

# Barbour Chu Addition: 933 Lakeview Way

# Barbour Chu Addition

## 933 Lakeview Way, San Mateo County, CA

### APN 057-270-730

#### Project Team

**Owners:**  
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#### Abbreviations

A.B.	ANCHOR BOLT	JT.	JOINT
A.F.F.	ABOVE FINISHED FLOOR	LB. OR #	FOUND OR NUMBER
ADDL.	ADDITIONAL	LNG.	LONG OR LENGTH
AGG.	AGGREGATE	L.S.L.	TIMBER STRAND
ALT.	ALTERNATE	L.T.M.T. OR LIV.	LIGHTWEIGHT
ARCH.	ARCHITECT OR ARCHITECTURAL	L.V.L.	LAMINATED VENEER LUMBER
B.F.F.	BELOW FINISHED FLOOR	MAX.	MAXIMUM
BEDRM.	BEDROOM	MB.	MACHINE BOLT
BLK.	BLOCK	M.E.P.	MECHANICAL ELECTRICAL AND PLUMBING
BLKG.	BLOCKING	MFR. OR MANU.	MANUFACTURER
BM.	BEAM	MIN.	MINIMUM
BOT.	BOTTOM	MICROLLAM.	MICROLLAM
BYPN.	BETWEEN	MSTR.	MASTER
CJ.	CONTROL JOINT	NEW	NEW
CMU	CONCRETE MASONRY UNITS	NOT IN CONTRACT	NOT IN CONTRACT
CALCS.	CALCULATIONS	NOT TO SCALE	NOT TO SCALE
CLG.	CEILING	OV.	OVER
CLR.	CLEAR OR CLEARANCE	O.C.	ON CENTER
COL.	COLUMN	O.P.T.	OPTIONAL
CONC.	CONCRETE	P.S.F.	POUNDS PER SQUARE FOOT
CONT.	CONTINUATION OR CONTINUOUS	PSL	PARALLAM
CONTR.	CONTRACTOR	P.T.	PRESSURE TREATED
COR.	CORNER	PAR.	PARALLEL
D.F.	DOUGLAS FIR	PERF.	PERFORATED
DL.	DEAD LOAD	PERP.	PERPENDICULAR
D.S.	DOWNSPOUT	PL.HT.	PLATE HEIGHT
DBL.	DOUBLE	PLYND. OR PLY.	PLYWOOD
DET.	DETAIL	PR.	PAIR
DIA. OR C.	DIAMETER	R.	RISER
DIM.	DIMENSION	RECOM. OR REC.	RECOMMENDATIONS
DN.	DOWN	REINF.	REINFORCING
(E)	EXISTING	REQD.	REQUIRED
E.J.	EXPANSION JOINT	REBAR.	REINFORCING BAR(S)
ELEV.	ELEVATION	R.J.	ROOF JOIST
EN.	EDGE NAIL	RM.	ROOM
EA.	EACH	RR.	ROOF RAFTER
E.S.	EACH SIDE	RT.	ROOF TRUSS
EQ.	EQUAL	RWD.	REDWOOD
E.M.	EACH WAY	S.C.D.	SEE CIVIL DRAWINGS
EXT.	EXTERIOR	S.L.D.	SEE LANDSCAPE DRAWINGS
F.F.	FINISHED FLOOR	S.S.D.	SEE STRUCTURAL DRAWINGS
F.J.	FLOOR JOIST	SCHED.	SCHEDULE
FL.	FLOUORESCENT	S.O.S.	SLAB ON GRADE
FLR.	FLOOR	SN.	SHEARNALL
FS.	FAR SIDE	T.	TREAD
FOUND. OR FND.	FOUNDATION	TOFF.	TOP OF FINISH FLOOR
FP.	FIREPLACE	TOH.	TOP OF HARDSCAPE
FT.	FLOOR TRUSS	TOGB.	TOP OF GRADE BEAM
FTG.	FOOTING	T.O.P.	TOP OF PARAPET
G.S.M.	GALVANIZED SHEET METAL	T.O.R.S.	TOP OF ROOF SHEATHING
GA.	GANGE	T.O.S.F.	TOP OF SUBFLOOR
GALV.	GALVANIZED	T/P.	TOP PLATE
GLU-LAM. GLB.	GLUE LAMINATED BEAM	TYP.	TYPICAL
GYP. BD.	GYPSON BOARD	U.O.N.	UNLESS OTHERWISE NOTED
HD.	HOLDDOWN	VERT.	VERTICAL
HORIZ.	HORIZONTAL	VF.	VERIFY IN FIELD
HDR.	HEADER	VVO.	VERIFY WITH OWNER
HGR.	HANGER	W.	WITH
INFO.	INFORMATION	WD.	WOOD
INSUL.	INSULATION OR INSULATED	WP.	WATERPROOF
INT.	INTERIOR	WRB.	WEATHER RESISTIVE BARRIER
INTER.	INTERSECTION	WWM.	WELDED WIRE MESH

#### General Notes

- ALL CONSTRUCTION SHALL EXCEED THE LATEST EDITION OF CODES ADOPTED BY THE LOCAL GOVERNING AGENCIES. THESE SHALL INCLUDE:  
  
2019 CALIFORNIA BUILDING CODE, 2019 CALIFORNIA RESIDENTIAL CODE, 2019 CALIFORNIA ELECTRICAL CODE, 2019 CALIFORNIA PLUMBING CODE, 2019 CALIFORNIA MECHANICAL CODE, 2019 CALIFORNIA FIRE CODE, 2019 CALIFORNIA GREEN BUILDING CODE, 2019 CALIFORNIA ENERGY CODE AND ALL OTHER HEALTH AND SAFETY CODES, ORDINANCES AND REQUIREMENTS ADOPTED BY GOVERNING AGENCIES.
- THESE PLANS ARE FOR GENERAL CONSTRUCTION PURPOSES ONLY. THEY ARE NOT EXHAUSTIVELY DETAILED NOR FULLY SPECIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SELECT, VERIFY, RESOLVE AND INSTALL ALL MATERIALS AND EQUIPMENT. ANY OR PART OF SYSTEMS, MATERIALS, CONNECTIONS, DETAILS, WATERPROOFING, FINISHES, FIXTURES, ETC... ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROPERLY VERIFY AND INSTALL.
- THE ARCHITECT WILL NOT BE OBSERVING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE QUALITY CONTROL AND CONSTRUCTION STANDARDS FOR THIS PROJECT.
- A CLASS A ROOF IS REQUIRED TO MEET THE REQUIREMENTS OF THE FIRE SEVERITY ZONE.
- LOT IS LOCATED IN VERY HIGH SRA (STATE RESPONSIBILITY AREA) OF WILDLAND URBAN INTERFACE (WUI). ALL APPLICABLE WUI REQUIREMENTS PER CRC 337 (2019) WILL BE MET FOR CONSTRUCTION.
- ALL BUILDING MATERIALS AND ASPECTS MUST MEET REQUIREMENTS OF CALIFIRE TESTED & APPROVED BUILDING MATERIALS AT:  
[HTTPS://OSFM.FIRE.CA.GOV/DIVISIONS/FIRE-ENGINEERING-AND-INVESTIGATIONS/BUILDING-MATERIALS-LISTING/BML-SEARCH-BUILDING-MATERIALS-LISTING/](https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/bml-search-building-materials-listing/)

#### Description of Application

- SCOPE OF WORK CONSISTS OF:
- TWO STORY ADDITION TO A SINGLE STORY RESIDENCE AT THE REAR OF THE EXISTING HOUSE ON A DOWNSLOPING LOT.
  - REMOVAL OF A 16" DIAMETER ELM TREE
  - SITE RETAINING WALLS WITH 3' VISIBLE HEIGHT AND CONCRETE PATIOS

#### Building & Lot Data

LOT SIZE	21,819 S.F.
ZONING	RH /DR
MAX ALLOWABLE COVERED FLOOR AREA (30%)	6,546 S.F.
MAX ALLOWABLE SITE COVERAGE (25%)	5,455 S.F.

#### Floor Area Calculations

EXISTING RESIDENCE FLOOR AREA	
FIRST FLOOR	2,152 S.F.
FRONT PORCH	28 S.F.
REAR PORCHES	86 S.F.
GARAGE	521 S.F.
TOTAL EXISTING FLOOR AREA	2,787 S.F.
EXISTING FLOOR AREA RATIO	12.71%

PROPOSED ADDITION FLOOR AREAS:

PROPOSED ADDITION FLOOR AREA =	1,123 S.F.
PROPOSED EXISTING+ADDITION TOTAL FLOOR AREA: 2,787 + 1,123 =	4,510 S.F.
PROPOSED TOTAL FLOOR AREA RATIO:	20.67%

#### Lot Coverage Calculations

EXISTING RESIDENCE LOT COVERAGE	
BUILDING FOOTPRINT : FIRST FLOOR LIVING, GARAGE, FRONT PORCH & REAR PORCHES	2,787 S.F.
TOTAL EXISTING LOT COVERAGE	2,787 S.F.
EXISTING LOT COVERAGE RATIO	12.71%

PROPOSED ADDITION LOT COVERAGE:

ADDITION FOOTPRINT	868 S.F.
METAL AWNING	108 S.F.
PATIOS #18" HEIGHT - NA	0 S.F.
PROPOSED ADDITION LOT COVERAGE	976 S.F.

PROPOSED (EXISTING & ADDITION) TOTAL LOT COVERAGE: 2,787 + 976 =

PROPOSED TOTAL SITE COVERAGE RATIO:	3,763 S.F. 17.25%
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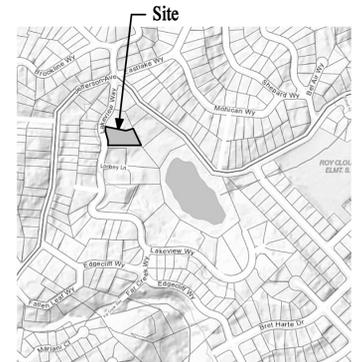
#### Landscaping Information

EXISTING LANDSCAPING TO BE REMOVED	NONE
LANDSCAPING TO BE REHABILITATED	NONE
NEW LANDSCAPING PROPOSED	NONE

#### Sheet Index

CS	Cover Sheet
TP1	Tree Protection Plan
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A6	Proposed Upper Floor Site Plan
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A11	Proposed Elevations
A12	Proposed Elevations
A13	Sections
A14	Upper Floor Proposed Exterior Lighting Plan
A15	Lower Floor Proposed Exterior Lighting Plan
C-1	Boundary & Topographic Survey Plan
C-2	Preliminary Grading & Drainage Plan
C-3	Erosion & Sedimentation Control Plan
C-4	Civil Details
C-5	Construction Best Management Practices Plan

#### Vicinity Map



#### REVISIONS

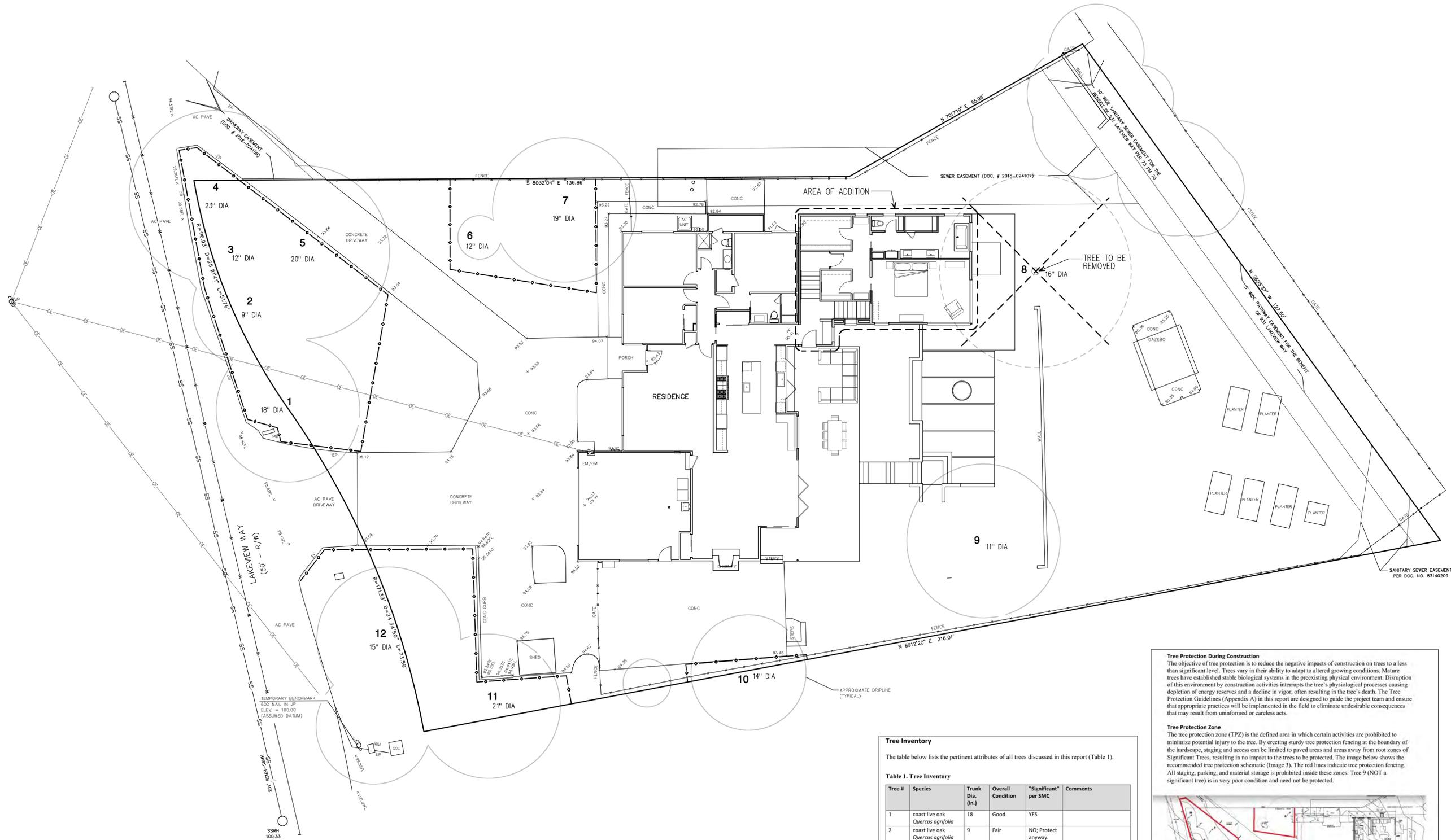
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#### Cover Sheet

Sheet

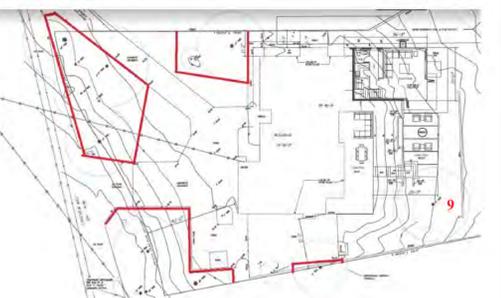
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**Tree Protection During Construction**  
The objective of tree protection is to reduce the negative impacts of construction on trees to a less than significant level. Trees vary in their ability to adapt to altered growing conditions. Mature trees have established stable biological systems in the preexisting physical environment. Disruption of this environment by construction activities interrupts the tree's physiological processes causing depletion of energy reserves and a decline in vigor, often resulting in the tree's death. The Tree Protection Guidelines (Appendix A) in this report are designed to guide the project team and ensure that appropriate practices will be implemented in the field to eliminate undesirable consequences that may result from uninformed or careless acts.

**Tree Protection Zone**  
The tree protection zone (TPZ) is the defined area in which certain activities are prohibited to minimize potential injury to the tree. By erecting sturdy tree protection fencing at the boundary of the landscape, staging and access can be limited to paved areas and areas away from root zones of Significant Trees, resulting in no impact to the trees to be protected. The image below shows the recommended tree protection schematic (Image 3). The red lines indicate tree protection fencing. All staging, parking, and material storage is prohibited inside these zones. Tree 9 (NOT a significant tree) is in very poor condition and need not be protected.



**Tree Inventory**

The table below lists the pertinent attributes of all trees discussed in this report (Table 1).

**Table 1. Tree Inventory**

Tree #	Species	Trunk Dia. (in.)	Overall Condition	"Significant" per SMC	Comments
1	coast live oak <i>Quercus agrifolia</i>	18	Good	YES	
2	coast live oak <i>Quercus agrifolia</i>	9	Fair	NO, Protect anyway.	
3	coast live oak <i>Quercus agrifolia</i>	12	Fair	YES	
4	elm <i>Ulmus sp.</i>	23	Good	YES	
5	coast live oak <i>Quercus agrifolia</i>	20	Good	YES	
6	coast live oak <i>Quercus agrifolia</i>	12	Fair	YES	Previously failed tree
7	coast live oak <i>Quercus agrifolia</i>	19	Fair	YES	
8	Chinese elm <i>Ulmus parvifolia</i>	16	Fair	YES	REMOVE; Lean; too close to proposed improvements;
9	locust <i>Gleditsia sp.</i>	11	Poor	NO	
10	black acacia <i>Acacia melanoxylon</i>	14	Poor	YES	Boundary tree; topped
11	coast live oak <i>Quercus agrifolia</i>	21	Good	YES	Boundary tree
12	black acacia <i>Acacia melanoxylon</i>	15	Poor	YES	

**LEGEND**

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SITE NOTES

1. THE SITE PLAN IS NOT A SURVEY AND IS BASED ON INFORMATION PROVIDED BY THE SURVEYOR, MACLEOD & ASSOCIATES INC. IT IS PROVIDED FOR BUILDING AND SITE WORK LAYOUT ONLY. THE CONTRACTOR SHALL VERIFY ON SITE ALL GRADES, EXISTING IMPROVEMENTS, PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES AND SUB-STRUCTURES. WHERE DISCREPANCIES OCCUR, CONTACT THE ARCHITECT.
2. USE OF THE SITE PLAN FOR ANY USE BEYOND THE SCOPE OF WORK OF THE ARCHITECT AND NOT AUTHORED, DRAWN OR PERFORMED BY THE ARCHITECT IS WITHOUT THE ARCHITECT'S AUTHORIZATION, IS AT THE USER'S RISK AND THE USER HOLDS THE ARCHITECT HARMLESS, RELEASES THE ARCHITECT FROM ALL LIABILITY, INCLUDING THIRD PARTY CLAIMS.
3. DRAWING KEY:  
 \_\_\_\_\_ EXISTING ITEMS TO REMAIN  
 - - - - - ITEMS TO BE REMOVED OR DEMOLISHED U.O.C.  
 \_\_\_\_\_ TREE TO BE REMOVED
4. SEE SHEET TPI FOR MORE TREE PLAN.
5. REFER TO TREE REPORT FROM HEARTWOOD CONSULTING ARBORISTS FOR TREE INFORMATION, PROTECTION MEASURES, PROTECTION ZONE & RECOMMENDATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY, GROUND CLEARING OR GRADING.

REVISIONS

△	Description	Date

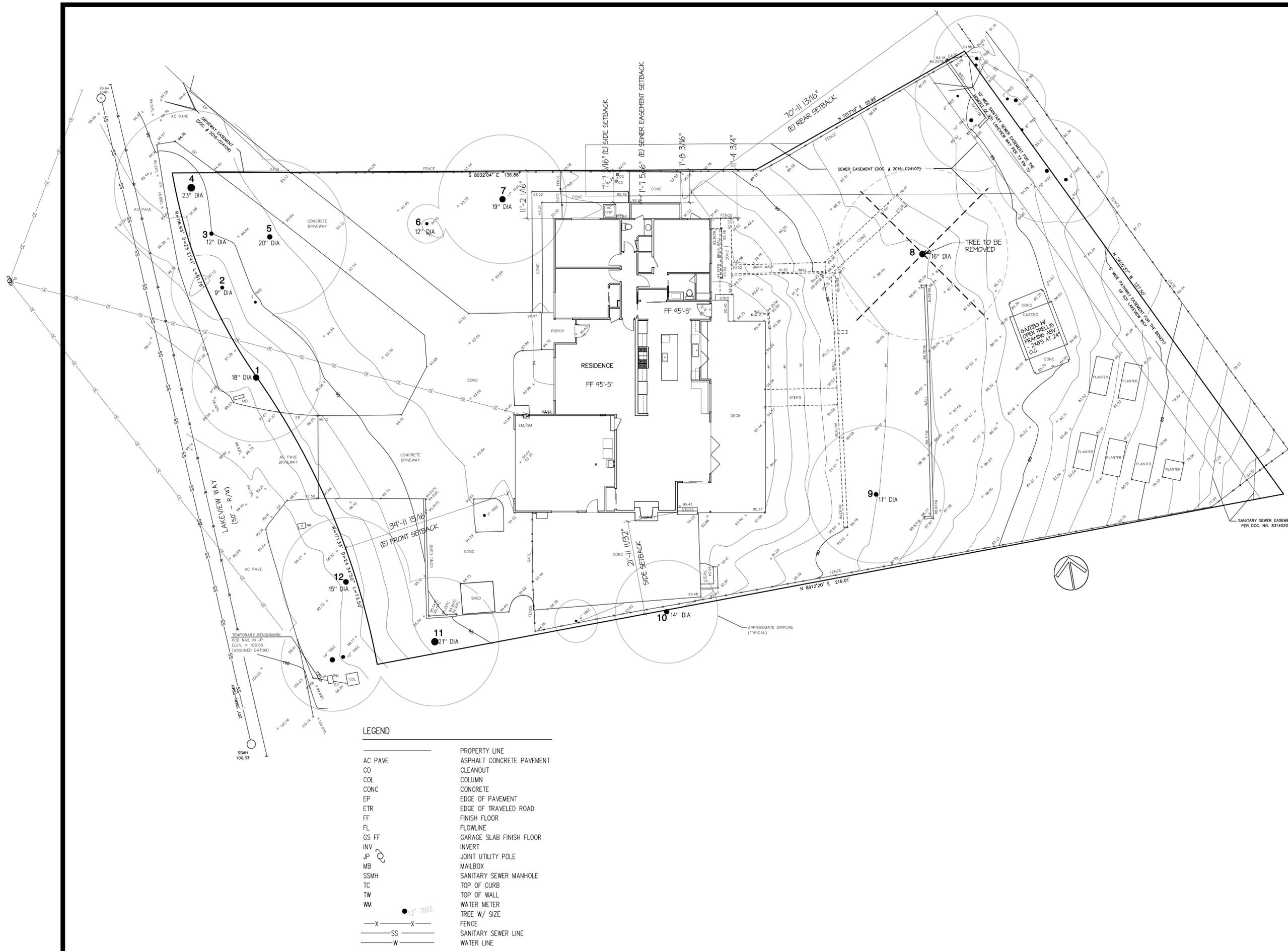
Existing Site & Demo Plan

1"=10'-0"

Sheet

A1

Date 5-18-21

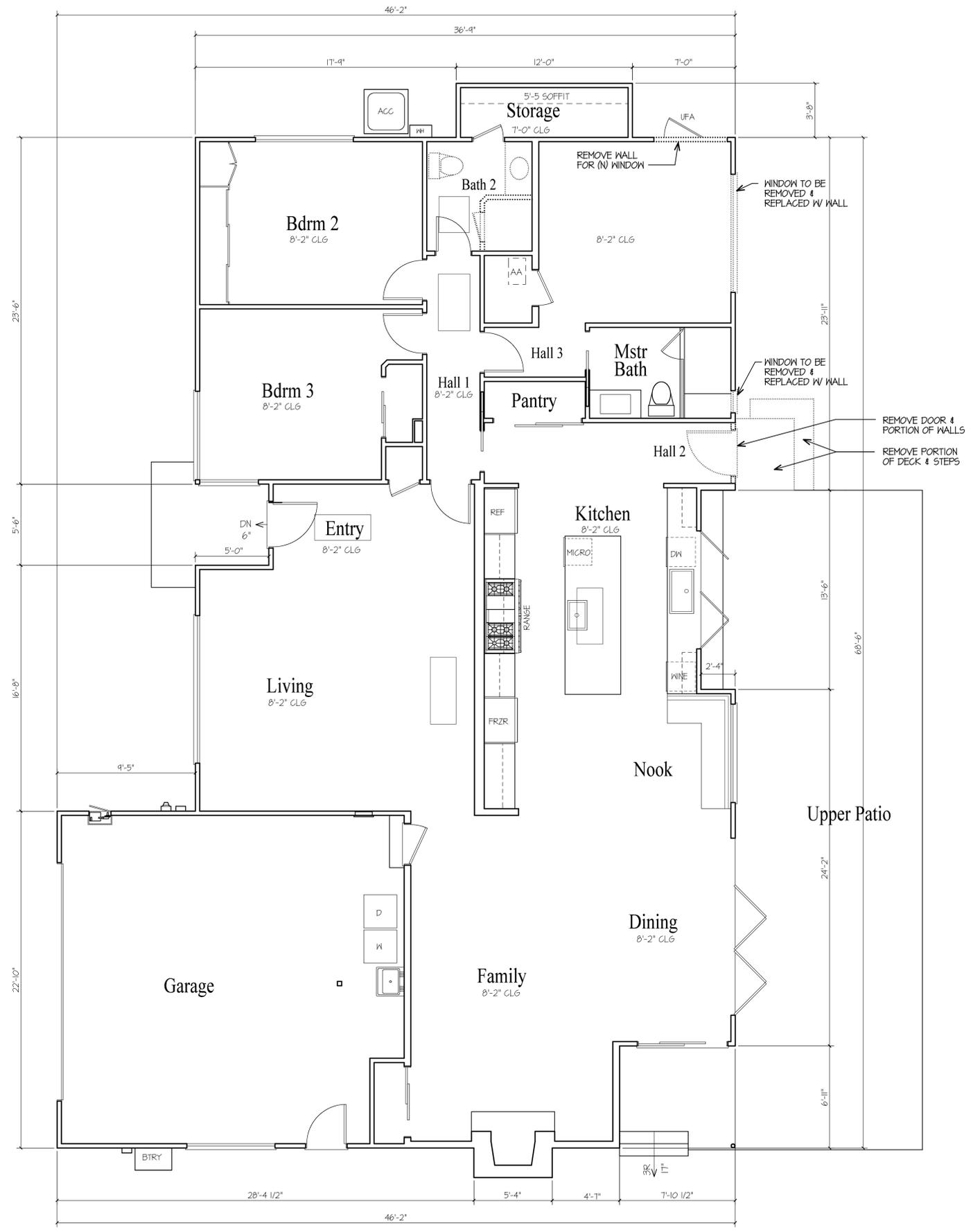


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EXISTING DRAWING NOTES

- THE EXISTING DRAWINGS ARE FOR REFERENCE ONLY AND ARE DRAWINGS BASED ON MEASUREMENTS WHERE FEASIBLE AND VISUAL OBSERVATIONS. THE EXISTING PLANS ARE NOT AS-BUILT OR RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND LOCATIONS AND SHALL CONTACT THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- REMOVE MATERIALS WITH EVIDENCE OF TERMITE DAMAGE, ROTTING MOLD OR ANY DETERIORATION. SEE STRUCTURAL PLANS FOR MINIMUM GRADES OF REPLACEMENT FRAMING.
- DRAWING KEY:  
 \_\_\_\_\_ EXISTING ITEMS TO REMAIN  
 ..... ITEMS TO BE REMOVED OR DEMOLISHED U.O.N.



REVISIONS

△	Description	Date

Existing & Demo  
Floor Plan

1/4"=1'-0"

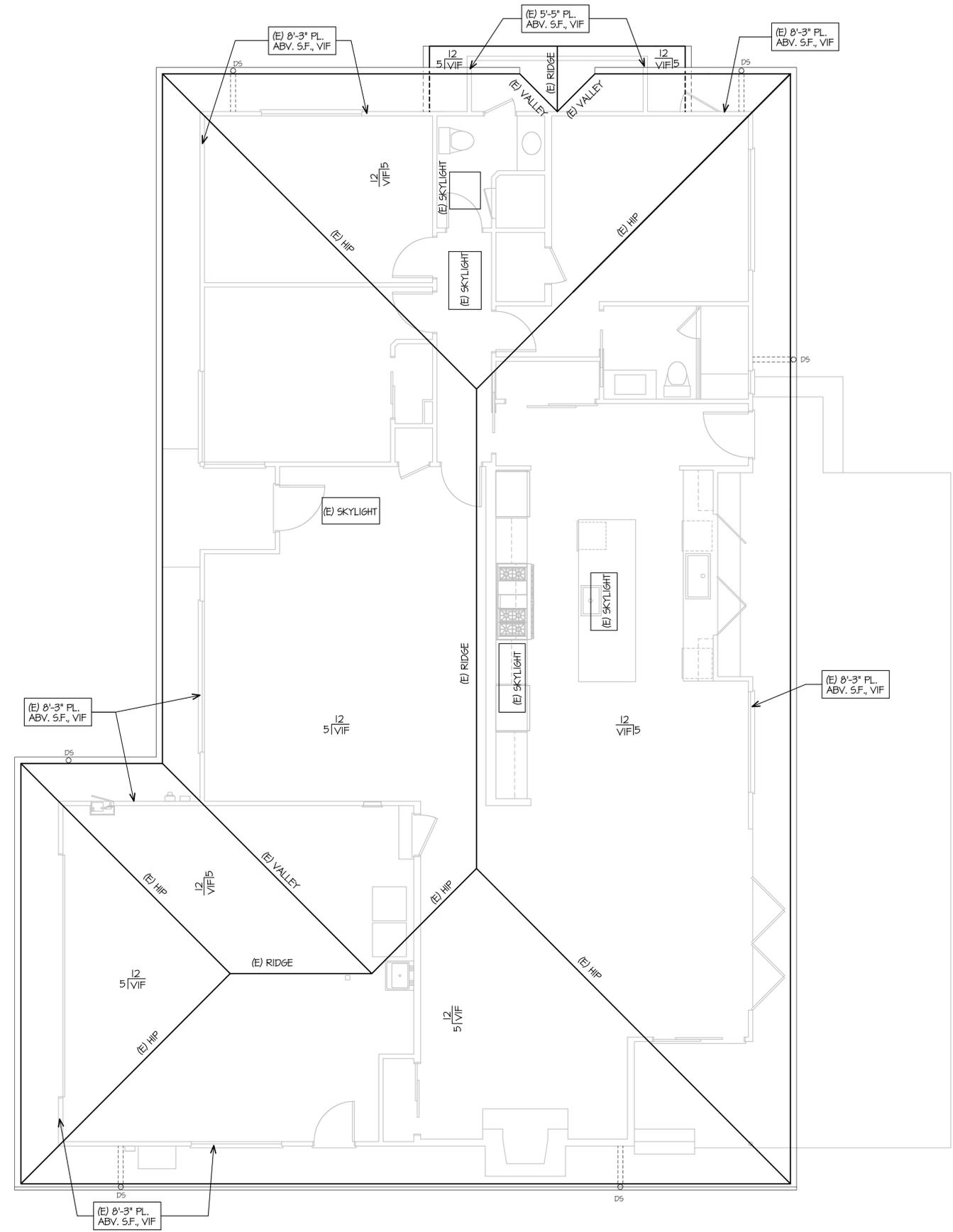


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**A2**  
Date 5-18-21

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REVISIONS

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Existing Roof Plan

1/4"=1'-0"



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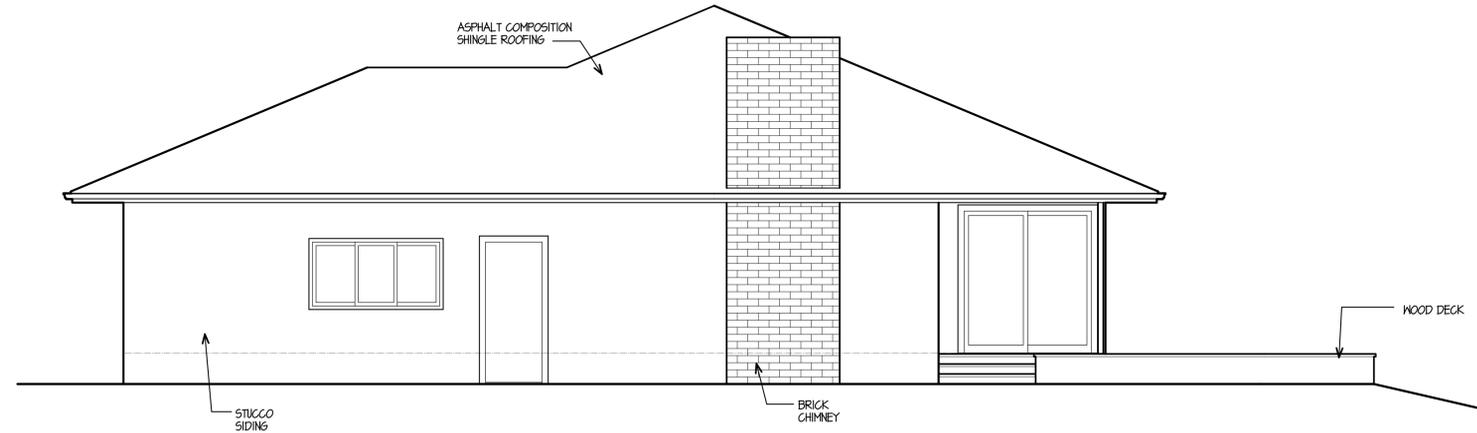
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Date 5-18-21

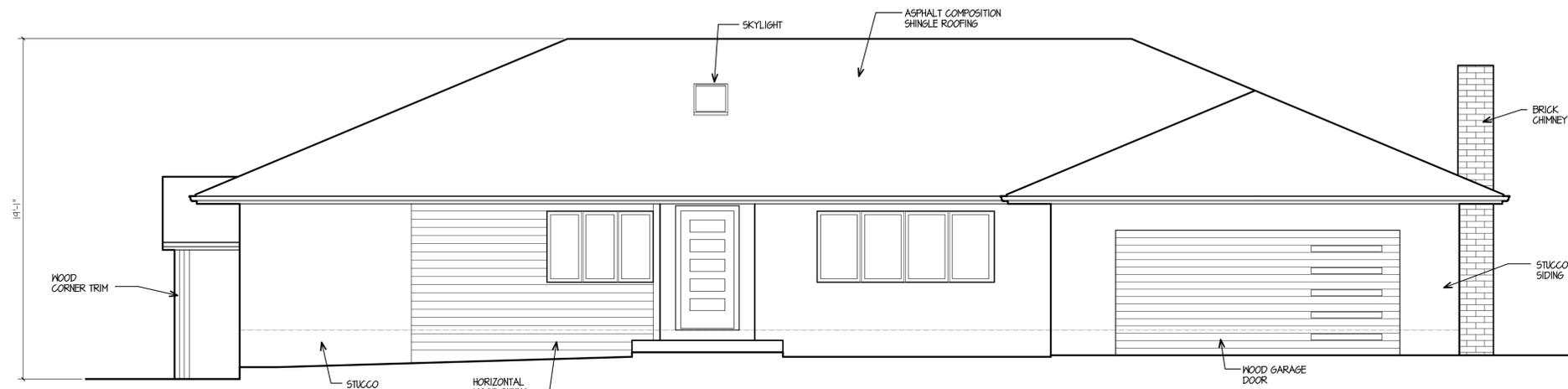
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Existing Right Elevation



Existing Front Elevation

REVISIONS

△	Description	Date
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Existing Elevations

1/4"=1'-0"

Sheet

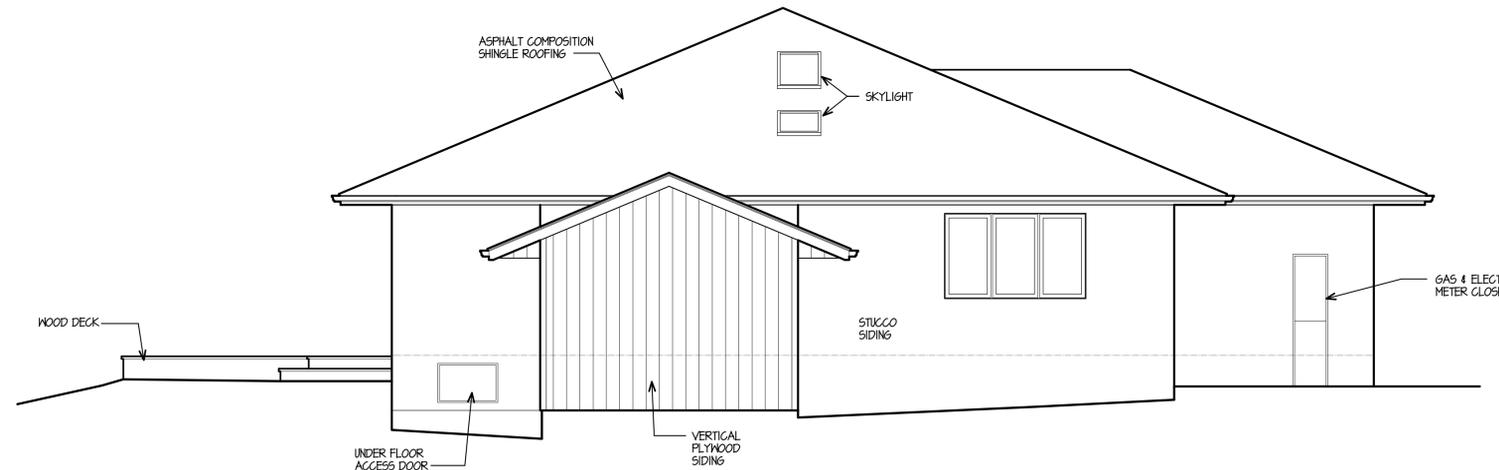
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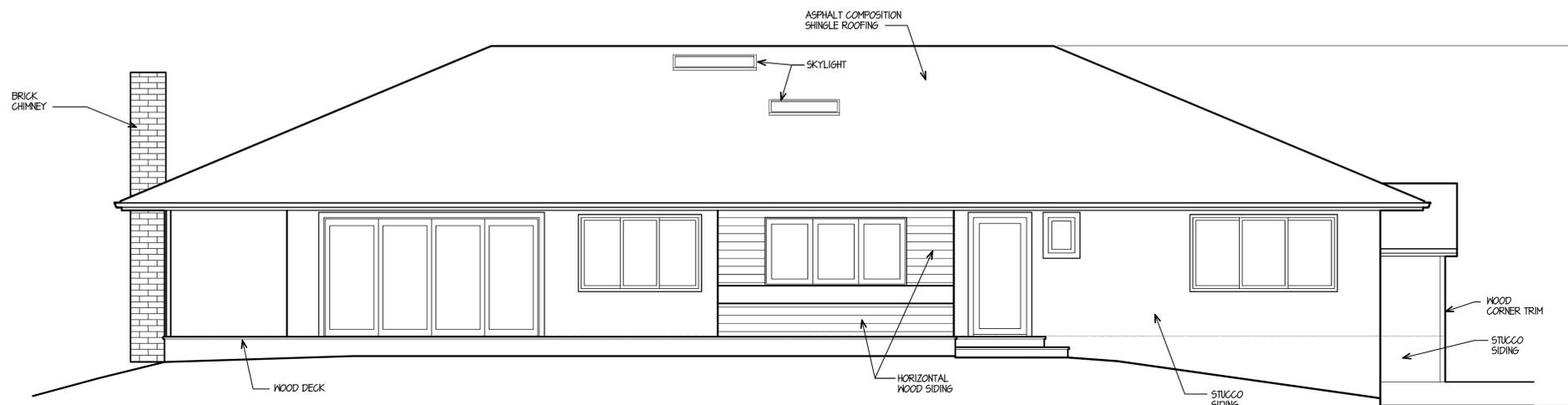
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Existing Left Elevation



Existing Rear Elevation

REVISIONS

△	Description	Date
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Existing Elevations

1/4"=1'-0"

Sheet

A5

Date 5-18-21

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3. SEE GRADING & DRAINAGE PLAN FOR INFORMATION REGARDING DRAINAGE, PAVEMENT, & IMPERVIOUS PAVING.
4. SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD. FINISH GRADE SHALL DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS & THE GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10' WHERE LOT LINES, WALLS, SLOPES, OR OTHER PHYSICAL BARRIERS PROHIBIT 6" OF FALL WITHIN 10'. DRAINS OR SWALES SHALL BE CONSTRUCTED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE. IMPERVIOUS SURFACES WITHIN 10' OF THE BUILDING FOUNDATION SHALL BE SLOPED A MIN. OF 2% AWAY FROM THE BUILDING.
5. PROVIDE EXPANSION AND CONTROL JOINTS IN ALL EXTERIOR CONCRETE SLABS. SPACING OF JOINTS SHALL BE PER INDUSTRY STANDARD.
6. STORMWATER FROM ROOF DOWNSPOUTS SHALL DISCHARGE ACCORDING TO THE GRADING & DRAINAGE PLANS
7. SURFACE WATER SWALES SHALL HAVE A 1% MINIMUM SLOPE.
8. SEE SHEET TPI FOR LOCATION OF TREE PROTECTION FENCING & SEE THE TREE REPORT FOR TREE PROTECTION INFORMATION.

ADDITION LEGEND

UPPER FLOOR ADDITION

REVISIONS

△	Description	Date

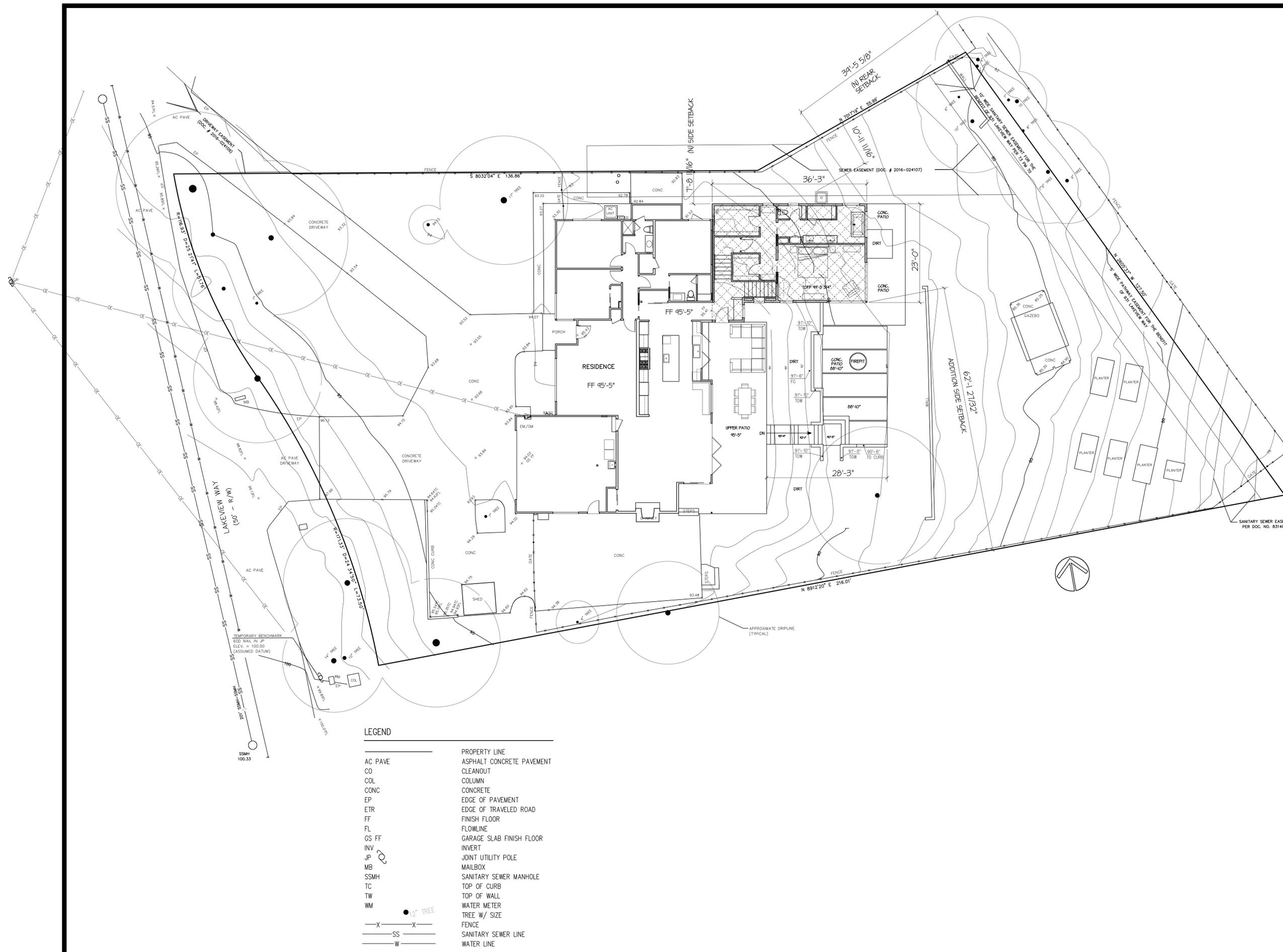
Proposed Upper Floor  
Site Plan

1"=10'-0"

Sheet

A6

Date 5-18-21



LEGEND

—	PROPERTY LINE
—X—X—	ASPHALT CONCRETE PAVEMENT
○	CLEANOUT
●	COLUMN
—	CONCRETE
—EP—	EDGE OF PAVEMENT
—ETR—	EDGE OF TRAVELED ROAD
—FF—	FINISH FLOOR
—FL—	FLOWLINE
—GS FF—	GARAGE SLAB FINISH FLOOR
—INV—	INVERT
—JP—	JOINT UTILITY POLE
—MB—	MAILBOX
—SSMH—	SANITARY SEWER MANHOLE
—TC—	TOP OF CURB
—TW—	TOP OF WALL
—WM—	WATER METER
●	TREE W/ SIZE
—X—X—	FENCE
—SS—	SANITARY SEWER LINE
—W—	WATER LINE

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ADDITION LEGEND

LOWER FLOOR ADDITION

REVISIONS

Description	Date

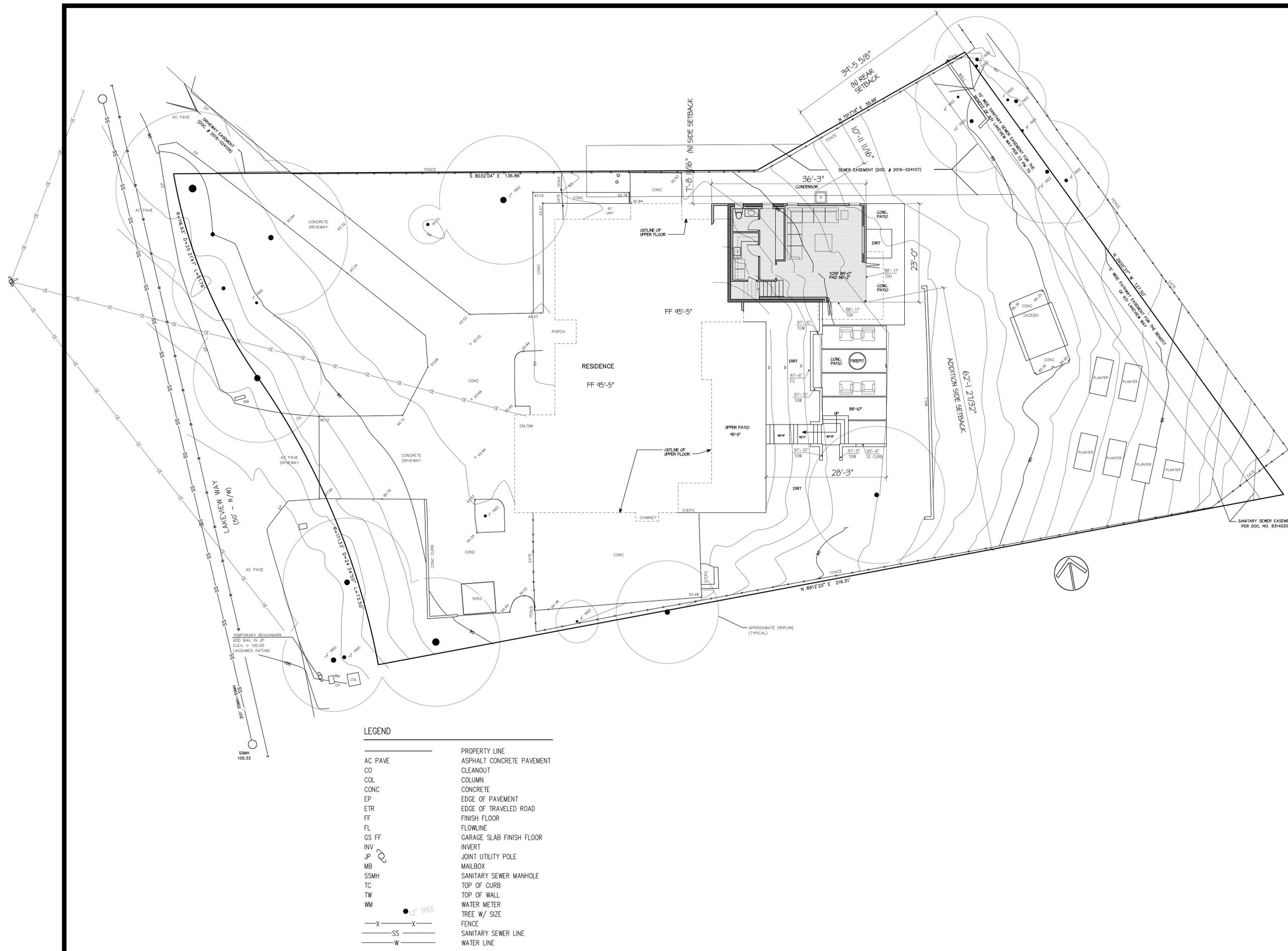
Proposed Lower Floor  
Site Plan

1"=10'-0"

Sheet

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Date 5-18-21

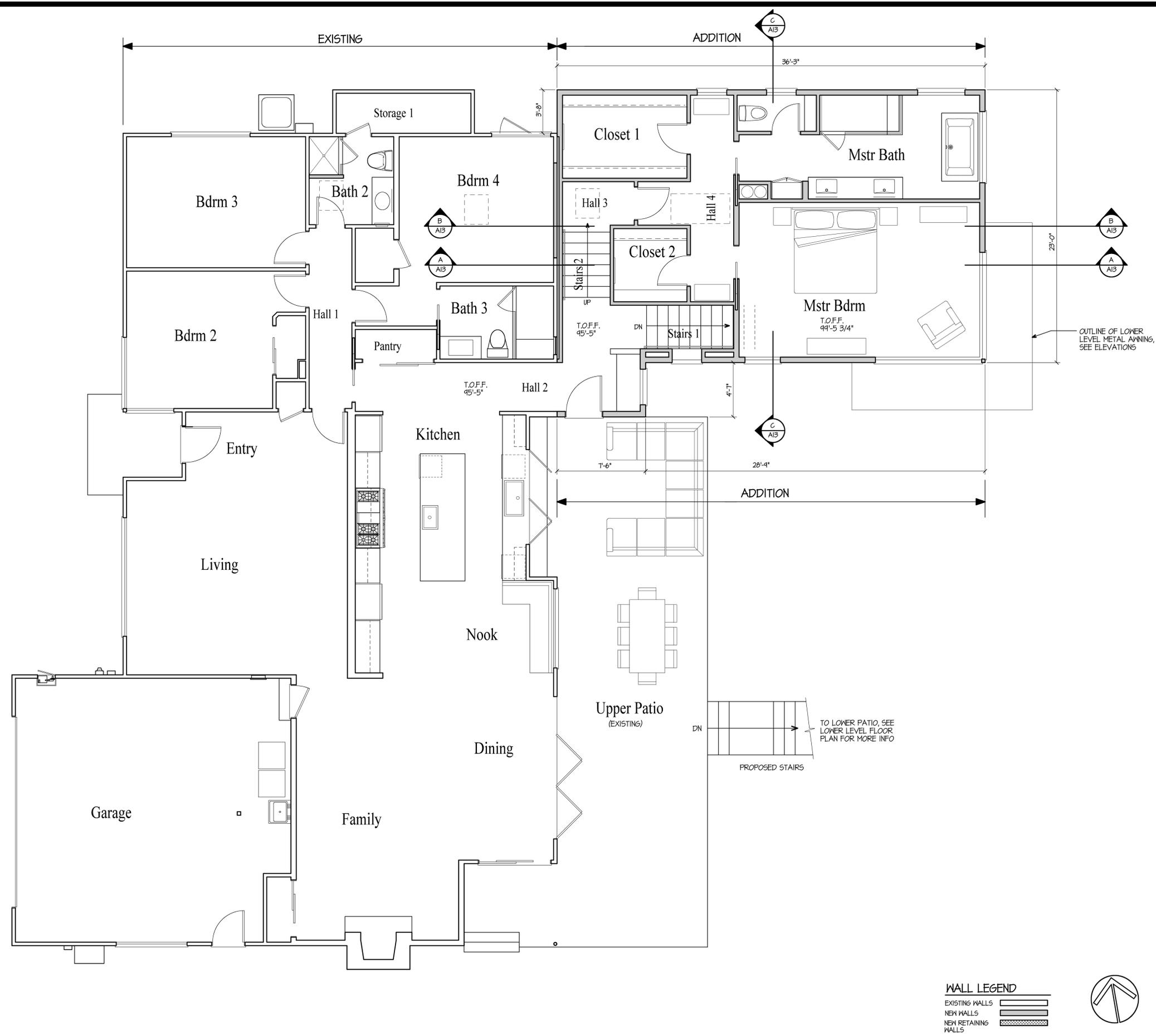


LEGEND

—	PROPERTY LINE
—X—X—	ASPHALT CONCRETE PAVEMENT
○	CLEANOUT
●	COLUMN
—	CONCRETE
—EP—	EDGE OF PAVEMENT
—ETR—	EDGE OF TRAVELED ROAD
—FF—	FINISH FLOOR
—FL—	FLOWLINE
—GS FF—	GARAGE SLAB FINISH FLOOR
—INV—	INVERT
—JP—	JOINT UTILITY POLE
—MB—	MAILBOX
—SSMH—	SANITARY SEWER MANHOLE
—TC—	TOP OF CURB
—TW—	TOP OF WALL
—WM—	WATER METER
●	TREE W/ SIZE
—X—X—	FENCE
—SS—	SANITARY SEWER LINE
—W—	WATER LINE

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**WALL LEGEND**  
 EXISTING WALLS [Symbol]  
 NEW WALLS [Symbol]  
 NEW RETAINING WALLS [Symbol]



REVISIONS		
△	Description	Date

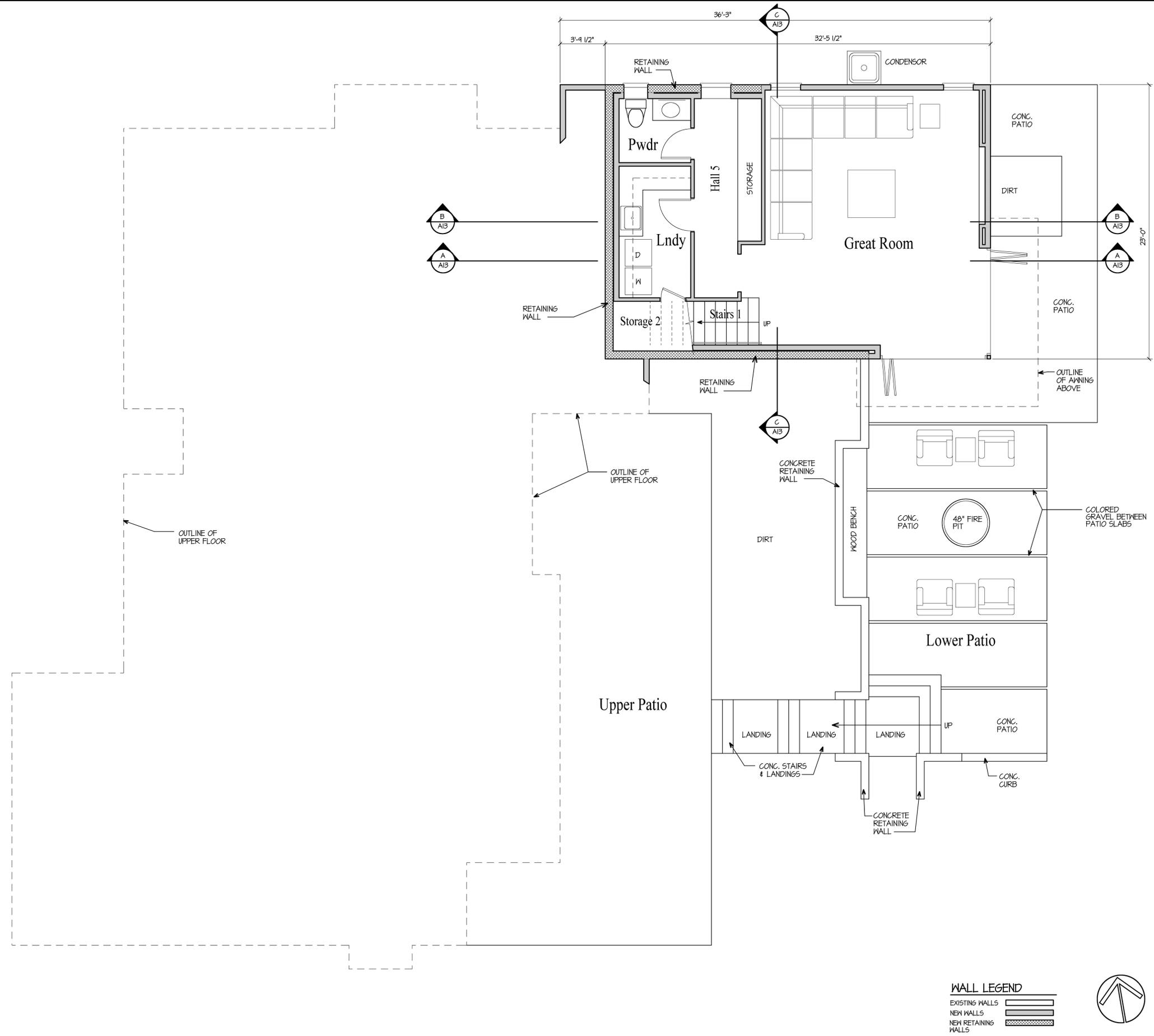
Proposed Upper Floor Plan  
 1/4"=1'-0"

Sheet  
**A8**  
 Date 5-18-21

Gregg K. Kawahara  
architect

5822 Dresslar Circle Livermore, CA 94550  
(925) 449-6182  
gkarchitect@comcast.net

Barbour Chu Addition  
933 Lakeview Way  
Redwood City, CA



REVISIONS

△	Description	Date

Proposed Lower Floor  
Plan

1/4"=1'-0"

WALL LEGEND

- EXISTING WALLS
- NEW WALLS
- NEW RETAINING WALLS



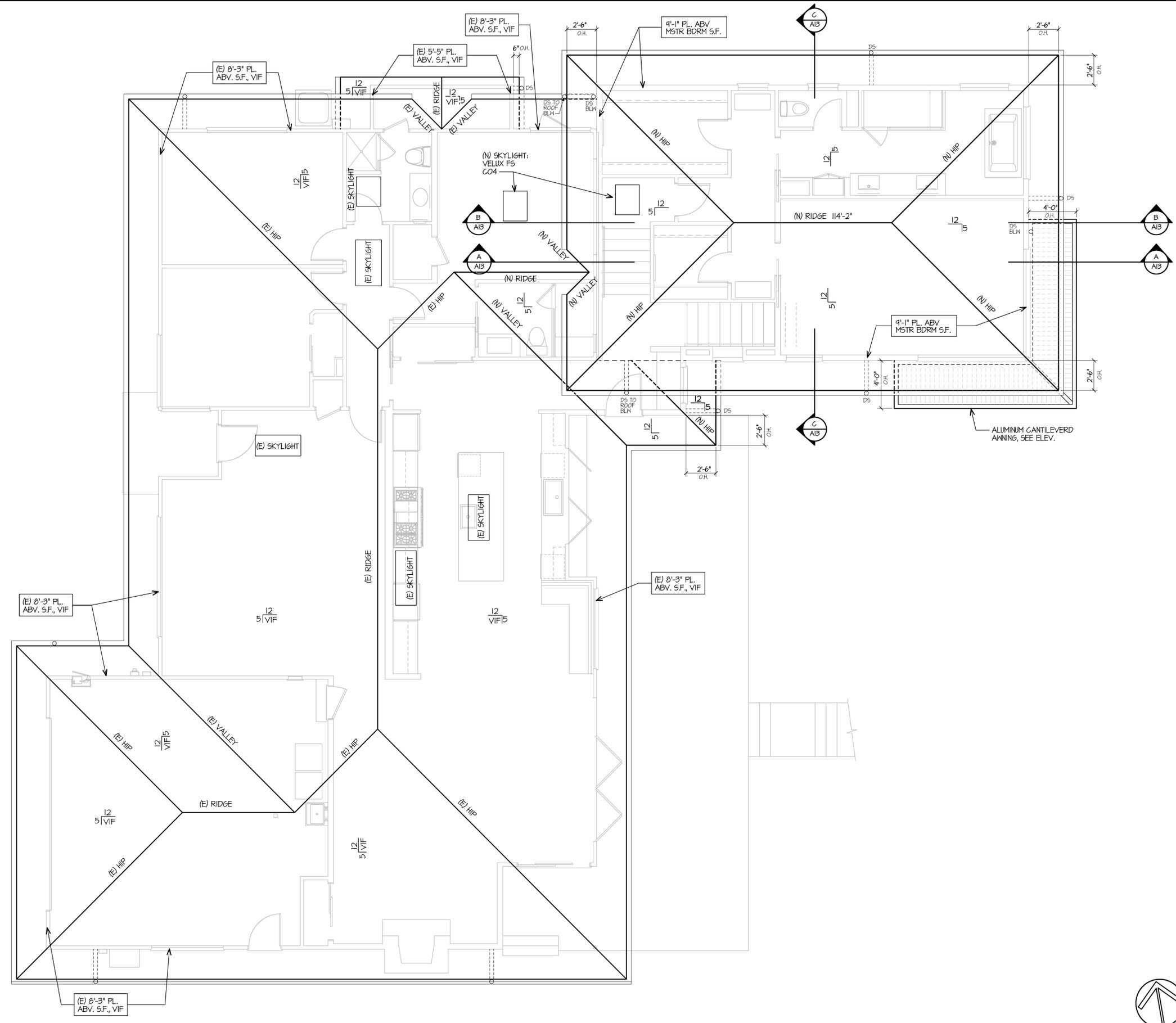
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A9

Date 5-18-21

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 5822 Dresslar Circle Livermore, CA 94550  
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Barbour Chu Addition  
 933 Lakeview Way  
 Redwood City, CA



REVISIONS

△	Description	Date

Proposed Roof Plan

1/4"=1'-0"

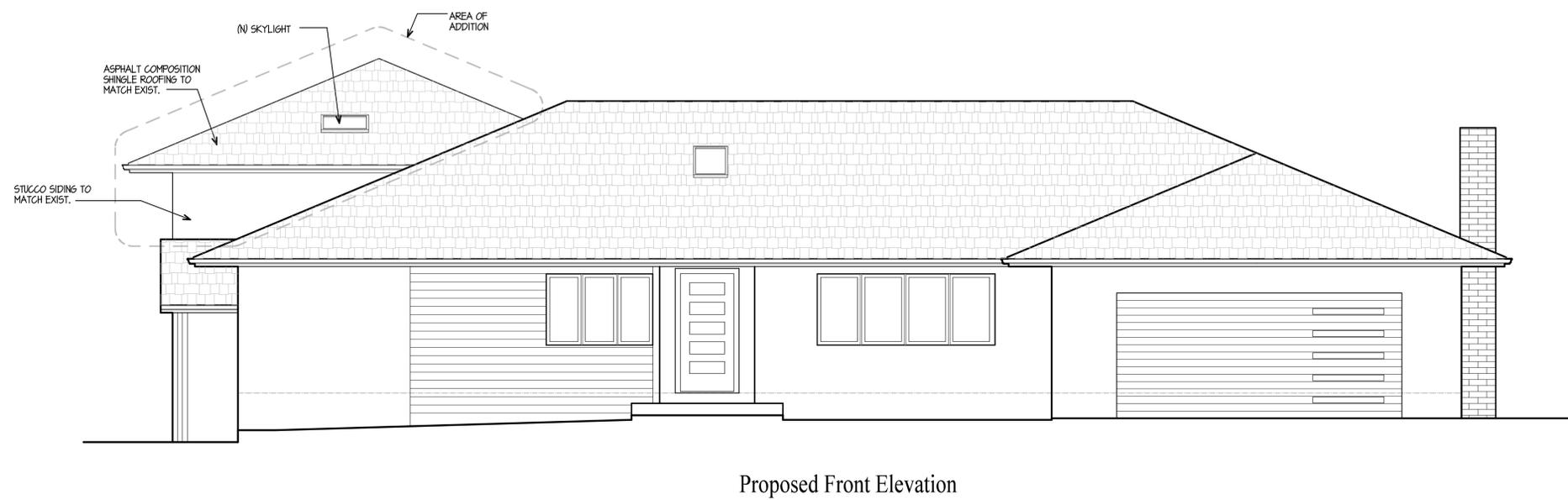
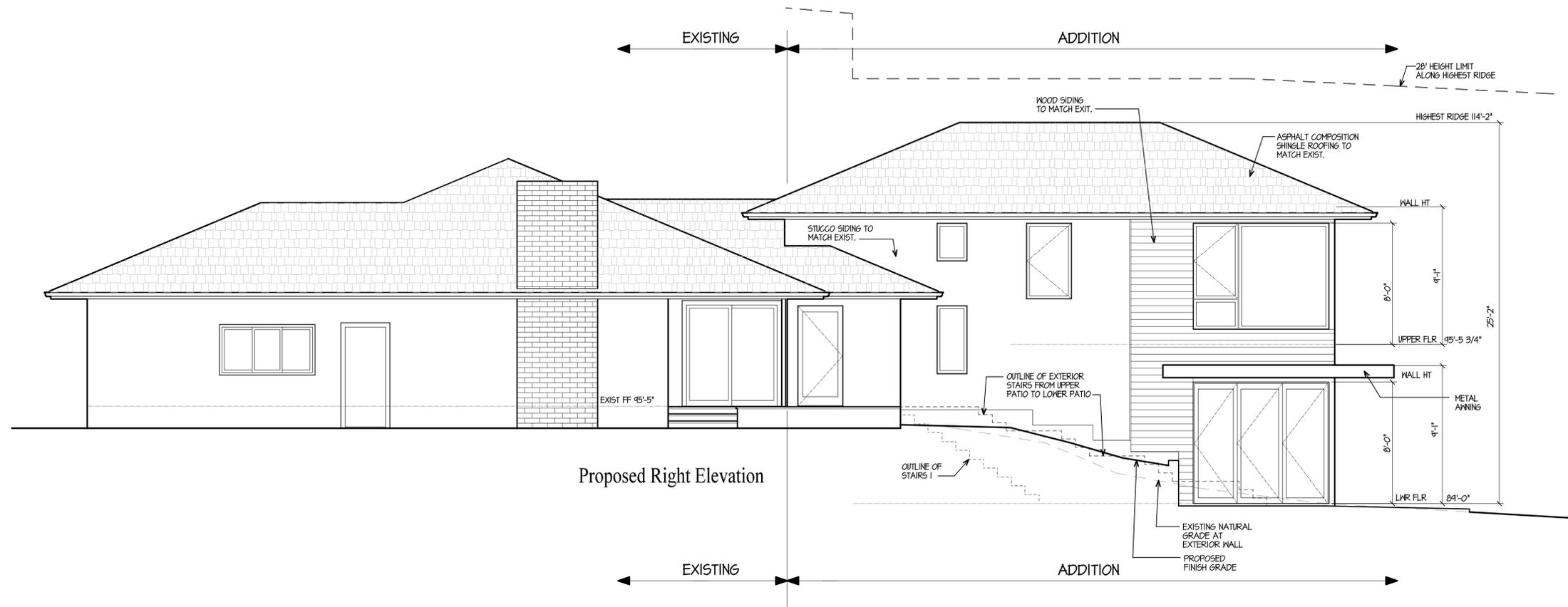


Sheet  
**A10**  
 Date 5-18-21

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gkarchitect@comcast.net

Barbour Chu Addition  
933 Lakeview Way  
Redwood City, CA



REVISIONS

△	Description	Date
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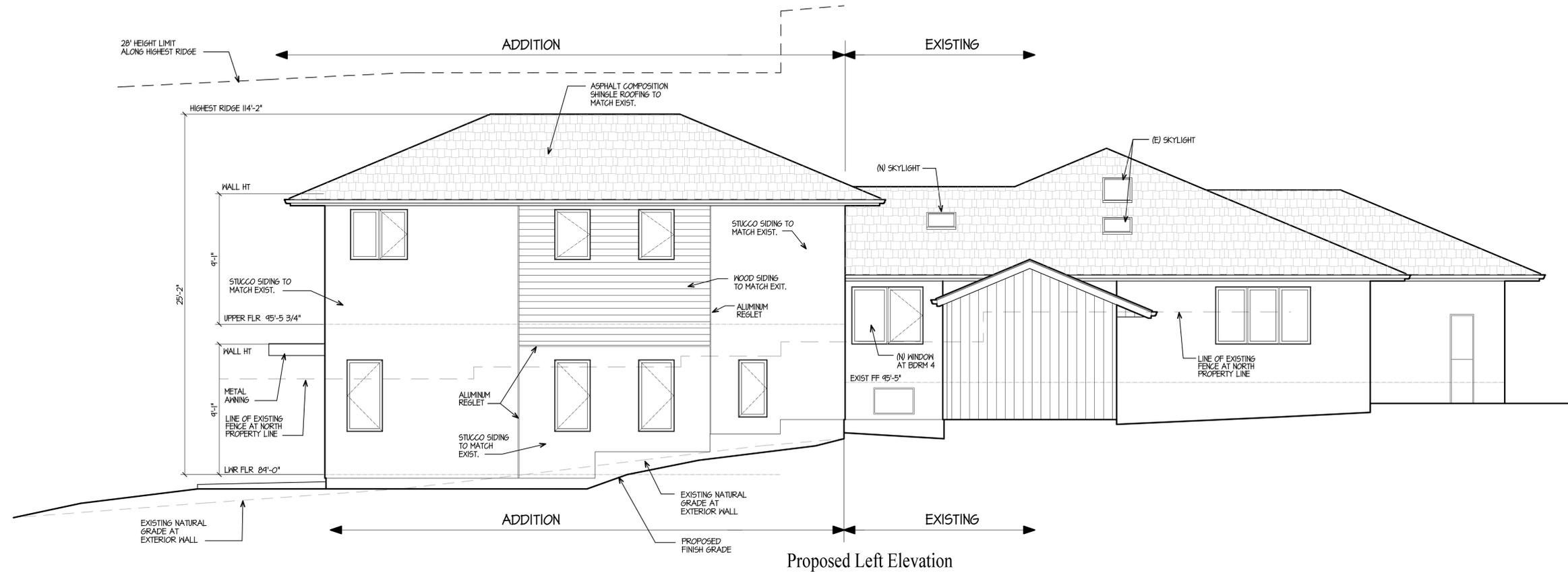
Proposed Elevations

1/4"=1'-0"

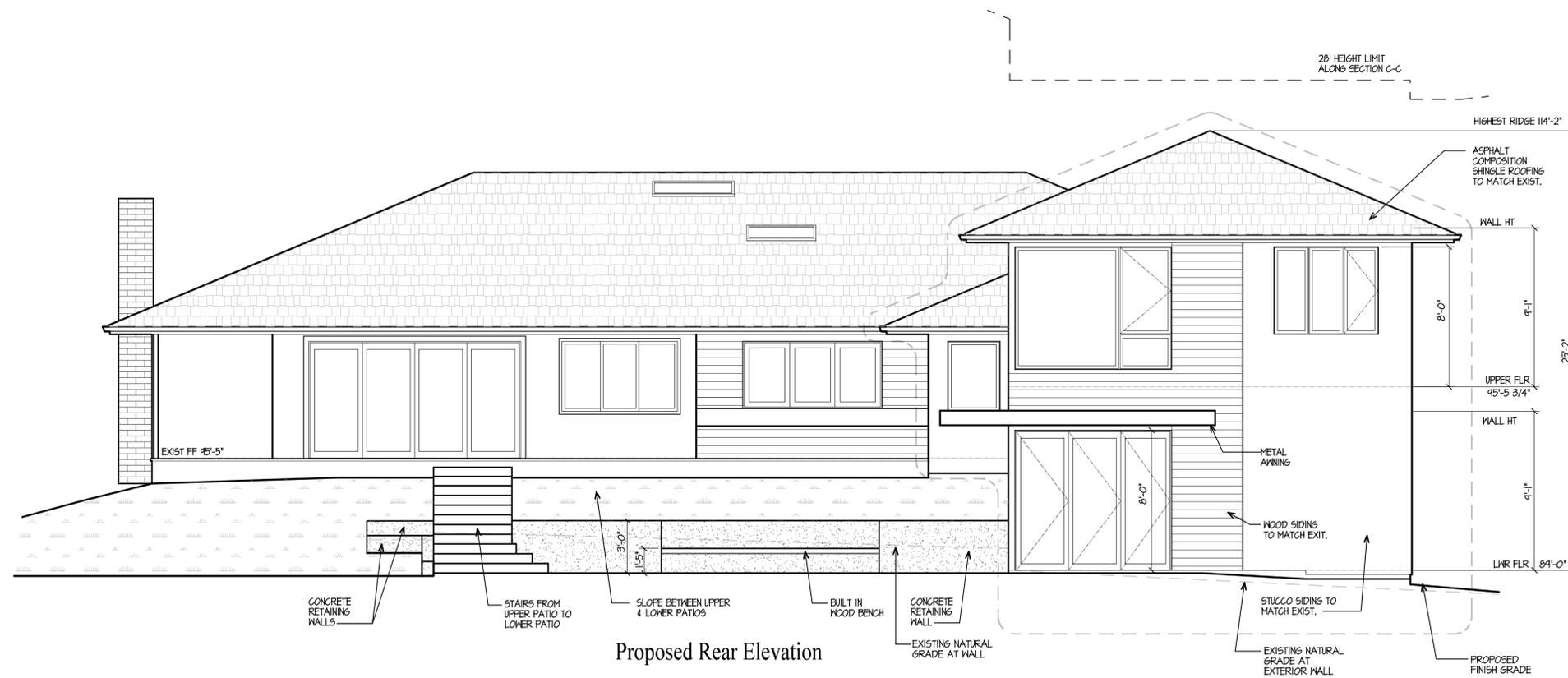
Sheet

A11

Date 5-18-21



Proposed Left Elevation



Proposed Rear Elevation

REVISIONS

△	Description	Date
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Proposed Elevations

1/4"=1'-0"

Sheet

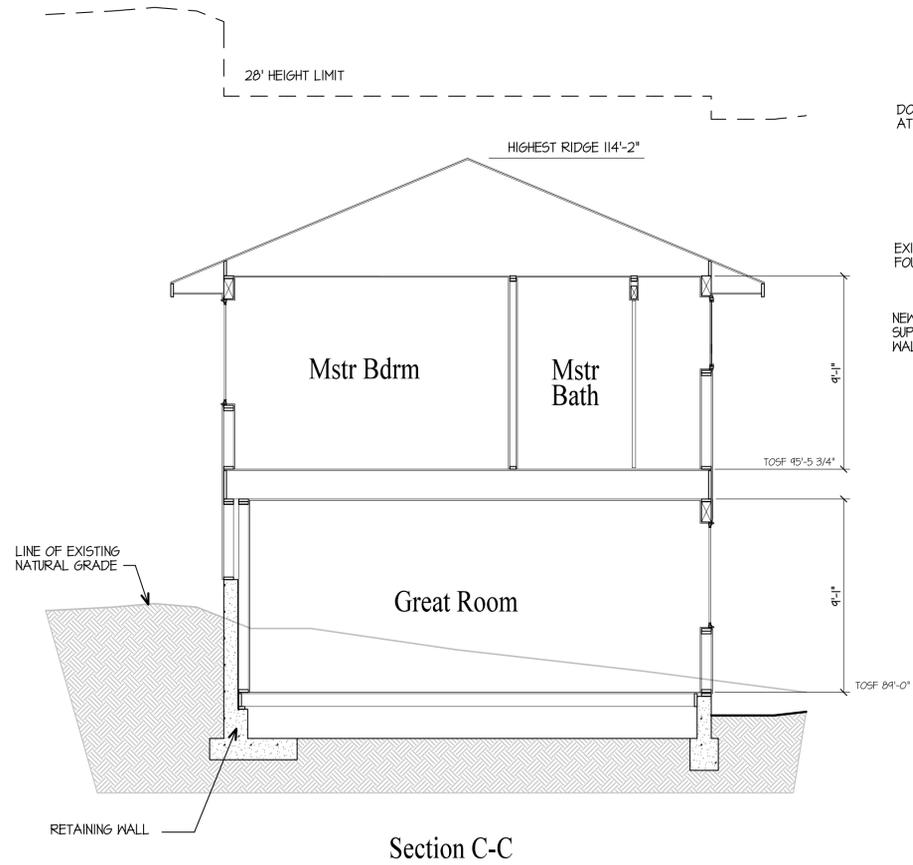
A12

Date 5-18-21

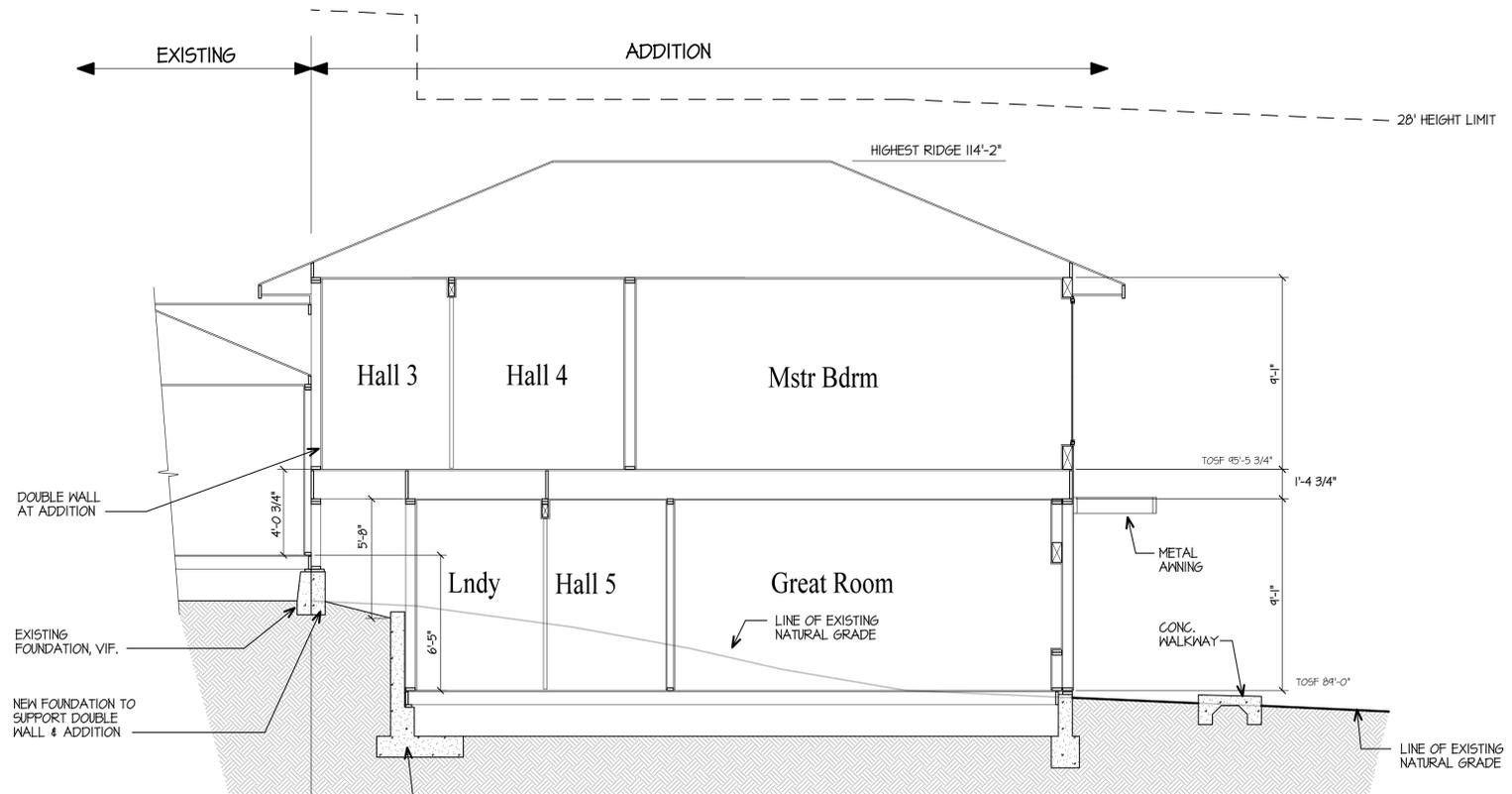
Gregg K. Kawahara  
architect

5822 Dresslar Circle Livermore, CA 94550  
(925) 449-6182  
gkarchitect@comcast.net

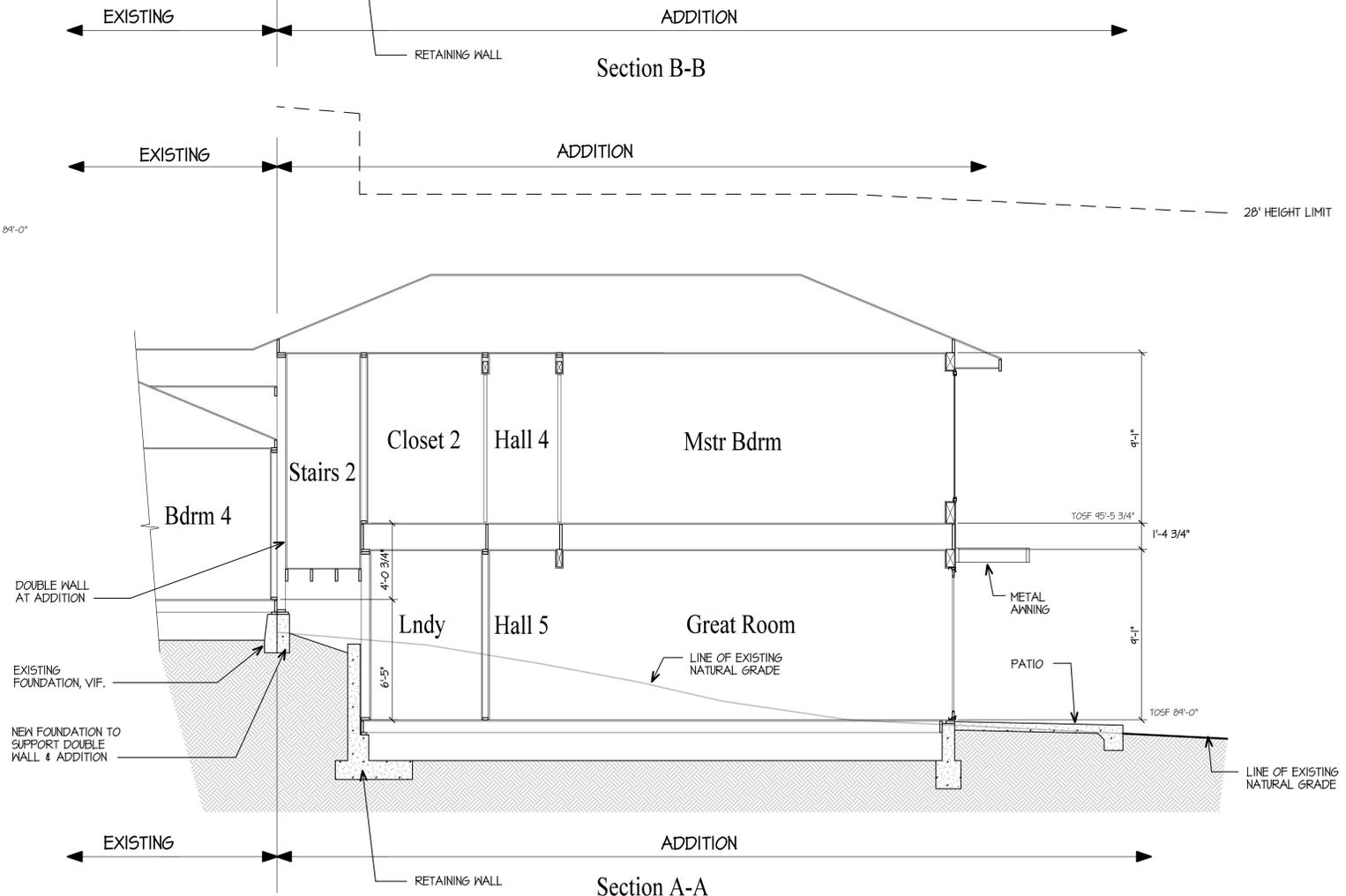
Barbour Chu Addition  
933 Lakeview Way  
Redwood City, CA



Section C-C



Section B-B



Section A-A

REVISIONS

△	Description	Date

Sections

1/4"=1'-0"

Sheet

A13

Date 5-18-21

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Barbour Chu Addition  
 933 Lakeview Way  
 Redwood City, CA



LIGHT SYMBOL LEGEND

NEW LED RECESSED LIGHT FIXTURES IN EAVES OR  
 AWNING. REFERENCE STANDARD PROGRESS LIGHTING  
 P800004-004-30, BRUSHED NICKEL TO MATCH EXISTING  
 FIXTURES



REVISIONS

△	Description	Date

Upper Floor Proposed  
 Exterior Lighting Plan

1/4"=1'-0"

Sheet

A14

Date 5-18-21

Gregg K. Kawahara  
architect

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gkarchitect@comcast.net

Barbour Chu Addition  
933 Lakeview Way  
Redwood City, CA



**LIGHT SYMBOL LEGEND**

NEW LED RECESSED LIGHT FIXTURES IN EAVES OR  
AWNING; REFERENCE STANDARD PROGRESS LIGHTING  
P800004-004-30, BRUSHED NICKEL TO MATCH EXISTING  
FIXTURES



**REVISIONS**

△	Description	Date

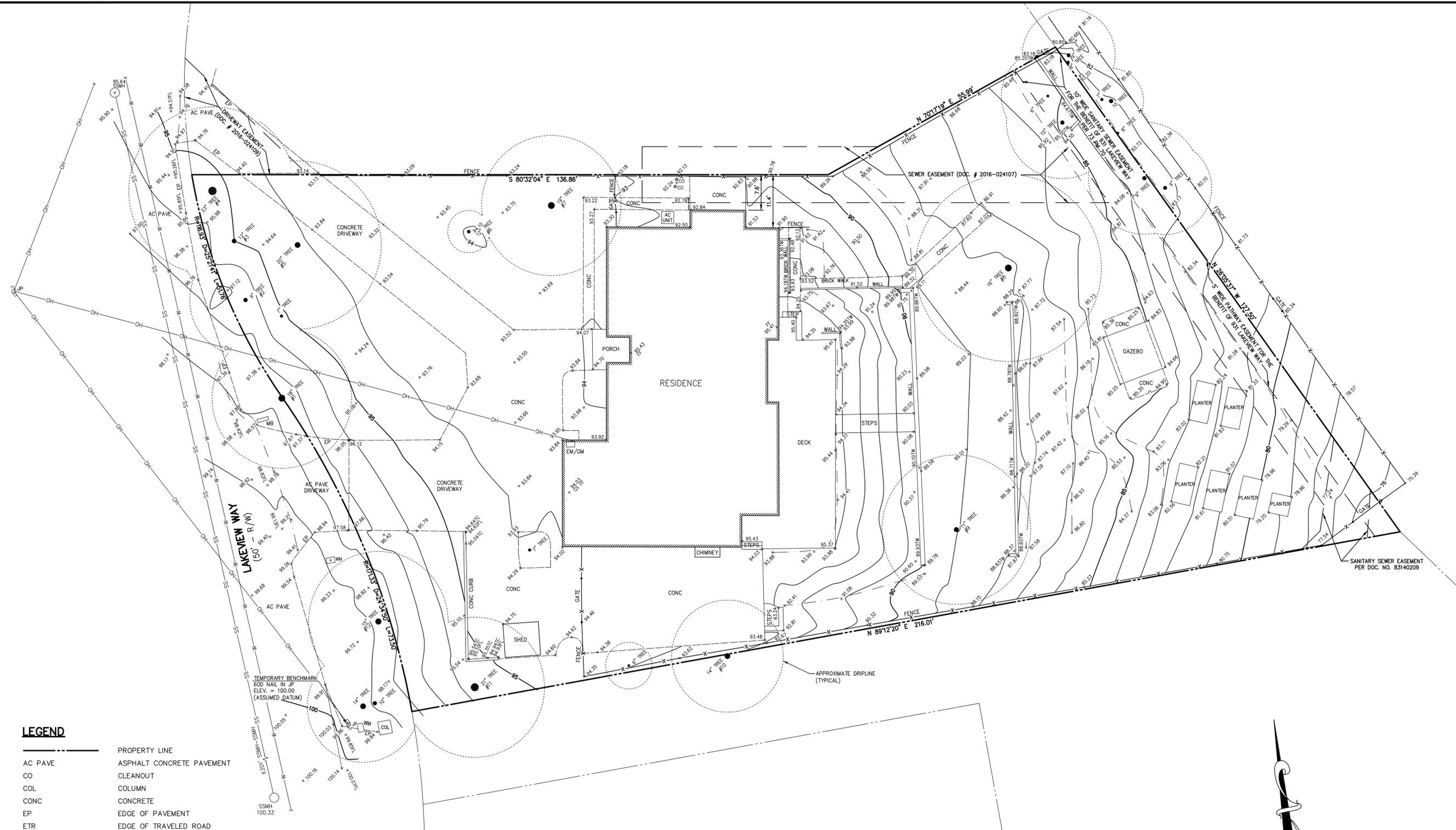
**Lower Floor Proposed  
Exterior Lighting Plan**

1/4"=1'-0"

Sheet

**A15**

Date 5-18-21



**LEGEND**

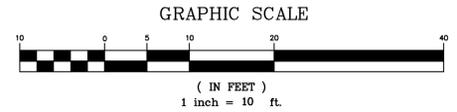
---	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
EP	EDGE OF PAVEMENT
ETR	EDGE OF TRAVELED ROAD
FF	FINISH FLOOR
FL	FLOWLINE
GS FF	GARAGE SLAB FINISH FLOOR
INV	INVERT
JP	JOINT UTILITY POLE
MB	MAILBOX
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB
TW	TOP OF WALL
WM	WATER METER
●	TREE W/ SIZE & ARBORIST NUMBER
-X-X-	FENCE
---	SANITARY SEWER LINE
---	WATER LINE

**GROSS LOT AREA:**

= 21,819 SQ. FT. ±  
= 0.501 ACRES ±

**UTILITY NOTE:**

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.



REV.	DESCRIPTION	BY:	DATE:
---	ADD DIMENSIONS	D.K.	05/17/21
---	ADD TREE NUMBERS PER ARBORIST REPORT AND REMOVE TREE	D.K.	05/03/21



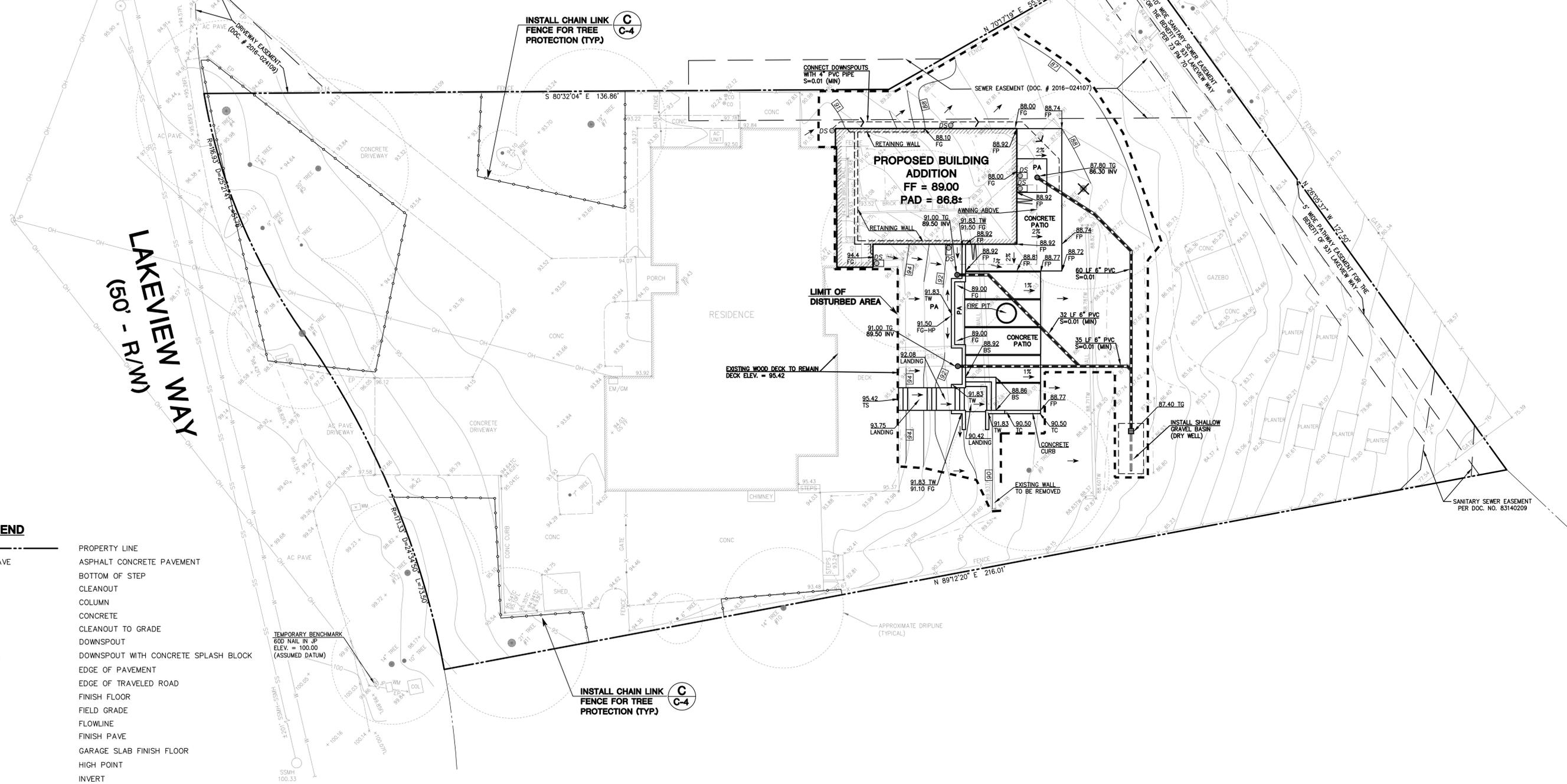
**MACLEOD AND ASSOCIATES**  
 CIVIL ENGINEERING • LAND SURVEYING  
 965 CENTER STREET • SAN CARLOS, CA 94070 • (650) 593-8560

PREPARED FOR:  
 JONAS BARBOUR

**BOUNDARY & TOPOGRAPHIC SURVEY PLAN**  
 933 LAKEVIEW WAY  
 A.P.N. 057-270-740  
 PARCEL 2, 73 P.M. 70  
 UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

DRAWN BY: MDL  
 DESIGNED BY: ---  
 CHECKED BY: DGM  
 SCALE: 1"=10'  
 DATE: 10-30-20  
 DRAWING NO. 4832-TOPO

SHEET  
**C-1**  
 1 OF 5



**LEGEND**

---	PROPERTY LINE
AC PAVE	ASPHALT CONCRETE PAVEMENT
BS	BOTTOM OF STEP
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
COTG	CLEANOUT TO GRADE
DS	DOWNSPOUT
DS	DOWNSPOUT WITH CONCRETE SPLASH BLOCK
EP	EDGE OF PAVEMENT
ETR	EDGE OF TRAVELED ROAD
FF	FINISH FLOOR
FG	FIELD GRADE
FL	FLOWLINE
FP	FINISH PAVE
GS FF	GARAGE SLAB FINISH FLOOR
HP	HIGH POINT
INV	INVERT
JP	JOINT UTILITY POLE
MB	MAILBOX
PA	PLANTING AREA
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL
WM	WATER METER
●	TREE W/ SIZE & ARBORIST NUMBER
✕	EXISTING TREE TO BE REMOVED
-X-	FENCE
SS	SANITARY SEWER LINE
W	WATER LINE
90	NEW CONTOUR
→	SURFACE RUNOFF DIRECTION
→	NEW STORM DRAIN LINE
⊙	NEW DRAIN INLET

- GENERAL NOTES:**
- ALL MATERIALS SHALL BE FURNISHED BY AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
  - WHEN APPLICABLE, ALL CONSTRUCTION MATERIALS AND METHODS SHALL COMPLY WITH THE ORDINANCES, SPECIFICATIONS AND STANDARDS OF THE COUNTY OF SAN MATEO, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) PRIOR TO START OF CONSTRUCTION. PHONE (800) 642-2444.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING ANY EXCESS MATERIAL OR SUPPLYING MATERIAL FOR DEFICIENCIES TO BRING DRIVEWAY AND BUILDING PADS TO REQUIRED GRADE.
  - THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, GRADING, ETC., AND TO AVOID ABRUPT OR APPARENT CHANGES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
  - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR ALL WORK SHOWN ON THIS PLAN.

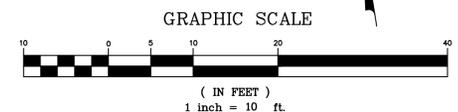
**GRADING QUANTITIES:**

	CUT	FILL
ADDITION PAD	105	--
STAIRS AND PATIO	45	--
YARD GRADING	5	10
SHALLOW GRAVEL BASIN	10	5
<b>TOTAL</b>	<b>165</b>	<b>15</b>

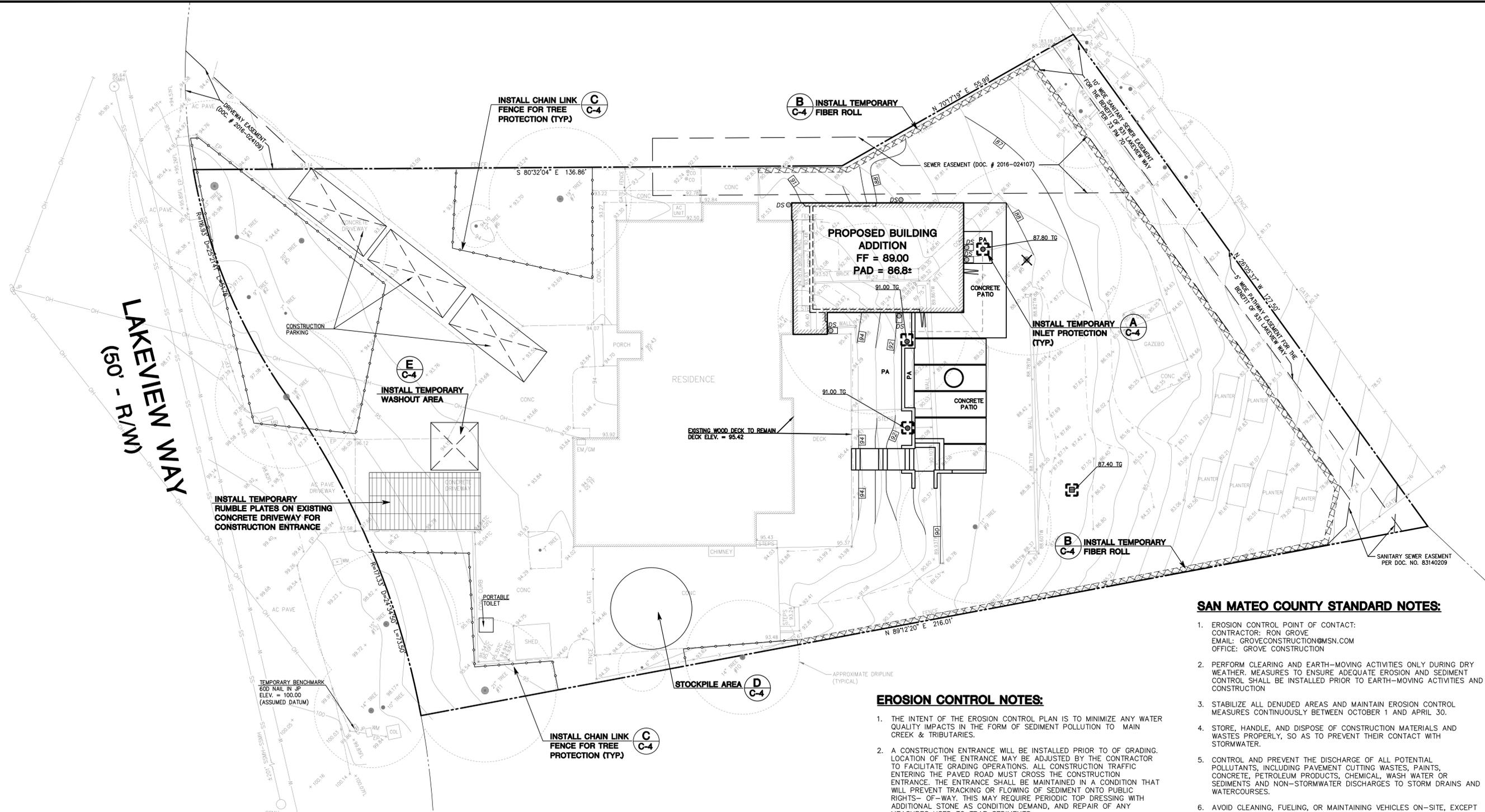
TOTAL EARTHWORK = 165 + 15 = 180 C.Y. ±  
 EXPORT = 165 - 15 = 150 C.Y. ±

NOTE:  
 EARTHWORK QUANTITIES SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.

**UTILITY NOTE:**  
 THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.



	DATE: _____
	BY: _____
	REV. DESCRIPTION
<b>MALEOD AND ASSOCIATES</b> CIVIL ENGINEERING • LAND SURVEYING 965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580	
PREPARED FOR: JONAS BARBOUR	UNINCORPORATED SAN MATEO COUNTY CALIFORNIA
<b>PRELIMINARY GRADING AND DRAINAGE PLAN</b> 933 LAKEVIEW WAY	
DRAWN BY: DJK DESIGNED BY: DJK CHECKED BY: DGM SCALE: 1"=10' DATE: 05/17/21 DRAWING NO. 4832-GRAD	
SHEET <b>C-2</b> 2 OF 5	



LAKEVIEW WAY  
(50' - R/W)

**PROPOSED BUILDING ADDITION**  
FF = 89.00  
PAD = 86.8

**E C-4**  
INSTALL TEMPORARY WASHOUT AREA

**INSTALL TEMPORARY RUMBLE PLATES ON EXISTING CONCRETE DRIVEWAY ENTRANCE FOR CONSTRUCTION**

**A C-4**  
INSTALL TEMPORARY INLET PROTECTION (TYP)

**B C-4**  
INSTALL TEMPORARY FIBER ROLL

**D C-4**  
STOCKPILE AREA

**C C-4**  
INSTALL CHAIN LINK FENCE FOR TREE PROTECTION (TYP)

**DUST CONTROL NOTES:**

1. WATER ALL CONSTRUCTION AND GRADING AREA AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS, OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST 2 FEET OF FREEBOARD.
3. PAVE, APPLY WATER TWO TIMES DAILY, OR APPLY (NON-TOXIC) SOIL ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE PROJECT SITE.
4. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
5. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY (NON-TOXIC) SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.).

**EROSION CONTROL NOTES:**

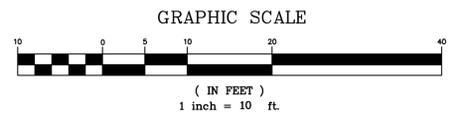
1. THE INTENT OF THE EROSION CONTROL PLAN IS TO MINIMIZE ANY WATER QUALITY IMPACTS IN THE FORM OF SEDIMENT POLLUTION TO MAIN CREEK & TRIBUTARIES.
2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH THE USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING AND INSTALLATION OF STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL FACILITIES WILL BE COMPLETED. NO GRADING WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE CITY REPRESENTATIVE.
5. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAINAGE SYSTEM.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE EROSION AND SEDIMENT CONTROL FIELD MANUAL OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD.

**ARBORIST NOTE:**

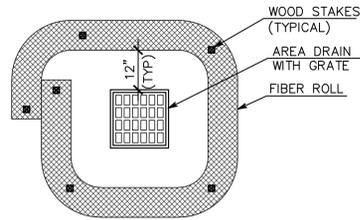
THE PROJECT ARBORIST SHALL BE ON-SITE TO OBSERVE ANY WORK WITHIN THE DRIPLINE OF THE PROTECTED TREES.

**SAN MATEO COUNTY STANDARD NOTES:**

1. EROSION CONTROL POINT OF CONTACT:  
CONTRACTOR: RON GROVE  
EMAIL: GROVECONSTRUCTION@MSN.COM  
OFFICE: GROVE CONSTRUCTION
2. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER. MEASURES TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO EARTH-MOVING ACTIVITIES AND CONSTRUCTION
3. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 1 AND APRIL 30.
4. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
5. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICAL, WASH WATER OR SEDIMENTS AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
6. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
7. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
8. LIMIT CONSTRUCTION ACCESS ROUTES TO STABILIZED, DESIGNATED ACCESS POINTS.
9. AVOID TRACKING DIRT OR OTHER MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS.
10. TRAIN AND PROVIDE INSTRUCTION TO ALL EMPLOYEES AND SUBCONTRACTORS REGARDING THE WATERSHED PROTECTION MAINTENANCE STANDARDS AND CONSTRUCTION BEST MANAGEMENT PRACTICES.
11. THE AREAS DELINEATED ON THE PLANS FOR PARKING, GRUBBING, STORAGE ETC., SHALL NOT BE ENLARGED OR "RUN OVER".
12. CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON".
13. DUST CONTROL IS REQUIRED YEAR-ROUND.
14. EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
15. USE OF PLASTIC SHEETING BETWEEN OCTOBER 1st, AND APRIL 30th IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
16. THE TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.

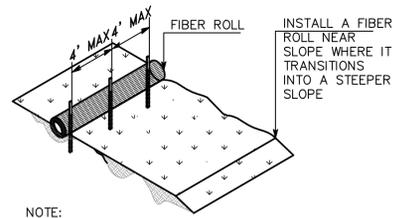


	DATE: _____ BY: _____ REV: _____ DESCRIPTION: _____
<b>MACLEOD AND ASSOCIATES</b> CIVIL ENGINEERING • LAND SURVEYING 965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580	
PREPARED FOR: JONAS BARBOUR	UNINCORPORATED SAN MATEO COUNTY CALIFORNIA
<b>EROSION &amp; SEDIMENTATION CONTROL PLAN</b> 933 LAKEVIEW WAY	
DRAWN BY: DJK DESIGNED BY: DJK CHECKED BY: DGM SCALE: 1"=10' DATE: 05/17/21 DRAWING NO. 4832-GRAD	SHEET <b>C-3</b> 3 OF 5



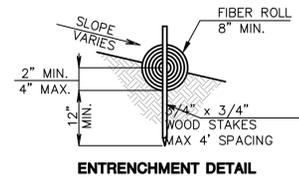
**A DRAIN INLET PROTECTION DETAIL**

SCALE: (NOT TO SCALE)



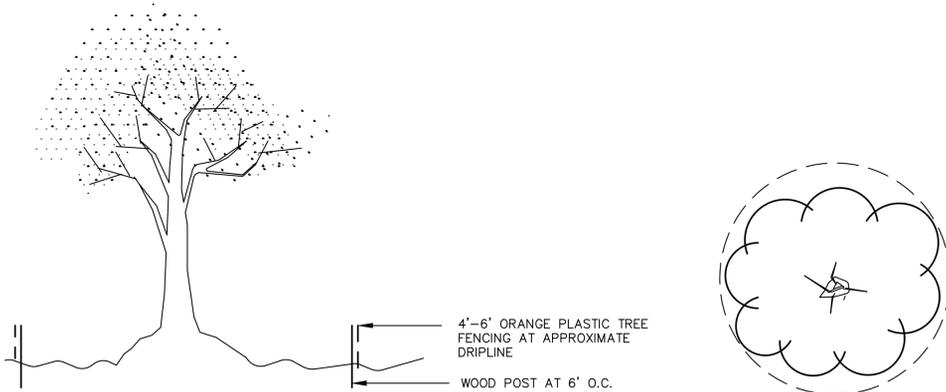
**TYPICAL FIBER ROLL INSTALLATION**

N.T.S.



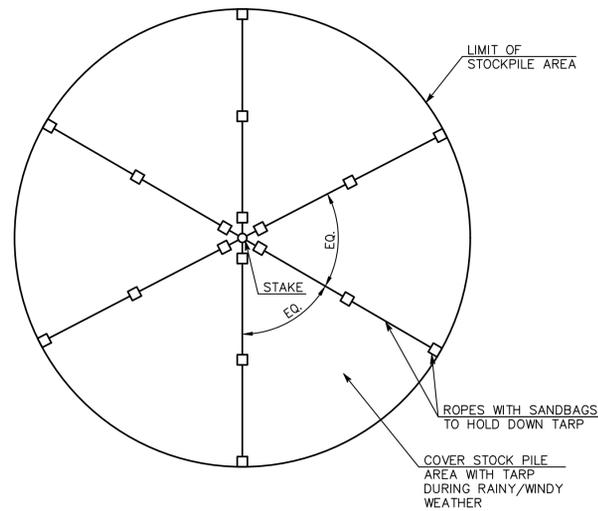
**ENTRENCHMENT DETAIL**

N.T.S.



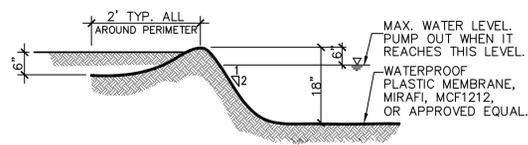
**C TYPICAL TREE PROTECTION DETAIL**

SCALE: (NOT TO SCALE)



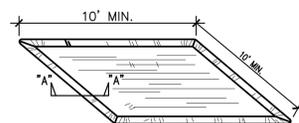
**D STOCKPILE AREA DETAIL**

SCALE: (NOT TO SCALE)



**SECTION 'A - A' FOR WASHOUT PIT**

N.T.S.



**PLAN**

N.T.S.

**E TEMPORARY WASHOUT AREA**

SCALE: (NOT TO SCALE)

DATE:	
BY:	
DESCRIPTION:	
REV:	



**MACLEOD AND ASSOCIATES**  
 CIVIL ENGINEERING • LAND SURVEYING  
 965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

PREPARED FOR:  
 JONAS BARBOUR

**CIVIL DETAILS**  
 933 LAKEVIEW WAY  
 SAN MATEO COUNTY CALIFORNIA  
 UNINCORPORATED

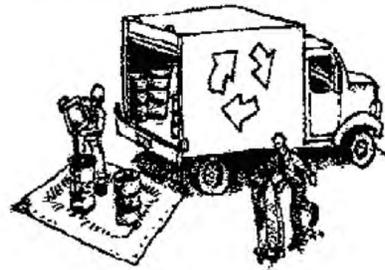
DRAWN BY: DJK  
 DESIGNED BY: DJK  
 CHECKED BY: DGM  
 SCALE: NONE  
 DATE: 05/17/21  
 DRAWING NO. 4832-GRAD

SHEET  
**C-4**  
 4 OF 5

# Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

## Materials & Waste Management



### Non-Hazardous Materials

- Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control.

### Hazardous Materials

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

### Waste Management

- Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

### Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

## Equipment Management & Spill Control



### Maintenance and Parking

- Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

### Spill Prevention and Control

- Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- Clean up spills or leaks immediately and dispose of cleanup materials properly.
- Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

## Earthmoving



- Schedule grading and excavation work during dry weather.
- Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

### Contaminated Soils

- If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

## Paving/Asphalt Work



- Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Do not use water to wash down fresh asphalt concrete pavement.

### Sawcutting & Asphalt/Concrete Removal

- Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If sawcut slurry enters a catch basin, clean it up immediately.

## Concrete, Grout & Mortar Application



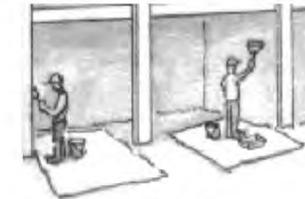
- Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

## Landscaping



- Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- Stack bagged material on pallets and under cover.
- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

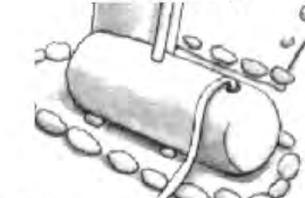
## Painting & Paint Removal



### Painting Cleanup and Removal

- Never clean brushes or rinse paint containers into a street, gutter, storm 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 as hazardous waste.
- 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 tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

## Dewatering



- Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- Divert run-on water from offsite away from all disturbed areas.
- When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

**Storm drain polluters may be liable for fines of up to \$10,000 per day!**

DATE:	
BY:	
DESCRIPTION:	
REV:	
<b>MACLEOD AND ASSOCIATES</b> CIVIL ENGINEERING • LAND SURVEYING 905 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580	
PREPARED FOR:	JONAS BARBOUR
CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN	933 LAKEVIEW WAY SAN MATEO COUNTY CALIFORNIA UNINCORPORATED
DRAWN BY:	DJK
DESIGNED BY:	DJK
CHECKED BY:	DGM
SCALE:	NONE
DATE:	05/17/21
DRAWING NO.	4832-GRAD
SHEET	<b>C-5</b>
	5 OF 5