practices for the Construction Industry

Best Management Practices for the

- Masons and bricklayers
- Sidewalk construction crews
- Patio construction workers
- Construction inspectors
- General contractors
- Home builders
- Developers
- Concrete delivery/pumping workers

Doing The Job Right

General Business Practices

- ☐ Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
- ☐ Wash out chutes onto dirt areas at site that do not flow to streets or drains.
- ☐ Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.
- ☐ Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- ☐ Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

During Construction

- ☐ Don't mix up more fresh concrete or cement than you will use in a two-hour period.
- ☐ Set up and operate small mixers on tarps or heavy plastic drop cloths.
- ☐ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- ☐ Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ☐ When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a landfill.
- ☐ Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- ☐ Never dispose of washout into the street, storm drains, drainage ditches, or streams.

Preventing Pollution: It's Up to Us

In the Santa Clara Valley, storm drains transport water directly to local creeks and San Francisco Bay without treatment. Storm water pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or bay lands. Some common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.

Thirteen valley municipalities have joined together with Santa Clara County and the Santa Clara Valley Water District to educate local residents and businesses and fight storm water pollution. TO comply with this program, contractors most comply with the practices described this drawing sheet.

Spill Response Agencies

DIAL 9-1-1

State Office of Emergency Services Warning Center (24 hours): **800-852-7550**

Santa Clara County Environmental Health Services: (408) 299-6930

Local Pollution Control Agencies

County of Santa Clara Pollution Prevention Program: (408) 441-1195

County of Santa Clara Integrated Waste Management Program: (408) 441-1198

County of Santa Clara District Attorney Environmental Crimes Hotline: (408) 299-TIPS

Santa Clara County Recycling Hotline: 1-800-533-8414

Santa Clara Valley Water District: (408) 265-2600

Santa Clara Valley Water District Pollution Hotline: 1-888-510-5151

Regional Water Quality Control Board San Francisco Bay Region: (510) 622-2300

Palo Alto Regional Water Quality Control Plant: (650) 329-2598
Serving East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford

City of Los Altos

Building Department: (650) 947-2752

Engineering Department: (650) 947-2780

Landscaping, Gardening, and Pool Maintenance

Best Management Practices for the Construction Industry

Best Management Practices for the

- Landscapers
- Gardeners
- Swimming pool/spa service and repair workers
- General contractors
- Home builders
- Developers
- Homeowners

Doing The Right Job

General Business Practices

- ☐ Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
- ☐ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
- ☐ Schedule grading and excavation projects during dry weather.
- ☐ Use temporary check dams or ditches to divert runoff away from storm drains.
- ☐ Protect storm drains with sandbags or other sediment controls.
- ☐ Re-vegetation is an excellent form of erosion control for any site

Landscaping/Garden Maintenance

- ☐ Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinse water as product. Dispose of rinsed, empty containers in the trash. Dispose of unused pesticides as hazardous waste.
- ☐ Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost.
- ☐ In communities with curbside pick-up of yard waste, place clippings and pruning waste at the curb in approved bags or containers. Or, take to a landfill that composts yard waste. No curbside pickup of yard waste is available for commercial properties.

Storm Drain Pollution From Landscaping and Swimming Pool Maintenance

Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

- ☐ Do not blow or rake leaves, etc. into the street, or place yard waste in gutters or on dirt shoulders, unless you are piling them for recycling (allowed by San Jose and unincorporated County only). Sweep up any leaves, litter or residue in gutters or on street.
- ☐ In San Jose, leave yard waste for curbside recycling pickup in piles in the street, 18 inches from the curb and completely out of the flow line to any storm drain.

Pool/Fountain/Spa Maintenance

Draining Pools Or Spas

When it's time to drain a pool, spa, or fountain, please be sure to call your local wastewater treatment plant before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows shall not exceed 100 gallon per minute.

- ☐ Never discharge pool or spa water to a street or storm drain; discharge to a sanitary sewer cleanout.
- ☐ If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area.
- ☐ Do not use copper-based algaecides. Control algae with chlorine or other alternatives, such as sodium bromide.

Filter Cleaning

- ☐ Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area, and spade filter residue into soil. Dispose of spent diatomaceous earth in the garbage.
- ☐ If there is no suitable dirt area, call your local wastewater treatment plant for instructions on discharging filter backwash or rinse water to the sanitary sewer.

Painting and Application of Solvents and Adhesives

Best Management Practices for the Construction Industry

Best Management Practices for the

- Homeowners
- Painters
- Paperhangers
- Plasterers
- Graphic artists
- Dry wall crews
- Floor covering installers
- General contractors
- Home builders
- Developers

Doing The Job Right

Handling Paint Products

- ☐ **Keep all liquid paint products and wastes away from the gutter, street, and storm drains.** Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program listed on the back of this brochure).
- ☐ When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Empty, dry paint cans also may be recycled as metal.
- ☐ Wash water from painted buildings constructed before 1978 can contain high amounts of lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory.
- ☐ If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with the wastewater treatment plant to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.

Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

Painting Cleanup

- ☐ **Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or stream.**
- ☐ For **water-based paints**, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For **oil-based paints**, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.

Paint Removal

- ☐ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- ☐ When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

Recycle/Reuse Leftover Paints Whenever Possible

- ☐ Recycle or donate excess **water-based (latex) paint,** or return to supplier.
- ☐ Reuse leftover **oil-based paint**. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste.
- ☐ Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

Los Altos Municipal Code Requirements

Los Altos Municipal Code Chapter 10.08.390 Non-storm water discharges

A. Unlawful discharges. It shall be unlawful to discharge any domestic waste or industrial waste into storm drains, gutters, creeks, or San Francisco Bay. Unlawful discharges to storm drains shall include, but not be limited to, discharge from toilets; sinks; industrial processes; cooling systems; boilers; fabric cleaning; equipment cleaning; vehicle cleaning; construction activities, including, but not limited to, painting, paving, concrete placement, saw cutting and grading; swimming pools; spas; and fountains, unless specifically permitted by a discharge permit or unless exempted pursuant to guidelines published by the superintendent.

B. Threatened discharges. It shall be unlawful to cause hazardous materials, domestic waste, or industrial waste to be deposited in such a manner or location as to constitute a threatened discharge into storm drains, gutters, creeks or San Francisco Bay. A "threatened discharge" is a condition creating a substantial probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural resources. Domestic or industrial wastes that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

Los Altos Municipal Code Section 10.08.430 Requirements for construction operations.

A. A spill response plan for hazardous waste, hazardous materials and uncontained construction materials shall be prepared and available at the construction sites for all projects where the proposed construction site is equal to or greater than one acre of disturbed soil and for any other projects for which the city engineer determines is necessary to protect surface waters. Preparation of the plan shall be in accordance with guidelines published by the city engineer.

B. A storm water pollution prevention plan shall be prepared and available at the construction sites for all projects greater than one acre of disturbed soil and for any other projects for which the city engineer determines that a storm water management plan is necessary to protect surface waters. Preparation of the plan shall be in accordance with guidelines published by the city engineer.

C. Prior approval shall be obtained from the city engineer or designee to discharge water pumped from construction sites to the storm drain. The city engineer or designee may require gravity settling and filtration upon a determination that either or both would improve the water quality of the discharge. Contaminated groundwater or water that exceeds state or federal requirements for discharge to navigable waters may not be discharged to the storm drain. Such water may be discharged to the sewer, provided that the requirements of Section 10.08.240 are met and the approval of the superintendent is obtained prior to discharge.

D. No cleanup of construction debris from the streets shall result in the discharge of water to the storm drain system; nor shall any construction debris be deposited or allowed to be deposited in the storm drain system. (Prior code § 5-5.643)

Criminal and judicial penalties can be assessed for non-compliance.

General Construction And Site Supervision

Best Management Practices For Construction

Best Management Practices for the

- General contractors
- Site supervisors
- Inspectors
- Home builders
- Developers

Storm Drain Pollution from Construction Activities

Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay.

As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

Doing The Job Right

General Principals

- ☐ Keep an orderly site and ensure good housekeeping practices are used.
- ☐ Maintain equipment properly.
- ☐ Cover materials when they are not in use.
- ☐ Keep materials away from streets, storm drains and drainage channels.
- ☐ Ensure dust control water doesn't leave site or discharge to storm drains.

Advance Planning To Prevent Pollution

- ☐ Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the *Erosion and Sediment Control Manual*, available from the Regional Water Quality Control Board, as a reference.
- ☐ Control the amount of runoff crossing your site (especially during excavation!) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce storm water runoff velocities by constructing temporary check dams or berms where appropriate.
- ☐ Train your employees and subcontractors. Make these best management practices available to everyone who works on the construction site. Inform subcontractors about the storm water requirements and their own responsibilities.

Good Housekeeping Practices

- ☐ Designate one area of the site for auto parking, vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs off site.
- ☐ Keep materials out of the rain – prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- ☐ Keep pollutants off exposed surfaces. Place trashcans and recycling receptacles around the site to minimize litter.
- ☐ Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Set portable toilets away from storm drains. Make sure portable toilets are in good working order. Check frequently for leaks.

Materials/Waste Handling

- ☐ Practice Source Reduction -- minimize waste when you order materials. Order only the amount you need to finish the job.
- ☐ Use recyclable materials whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
- ☐ Dispose of all wastes properly. Many construction materials and wastes, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the street or near a creek or stream bed.

Permits

- ☐ In addition to local building permits, you will need to obtain coverage under the State's General Construction Activity Storm water Permit if your construction site disturbs one acre or more. Obtain information from the Regional Water Quality Control Board.

Earth-Moving And Dewatering Activities

Best Management Practices for the Construction Industry

Best Management Practices for the

- Bulldozer, back hoe, and grading machine operators
- Dump truck drivers
- Site supervisors
- General contractors
- Home builders
- Developers

Doing The Job Right

General Business Practices

- ☐ Schedule excavation and grading work during dry weather.
- ☐ Perform major equipment repairs away from the job site.
- ☐ When refueling or vehicle/equipment maintenance must be done on site, designate a location away from storm drains.
- ☐ Do not use diesel oil to lubricate equipment parts, or clean equipment.

Practices During Construction

- ☐ Remove existing vegetation only when absolutely necessary. Plant *temporary* vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Protect down slope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's *Erosion and Sediment Control Field Manual* for proper erosion and sediment control measures.

Storm Drain Pollution from Earth-Moving Activities and Dewatering

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runoff crossing a site *and* slow the flow with check dams or roughened ground surfaces.

Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxics (such as oil or solvents) or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation.

Discharging sediment-laden water from a dewatering site into any water of the state without treatment is prohibited.

- ☐ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.

Dewatering Operations

1. Check for Toxic Pollutants

- ☐ Check for odors, discoloration, or an oily sheen on groundwater.
- ☐ Call your local wastewater treatment agency and ask whether the groundwater must be tested.
- ☐ If contamination is suspected, have the water tested by a certified laboratory.
- ☐ Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain (if no sediments present) or sanitary sewer. OR, you may be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment facility.

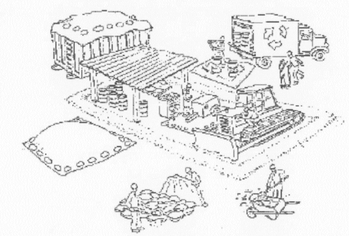
2. Check for Sediment Levels

- ☐ If the water is clear, the pumping time is less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain.
- ☐ If the pumping time is more than 24 hours and the flow rate greater than 20 gpm, call your local wastewater treatment plant for guidance.
- ☐ If the water is not clear, solids must be filtered or settled out by pumping to a settling tank prior to discharge. Options for filtering include:
  - Pumping through a perforated pipe sunk part way into a small pit filled with gravel;
  - Pumping from a bucket placed below water level using a submersible pump;
  - Pumping through a filtering device such as a swimming pool filter or filter fabric wrapped around end of suction pipe.
- ☐ When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate. OR pump water through a grassy swale prior to discharge.

Blueprint for a Clean Bay

Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Best Management Practices for the Construction Industry



Santa Clara Urban Runoff Pollution Prevention Program

DESIGNED BY: LARRY LIND	APPROVED BY: CITY OF LOS ALTOS	DATE: OCTOBER, 2003
DRAWN BY: VICTOR CHEN	CITY ENGINEER 48056 R.C.E.	SCALE: N.T.S.
CHECKED BY: JIM GUSTAFSON	SHEET OF SHEETS	DRAWING NO:

REGISTERED PROFESSIONAL ENGINEER — JAMES TOBY — No. 63127 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS
MAIN OFFICE: 2495 INDUSTRIAL PKWY WEST HAYWARD, CALIFORNIA 94545 (510) 887-4086
REGIONAL OFFICES: ROSEVILLE DUBLIN SAN JOSE
WWW.LEABRAZE.COM

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA
SANTA CLARA COUNTY
APN: 189-42-027

BLUEPRINT FOR A CLEAN BAY

1	PLAN CHECK #1 03-18-24	ZA
	REVISIONS	BY

JOB NO: 2221914
DATE: 12-13-23
SCALE: AS NOTED
DESIGN BY: ZA
CHECKED BY: JT
SHEET NO:

BMP-1

10 OF 10 SHEETS

SITE PLAN LEGEND

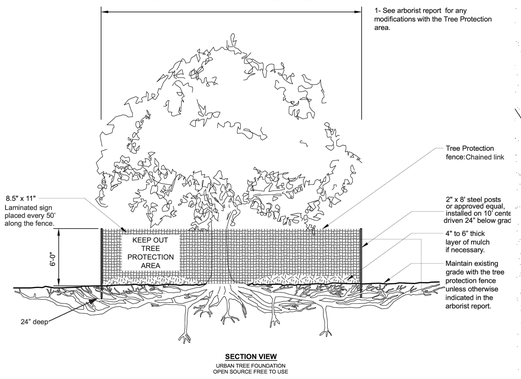
- PROPERTY LINE
- SETBACK LINE OR LINE OF EASEMENT
- OUTLINE OF (E) HOUSE
- W — UTILITY LINE - UNDER GROUND
- E(O.H) — UTILITY LINE - OVERHEAD
- PUE & DRAINAGE EASEMENT.
- x — FENCE / GATE
- TREE PROTECTION FENCE
- AREA OF (E) RESIDENCE TO BE REMOVED
- (E) TREE TO REMAIN
- (E) TREE TO BE REMOVED
- (N) TREE
- 100.00 T.O. SUBFLR — TOP OF SUB FLOOR (ELEVATION).

SITE DEMOLITION NOTES

1. DEMOLISH (E) WOOD FRAME RESIDENCE AND CONCRETE FOOTINGS / SLABS.
2. SALVAGE (E) DRIVEWAY PAVERS TO OWNER.
3. REMOVE ALL (E) CONCRETE PATIO SLABS, STONE WALKWAYS AND SPORT COURT SURFACES.
4. REMOVE (E) AIR CONDENSER.
5. GRADE SITE PER CIVIL ENGINEER'S RECOMMENDATIONS.
6. REFER TO ARBORIST REPORT, SHEET #3 & #4 AND LANDSCAPE SHEET L-1.1 FOR TREE REMOVAL AND TREE PROTECTION DETAILS.

Type I & II TPZ Diagram

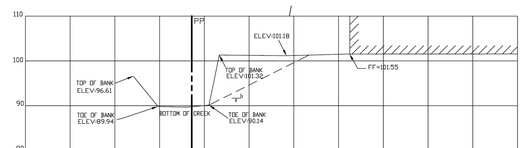
Note: Type II adjusted to fit in park strip or parking lot planting bed.



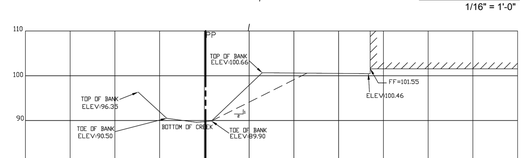
Notes:

1- See arborist report for any modifications with the Tree Protection area.

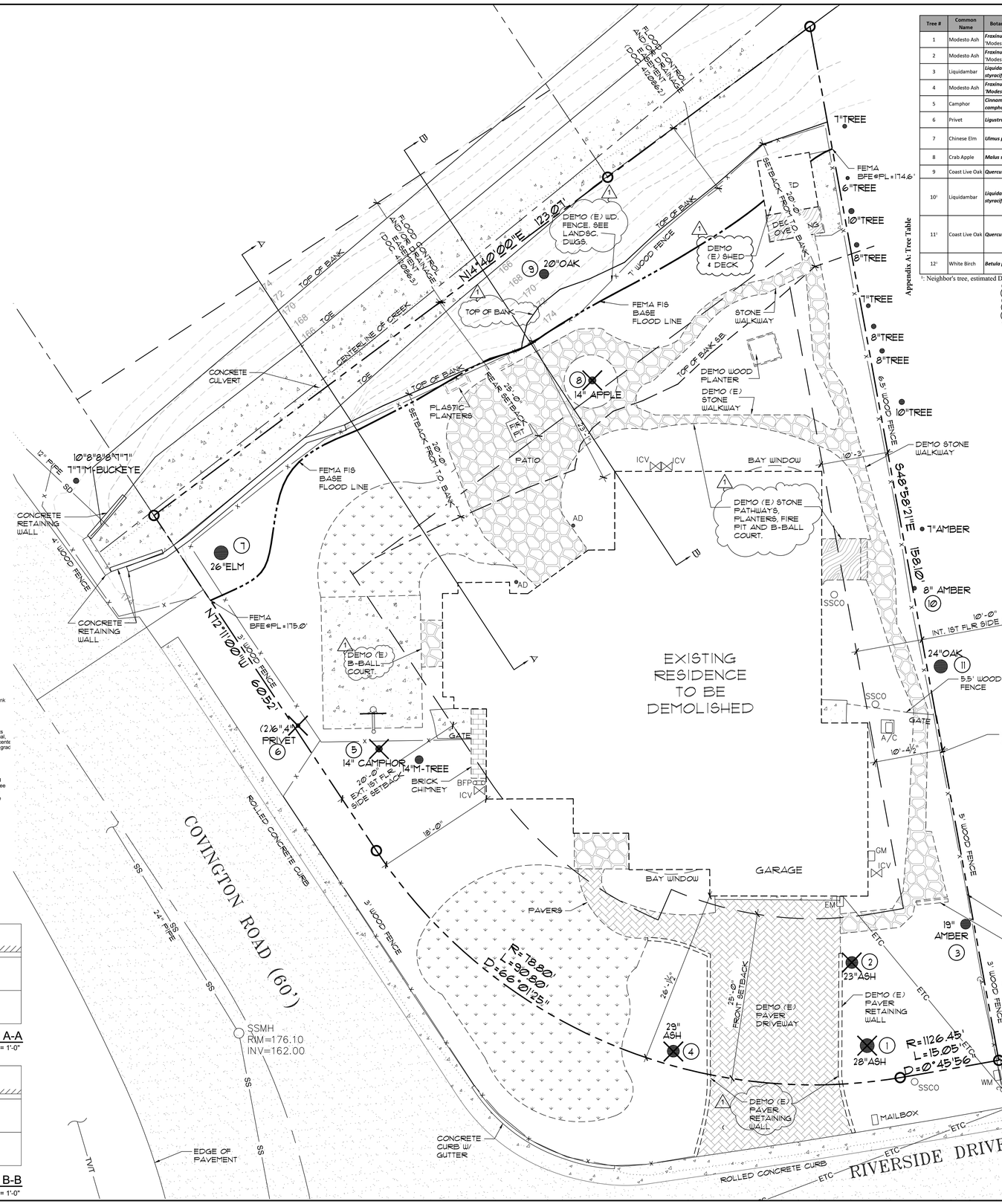
SECTION VIEW
URBAN TREE FOUNDATION
OPEN SOURCE FREE TO USE



SECTION A-A
1/16" = 1'-0"



SECTION B-B
1/16" = 1'-0"



EXISTING SITE PLAN

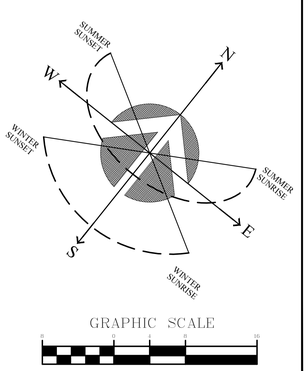
Appendix A: Tree Table

Tree #	Common Name	Botanical Name	DBH (in.)	Spread (ft.)	Condition (0-5)	Suitability	Impacts	Disposition	TPZ Radius (ft.)
1	Modesto Ash	***Fraxinus velutina*** 'Modesto'	28.5	~35	3	Moderate	Located in footprint of proposed driveway.	Remove	N/A
2	Modesto Ash	***Fraxinus velutina*** 'Modesto'	22.7	~35	3	Moderate	Located in footprint of proposed driveway.	Remove	N/A
3	Liquidambar	***Liquidambar styraciflua***	18.7	20	4	Moderate	Direct impacts, soil compaction, root loss.	Retain/Protect	14/20
4	Modesto Ash	***Fraxinus velutina 'Modesto'***	28.9	35	2	Low	Direct impacts, soil compaction, root loss.	Remove	N/A
5	Camphor	***Cinnamomum camphora***	14.2	30	3	Low	Direct impacts, soil compaction, root loss.	Remove	N/A
6	Privet	***Ligustrum lucidum***	6, 6, 4	15	2	Low	Direct impacts, soil compaction, root loss.	Remove	N/A
7	Chinese Elm	***Ulmus parvifolia***	26	50	3	High	Direct impacts, soil compaction.	Retain/Protect	Perimeter of existing planting bed.
8	Crab Apple	***Malus spp.***	13.8	30	4	Moderate	Located in footprint of proposed hardscape.	Remove	N/A
9	Coast Live Oak	***Quercus agrifolia***	~20	35	4	High	None	Not at Risk	N/A
10'	Liquidambar	***Liquidambar styraciflua***	~8, 8	25	3	High	Minor root disturbances.	Retain/Monitor	Hand excavate to 24 inches in depth prior to using mechanical assist for basement lightwell.
11'	Coast Live Oak	***Quercus agrifolia***	~24	35	3	High	Minor root disturbances.	Retain/Monitor	Hand excavate to 24 inches in depth prior to using mechanical assist for basement lightwell.
12'	White Birch	***Betula pendula***	~8, 8, 7	25	3	High	Minor root disturbances.	Retain/Monitor	Will be protected by fence erected for tree #3.

1: Neighbor's tree, estimated DBH.

TREE INVENTORY

(REFER TO L-1 FOR NEW TREE INVENTORY)



GRAPHIC SCALE

(IN FEET)
1 inch = 8 ft.

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

Prepared by Dave Laczko for Rajashree & Mangesh Pimpalkhare 12

HERITAGE ARCHITECTURE

LICENSED ARCHITECT — DAVID VARGAS HERNANDEZ — C-24801 — 3/31/25 RENEWAL DATE — STATE OF CALIFORNIA

SIGNATURE

HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
P.O. BOX 8033, San Jose, California 95155
C: (408) 772-3502 VM: (408) 298-0998
E-mail: dvhernandez@pacbell.net

PIMPALKHARE RESIDENCE

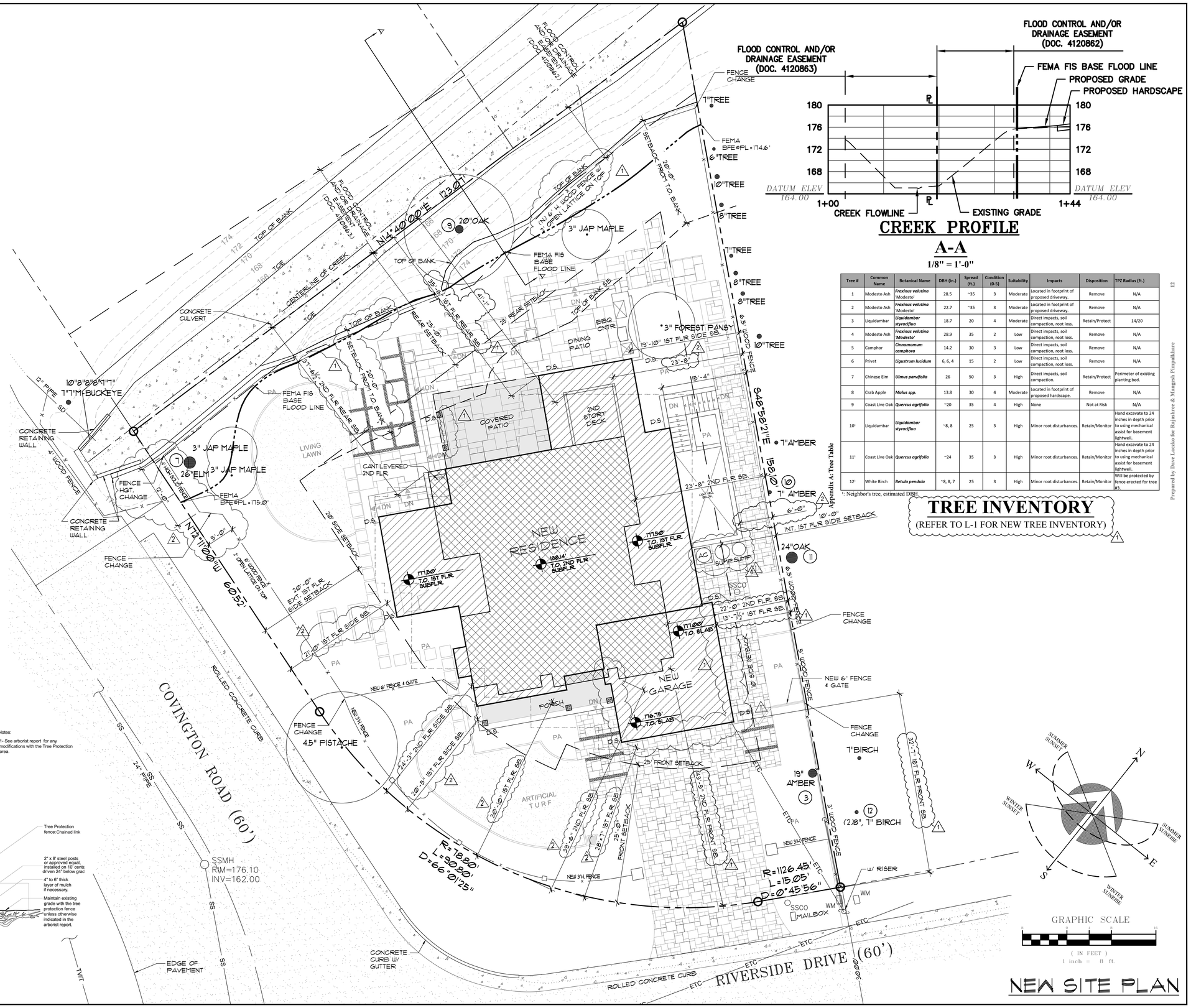
962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN:	DVH
SCALE:	1/8" = 1'-0"
JOB NO.	2022.01
DATE:	06/26/2024

A1.1

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACK LINE OR LINE OF EASEMENT
- OUTLINE OF (E) HOUSE
- W — UTILITY LINE - UNDER GROUND
- E(O.H) — UTILITY LINE - OVERHEAD
- P.U.E & DRAINAGE EASEMENT.
- x — FENCE / GATE
- TREE PROTECTION FENCE
- AREA OF (E) RESIDENCE TO BE REMOVED
- AREA OF NEW RESIDENCE AT 1ST FLOOR
- AREA OF NEW RESIDENCE AT 2ND FLOOR
- AREA OF COVERED PATIO
- (E) TREE TO REMAIN REFER TO ARBORIST REPORT
- (E) TREE TO BE REMOVED REFER TO ARBORIST REPORT
- (N.) TREE REFER TO LANDSCAPE PLANS
- 100.00 T.O. SUBFLR. — TOP OF SUB FLOOR (ELEVATION).



FLOOD CONTROL AND/OR DRAINAGE EASEMENT (DOC. 4120862)

CREEK PROFILE

A-A

1/8" = 1'-0"

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10¹	Liquidambar	***Liquidambar styraciflua***	~8, 8	25	3	High	Minor root disturbances.	Retain/Monitor	Hand excavate to 24 inches in depth prior to using mechanical assist for basement lightwell.
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¹: Neighbor's tree, estimated DBH

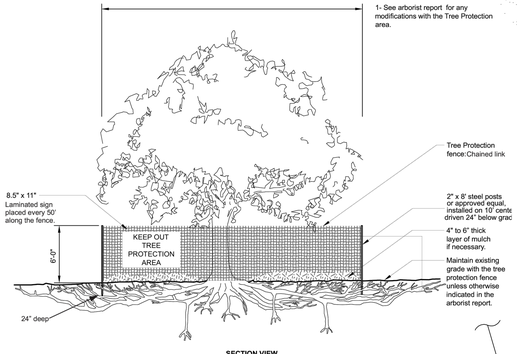
Appendix A: Tree Table

TREE INVENTORY

(REFER TO L-1 FOR NEW TREE INVENTORY) 1

Type I & II TPZ Diagram

Note: Type II adjusted to fit in park strip or parking lot planting bed.



SECTION VIEW

URBAN TREE FOUNDATION
OPEN SOURCE FREE TO USE

Notes:

1- See arborist report for any modifications with the Tree Protection area.

NEW SITE PLAN

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT DAVID VARGAS HERNANDEZ C-24801 3 / 31 / 25 RENEWAL DATE STATE OF CALIFORNIA

SIGNATURE

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Prepared by Dave Laczko for Rajashree & Mangesh Pimpalkhare

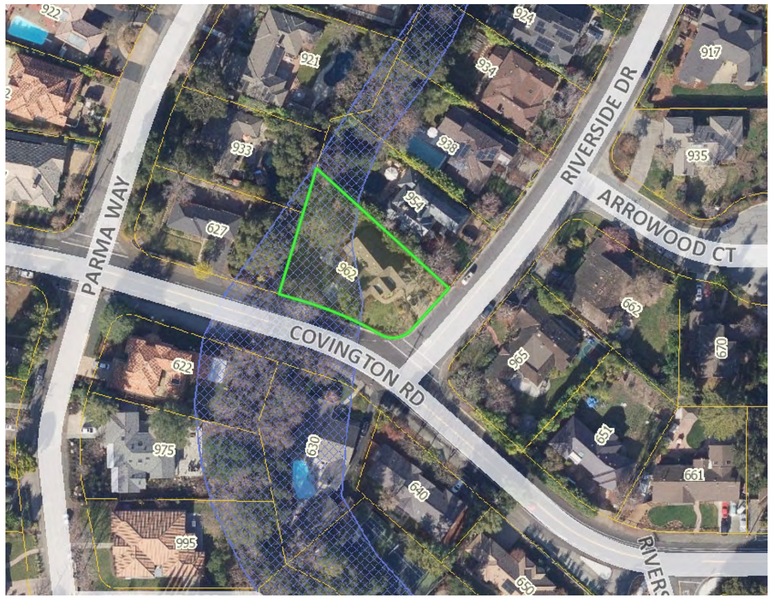
12

PIMPALKHARE RESIDENCE

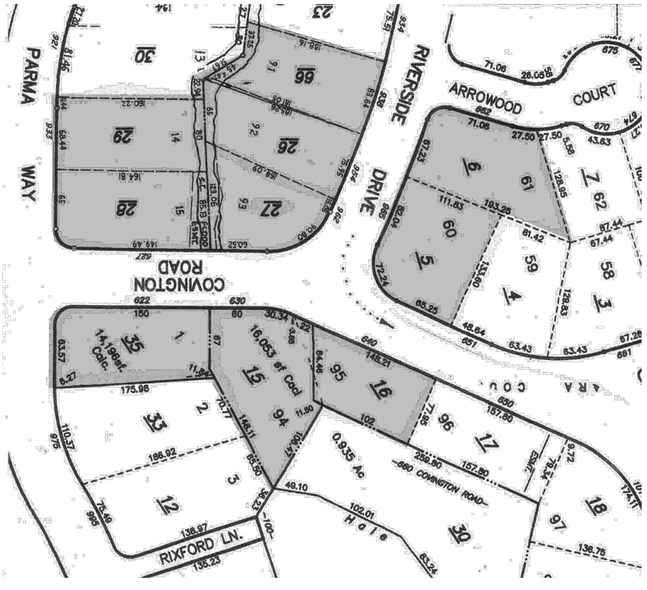
962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN:	DVH
SCALE:	1/8" = 1'-0"
JOB NO.	2022.01
DATE:	06/26/2024

A1.2



ASSESSOR'S AERIAL VIEW
NEIGHBORHOOD CONTEXT MAP



ASSESSOR'S PLATT MAP

LOT 27
962 RIVERSIDE DRIVE

LOT 26
954 RIVERSIDE DRIVE

LOT 66
938 RIVERSIDE DRIVE

LOT 5
965 RIVERSIDE DRIVE

LOT 6
662 ARROWOOD COURT

LOT 6
662 ARROWOOD COURT

LOT 16
640 COVINGTON ROAD

LOT 15
630 COVINGTON ROAD

LOT 35
622 COVINGTON ROAD

LOT 28
627 COVINGTON ROAD

LOT 29
933 PARMA WAY

NEIGHBORHOOD STREETSCAPE

REVISIONS	BY

HERITAGE ARCHITECTURE
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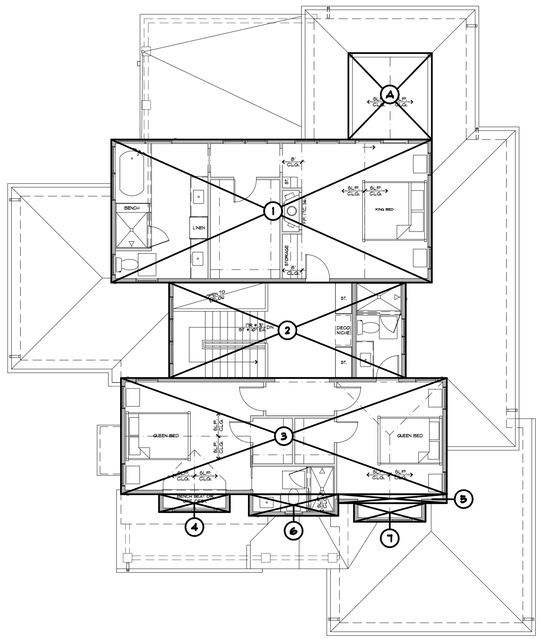
C-24801
3 / 31 / 25
RENEWAL DATE
STATE OF CALIFORNIA
SIGNATURE

PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN: DVH
SCALE:
JOB NO. 2022.01
DATE: 01/10/2024

A1.3

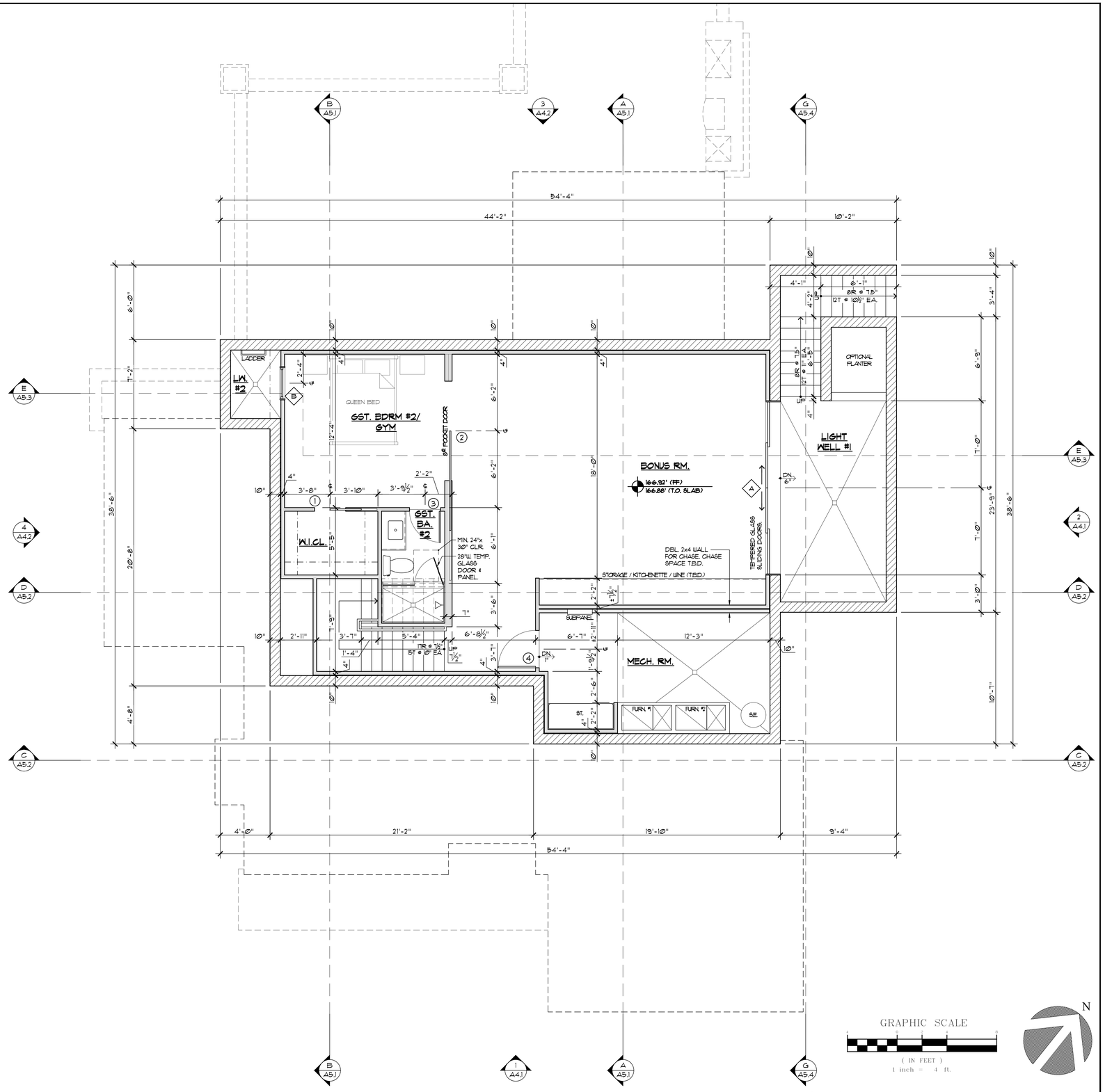

BENCH
LINEN
LINEN
KING BED
QUEEN BED
QUEEN BED
DECK NICHE
BLK. 10" SOFFIT
BLK. 12" SOFFIT
BLK. 24" SOFFIT
BLK. 30" SOFFIT
BLK. 36" SOFFIT
BLK. 42" SOFFIT
BLK. 48" SOFFIT
BLK. 54" SOFFIT
BLK. 60" SOFFIT
BLK. 66" SOFFIT
BLK. 72" SOFFIT
BLK. 78" SOFFIT
BLK. 84" SOFFIT
BLK. 90" SOFFIT
BLK. 96" SOFFIT
BLK.

WALL / SYMBOL LEGEND

	NEW 2x6 FRAMED WALL CONSTRUCTION. PROVIDE ⅝" GYP. BD. @ INTERIOR FINISH. SEE FINISH SCHEDULE, STRUCTURAL PLANS AND SECTIONS FOR WATERPROOF ⅝" TYPE 'X' GYP. BD. AND SHEAR WALL LOCATIONS.
	NEW 2x4 FRAMED WALL CONSTRUCTION. PROVIDE ⅝" GYP. BD. @ INTERIOR FINISH. SEE FINISH SCHEDULE, STRUCTURAL PLANS AND SECTIONS FOR WATERPROOF ⅝" TYPE 'X' GYP. BD. AND SHEAR WALL LOCATIONS.
	NEW OPENING IN EXISTING WALL.
	2x WALL w/ SOUND ISOLATION BATTS.
	LINE OF WALL, BEAM, SOFFIT OR CABINET ABOVE.
	POLE w/ SHELF ABOVE.
6⁰ x 3⁰ CMST.	(E) WINDOW / DOOR - SIZE & FUNCTION
A	(N) WINDOW TYPE - LETTER.
#	(N) DOOR TYPE - NUMBER.
T	TEMPERED SAFETY GLASS LOCATION.
E	EGRESS WINDOW.
C	SELF-CLOSING DOOR
#	REVISION MARK - NUMBER.
A / C A6.1 B / D	INTERIOR ELEVATION TAG - LETTER.
# / A4.1	EXTERIOR ELEVATION TAG.
# / A8.1	DETAIL MARK - NUMBER / SHEET.
A / A8.1	BUILDING SECTION - LETTER / SHEET.
100.00 T.O. SUBFLR.	TOP OF SUB FLOOR (ELEVATION).
DS.	DOWNSPOUT TO SPLASH BLOCK @ GRADE.

FLOOR PLAN NOTES

1. DO NOT SCALE THE DRAWINGS!! DIMENSIONS SHALL TAKE PRECEDENCE. VERIFY AND REPORT ANY AND ALL DISCREPANCIES TO THE ARCHITECT PRIOR TO COMMENCING THE WORK. TEL: (408) 772-3502.
2. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF STUD, POST, OR CMU WALL, UNLESS OTHERWISE NOTED.
3. VERIFY IN THE FIELD, ALL DIMENSIONS WITH THE SETBACK LINE.
4. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
5. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
6. CENTER ALL WINDOWS/DOORS OR OPENINGS ON INSIDE WALLS UNLESS OTHERWISE DIMENSIONED.
7. SEE SITE PLAN, SHEET A1.1 FOR FURTHER INFORMATION REGARDING TERRACES, STEPS, PORCHES, PATIOS, DECKS AND OTHER SITE DEVELOPMENT.
8. SEE STRUCTURAL DRAWINGS FOR LOCATION OF 2x6 STUDS, WALLS, SHEAR WALLS, POSTS, FRAMES AND ALL OTHER STRUCTURAL MEMBERS.
9. LOCATE ALL WATER CLOSETS AT 15" MIN. FROM CENTER TO ADJACENT WALL AND 30" MIN. CLEAR. PROVIDE 24" MIN. CLEAR IN FRONT OF FIXTURE. U.O.N.
10. PROVIDE MINIMUM 22"x30" ATTIC ACCESS TO EACH ATTIC AREA. A 30" MIN. CLEAR HEAD ROOM SHALL BE PROVIDED ABOVE THE ACCESS. U.O.N. CRC SEC. 807.1.
11. ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
12. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST w/ THEIR BACKGROUND, SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH, WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 501.2.
13. PROVIDE A MINIMUM INSULATION OF R-15 AT ALL EXTERIOR WALLS, R-19 and/or R-30 INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-38 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF. REFER TO T-24 COMPLIANCE REPORTS.
14. PROVIDE MINIMUM 18"x24" (U.O.N.) UNDER-FLOOR CRAWL SPACE ACCESS PIPES, DUCTS AND OTHER NONSTRUCTURAL CONSTRUCTION SHALL NOT INTERFERE WITH THE ACCESSIBILITY TO OR WITHIN UNDER-FLOOR AREAS. CRC SEC. 408.4.
15. MINIMUM OF 5% GRADE SLOPE AWAY FROM THE FOUNDATION AROUND BUILDING.
16. WALL COVERING SHALL BE TILE, MIN. 72" ABOVE DRAIN AT ALL SHOWERS OR TUB / SHOWER UNITS. MATERIALS OTHER THAN STRUCTURAL ELEMENTS TO BE MOISTURE RESISTANT. (CRC 307.2.)
17. SHOWER AND TUB/SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE.
18. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL, CASINGS & TRIM.



BASEMENT FLOOR PLAN

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT DAVID VARGAS HERNANDEZ C-24801 3/31/25 RENEWAL DATE STATE OF CALIFORNIA

SIGNATURE

HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
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PIMPALKHARE RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN:	DVH
SCALE:	1/4" = 1'-0"
JOB NO.	2022.01
DATE:	06/26/2024

A2.1

WALL / SYMBOL LEGEND

	NEW 2x6 FRAMED WALL CONSTRUCTION. PROVIDE ⅝" GYP. BD. @ INTERIOR FINISH. SEE FINISH SCHEDULE, STRUCTURAL PLANS AND SECTIONS FOR WATERPROOF ⅝" TYPE 'X' GYP. BD. AND SHEAR WALL LOCATIONS.
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	POLE w/ SHELF ABOVE.
6⁰ x 3⁰ CMST.	(E) WINDOW / DOOR - SIZE & FUNCTION
A	(N) WINDOW TYPE - LETTER.
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T	TEMPERED SAFETY GLASS LOCATION.
E	EGRESS WINDOW.
C	SELF-CLOSING DOOR
#	REVISION MARK - NUMBER.
A C A6.1 B D	INTERIOR ELEVATION TAG - LETTER.
# A4.1	EXTERIOR ELEVATION TAG.
# A8.1	DETAIL MARK - NUMBER / SHEET.
A A8.1	BUILDING SECTION - LETTER / SHEET.
100.00 T.O. SUBFLR.	TOP OF SUB FLOOR (ELEVATION).
D.S.	DOWNSPOUT TO SPLASH BLOCK @ GRADE.

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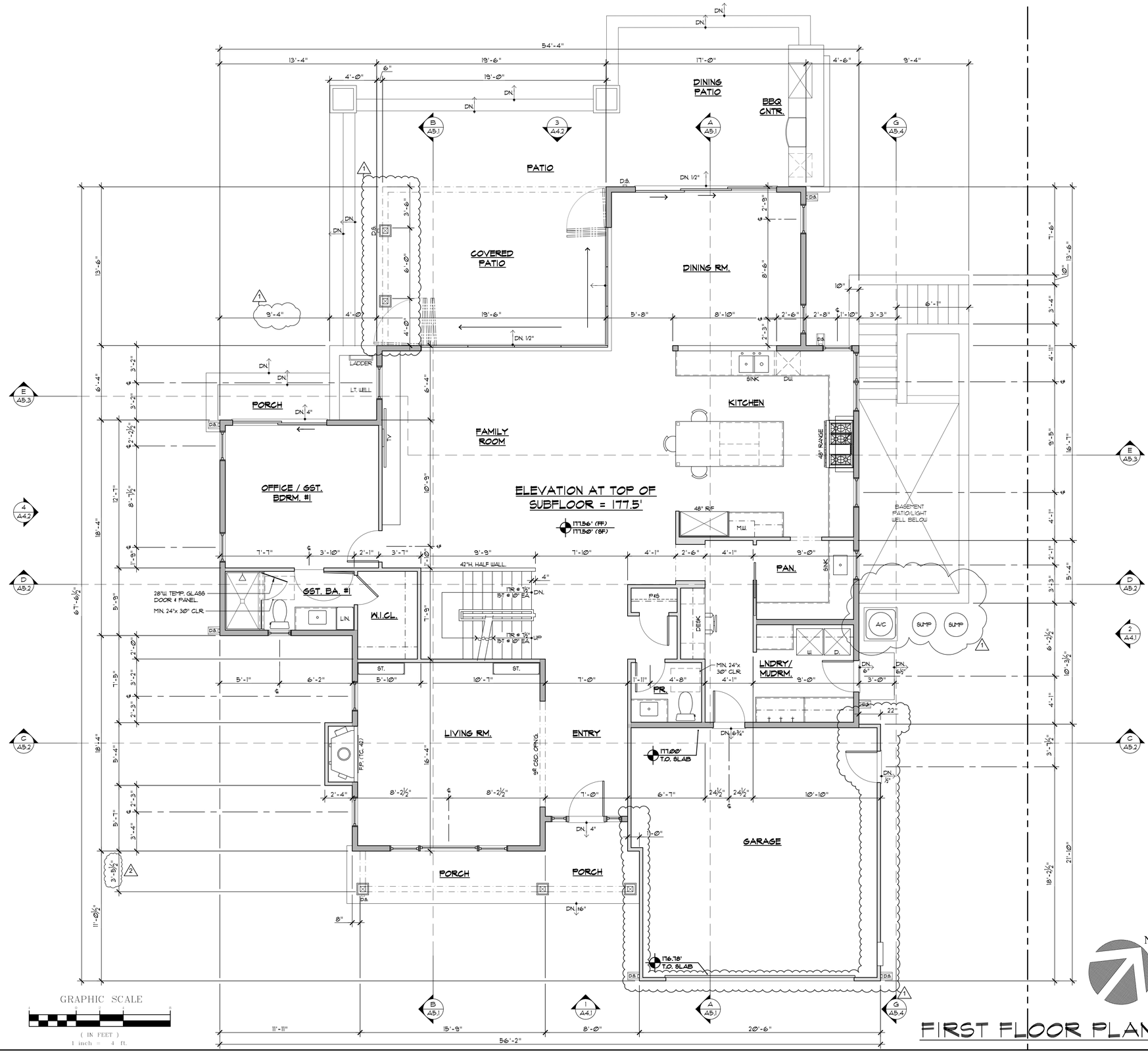

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT — DAVID VARGAS HERNANDEZ — C-24801 — 3/31/25 RENEWAL DATE — STATE OF CALIFORNIA

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E-mail: dvhernandez@pacbell.net

PIMPALKHARE RESIDENCE

962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN: DVH

SCALE: 1/4" = 1'-0"

JOB NO. 2022.01

DATE: 06/26/2024

A2.2

N

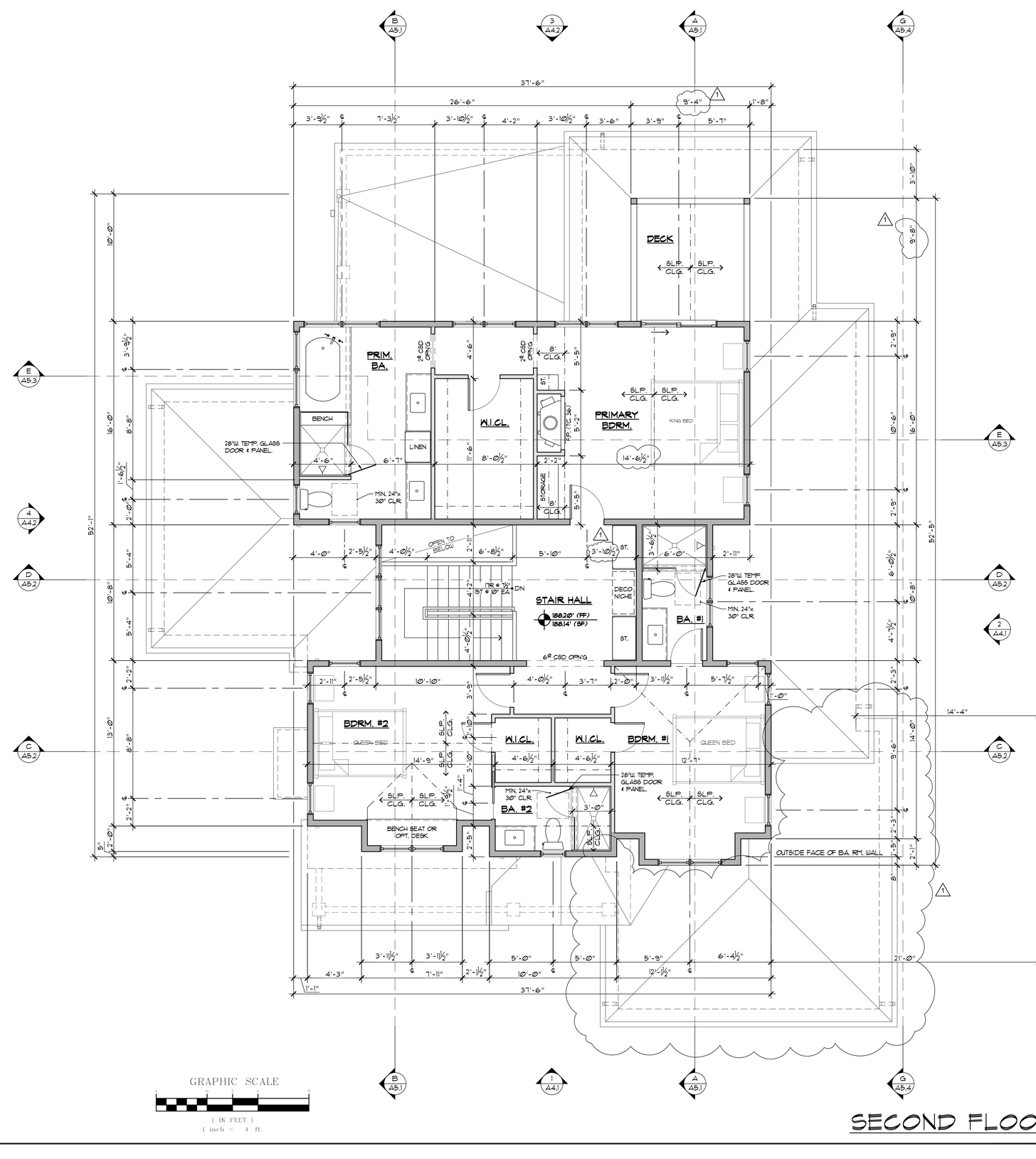
FIRST FLOOR PLAN

WALL / SYMBOL LEGEND

	NEW 2x6 FRAMED WALL CONSTRUCTION. PROVIDE ⅝" GYP. BD. @ INTERIOR FINISH. SEE FINISH SCHEDULE, STRUCTURAL PLANS AND SECTIONS FOR WATERPROOF ⅝" TYPE 'X' GYP. BD. AND SHEAR WALL LOCATIONS.
	NEW 2x4 FRAMED WALL CONSTRUCTION. PROVIDE ⅝" GYP. BD. @ INTERIOR FINISH. SEE FINISH SCHEDULE, STRUCTURAL PLANS AND SECTIONS FOR WATERPROOF ⅝" TYPE 'X' GYP. BD. AND SHEAR WALL LOCATIONS.
	NEW OPENING IN EXISTING WALL.
	2x WALL w/ SOUND ISOLATION BATTS.
	LINE OF WALL, BEAM, SOFFIT OR CABINET ABOVE.
	POLE w/ SHELF ABOVE.
6⁰ x 3⁰ CMST.	(E) WINDOW / DOOR - SIZE & FUNCTION
A	(N) WINDOW TYPE - LETTER.
#	(N) DOOR TYPE - NUMBER.
T	TEMPERED SAFETY GLASS LOCATION.
E	EGRESS WINDOW.
C	SELF-CLOSING DOOR
#	REVISION MARK - NUMBER.
A / C A5.1 B / D	INTERIOR ELEVATION TAG - LETTER.
# / A4.1	EXTERIOR ELEVATION TAG.
# / A8.1	DETAIL MARK - NUMBER / SHEET.
A / A8.1	BUILDING SECTION - LETTER / SHEET.
100.00 T.O. SUBFLR.	TOP OF SUB FLOOR (ELEVATION).
DS.	DOWNSPOUT TO SPLASH BLOCK @ GRADE.

FLOOR PLAN NOTES

1. DO NOT SCALE THE DRAWINGS!! DIMENSIONS SHALL TAKE PRECEDENCE. VERIFY AND REPORT ANY AND ALL DISCREPANCIES TO THE ARCHITECT PRIOR TO COMMENCING THE WORK. TEL: (408) 772-3502.
2. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF STUD, POST, OR CMU WALL, UNLESS OTHERWISE NOTED.
3. VERIFY IN THE FIELD, ALL DIMENSIONS WITH THE SETBACK LINE.
4. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
5. ALL INTERIOR ELEVATION DIMENSIONS ARE TO FINISH SURFACE, SHEET ROCK OR CABINET, UNLESS OTHERWISE NOTED.
6. CENTER ALL WINDOWS/DOORS OR OPENINGS ON INSIDE WALLS UNLESS OTHERWISE DIMENSIONED.
7. SEE SITE PLAN, SHEET A1.1 FOR FURTHER INFORMATION REGARDING TERRACES, STEPS, PORCHES, PATIOS, DECKS AND OTHER SITE DEVELOPMENT.
8. SEE STRUCTURAL DRAWINGS FOR LOCATION OF 2x6 STUDS, WALLS, SHEAR WALLS, POSTS, FRAMES AND ALL OTHER STRUCTURAL MEMBERS.
9. LOCATE ALL WATER CLOSETS AT 15" MIN. FROM CENTER TO ADJACENT WALL AND 30" MIN. CLEAR. PROVIDE 24" MIN. CLEAR IN FRONT OF FIXTURE. U.O.N.
10. PROVIDE MINIMUM 22"x30" ATTIC ACCESS TO EACH ATTIC AREA. A 30" MIN. CLEAR HEAD ROOM SHALL BE PROVIDED ABOVE THE ACCESS. U.O.N. CRC SEC. 807.1.
11. ONE WINDOW/DOOR FROM EACH SLEEPING ROOM MUST HAVE A NET CLEAR OPENING OF 5.7 SQFT (5.0 SQFT. WHEN WINDOW IS AT FLOOR / GRADE LEVEL) WITH A NET CLEAR HEIGHT OF 24", A NET CLEAR WIDTH OF 20" AND THE SILL MUST BE WITHIN 44" OFF THE FLOOR.
12. AN APPROVED NUMBER OR ADDRESS SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST w/ THEIR BACKGROUND, SHALL BE ARABIC NUMERALS OR ALPHABETICAL LETTERS. NUMERALS SHALL BE A MIN. OF 4" HIGH, WITH A MIN. STROKE WIDTH OF ½ INCH. REFER TO CBC 5012.
13. PROVIDE A MINIMUM INSULATION OF R-15 AT ALL EXTERIOR WALLS, R-19 and/or R-30 INSULATION AT CEILING JOISTS LOCATED UNDER THE SLOPED ROOF ATTIC AND R-38 INSULATION AT CEILING JOISTS LOCATED AT THE FLAT ROOF, REFER TO T-24 COMPLIANCE REPORTS.
14. PROVIDE MINIMUM 18"x24" (U.O.N.) UNDER-FLOOR CRAWL SPACE ACCESS PIPES, DUCTS AND OTHER NONSTRUCTURAL CONSTRUCTION SHALL NOT INTERFERE WITH THE ACCESSIBILITY TO OR WITHIN UNDER-FLOOR AREAS. CRC SEC. 408.4.
15. MINIMUM OF 5% GRADE SLOPE AWAY FROM THE FOUNDATION AROUND BUILDING.
16. WALL COVERING SHALL BE TILE, MIN. 72" ABOVE DRAIN AT ALL SHOWERS OR TUB / SHOWER UNITS. MATERIALS OTHER THAN STRUCTURAL ELEMENTS TO BE MOISTURE RESISTANT. (CRC 3071.2).
17. SHOWER AND TUB/SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE.
18. SEE INTERIOR ELEVATIONS FOR EXTENT OF CABINETRY, PANEL, CASINGS & TRIM.



SECOND FLOOR PLAN

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT — DAVID VARGAS HERNANDEZ — C-24801 — 3/31/25 RENEWAL DATE — STATE OF CALIFORNIA

SIGNATURE

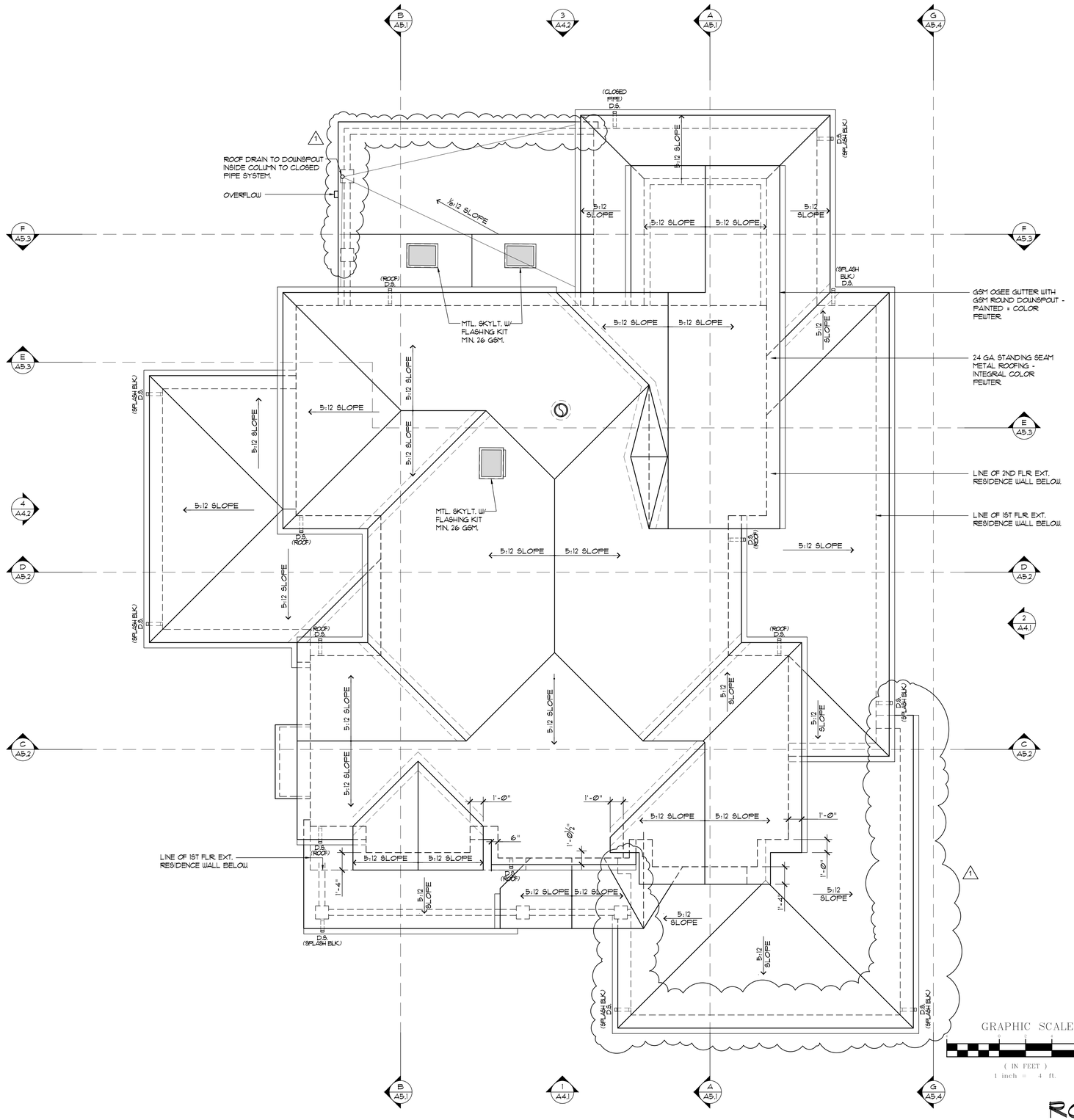
HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
P.O. BOX 8033, San Jose, California 95155
C: (408) 772-3502 VM: (408) 298-0998
E-mail: dvhernandez@pacbell.net

PIMPALKHARE RESIDENCE

962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

DRAWN:	DVH
SCALE:	1/4" = 1'-0"
JOB NO.	2022.01
DATE:	06/26/2024

A2.3



ROOF PLAN

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

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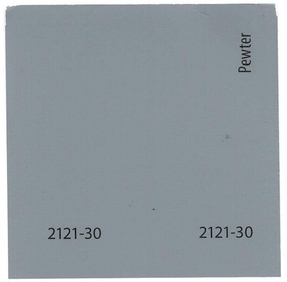
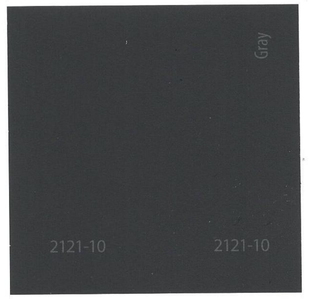
A3.1

ROOFING :
STANDING SEAM METAL ROOFING
W/ INTEGRAL COLOR - PEWTER.

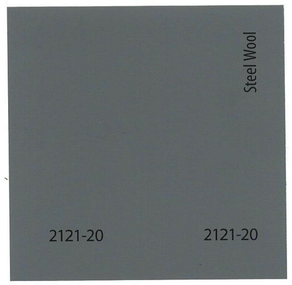
STANDING SEAM ROOF COLOR:
#2121-30 PEWTER
BY BENJAMIN MOORE



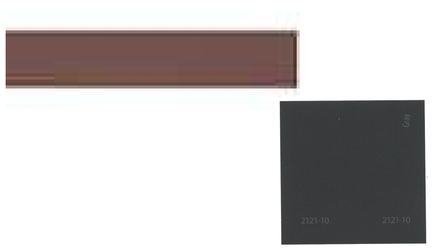
TRIM AND GARAGE DOOR COLOR:
PREPRIMED AND PAINTED
W/ 2121-10 GRAY
BY BENJAMIN MOORE



BODY COLOR: 1ST AND 2ND FLOORS:
PREPRIMED AND PAINTED
W/ #2121-20 STEEL WOOL
BY BENJAMIN MOORE



WOOD TRIM BOARDS AND PROFILES
BY JAMES HARDIE - SMOOTH.
PREPRIMED AND PAINTED
W/ #2121-20 GRAY
BY BENJAMIN MOORE



1ST FLOOR SIDING:
CEMENT PLASTER STUCOO
FINISH: SMOOTH
COLOR: #2121-20 STEEL WOOL

2ND FLOOR SIDING:
HORIZ. BEVELED CEDAR SIDING W/ 7" EXPOSURE
PREPRIMED AND PAINTED W/ #2121-20 STEEL WOOL
BY BENJAMIN MOORE

WINDOWS AND DOORS BY KOLBE-KOLBE:
EXTRUDED ALUMINUM WOOD CLAD W/
INTEGRAL EXTRUDED ALUMINUM TRIM
AND COLOR BY KOLBE-KOBLE.

WAINSCOT:
CULTURED STONE BY:
EL DORADO. STYLE: YORK

MATERIALS BOARD

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
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HERITAGE ARCHITECTURE

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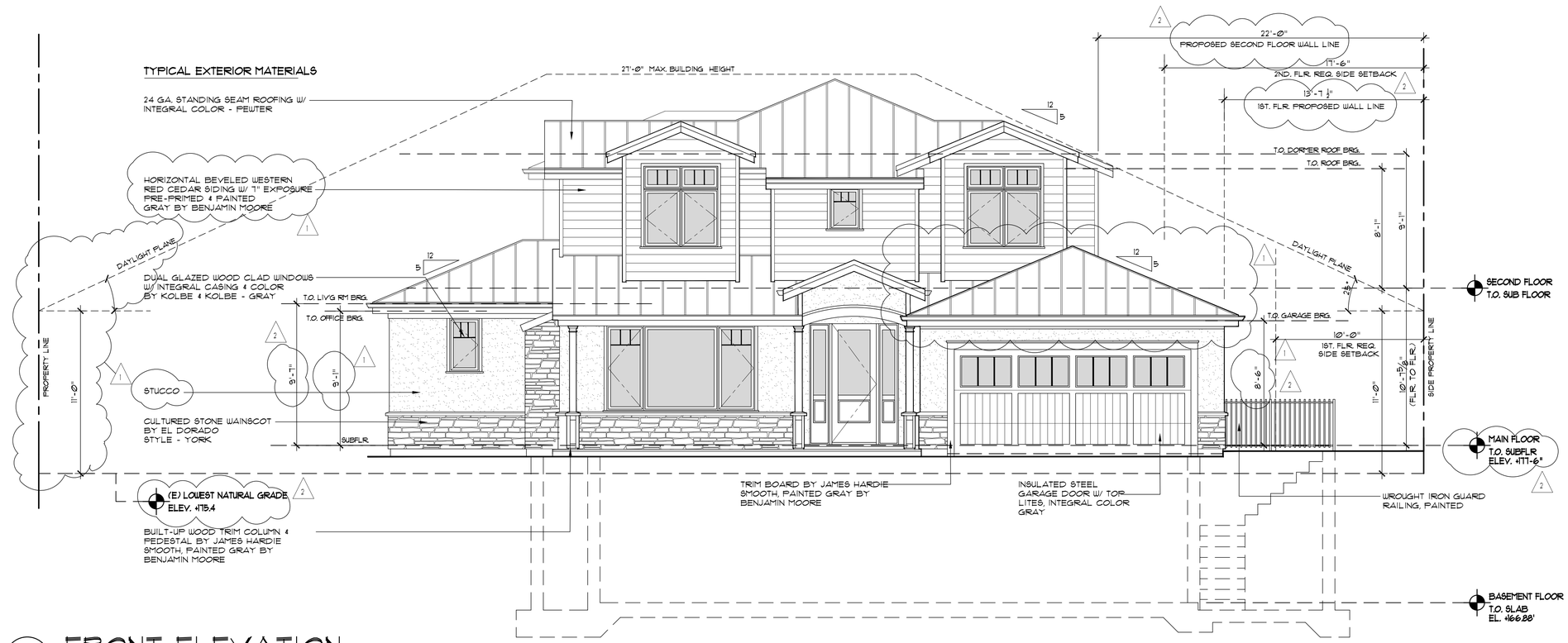
A4.0



1 FRONT ELEVATION

2 RIGHT SIDE ELEVATION / SECTION

GRAPHIC SCALE
(IN FEET)
1 inch = 4 ft.

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

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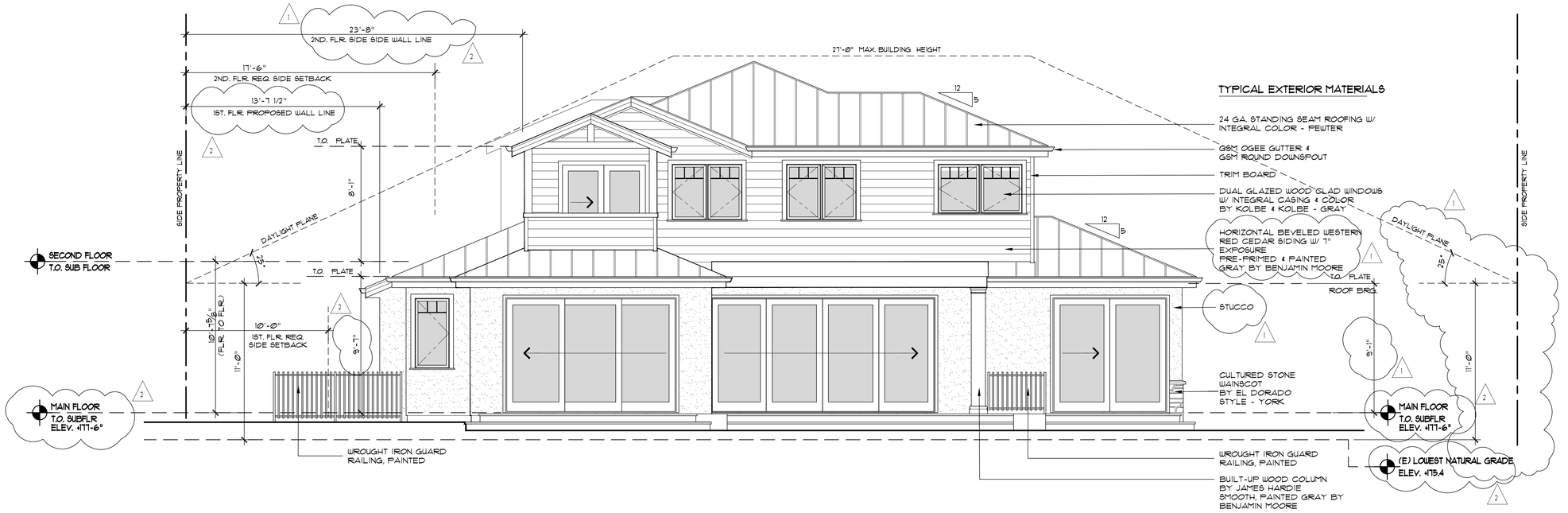
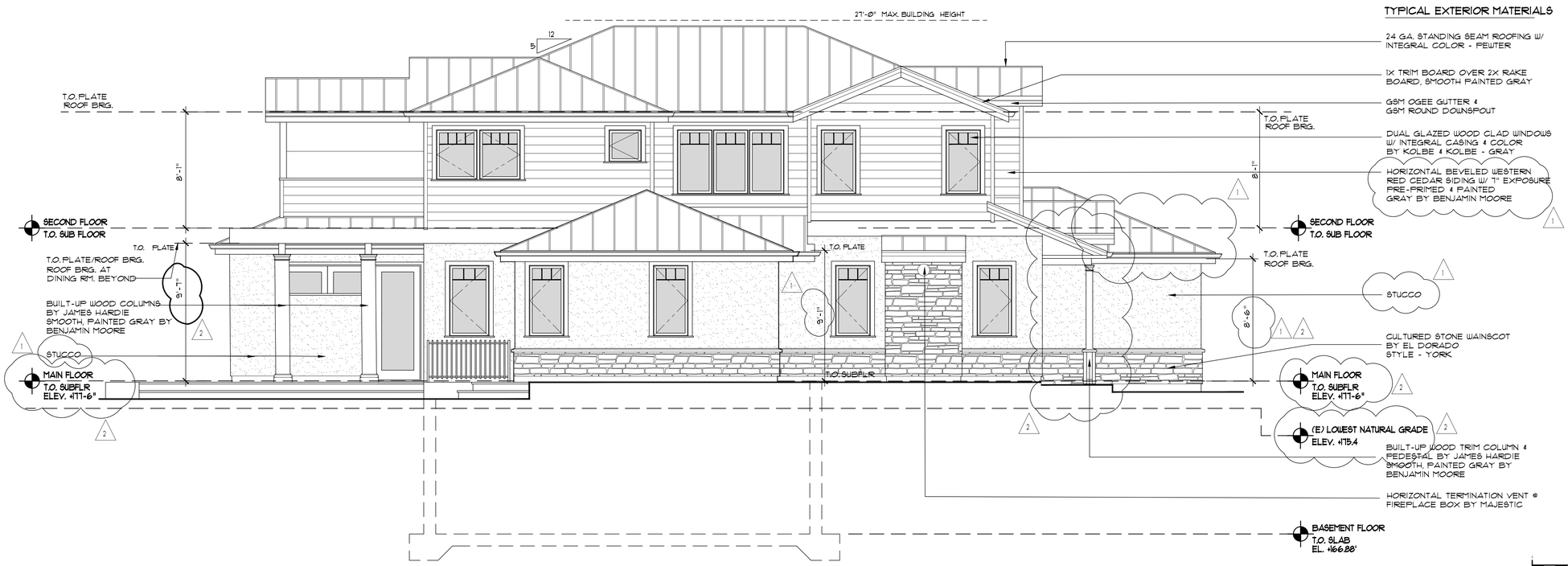
A4.1



3 REAR ELEVATION



4 LEFT SIDE ELEVATION

GRAPHIC SCALE
(IN FEET)
1 inch = 4 ft.

REVISIONS	BY
DESIGN REVIEW SBMTL Ø1/12/2024	
1 PLNG. PLAN CHK. Ø4/11/24	DVH
2 PLNG. CMNTS. 2 Ø6/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT DAVID VARGAS HERNANDEZ C-24801 3/31/25 RENEWAL DATE STATE OF CALIFORNIA

SIGNATURE

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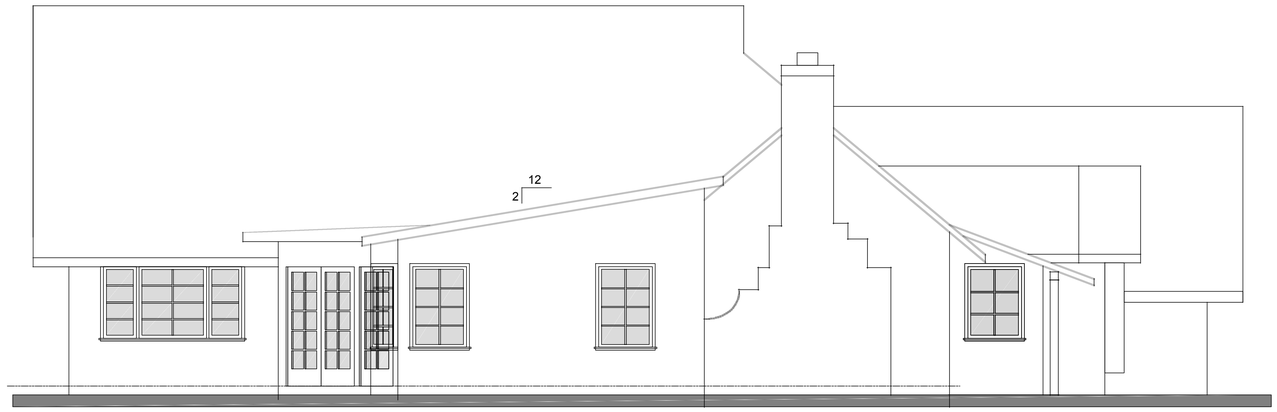
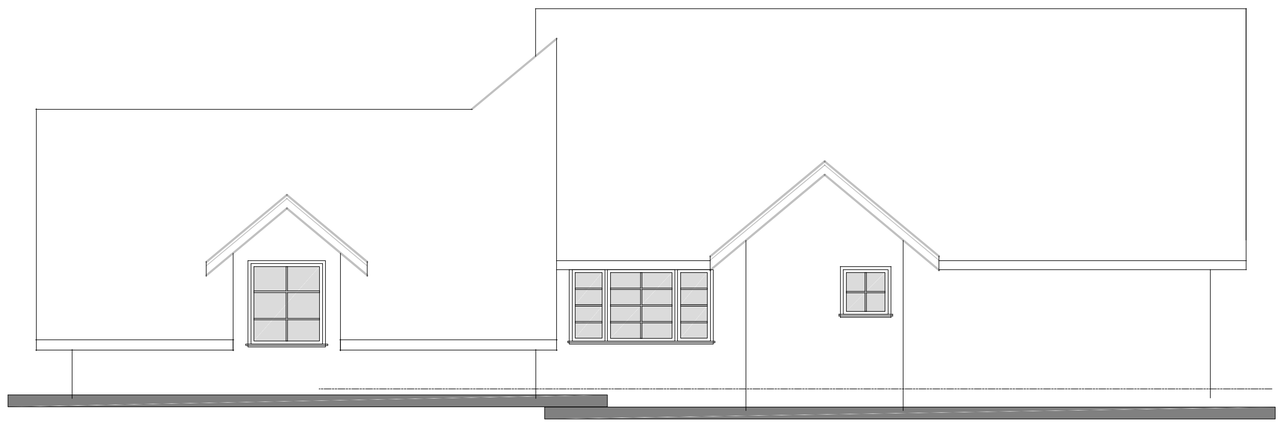
A4.2



1 EXISTING LEFT-SIDE ELEVATION

2 EXISTING FRONT ELEVATION



3 EXISTING RIGHT-SIDE ELEVATION

GRAPHIC SCALE
(IN FEET)
1 inch = 4 ft.

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT
DAVID VARGAS HERNANDEZ
C-24801
3 / 31 / 25
RENEWAL DATE
STATE OF CALIFORNIA
SIGNATURE

HERITAGE ARCHITECTURE
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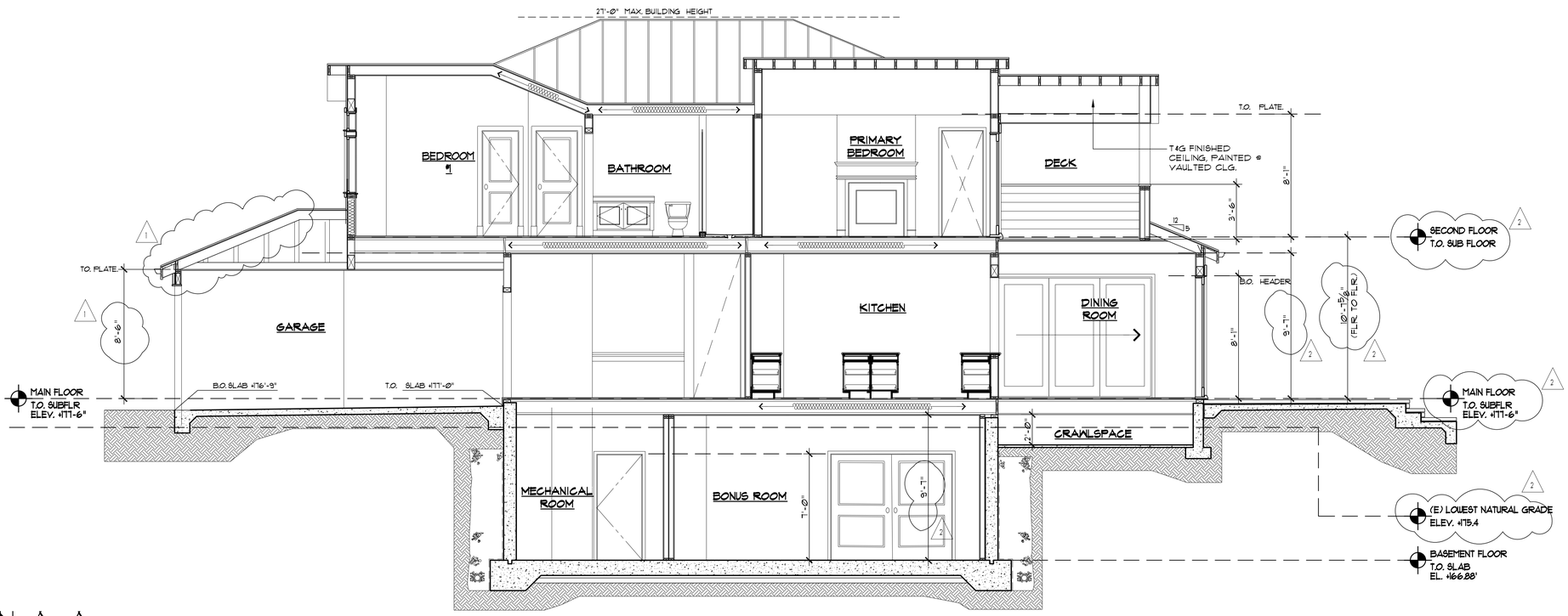
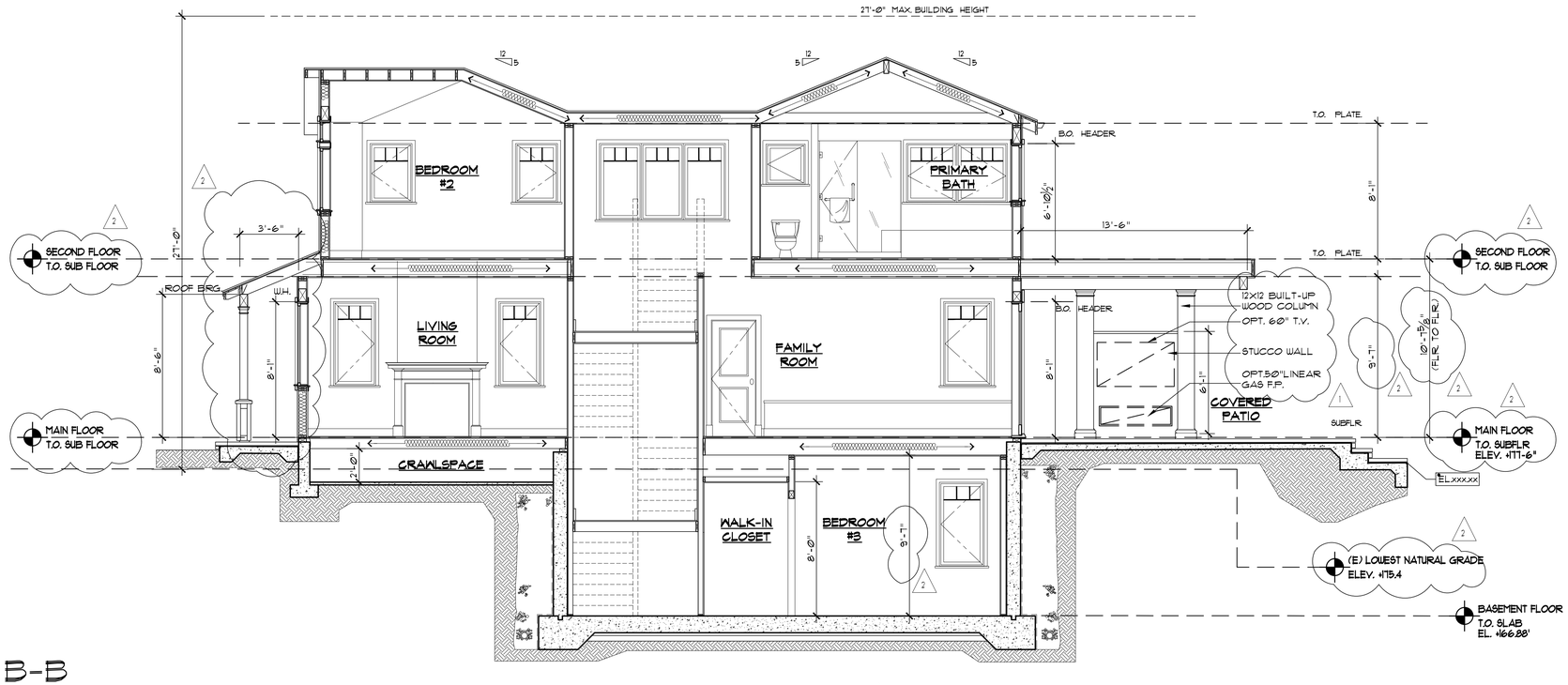
A4.3



SECTION A-A



SECTION B-B

GRAPHIC SCALE

(IN FEET)
1 inch = 4 ft.

REVISIONS	BY
DESIGN REVIEW SBMTL 01/12/2024	
1 PLNG. PLAN CHK. 04/11/24	DVH
2 PLNG. CMNTS. 2 06/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT DAVID VARGAS HERNANDEZ STATE OF CALIFORNIA
C-24801
3/31/25
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JOB NO.	2022.01
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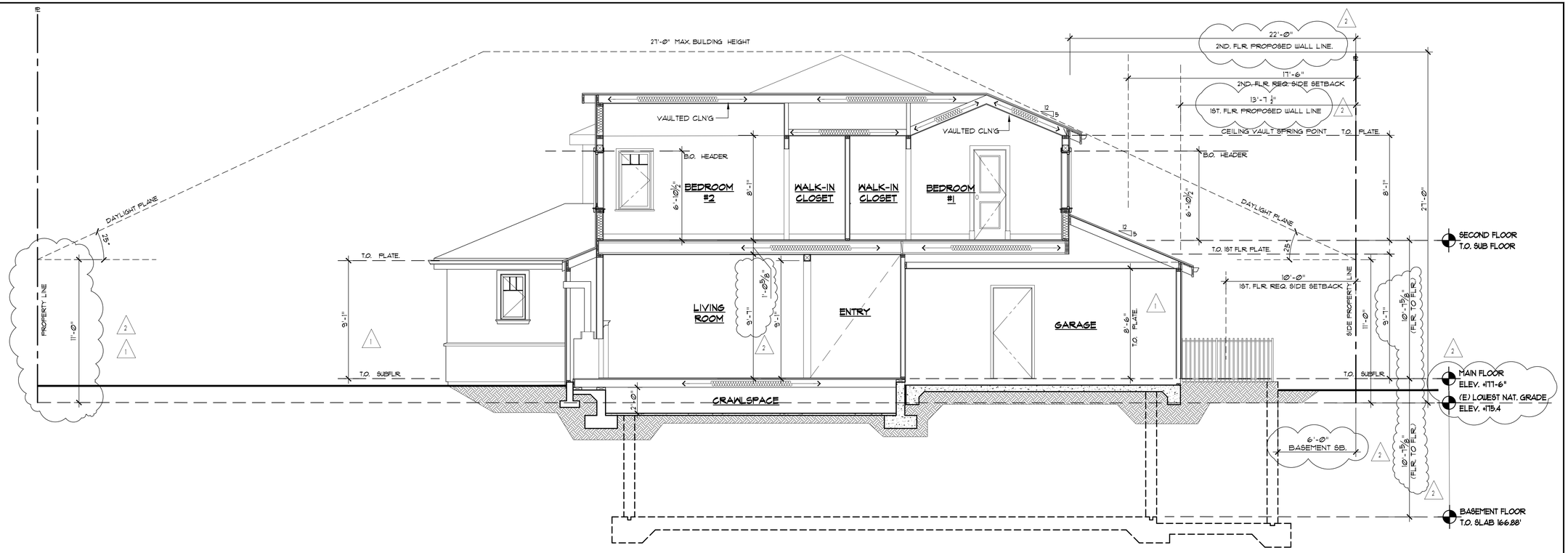
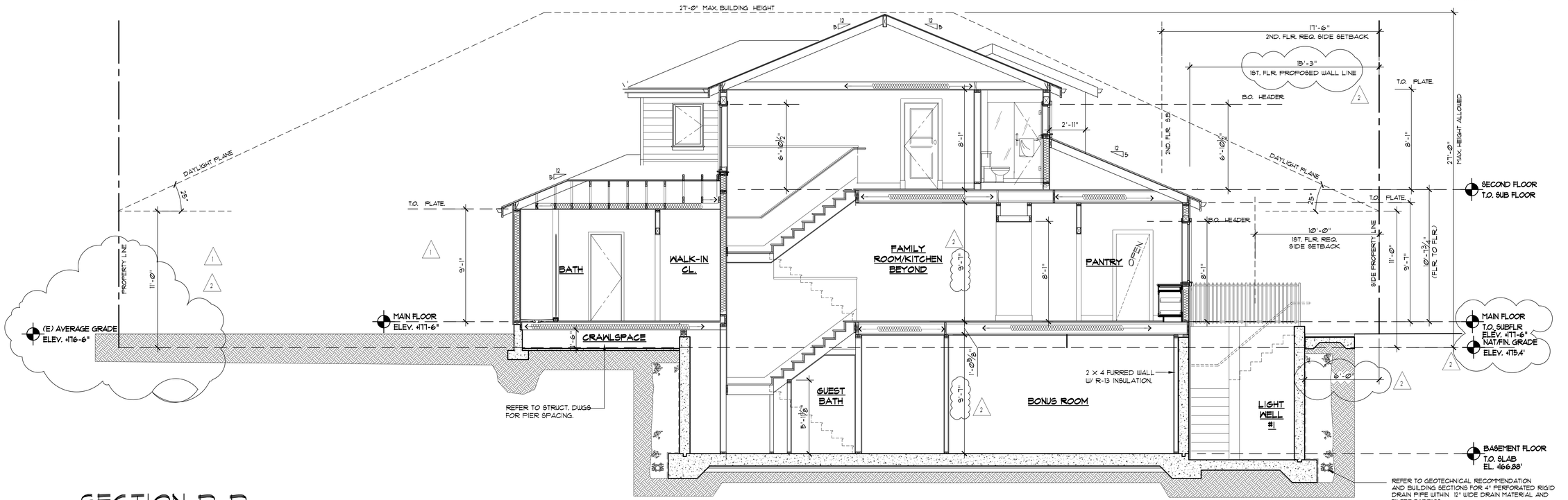
A5.1



SECTION C-C

GRAPHIC SCALE

(IN FEET)
1 inch = 4 ft.



SECTION D-D

REVISIONS	BY
DESIGN REVIEW SBMTL Ø1/12/2024	
1 PLNG. PLAN CHK. Ø4/11/24	DVH
2 PLNG. CMNTS. 2 Ø6/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT — DAVID VARGAS HERNANDEZ — C-24801 — 3/31/25 RENEWAL DATE — STATE OF CALIFORNIA — SIGNATURE

HERITAGE ARCHITECTURE
DAVID V. HERNANDEZ, ARCHITECT
P. O. BOX 8033, San Jose, California 95155
C: (408) 772-3502 VM: (408) 298-0998
E-mail: dvhernandez@pacbell.net

PIMPALKHARE RESIDENCE

962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

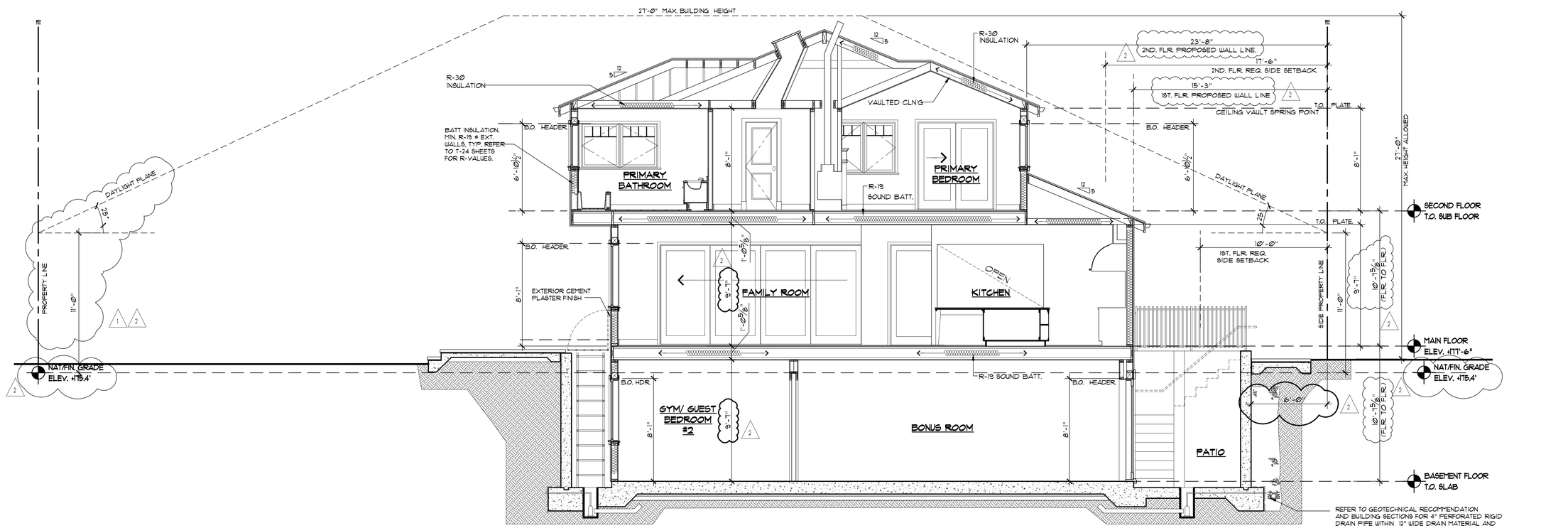
DRAWN: DVH

SCALE: 1/4" = 1'-Ø"

JOB NO. 2022.Ø1

DATE: Ø6/26/2024

A5.2



SECTION E-E

REVISIONS	BY
DESIGN REVIEW SBMTL Ø1/12/2024	
1 PLNG. PLAN CHK. Ø4/11/24	DVH
2 PLNG. CMNTS. 2 Ø6/26/24	DVH

HERITAGE ARCHITECTURE

LICENSED ARCHITECT
DAVID VARGAS HERNANDEZ
C-24801
3 / 31 / 25
RENEWAL DATE
STATE OF CALIFORNIA

SIGNATURE

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PIMPALKHARE RESIDENCE

962 RIVERSIDE DRIVE, LOS ALTOS, CA 94024

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SCALE: 1/4" = 1'-Ø"

JOB NO. 2022Ø1

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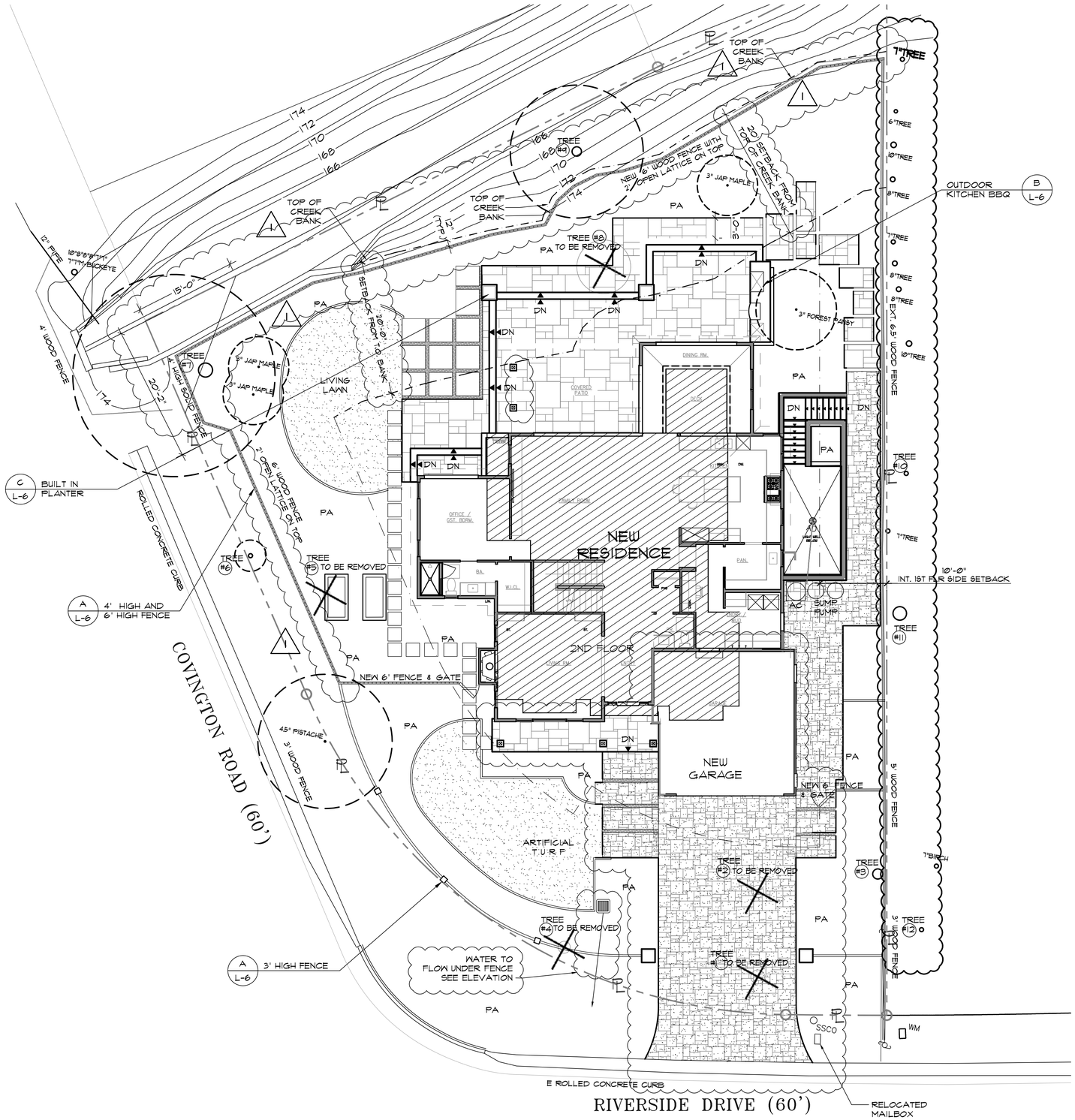
A5.3



MATERIALS LEGEND

STONE PATIO AND PADS ON CONCRETE BASE.
STONE TO BE SELECTED BY OWNER
STONE TO BE MORTARED ON 4" MIN THICK CONC. BASE
SUB BASE TO BE 16" MIN CLASS 3 BASEROCK.

STEPS DOWN TO LIGHT WELL
MATERIALS CHOSEN BY OWNER

INTERLOCKING CONCRETE PAVERS DRIVEWAY AND WALKS
AS SHOWN ON PLAN, STYLE AND COLOR CHOSEN BY OWNER.
INSTALL PER MANUFACTURERS SPECIFICATIONS
JOINTS IN BETWEEN PAVERS ARE TO BE 1.5"/2.5" COBBLE STONES

MATCHING STONE PADS ON CONCRETE BASE
1"-1.5" COBBLES IN JOINTS AS SHOWN ON PLAN

STEEL BORDER EDGING FOR LAWN AREAS ETC.

FRONT YARD 3' HIGH PROPERTY LINE FENCING.
BUILD AS PER PLAN. OWNER TO SELECT STYLING.

BUILT UP STONE PLANTERS AS SHOWN ON PLAN
BUILD WITH 4" CMU BLOCKS, #4 BARS #16" O.C. BOTH WAYS
BOTTOM OPEN TO NATIVE SOIL
VENEER SIDES AND CAP WITH MATCHING STONE

18" SQUARE STONE STEPPING STONES
SET AS SHOWN ON PLAN

FENCE AND COLUMNS
SEE DETAILS

1 NEW REAR YARD FENCE
FENCE TO BE 6' HIGH WITH 2' OPEN LATTICE ON TOP.
STYLE TO BE CHOSEN BY OWNER

BAR-B-QUE AND ARBOR
SEE DETAILS

General Project Notes

1. I Agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package 12/12/2023
2. Recirculating water systems shall be used for water features.
3. I have compiled with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans
4. A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation Controller for subsequent managment purposes.
5. A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plan or licensed landscape contractor for the project.
6. An irrigation audit report shall be completed at the time of final inspection. Submit this report to San Mateo County Planning for review and acceptance.
7. At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule of landscape and irrigation maintenance.

Todd Kalbfeld
Professional Landscape Designer
12/12/2023

LEGEND

(E)	EXISTING ITEM	SL	SERVICE LINE
PL	PROPERTY LINE	O	ELECTRIC OUTLET
W	WATER METER	G	GAS METER
P	PG&E BOX	S	SEWER ACCESS
A/C	AIR CONDITION	MB	MAILBOX
LT	LIGHT	E	ELECTRIC METER
HB	HOSE BIBB	PA	PLANTING AREA
WM	WATER MAIN	IC	IRRIGATION CONTROLLER

NORTH

Todd Kalbfeld
Landscape Design
landscapeDesign & Construction Management
2345 TULIP ROAD, SAN JOSE, CA 95126
(408) 605-9973

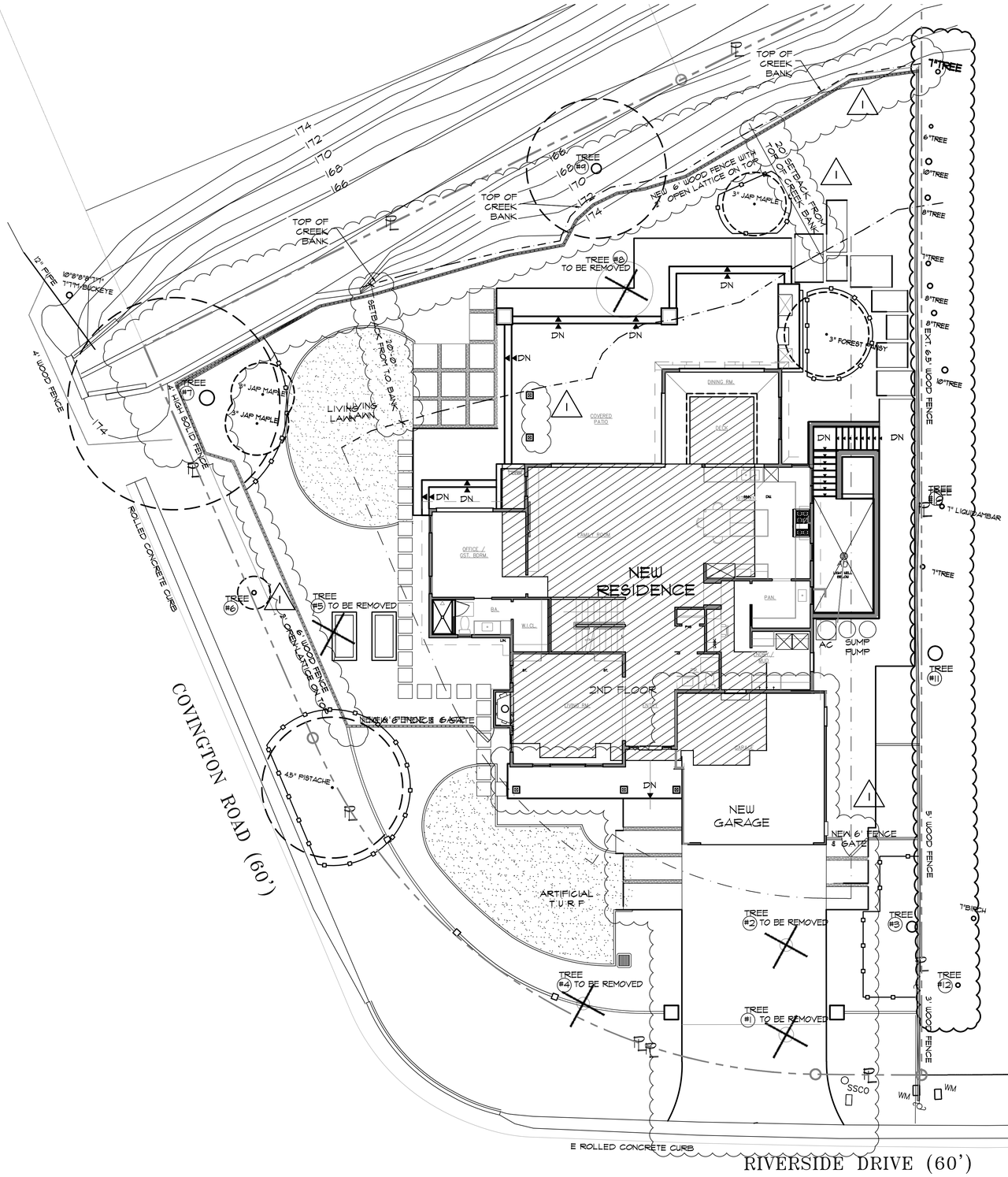
REVISIONS	BY
1 6/25/2024	TK

TODD KALBFELD
PROFESSIONAL
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

MATERIALS PLAN

DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-1
OF	SHEETS

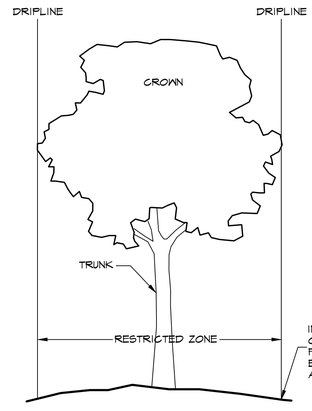


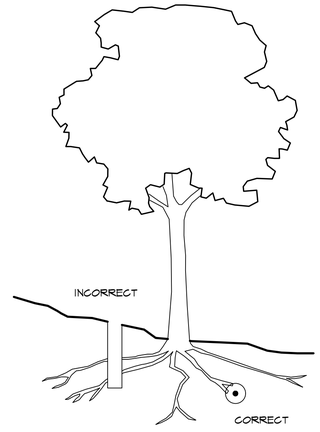
TREE LEGEND

Tree #	Common Name	Botanical Name	DBH (in.)	Circumference	Protected Status	Disposition
1	Modesto Ash	*Fraxinus velutina 'Modesto'*	28.5	89.5	Protected	Remove
2	Modesto Ash	*Fraxinus velutina 'Modesto'*	22.7	71.3	Protected	Remove
3	Liquidambar	*Liquidambar styraciflua*	18.7	58.7	Protected	Retain/Protect
4	Modesto Ash	*Fraxinus velutina 'Modesto'*	28.9	90.8	Protected	Remove
5	Camphor	*Cinnamomum camphora*	14.2	44.6	Not Protected	Remove
6	Privet	*Ligustrum lucidum*	6, 6, 4	18.8, 18.8, 12.6	Not Protected	Remove
7	Chinese Elm	Ulmus parvifolia	26	81.7	Protected	Retain/Protect
8	Crab Apple	*Malus spp.*	13.8	43.4	Not Protected	Remove
9	Coast Live Oak	Quercus agrifolia	~20	~62.8	Protected	Not at Risk
10	Liquidambar	*Liquidambar styraciflua*	~8, 8	~25.1, 25.1	Not Protected	Retain/Monitor
11	Coast Live Oak	Quercus agrifolia	~24	~24	Not Protected	Retain/Monitor
12	White Birch	*Betula pendula*	~8, 8, 7	~25.1, 25.1, 22	Not Protected	Retain/Monitor

See Tree Protection Type for each Tree on Site Plan
6-foot-tall metal chain link type supported by
2-inch diameter metal poles pounded
into the ground to a depth of no less than 2 feet.
The support poles should be spaced
no more than 10 feet apart on center.
Refer to Arborist report for further tree protection measures.

NOTE: NON ORDINANCE TREES ON THIS PLAN THAT ARE NOT SHOWN ON ARBORIST REPORT ARE TO BE PROTECTED PER OWNERS REQUEST.





- CONSULT A PROFESSIONAL ARBORIST WITH ANY QUESTIONS.
- NO CONSTRUCTION VEHICLES DEBRIS OR TOOLS TO BE PLACED IN RESTRICTED ZONE.
- PROTECT THE CROWN, TRUNK, AND ROOTS FROM DAMAGE.
- AVOID DISTURBING THE SOIL GRADE.
- PRUNE ANY LARGE ROOTS REMOVED, DO NOT TEAR THEM OUT.
- TUNNEL UNDER ROOTS INSTEAD OF TRENCHING..
- ALLOW FOR WATERING OF TREES AND SHRUBS DURING CONSTRUCTION.
- DO NOT DISPOSE OF CHEMICALS IN THE CONSTRUCTION AREA.

TREE PROTECTION NOTES

1. PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY IN THE AREA, INCLUDING GRADING, TEMPORARY PROTECTIVE FENCING SHALL BE INSTALLED AT EACH SITE TREE. FENCING IS IDEALLY LOCATED AT OR BEYOND THE CANOPY DRIPLINE AND AS MUCH DRIPLINE AS POSSIBLE WILL BE PROTECTED BY FENCING.

2. FENCING SHALL BE MINIMUM OF 5 FEET TALL AT ALL LOCATIONS, AND SHALL FORM A CONTINUOUS BARRIER WITHOUT ENTRY POINTS AROUND ALL TREES OR GROUPS OF TREES. BARRIER-TYPE FENCING SUCH AS CHAIN LINK IS PREFERRED; THE USE OF SIMPLE POST AND CABLE FENCING IS DISCOURAGED. ANY ENCROACHMENT INTO THE DRIPLINE FOR FENCING OR CONSTRUCTION PURPOSED SHOULD BE DISCUSSED AND AGREED UPON IN ADVANCE WITH THE PROJECT ARBORIST.

3. THIS FENCING SHALL SERVE AS A BARRIER TO PREVENT DRIPLINE ENCROACHMENT OF ANY TYPE OF CONSTRUCTION ACTIVITIES AND EQUIPMENT. ACCIDENTAL DAMAGE TO BARD, ROOT CROWN, OR LIMBS MY INCREASE POTENTIAL FOR FUTURE DECLINE.

4. CONTRACTORS AND SUBCONTRACTORS SHALL DIRECT ALL EQUIPMENT AND PERSONNEL TO REMAIN OUTSIDE THE FENCED AREA AT ALL TIMES UNTIL PROJECT IS COMPLETE, AND SHALL INSTRUCT EMPLOYEES AS TO THE PURPOSE AND IMPORTANCE OF FENCING.

5. A WARNING SIGN SHALL BE POSTED AT EACH TREE INDICATING THE PURPOSE OF THE FENCING.

6. THE PROJECT ARBORIST SHALL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF THE FENCING PRIOR TO ANY GRADING OPERATIONS.

7. FENCING MUST REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETED. THIS SHALL INCLUDE GRADING AND COMPACTION ACTIVITIES, INSTALLATION OF UNDERGROUND UTILITIES, ALL CONSTRUCTION ACTIVITIES AND ANY OTHER CONSTRUCTION OR ACTIVITY THAT IS SCHEDULED PRIOR TO LANDSCAPE INSTALLATION.

8. ROOTS OF SINGLE STANDING TREES OFTEN EXTEND UP TO THREE TIMES THE DISTANCE OF THE ACTUAL DRIPLINE AND FUNCTION PRIMARILY IN THE UPTAKE OF NUTRIENTS AND WATER. THE DRIPLINE IS ARBITRARILY ESTABLISHED AS THE MINIMUM ROOT AREA GENERALLY REQUIRED TO PRESERVE TREE HEALTH. AS MUCH AREA AS POSSIBLE AROUND THE CIRCUMFERENCE OF THE TREE SHOULD HAVE MINIMUM INTRUSION TO FURTHER ENSURE TREE SURVIVAL AND HEALTH.

NORTH

Todd Kalbfeld Landscape Design
landscapeDesign & Construction Management
2345 TULIP ROAD SAN JOSE, CA 95126
(408) 605-9475

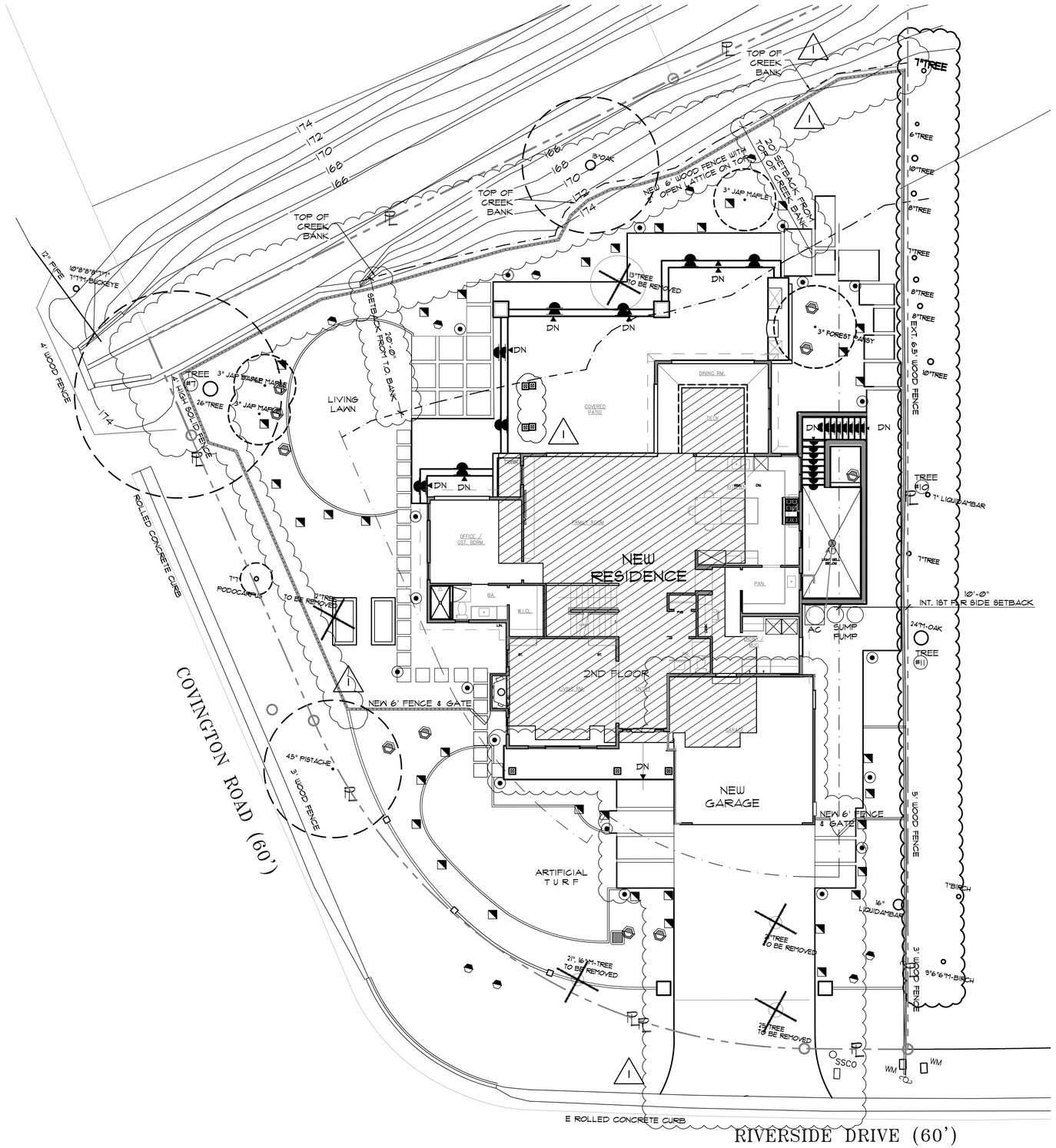
REVISIONS	BY
6/24/2024	TK

TODD KALBFELD
PROFESSIONAL
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

TREE PROTECTION PLAN

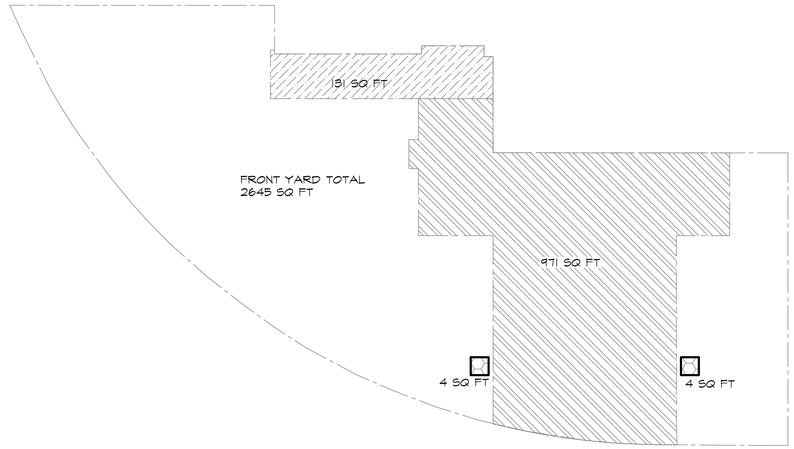
DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-1.1
OF	SHEETS



Front Yard Area calculation diagram

962 RIVERSIDE DRIVE
LOS ALTOS, CALIFORNIA

	A. N PAVER DRIVEWAY AND WALKS	971 SF
	B. N FRONT PORCH	131 SF
	C. FENCE COLUMNS	8 SF
	AREA TOTAL	1,110 SF
	TOTAL FRONT YARD SQUARE FOOTAGE	2,645 SF
	TOTAL ALLOWED: 50%	1,322.5 SF
	TOTAL HARDSCAPE PROPOSED: 41.9%	1,110 SF



LIGHTING LEGEND

SYM.	QTY.	MANUFAC.	MODEL #	DESCRIPTION	VOLT.	WATTS
	9	Vista	GR-4006-R 4.5-W-36	SPOTLIGHT	12V	4.5W
	10	Vista	GR-5004-R 2.5-W-60	SPOTLIGHT	12V	2.5W
	34	Vista	GR-5105-R 2-W-FR	SPOTLIGHT	12V	2W
	42	Vista	SL-4242-WI 2.5-W-T3	STEPLIGHT	12V	2.5W
	19	Vista	PR-6519-R 2.5-W-T3	PATHLIGHT	12V	2.5W
	2	Vista	TCS Series	TRANS.	120V	300

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Todd Kalbfeld
Professional Landscape Designer
12/12/2023

LEGEND

(E)	EXISTING ITEM	SL	SERVICE LINE
PL	PROPERTY LINE	O	ELECTRIC OUTLET
W	WATER METER	G	GAS METER
P	PG&E BOX	S	SEWER ACCESS
A/C	AIR CONDITION	MB	MAILBOX
LT	LIGHT	E	ELECTRIC METER
HB	HOSE BIBB	PA	PLANTING AREA
WM	WATER MAIN	IC	IRRIGATION CONTROLLER

NORTH

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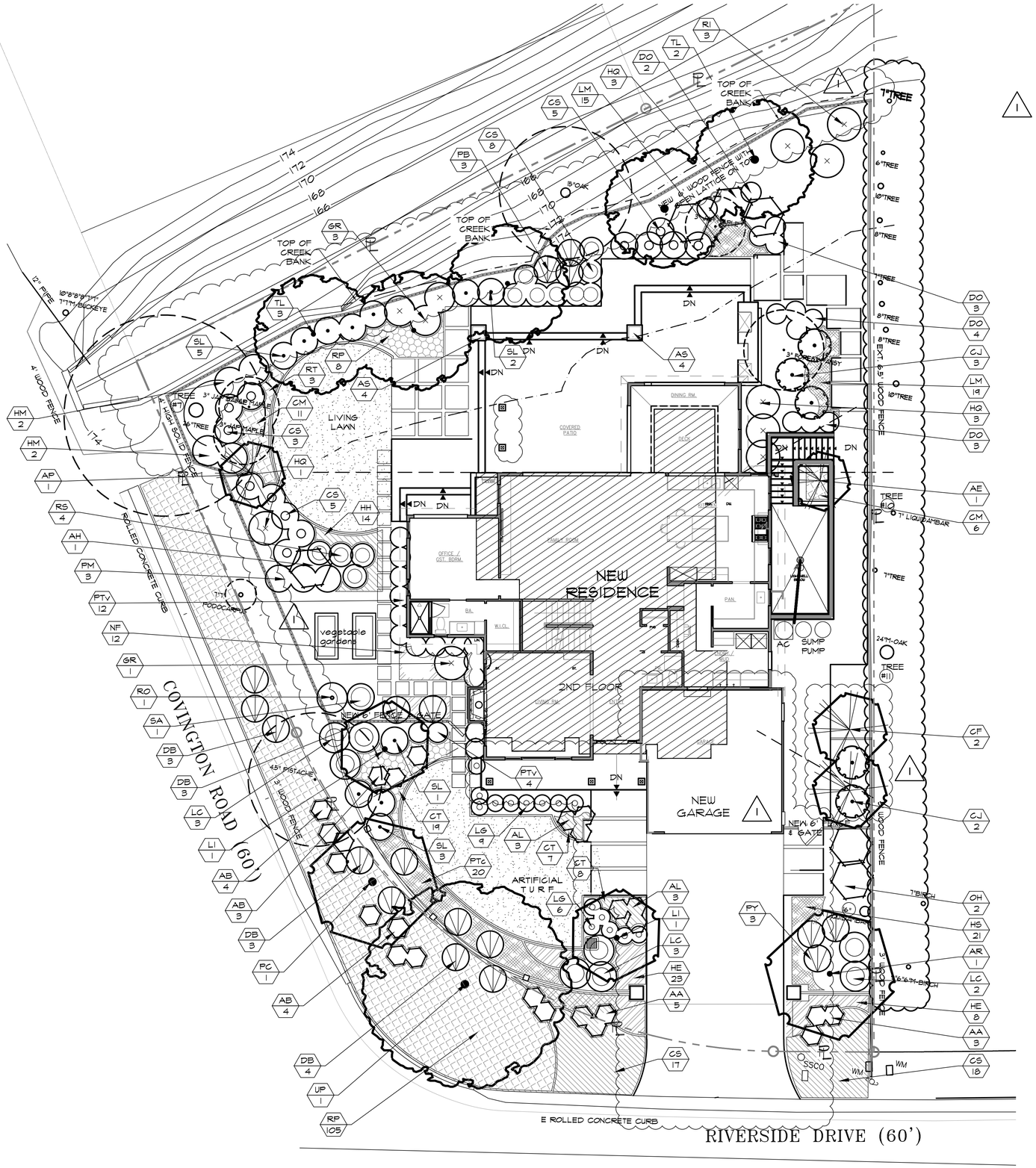
REVISIONS	BY
1 6/25/2024	TK

TODD KALBFELD
PROFESSIONAL
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

COVERAGE AND LIGHTING PLAN

DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-2
OF	SHEETS



PLANT LEGEND

SYM.	SIZE	QTY.	BOTANICAL NAME	COMMON NAME	REMARKS	WUCOLS PLANT FACTOR
TREES						
AE	24" Bx	1	Acer p. 'Emeror 1'	Emperor 1 Japanese Maple	Standard	P.F. 0.5 Moderate
AP	24" Bx	1	Acer p. 'Bloodgood'	Bloodgood Red Japanese Maple	Standard	P.F. 0.5 Moderate
AR	24" Bx	1	Acer f. 'Autumn Blaze'	Autumn Blaze Maple	Standard	P.F. 0.2 Low
CF	24" Bx	2	Podocarpus gracilior	Fern Pine	Standard	P.F. 0.5 Moderate
LI	24" Bx	2	Lagerstroemia i. 'Muskogee'	Lavendar Crepe Myrtle	Multi Trunk	P.F. 0.2 Low
PC	24" Bx	1	Pistacia chinensis	Chinese Pistache	Standard	P.F. 0.2 Low
TL	24" Bx	5	Tristania laurina	Water Gum	Standard	P.F. 0.2 Low
UP	24" Bx	1	Ulmus parvifolia	Chinese Elm	Standard	P.F. 0.2 Low
SHRUBS						
AA	15g	8	Agave attenuata	Foxtail Agave		P.F. 0.2 Low
AB	15g	11	Agave 'Boutin Blue'	Blue Foxtail Agave		P.F. 0.2 Low
AH	15g	1	Abutillon h. 'Tiger Eye'	Chinese Lantern	Space 30" o.c.	P.F. 0.2 Low
AL	15g	6	Agave 'Ray of Light'	Ray of Light Agave		P.F. 0.2 Low
AS	1g	4	Aeoneum 'Sunburst'	Sunburst Aeoneum	Space 18" o.c.	P.F. 0.2 Low
CJ	15g	5	Camellia J. Red	Camellia Japonica		P.F. 0.2 Low
CM	5g	17	Clivia miniata	Kaffir Lily	Space 30" o.c.	P.F. 0.5 Moderate
CS	5g	13	Camellia s. 'Shishi Gashira'	Sandanqua Camellia	Space 36" o.c.	P.F. 0.2 Low
DB	5g	13	Dietes bicolor	Yellow Fortnight Lily		P.F. 0.2 Low
DO	5g	11	Daphne odora 'Aureo-marginata'	Winter Daphne		P.F. 0.5 Moderate
GR	15g	4	Grevillea 'Robyn Gordon'	NCN		P.F. 0.2 Low
HH	1g	14	Hemerocallis 'Evergreen Yellow'	Day Lily	Space 30" o.c.	P.F. 0.5 Moderate
HM	5g	4	Hydrangea m. 'Lacecap Blue'	Blue Lacecap Hydrangea		P.F. 0.5 Moderate
HQ	5g	7	Hydrangea quercifolia	Oak Leaf Hydrangea		P.F. 0.5 Moderate
LC	5g	8	Loropetalum c. 'Burgundy'	Chinese Fringe Flower		P.F. 0.2 Low
LG	5g	15	Lavandula x 'Grosso'	Lavandin		P.F. 0.2 Low
OH	15g	2	Osmanthus fragrans	Sweet Olive		P.F. 0.2 Low
PB	5g	3	Phormium 'Bronze Baby'	New Zealand Flax		P.F. 0.2 Low
PM	15g	3	Pittosporum t. 'Marjorie Channon'	Marjorie Channon Pittosporum		P.F. 0.5 Moderate
PTc	5g	20	Pittosporum t. 'Creme De Mint'	Creme De Mint Dwf Tobira	Space 30" o.c.	P.F. 0.2 Low
PTV	5g	16	Pittosporum t. variegata	Variegated Tobira		P.F. 0.2 Low
PY	5g	3	Phormium 'Yellow Wave'	New Zealand Flax		P.F. 0.2 Low
RI	5g	3	Ribes sanguineum	Red Flowering Current		P.F. 0.2 Low
RO	5g	1	Rosmarinus officinalis	Rosemary Bush		P.F. 0.2 Low
RS	5g	4	Rose Shrub 'Owner Selected'	Owner Selected Roses		P.F. 0.5 Moderate
SL	5g	11	Salvia g. 'Hot Lips'	Hot Lips Sage		P.F. 0.2 Low
VINES AND GROUND COVERS						
CS	5g	43	Coleonemia 'Sunset Gold'	Sunset Gold Breath of Heaven	Space 39" o.c.	P.F. 0.2 Low
CT	1g	34	Carex testacea	Orange Sedge	Space 24" o.c.	P.F. 0.2 Low
HE	5g	31	Hellebore h. 'Pink Flower'	Hellebore	Space 30" o.c.	P.F. 0.2 Low
LM	1g	24	Liriope m. 'Big Blue'	Lilly Turf	Space 24" o.c.	P.F. 0.5 Moderate
NF	1g	12	Nepeta fassenii	Catmint	Space 30" o.c.	P.F. 0.2 Low
RO	1g	113	Rosmarinus o. 'Irene'	Prostrate Rosemary	Space 36" o.c.	P.F. 0.2 Low
HS	1g	21	Heuchera sanguinea 'Red'	Coral Bells	Space 24" o.c.	P.F. 0.2 Low

Planting Notes

1. All trees 15 gallons or larger to receive (2) 2'x10' Lodge Pole Pine Stakes with (1) 1"x4" backer board nailed to stakes. Tie all trees to stakes with rubber ties at mid point of trunk, and right below branck crotch. Nail with galvanized roofing nails.
2. Provide deep watering/inspection tubes on all trees. Water basins should be sufficient enough to contain water at base of tree, as necessary.
3. Fertilizer tablets shall be placed at the mid-point of root ball per manu. recommendation.
4. Rototill and amend entire planting site with 6" or more of compost into top 6"-12" of existing soil as necessary for planting needs.

   For All soils:
   compost at a rate of a min. of 4 cubic inches per 1000 square feet of permeable area shall be incorporated to a depth of 6" of soil.
5. Provide Min. 3" of shredded mulch under all trees, shrubs and unplanted areas for water conservation.

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Todd Kalbfeld
Professional Landscape Designer
12/12/2023

LEGEND

(E)	EXISTING ITEM	SL	SERVICE LINE
PL	PROPERTY LINE	O	ELECTRIC OUTLET
W	WATER METER	G	GAS METER
P	PG&E BOX	S	SEWER ACCESS
A/C	AIR CONDITION	MB	MAILBOX
LT	LIGHT	E	ELECTRIC METER
HB	HOSE BIBB	PA	PLANTING AREA
WM	WATER MAIN	IC	IRRIGATION CONTROLLER

NORTH

Todd Kalbfeld Landscape Design
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2345 TULIP ROAD, SAN JOSE, CA 95125
(408) 605-9973

REVISIONS	BY
1 6/24/2024	TK

TODD KALBFELD
PROFESSIONAL
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

LANDSCAPE PLANTING PLAN

DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-3
OF	SHEETS

SCREEN TREE IN USE

LEAVES AND FLOWERS

TREE BARK

SCREEN TREE

BOTANICAL NAME	COMMON NAME
TRISTANIA LAURINA	WATER GUM

SCREEN TREE CHARACTERISTICS

MAXIMUM TREE HEIGHT:	40'
CANOPY WIDTH:	15'-30'
GROWTH RATE:	12"-24" PER YEAR
WATER USAGE:	LOW

SCREEN TREE IN USE

LEAVES AND FLOWERS

TREE BARK

SCREEN TREE

BOTANICAL NAME	COMMON NAME
PODOCARPUS GRACILLIOR	FERN PINE

SCREEN TREE CHARACTERISTICS

MAXIMUM TREE HEIGHT:	50'
CANOPY WIDTH:	15'-25'
GROWTH RATE:	12"-36" PER YEAR
WATER USAGE:	MODERATE

Todd Kalbfeld Landscape Design
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2345 TULIP ROAD, SAN JOSE, CA 95126
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REVISIONS	BY
1 6/24/2024	TK

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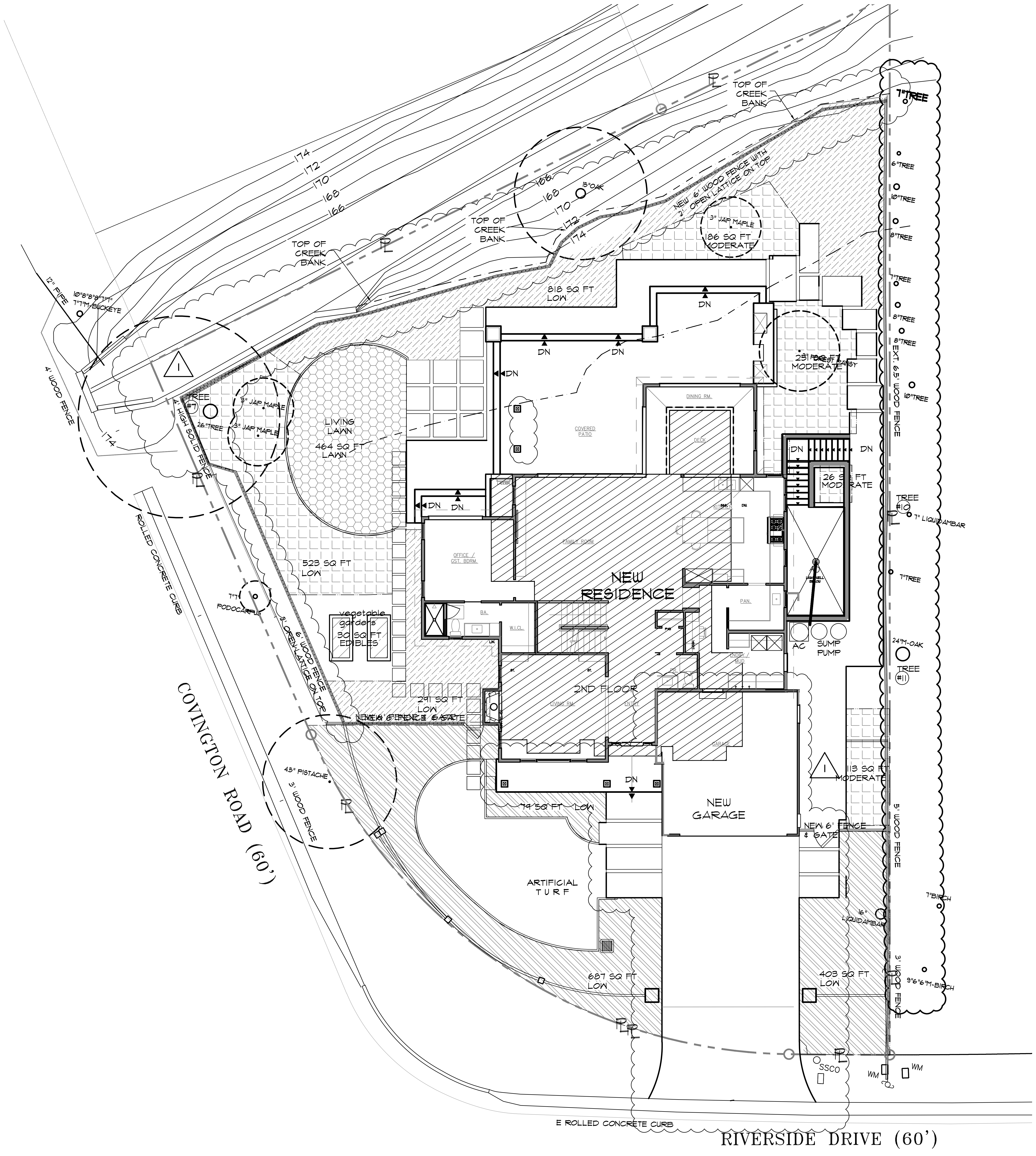
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

SCREEN TREE
SELECT GUIDE

DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-3.1
OF	SHEETS



HYDRO - ZONES SQUARE FOOT CALCULATIONS LEGEND

▨	1. FRONT YARD NON-TURF LOW WATER USE	1,169 SF
▨	5. REAR YARD NON-TURF LOW WATER USE	1,632 SF
▤	4. REAR AND SIDE YARDS NON-TURF MODERATE WATER USE	576 SF
▦	6. REAR YARD LAWN HIGH WATER USE	464 SF
▨	7. REAR YARD EDIBLES SPECIAL WATER USE	30 SF

LOW WATER USE LANDSCAPE AREA TOTAL	2,801 SF
MOD. WATER USE LANDSCAPE AREA TOTAL	576 SF
HIGH WATER USE LANDSCAPE AREA TOTAL	464 SF
SPECIAL WATER USE LANDSCAPE AREA TOTAL	30 SF
LANDSCAPE AREA TOTAL	3,871 SF

WATER EFFICIENT LANDSCAPE WORKSHEET

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

Package. **Reference Evapotranspiration (ETo) 43.0_____**

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
Front Low	.2	Drip	.81	.247	1169	288.74	7,697.89
Rear Low	.2	Drip	.81	.247	1632	403.10	10,743.98
Rear and Sides Mod.	.5	Drip	.81	0.617	576	355.39	9,474.70
Rear Lawn	.8	Spray	.75	1.067	464	495.09	13,199.10
				Totals	3841 (A)	1542.32 (B)	
Special Landscape Areas							
	[redacted]	[redacted]	[redacted]	1	30	30	799.8
	[redacted]	[redacted]	[redacted]	1			
	[redacted]	[redacted]	[redacted]	1			
				Totals	30 (C)	30 (D)	
						ETWU Total	41,917.67
						Maximum Allowed Water Allowance (MAWA)[e]	56,680.49

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

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

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

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

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

(43.0) (.62) [(.55 x 3841) + (1-.55 x 30)] = 56,680.49

26.66 x [(2,112.55) + (13.5)] = 56,680.49

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	1542.32
Total Area	(A)	3841
Average ETAF	**B ÷ A**	0.401

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

All Landscape Areas

Total ETAF x Area	(B+D)	1,572.32
Total Area	(A+C)	3871
Sitewide ETAF	**(B+D) ÷ (A+C)**	0.406

A copy of this form may be obtained from Department of Water Resources website:
http://www.water.ca.gov/wateruseefficiency/landscapeordinance/

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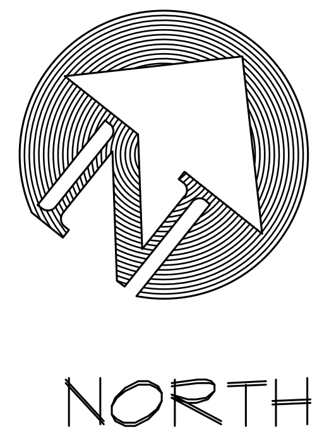
12/12/2023
Todd Kalbfeld
Professional Landscape Designer



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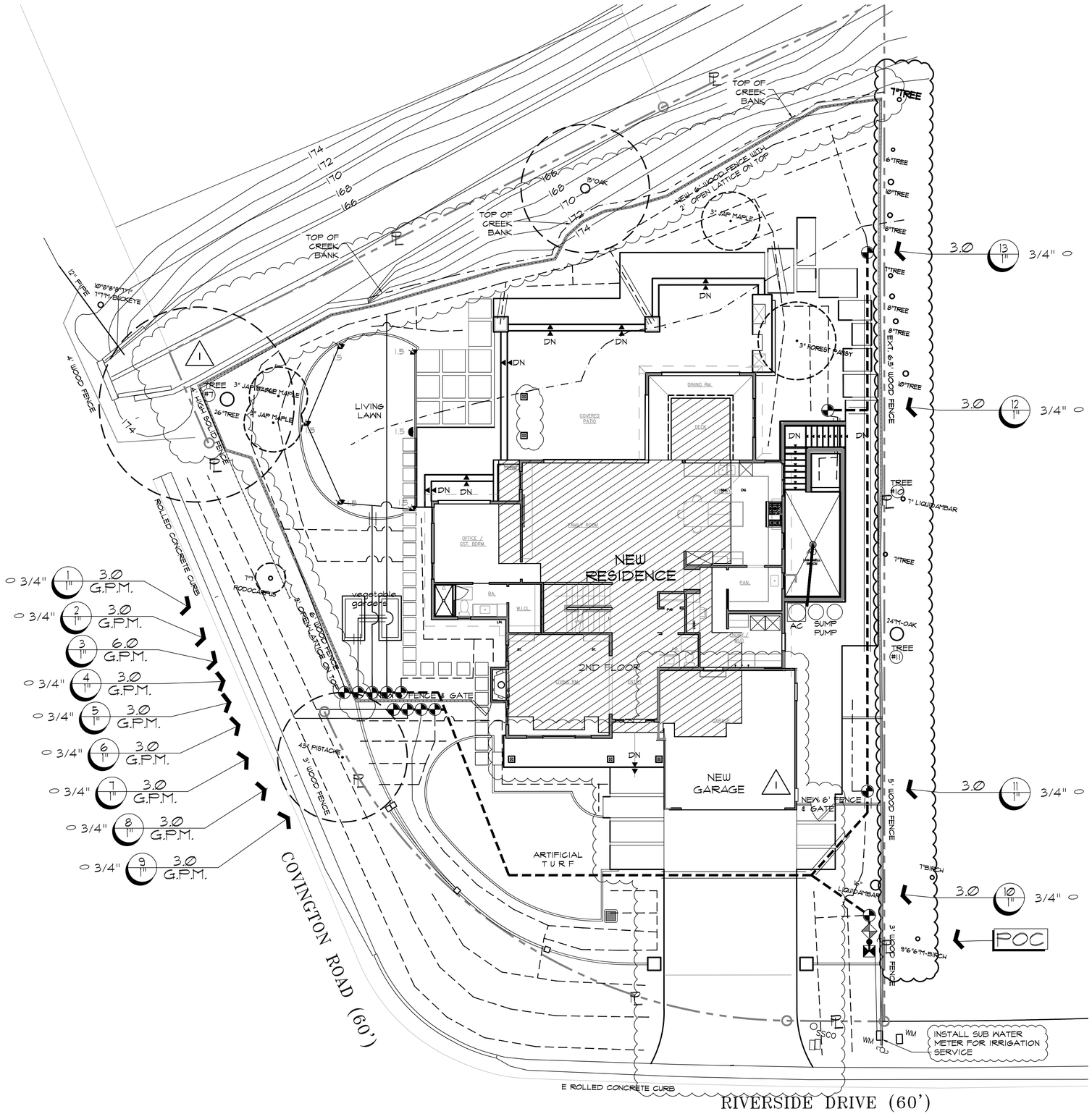
REVISIONS	BY
1 6/24/2024	TK

TODD KALBFELD
PROFESSIONAL
LANDSCAPE DESIGNER

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

HYDRO-ZONE PLAN

DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-4
OF	SHEETS



IRRIGATION LEGEND

SYM.	DESCRIPTION
POC	POINT OF CONNECTION (TEE-OFF IRRIGATION SUB METER WATER SERVICE LINE, VERIFY LOCATION IN FIELD)
C	Controller: Rainbird ESP-LX Modular Series With Weather Sensor and water sensor shut off devices or equal. Controller operating times to be set between 10:00pm and 6:00am
	Solenoid Valve: Irritrol 700 series 1", or equal located in valve box. Drip Zones - Pressure regulated Solenoid valve: Irritrol 700 series 1" or w/Omnireg 'OMR-100' or equal. Initial Setting to be 20 psi. Adjust as required. Locate in Valve Box.
	FEBCO - LF825YA Reduced Pressure Zone Assembly Device 1" size (Lead Free) WATTS - Series LFU5B - Lead Free Water Pressure Reducing Valve - Size as Main Line
	325A Simple Adjust Rotor Sprinklers 90 Arc .75 Low Flow Nozzle Adjust as Needed
	325A Simple Adjust Rotor Sprinklers 180 Arc 1.5 Low Flow Nozzle Adjust as Needed
	325A Simple Adjust Rotor Sprinklers 360 Arc 3.0 Low Flow Nozzle Adjust as Needed
	325A Simple Adjust Rotor Sprinklers Variable Arc 1.5 Low Flow Nozzle Adjust as Needed
	Polyethylene drip tube: Transition from PVC as required. Poly Line shall be 3/4" w/emitters plugged directly into 1/2", or 1/4" feeder tubes as required. All tubing shall be staked @ 5'-0" max & buried 2" min. drip emitters shall be isoflow 2gph pressure compensating emitters. (1) emitter per 4" pot-1gal shrub. (2) emitters per 5 gallon shrub, (4) emitters per 15 gallon can, (10) emitters per 24" box tree, (20) emitters per 36" Box tree or greater.
	3/4", 1" or 1-1/4" Schedule 40 PVC Pipe. Refer to Pipe Sizing Chart Below.
	1-1/4" Sch 40 PVC Main Line
	Soaker emitter tubing for ground covers
	3" Dia. Irrigation Sleeves for paving
1 / 1"	INDICATES CONTROLLER STATION # INDICATES VALVE SIZE

IRRIGATION ZONES

- ALL ZONES LOW WATER UNLESS OTHERWISE SHOW AT ZONE FLAG USE DRIP IRRIGATION
- CONTRACTOR TO SUPPLY LATEST SMART CONTROLLER WITH RAIN SENSOR.

IRRIGATION NOTES

- WATER SOURCE TO BE FROM CITY SUPPLY WATER MAIN TO RESIDENCE INSTALL SEPARATE IRRIGATION SUB WATER METER AS REQUIRED PER ORDINANCE
- THIS SYSTEM IS BASED ON AN ESTIMATED AVAILABLE 20 GPM @APPROXIMATELY 60 PSI @ POINT OF CONNECTION. CONTRACTOR IS TO VERIFY EXISTING PRESSURE AT POC AND ADD PRESSURE REGULATING DEVICE AS NEEDED. ANY DISCREPANCIES SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- EXACT WATER METER LOCATION AND AVAILABLE PSI TO BE VERIFIED WITH WATER SUPPLIER PRIOR TO CONSTRUCTION.
- Check valves or anti-drain valves are required on all sprinkler heads where lon point drainage could occur.
- PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.
- CONTRACTOR SHALL LOCATE ALL LATERALS, MAINS, AND VALVES IN PLANTING AREAS WHENEVER POSSIBLE. DO NOT CONSTRUCT TEES OR ELLS BENEATH PAVING. ALL PIPING BENEATH PAVING SHALL BE LOCATED WITHIN PVC SCH 40 SLEEVING.
- CONTRACTOR SHALL ALLOW FOR AN ADDITIONAL 1-2 SPRAY HEADS AND ENOUGH DRIP IRRIGATION SUPPLIES IN IRRIGATION BID PRICE TO INSURE ADEQUATE COVERAGE.
- CONTRACTOR SHALL INSTALL FILTER AND THOROUGHLY FLUSH ALL DRIP IRRIGATION LINES PRIOR TO INSTALLATION OF DRIP EMITTERS.
- CONTRACTOR SHALL PROVIDE 1 ADDITIONAL / EXTRA CONTROL WIRE AND CAPPED MAIN FOR FUTURE EXPANSION AND MAINTENANCE.
- TRENCHES WITHIN DRIPLINES OF EXISTING TREES TO REMAIN SHALL BE HAND DUG. NO ROOTS GREATER THAN 1" DIA. SHALL BE CUT. ALL CUT ROOTS BETWEEN 1/2" & 1" DIA. SHALL BE CLEANLY CUT AND DRESSED.

IRRIGATION PIPE SIZING CHART

CLASS 200		
1/2"	==	0-4 GPM
3/4'	==	5-9 GPM
1"	==	10-16 GPM
1-1/2"	==	27-35 GPM
1-1/4"	==	17-26 GPM
2"	==	36-55 GPM

SCHEDULE 40		
1/2"	==	0-4 GPM
3/4'	==	5-8 GPM
1"	==	9-16 GPM
1-1/4"	==	16-22 GPM
1-1/2"	==	23-30 GPM
2"	==	31-50 GPM

General Project Notes

1. I Agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package 12/12/2023
2. Recirculating water systems shall be used for water features.
3. I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans
4. A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation Controller for subsequent managment purposes.
5. A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigatin pland or licensed landscape contractor for the project.
6. An irrigation audit report shall be completed at the time of final inspection. Submit this report to City of Palo Alto Building Dept. for review and acceptance.
7. At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule of landscape and irrigation maintenance.

12/12/2023 Todd Kalbfeld
Professional Landscape Designer

NORTH

Todd Kalbfeld
Landscape Design
landscapeDesign & Construction Management
2345 TULIP ROAD, SAN JOSE, CA 95125
(408) 605-9473

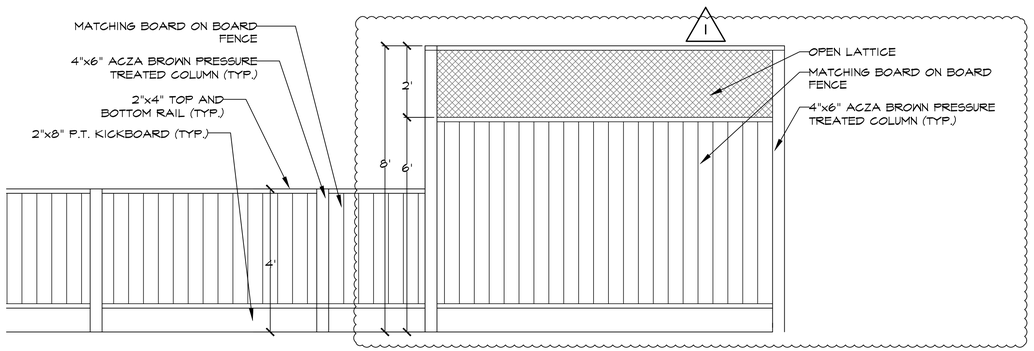
REVISIONS	BY
1 6/24/2024	TK

TODD KALBFELD
PROFESSIONAL LANDSCAPE DESIGNER

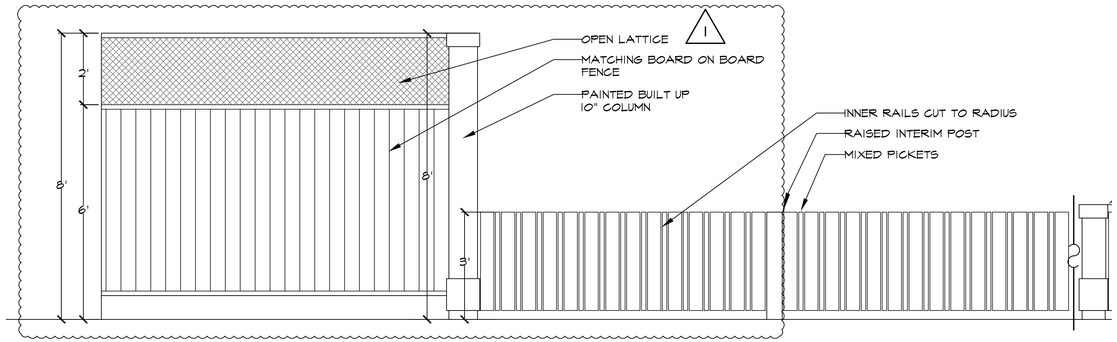
SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

IRRIGATION PLAN

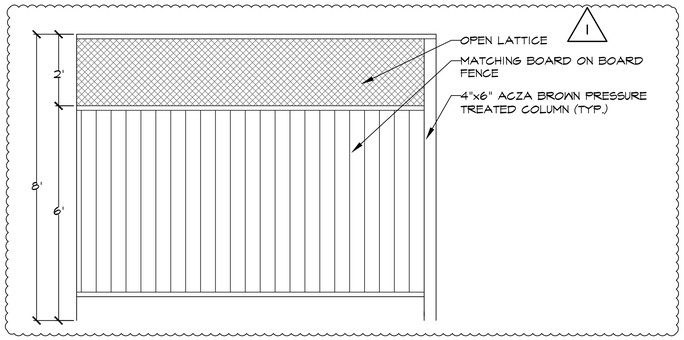
DATE	AUG / 2023
SCALE	1/8"=1'-0"
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-5
OF	SHEETS



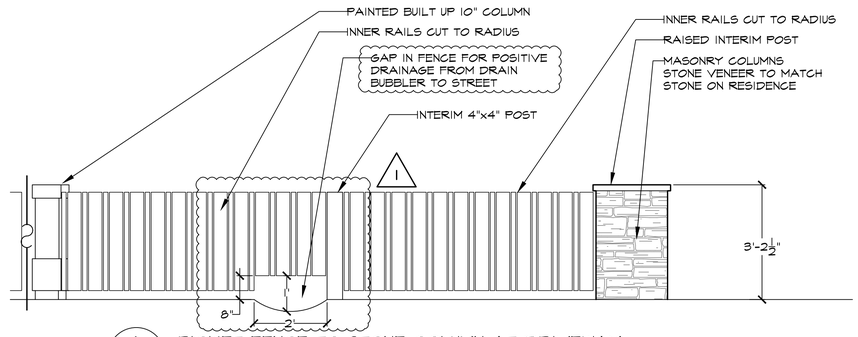
A L-6 4' HIGH SOLID FENCE TO 6' FENCE WITH 2' OF OPEN LATTICE SCALE: 1/2"=1'-0"



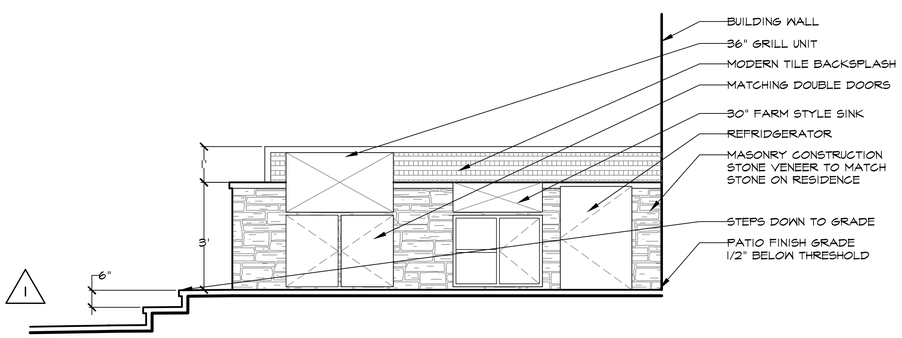
A L-6 NEW FENCE TO PICKET FENCE SCALE: 1/2"=1'-0"



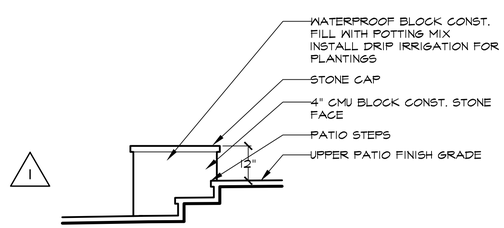
A L-6 6' FENCE WITH 2' OF OPEN LATTICE SCALE: 1/2"=1'-0"



A L-6 PICKET FENCE TO STONE COLUMN AT DRIVEWAY SCALE: 1/2"=1'-0"



B L-6 COOKING STATION ELEVATION SCALE: 1/2"=1'-0"



C L-6 BUILT IN PLANTER SCALE: 1/2"=1'-0"

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REVISIONS	BY
6/24/2024	TK
1	

SINGLE FAMILY RESIDENCE
962 RIVERSIDE DRIVE, LOS ALTOS, CA

CONSTRUCTION DETAILS

DATE	SEPT / 2023
SCALE	AS SHOWN
DRAWN	TK
JOB	RIVERSIDE
SHEET	L-6
OF	SHEETS