



LOCATION



BLDG CODES



GODSTON RESIDENCE

LOS GATOS, CA

PROJECT DATA

DESCRIPTION: NEW SINGLE FAMILY, 4 BEDROOMS, CARPORT, DRIVEWAY, SEPTIC SYSTEM (BY OTHERS),

LOCATION: 20411 HARVEY WAY
LOS GATOS, CA 95033
APN: 558-04-033
LOT SIZE: 48,602.3 SQ.FT.

BUILDING AREA CALCULATION: PROPOSED

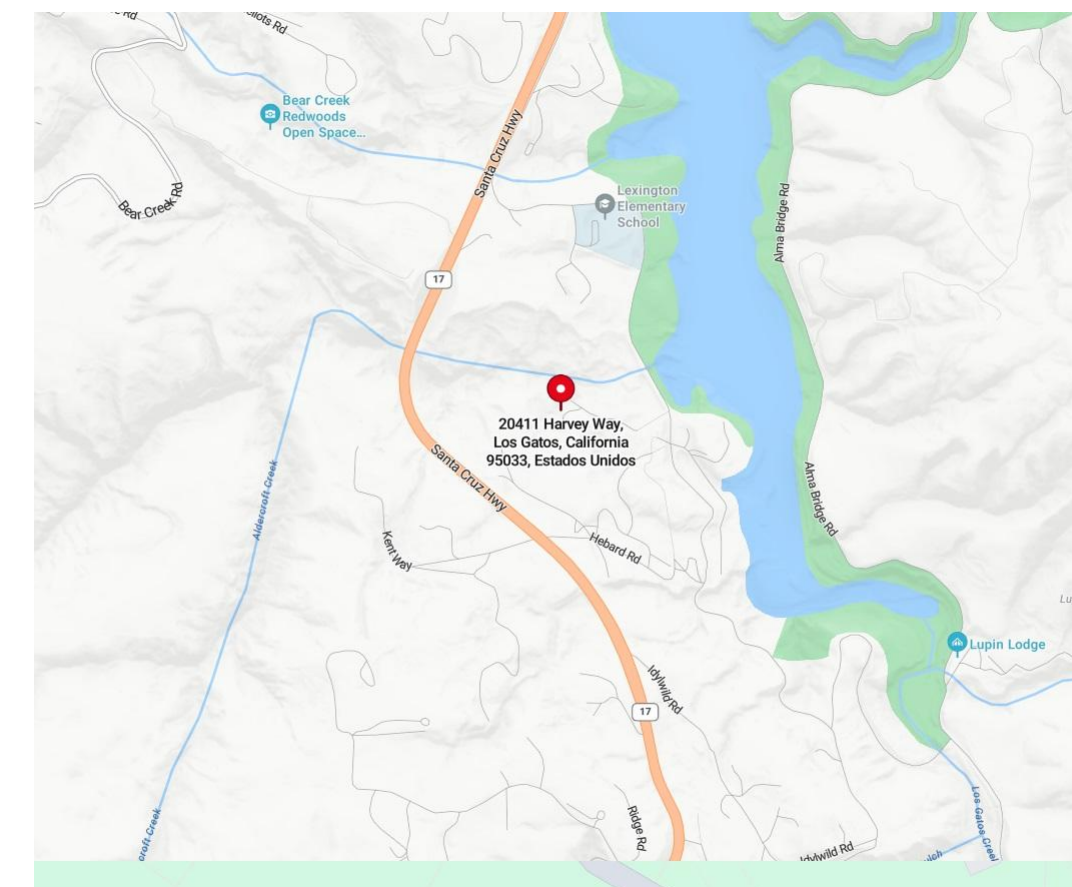
UNCONDITIONED	
1ST STORY (CARPORT)	390 ft ²
2ND STORY (PORCH)	114 ft ²
CONDITIONED	
1ST STORY	420 ft ²
2ND STORY	1,215 ft ²
3RD STORY	920 ft ²
TOTAL CONDITIONED	
TOTAL BUILDING AREA: 3,059 ft ²	

IMPERVIOUS SURFACE	
DRIVEWAY	5,279 ft ²
BUILDING	1,215 ft ²
WATER TANK	863 ft ²
TOTAL	
7,357 ft ²	

PERVIOUS SURFACE	
PERMEABLE PAVER PATIO	1,118 ft ²

PARKING:	
CAR	2

CONSTRUCTION:	
ZONE/HEIGHT:	V-B
OCCUPANCY:	HS
NO. OF UNITS:	R-3
NO. OF STORIES:	1
FIRE SPRINKLERS:	3
WATER WELL:	Yes
FIRE SRA:	Existing
	Yes



FIRE PROTECTION

1. AUTOMATIC FIRE SPRINKLERS SHALL COMPLY WITH NFPA-13D AND BE INSTALLED BY LICENSED C-16 CONTRACTOR.
2. SMOKE AND CO DETECTORS SHALL BE INSTALLED AS REQUIRED BY CODE, WHERE INDICATED ON PLANS, AND POWERED BY 110V AC CURRENT WITH 9V BATTERY BACK-UP.

CODE DATA

2022 CA BUILDING CODE
2022 CA MECHANICAL CODE
2022 CA ELECTRICAL CODE
2022 CA PLUMBING CODE
2022 CA ENERGY CODE
2022 CA GREEN BUILDING CODE
2022 CA RESIDENTIAL CODE

COMPLY WITH ALL LOCAL ORDINANCES AND AMENDMENTS

PROJECT CONTACTS

OWNER:	JON GODSTON 20411 HARVEY WAY LOS GATOS, CA 95033	E: godston@gmail.com T: (312) 451-3960
ARCHITECT:	DNM ARCHITECTURE 1A GATE 5 ROAD SAUSALITO, CA 94965	DAVID MARLATT, AIA E: david@dnmarchitecture.com T: 415-348-8910
CONTRACTOR:	TBD	
STRUCTURAL ENGINEER:	TBD	
GEOTECHNICAL ENGINEER:	TBD	
SURVEYOR:	JMH WEISS 150 ALMADEN BOULEVARD SUITE 700, SAN JOSE CA.	T:(408) 286-4555
CIVIL ENGINEER:	DEBOLT 480 SAN RAMON VALLEY BLVD UNIT L, DANVILLE CA 94526	T:(925) 837-3780
ENERGY CONSULTANT:	TBD	
CIVIL ENGINEER:	HOGAN 2604 41ST AVENUE SUITE B, SOQUEL CA 95073	T:(831) 425-1617

APPROVALS

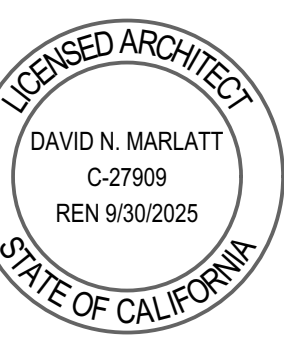
DRAWING INDEX

SHT	TITLE	1/19/24				
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C3	DRIP SYSTEM DETAILS	x				
C4	DRIP SYSTEM PLAN	x				



LOCATION

DNM ARCHITECTURE
DNM Architecture • 1A Gate 5 Road • Sausalito, CA 94965
T: 415-348-8910 • E: info@dnmarchitecture.com



SITE APPROVAL PERMIT

PROJECT DATA

23.0911
GODSTON RESIDENCE
20411 HARVEY WAY
LOS GATOS, CA 95033

APN: 558-04-033

REVISIONS	
#	REASON DATE
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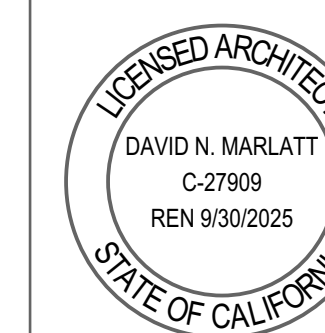
1/19/2024

A0.0



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SITE PLAN

23.0911
GODSTON RESIDENCE
20411 HARVEY WAY
LOS GATOS, CA 95033

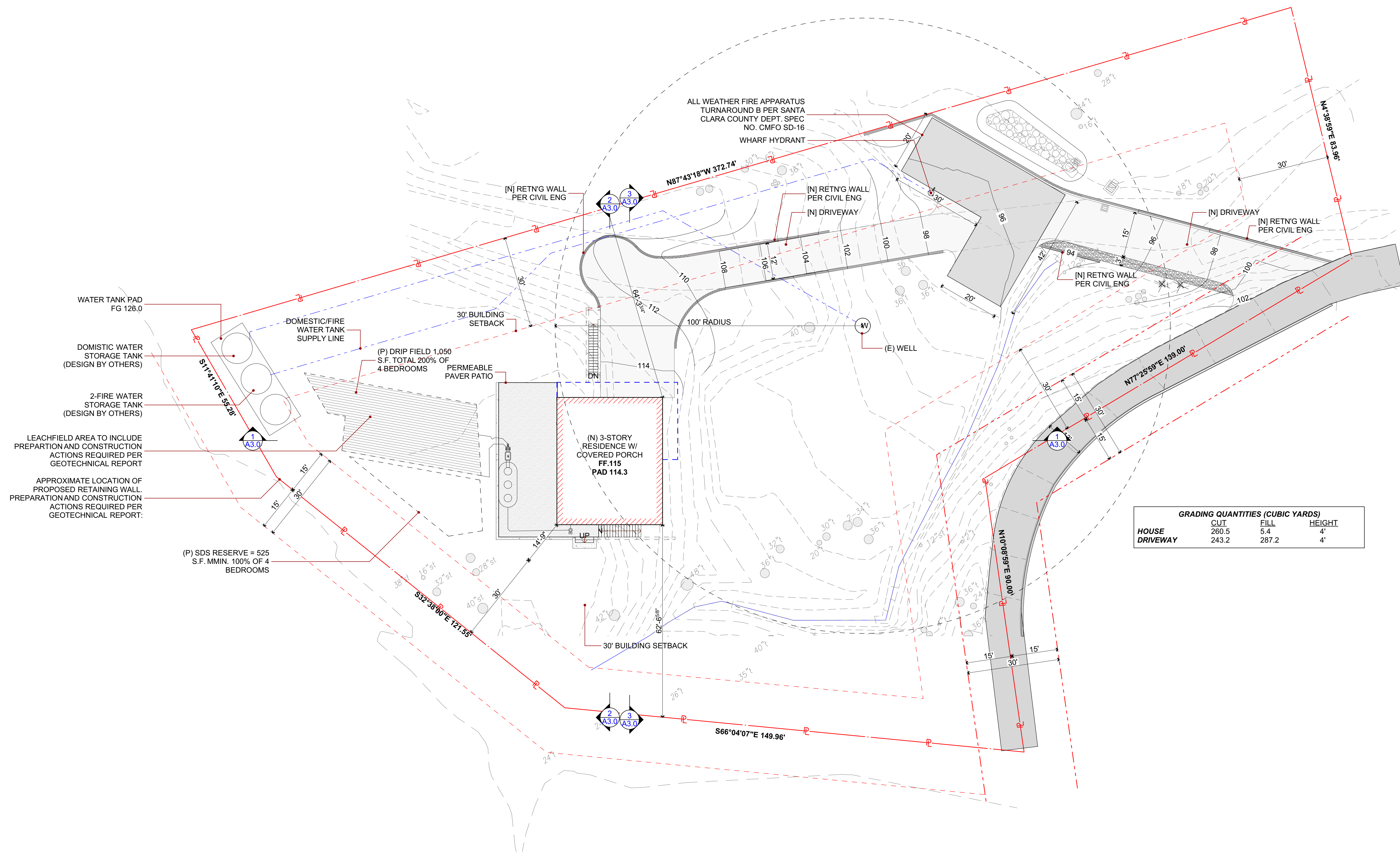
APN: 558-04-033

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1/19/2024

A1.0



GRADING QUANTITIES (CUBIC YARDS)			
	CUT	FILL	HEIGHT
HOUSE	260.5	5.4	4'
DRIVEWAY	243.2	287.2	4'

SITE PLAN

SCALE: 1/16" = 1'-0"

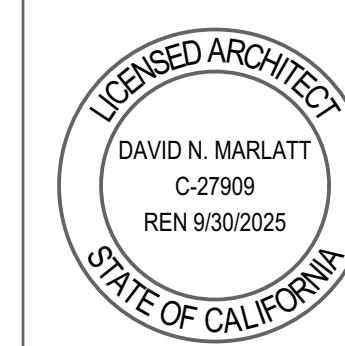


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1ST & 2ND STORY

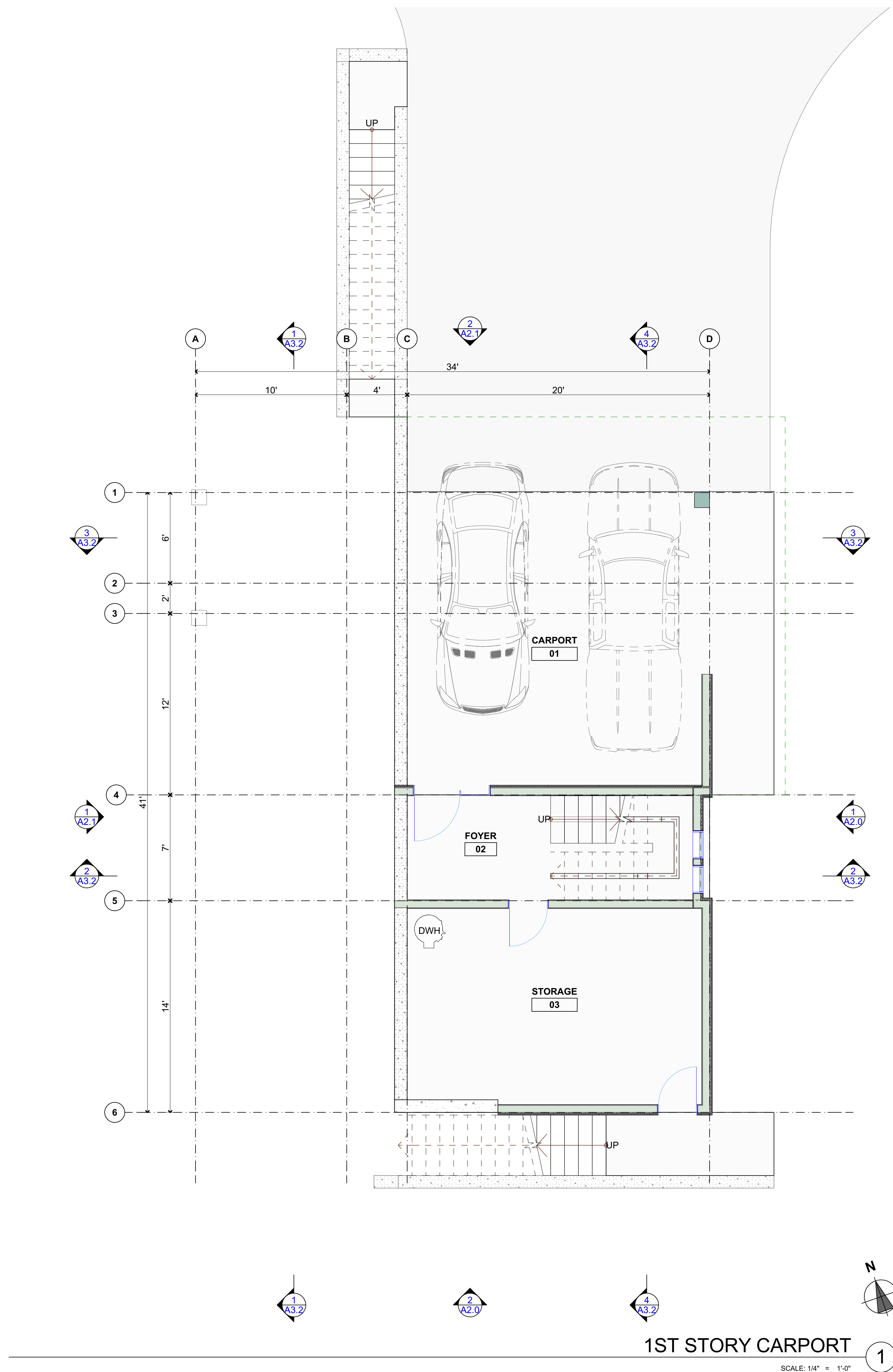
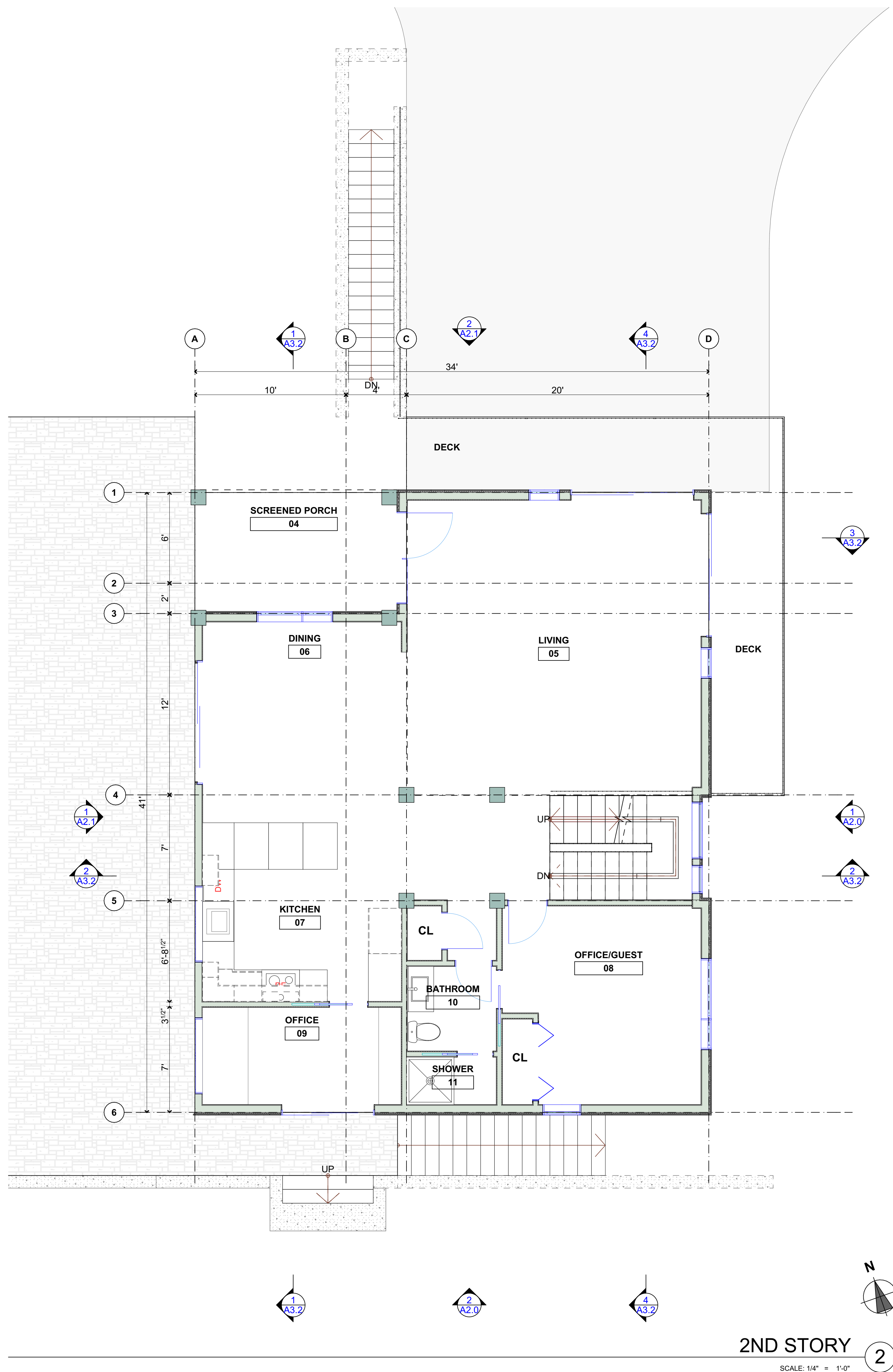
23.0911
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APN: 558-04-033

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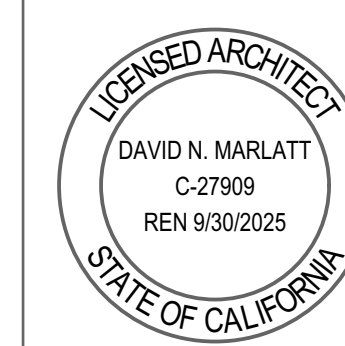
A1.1





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3RD STORY & ROOF PLAN

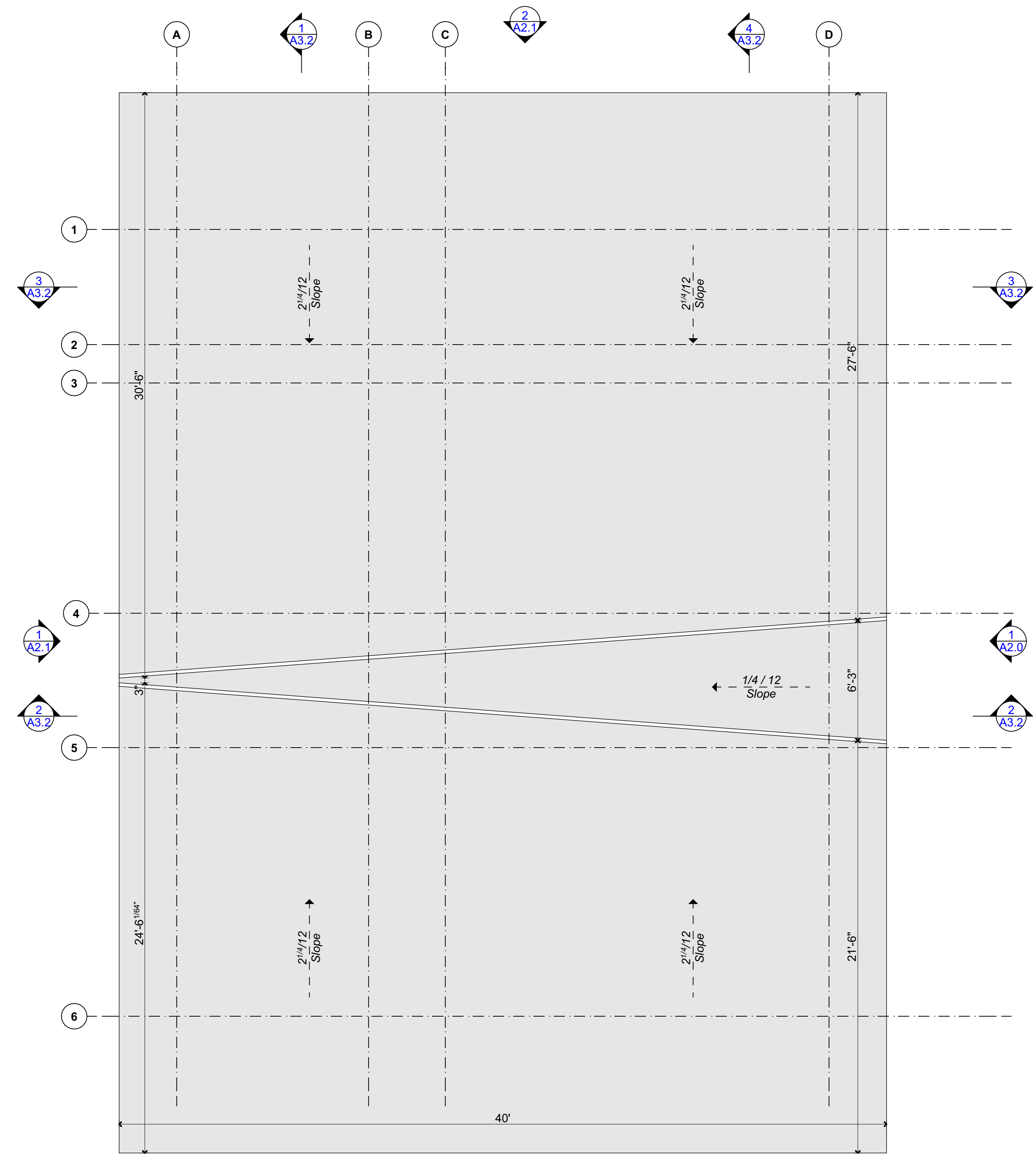
23.0911
GODSTON RESIDENCE
20411 HARVEY WAY
LOS GATOS, CA 95033

APN: 558-04-033

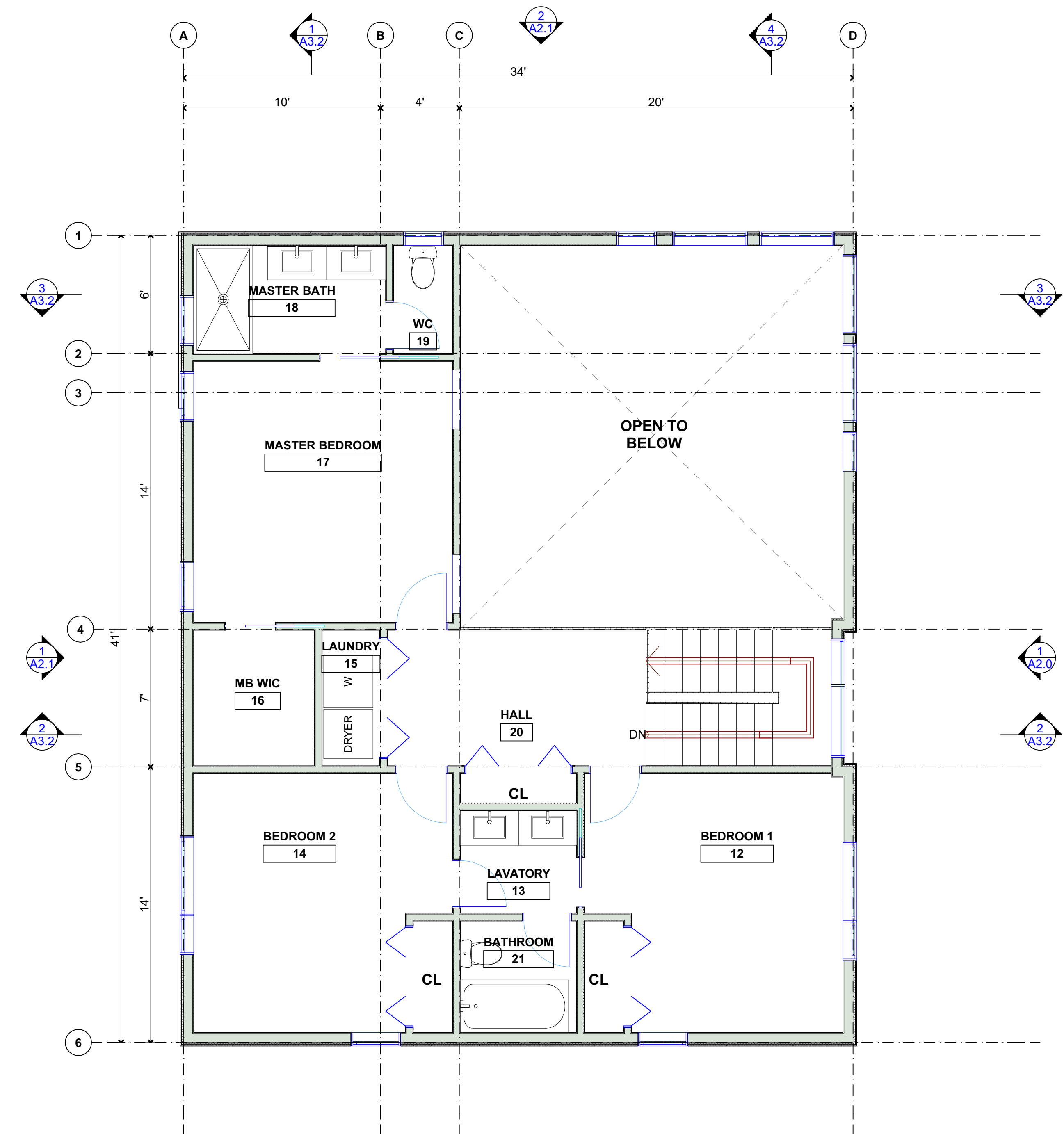
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1/19/2024

A1.2



ROOF ②
SCALE: 1/4" = 1'-0"

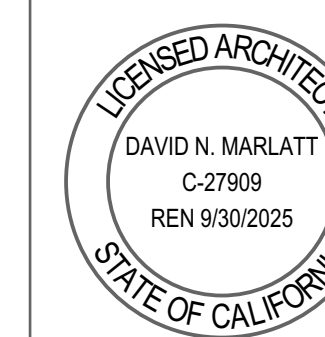


3RD STORY ①
SCALE: 1/4" = 1'-0"



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ELEVATIONS

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GODSTON RESIDENCE
20411 HARVEY WAY
LOS GATOS, CA 95033

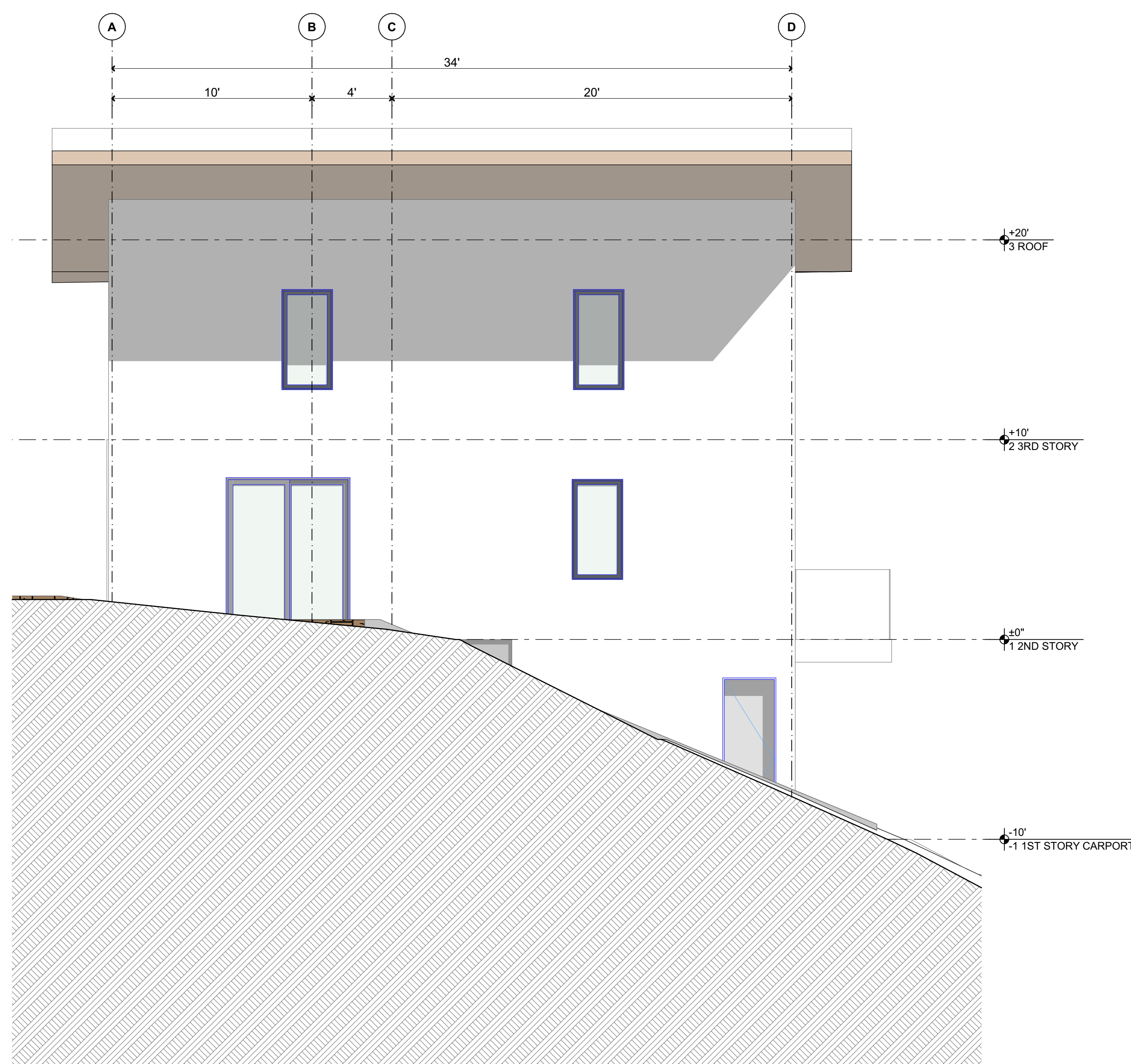
APN: 558-04-033

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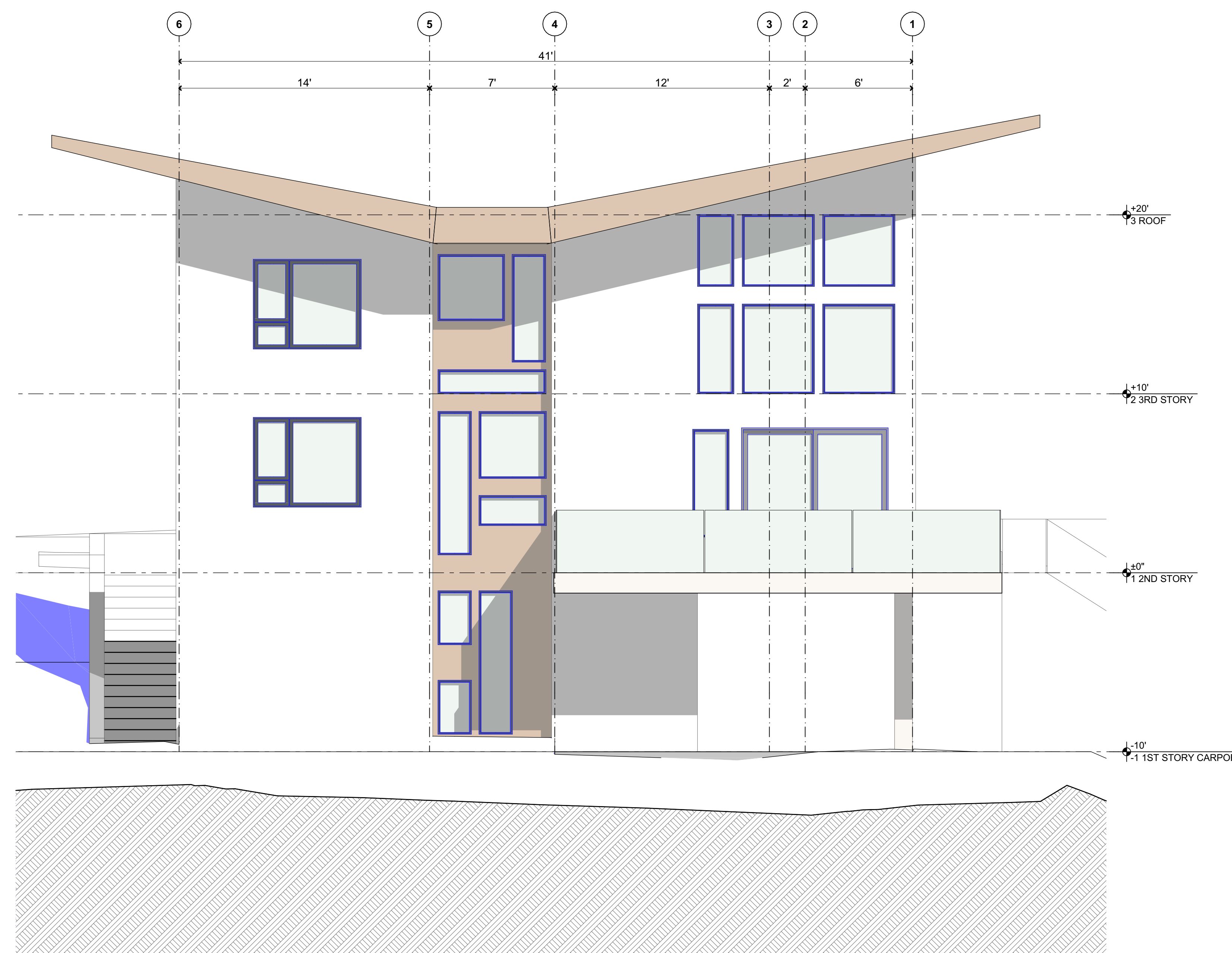
1/19/2024

A2.0



SOUTH ELEVATION ②

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



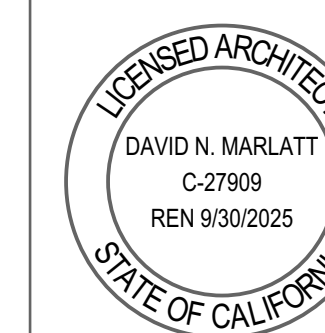
EAST ELEVATION ①

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



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SITE APPROVAL PERMIT

ELEVATIONS

23.0911
GODSTON RESIDENCE
20411 HARVEY WAY
LOS GATOS, CA 95033

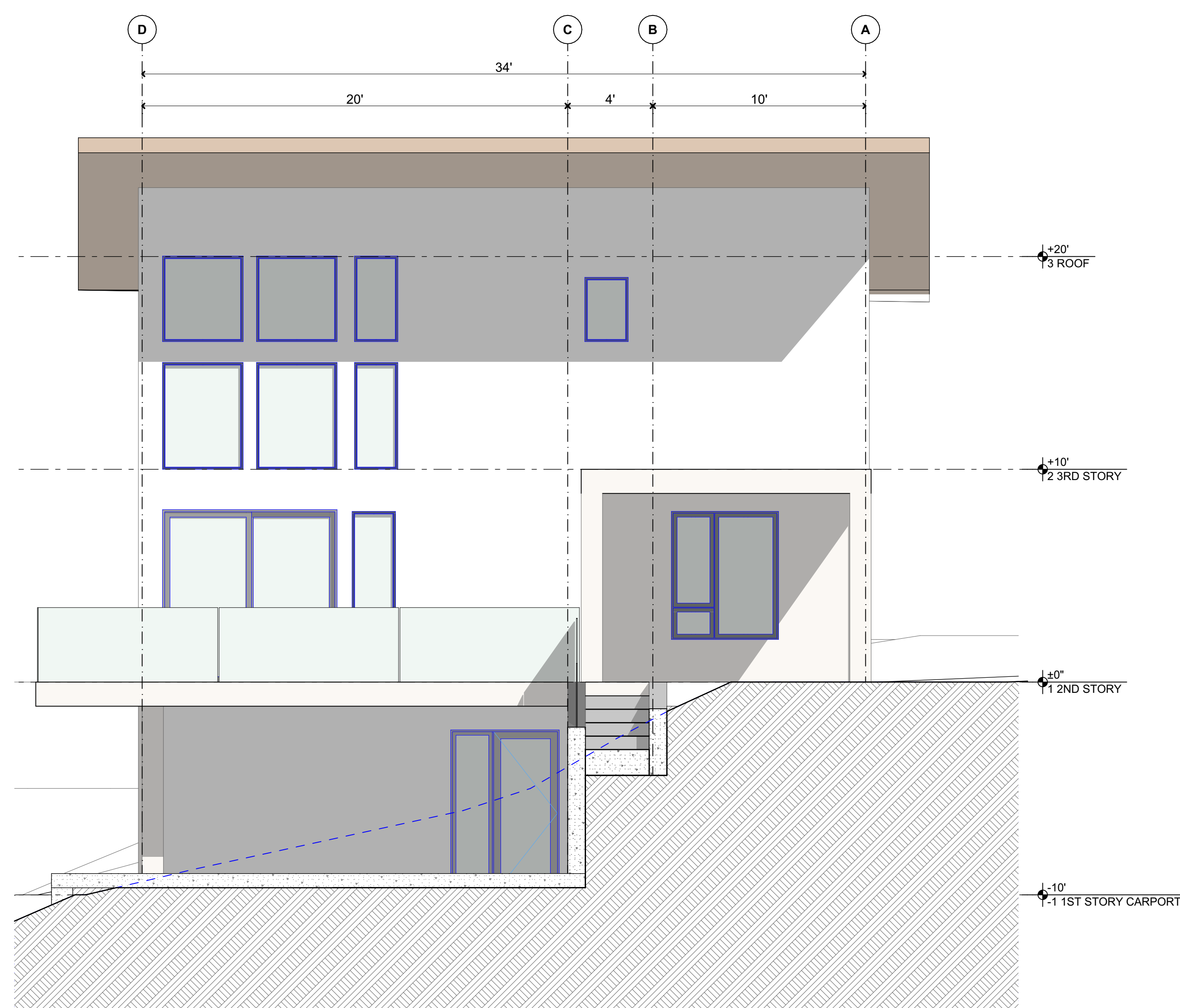
APN: 558-04-033

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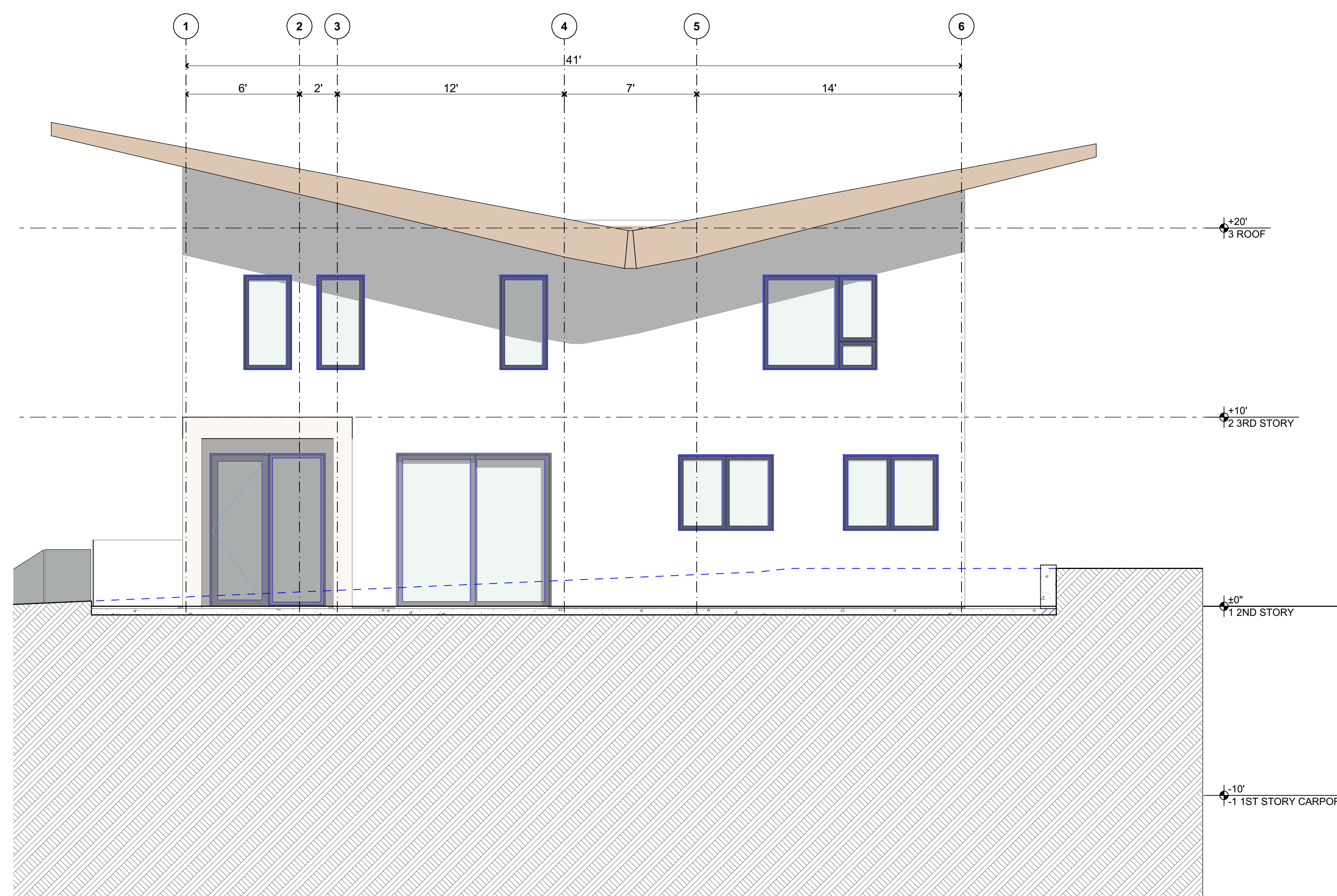
A2.1



NORTH ELEVATION

2

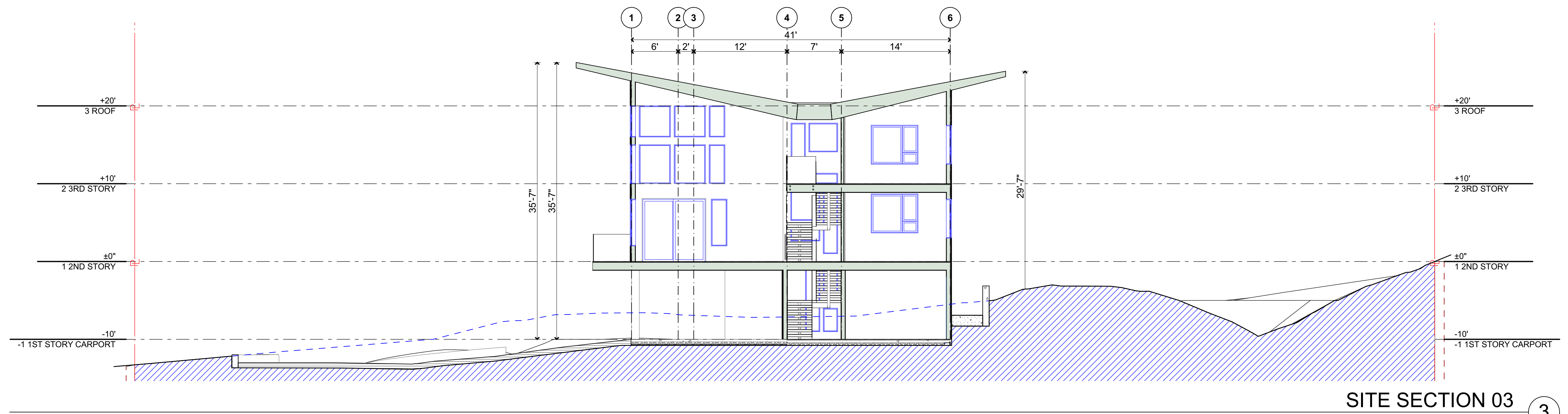
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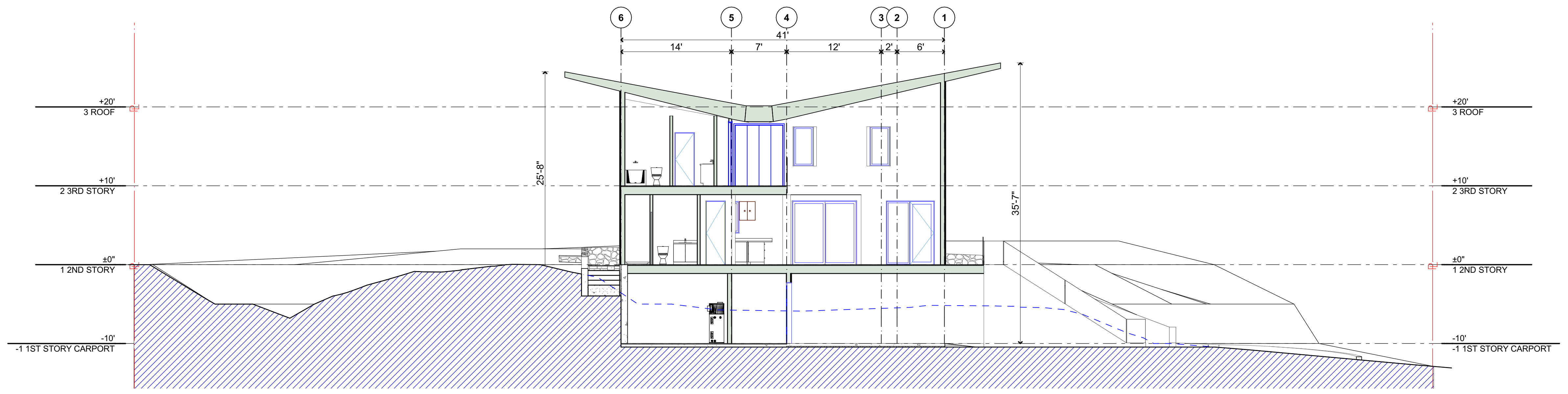
WEST ELEVATION

1

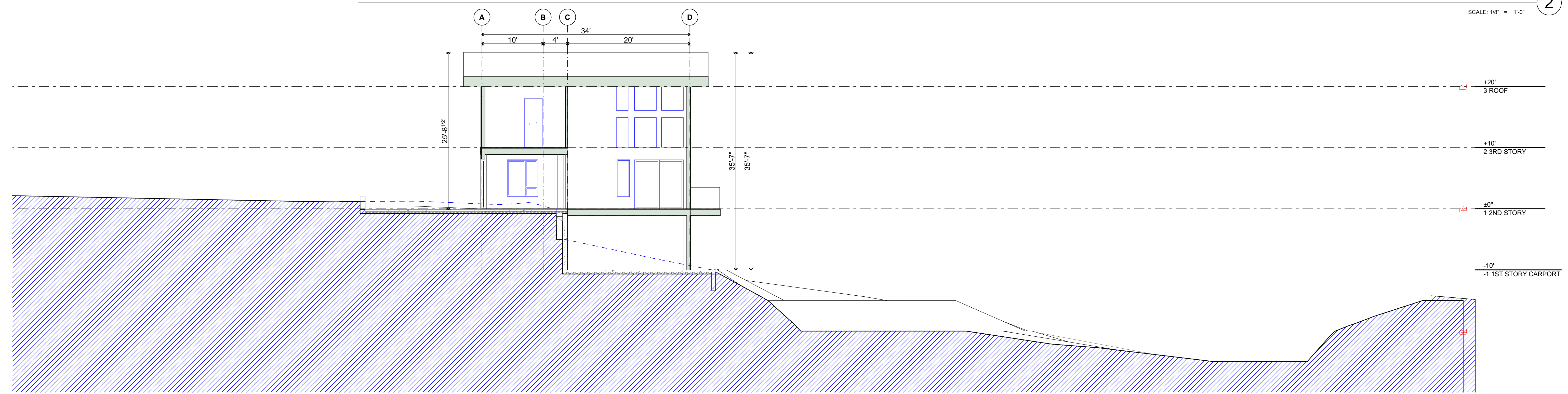
SCALE: 1/4" = 1'-0"



SITE SECTION 03 ③
SCALE: 1/8" = 1'-0"



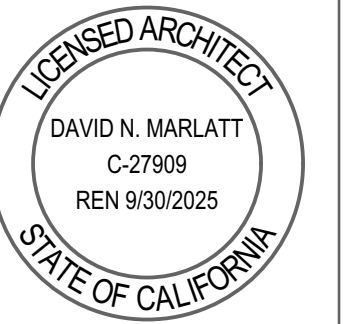
SITE SECTION 02 ②
SCALE: 1/8" = 1'-0"



SITE SECTION 01 ①
SCALE: 1/8" = 1'-0"



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SITE APPROVAL PERMIT
SITE SECTIONS

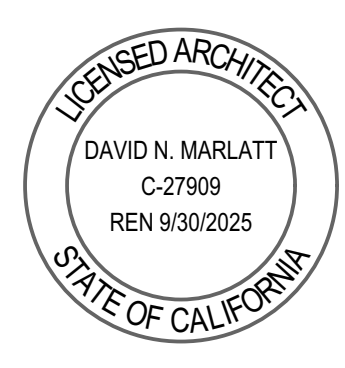
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GODSTON RESIDENCE
 20411 HARVEY WAY
 LOS GATOS, CA 95033

APN: 558-04-033

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1/19/2024

A3.0



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BUILDING SECTIONS

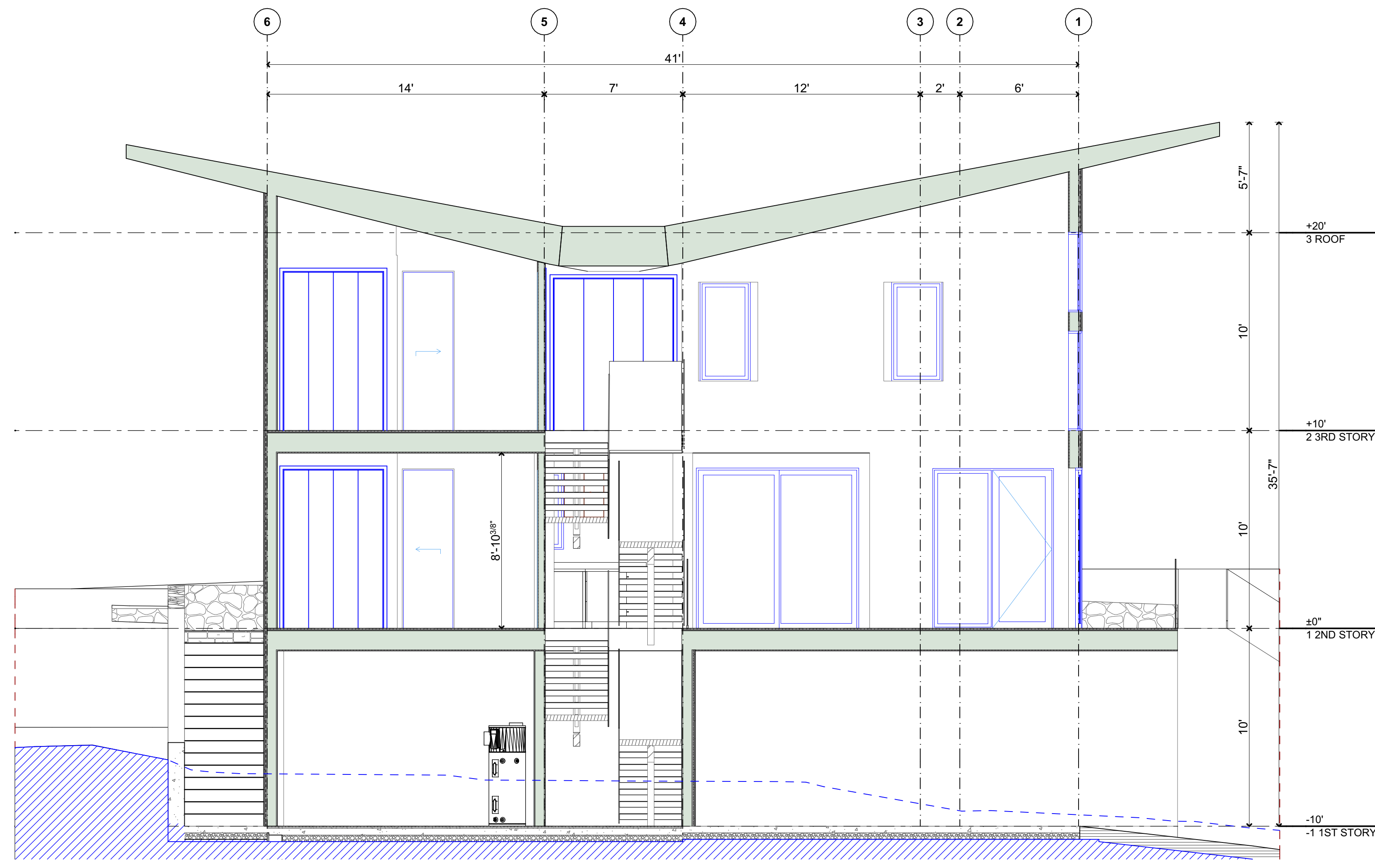
23.0911
GODSTON RESIDENCE
 20411 HARVEY WAY
 LOS GATOS, CA 95033

APN: 558-04-033

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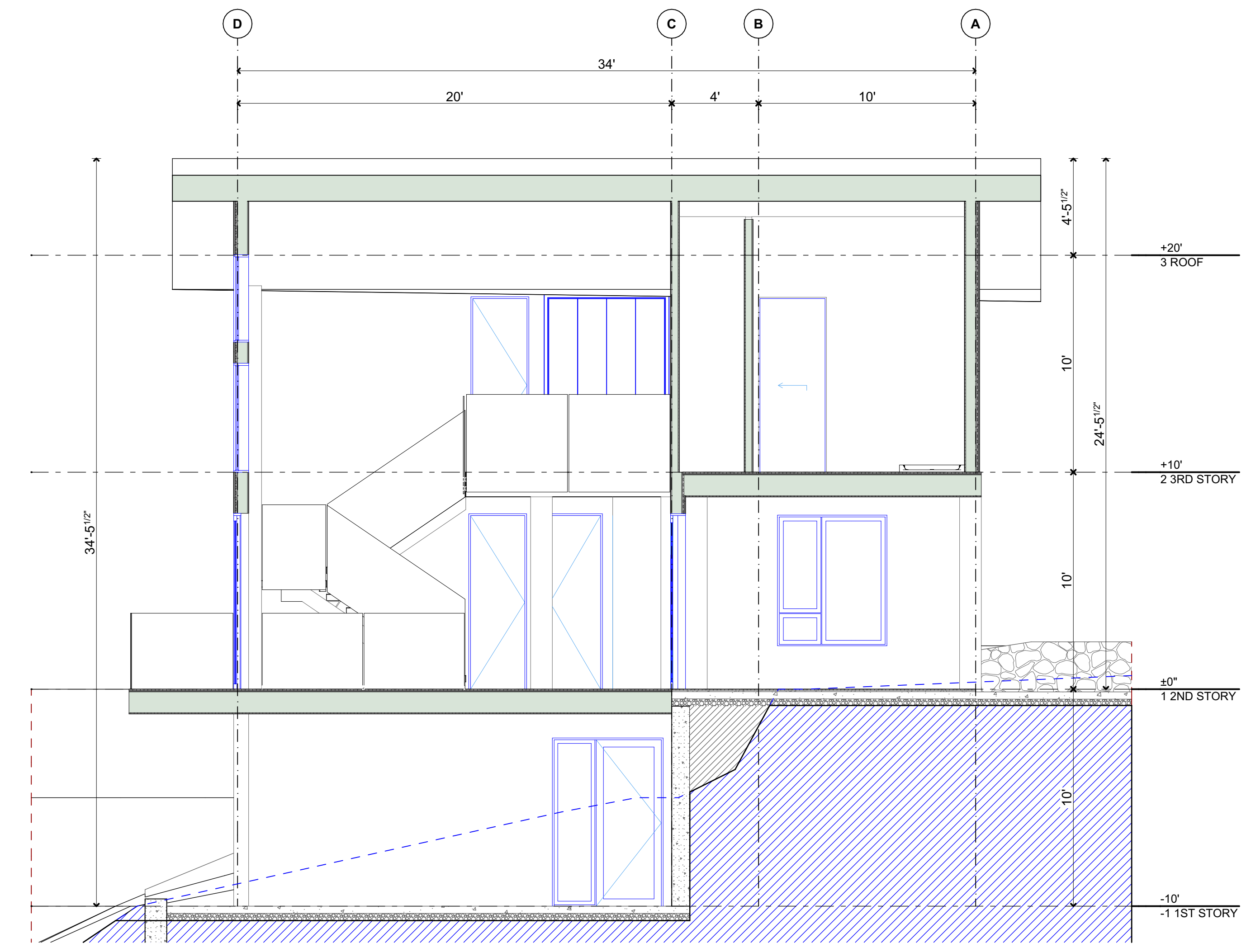
1/19/2024

A3.2



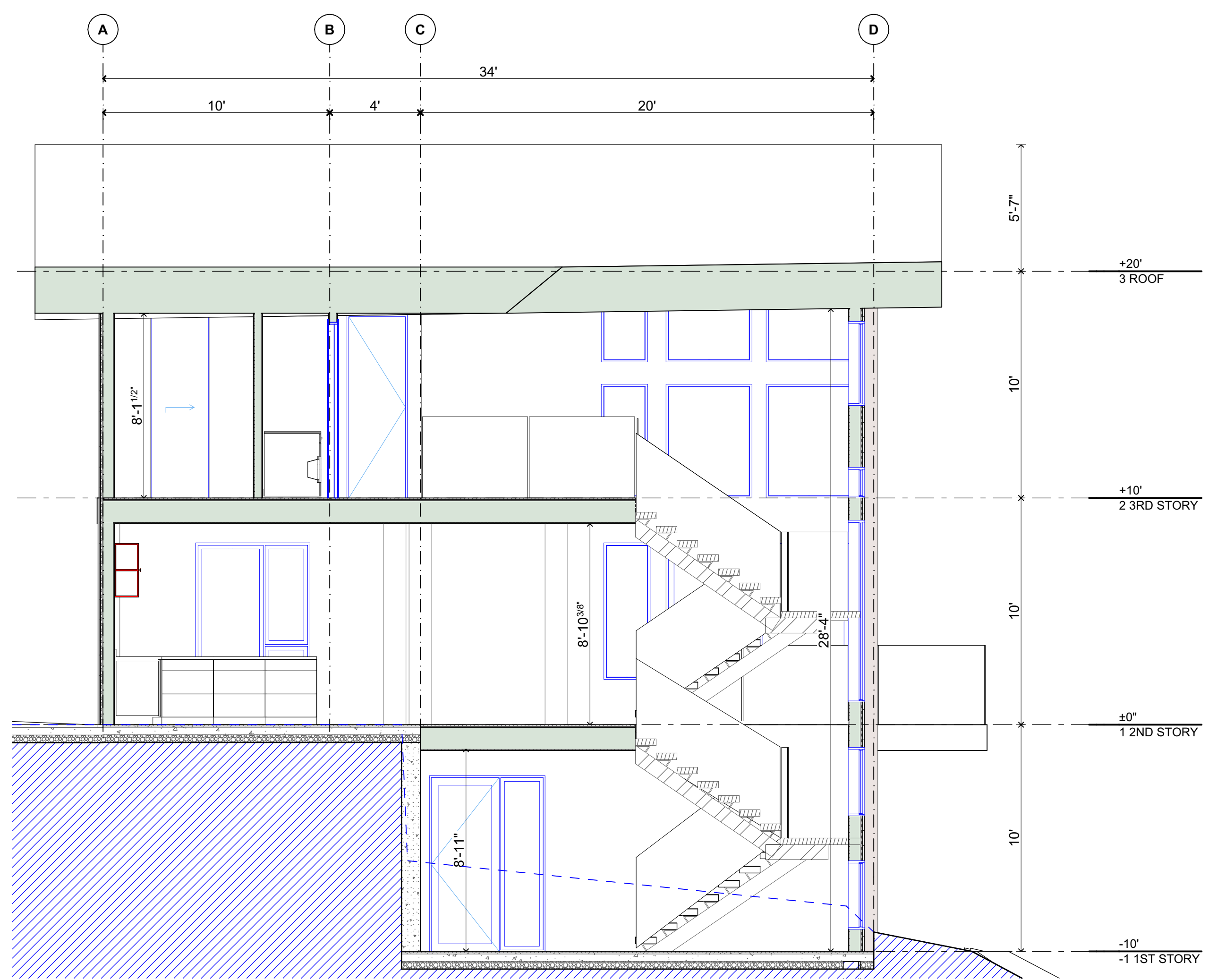
SECTION AT BEDROOMS

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



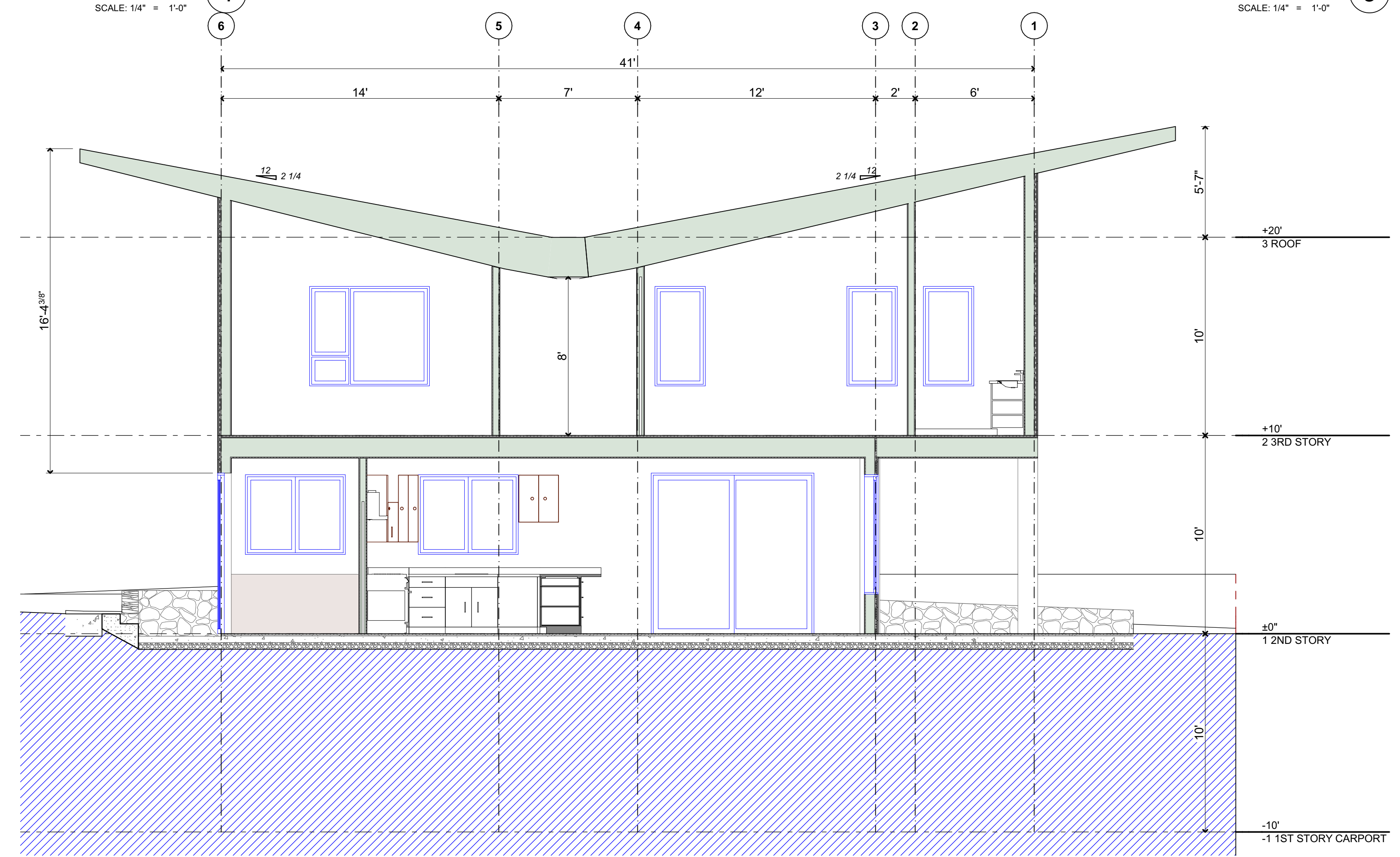
SECTION THRU PORCH

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



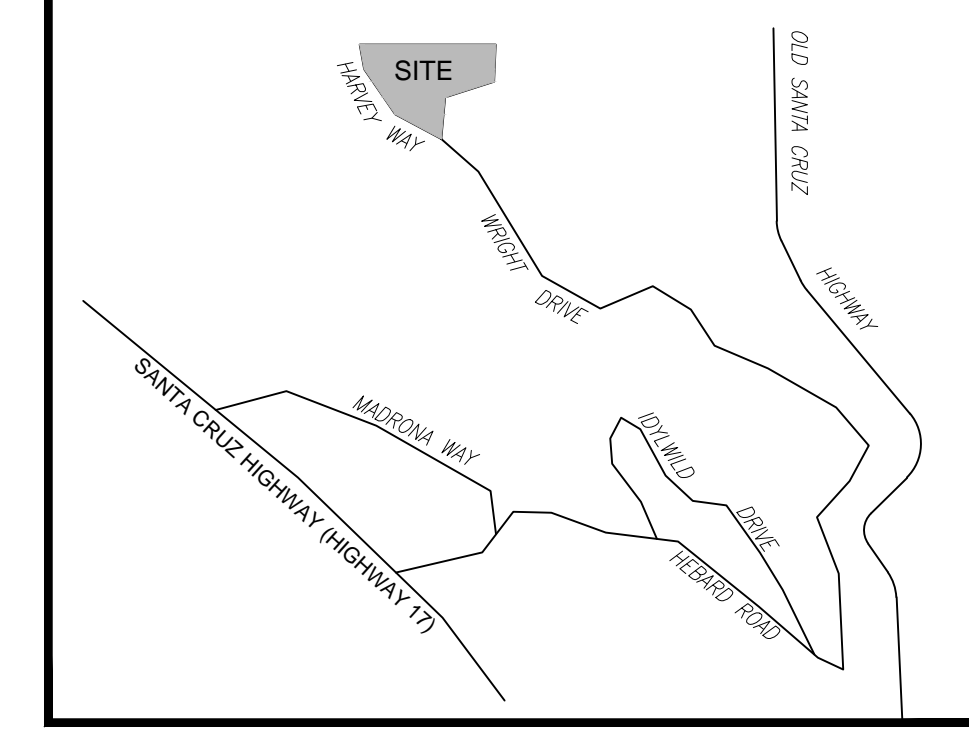
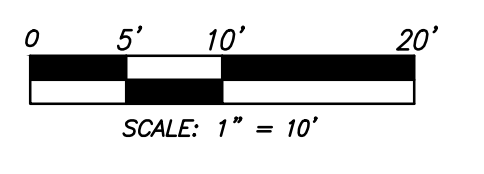
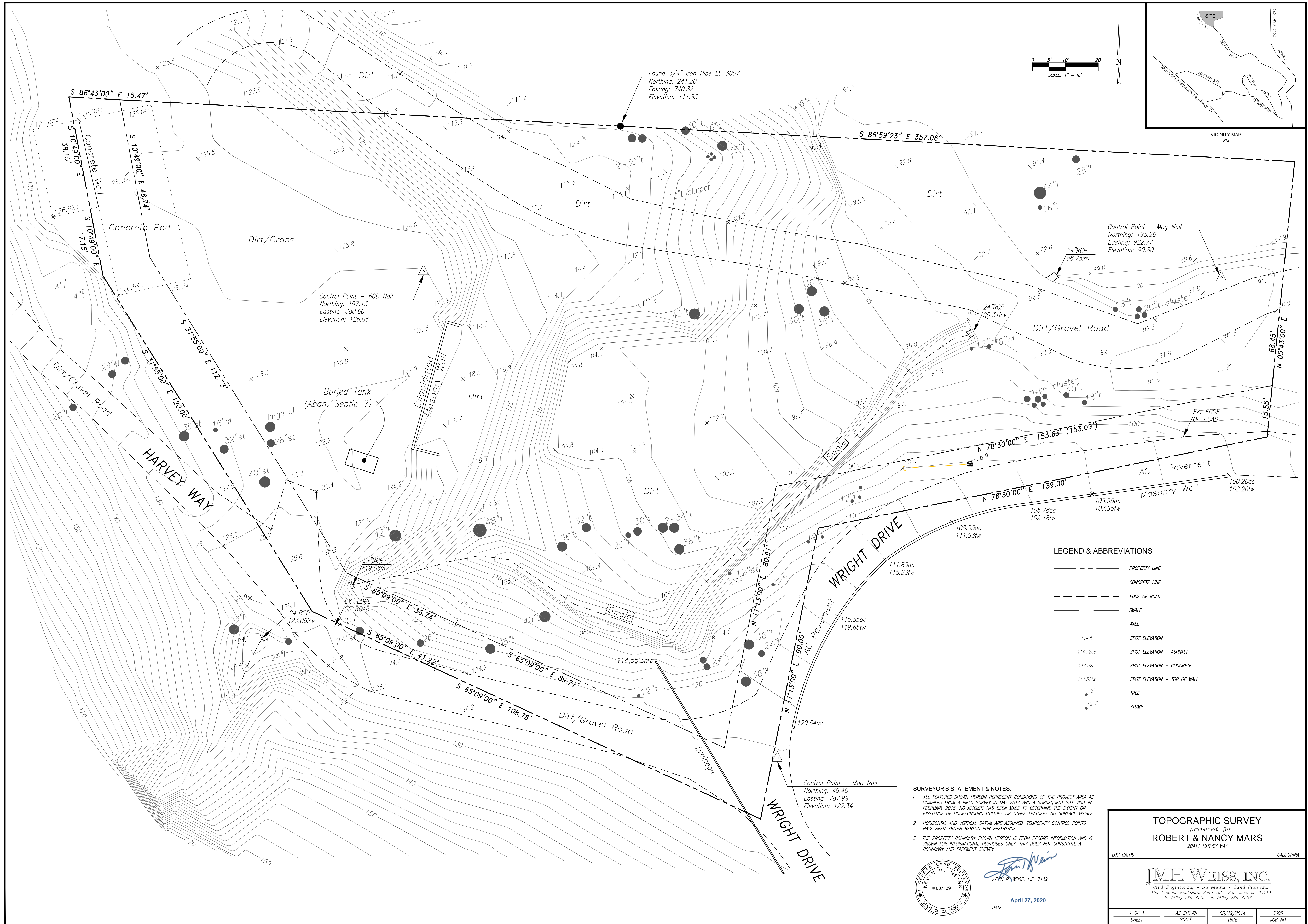
SECTION THRU STAIRS

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



SECTION THRU KITCHEN

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



LEGEND & ABBREVIATIONS

---	PROPERTY LINE
---	CONCRETE LINE
---	EDGE OF ROAD
---	SWALE
---	WALL
114.5	SPOT ELEVATION
114.52ac	SPOT ELEVATION - ASPHALT
114.52c	SPOT ELEVATION - CONCRETE
114.52tw	SPOT ELEVATION - TOP OF WALL
● 12"	TREE
● 12"st	STUMP

SURVEYOR'S STATEMENT & NOTES:

- ALL FEATURES SHOWN HEREON REPRESENT CONDITIONS OF THE PROJECT AREA AS COMPILED FROM A FIELD SURVEY IN MAY 2014 AND A SUBSEQUENT SITE VISIT IN FEBRUARY 2015. NO ATTEMPT HAS BEEN MADE TO DETERMINE THE EXTENT OR EXISTENCE OF UNDERGROUND UTILITIES OR OTHER FEATURES NOT SURFACE VISIBLE.
- HORIZONTAL AND VERTICAL DATUM ARE ASSUMED. TEMPORARY CONTROL POINTS HAVE BEEN SHOWN HEREON FOR REFERENCE.
- THE PROPERTY BOUNDARY SHOWN HEREON IS FROM RECORD INFORMATION AND IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. THIS DOES NOT CONSTITUTE A BOUNDARY AND EASEMENT SURVEY.



Kevin R. Weiss
 KEVIN R. WEISS, L.S. 7139

DATE: April 27, 2020

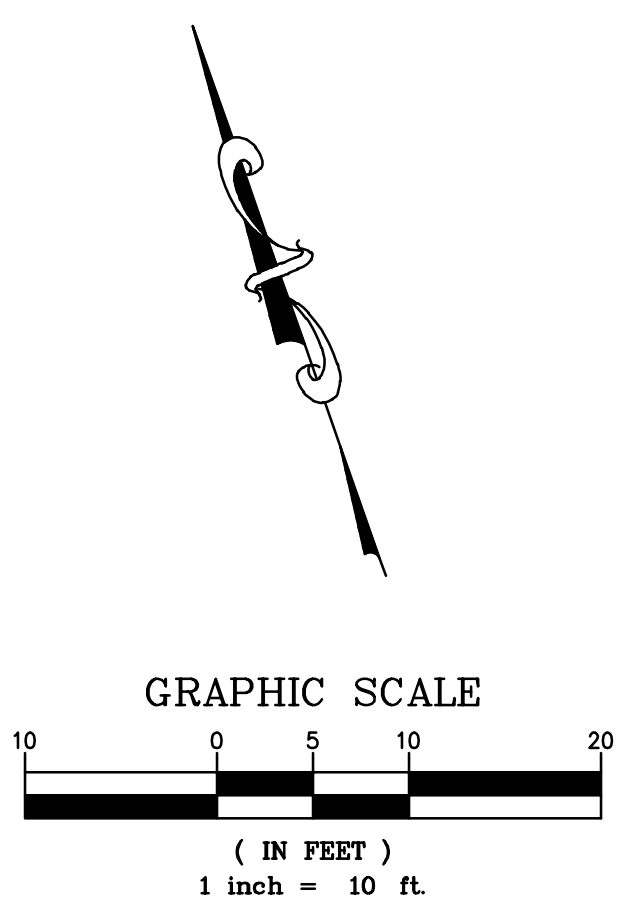
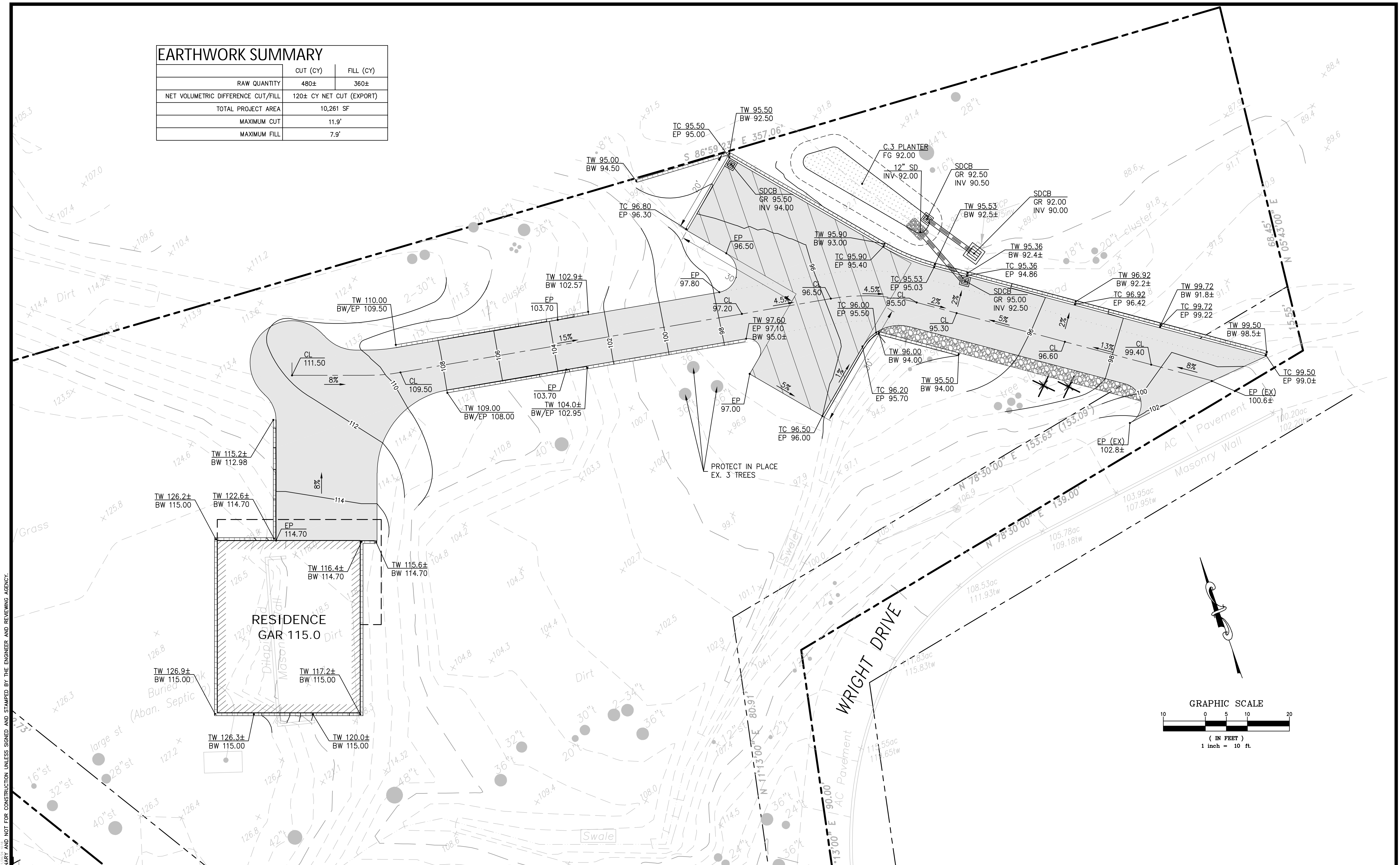
TOPOGRAPHIC SURVEY
 prepared for
ROBERT & NANCY MARS
 20411 HARVEY WAY
 LOS GATOS, CALIFORNIA

JMH WEISS, INC.
 Civil Engineering - Surveying - Land Planning
 150 Almaden Boulevard, Suite 700 San Jose, CA 95113
 P: (408) 286-4555 F: (408) 286-4558

1 OF 1 SHEET	AS SHOWN SCALE	05/19/2014 DATE	5005 JOB NO.
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DATE PLOTTED: 05/19/2014 10:58 AM PLOT FILE: C:\Users\jweiss\OneDrive\Documents\Projects\2020\05192020\05192020.dwg PLOT DEVICE: HP DesignJet 5000 Series Plotter

EARTHWORK SUMMARY		
	CUT (CY)	FILL (CY)
RAW QUANTITY	480±	360±
NET VOLUMETRIC DIFFERENCE CUT/FILL	120± CY NET CUT (EXPORT)	
TOTAL PROJECT AREA	10,261 SF	
MAXIMUM CUT	11.9'	
MAXIMUM FILL	7.9'	



GRAPHIC SCALE
 0 5 10 20
 (IN FEET)
 1 inch = 10 ft.

ALL PLANS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS SIGNED AND STAMPED BY THE ENGINEER AND REVIEWING AGENCY.

PRELIMINARY GRADING AND DRAINAGE PLAN

20411 HARVEY WAY

LOS GATOS

SANTA CLARA COUNTY

CALIFORNIA

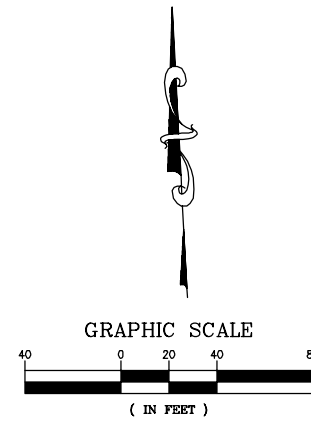
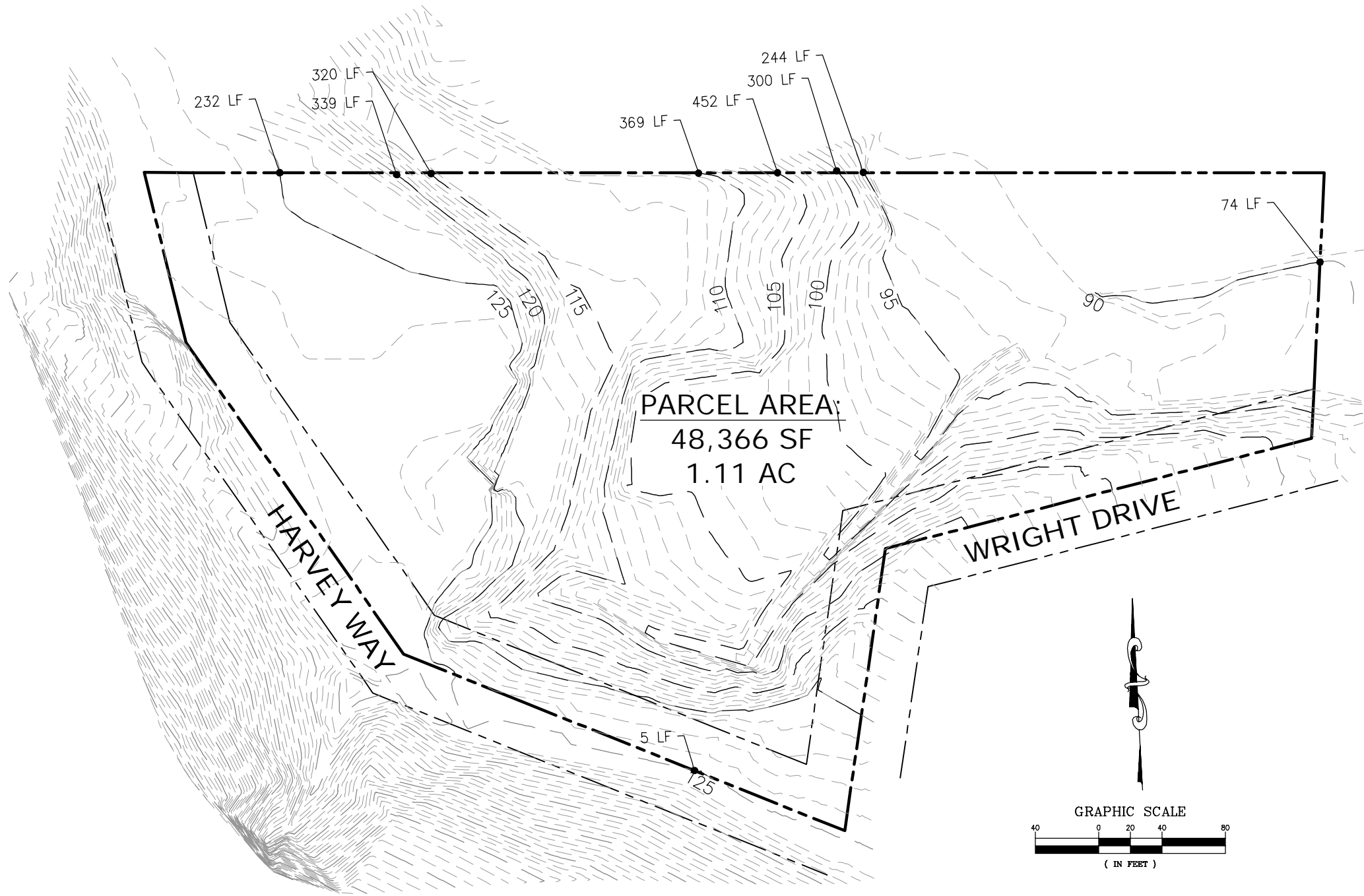
EASTON C McALLISTER - PE 61148 / PLS 9583
 RENEWAL DATE: 12/31/24 (PE) 03/31/25 (PLS)

#	REVISIONS	DATE

(925) 837-3780 | OFFICE@DEBOLTCIVIL.COM
 480 SAN RAMON VALLEY BLVD UNIT L, DANVILLE, CA 94526

Date: 01/11/24
 Scale: 1"=10'
 By: EM
 Job No.: 23213

DATE: 01-12-24 PLOTTED BY: emile



Slope Density Calculation
 23213-20411 Harvey Way
 Dated: 01/11/24

Interval 5 ft

Contour	Length
90	74
95	244
100	300
105	452
110	369
115	320
120	339
125	237
Total	2,335

SLOPE DENSITY

$$\text{SLOPE DENSITY} = \frac{0.00229 * I * L}{A} * (100)$$

$$\frac{0.00229 * 5 * 2,335}{1.11} * (100) = 24.1\%$$

SLOPE DENSITY = 24.1%



Revisions	
No.	
Date	
Scale	
Job No.	
Drawing Number	

LANDS OF GODSTON

SUBSURFACE DRIP SEWAGE DISPOSAL SYSTEM

20411 HARVEY WAY, LOS GATOS CA 95033

APN: 558-400-33

GENERAL NOTES

- DRIP LINES SHALL FOLLOW THE NATURAL CONTOUR OF THE GROUND; TRENCH BOTTOMS SHALL BE LEVEL. THE MAXIMUM DEVIATION ALONG THE DOWNHILL SIDE OF THE TRENCH SHALL NOT VARY MORE THAN 0.25 FEET (THREE INCHES) VERTICALLY PER A 100 FOOT RUN. DISTRIBUTION TRENCHES SHALL BE ANGLED OR CURVED TO MEET THIS REQUIREMENT.
- BACKFILL MATERIAL SHALL BE NATIVE TOP SOIL PLACE AT NATIVE COMPACTION AND MOUNDED FOR SETTLEMENT.
- PLACE CLEANOUTS EVERY 100' ON GRAVITY MAIN FROM SERVICE CONNECTION TO TANK.
- CONTACT HOGAN LAND SERVICES (831-425-1617) AND SANTA CLARA COUNTY ENVIRONMENTAL HEALTH (408-918-3400) A MIN. OF 48 HOURS BEFORE INITIATING CONSTRUCTION AND PRIOR TO ALL INSPECTION REQUESTS.
- ALL TANKS SHALL BE SIZED ACCORDING TO PLAN AND IAPMO APPROVED. ALL TANKS SHALL HAVE APPROVED RISERS THAT EXTEND 2" ABOVE SURROUNDING GRADE.
- AT THE TIME OF INSPECTION OF THE DISPOSAL FIELD THE CONTRACTOR SHALL PERFORM A HYDRAULIC PUMP TEST FOR BOTH THE ES-6 UNIT AND DRIP FIELD.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. ALL MECHANICAL, PLUMBING AND ELECTRICAL WORK SHALL CONFORM TO THE APPROPRIATE CODES ADOPTED BY THE COUNTY OF SANTA CLARA.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND AVOIDING UTILITY LINES IN THE WORK AREA.
- THE INSTALLATION OF THIS SEWAGE DISPOSAL SYSTEM MAY BE RESTRICTED TO CERTAIN TIMES OF THE YEAR BASED ON SEASONAL GROUND WATER AND WEATHER CONDITIONS. CONTRACTOR TO VERIFY STARTING TIME WITH HOGAN LAND SERVICES AND SANTA CLARA COUNTY ENVIRONMENTAL HEALTH.
- QUESTIONS REGARDING THE SUITABILITY OF ANY MATERIALS OR CONSTRUCTION PROCEDURES USED IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS SHALL BE DIRECTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
- ALL SEPTIC TANK AND SUMP JOINTS TO BE WATERTIGHT: SEAL WITH RAMNEX JOINT COMPOUND OR EQUAL. SEAL PIPES EXTENDING THROUGH TANK WALLS WITH NON-SHRINK GROUT OVERLAD WITH XYPEX OR THOROSEAL OR PRECAST INTO SUMP. TANK AND RISER JOINT SHALL BE SEALED AND MADE WATER TIGHT WITH NON-SHRINK GROUT OVERLAD WITH XYPEX OR THOROSEAL.
- THIS SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED TO ACCOMMODATE A PEAK DAILY FLOW OF 525 GALLONS PER DAY. WATER CONSERVATION MEASURES MAY BE NECESSARY TO MAINTAIN THESE WATER USAGE LIMITS. LOW FLOW TOILETS (1.6 GALLONS MAXIMUM PER FLUSH) ARE REQUIRED.
- FILL MATERIAL SHALL BE REMOVED FROM LEACHING AND TANK AREAS PRIOR TO INSTALLATION.

INSTALLATION GUIDELINES

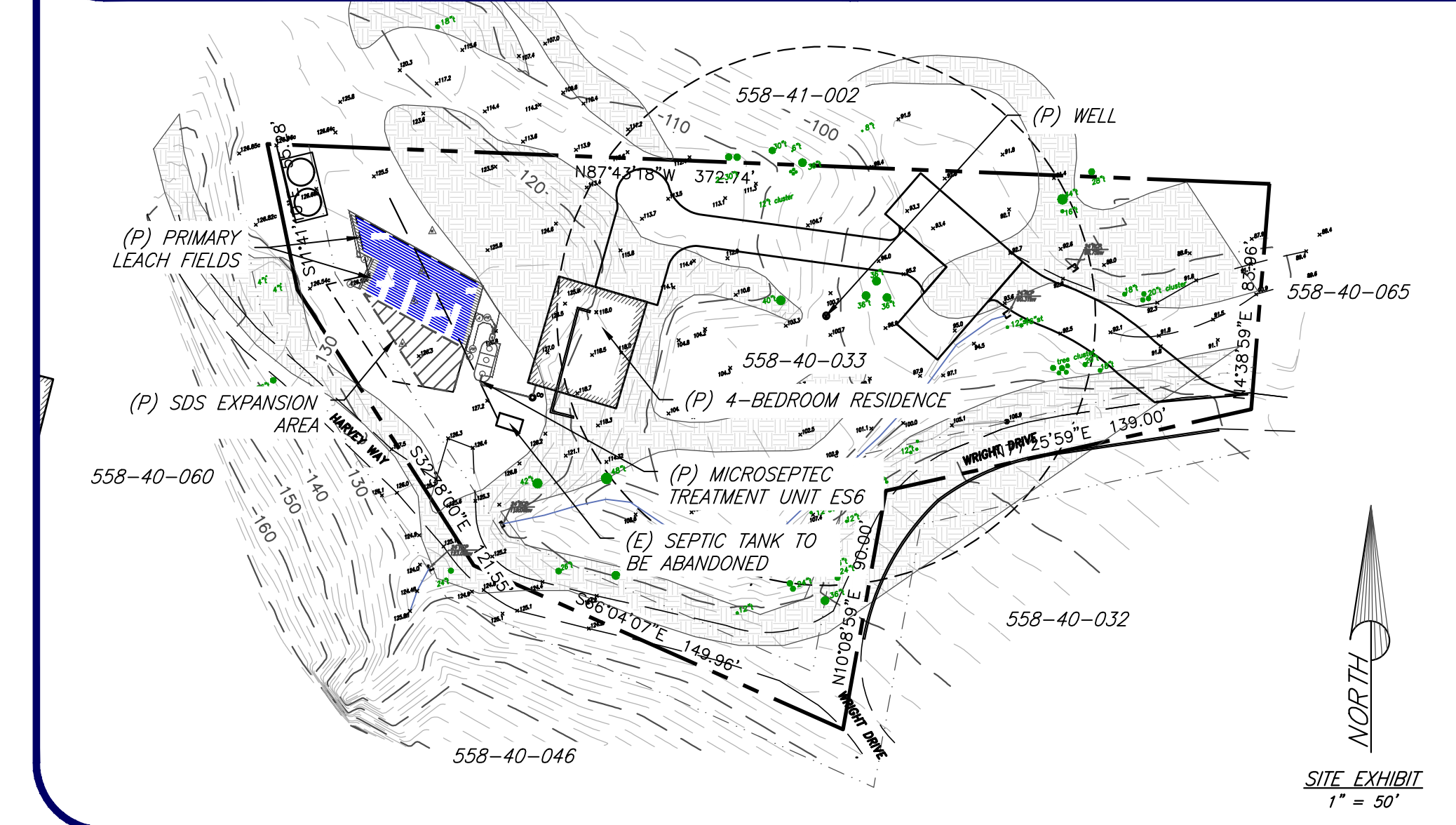
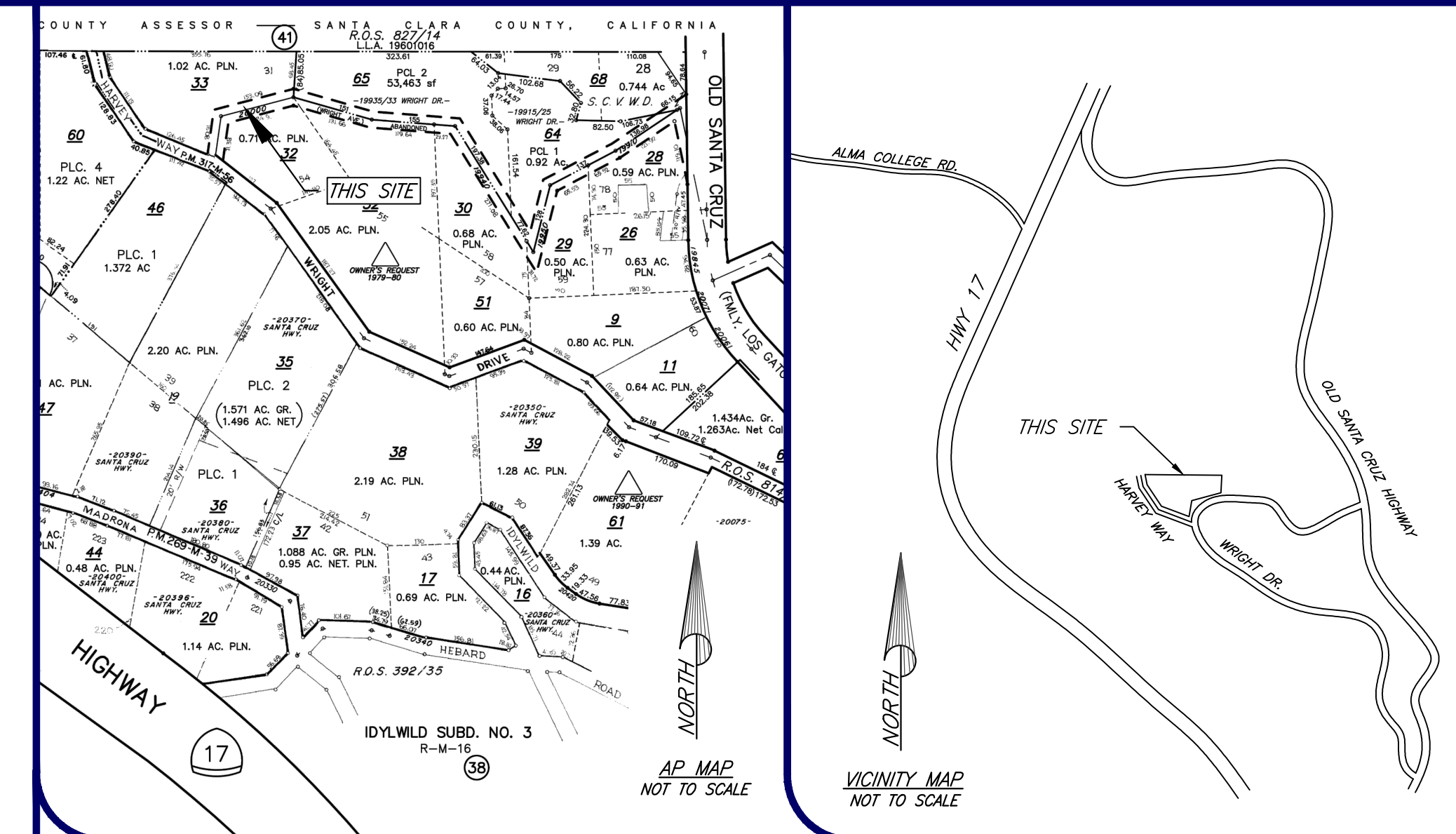
- ALL GEOFLOW DRIP SYSTEMS REQUIRE:
100 MICRON / 150 MESH FILTER, FILTER FLUSH VALVE, FIELD FLUSH VALVE AND AIR VENT IN EACH ZONE. ALL WASTEFLOW CLASSIC DRIP SYSTEMS REQUIRE PRESSURE REGULATION. SYSTEM TO BE INSTALLED BY LICENSED CONTRACTOR WITH AT LEAST 5 YEARS EXPERIENCE. HANDLE DRIP LINES AND COMPONENTS WITH CARE. ROOTGUARD IS TEMPERATURE SENSITIVE. TO ASSURE A LONG LIFE STORE THE DRIP LINE OUT OF DIRECT SUNLIGHT IN A COOL PLACE. THIS SHOULD BE A CONSIDERATION WHEN INSTALLING THE SYSTEM IN VERY HOT AND SUNNY AREAS.
- ALL DRIPFIELD CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH LOCAL RULES AND REGULATIONS.
 - NO UTILITIES, CABLE WIRE, DRAINAGE LINES, ETC. SHALL BE LOCATED IN DRIPFIELD.
 - TAKE MEASURES TO PREVENT COMPACTION OF THE DRIP FIELD DURING AND AFTER CONSTRUCTION.
 - THE SYSTEM IS NOT TO BE INSTALLED WHEN GROUND IS WET OR FROZEN.
 - DIVERT ALL DOWNSPOUTS AND SURFACE WATERS AWAY FROM DRIPFIELD.
 - ALL MATERIALS REQUIRED FOR THE INSTALLATION SHOULD BE ON SITE PRIOR TO OPENING TRENCHES. PRE-ASSEMBLE COMPONENTS AS PRACTICAL ABOVE GROUND AND IN A COMFORTABLE PLACE. COMPRESSION OR LOCKSLIP ADAPTERS SHOULD BE GLUED TO PVC TEES. RISER UNITS SHOULD BE PRE-ASSEMBLED. THE SUB-MAIN MANIFOLD WITH TEES CAN BE PRE-ASSEMBLED AND USED TO MARK THE BEGINNING AND END OF WASTEFLOW LINES.
 - THE SOIL SURFACE SHOULD BE DRY SO THAT THE INSTALLATION EQUIPMENT MAINTAINS TRACTION. PROPER PRECAUTION SHOULD BE TAKEN TO REDUCE SMEARING AND COMPACTION OF THE DRAINFIELD AND THE TRENCH SIDEWALLS.
 - MARK THE FOUR CORNERS OF THE FIELD. THE TOP TWO CORNERS SHOULD BE AT THE SAME ELEVATION AND THE BOTTOM TWO CORNERS SHOULD BE AT A LOWER ELEVATION. IN FREEZING CONDITIONS THE BOTTOM DRIPLINE MUST BE HIGHER THAN THE SUPPLY AND RETURN LINE ELEVATION AT THE DOSING TANK.
 - INSTALL THE DOSING TANK PER PLAN. IN FREEZING CONDITIONS THE DOSING TANK SHOULD BE AT THE LOWEST ELEVATION OF THE ENTIRE SYSTEM. INSTALL A WATERTIGHT RISER ON THE DOSING TANK.
 - DETERMINE THE PROPER SIZE FOR THE SUPPLY AND RETURN MANIFOLDS. SEE WORKSHEET & PLAN.
 - INSTALL THE PVC SUPPLY LINE FROM THE DOSING TANK TO THE TOP FEED MANIFOLD ON THE SUPPLY SIDE OF THE DISPERSION FIELD. 24" MINIMUM COVER FOR SUPPLY, RETURN AND PRESSURE MAINS.
 - PAINT A LINE BETWEEN THE TWO CORNER STAKES ON THE RETURN SIDE OF THE DISPERSION FIELD.
 - INSTALL THE GEOFLOW WASTEFLOW DRIPLINE BY HAND WITH 3" WIDE SHOVEL FROM THE SUPPLY SIDE OF THE DISPERSION FIELD TO THE PAINTED LINE, TO AN 8" MINIMUM DEPTH OR AS SPECIFIED. UPON REACHING THE PAINTED LINE, PULL THE PLOW OUT OF THE GROUND AND CUT THE DRIPLINE ONE FOOT ABOVE THE GROUND. TAPE THE END OF THE DRIPLINE TO PREVENT DEBRIS FROM ENTERING. CONTINUE THIS PROCESS UNTIL THE REQUIRED FOOTAGE OF DRIP LINE IS INSTALLED. GEOFLOW DRIPLINE MUST BE SPACED ACCORDING TO SPECIFICATION (TWO FEET IS STANDARD). DEPTH OF BURIAL OF DRIPLINE MUST BE CONSISTENT THROUGHOUT THE FIELD. TAKE CARE NOT TO GET DIRT INTO THE LINES. SERPENTINE LINES MAY BE UTILIZED TO REDUCE THE NUMBER OF REQUIRED TEES. MAX ALLOWABLE LENGTH OF A SINGLE WASTEFLOW LINE SHALL BE NO MORE THAN 100'.
 - INSTALL THE SUPPLY TOP FEED MANIFOLD. HOOK UP THE GEOFLOW LINES TO THE TOP FEED MANIFOLD PER DETAIL/PLAN. DO NOT GLUE WASTEFLOW DRIPLINE.
- INSTALLING LOCKSLIP FITTINGS**
- HOLD THE FITTING IN ONE HAND AND POSITION THE TUBING WITH THE OTHER HAND.
 - MOVE THE SLEEVE BACK, AND PUSH THE TUBING ONTO THE EXPOSED STEM AS FAR AS POSSIBLE.
 - PUSH THE SLEEVE OUT OVER THE TUBING AND THREAD THE SLEEVE ONTO TUBING, AS THOUGH TIGHTENING A NUT TO A BOLT. HAND TIGHTEN. DO NOT USE TOOLS.
 - INSTALL THE VORTEX FILTER AND FILTER FLUSH VALVE, OR INSTALL THE PRE-ASSEMBLED HEADWORKS BETWEEN THE FIELD AND THE PUMP TANK ON THE SUPPLY LINE. *INSULATE THE BOX IN FREEZING CONDITIONS. INSTALL SUPPLY AND RETURN FLOW METERS IN CONCRETE OR PLASTIC BOX PER DETAIL.
 - IF USING A PRESSURE REGULATOR, INSTALL IT DOWNSTREAM OF THE FILTER OR HEADWORKS, JUST AHEAD OF THE DISPERSAL FIELD, ON THE SUPPLY LINE. INSTALL THE PRESSURE REGULATOR INSIDE A SMALL VALVE BOX FOR EASY ACCESS. *INSULATE THE BOX IN FREEZING CONDITIONS.
 - INSTALL THE FLOATS IN THE DOSING TANK AND WIRE TO THE TIMER CONTROL. THE TIMER CONTROL SHOULD BE SET TO PUMP NO MORE THAN THE DESIGN FLOW. DO NOT SET TO MATCH THE TREATMENT CAPACITY. 3 FLOAT SYSTEM REQUIRED FOR TIME DOSED SETUP.
 - INSTALL THE PUMP. FILL THE DOSING TANK WITH FRESH WATER AND TURN ON THE PUMP. CHECK FOR FLOW OUT THE ENDS OF ALL OF THE GEOFLOW LINES. LET THE PUMP RUN FOR ABOUT FIVE MINUTES TO FLUSH OUT ANY DIRT. SHUT OFF THE PUMP AND TAPE THE ENDS OF THE LINES.
 - DIG THE RETURN SIDE TOP FEED MANIFOLD DITCH ALONG THE LINE PAINTED ON THE GROUND AND BACK TO THE PRE-TREATMENT TANK. START THE RETURN HEADER AT THE FURTHEST END FROM THE DOSING TANK. THE RETURN LINE MUST HAVE SLOPE BACK TO THE TREATMENT TANK OR SEPTIC TANK.
 - INSTALL THE RETURN SIDE TOP FIELD MANIFOLD AND CONNECT ALL OF THE GEOFLOW LINES. CARE MUST BE TAKEN NOT TO KINK THE DRIPLINE.
 - INSTALL AIR VACUUM BREAKERS AT THE HIGHEST POINTS IN THE DISPERSAL FIELD. USE PIPE DOPE OR TEFLON TAPE AND HAND TIGHTEN.
 - CONNECT THE RETURN LINE BACK THROUGH THE HEADWORKS BOX & FIELD FLUSHING VALVE. OPEN THE FIELD FLUSH VALVE AND TURN ON THE PUMP TO FLUSH LINES THEN CLOSE THE VALVE AND CHECK THE FIELD AND ALL PIPING AND CONNECTIONS FOR LEAKS. TURN OFF THE SYSTEM.
 - TURN ON THE PUMP AND CHECK THE PRESSURE AT THE AIR VACUUM BREAKER(S). IT SHOULD BE BETWEEN 15 TO 45 PSI. CHECK THE PRESSURE IN THE WASTEFLOW HEADWORKS. IT SHOULD BE FIVE PSI OR HIGHER. IF USING A MANUAL VALVE FOR FIELD FLUSHING, CRACK IT OPEN UNTIL AT LEAST ONE PSI IS LOST OR DESIGN PRESSURE IS REACHED AND LEAVE IN THAT POSITION.
 - CHECK THE FILTER FOR CONSTRUCTION DEBRIS AND CLEAN.
 - PROVIDE OWNER WITH FINAL AS-BUILT DIAGRAMS, FLOW MEASUREMENTS AND PRESSURE READINGS AT STARTUP.
- VALVE INSTALLATION AND OPERATION**
- WRAP MALE ADAPTERS WITH 2 WRAPS OF TEFLON TAPE AND THREAD THE ADAPTERS INTO THE VALVE INLET AND OUTLET 1 TURN PAST HAND TIGHT. CAUTION: OVER TIGHTENING MAY CAUSE DAMAGE TO THE VALVE. THE SOLENOID IS LOCATED ON THE DOWNSTREAM SIDE OF THE VALVE.
 - USING WATERTIGHT CONNECTORS, CONNECT THE VALVE COMMON AND AN INDIVIDUAL OUTPUT WIRE TO THE SOLENOID LEADS.
 - FLUSH THE LATERALS BY OPENING THE INTERNAL MANUAL BLEED LEVER ON THE DOWNSTREAM SIDE OF THE SOLENOID. TURN THE FLOW CONTROL STEM FULLY OPEN (COUNTERCLOCKWISE) FOR FLOW CONTROL MODELS.
 - CLOSE THE INTERNAL MANUAL BLEED AFTER FLUSHING THE SYSTEM.

NOTES TO OWNER, CONTRACTOR, & OTHERS

- INSTALLATION OF THIS DESIGN WILL REQUIRE A MINIMUM OF ONE SITE REVIEW BY THE ENGINEER DURING CONSTRUCTION. ADDITIONAL REVIEWS MAY BE REQUIRED DEPENDING ON THE ABILITY OF THE CONTRACTOR TO COMPLETE THE SYSTEM IN A TIMELY MANNER AND PER PLAN. ALL FIELD REVIEWS WILL BE BILLED TO THE OWNER AT THE PRINCIPAL ENGINEER RATE SHOWN IN THE PROFESSIONAL SERVICE AGREEMENT.
- ADDITIONALLY, THE SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH REQUIRES A LETTER OF DESIGN CONFORMANCE AND AN AS-BUILT PLAN ISSUED BY THE ENGINEER ASSESSING DESIGN COMPLIANCE AND NOTING ANY SUBSTANTIVE CHANGES TO THE APPROVED PLAN. THIS LETTER AND PLAN IS PREPARED AND SENT UPON COMPLETION OF CONSTRUCTION AND SATISFACTION OF ALL OUTSTANDING INVOICES DUE TO THE ENGINEER.
- SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH REQUIRES ALTERNATIVE SYSTEMS TO HAVE AN OPERATING PERMIT WITH THE COUNTY AND AN ONGOING SERVICE PROVIDER AGREEMENT. THESE TWO CONDITIONS WILL BE RECORDED ON THE PROPERTY DEED.
- SUBSURFACE CONDITIONS MAY BE COMPLEX AND MAY DIFFER FROM THOSE INDICATED BY SURFACE FEATURES OR AS ENCOUNTERED AT PERCOLATION TEST HOLE OR PROFILE TRENCH LOCATIONS. THEREFORE, ROCK OR OTHER VARIATIONS IN SUBSURFACE CONDITIONS NOT INDICATED IN REPORTS OR SHOWN ON THIS PLAN COULD BE ENCOUNTERED. HOGAN LAND SERVICES SHOULD BE NOTIFIED IMMEDIATELY IF ANY ADVERSE CONDITIONS ARE DISCOVERED DURING CONSTRUCTION SO THAT TIMELY ACTION CAN BE TAKEN TO MODIFY THIS PLAN AND/OR THE SYSTEM HEREIN DESIGNED.
- THIS PLAN AND DESIGN IS BASED ON CURRENT STANDARDS AND TECHNICAL DATA REQUIREMENTS OF THE SANTA CLARA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COMPLIANCE WITH CURRENT COUNTY CODES, STANDARDS, AND REQUIREMENTS IS NOT A GUARANTEE OF WARRANTY, EITHER EXPRESSED OR IMPLIED, OF SEPTIC SYSTEM FUNCTION OR PERFORMANCE OF THE SYSTEM.
- HOGAN LAND SERVICES WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USE OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY HOGAN LAND SERVICES. IN ADDITION, THE ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE FUNCTION OF ANY OF THE SYSTEM COMPONENTS MANUFACTURED/DESIGNED BY OTHERS.
- THE CONSTRUCTION CONTRACTOR AGREES IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE/SHE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL EXEMPT FROM ANY AND ALL LIABILITY IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- PRINTS OF THESE PLANS USED IN CONSTRUCTION MUST HAVE A "WET" STAMP OF APPROVAL APPLIED BY THE SANTA CLARA COUNTY DEPARTMENT ENVIRONMENTAL HEALTH TO INDICATE THAT A PERMIT TO INSTALL THE SEPTIC SYSTEM HAS BEEN GRANTED. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR CONSTRUCTION DONE WITHOUT PERMITS OR THE COUNTY APPROVED PLAN(S).
- THE SITE EXHIBITS ASSOCIATED WITH THE PRODUCTION OF THESE PLANS DOES NOT REPRESENT A BOUNDARY DETERMINATION OR COMPLETE TOPOGRAPHIC SURVEY OF THE SITE. PROPERTY LINES SHOWN IN THESE EXHIBITS ARE FOR GENERAL REFERENCE ONLY. ANY USE OF THESE PLANS OTHER THAN FOR INSTALLATION OF THE PROPOSED SEPTIC SYSTEM IS AT THE RISK OF THE DEVELOPER.
- SHOULD TREE ROOT ZONE BE IMPACTED, IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSULT WITH A QUALIFIED ARBORIST TO DETERMINE THE APPROPRIATE COURSE OF ACTION.

EROSION AND SEDIMENT CONTROL

- PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF THE CBC AND THE SANTA CLARA COUNTY CODE.
- DURING THE RAINY SEASON, OCT. 15 TO APRIL 15, EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE.
- PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
- THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED ON THE SITE. IF QUESTIONS REGARDING THE COUNTY SPECIFIED BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL CALL HOGAN LAND SERVICES.
- EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE AND AFTER STORM EVENTS.
- CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MAY RESULT IN RESPONSE TO FIELD CONDITIONS.
- ENTRANCES TO SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY R.O.W. SHALL BE DISPOSED OF AS THEY OCCUR.
- EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES. FIBER ROLL SILT BARRIERS AND SILT FENCES SHALL BE KEYED INTO THE SOIL AND INSTALLED ON CONTOUR.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE AFTER GRADING. GROUND SHOULD BE COMPLETELY COVERED.
- STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS.
- SOIL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE RUNOFF.
- SOLID WASTE AND CONSTRUCTION MATERIALS SHALL BE PLACED IN DESIGNATED COLLECTION AREAS AND DISPOSED OF AT APPROVED DISPOSAL SITES.



NOTE: THIS EXHIBIT REPRESENTS A TOPOGRAPHIC SURVEY BY JMH WEISS INC. PERFORMED ON 05/19/2014. THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY DETERMINATION. BOUNDARY SHOWN IS PER ASSESSOR RECORDS AND RECORD DATA ONLY AND HAS NOT BEEN SURVEYED OR CONFIRMED.

STAGES TO BE INSPECTED

CONTRACTOR IS REQUIRED TO HAVE ENGINEER AND/OR ENVIRONMENTAL HEALTH INSPECT THE CONSTRUCTION AT THE FOLLOWING STAGES. FAILURE TO REQUEST THESE INSPECTIONS WILL RESULT IN THE CONTRACTOR HAVING TO UN-EARTH AND REDO THE WORK. THE ENGINEER MUST ISSUE AN INSPECTION REPORT TO THE COUNTY PRIOR TO ACCEPTANCE OF THE SYSTEM BY THE COUNTY. THE CONTRACTOR SHALL GIVE 48-HOUR ADVANCE NOTICE TO THE ENGINEER FOR ANY OF THESE INSPECTIONS:

INSPECTIONS BY ENGINEER ONLY

- INSPECTION OF IMPORTED MATERIALS
- CHECKING OF LAYOUT; LINE AND GRADE, STAKES.
- INSPECTIONS BY HOGAN LAND SERVICES AND WELL & SEPTIC STAFF
- SEPTIC & SUMP TANK WATER TIGHTNESS TEST.
- INSPECTION OF HYDRAULIC (SQUIRT) TEST.
- INSPECTION OF PRESSURE LINES PRIOR TO COVER.
- FINAL INSPECTION, MONITORING WELL LOCATIONS.

NOTE: ATU SERVICE PROVIDER SHALL BE ON SITE AT STARTUP INSPECTION.
NOTE: ELECTRICAL PERMIT SHALL BE APPROVED PRIOR TO SYSTEM FINAL (UNDER SEPARATE BUILDING PERMIT).

7. THE ENGINEER, INSTALLER AND SERVICE PROVIDER WILL BE PRESENT WITH WELL AND SEPTIC STAFF AT THE START UP INSPECTION.

LIST OF SITE INVESTIGATIONS

SITE EVALUATION	02/14/18
SHALLOW PERC TEST	02/16/18

SHEET INDEX

C1	DRIP SYSTEM NOTES
C2	DRIP SYSTEM DETAILS
C3	DRIP SYSTEM DETAILS
C4	DRIP SYSTEM PLAN

REVISION BLOCK

1			
2			
3			

PROFESSIONAL ENGINEER # 41607
J. FLEISSNER
NO. 82889
REGISTERED PROFESSIONAL ENGINEER # 41607
CALIFORNIA STATE

THESE PLANS WERE PREPARED BY ME OR UNDER MY SUPERVISION AND THE REQUEST OF JON GODSTON IN JANUARY, 2024.

APN: 558-40-033

DATE: 1/18/24

JOB #: 8406

DRN: RS

CHK: GTF

PM: GTF

DATE: 1/18/24

JOB #: 8406

DRN: RS

CHK: GTF

PM: GTF

DATE: 1/18/24

JOB #: 8406

HOGAN LAND SERVICES
A CALIFORNIA CORPORATION

2601 41ST AVENUE, SUITE B
SOUQUEL, CA 95073

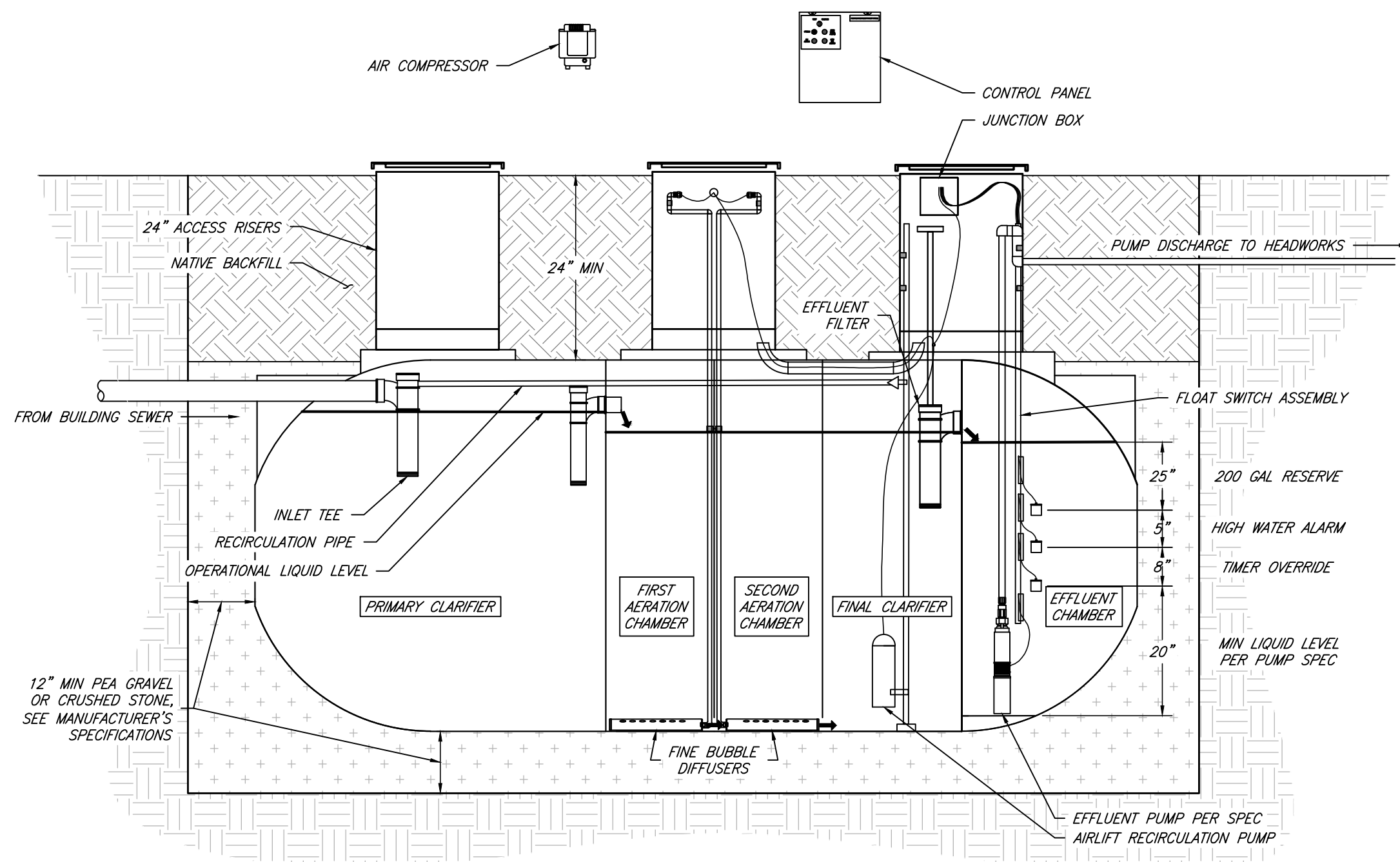
TEL (831) 425-1617
FAX (831) 425-0224

www.hogans.com

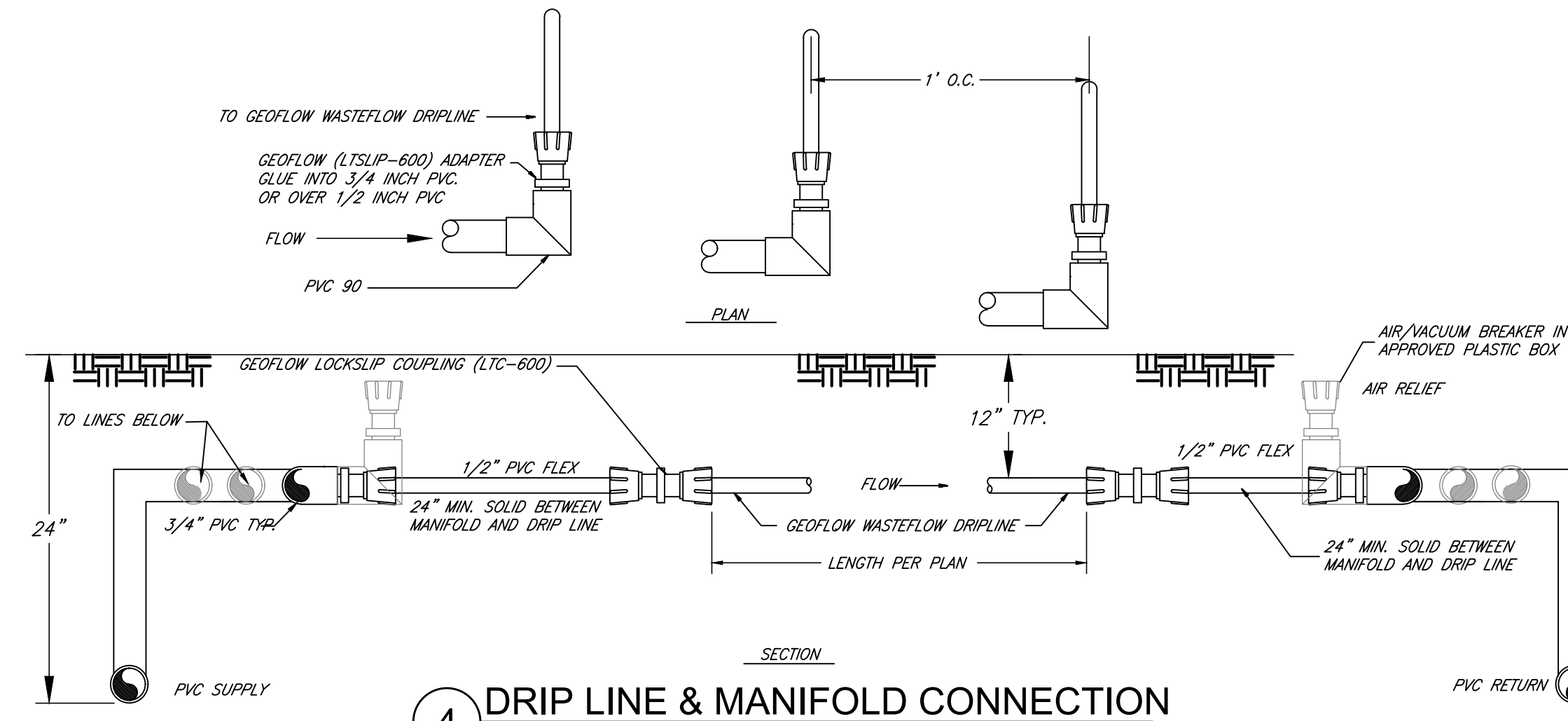
APN: 558-40-033

LANDS OF GODSTON
DRIP SYSTEM NOTES

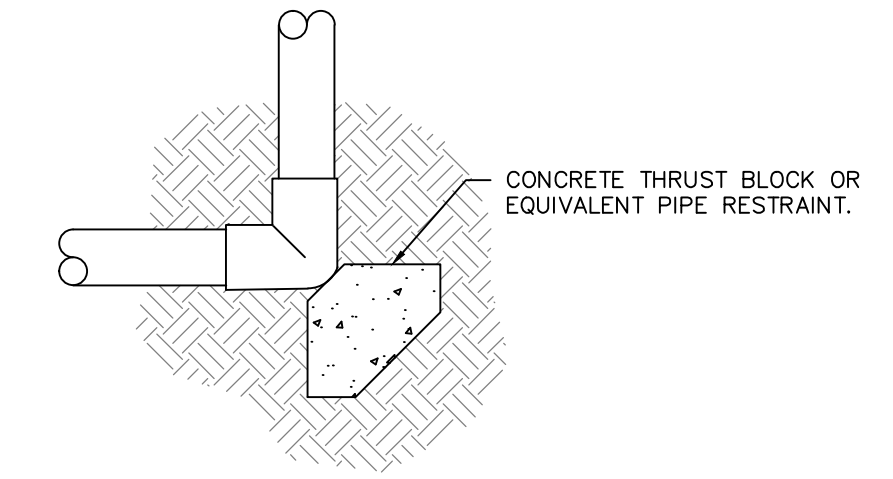
C1 of 4



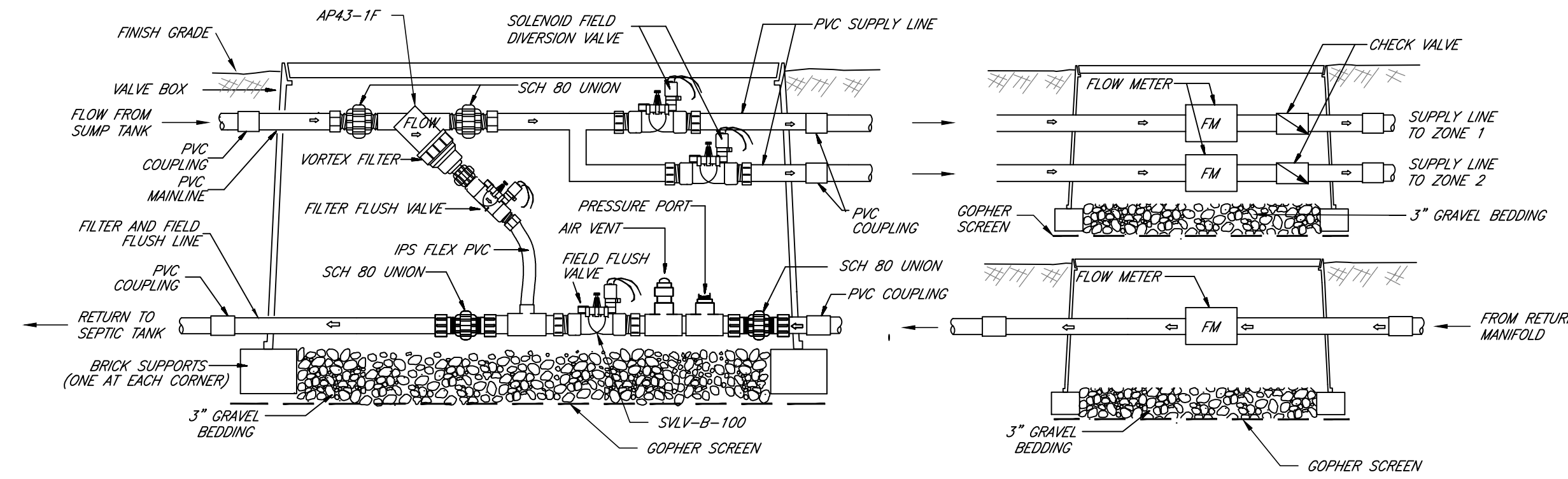
1 MICROSEPTIC ES6 DETAIL
 SEE MICROSEPTIC INSTALLATION NOTES AND ENVIROSERVER SERIES SPECIFICATION MANUAL FOR FURTHER DETAILS
 NO SCALE



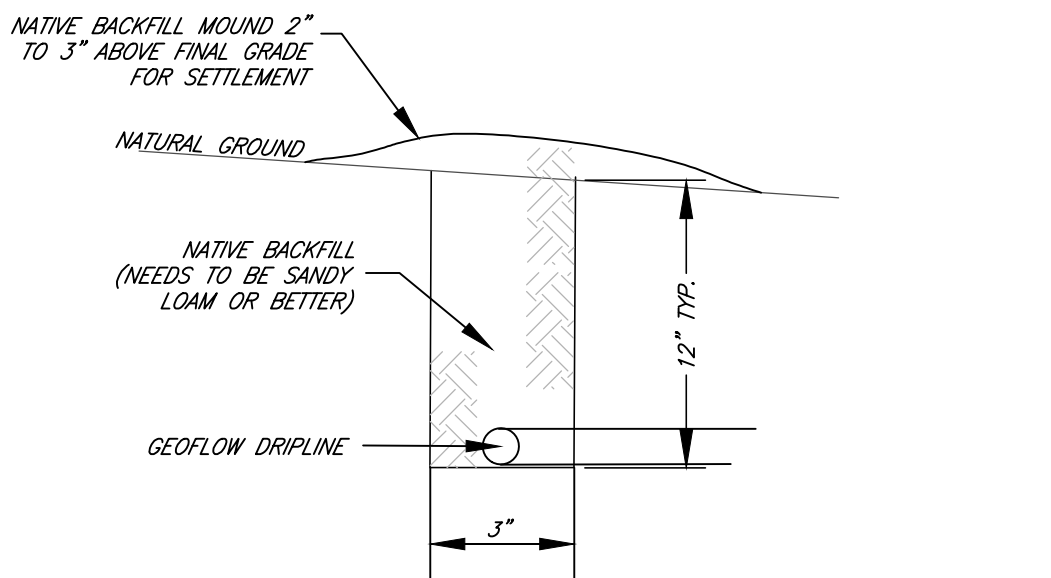
4 DRIP LINE & MANIFOLD CONNECTION
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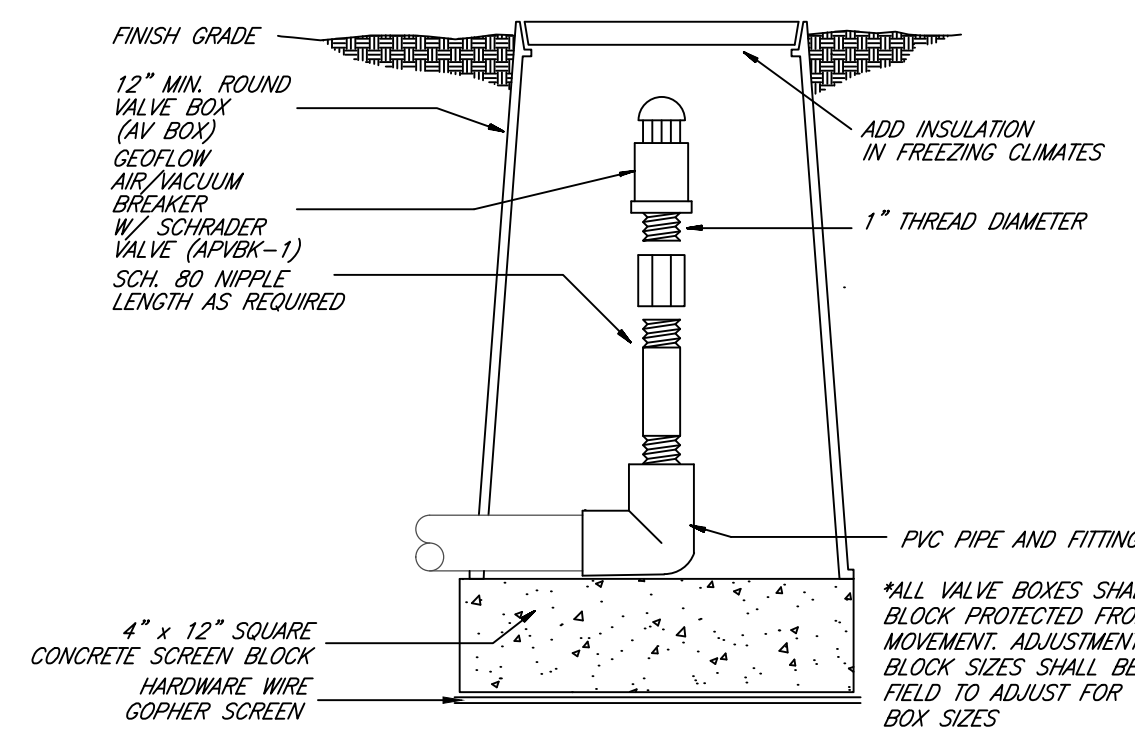
8 THRUST BLOCK DETAIL
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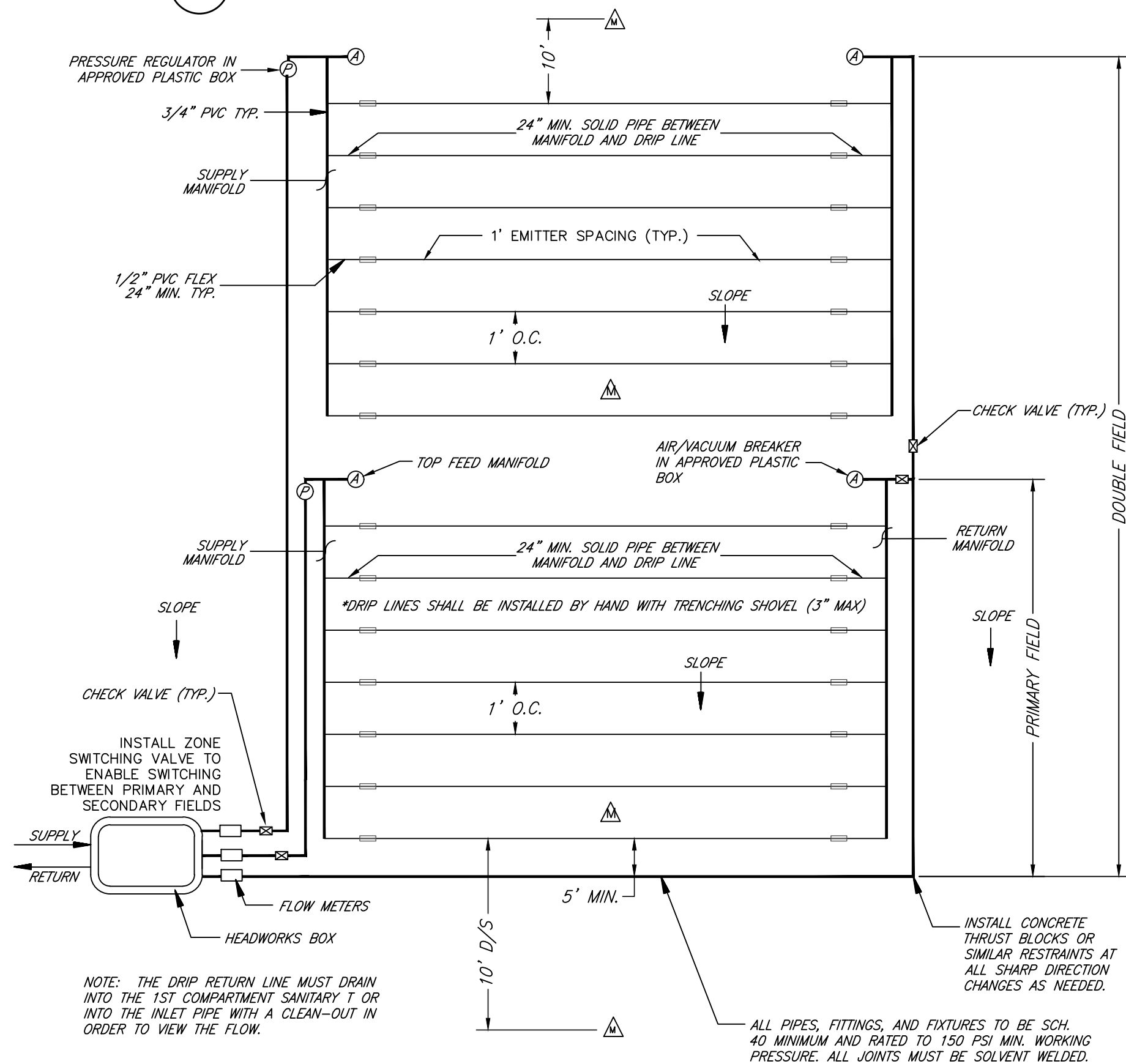
2 DUAL FIELD HEADWORKS BOX & FLOW METERS DETAIL
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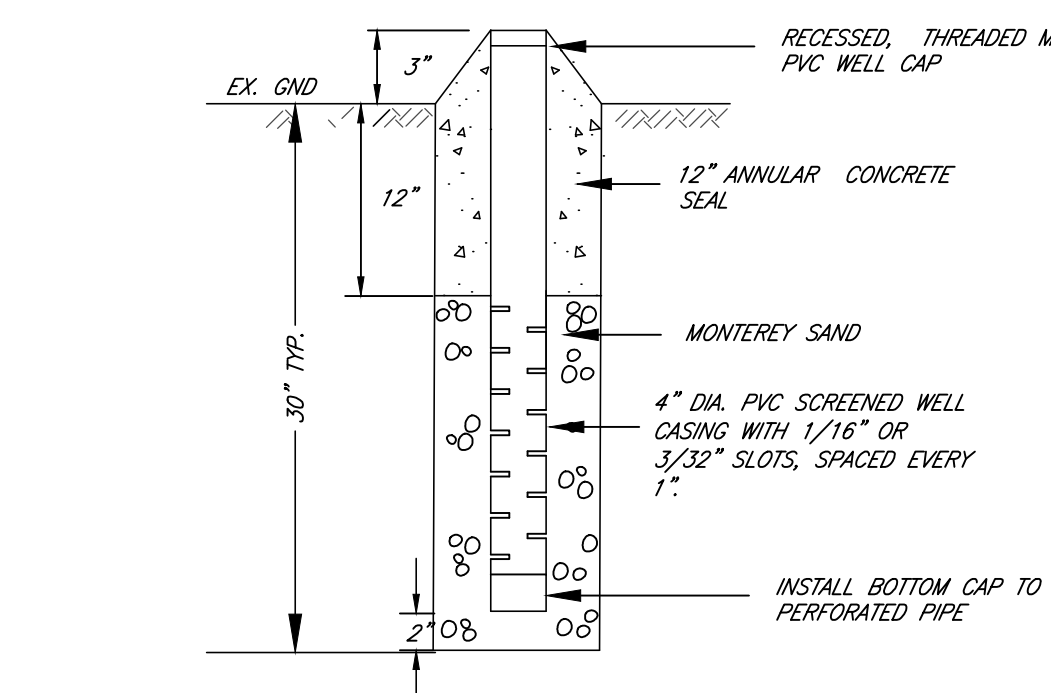
5 DRIP LINE TRENCH DETAIL
 NO SCALE



**6 1\"/>
 NO SCALE**



3 FIELD LAYOUT SCHEMATIC
 NO SCALE



7 MONITORING WELL DETAIL
 NO SCALE

REVISION BLOCK

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2		
3		

HOGAN LAND SERVICES
 A CALIFORNIA CORPORATION

2601 41ST AVENUE, SUITE B
 SOQUEL, CA 95073
 www.hoganis.com

APN: 558-40-033

LANDS OF GODSTON
 DRIP SYSTEM DETAILS

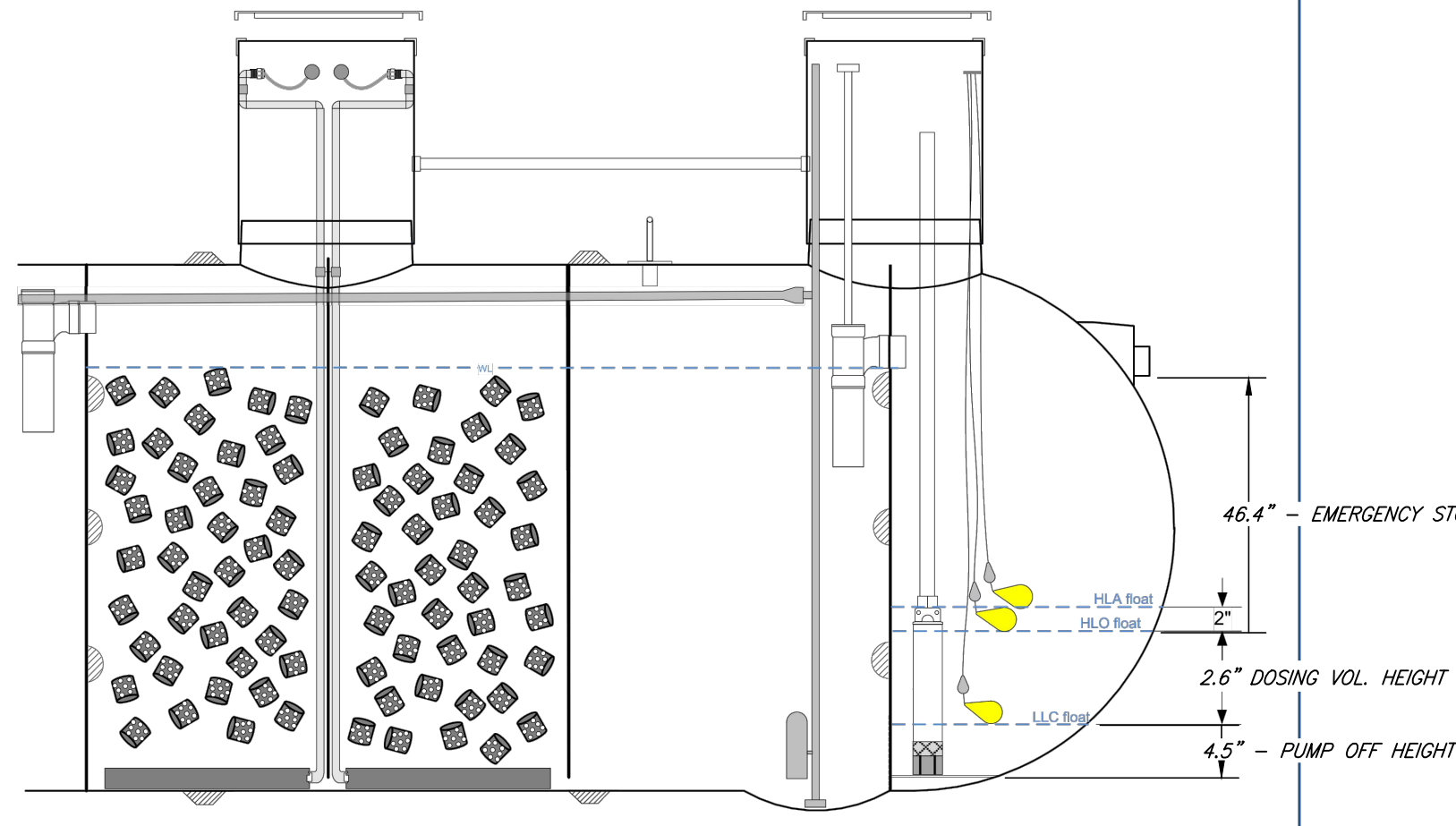
20411 HARVEY WAY
 LOS GATOS, CALIFORNIA

C2 OF 4

THESE PLANS WERE PREPARED BY ME OR UNDER MY SUPERVISION AT THE REQUEST OF JON GODSTON IN JANUARY, 2024.
 GEOFF FLEISSNER R.C.E. 82889
 REGISTERED PROFESSIONAL ENGINEER - CIVIL
 STATE OF CALIFORNIA



Pump Chamber Volume



Volume above LLC float	
ES6	843
ES12	1023
ES25	2014

Description	Function
HLA float	Alarm creates alarm
HLO float	Override turns on pump, regardless of timer
LLC float	Timer Enable turns on timer

VOLUMETRIC/TANK ELEVATION CALCULATIONS:

TANK VOLUME ESTIMATED AT APPROX. 17 GAL./IN. FOR THE PURPOSES OF FLOAT ELEVATION SETTING

PUMP OFF ELEVATION:

BASED ON SANTA CLARA COUNTY OWS DESIGN MANUAL
 4" MINIMUM CLEARANCE - 4.5" PER MANUFACTURERS SPECIFICATION
 4.5" X 17 GAL./IN. = 76.5 GAL.

DOSING VOLUME

DAILY LOAD = 525 GPD
 TIMED DOSAGES = 12
 VOLUME PER DOSE = 525/12 = ~44 GAL.
 ELEVATION IN TANK = 44 GAL./17 GAL./IN. = 2.6 IN.

EMERGENCY STORAGE VOLUME

BASED ON SANTA CLARA COUNTY OWS DESIGN MANUAL
 1.5 DAYS OF DAILY FLOW
 1.5 X 525 GAL. = ~788 GAL.
 ELEVATION IN TANK = 788 GAL./17 GAL./IN. = 46.4 IN.

TOTALS:

TOTAL VOLUME USED:
 PUMP OFF VOLUME = 76.5 GAL.
 DOSING VOLUME = 44 GAL.
 EMERGENCY STORAGE VOLUME = 788 GAL.
 908.5 GAL.

PUMP OFF VOLUME DISCOUNTED FROM TOTAL, SEE DIAGRAM ON THIS PAGE
 TANK VOLUME REQUIRED = 908.5 GAL. - 76.5 GAL. = 832 GAL.
 TANK VOLUME AVAILABLE ABOVE PUMP OFF SWITCH = 843 GAL.

TOTAL HEIGHT USED:
 PUMP OFF HEIGHT = 4.5"
 DOSING HEIGHT = 2.6"
 EMERGENCY STORAGE HEIGHT = 46.4"
 53.5"

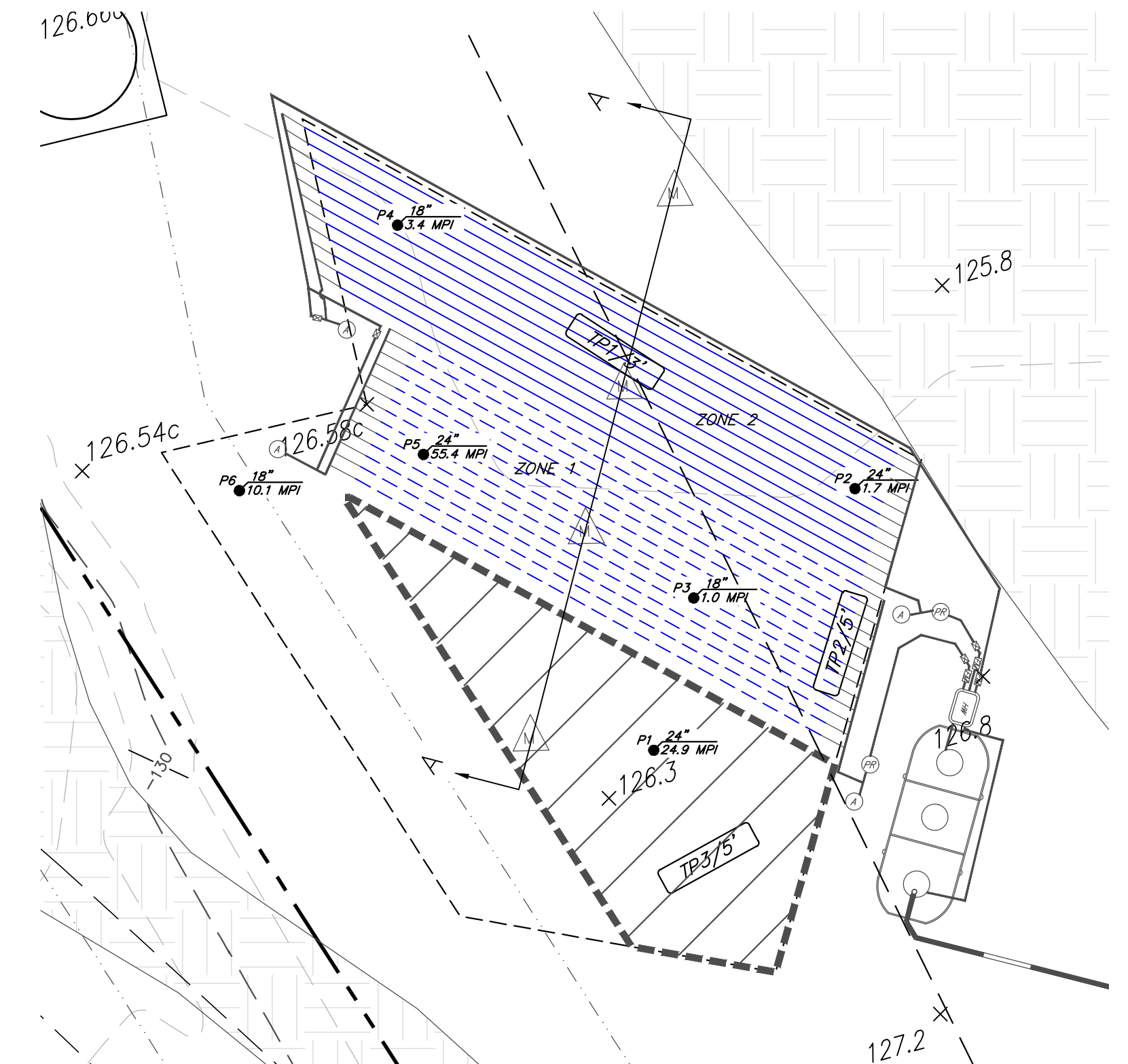
TANK HEIGHT AVAILABLE TO BOTTOM OF OUTFLOW = 56"

SOIL PROFILE SUMMARY

- PROFILE 1 (TP1)
 0' - 2.5' REDDISH SAND AND SANDSTONE COBBLES. POSSIBLE DRAINROCK. LOCATED ORIGINAL LEACH FIELD. TERMINATED DIG.
- PROFILE 2 (TP2)
 0' - 2.5' REDDISH SAND, LIGHT CLAYS, SMALL STONES. LOW MOISTURE.
 2.5' - 3.5' SANDY CLAY LOAM OVER LARGE SANDSTONE BOULDERS, 2-3" DIMENSIONS.
 3.5' - 5' LARGE BOULDERS AND SILTY SAND FINES.
- PROFILE 3 (TP3)
 0' - 8" DARK LOAMY TOPSOIL. SILTY CLAY LOAM.
 8" - 3' SILTY CLAY LOAM. SOME ROOTS.
 3' - 4' CONSOLIDATED, STIFF CLAY.
 4' - 5' ROCK COBBLES AND SAND FINES.

LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- SDS PRIMARY FIELD
- SDS EXPANSION AREA
- SDS SETBACK LINE
- PERC HOLE W/DEPTH & MINUTES PER INCH
- SOILS PROFILE PIT W/DEPTH
- CLEAN OUT
- MONITORING WELL
- HEADWORKS BOX
- MICROSEPTIC ES-6 TREATMENT UNIT



DRIPFIELD AND MONITORING WELL DETAIL
 SCALE 1" = 10'

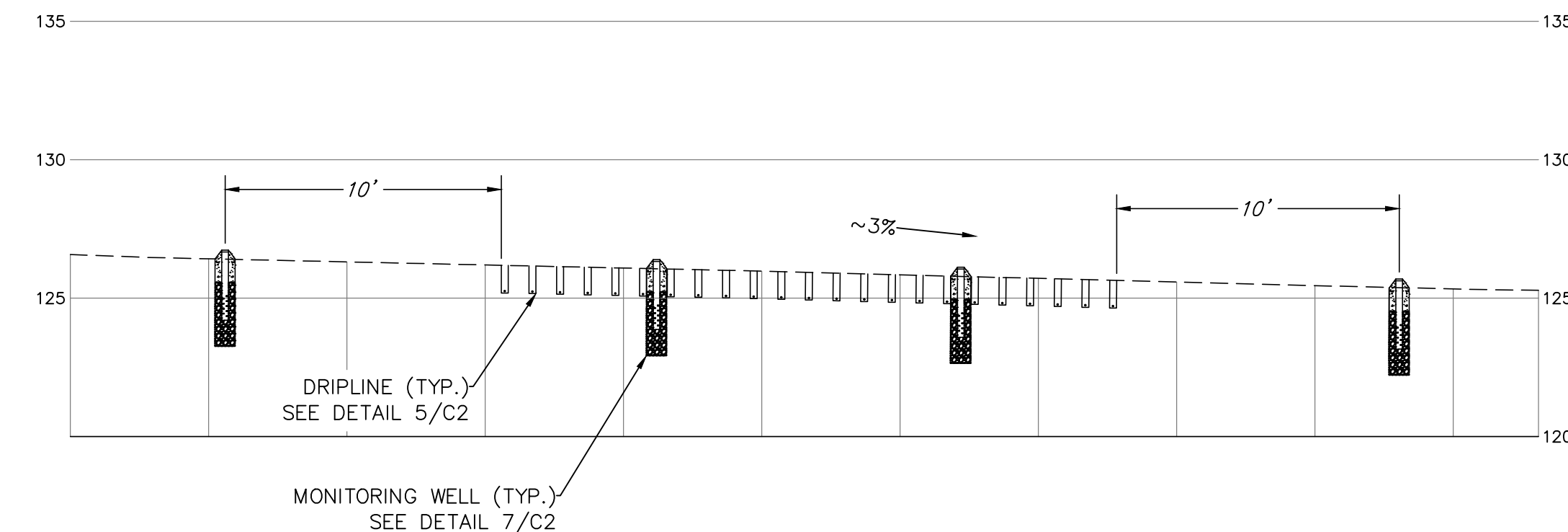
DRIP FIELD MANAGEMENT REQUIREMENTS

	Work	Frequency
Inspection	<ul style="list-style-type: none"> Conduct routine visual observations of drip field, downslope area and surroundings for wet areas, pipe leaks or damage, soil erosion, drainage issues, abnormal vegetation, gophers or other problems. Conduct routine physical inspections of system components, including valves, filters, and headworks box(es). Perform special inspections of drip field at time of any landscaping work or other digging in drip field area. Perform inspections of dosing pump(s) and appurtenances (per O&M manual and Performance Evaluation Guidelines, Part 5 of this Manual). Record observations. 	<ul style="list-style-type: none"> Every 6 to 12 months.
Maintenance	<ul style="list-style-type: none"> Manually remove and clean filter. Clean and check operation of pressure reducing valves. Clean flush valves and vacuum release valves. 	<ul style="list-style-type: none"> Clean filter every 6 months. Other maintenance annually.
Water Monitoring & Sampling	<ul style="list-style-type: none"> Measure and record water levels in dispersal field monitoring wells, as applicable, per permit requirements. Obtain and analyze water samples from dispersal field monitoring wells, as applicable, per permit requirements. 	<ul style="list-style-type: none"> According to permit conditions, if applicable.
Reporting	<ul style="list-style-type: none"> Report findings to DEH per permit requirements. Standard report to include dates, monitoring well and other data collected, work performed, corrective actions taken, and performance summary. Report public health/water quality emergency to DEH immediately. 	<ul style="list-style-type: none"> According to permit conditions, typically every 1 to 2 years, depending on system size, usage, history, location.

Worksheet - Pump Sizing

Section 1 - Summary from Worksheet 1	
Flow required to dose field	4.64 gpm
Flow required to flush field	4.81 gpm
Flow required to dose & flush field	9.45 gpm
Filter	BioDisc Filter-150
No. of Zones	2 zones
Zone valve	HT-4402
Dripline	Wasteflow PC - 1/2gph
Dripline longest lateral	40.38 ft.

Section 2	Ft of head	Pressure
A. Flush line - Losses through return line		
Select Pipe from dropdown menu	PVC schedule 40	
Select Flush Line Diameter	2" inch	
Length of return line	60 ft.	
Equivalent length of fittings	5 ft.	
Elevation change. (if downhill enter 0)	5 ft.	
Pressure loss in 100 ft of pipe	0.06 ft.	0.03 psi
Total pressure loss from end of dripline to return tank	5.0 ft.	2.18 psi
B. Dripline - Losses through Wasteflow dripline		
Length of longest dripline lateral	40 ft.	
Minimum dosing pressure required at end of dripline	23.10 ft.	10.00 psi
Loss through dripline during flushing	0.32 ft.	0.14 psi
Total minimum required dripline pressure	23.42 ft.	10.14 psi
A+B. Minimum Pressure required at beginning of dripfield		
CALCULATED pressure required at beginning of dripline	28.46 ft.	12.32 psi
SPECIFIED pressure at beginning of dripline (from)	57.8 ft.	25.00 psi
Great! SPECIFIED Pressure is greater than CALCULATED Pressure requirement. Go to next step		
C. Drip components - Losses through headworks		
Filter	11.6 ft.	5.00 psi
Zone valve pressure loss (not in diagram)	4.62 ft.	2.00 psi
Flow meter pressure loss (not in diagram)	ft.	psi
Other pressure losses	ft.	psi
Total loss through drip components	16.17 ft.	7.00 psi
D. Supply line - Minimum Pressure head required to get from pump tank to top of dripfield		
Select Pipe from dropdown menu	PVC schedule 40	
Select Supply line diameter	2" inch	
Length of supply line	20 ft.	
Equivalent length of fittings	5 ft.	
Height from pump to tank outlet	5 ft.	
Elevation change. (if downhill enter 0)	-5 ft.	
Pressure loss/gain in 100 ft. of pipe	0.21 ft.	0.09 psi
Total gain or loss from pump to field	0.1 ft.	0.02 psi
Total dynamic head	74.0 ft.	32.02 psi
Pump capacity *	- Field Flush Flow	9.4 gpm
	- Field Dose Flow	4.6 gpm
	- Filter Flush Flow	- gpm
Pump Model Number	20DOM05121	
Voltz / Hp / phase	115 VAC / 0.5 HP / 1 PH	



SECTION A - A: DRIPFIELD DETAIL
 SCALE 1" = 5'

REVISION BLOCK

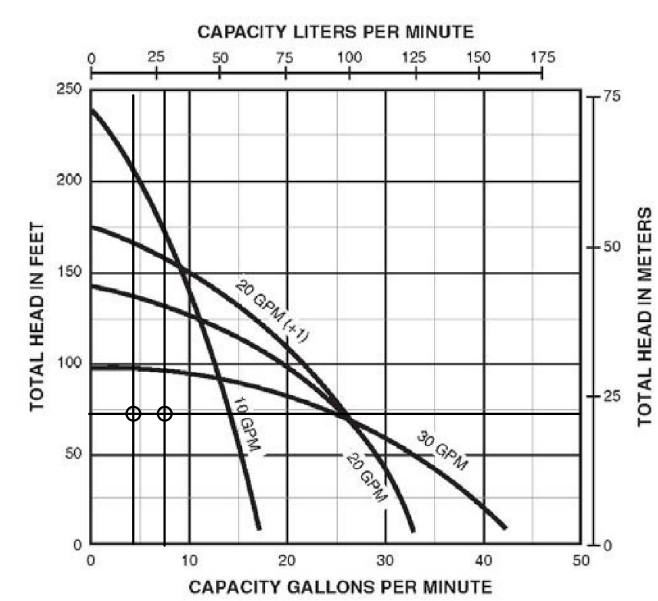
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EnviroServer® ES Specifications Book



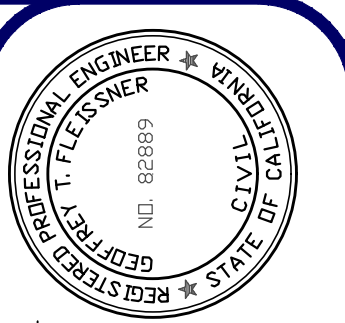
4" multi-stage submersible pump

PUMP PERFORMANCE



PUMP PERFORMANCE (Capacity in Gallons per Minute)		Psi											
Pump Model	Flow Rate (GPM)	0	10	20	30	40	50	60	70	80	90	100	110
10DOM05121	10		15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0		
20DOM05121	20		30.0	26.0	21.5	14.2	4.4						
30DOM05121	30		38.5	33.3	25.8	16							
20DOM05121+1	20+1		38.5	33.3	25.8	16							
20DOM05121+1	20+1		30	27.5	24	20	13.5	6					

PUMP PERFORMANCE (Capacity in Liters per Minute)		Bar											
Pump Model	Flow Rate (LPM)	0	49	138	207	276	345	413	482	551	620	689	758
10DOM05121	37.85		56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8		
20DOM05121	75.7		113.6	98.4	81.4	53.7	16.7						
30DOM05121	113.55		145.7	126.0	97.7	60.6							
20DOM05121+1	75.7+1		113.4	103.9	90.7	75.6	51.0	22.6					
20DOM05121+1	75.7+1		113.4	103.9	90.7	75.6	51.0	22.6					



THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND REQUEST OF JON GODSTON IN JANUARY, 2024

Geoff Fleissner

RS	GTF	GTF		
DRN:	CHK:	PM:	DATE:	JOB #:
			1/18/24	8406

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APN: 558-40-033

LANDS OF GODSTON
 DRIP SYSTEM DETAILS

20411 HARVEY WAY
 LOS GATOS, CALIFORNIA

C3 OF 4

GEOFLOW
SUBSURFACE DRIP

Updated Mar 2015

FIELD FLOW	
Job Description:	6406 GODSTON-HARVEY WY
Contact:	JON GODSTON
Prepared by:	HOGAN LAND SERVICES
Date:	23-Aug-18

Worksheet 1- Field Flow

Total field	
Total Quantity of effluent to be disposed per day	525 gallons / day note
Hydraulic loading rate	1 gallons / sq ft / d note
Minimum Dispersal Field Area	525 square ft. note
Total Dispersal Field Area	1,050 square ft. note

Flow per zone	
Number of Zones	2 (zone(s)) note
Dispersal area per zone	525 square ft. note
Choose line spacing between WASTEFLOW lines	1 ft. note
Choose emitter spacing between WASTEFLOW emitters	1 ft. note
Total linear ft. per zone (minimum required)	525 ft. per zone note
Total number of emitters per zone	525 emitters per zone note
Select Wasteflow dripline (16mm)	Wasteflow PC - 1/2gph dripline note
	Wasteflow Classic note
	Wasteflow PC - 1/2gph note
	Wasteflow PC - 1 gph note
Pressure at the beginning of the dripline	25 psi note
Feet of Head at the beginning of the dripline	57.75 ft. note
What is the flow rate per emitter in gph?	0.53 gph note
Dose flow per zone	4.64 gpm note

Note: A few States or Counties require additional flow for flushing. Please check your local regulations. Flush velocity calculation below is for PC dripline. Classic dripline requires less flow to flush than PC. Please refer to Geoflow's spreadsheet "Design Flow and Flush Curves" at www.geoflow.com or call 800-455-4555.

Select Filters and zone valves	
Select Filter Type	BioDisc Filter note
Recommended Filter (item no.)	BioDisc Filter-150 1.5in < 30 gpm note
Select Zone Valve Type	Hydraulic note
Recommended Zone Valve (item no.)	HT-4402 1.5in x 1.25" x 24" note
Note: minimum pressure of 25 psi required for hydraulic valves. Check pressure in Cell D28 above.	

Dosing	
Number of doses per day / zone:	12 doses note
Timer ON Pump run time per dose/zone:	4.43 mins.secs 4.72 note
Timer OFF Pump off time between doses	1:55 hrs:mins 1.92 note
Per Zone - Pump run time per day/zone:	0:56 hrs:mins 0.94 note
All Zones - Number of doses per day / all zones	24 doses / day note
Allow time for field to pressurize	0:00:30 hrs:mins:secs 0.500 note
Filter flush timer	0:00:20 hrs:mins:secs 0.333 note
Drain timer	0:05:00 hrs:mins:secs 5.000 note
Field flush timer	0:01:00 hrs:mins:secs 1.000 note
Field flush counter	3 cycles note
Time required to complete all functions per day	4:37 hrs:mins 4.620 note
Dose volume per zone	22 gallons per dose note

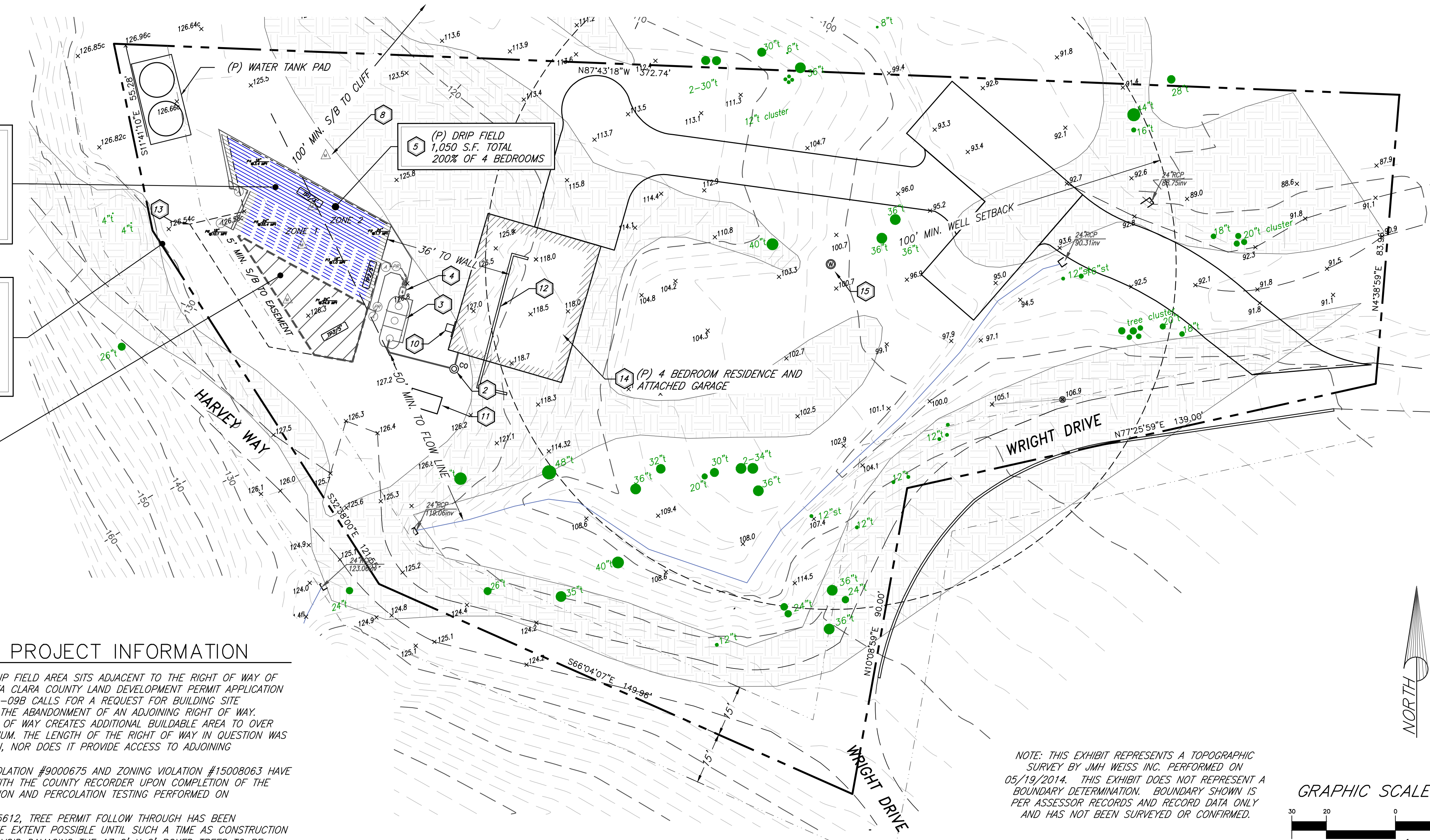
GEOFLOW DRIP CALCULATIONS

ADDITIONAL PROJECT INFORMATION

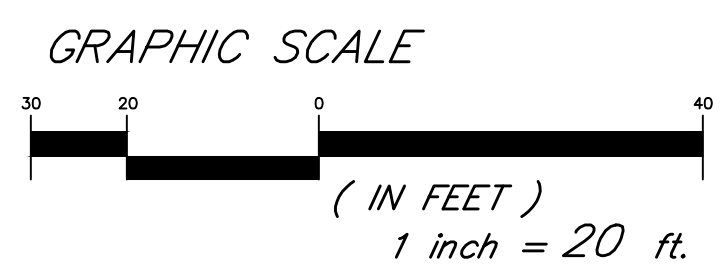
- THE PROPOSED DRIP FIELD AREA SITS ADJACENT TO THE RIGHT OF WAY OF HARVEY WAY. SANTA CLARA COUNTY LAND DEVELOPMENT PERMIT APPLICATION FILE: 4094-27-44-09B CALLS FOR A REQUEST FOR BUILDING SITE APPROVAL. CITING THE ABANDONMENT OF AN ADJOINING RIGHT OF WAY. ABANDONED RIGHT OF WAY CREATES ADDITIONAL BUILDABLE AREA TO OVER THE 1-ACRE MINIMUM. THE LENGTH OF THE RIGHT OF WAY IN QUESTION WAS NEVER BUILT UPON, NOR DOES IT PROVIDE ACCESS TO ADJOINING PROPERTIES.
- BUILDING CODE VIOLATION #9000675 AND ZONING VIOLATION #15008063 HAVE BEEN RESOLVED WITH THE COUNTY RECORDER UPON COMPLETION OF THE SOIL SITE EVALUATION AND PERCOLATION TESTING PERFORMED ON 8 FEBRUARY 2018.
- PER COMPLAINT #5612, TREE PERMIT FOLLOW THROUGH HAS BEEN PERFORMED TO THE EXTENT POSSIBLE UNTIL SUCH A TIME AS CONSTRUCTION IS COMPLETE TO AVOID DAMAGING THE 17 2" X 2" BOXED TREES TO BE PLANTED PER ROB SALISBURY. ALL TREE STUMPS GROUND DOWN 2' AS REQUIRED.
- ALL TRASH, SCRAP, DEBRIS, AND JUNK HAVE BEEN PROPERLY REMOVED FROM THE PROPERTY, INCLUDING ALL WOOD, MILLING EQUIPMENT, TENTS, ETC.
- THE PROPOSED RESIDENCE LOCATION AND FOOTPRINT ARE PRELIMINARY AND APPROXIMATE. PROPOSED SIZE NOT TO EXCEED 4 BEDROOMS AND ~2,650 SQFT.

ELECTRICAL NOTES

- REQUIRED ELECTRICAL FEATURES
 - ALL MATERIALS, CONNECTIONS, AND SPECIFICATIONS SHALL MEET THE CALIFORNIA ELECTRICAL CODE.
 - IN ALL CASES IN WHICH A SUMP WITH A PUMP IS USED FOR A SEWAGE DISPOSAL SYSTEM, THE CONTRACTOR/OWNER SHALL OBTAIN AN ELECTRICAL PERMIT FROM PRMO OR CITY BUILDING DEPARTMENT HAVING JURISDICTION.
 - THE BUILDING OFFICIAL SHALL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL ELECTRICAL CODE.
 - DISCONNECTING MEANS (CONTROL PANEL OR DISCONNECTING SWITCH) SHALL BE LOCATED IN SIGHT FROM THE PUMP LOCATION PER THE COUNTY ADOPTED ELECTRICAL CODE.
 - THE ALARM SHALL BE EQUIPPED WITH:
 - A LOUD (87 DECIBELS AT A 10 FOOT MINIMUM HORIZONTAL DISTANCE FROM THE ALARM LOCATION) AUDIO ALARM OPERATED BY A FLOAT SWITCH(S) TO INDICATE AN "ALARM" CONDITION.
 - A MINIMUM SIZED 7/8 INCH DIAMETER RED LIGHT SHALL BE MOUNTED ON THE FACE OF THE PANEL, WHICH SHALL GLOW AS LONG AS THE "ALARM" CONDITION EXISTS.
 - A MOMENTARY "ALARM TEST/ALARM SILENCE" SWITCH TO TEST THE ALARM LIGHT AND HORN TO SIMULATE AN "ALARM" CONDITION AND TO SILENCE THE AUDIO ALARM HORN.
 - AN APPROVED LISTED MODEL OR TYPE OF FLOAT SWITCH SHALL BE USED TO ACTIVATE EACH PUMP. THE ALARM/CONTROL PANEL SHALL BE EQUIPPED WITH A MOTOR CONTACTOR FOR THE PUMP AND A PUMP HAND/OFF/AUTOMATIC SWITCH TO MANUALLY RUN THE PUMP BYPASSING THE CONTROL PANEL AUTOMATIC MODE AND TO TEST THE ALARM.
 - POWER SUPPLY TO EACH CIRCUIT BREAKER IN THE CONTROL PANEL SHALL BE FROM A SEPARATE DEDICATED CIRCUIT WITH CIRCUIT PROTECTION OF EQUIVALENT OR HIGHER AMPERAGE RATING, AT THE POWER SUPPLY PANEL.
 - THE ALARM/CONTROL PANEL SHALL BE EQUIPPED INTERNALLY WITH SEPARATE CIRCUIT PROTECTION FOR THE CONTROL AND PUMP CIRCUITRY.
 - MULTI-PLEX (MORE THAN ONE PUMP) SYSTEMS SHALL HAVE SEPARATE POWER SUPPLY CIRCUITS.
 - SEPARATE CIRCUITS ARE REQUIRED FOR CONTROLS AND EACH PUMP.
 - JOINT CIRCUITS MAY BE ACCEPTABLE FOR EXISTING SUMP/PUMP SYSTEMS THAT WERE INSTALLED PRIOR TO THIS REQUIREMENT IF FUSED PURSUANT TO THE CURRENT ELECTRICAL CODE.
 - PUMP PROTECTION SHALL BE PROVIDED BY A THERMAL MAGNETIC CIRCUIT BREAKER FOR OVERLOAD PROTECTION.
 - IS SINGLE-PHASE, THE MOTOR WINDINGS SHALL HAVE THERMAL OVERLOAD PROTECTION.
 - IS THREE-PHASE, THE CIRCUIT PROTECTION IN THE PUMP BOX SHALL BE EQUIPPED WITH AN ADJUSTABLE THERMAL OVERLOAD PROTECTION.
- BELOW GRADE ELECTRICAL SPLICES SHALL BE PLACED IN A SONOMA COUNTY-APPROVED PULL BOX INSTALLATION OR A SONOMA COUNTY-APPROVED EXTERNAL SPLICE BOX WITH WATERPROOF SPLICE CONNECTORS. TRAFFIC-RATED PULL BOXES SHALL BE USED IN TRAFFIC AND ADJACENT AREAS. (SEE THE PULL BOX DIAGRAMS.)
- ELECTRICAL NON-METALLIC SPLICE BOXES MAY BE PLACED WITHIN THE SUMP CHAMBER FOR EXISTING SUMP/PUMP SYSTEMS THAT WERE INSTALLED PRIOR TO THIS REQUIREMENT. THEY SHALL BE GAS-TIGHT BOXES WITH WATERPROOF SPLICE CONNECTORS.
- THE PUMP POWER LEAD AND THE FLOAT SWITCH CONTROL WIRES MAY RUN IN A COMMON CONDUIT. HIGH VOLTAGE AND LOW VOLTAGE CONDUCTORS SHALL BE RUN IN SEPARATE CONDUITS.
 - ALL CORDS GOING INTO THE SUMP SHALL BE INDIVIDUALLY SEALED WITH NON-METALLIC GAS TIGHT FITTINGS IN EITHER THE RISER, JUNCTION BOX OR ALARM/CONTROL PANEL AS APPROPRIATE.
 - METALLIC GAS TIGHT FITTINGS ARE NOT ALLOWED.
 - ALL EXPOSED PVC CONDUIT SHALL BE SCHEDULE 80.
- THE CONTROL PANEL AND ITS CONTENTS SHALL BE UL LISTED.
 - THE CONTROL PANEL SHALL BE PLACED IN AN EASILY ACCESSIBLE LOCATION.
 - A NON-RESETTING DOSE COUNTER SHALL BE INSTALLED IN CONTROL BOXES UTILIZED FOR NON-STANDARD SYSTEMS.
 - IF A DOSE COUNTER IS NOT PROVIDED, A NON-RESETTING FLOW METER SHALL BE PROVIDED ON THE OUTGOING LINE TO THE DISPOSAL FIELD. ADDITIONALLY, SYSTEMS WITH FLUSH MODES SHALL BE EQUIPPED WITH A FLOW METER ON THE RETURN LINE. THE FLOW METER SHALL READ IN GALLONS PER MINUTE AND TOTAL GALLONS.
 - THE CONTROL PANEL SHALL BE EQUIPPED SO SETTINGS CAN BE ADJUSTED MANUALLY ON-SITE.
 - CONTROL BOXES THAT MUST BE OPENED TO VIEW THE DOSE COUNTER SHALL BE EQUIPPED WITH A CLEAR PLASTIC OR PYREX SAFETY SHIELD INSIDE THE CONTROL BOX.
 - THE CONTROL BOX SHALL BE LABELED, "CAUTION- ELECTRICAL HAZARD"
 - THE DOSE SETTINGS (TIME OR GALLONS), CALCULATED DOSE VOLUME AND FLOAT SETTINGS SHALL BE POSTED ON THE INSIDE OF THE PANEL.
- ALL EXTERIOR MOUNTED ALARM AND CONTROLLER ENCLOSURE SHALL BE NEMA TYPE 4. IF THE ALARM/CONTROLLER IS MOUNTED MORE THAN 75 FEET FROM ANY RESIDENCE SERVED BY THE SYSTEM, A SEPARATE AUDIBLE/VISIBLE ALARM SHALL BE PROVIDED AT EACH STRUCTURE CONNECTED TO THE SEPTIC SYSTEM. THE ENCLOSURE FOR THE REMOTE AND AUDIO/VISUAL ALARM SHALL BE NEMA TYPE 1 IF MOUNTED INDOORS.



NOTE: THIS EXHIBIT REPRESENTS A TOPOGRAPHIC SURVEY BY JMH WEISS INC. PERFORMED ON 05/19/2014. THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY DETERMINATION. BOUNDARY SHOWN IS PER ASSESSOR RECORDS AND RECORD DATA ONLY AND HAS NOT BEEN SURVEYED OR CONFIRMED.



INSTALLATION NOTES

- REMOVE ~12" OF FILL FROM DRIPFIELD AREA PRIOR TO INSTALLATION, PER GEOTECHNICAL RECOMMENDATIONS.
- INSTALL NEW SEWER LATERAL FROM BUILDING TO TREATMENT UNIT. USE 4" ABS OR EQUIVALENT. ENSURE 2% MINIMUM SLOPE.
- INSTALL MICROSEPTIC ES-6 TREATMENT UNIT. SEE MANUFACTURER SPECIFICATIONS FOR COMPLETE INSTALLATION INSTRUCTIONS. FINAL LOCATION SHALL BE DETERMINED AT TIME OF CONSTRUCTION. MAINTAIN 10' MIN. SETBACK TO PROPERTY LINE AND DRIVEWAY. ALTERNATE TANK LOCATION TO BE CONFIRMED WITH HLS PRIOR TO CONSTRUCTION. SEE DETAIL 1/C2.
- INSTALL HEADWORKS WASTEFLOW BOX WITH FLUSH VALVE AND VORTEX FILTER. INSTALL CHECK VALVE ON SUPPLY LINE PRIOR TO DRIP FIELD PER DETAIL. SEE DETAIL AND MANUFACTURER SPECIFICATIONS. INSTALL ZONE SWITCHING VALVE MODEL V4402A. SEE DETAIL 2/C2.
- INSTALL PRIMARY DRIP FIELDS A & B 525 S.F. MIN. EACH WITH TOP FEED MANIFOLD AND 25 PSI PRESSURE REGULATOR. INSTALL AIR RELIEF VALVE ON SUPPLY/RETURN LINE ENDS. SEE DETAIL 3/C2, 4/C2, 5/C2, AND 6/C2.
- SMOOTH GRADE DRIPFIELD SURFACE AFTER INSTALLATION TO PREVENT SURFACE PONDING, PER GEOTECHNICAL RECOMMENDATIONS.
- 100% RESERVE AREA (525 S.F. MIN.) TO REMAIN NATIVE AND UNDISTURBED.
- INSTALL 4 MONITORING WELLS PRIOR TO DRIP LINE INSTALLATION. SEE DETAIL 7/C2.
- INSTALL REBAR AT SUPPLY LINE ANGLE POINTS FOR FUTURE LOCATION DETERMINATION.
- INSTALL CONTROL PANEL WITH ALARM AND TELEMETRY CONNECTIONS, PER MANUFACTURER'S SPECIFICATION.
- DEMOLISH EXISTING SEPTIC TANK AND ABANDON LEACH LINE PER ENVIRONMENTAL HEALTH GUIDELINES.
- EXISTING RETAINING WALL, PROPOSED TO BE INTEGRATED INTO RESIDENCE U.S.P. CONSTRUCTION. APPROXIMATE RETAINED HEIGHT = 9'
- AVAILABLE LEACH FIELD AREA, AS DEFINED BY SITE EXPLORATION WITH SANTA CLARA COUNTY ENVIRONMENTAL HEALTH.
- PROPOSED 4 BEDROOM SINGLE FAMILY RESIDENCE. LOCATION AND FOOTPRINT APPROXIMATE.
- PROPOSED WELL TO BE INSTALLED UNDER SEPARATE PERMIT. LOCATION APPROXIMATE.
- INSTALL THRUST BLOCKS AT ALL PRESSURE LINE ANGLE POINTS. SEE DETAIL 8/C2.

LEGEND

- RECORD BOUNDARY LINE
- TREE (DIAMETER IN INCHES)
- FLOWLINE
- EASEMENT AND RIGHT OF WAYS
- EDGE OF GRAVEL ROAD
- FENCE
- APPROXIMATE LOCATIONS OF FILL PER GEOTECHNICAL REPORT
- SDS EXPANSION AREA
- SOILS PROFILE PIT W/DEPTH
- SDS PRIMARY FIELD ZONE "A"
- SDS PRIMARY FIELD ZONE "B"
- SDS RESERVE AREA
- SANITARY SEWER W/SIZE
- CULVERT/STORMDRAIN W/SIZE & TYPE
- SDS SETBACK LINE
- PERC HOLE W/DEPTH & MINUTES PER INCH
- DOWN SLOPE
- WELL
- CLEANOUT
- HOSE BIB
- PRESSURE REGULATOR
- AIR RELIEF VALVE
- CHECK VALVE
- FLOW METER
- HEADWORKS BOX
- INSTAL. KEY NOTE
- MONITORING WELL

REVISION BLOCK

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C4 OF 4

PROFESSIONAL ENGINEER - WASHINGTON STATE
NO. 82889

THESE PLANS WERE PREPARED BY ME OR UNDER MY SUPERVISION AND REQUEST OF JON GODSTON IN JANUARY, 2024

DATE: 1/18/24
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