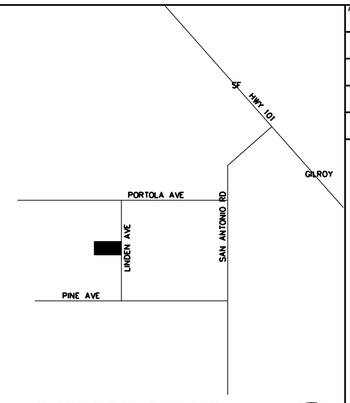
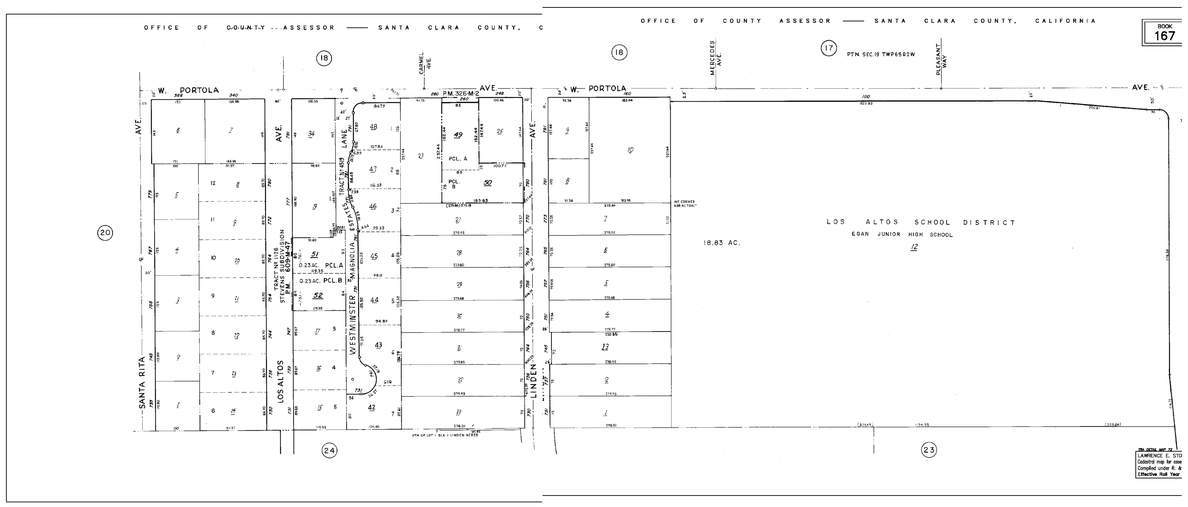
SHEET INDEX



SITE LOCATION MAP



VICINITY MAP

CONSTRUCTION DATA

BUILDING TYPE: VB
NUMBER OF STORIES:2
OCCUPANCY GROUP: R3
FIRE SPRINKLER: YES

CODES:
2016 CRC
2016 CBC
2016 FIRE CODE
2016 CMC,CPC,CEC
2016 CEC (TITLE 24 ENERGY CODE
2016 CAL GREEN CODE

SCOPE OF WORK

DEMO EXISTING HOME AND BUILD A NEW
2 STORY HOME WITH BASEMENT

SITE DATA AND ZONING

APN 167-21-032
ZONING R1-10
LOT AREA 19,858.32

LOT COVERAGE

EXISTING	PROPOSED	ALLOWED
2688 = 13.5%	3629 = 18.3%	5957.4 = 30%

FLOOR AREA

EXISTING	PROPOSED		ALLOWED
2688	TOTAL	4730	4735.82
	HABITABLE		
2012 HABITABLE	FIRST FLOOR	2487.1	
676 NON HABITABLE	SECOND FLOOR	1679	
	BASEMENT (ADU 1640.7)	2456	
	NON HABITABLE		
	GARAGE	542.8	
	PORCHES OPEN AT 3 SIDES	574	
	PORCHES CLOSED AT 3 SIDES	21	

SETBACKS

	EXISTING	PROPOSED		ALLOWED	
		FIRST FLOOR	SECOND FLOOR	FIRST FLOOR	SECOND FLOOR
FRONT	42'-4	25'	54'	25'	25'
REAR	207	160.25'	160.25'	25'	25'
RIGHT SIDE	13	7'-2'	21'-8	7'-2'	14'-8
LEFT SIDE	13	7'-2	20'-8	7'-2'	14'-8
HEIGHT	15	26'-6		27'-0	

NET LOT AREA 19,858.32
FRONT YARD 1800
HARDSCAPE AREA 444

LANDSCAPING BREAKDOWN

TOTAL LANDSCAPE AREA	14,157.12
EXISTING SOFTSCAPE	10,182.12
NEW SOFTSCAPE	3,975.0
FOOTPRINT / HOME	4059.4
WALKWAYS	1641.8
TOTAL HARDSCAPE	5701.2
TOTAL HARDSCAPE AND SOFTSCAPE	19,858.32

REVISION:	
	1
	2
	3
	4
	5

SITE PLAN
SITE DATA
INDEX

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DRAFTING AND PLANNING, INC.
2150 MANGIN WAY, SAN JOSE, CA 95148
(408) 532-1755 HARDINC1@ADL.COM
HARD DRAFTING PLANNING . COM

ALTHOFF RESIDENCE
JIM AND ABBEY ALTHOFF
744 LINDEN AVE
LOS ALTOS, CA

Date: 1-19-19
Drawn: RH
Scale: 1/8=1'-0
Job: ALTHOFF

C
SHT 1 OF

SITE PLAN

SCALE: $\frac{1}{8}$"=1'-0

REVISION	
	1

SITE PLAN

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1

SHT 1 OF

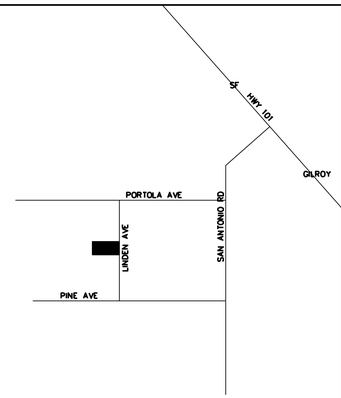

TABLE OF EXISTING TREES				
1	QUERCUS LOBATA	VALLEY OAK	20" DIA	SAVE
2	SEQUOIA SEMPERVIRENS	REDWOOD	12" DIA	SAVE
3	SEQUOIA SEMPERVIRENS	REDWOOD	8" DIA	SAVE
4	PRUNUS PERSICA	FRUIT TREE (PEACH)	6" DIA	REMOVE
5	ERIOBOTRYA	LOQUAT	8" DIA	REMOVE

X TREES TO BE REMOVED

A/C UNITS
MODEL 189BNV
EVOLUTION
19 SEER
55 dBA

6' REDWOOD FENCE ALL THRE SIDE OF PROPERTY

(E) GARAGE RIDGE

PG&E

FH

PROPERT LINE 275.77'

PROPERT LINE 275.85'

PROPERT LINE 72.0'

24"ø DRIP 70'

2X20"ø DRIP 60'

20"ø DRIP 42'

9"ø DRIP 24'

12"ø DRIP 20'

8"ø DRIP 16'

14"ø DRIP 18'

16"ø DRIP 24'

20"ø DRIP 28'

POOL EQUIP.

8"ø DRIP 16'

10"ø DRIP 24'

6"ø DRIP 20'

2X8"ø DRIP 24'

6"ø DRIP 20'

12"ø DRIP 22'

(E) HOUSE RIDGE

(E) HOUSE FF RIDGE

BRICK

GM EM

CO

SSMH RIM

WM

FIRST FLOOR 25'-0"

SECOND FLOOR 54'-0"

FIRST FLOOR SETBACK LINE

SECOND FLOOR SETBACK LINE

OUTLINE OF THE LOWER FLOOR

OUTLINE OF THE UPPER FLOOR

LIGHT WELLS

SIDE ENTRY DRIVEWAY

DRIVEWAY

BRICK

LINDEN AVE. (40' WIDE)

NORTH

X TREES TO BE REMOVED

SITE PLAN

SCALE: 1'=10'-0

REVISION	
	1

SITE PLAN WITH TREES

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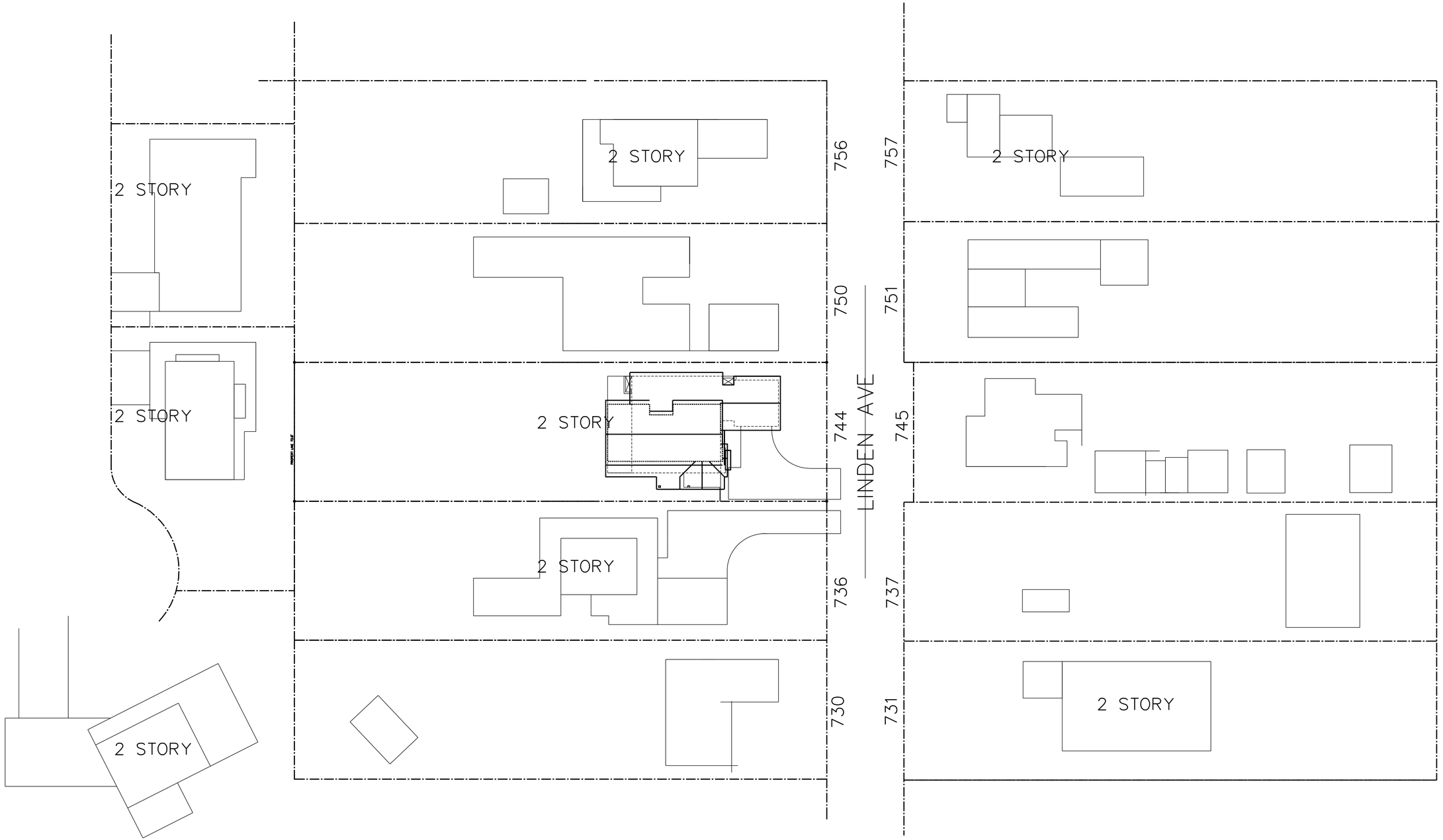
LOS ALTOS, CA

Date: 1-19-19
Drawn: RH
Scale: 1/8=1'-0
Job: ALTHOFF

1.1
SHT 1 OF



REVISION	
	1

NEIGHBORHOOD

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744 LINDEN AVE
LOS ALTOS, CA

Date:

Drawn: RH

Scale: 1/8=1'-0

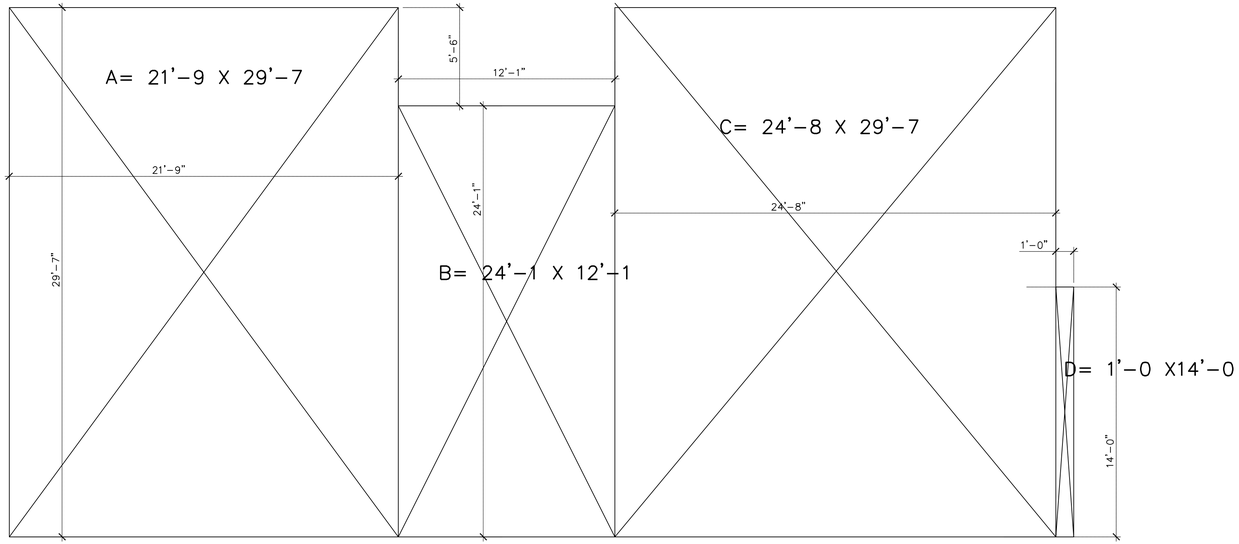
Job:

1.2

SHT 1 OF

DIMENSION A					DIMENSION B			FLOOR AREA
SECTION	FEET	INCHES	LENGTH		FEET	INCHES	LENGTH	(A X B)
A	21	9	21.75	X	29	7	29.6	643.8
B	24	1	24.08		12	1	12.08	290.9
C	24	8	24.7		29	7	29.6	731.1
D	1	0	1.0		14	0	14.0	14
TOTAL FLOOR AREA					TOTAL FLOOR AREA			1679.82

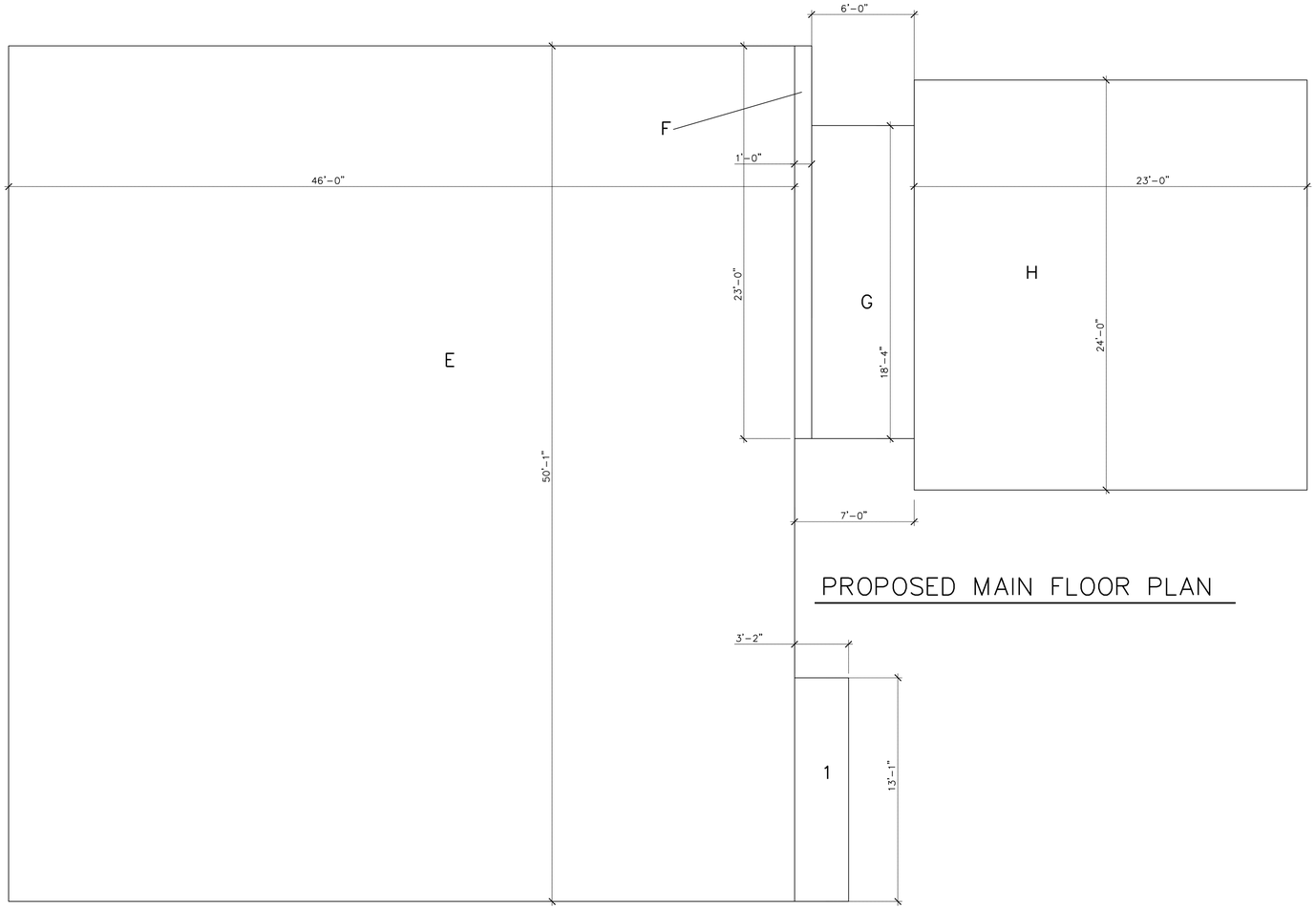
PROPOSED UPPER FLOOR PLAN



PROPOSED UPPER FLOOR PLAN

NSION A					DIMENSION B			FLOOR AREA
FEET	INCHES	LENGTH		FEET	INCHES	LENGTH		(A X B)
46	0	46.0	X	50	1	50.08		2303.68
1	0	1		23	0	23		23
6	0	6		18	4	18.33		109.98
24	0	24		23	0	23		552
3	2	3.17		13	1	13.08		41.46
OOR AREA				TOTAL FLOOR AREA				3030.12

PROPOSED UPPER FLOOR PLAN



PROPOSED MAIN FLOOR PLAN

REVISION

AREA CALC DIAGRAMS

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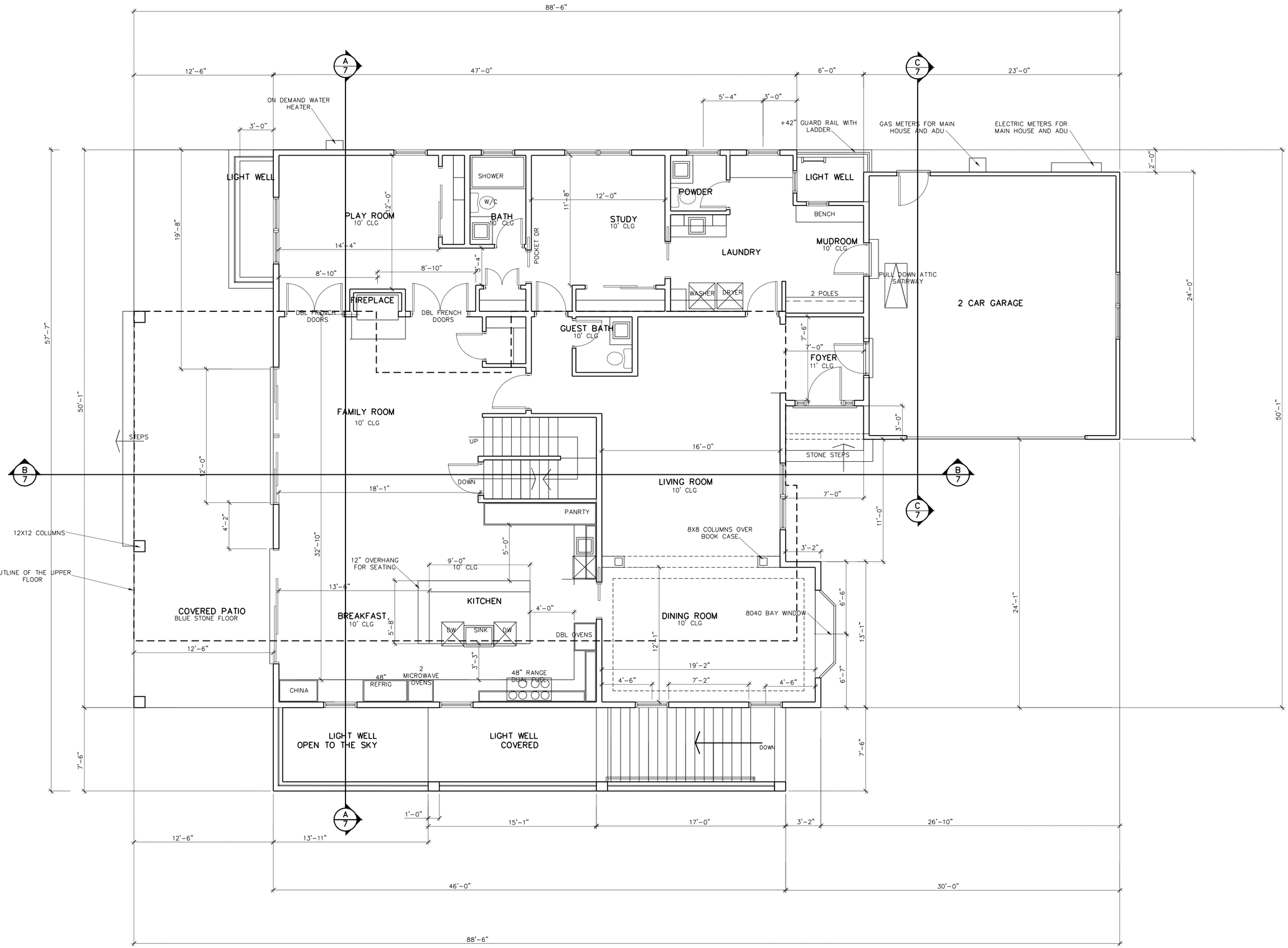
Date:
Drawn: RH
Scale: 1/8=1'-0
Job:

1.3
SHT 1 OF



PROPOSED LOWER FLOOR PLAN

SCALE 1/ 4" = 1'-0"

REVISION	
	1

LOWER FLOOR PLAN

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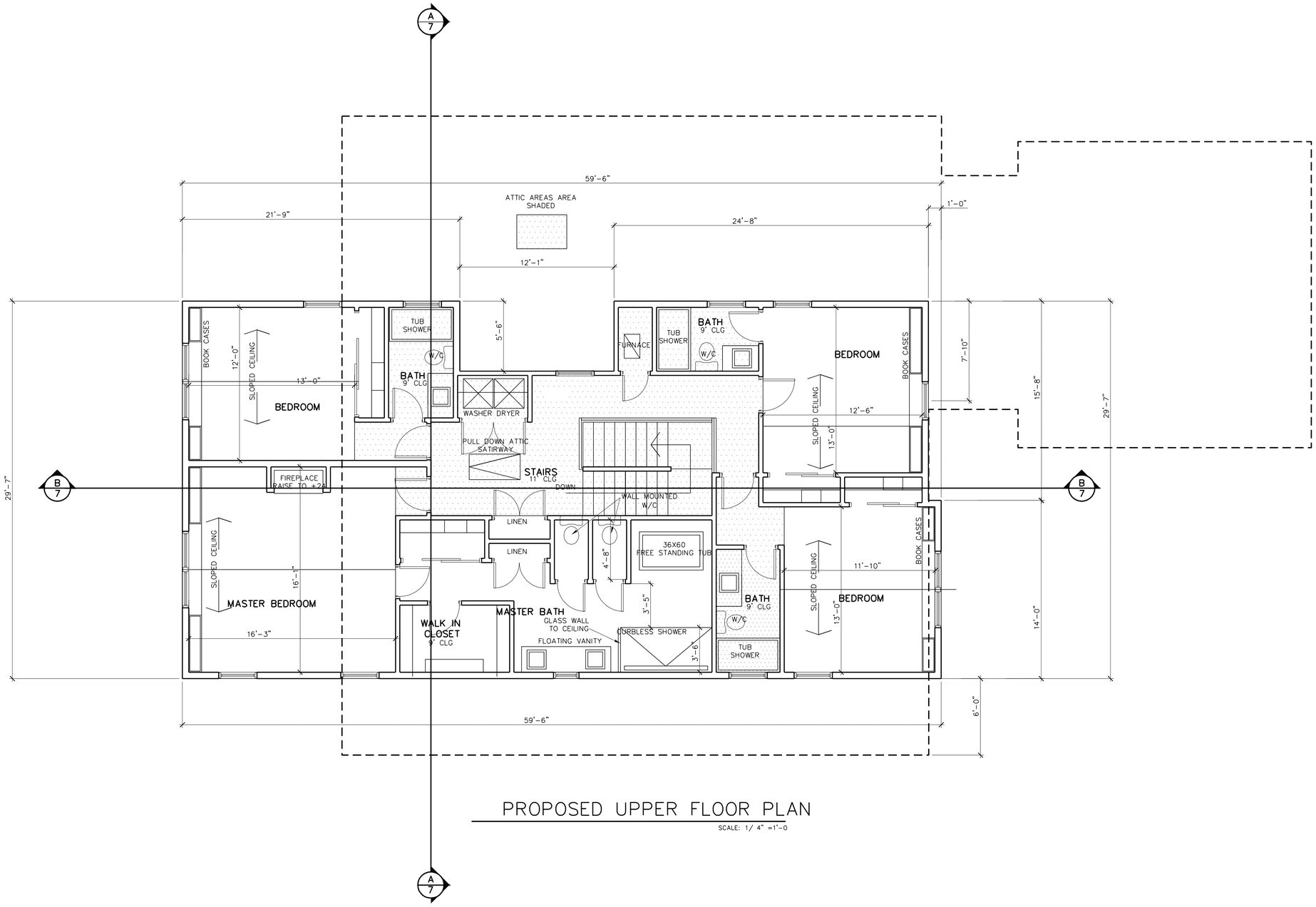
LOS ALTOS, CA

Date:	
Drawn:	RH
Scale:	1/4=1'-0
Job:	

2

SHT 1 OF

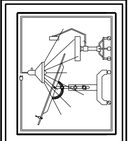


PROPOSED UPPER FLOOR PLAN

SCALE: 1/ 4" =1'-0

REVISION	
	1

UPPER FLOOR PLAN



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ALHOFF RESIDENCE
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744 LINDEN AVE
LOS ALTOS, CA

Date:

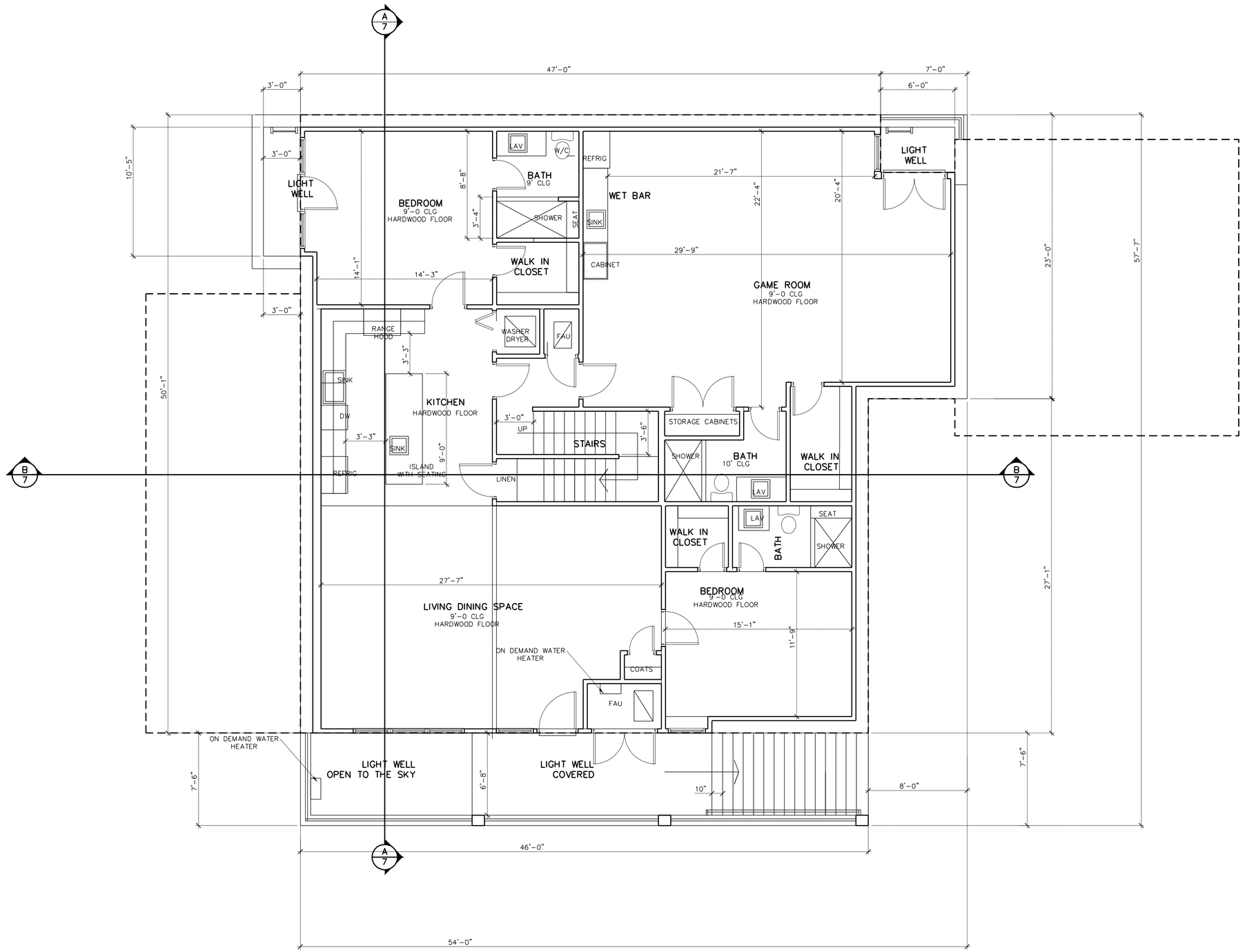
Drawn: RH

Scale: 1/4=1'-0

Job:

3

SHT 1 OF



PROPOSED BASEMENT PLAN

SCALE 1/ 4' = 1'-0'

REVISION	
	1

BASEMENT FLOOR PLAN

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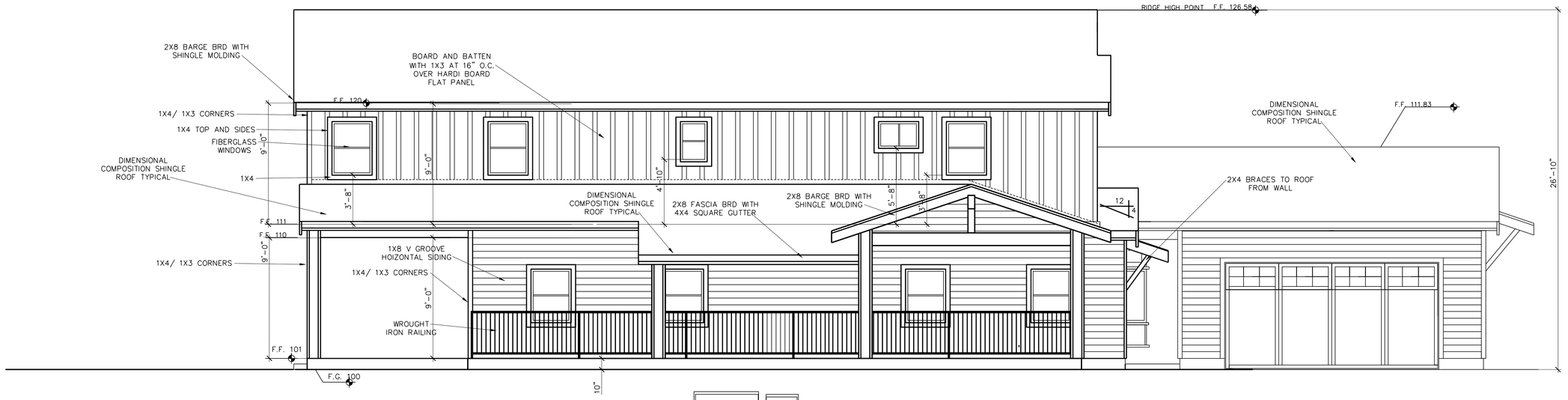
744 LINDEN AVE
LOS ALTOS, CA

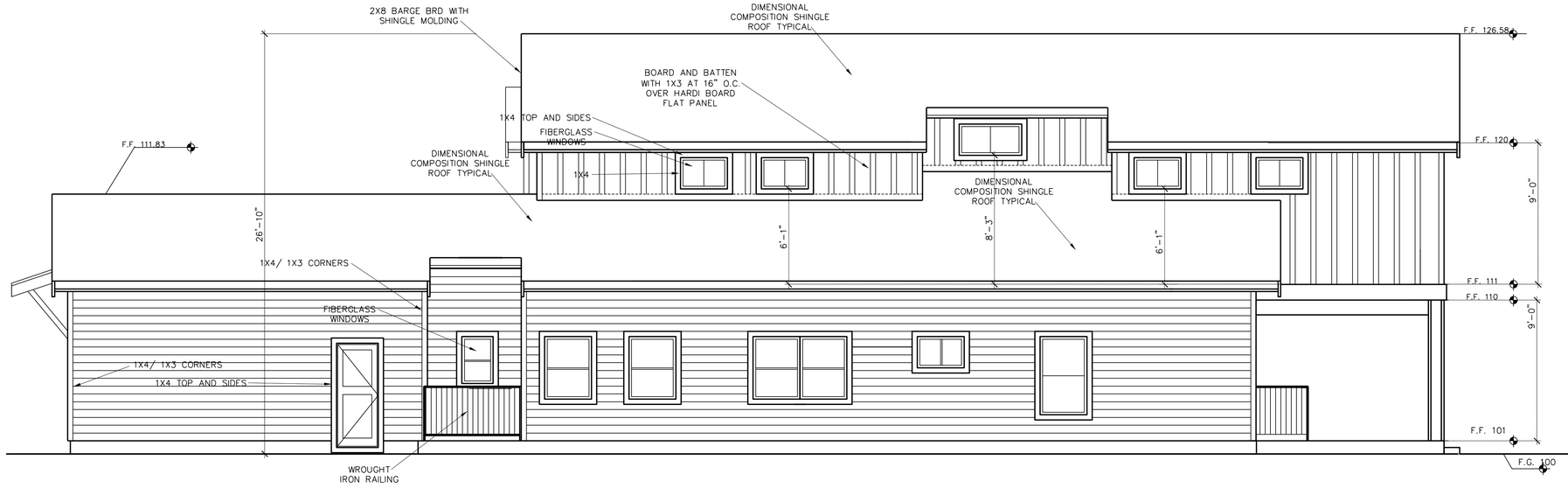
Date:
Drawn: RH
Scale: 1/4=1'-0
Job:

4
SHT 1 OF



LEFT SIDE ELEVATION

SCALE: 1/ 4" =1'-0



RIGHT SIDE ELEVATION

SCALE: 1/ 4" =1'-0

REVISION

EXTERIOR ELEVATIONS

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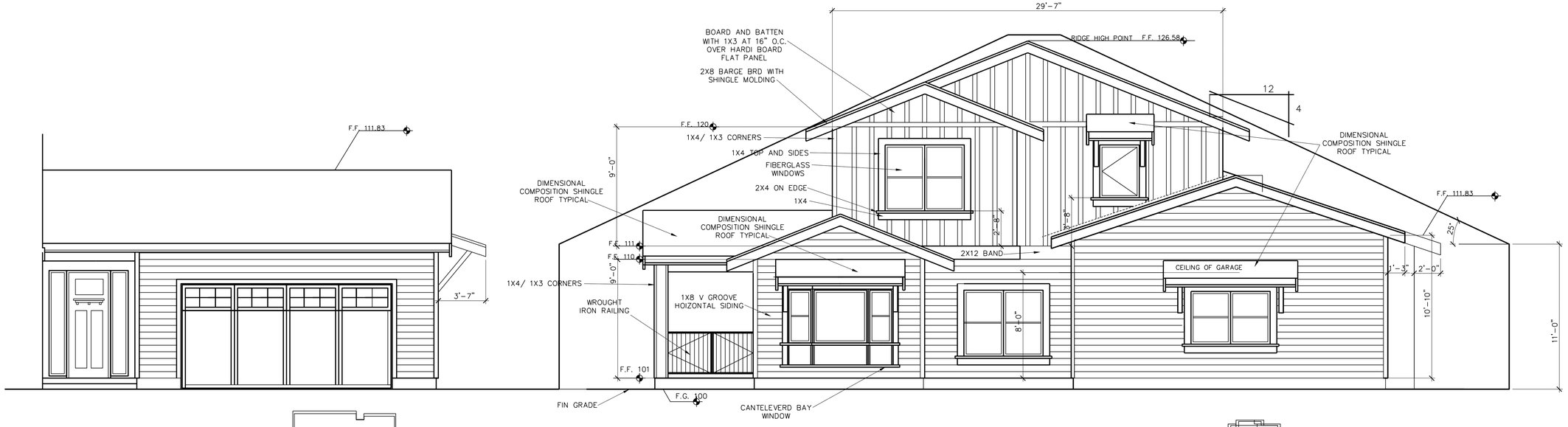
744 LINDEN AVE
LOS ALTOS, CA

Date:
Drawn: RH
Scale: 1/4=1'-0
Job:

5
SHT 1 OF

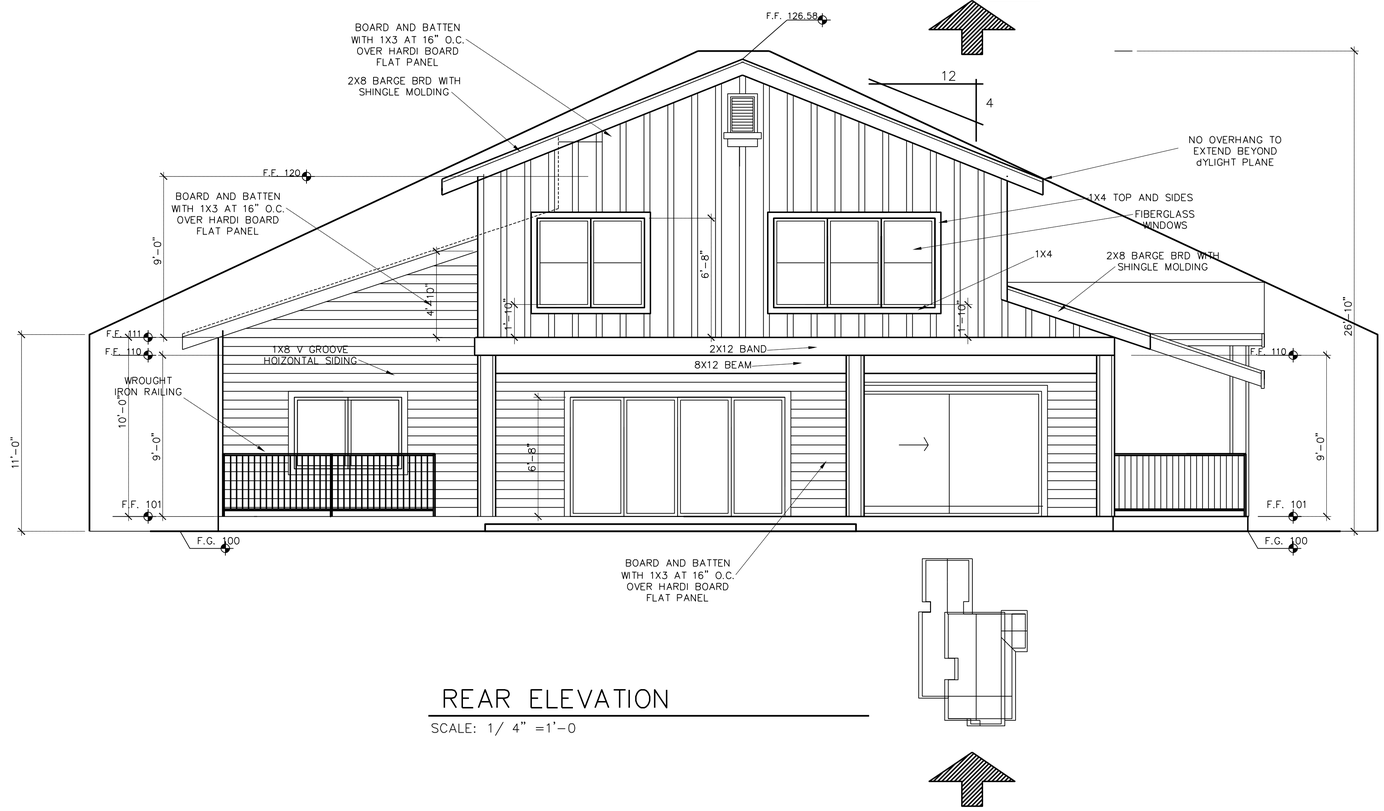


FRONT ENTRY ELEVATION

SCALE: 1/ 4" =1'-0

FRONT ELEVATION

SCALE: 1/ 4" =1'-0



REAR ELEVATION

SCALE: 1/ 4" =1'-0

REVISION	
	1

EXTERIOR ELEVATIONS

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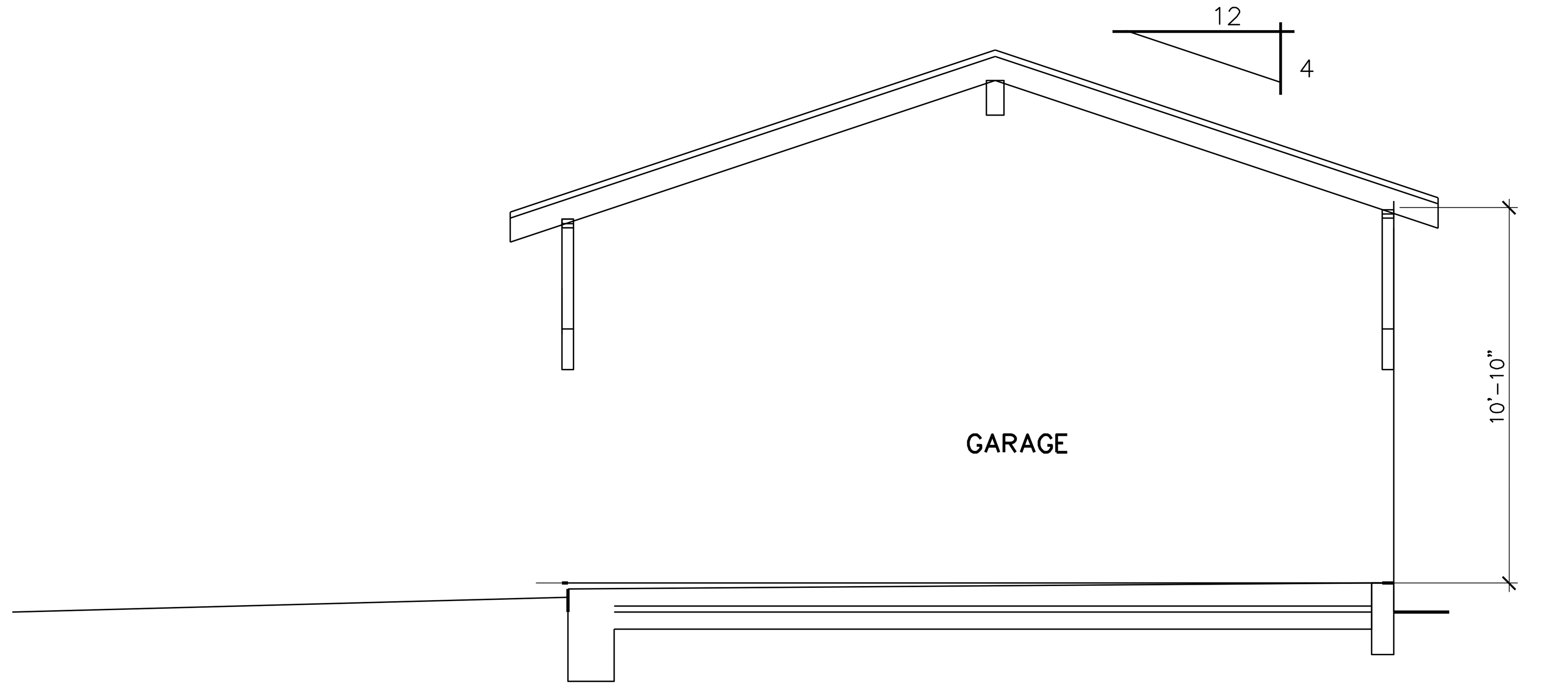
744 LINDEN AVE
LOS ALTOS, CA

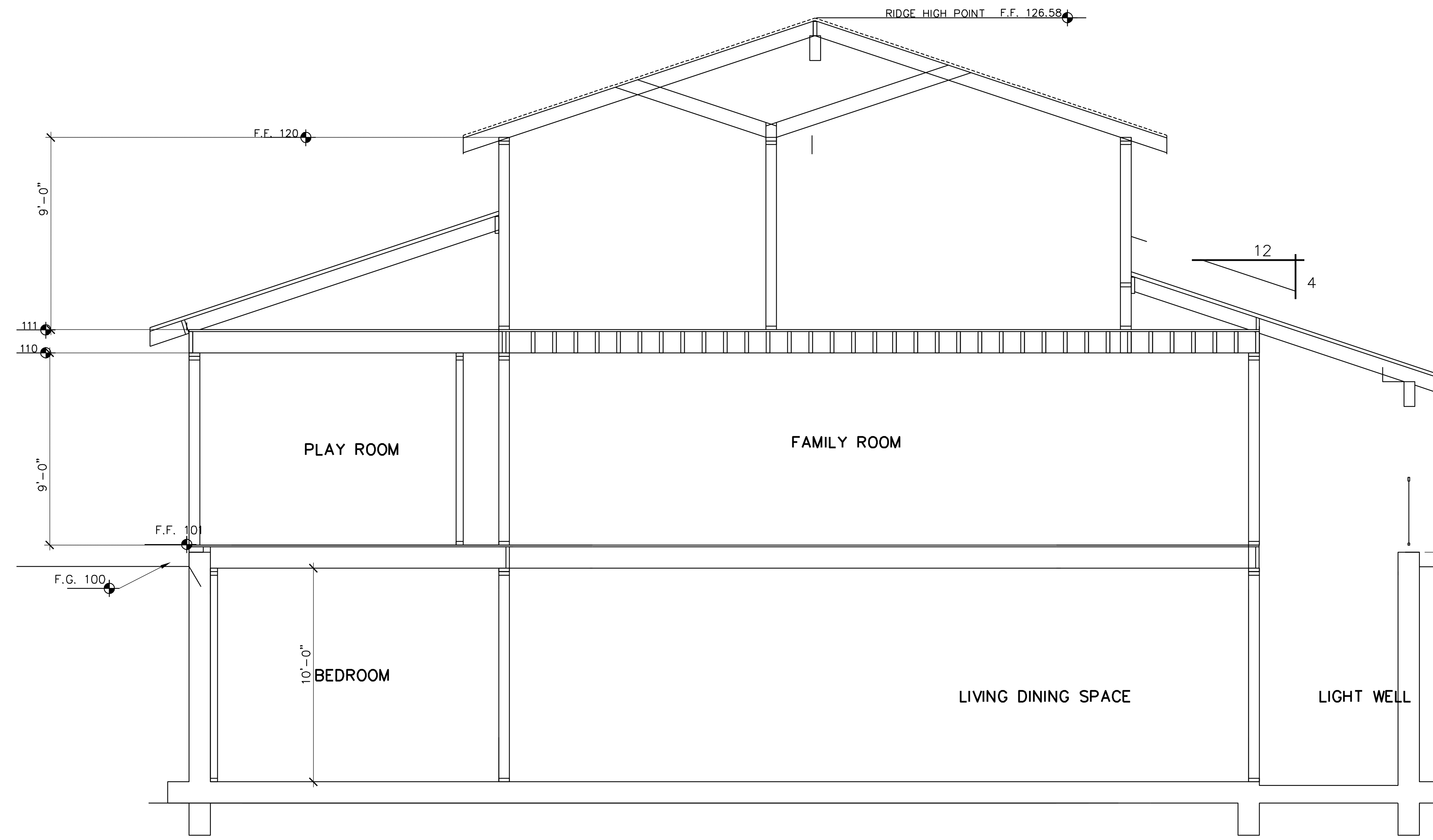
Date:
Drawn: RH
Scale: 1/4=1'-0
Job:

6
SHT 1 OF



SECTION C/7

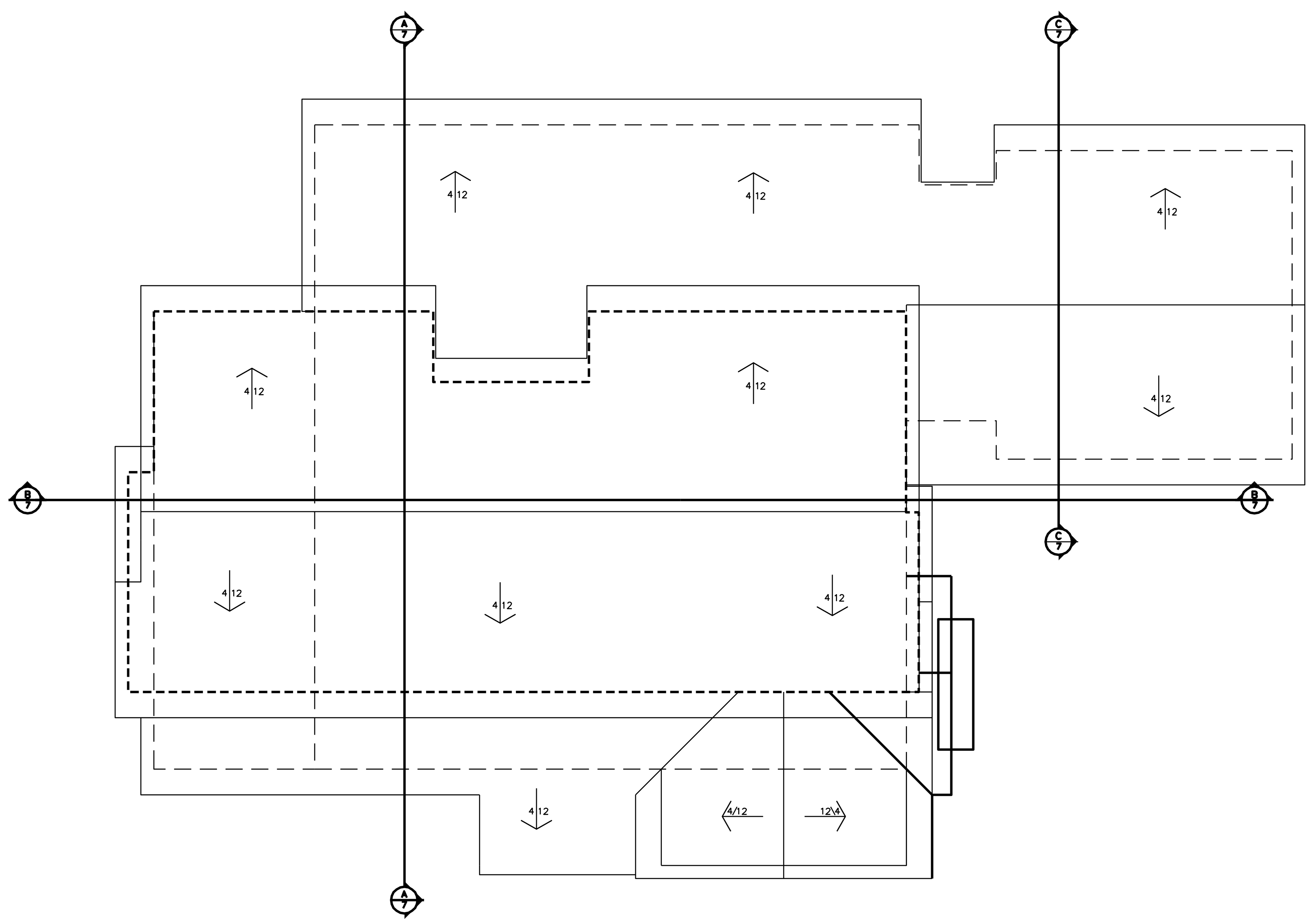
SCALE: 1/ 4" =1'-0



SECTION A/7

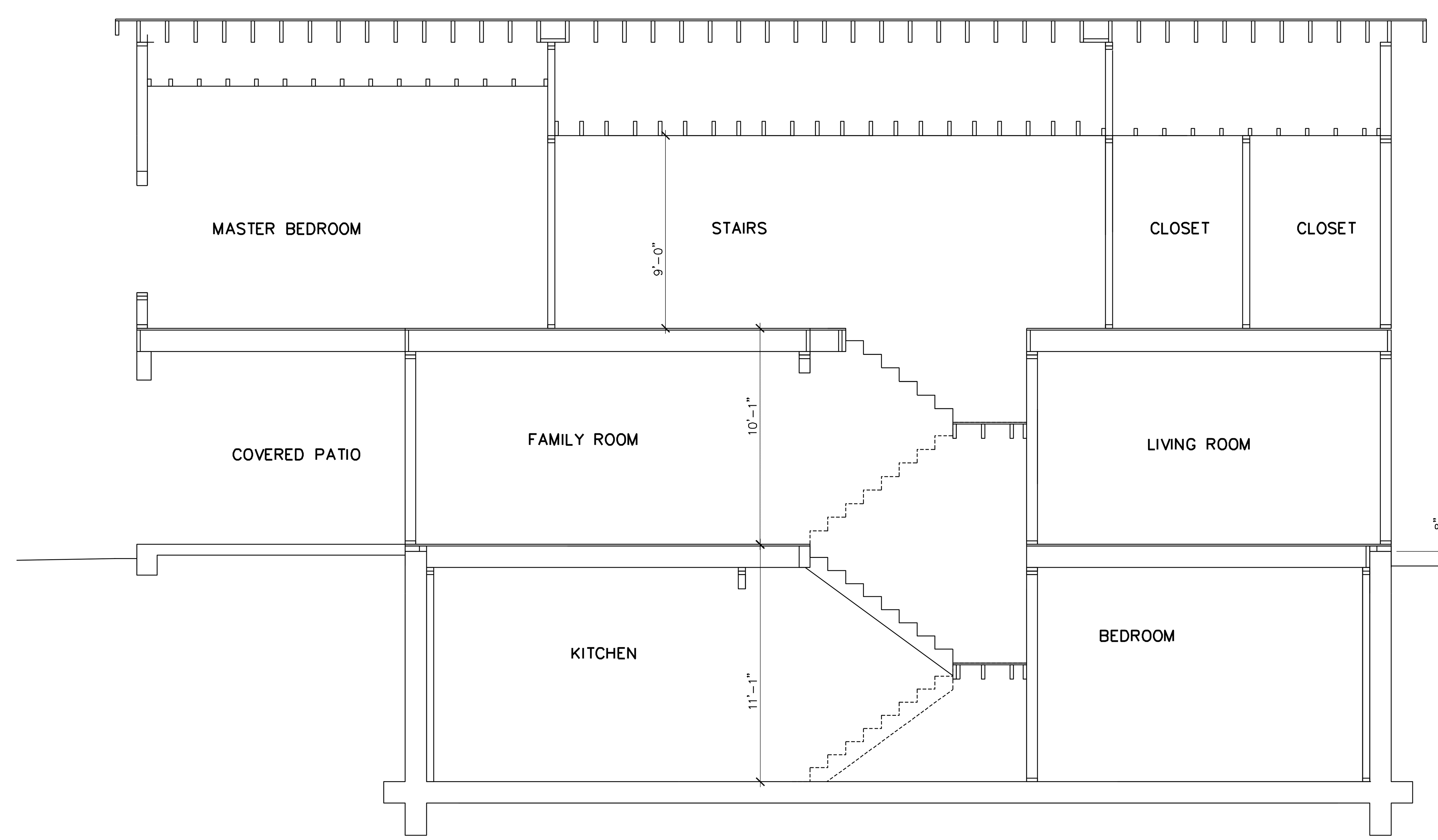
KITCHEN

SCALE: 1/ 4" =1'-0



ROOF PLAN

SCALE: 1/ 8" =1'-0



REVISION:

	1

ROOF PLAN
SECTIONS

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DRAFTING AND PLANNING, INC.
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ALHOFF RESIDENCE
JAMES AND ABBEY ALTHOFF
744 LINDEN AVE
LOS ALTOS, CA

Date:	
Drawn:	RH
Scale:	1/4=1'-0
Job:	

7

SHT 1 OF

REVISION	
	1

RENDERING

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ALHOFF RESIDENCE
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744 LINDEN AVE
LOS ALTOS, CA

Date:
Drawn: RH
Scale:
Job:

8
SHT 1 OF

GRADING AND DRAINAGE PLANS

NEW, SINGLE FAMILY RESIDENTIAL

744 LINDEN AVE., LOS ALTOS, CA 94022

APN: 167-21-031

ABBREVIATIONS

	DESCRIPTION		DESCRIPTION
AB	AGGREGATE BASE (CLASS AS NOTED)	JP	JOINT POLE
AC	ASPHALT CONCRETE	MON.	MONUMENT
AD	AREA DRAIN	OG	ORIGINAL GROUND
BC	BEGIN OF CURVE	PB	PULL BOX
BFP	BACK FLOW PREVENTER	PGEV	PG&E VAULT
BO	BLOW OFF	P_PL	PROPERTY LINE
BW	BACK OF WALK	PP	POWER POLE
BWAL	BLACK WALNUT TREE	PPP	PLASTIC PERFORATED PIPE
,CFF	GARAGE FINISH FLOOR (BACK)	PSE	PUBLIC SERVICE EASEMENT
℄L	CENTERLINE	PVC	POLYVINYL CHLORIDE
CLSW	CENTERLINE SWALE	R/W	RIGHT OF WAY
CO	CLEANOUT	RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE	SD	STORM DRAIN
CP	CONTROL POINT	SDMH	STORM DRAIN MANHOLE
DDW	DIRT DRIVEWAY	SS	SANITARY SEWER LINE
DI	DROP INLET	SSMH	SANITARY SEWER MANHOLE
DETAIL	DAYLIGHT	SW	SIDEWALK
ELCT	ELECTROLIER	TC	TOP OF CURB
EP	EDGE OF PAVEMENT ELEVATION	TOB	TOP OF BANK
EUC	EUCALYPTUS TREE	TOE	TOE OF SLOPE
EX	EXISTING	TF	TOP OF FOUNDATION
FF	FINISHED FLOOR	TP	TOP OF PIPE
FG	FINISH GRADE	UG	UNDERGROUND GAS
FH	FIRE HYDRANT	USS	UNDERGROUND SANITARY SEWER
FL	FLOW LINE	UST	UNDERGROUND STORM DRAIN
FNC	FENCE	UT	UNDERGROUND TELEPHONE
FOG	FOG LINE	UW	UNDERGROUND WATER
GB	GRADE BREAK	VCP	VITRIFIED CLAY PIPE
GFF	GARAGE FINISHED FLOOR (FRONT)	WL	WHITE LINE STRIPE
GUY	GUY WIRE	WLK	WALKWAY
HP	HIGH POINT	WM	WATER METER
IP	IRON PIPE	WV	WATER VALVE
LIP	LIP OF GUTTER	YL	YELLOW LINE STRIPE
C&G	CURB AND GUTTER		

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
F	F	FILL AREA LIMIT
C	C	CUT AREA LIMIT
102	102	CONTOUR
W	W	WATER LINE
SD	SD	STORM DRAIN PIPE (SOLID)
SS	SS	SANITARY SEWER PIPE
SUB	SUB	SUBDRAIN PIPE (PERFORATED)
OH e,T,TV	OH e,T,TV	OVERHEAD UTILITIES WITH POLE
G	G	GAS LINE
E	E	ELECTRIC LINE (UNDERGROUND)
JT	JT	JOINT TRENCH
SLV	SLV	STREET LIGHT VAULT
SSCO	SSCO	SANITARY SEWER CLEANOUT
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		ELECTROLIER
WM	WM	WATER METER
		TREE WITH TRUNK
x x	x x	6' WOODEN FENCE
102.23	102.23	SPOT ELEVATION
		TREE PROTECTION FENCE 5' TALL CHAIN LINK
		SWALE
		DIRECTION OF FLOW IN PIPE
		AREA DRAIN/ INLET
		OVERLAND RELEASE PATH
		GRADING DIRECTION
		(E) TREE TO BE REMOVE
		SPLASH BLOCK

LOCATION MAP
N.T.S.

SHEET INDEX:

EARTHWORK TABLE

	FILL (CY)	CUT (CY)	IMPORT (CY)	EXPORT (CY)
HOUSE/ BASEMENT	0	1032		
LIGHTWELL	0	145		
DRIVEWAY	0	42		
PORCH/ PATIO	0	4		
SITE	34	0		
TOTAL	34	1,223	0	1,189

NOTE:

1. EARTHWORK QUANTITIES ON THIS TABLE ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.

NOTE :

ANY DAMAGED RIGHT-OF-WAY INFRASTRUCTURES AND OTHERWISE DISPLACED CURB AND GUTTER SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE CITY ENGINEER OR HIS DESIGNEE, CONTRACTOR SHALL COORDINATE WITH PUBLIC WORKS DEPARTMENT AT (650) 947-2780.

DRAINAGE NOTES

1. Surface water shall be directed away from all buildings into drainage swales, gutters, storm drain inlets and drainage systems.
2. All roof down spouts shall discharge onto splash blocks and directed away from building.
3. On site storm drain lines shall consist of PVC-SCH 40 minimum or better.
4. Storm drain inlets shall be precast concrete, Christy U23 type or equivalent.

BASIS OF BEARINGS:

THE BEARING, EAST, OF THE CENTER LINE OF JAY STREET, AS SHOWN ON THAT CERTAIN MAP FILED IN THE OFFICE OF THE RECORDER OF SANTA CLARA COUNTY, STATE OF CALIFORNIA, IN BOOK 7 OF MAPS AT PAGE 49, WAS USED AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

BASIS OF ELEVATION:

TBM ELEV=100.00 (ASSUMED)

SURVEY MAP DISCLAIMER NOTE:

SMP ENGINEERS ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE TOPOGRAPHIC SURVEYING DEPICTED ON THIS PLAN SET. TOPOGRAPHIC SURVEYING MAP WAS PREPARED BY OTHERS AND FURNISHED TO SMP ENGINEERS BY THE OWNER.

NOTE:

PRIOR TO THE COMMENCEMENT OF ANY WORK DONE IN THE PUBLIC RIGHT-OF-WAY, A PERMIT TO OPEN STREET AND/OR AN ENCROACHMENT PERMIT WILL BE REQUIRED.

NOTE:

GRADING AND DRAINAGE PLANS SHALL BE REVIEWED AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.

GEOTECHNICAL ENGINEER OF RECORD

THIS PLAN HAS BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE INTENT AND PURPOSE OF THE GEOTECHNICAL REPORT

PREPARED BY _____ DATED _____

BY C.E.G. # _____ BY G.E. # _____

NOTICE TO CONTRACTORS

CONTRACTOR TO NOTIFY U.S.A. (UNDERGROUND SERVICE ALERT) AT 800-227-2600 A MINIMUM OF 2 WORKING DAYS BEFORE BEGINNING UNDER-GROUND WORK FOR VERIFICATION OF THE LOCATION AND DEPTH OF UNDERGROUND UTILITIES.

1-800-227-2600 CALL BEFORE YOU DIG U.S.A. UNDERGROUND SERVICE ALERT 1-800-227-2600

SMP ENGINEERS
CIVIL ENGINEERS

1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER:

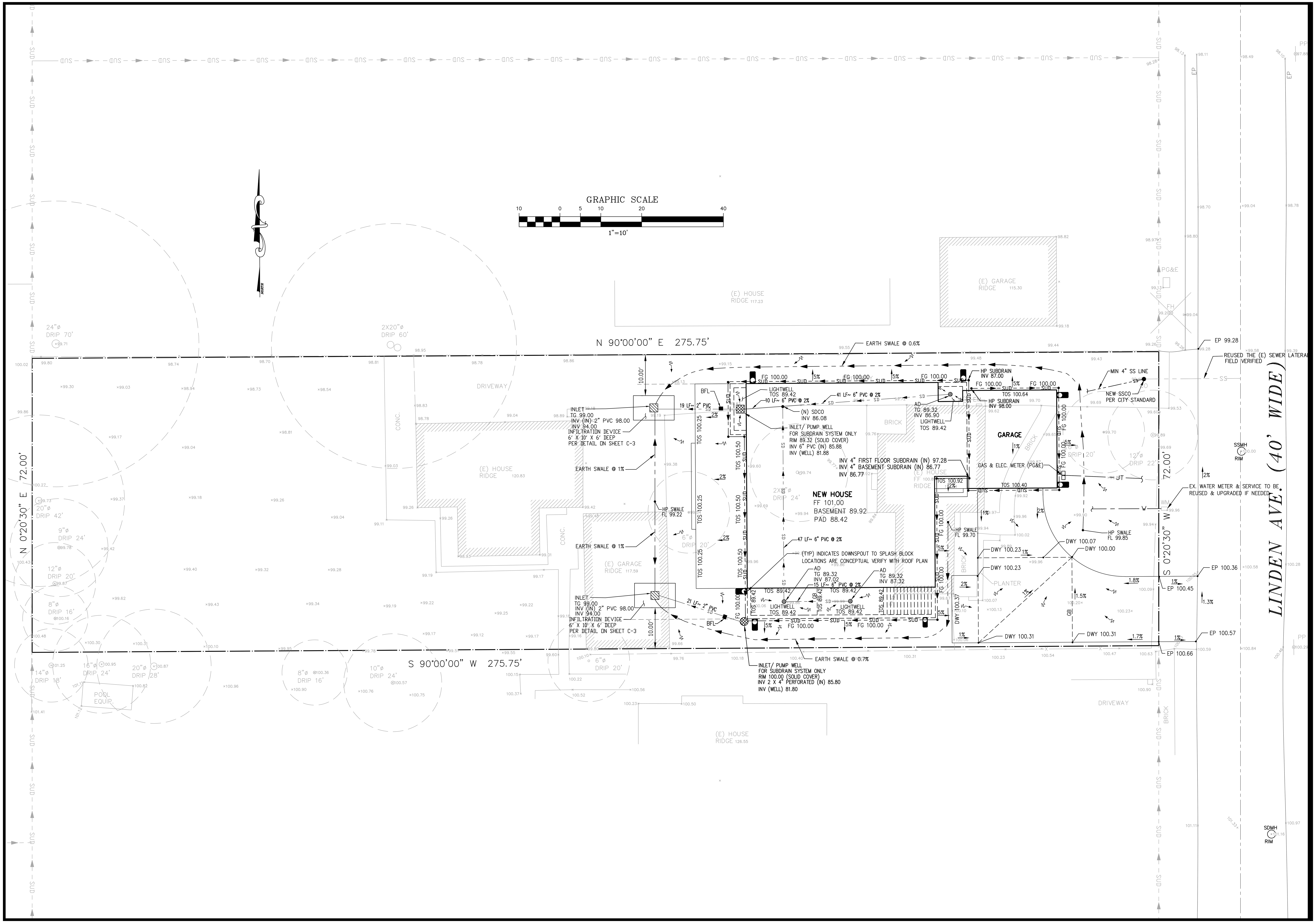
GRADING AND DRAINAGE PLANS
NEW SINGLE FAMILY RESIDENTIAL
744 LINDEN AVE, LOS ALTOS, CA 94022
APN: 167-21-031
COVER SHEET

Revisions:

REGISTERED PROFESSIONAL ENGINEER
SAEID RAZAVI
No. C52724
CIVIL
STATE OF CALIFORNIA

Date: 08-01-2019
Scale: NTS
Prepared by: S.P.
Checked by: S.R.
Job #: 219065

Sheet: 1 OF 5
C-1



SMP

ENGINEERS
CIVIL ENGINEERS

1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER:

GRADING AND DRAINAGE PLANS
NEW SINGLE FAMILY RESIDENTIAL
744 LINDEN AVE., LOS ALTOS, CA 94022
APN: 167-21-031

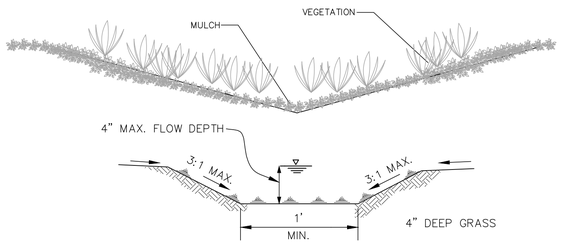
GRADING AND DRAINAGE PLAN

Revisions:

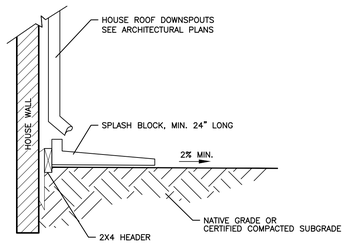
REGISTERED PROFESSIONAL ENGINEER
SAEID RAZAVI
No. C52724
CIVIL
STATE OF CALIFORNIA

Date: 08-01-2019
Scale: 1"=10'
Prepared by: S.P.
Checked by: S.R.
Job #: 219065

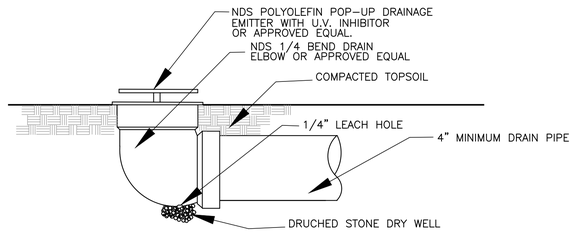
Sheet:
2 OF 5
C-2



EARTH SWALE DETAIL
N.T.S.



ROOF DOWNSPOUT/SPLASH BLOCK
N.T.S.



POP-UP DRAINAGE EMITTER
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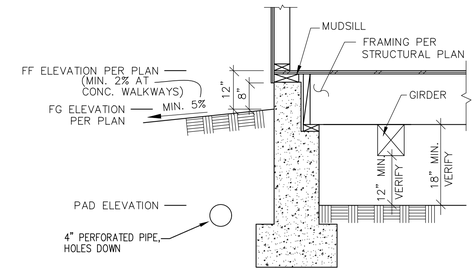
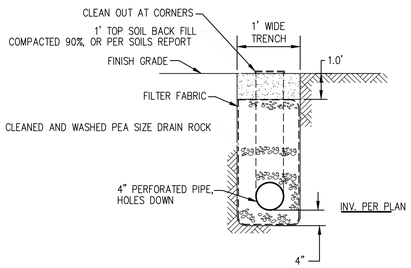
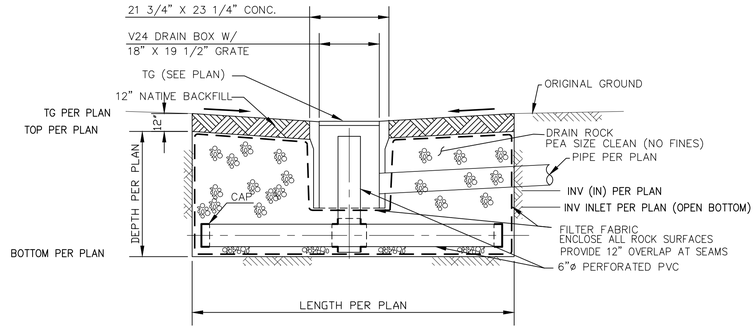


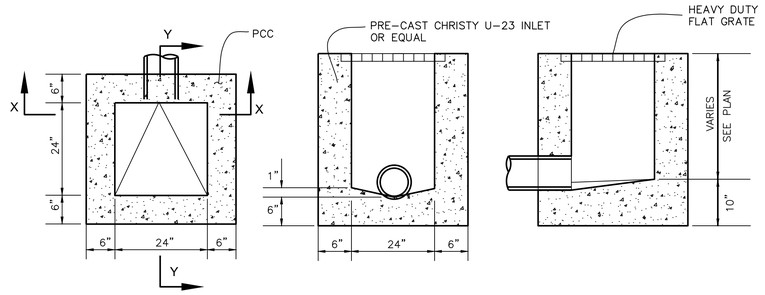
DROPPED FOUNDATION CONCEPTUAL DETAIL
N.T.S.



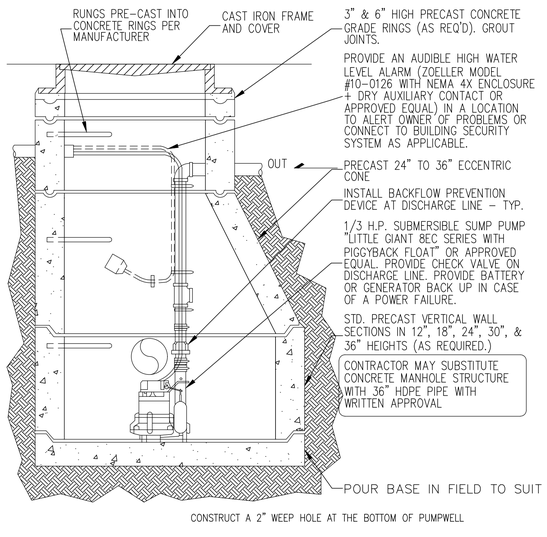
SUBDRAIN TRENCH DETAIL
ELEVATION VIEW- NTS



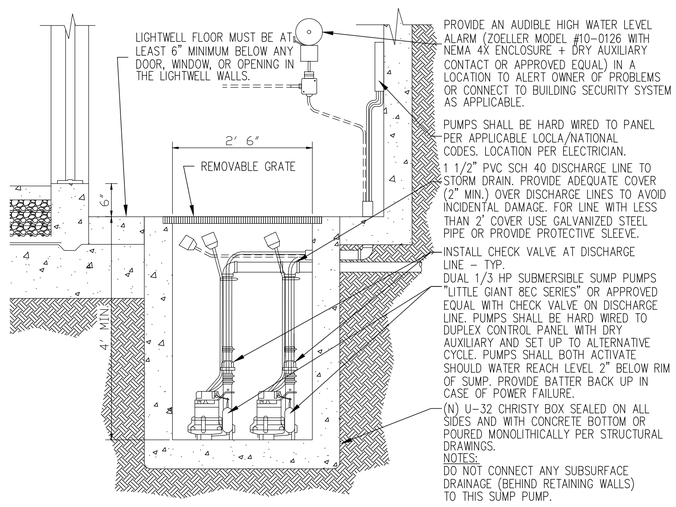
INFILTRATION DEVICE
ELEVATION VIEW- NTS



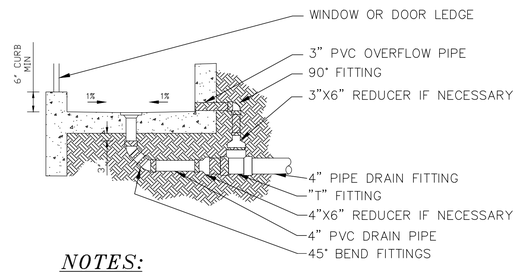
STORM DRAIN INLET
N.T.S.



PUMPWELL DETAIL FOR OVERFLOW & SUBDRAIN
N.T.S.



INLET/ PUMPWELL DETAIL FOR BASEMENT LIGHTWELL DRAIN
N.T.S.



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.

OVERFLOW FOR BASEMENT LIGHTWELL DRAIN
N.T.S.

PUMP NOTES:

1. HARD WIRE THE PUMPS TO PREVENT ANY UNPLUGGING.
2. PUMPS TO BE CONNECTED TO BACKUP GENERATORS OR BATTERIES TO PREVENT FLOODING IN CASE OF BLACKOUT.
3. PROVIDE BACK FLOW PREVENTOR VALVE FOR PUMP OUTLET.
4. PROVIDE RESERVE PUMP FOR EACH PUMP WELL.
5. PROVIDE FLOATING DEVICE, CONNECTED TO SOUND/ LIGHT ALARM, TO NOTIFY RESIDENTS OF POSSIBLE RISE OF WATER IN PUMPWELL.
6. PROVIDE TWO SEPARATE SYSTEM AND PUMP WELLS FOR: a) SUBDRAIN AND b) LIGHTWELL AREA DRAINS.

SMP
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CIVIL ENGINEERS
1534 CAROB LANE
LOS ALTOS, CA 94024
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DETAILS

Revisions:

REGISTERED PROFESSIONAL ENGINEER
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Date: 08-01-2019
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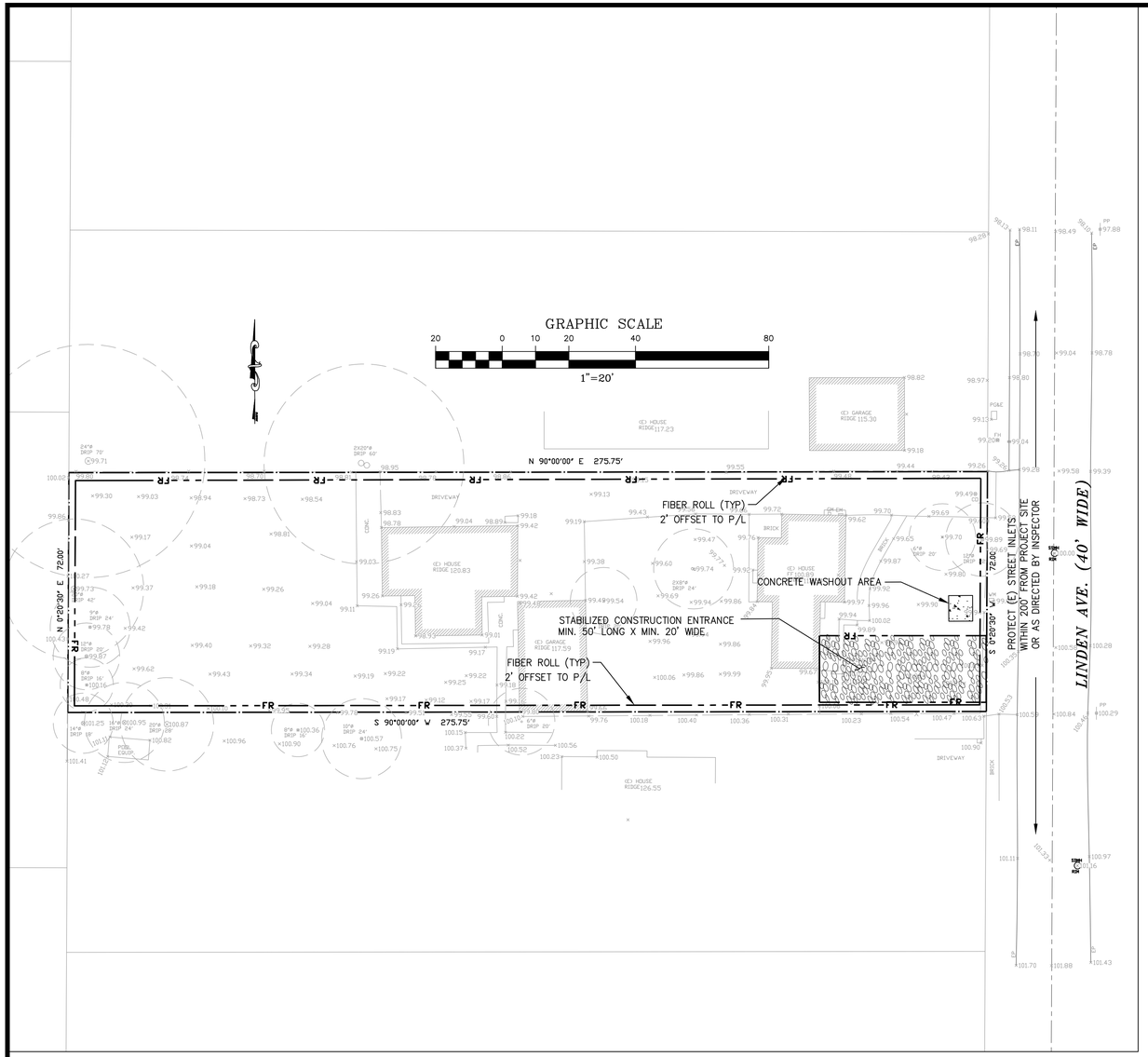
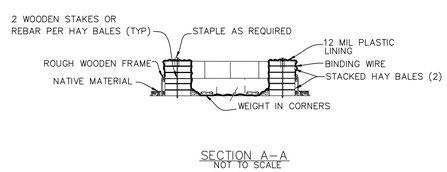
Sheet: 3 OF 5
C-3



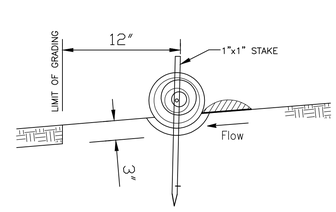
SITE PLAN
1"=20'

PLAN
NOT TO SCALE



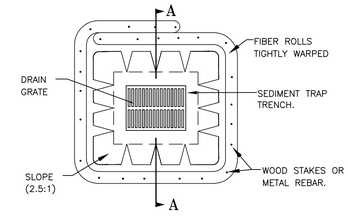
SECTION A-A
NOT TO SCALE

CONCRETE WASHOUT AREA
N.T.S.

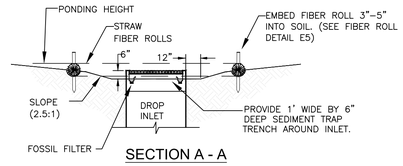


FIBER ROLL
N.T.S.

FIBER ROLL NOTES
1. Place fiber roll in key trench 3" deep and place excavated soil on uphill or flow side of the roll.
2. On slopes and hillsides, fiber rolls shall be abutted at the ends and not overlapped. Place alternate stakes on both sides of the roll, every 6'.
3. Install fiber roll 12" from limit of grading

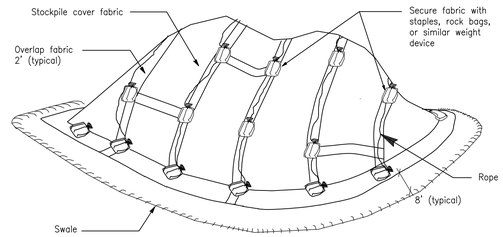


PLAN VIEW



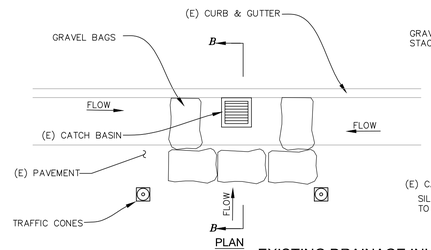
SECTION A - A

STORM INLET SEDIMENT TRAP-FIBER ROLLS
N.T.S.

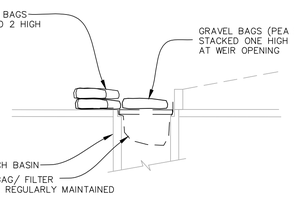


PERSPECTIVE

TEMPORARY COVER ON STOCK PILE
N.T.S.

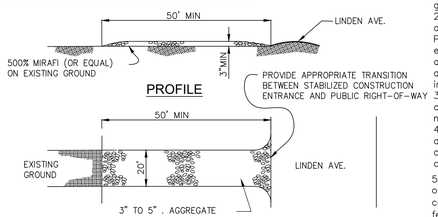


PLAN



SECTION B-B

EXISTING DRAINAGE INLET PROTECTION
N.T.S.



PROFILE

PLAN

Maintenance
– The entrance shall be maintained in a condition that will prevent tracking or flowing sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or clean out any measures used to trap sediment.
– All sediment spilled, dropped, washed, or tracked onto public rights-of-way shall be removed immediately.
– When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. This shall be done at an area stabilized with crushed stone, which drains into an approved sediment trap or sediment basin.

STABILIZED CONSTRUCTION ENTRANCE
(TO BE MAINTAINED)

NOTES:
1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 – 30 FT. LONG.

2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

4. FOSSIL FILTERS SHALL BE INCORPORATED IN ALL CATCH BASINS AND FIELD INLETS 24" AND LARGER AND SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS. FOSSIL FILTERS ARE AVAILABLE FROM KRISTAR ENTERPRISES INC., 422 LARKFIELD CENTER, SUITE 271, SANTA ROSA, CA 95403, PHONE (800) 579-8819.

EROSION AND SEDIMENT CONTROL NOTES AND MEASURES
1. The facilities shown on this Plan are designed to control Erosion and sediment during the rainy season, October 1st to April 30th. Facilities are to be operable prior to October 1 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. This plan covers only the first winter following grading with assumed site conditions as shown on the Erosion Control Plan. Prior to September 15, the completion of site improvement shall be evaluated and revisions made to this plan as necessary with the approval of the city engineer. Plans are to be resubmitted for city approval prior to September 1 of each subsequent year until site improvements are accepted by the city.
3. Construction entrances shall be installed prior to commencement of grading. All construction traffic entering onto the paved roads must cross the stabilized construction entranceways.
4. 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 city.
5. If hydroseeding is not used or or is not effectively 10/10, 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.
6. 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.
7. Lots with houses under construction will not be hydroseeded Erosion protection for each lot with a house under construction shall confirm to the Typical Lot Erosion Control Detail shown on this sheet.
8. 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. Notify the city representative of any field changes.
9. This plan is intended to be used for interim erosion and sediment control only and is not to be used for final elevations or permanent improvements.
10. Contractor shall be responsible for monitoring erosion and sediment control prior, during, and after storm events.
11. Reasonable care shall be taken when hauling any earth, sand, gravel, stone, debris, paper or any other substance over any public street, alley or other public place. Should any blow, spill, or track over and upon said public or adjacent private property, immediately remedy shall occur.
12. Sanitary facilities shall be maintained on the site.
10. 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 systems, including existing drainage swales and water courses.
13. Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.
14. Contractors shall provide dust control as required by the appropriate federal, state, and local agency requirements.
13. With the approval of the city inspector, erosion and sediment controls maybe removed after areas above them have been stabilized.

MAINTENANCE NOTES
1. Maintenance is to be performed as follows:
   A. Repair damages caused by soil erosion or construction 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 traps restored to its original dimensions when sediment has accumulated to a depth of one 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. All existing drainage inlets on St. George Lane within the limit of the project , shall be protected with sand bags during construction. See detail. Sand bag inlet protection shall be cleaned out whenever sediment depth is one half the height of one sand bag.
3. Existing concrete ditch sediment trap shall be cleaned out routinely during construction.

SMP
ENGINEERS
CIVIL ENGINEERS
1534 CAROB LANE
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GRADING AND DRAINAGE PLANS
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744 LINDEN AVE, LOS ALTOS, CA 94022
APN: 167-21-031
EROSION CONTROL PLAN

Revisions:

REGISTERED PROFESSIONAL ENGINEER
SAETO RAZAVI
No. C52724
CIVIL
STATE OF CALIFORNIA

Date: 08-01-2019
Scale: AS NOTED
Prepared by: S.P.
Checked by: S.R.
Job #: 219065

Sheet: 4 OF 5
C-4

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
- Driveways/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.

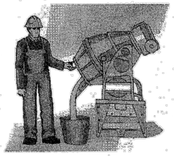
- ☐ Never wash excess material from exposed- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- ☐ Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with 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.

Material/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

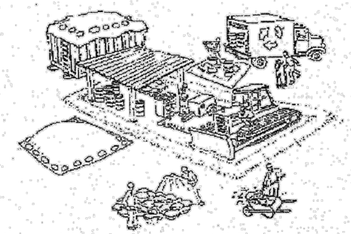
- ☐ If the water is clear, the pumping time is less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain.
- ☐ If the pumping time is more than 24 hours and the flow rate greater than 20 gpm, call your local wastewater treatment plant for 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 18056 R.C.E.		SCALE: N.T.S.
CHECKED BY: JIM GUSTAFSON	SHEET OF SHEETS		DRAWING NO:

SMP ENGINEERS CIVIL ENGINEERS

1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER:

GRADING AND DRAINAGE PLANS
NEW SINGLE FAMILY RESIDENTIAL
744 LINDEN AVE., LOS ALTOS, CA 94022
APN: 167-21-031
BEST MANAGEMENT PRACTICES

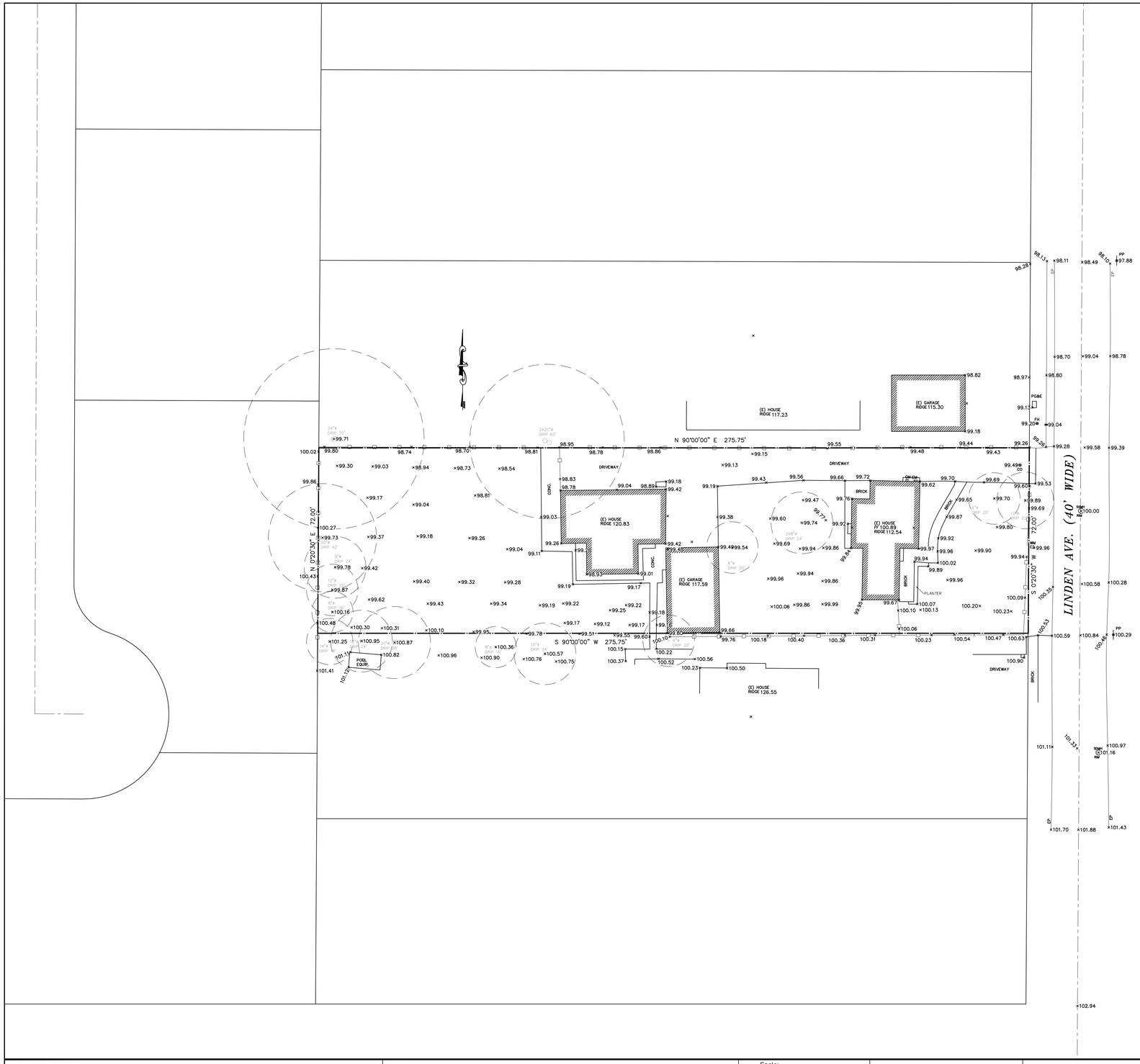
Revisions:

REGISTERED PROFESSIONAL ENGINEER — SAEED RAZAVI — No. C52724 — CIVIL — STATE OF CALIFORNIA

Date: 08-01-2019
Scale: 1"=10'
Prepared by: S.P.
Checked by: S.R.
Job #: 219065

Sheet: 5 OF 5

C-5



LEGEND

PROPERTY LINE	POWER POLE
EXISTING LOTS	FIRE HYDRANT
CENTERLINE	JOINT POLE
EASEMENT LINE	SURVEY MONUMENT FOUND
SANITARY SEWER LINE	TBM (ELEVATION)
STORM DRAIN LINE	WATER VALVE
OVERHEAD POWER LINE	
WOOD FENCE	

AC	ASPHALT
AD	AREA DRAIN
ANC	ANCHOR
BSBL	BUILDING SETBACK LINE
C&G	CURB AND GUTTER
CB	CATCH BASIN
CO	CLEAN OUT
DW	DRIVEWAY
EB	ELECTRIC BOX
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
GA	GUY ANCHOR
GM	GAS METER
GV	GAS VALVE
IV	IRRIGATION VALVE
LP	LIGHT POLE
MB	MAIL BOX
MH	UTILITY MANHOLE
P.U.E.	PUBLIC UTILITY EASEMENT
P	BRICK CONC PILLAR
PP	POWER POLE
(R)	RADIAL BEARING
SL	STREET LIGHT
SDMH	STORM DRAINAGE MANHOLE
SSMH	SANITARY SEWER MANHOLE
SSCO	SANITARY SEWER CLEAN OUT
TCD	THROUGH CURB DRAIN
TS	TRAFFIC SIGN
VG	VALLEY GUTTER
WM	WATER METER
WV	WATER VALVE

DISCLAIMER:

SMP ENGINEERS OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN.

NOTE:

THIS MAP REPRESENTS TOPOGRAPHY OF THE SURFACE FEATURES ONLY. UNLESS SPECIFIED ON THIS MAP, LOCATIONS OF THE UNDERGROUND UTILITIES ARE NEITHER INTENDED NOR IMPLIED. FOR THE LOCATIONS OF UNDERGROUND UTILITIES CALL "USA" (1-800-642-2444). SURFACE FEATURES ARE LOCATED BY MEANS OF A STATION AND OFFSET FROM THE CONTROL LINE.

BASIS OF BEARINGS:

THE BEARING S 89°57'00" E OF CENTERLINE OF W. PORTOLA AVE., AS SHOWN ON CERTAIN PARCEL MAP, FILED FOR RECORD IN BOOK 326 OF MAPS AT PAGE 2, WAS USED AS THE BASIS OF BEARINGS SHOWN HEREON.

PROJECT BENCHMARK:

TOP OF SANITARY SEWER MANHOLE LOCATED AT LINDEN AVE., IN FRONT OF PROPERTY EL:100.00

NOTES:

1. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMALS THEREOF.
2. THE GROSS AREA OF LAND OF RECORD IS 19853.50 SQ. FT. ±.
3. THE MAP WAS BASED ON A GRANT DEED DOC.# 167-21-031 BY NORTH AMERICAN TITLE CO. DATED 07/15/2005, RECORDED IN SANTA CLARA COUNTY.
4. ALL EXISTING BUILDINGS ARE WOOD.
5. FOR PRECISE SPECIES OF TREES A CERTIFIED ARBORIST SHALL BE CONSULTED.
6. THIS DRAWING REPRESENTS A TOPOGRAPHIC SURVEY PREPARED IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYORS ACT. THE PROPERTY LINES SHOWN HEREON ARE COMPILED FROM RECORD DATA AND REPRESENT THE BEST GRAPHICAL FIT BETWEEN RECORD INFORMATION AND THE TOPOGRAPHICAL FEATURES SURVEYED AND SHOULD NOT BE RELIED UPON OR USED FOR ANY OTHER PURPOSES. PURSUANT TO THE CLIENT'S DIRECTION A BOUNDARY SURVEY WAS NOT PERFORMED AT THIS TIME WHICH MAY HAVE DETERMINED THE ACTUAL PROPERTY LINES.

SCALE 1"= 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

744 LINDEN AVE.
LOS ALTOS, CA 94022
APN: 167-21-031

SMP ENGINEERS
CIVIL ENGINEERS—LAND SURVEYORS
1534 Carob Lane Los Altos, CA 94024
Tel. (650) 941-8055 Fax (650) 941-8755

Scale: 1" = 20'
Prepared by: S.S.
Checked by: S.R.
Date: 05/30/2019
Project No: 219065

PRELIMINARY BOUNDARY AND TOPOGRAPHIC SURVEY MAP

Sheet No: T-1

	REVISIONS	DESIGN BY	DESIGN DATE	CITY APPR.	APPR. DATE

CITY OF LOS ALTOS

Tree Protection During Construction

PROTECTED TREES DESIGNATED FOR PRESERVATION SHALL BE PROTECTED DURING DEVELOPMENT OF A PROPERTY BY COMPLIANCE WITH THE FOLLOWING, WHICH MAY BE MODIFIED BY THE PLANNING DIRECTOR:

A. PROTECTIVE FENCING SHALL BE INSTALLED NO CLOSER TO THE TRUNK THAN THE DRIPLINE, AND FAR ENOUGH FROM THE TRUNK TO PROTECT THE INTEGRITY OF THE TREE. THE FENCE SHALL BE A MINIMUM OF FIVE FEET IN HEIGHT AND SHALL BE SET SECURELY IN PLACE. THE FENCE SHALL BE OF A STURDY BUT OPEN MATERIAL (I.E., CHAINLINK), TO ALLOW VISIBILITY TO THE TRUNK FOR INSPECTIONS AND SAFETY. THERE SHALL BE NO STORAGE OF ANY KIND WITHIN THE PROTECTIVE FENCING. A CERTIFIED ARBORIST IS TO DETERMINE THE LOCATION OF THE FENCING AND IT IS TO BE INSTALLED PRIOR TO DEMOLITION OF THE EXISTING STRUCTURES OR ANY OTHER CONSTRUCTION ACTIVITY INCLUDING GRADING

B. THE EXISTING GRADE LEVEL AROUND A TREE SHALL NORMALLY BE MAINTAINED OUT TO THE DRIPLINE OF THE TREE. ALTERNATE GRADE LEVELS MAY BE APPROVED BY THE PLANNING DIRECTOR.

C. WHEN PAVING IS INSTALLED UNDER THE CANOPY OF EXISTING TREES THE CONSTRUCTION DETAILING IS TO BE APPROVED BY A CERTIFIED ARBORIST

D. TREES THAT HAVE BEEN DAMAGED BY CONSTRUCTION SHALL BE REPAIRED IN ACCORDANCE WITH ACCEPTED ARBORICULTURE METHODS.

E. NO SIGNS, WIRES, OR ANY OTHER OBJECT SHALL BE ATTACHED TO THE TREE.

F. WHEN PATHWAYS ARE REQUIRED UNDER THE CANOPIES OF EXISTING TREES IN ORDER TO BUILD THE STRUCTURES INSTALL 6 INCH DEEP COARSE BARK TO REDUCE COMPACTION OF SOIL. ALSO INSTALL THICK PLYWOOD ON TOP OF THE BARK IF POSSIBLE

Landscape Site Legend

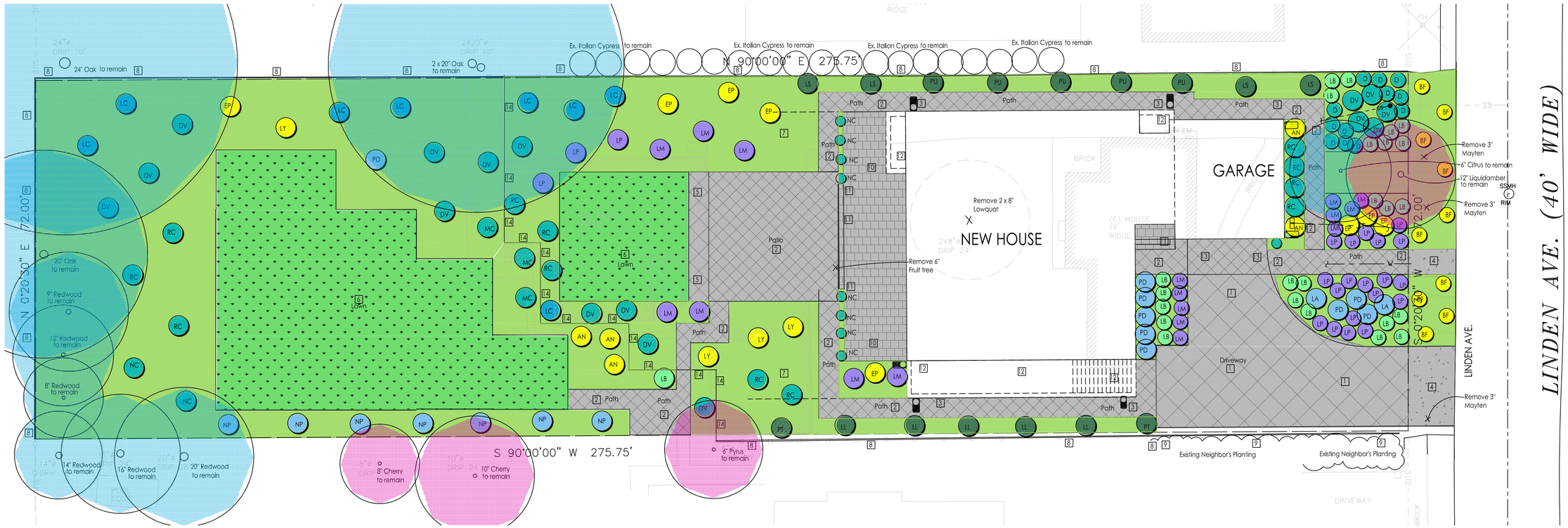
1. Driveway - Interlocking conc. pavers - pattern and color to be determined later by owner
2. Front walkways, rear walkways, rear patios - Interlocking conc. pavers - pattern dn color to be determined later by owner
3. Side walkways - poured in place conc. or interlocking conc. pavers - pattern and color to be determined later by owner
4. Paving in public ROW - use interlocking conc. pavers if allowed, otherwise use AC Paving or poured in place concrete as required by the city
5. Pervious interlocking pavers next to lawn
6. Lawn with 2x4 rough redwood header board - relatively level area
7. Infiltration Device - see civil grading and drainage plans
8. Existing wood fence to remain - repair if necessary
9. Existing fence to remain on neighbor's property
10. Covered patio
11. Step(s) - see grading and drainage plan
12. Light well - architectural plans
13. Path pavers in driveway - interlocking pavers to match other path pavers that contrast with but are complimentary to driveway pavers - use same subgrade treatment as other driveway pavers to survive weight of vehicles
14. Optional - edging of stones or wood as a sculptural element

Plant Legend

KEY	QTY	SIZE GALLONS	SPACING	WUCOLS RATING	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	MATURE WIDTH	GROWTH RATE/YEAR
TALL SCREEN SHRUBS (if required)									
LN	-	5	6' - 10'	LOW	Laurus nobilis	Grecian Laurel	15' - 40'	15' - 30'	12" -24"/yr
PT	-	5	6' - 10'	LOW	Pittosporum tobira	Tobira Pittosporum	10' - 25'	5' - 15'	12" -24"/yr
PU	-	5	6' - 10'	LOW	Pittosporum undulatum	Victorian Box	30' - 40'	30' - 40'	24" -36"/yr
LL	-	5	6' - 10'	LOW	Leptospermum laevigatum	Australian Tea Tree	10' - 30'	10' - 30'	24"/yr
SHRUBS									
MC	-	5	4' - 8'	LOW	Myrtus communis	Myrtle			
RC	-	5	4' - 8'	LOW	Rhaphiolepis minor or Clara	India Hawthorne			
GROUND COVERS									
BF	-	1	3' - 6'	LOW	Bulbine frutescens Yellow				
LY	-	1	4' - 8'	LOW	Lantana SpreadingYellow	Low Yellow Lantana			
SL	-	1	4' - 8'	LOW	Salvia leucantha	Mexican Sage			
LB	-	1	3' - 8'	LOW	Lomandra Breeze				
LC	-	1	3' - 5'	LOW	Loropetalum Razzleberry				
NC	-	1	3' - 5'	LOW	Nandina Gulf Stream	Heavenly Bamboo			
LP	-	1	3' - 5'	LOW	Limonium perezii	Sea Statice			
LM	-	1	3' - 5'	LOW	Lantana montevidensis	Purple Lantana			
D	-	1	2'-3'	LOW	Aeonium urbicum	Dinner Platter Succulent			
DV	-	1	5'-7'	LOW	Dietes irridioides - variegated	Fortnight Lily			
EP	-	1	5'-7'	LOW	Euryops pectinatis	Euryops Daisy			
LA	-	1	3'-6'	LOW	Lavandula - selected by owner	Lavender			
NP	-	1	3'-6'	LOW	Nepeta x faassenii	Catmint			
AN	-	1	3'-6'	LOW	Anigozanthus Bush Gold	Kangaroo Paws			
RO	-	1	3'-6'	LOW	Rosmarinus Collingwood Ingram	Medium Rosemary			
PD	-	1	3'-6'	LOW	Polygala x dalmaisiana	Sweet Pea Shrub			
LAWN	sod			HIGH	Turf Tall Fescue with 2x4 rough RWD headerboard at edge				

Plant quantities are for planning purposes only. Contractor to do own plant count and install all plants on plan

Plant quantities are for planning purposes only. Contractor to do own plant count.



"I have complied with the criteria of the Water Conservation in Landscaping Ordinance and applied them for the efficient use of water in the landscape design plan"
GregLewis
Gregory Lewis - Landscape Architect Lic. #2176 9-23-19

Landscape Site/Planting Plan

1"=10'-0"
0' 10' 20

Revision

GREGORY LEWIS LANDSCAPE ARCHITECT #2176
736 Park Way Santa Cruz, CA 95065 (831) 359-0960
lewislandscape@sbcglobal.net

LICENSED LANDSCAPE ARCHITECT GREGORY LEWIS No. 2176 GregLewis 4/30/2020 STATE OF CALIFORNIA

Single Family Residence
744 Linden Ave., Los Altos, CA
APN 167-21-031

Date 9/23/19
Scale As Noted
Drawn Greg
Job
Sheet L1
of

Leptospermum laevigatum
Australian Tea Tree

Leptospermum laevigatum
Australian Tea Tree

Pittosporum undulatum
Victorian Box

Pittosporum tobira
Japanese Cheesewood

Laurus nobilis
Sweet Bay

Lavandula
Lavender

Euryops pectinatis
Euryops Daisy

Lantana montevidensis
Low Purple Lantana

Nepeta
Catment

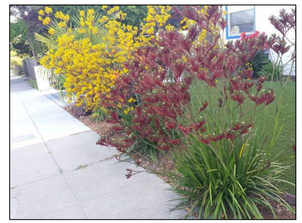
Bulbine frutescens

Nandina
Heavenly Bamboo

Dietes irridioides
Fortnight Lily

Loropetalum - maroon leaf

Salvia leucantha
Mexican Sage



Anigozanthos
Kangaroo Paws

Myrtus communis
Myrtle

Limonium perezii
Sea Statice

Lomandra Breeze

Aeonium Dinner Plate

Polygala x dalmaiseana
Sweet Pea Shrub

Lantana Spreading Yellow
Low Yellow Lantana

Rosmarinus Collingwood Ingram
Medium Height Rosemary

Rhaphiolepis minor
India Hawthorne

Plant Photos

Revision

GREGORY LEWIS LANDSCAPE ARCHITECT #2176
736 Park Way Santa Cruz, CA 95065 (831) 359-0980
lewislandscape@sbcglobal.net

LICENSED LANDSCAPE ARCHITECT
GREGORY LEWIS
No. 2176
GregLewis
4/30/2020
RENEWAL
STATE OF CALIFORNIA

Single Family Residence
744 Linden Ave., Los Altos, CA
APN 167-21-031

Date 8/22/19
Scale As Noted
Drawn Greg
Job
Sheet L2
of

WATER EFFICIENT LANDSCAPE WORKSHEET

Date: 9/23/2019
Project Single Family Residence
Address: 744 Linden Ave., Los Altos

Total Planted Area (sq.ft.) 12,004

Reference Evapotranspiration (Eto): 43 Palo Alto/Los Altos

HYDRO ZONE NO.	VALVES	HYDRO ZONE DESC.	Plant Factor PF	Irrig. Method	Irrig. Efficiency IE	ETAF PF/IE	LDSCP AREA Square Feet	ETAF x Area	Estimated Total Water Use (Gal.)
Regular Landscape Areas									
1	1	Drip,low water,sun,shrub	0.25	Drip	0.81	0.3086	8,511	2626.85	70,032
2	1	Spry,high water lawn 20'	0.8	Spray	0.75	1.0667	2,000	2133.33	56,875
3	1	Spry,high water lawn 15"	0.8	Spray	0.75	1.0667	963	1027.20	27,385
4	1	Drip med water, trees	0.5	Drip	0.81	0.6173	139	85.80	2,287
5	1	Drip low water shade	0.25	Drip	0.81	0.3086	391	120.68	3,217
6									
7									
8									
						Totals	12,004	5,994	159,796
Special Landscape Areas									
						1	0		
						1			
						1			
						Totals	0		0
								ETWU Total	159,796
								Maximum Allowed Water Allowance (MAWA)	176,015

Residential ETAF for MAWA calc. 0.55

MAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	5,994
Total Area	12,004
Average ETAF	0.50

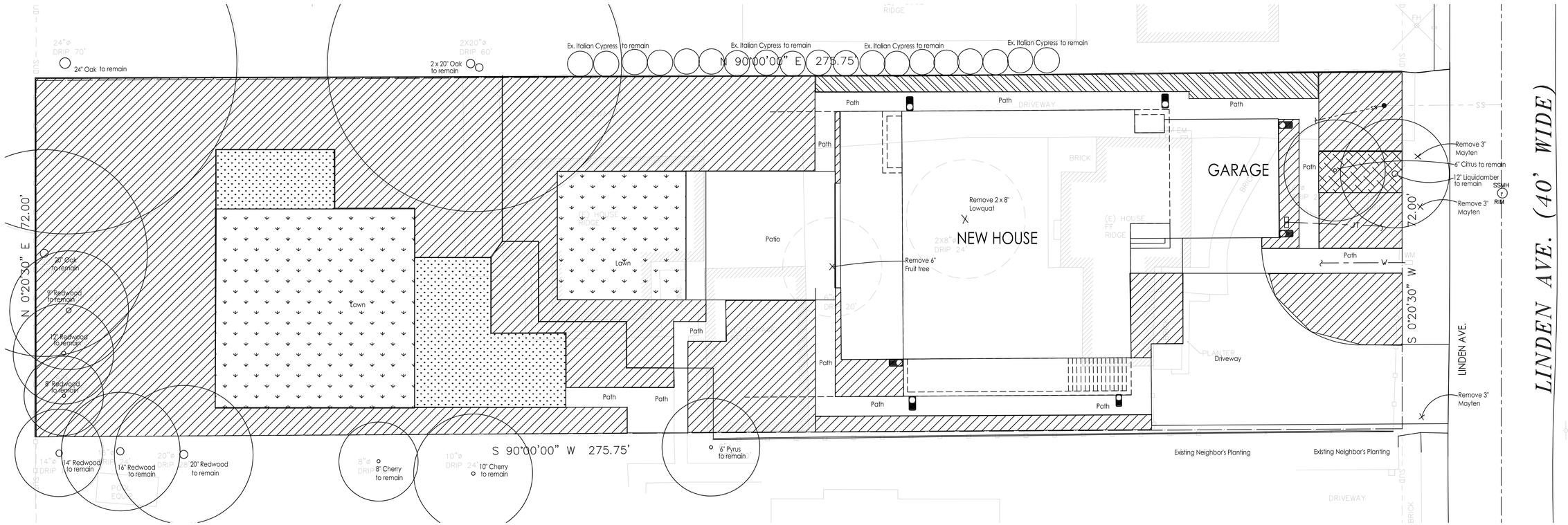
All Lanscape Areas

Total ETAF x Area	5,994
Total Area	12,004
Sitewide ETAF	0.50

Average total ETAF must be .55 or less for residential

Hydrozone Table

KEY		HYDROZONE DESCRIPTION	ZONE or VALVE	WATER USE RATING	IRRIG. METHOD	AREA SQ. FT.	PERCENT of LANDSCAPE AREA
	1	Drip, low water, sun, shrubs	1	Low	Drip	8511	71 %
	2	Spray 20' ,high water lawn	2	High	Spray 20'	2000	17 %
	3	Spray 15',high water lawn	3	High	Drip	963	8 %
	4	Drip, med water, front trees	4	Med	Drip	139	1 %
	5	Drip, low water, shade, shrubs	5	Low	Drip	391	3 %
						12,004	100 %



Hydrozone Plan

1"=10'-0"
0' 10' 20

Revision

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LICENSED LANDSCAPE ARCHITECT GREGORY LEWIS No. 2176 Greg Lewis 7/30/2020 7/23/19 STATE OF CALIFORNIA

Single Family Residence

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