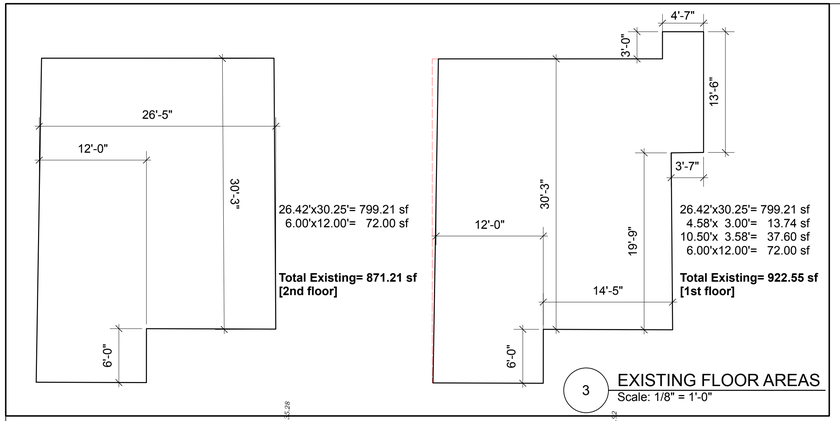
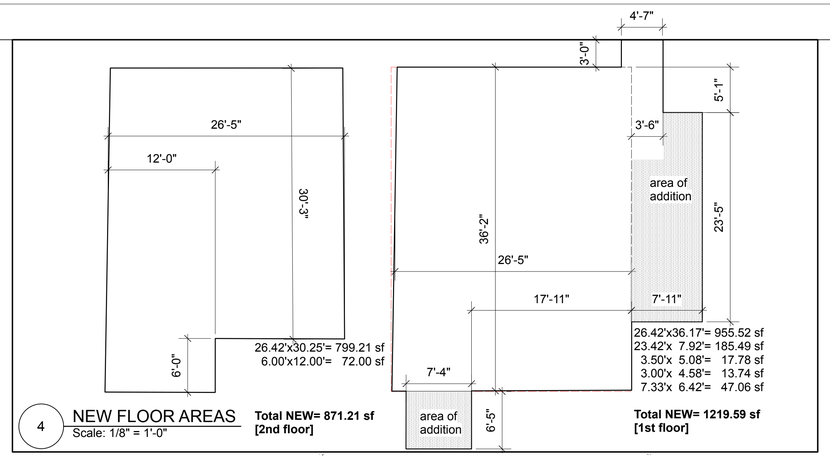
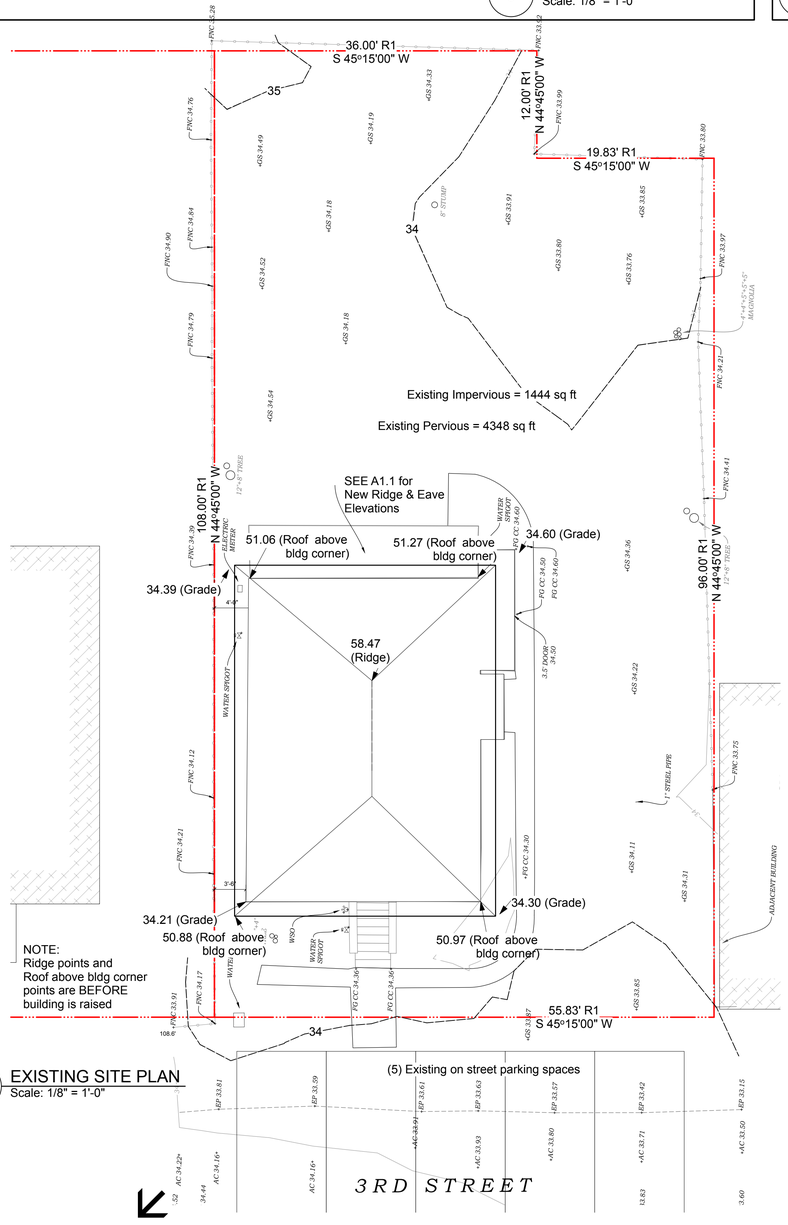


3 EXISTING FLOOR AREAS
Scale: 1/8" = 1'-0"



4 NEW FLOOR AREAS
Scale: 1/8" = 1'-0"

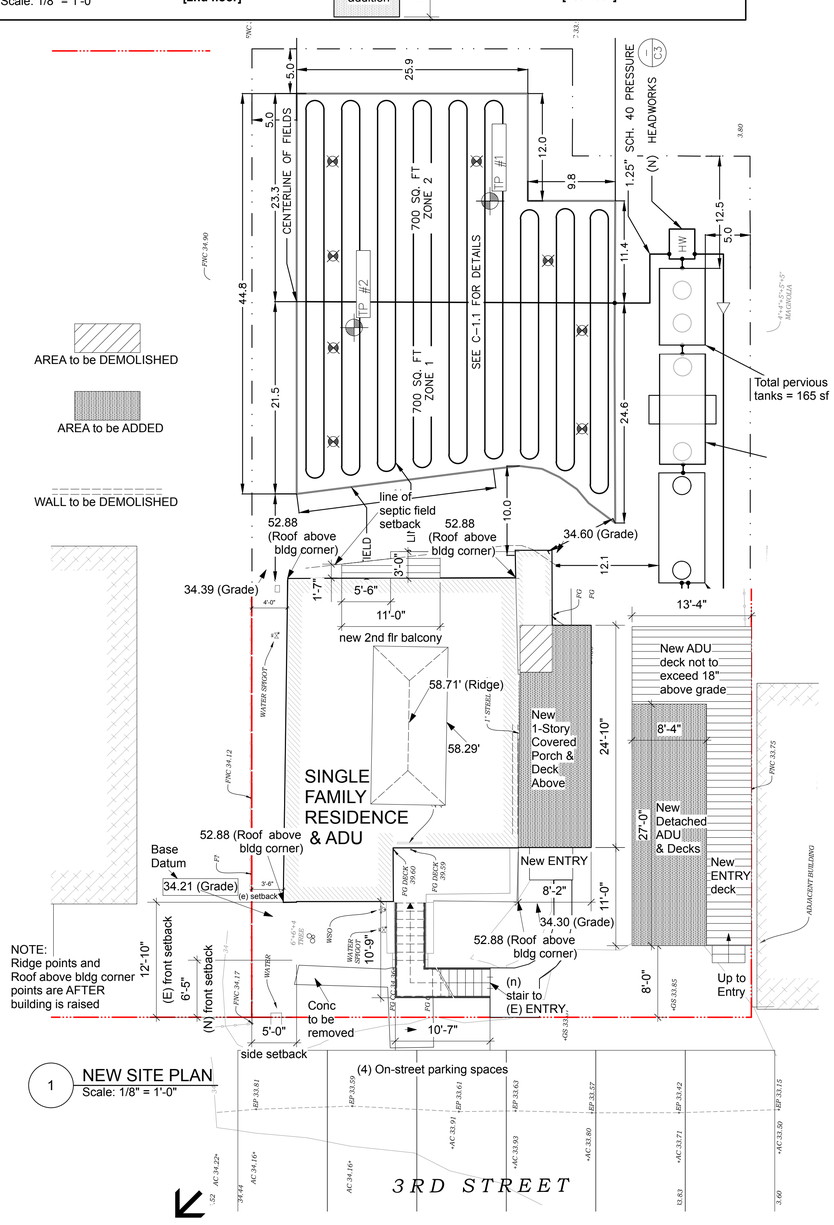


2 EXISTING SITE PLAN
Scale: 1/8" = 1'-0"

AREA to be DEMOLISHED

AREA to be ADDED

WALL to be DEMOLISHED



1 NEW SITE PLAN
Scale: 1/8" = 1'-0"

PROPERTY & BUILDING INFORMATION

Parcel No. 119-226-13
Zoning: C-VCR-B2
Lot Size: 5792 sq ft

Existing Bldg; Type 5 NR, no sprinkler
2 stories; R-3 over S
New Bldg; Type 5A, 2 stories, R-3,1hr
Fully sprinklered per NFPA 13D

BUILDING INFO:
Existing 2nd flr area: **895 sq ft**
Existing 1st floor area: **986 sq ft**
Total new building floor area: **1881 sq ft**
less Detached ADU

Grading: Cut: 20 yds x 1yd² = 20 cu. yds.
No fill proposed/required

Demolition:
(See A0.2) Demo exterior wall = 17.42 lin. ft of exterior wall to be removed out of 139.5 lin ft. of perimeter walls. No demolition at 2nd floor.

New 2nd Floor **895 sq ft**
New 1st floor **800 sq ft ADU**
Laundry/Utility **186 sq ft**
Detached ADU **186 sq ft**

SCOPE of WORK
Raise building 2'-7" to max. 25' from grade; New 1-story Addition to side; add 1-attached 2-Bdrm ADU + 1 detached Studio ADU, Install New septic system. No change in Occupancy; R3 to remain

APPLICABLE CODES
2022 CALIFORNIA BUILDING CODE WITH LOCAL AMENDMENTS
2022 CALIFORNIA MECHANICAL CODE WITH LOCAL AMENDMENTS
2022 CALIFORNIA ELECTRICAL CODE WITH LOCAL AMENDMENTS
2022 CALIFORNIA PLUMBING CODE WITH LOCAL AMENDMENTS
2022 GREEN BUILDING CODE WITH LOCAL AMENDMENTS
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE WITH LOCAL AMENDMENTS

SHEET INDEX

Project Description

The project involves alterations and additions to the existing single family house, adding two new ADUs.
The house will be lifted 31", the existing lower floor will be converted to a 800 sq ft ADU under the State program. The first floor will be raised to be level with adjacent grade.
The resulting building will have one main unit upstairs with one attached ADU below and one detached ADU in the side yard. A total of 4 bedrooms and 3 baths.

CLAM commits to ensuring the perpetual affordability of its housing units, catering specifically to households earning less than 80% of the area median income

Existing lot area = 5792 sq ft

Existing Building Area = 1881 sq ft
Proposed Building Area= 1881 sq ft

FAR =1881/5792= .032 (proposed)
1881/5792= .032 (existing)

Existing Lot Coverage:
Impervious = 1444 sq ft
Pervious = 4348 sq ft

Proposed Lot Coverage:
Impervious = 1520 sq ft
Pervious = 4272 sq ft

Existing Parking = 0
Proposed Parking = 0
Minimum Setbacks =
Front: 25 ft
Sides: 10 ft
Rear: 20% of lot depth(max) or 25 ft max
Height Limit: 35 feet
ADU's Exempt from setbacks, FAR and pervious surfaces

PROPERTY OWNER & Applicant

Owner: CLAM
Community Land Trust Association of West Main
PO Box 273, Point Reyes Station, CA 94956
415-663-1005
Applicant:
CLAM Project Manager
Tom McCafferty
314-570-8722

Alterations & Additions to existing single family dwelling

60 3rd Street, Point Reyes Station, CA 94956

Project Title

LICENSED ARCHITECT STEPHEN ANTONAROS NO. C14386 Exp. 6/30/25 STATE OF CALIFORNIA

Architect Stephen Antonaros
Architect
(415) 864-2261
santonaros@gmail.com
Point Reyes Station
California 94956

Consultant

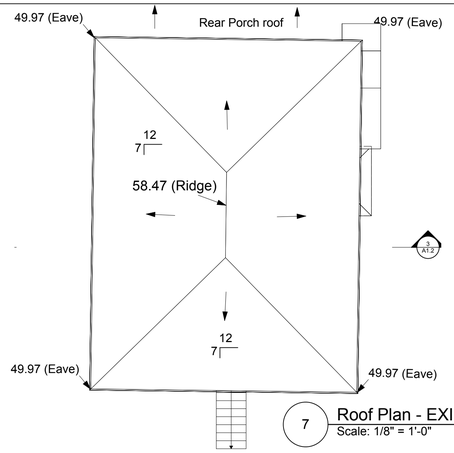
REV.	DATE	DESCRIPTION
B	1/27/25	revise for final review
A	1/16/25	Revise roof height; Unit labels

NO.	DATE	ISSUE NOTE

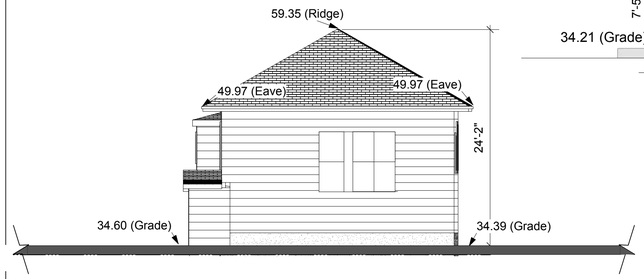
Project Manager
Drawn By
Date: January 2025
Reviewed By
Project ID: LFT.35

Sheet Title
Existing+New Site Plans

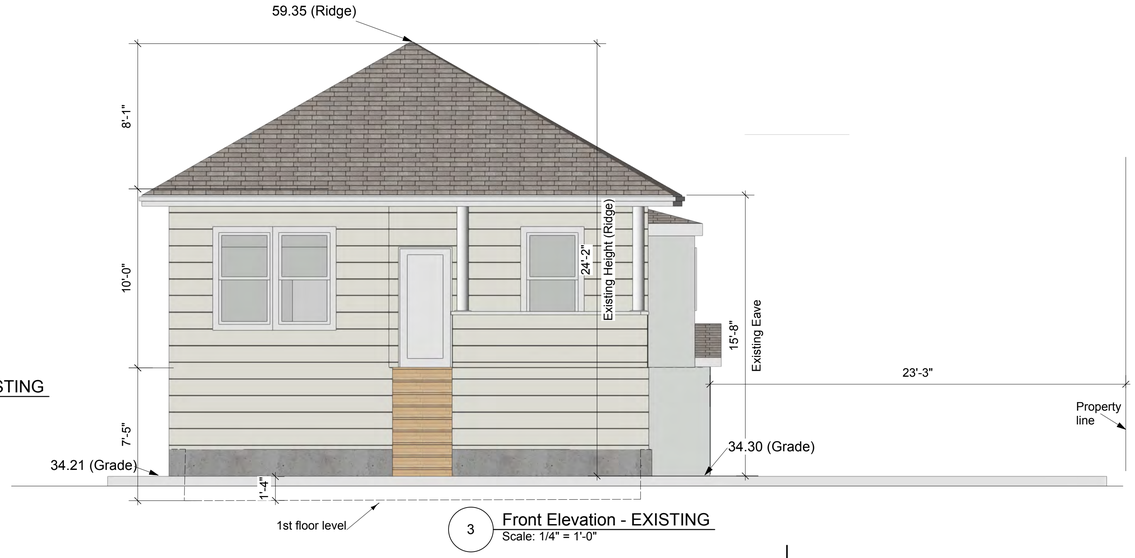
Sheet No.
A0.1



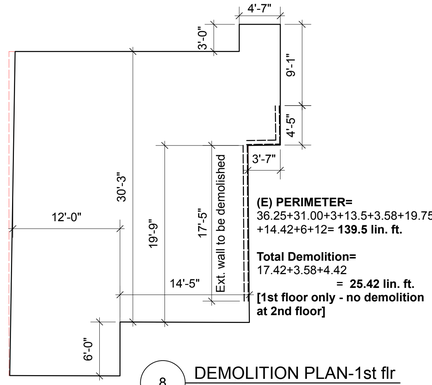
7 Roof Plan - EXISTING
Scale: 1/8" = 1'-0"



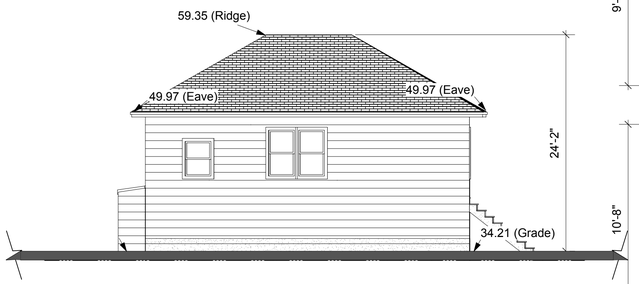
6 Rear Elevation - Existing
Scale: 1/8" = 1'-0"



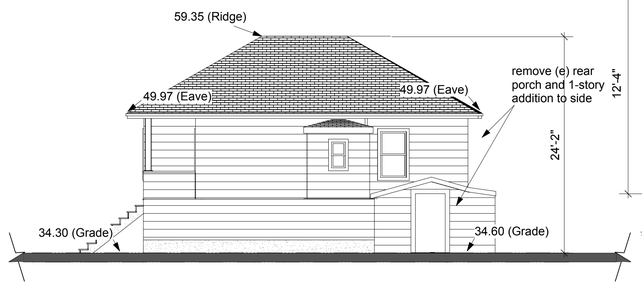
3 Front Elevation - EXISTING
Scale: 1/4" = 1'-0"



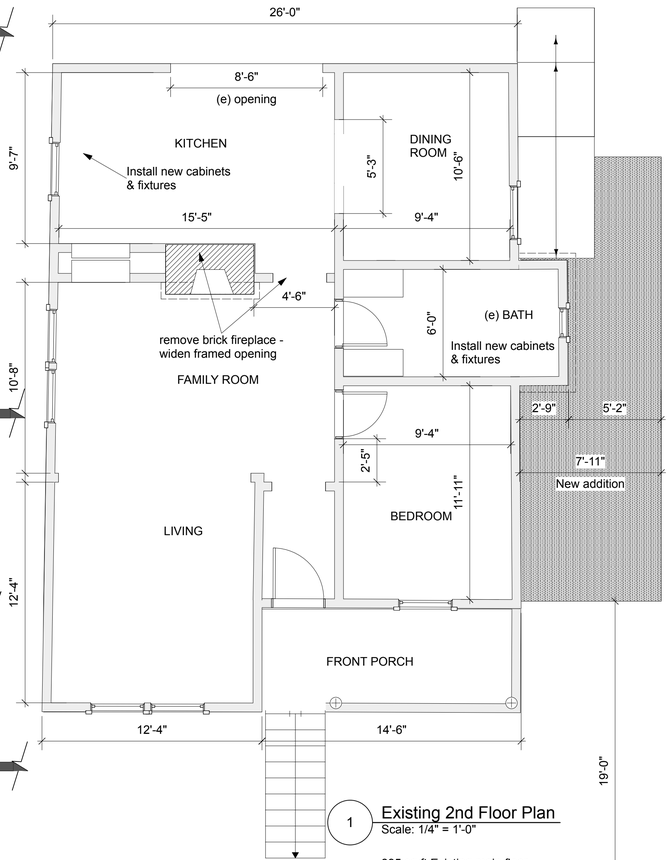
8 DEMOLITION PLAN-1st flr
Scale: 1/8" = 1'-0"



5 West Side Elevation - Existing
Scale: 1/8" = 1'-0"

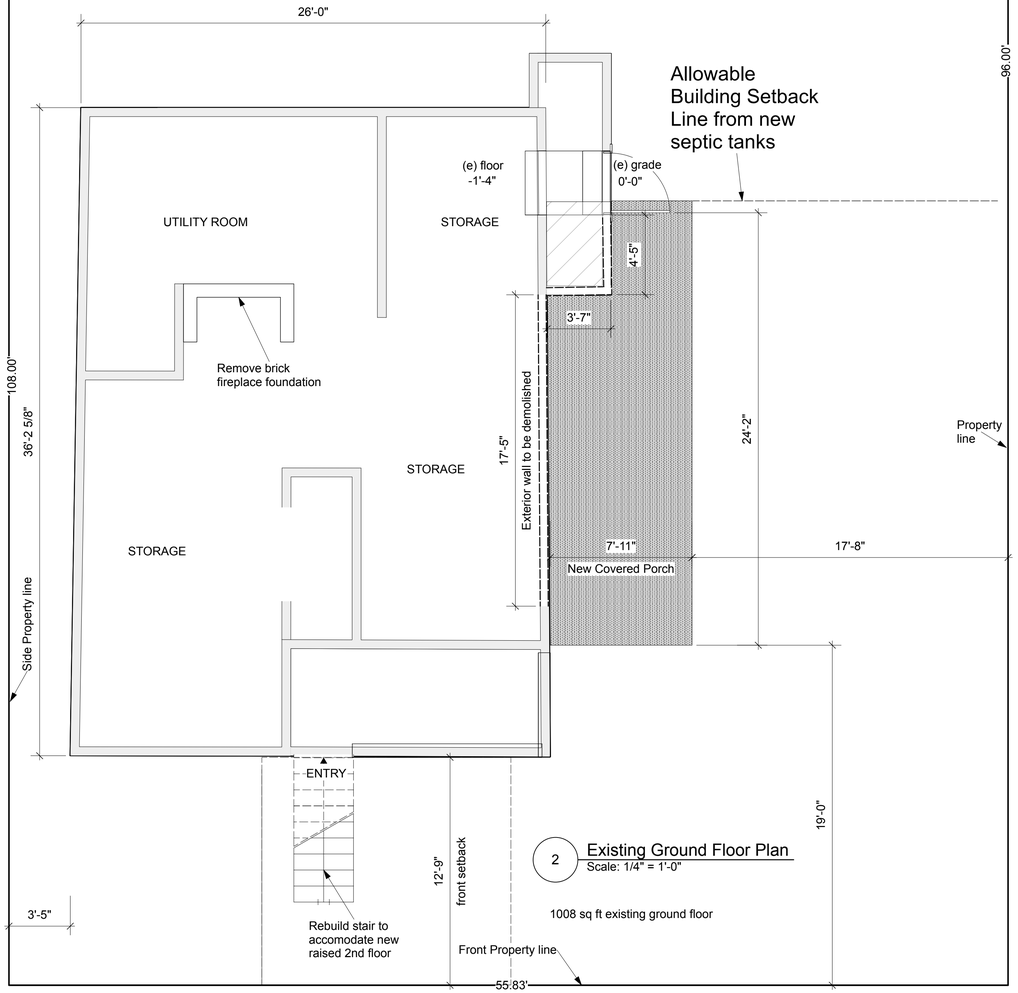


4 East Side Elevation - Existing
Scale: 1/8" = 1'-0"



1 Existing 2nd Floor Plan
Scale: 1/4" = 1'-0"

895 sq ft Existing main floor



2 Existing Ground Floor Plan
Scale: 1/4" = 1'-0"

1008 sq ft existing ground floor

Alterations & Additions to existing single family dwelling

60 3rd Street, Point Reyes Station, CA 94956

Project Title

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Stephen Antonaros
Architect
(415) 864-2261
santonaros@gmail.com
Point Reyes Station
California 94956

Consultant

REV.	DATE	DESCRIPTION
B	1/27/25	revise for final review
A	1/16/25	Revise roof height; Unit labels

NO.	DATE	ISSUE NOTE

Project Manager | Drawn By

Date: January 2025 | Reviewed By

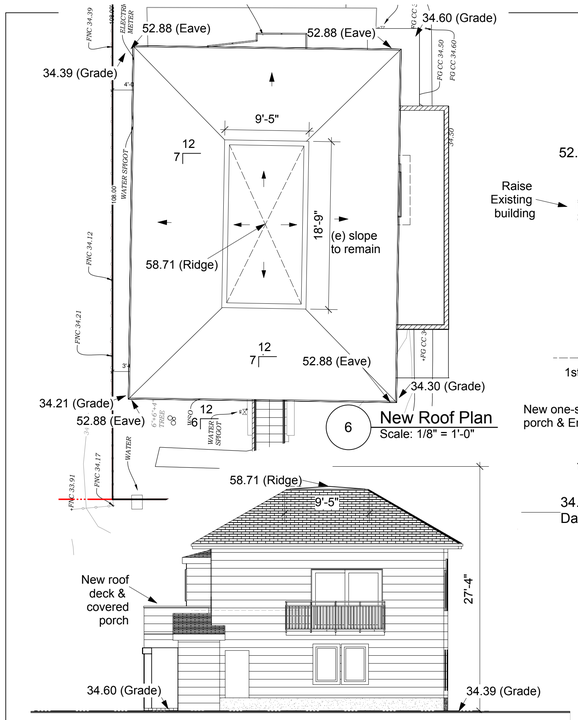
Project ID: LFT.35

Sheet Title

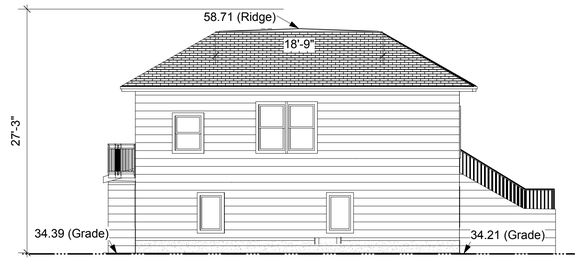
Existing Building Floor plans & Elevations

Sheet No.

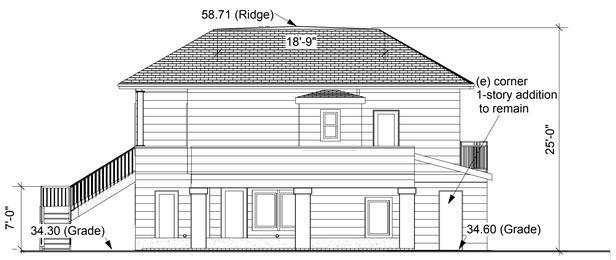
A0.2



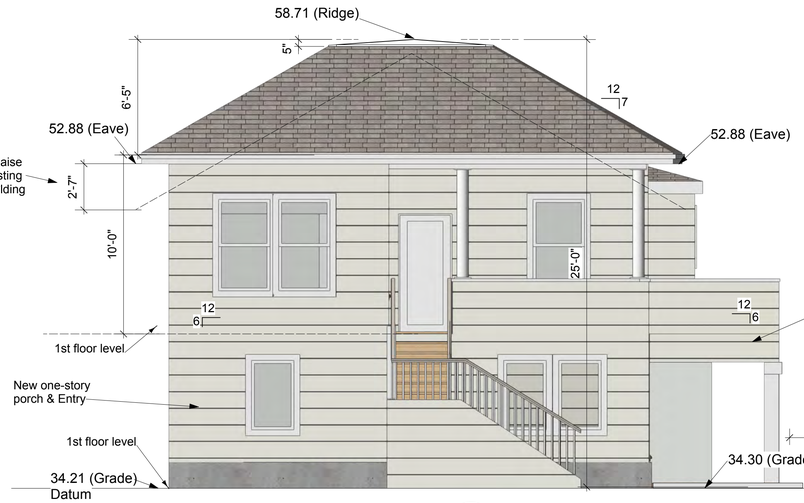
5 Rear Elevation - NEW
Scale: 1/8" = 1'-0"



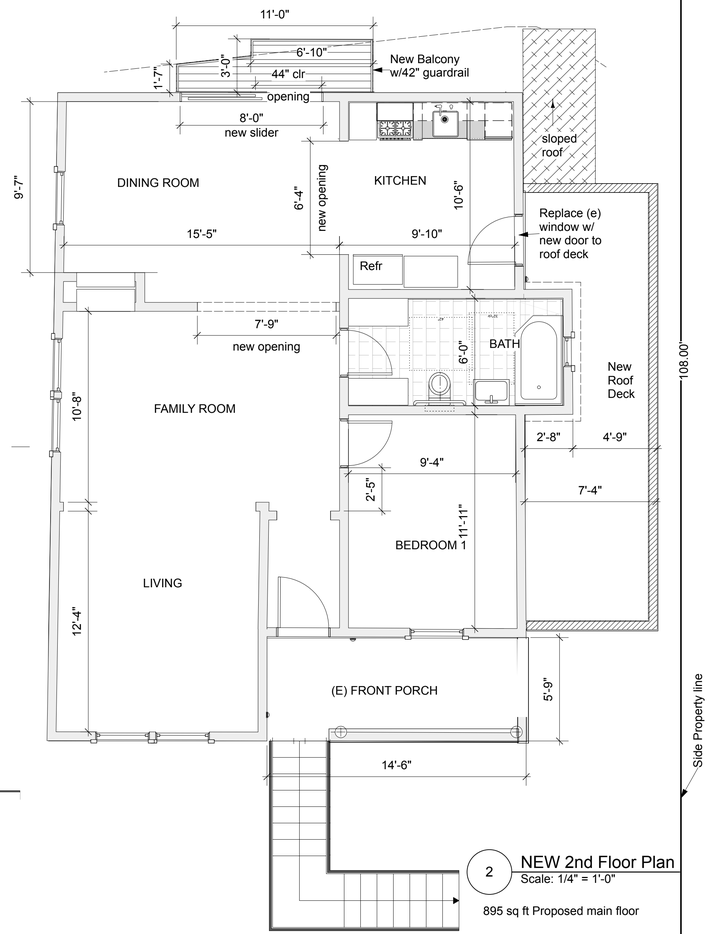
4 West Side Elevation - NEW
Scale: 1/8" = 1'-0"



3 East Side Elevation - NEW
Scale: 1/8" = 1'-0"

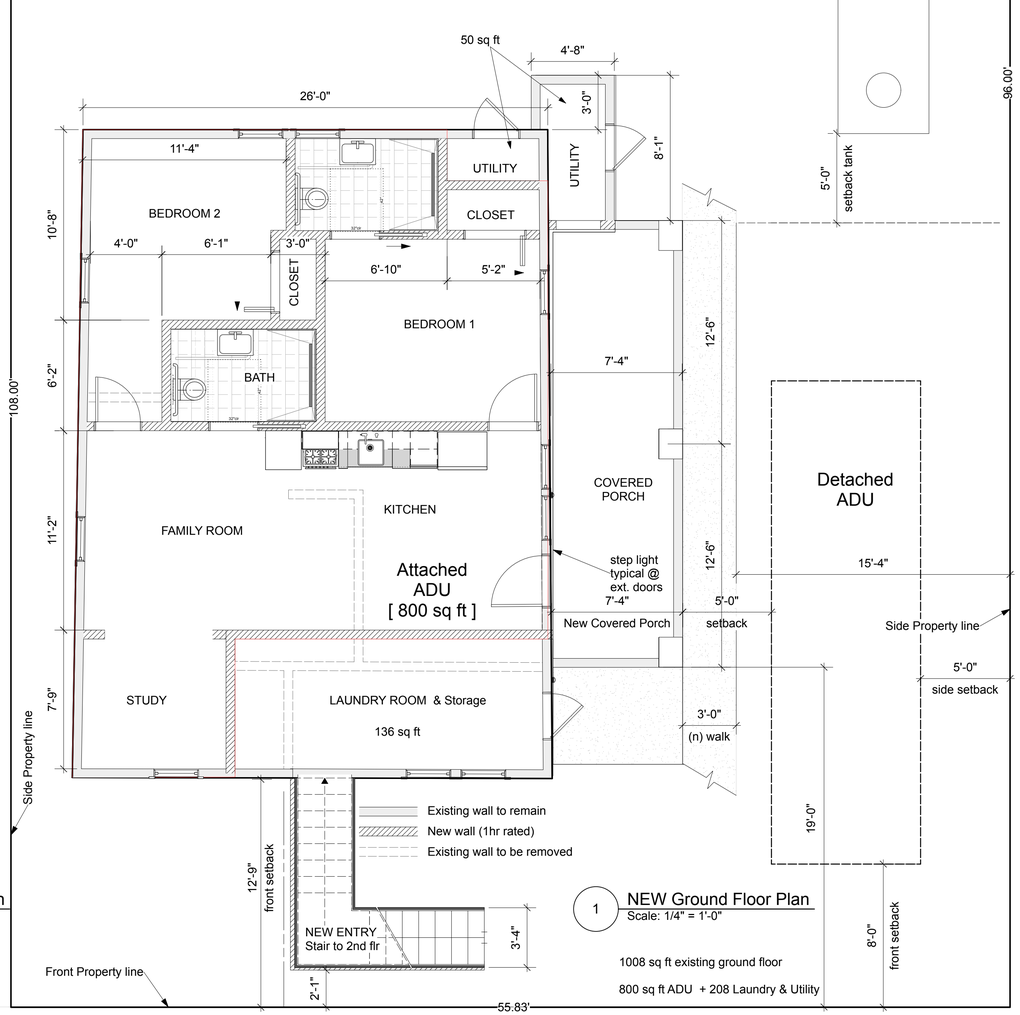


7 Front Elevation
Scale: 1/4" = 1'-0"



2 NEW 2nd Floor Plan
Scale: 1/4" = 1'-0"

895 sq ft Proposed main floor



1 NEW Ground Floor Plan
Scale: 1/4" = 1'-0"

1008 sq ft existing ground floor

800 sq ft ADU + 208 Laundry & Utility

C2LIGHTS.com

Exterior Dark Sky compliant step/deck light SRD-406LED Surface Mount-Typ.

COLOR & MATERIALS

Roof to be Compostion Shingles

All Siding to be Hardiboard to match existing lap siding, painted

Trim and Doors to be wood, painted

Benjamin-Moore
Historic Color
for Siding, Doors & Trim

Salamander
2050-10

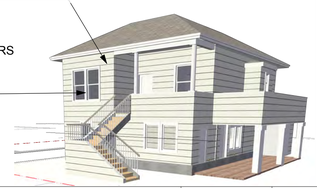
SIDING

Rustique
AF-275

DOORS

Sycamore
1137

TRIM



Alterations & Additions to existing single family dwelling

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Architect
Stephen Antonaros
Architect
(415) 864-2261
santonaros@gmail.com
Point Reyes Station
California 94956

Consultant

REV.	DATE	DESCRIPTION
E	1/27/25	revise for final review
D	1/16/25	Revise roof height; Unit labels
C	10/15/24	Story Pole data
B	9/16/24	CDA Review responses
A	6/27/24	Revise to SFD

NO.	DATE	ISSUE NOTE

Project Manager | Drawn By

Date: January 2025 | Reviewed By

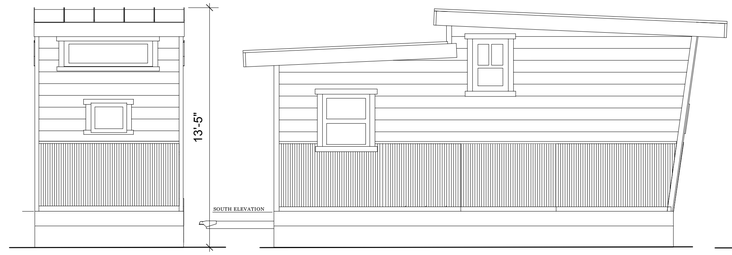
Project ID: LFT.35

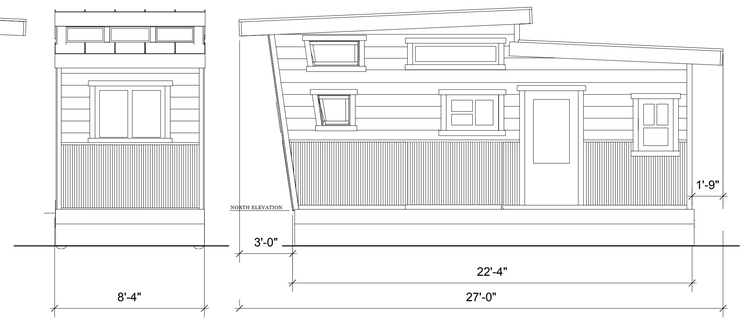
Sheet Title

New Building Floor plans

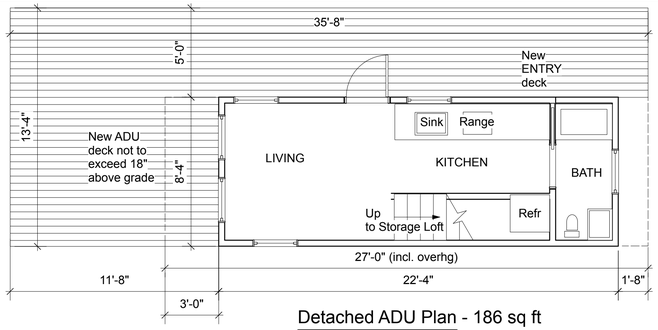
Sheet No.

A1.1

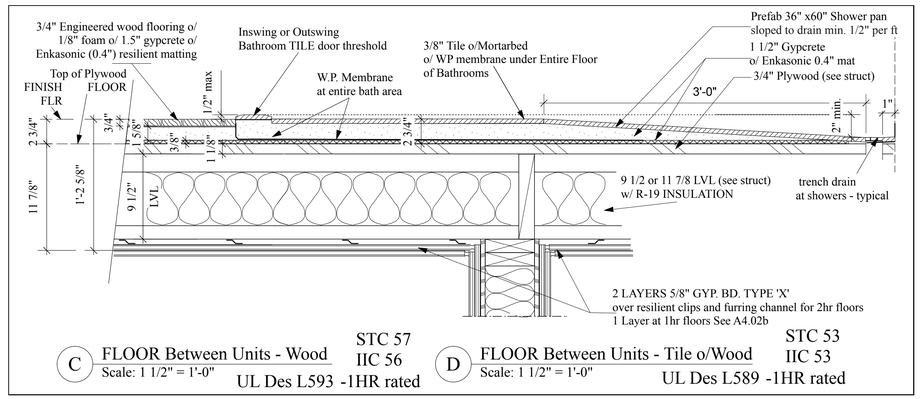




2 New Detached ADU
Scale: 1/4" = 1'-0"

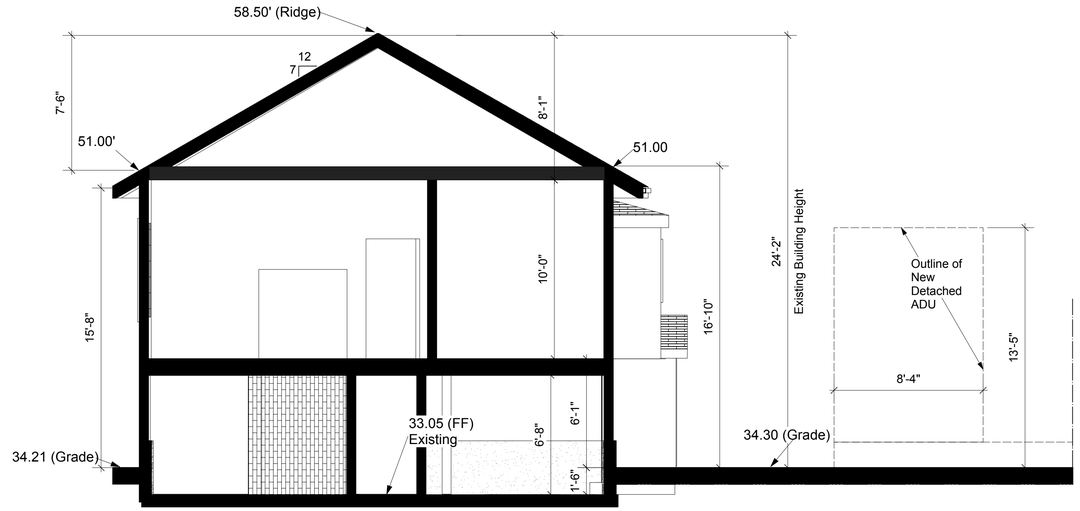


Detached ADU Plan - 186 sq ft

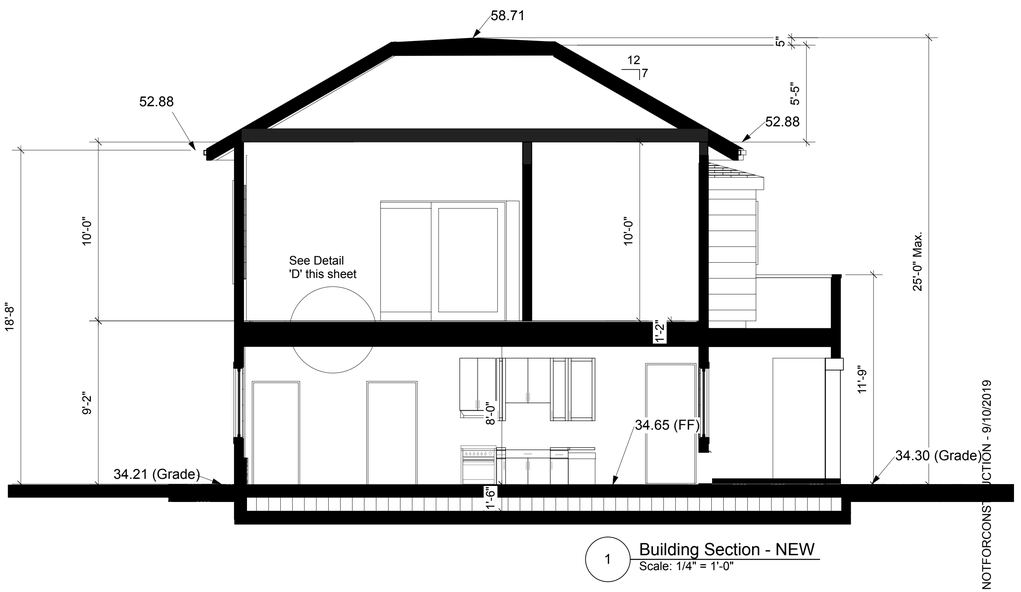


C FLOOR Between Units - Wood
Scale: 1 1/2" = 1'-0"
STC 57
IIC 56
UL Des L593 -1HR rated

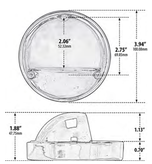
D FLOOR Between Units - Tile o/Wood
Scale: 1 1/2" = 1'-0"
STC 53
IIC 53
UL Des L589 -1HR rated



3 Building Section - EXISTING
Scale: 1/4" = 1'-0"



1 Building Section - NEW
Scale: 1/4" = 1'-0"



PROJECT	DATE
TYPE	CATALOG #

HALF MOON STEP/DECK LIGHT

SRD-406LED - SURFACE MOUNT

KEY FEATURES

- HEAVY GAUGE DIE-CAST BRASS
- NATURAL BRONZE FINISH (OTHER FINISHES AVAILABLE, CONSULT FACTORY)
- DIMMABLE* (TRANSFORMER USED MUST BE DIMMABLE)
- TEMPERED, SHOCK AND HEAT RESISTENT FROSTED LENS LENS
- FIELD REPLACEABLE LED

PRODUCT SPECIFICATIONS

MATERIAL	SOLID DIE-CAST BRASS
LENS	FROSTED TEMPERED GLASS
VOLTAGE	12V AC/DC
ILLUMINATION	WIDE FLOOD / STEP / DECK PATH
LEAD WIRE	39"

STEP 1
FIXTURE CONFIGURATION

SRD-406LED [ ]

FINISH
BZ - BRONZE CST - CUSTOM

STEP 2
LED LAMP CONFIGURATION

LED [ ] [ ] [ ]

LED WATTAGE
1.5W 140 LM
3W 280 LM
4W 375 LM
6W 500 LM

KELVIN TEMPERATURE
27K 2700K
30K 3000K
40K 4000K
50K 5000K

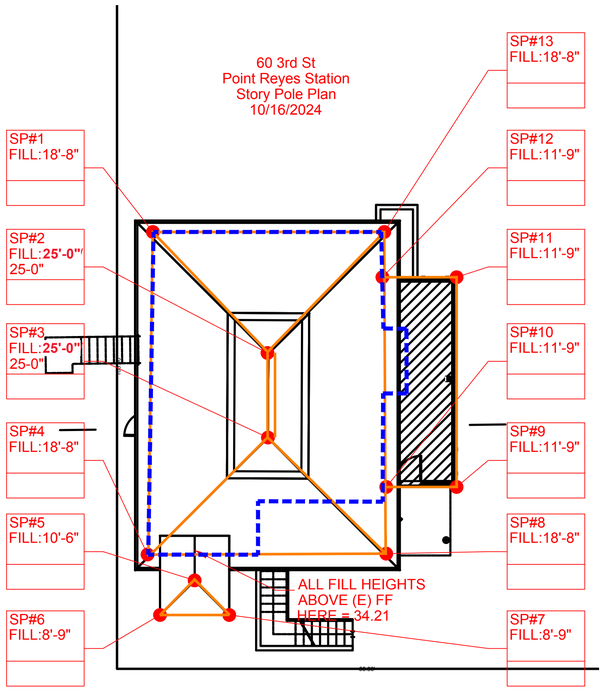
BEAM ANGLE
120D 120° WIDE FLOOD

STEP 3
ACCESSORY OPTIONS

PTH-SPK OPTIONAL [ ]

OPTION
SF SURFACE MOUNT AS STEP / DECK LIGHT (STANDARD)
PTH-SPK PVC IN-GROUND SPIKE TO USE AS PATH LIGHT (OPTIONAL)

PHONE: 818.772.0500 | FAX: 818.772.0599 | E-MAIL: SALES@C2CLIGHTS.COM



Alterations & Additions to existing single family dwelling

60 3rd Street, Point Reyes Station, CA 94956

Project Title

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Architect Stephen Antonaros
Architect
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santonaros@gmail.com
Point Reyes Station
California 94956

Consultant

REV.	DATE	DESCRIPTION
B	1/27/25	revise for final review
A	1/16/25	Revise roof height; Unit labels

NO.	DATE	ISSUE NOTE

NOTFORCONSTRUCTION - 9/10/2019

Project Manager	Drawn By
Date: January 2025	Reviewed By
Project ID: LFT.35	

Sheet Title

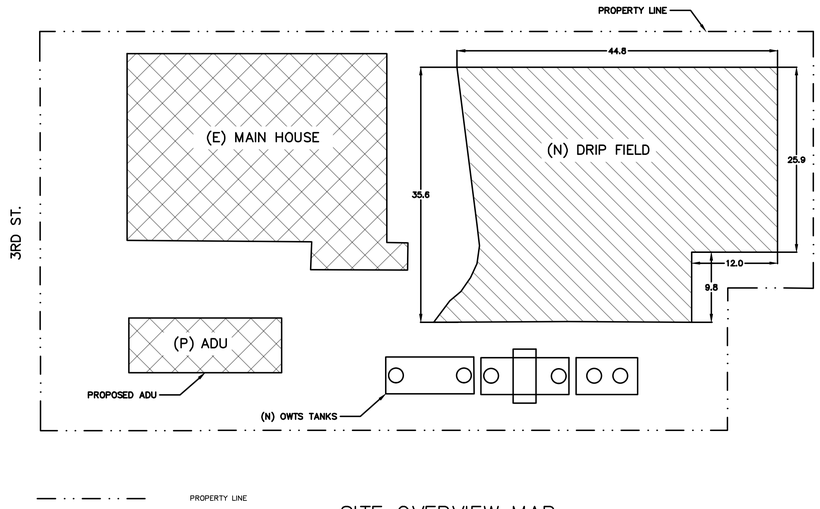
Existing & New Sections

Sheet No.

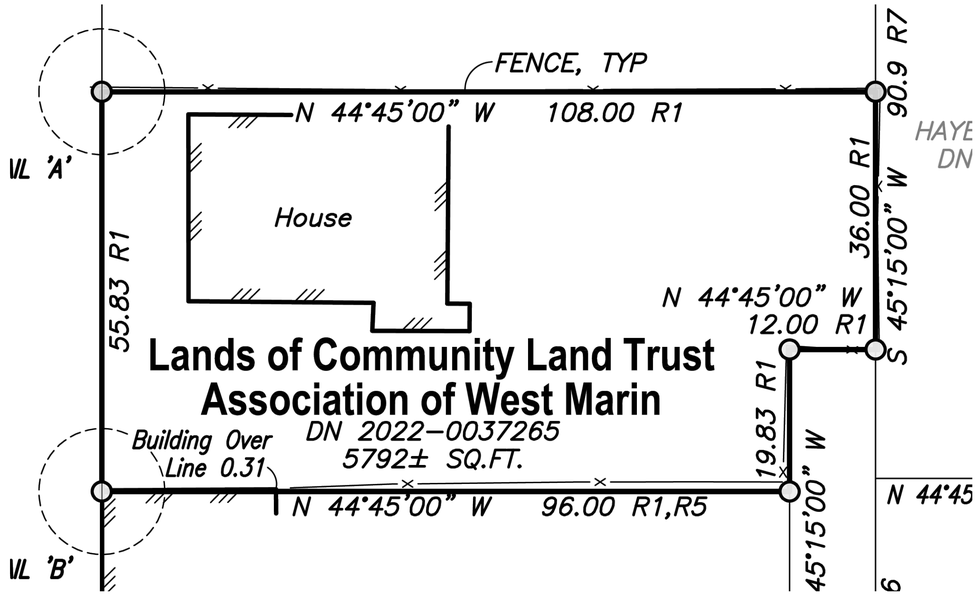
A1.2

ONSITE WASTEWATER TREAMENT SYSTEM DESIGN

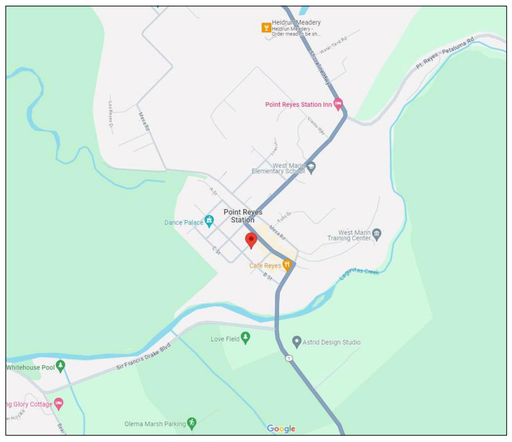
60 3RD ST, POINT REYES STATION, CA 94956



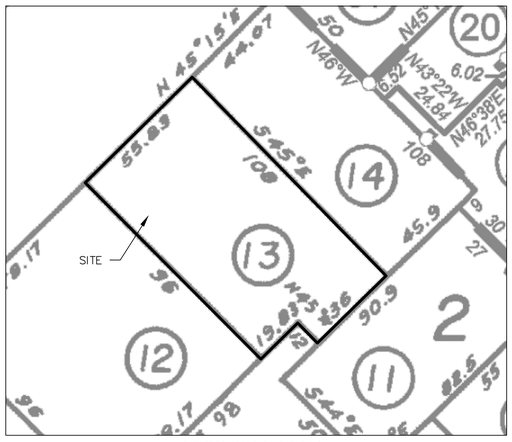
SITE OVERVIEW MAP
SCALE: 1"=10'



PARTIAL TOPO
SCALE: 1"=10'



PARCEL LOCATION
SCALE: NA



VICINITY MAP
SCALE: NA

SHEET INDEX	
C-0	TITLE SHEET
C-1	OWTS SITE PLAN
C-1.1	DRIP FIELD SCHEMATIC
C-2	TANK AND PRE-TREATMENT DETAILS
C-3	ASSORTED DETAILS
C-4	OWTS NOTES
C-5	CONSTRUCTION BMPS
ATTACHED	RECORD OF SURVEY

DEVELOPER/APPLICANT
COMMUNITY LAND TRUST OF WEST MARIN
SCOPE OF WORK
1. NEW OWTS AND DRIP FIELD
SITE INFO
60 3rd St, Point Reyes Station, CA 94956

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 INCH = 10 FEET

ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A AT (800-227-2600) 48 HOURS BEFORE DIGGING, AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).

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

REV.	DATE	BY
REVISIONS		
0	12/13/23	INITIAL RELEASE
REV.	DATE	DESC.

ISSUES

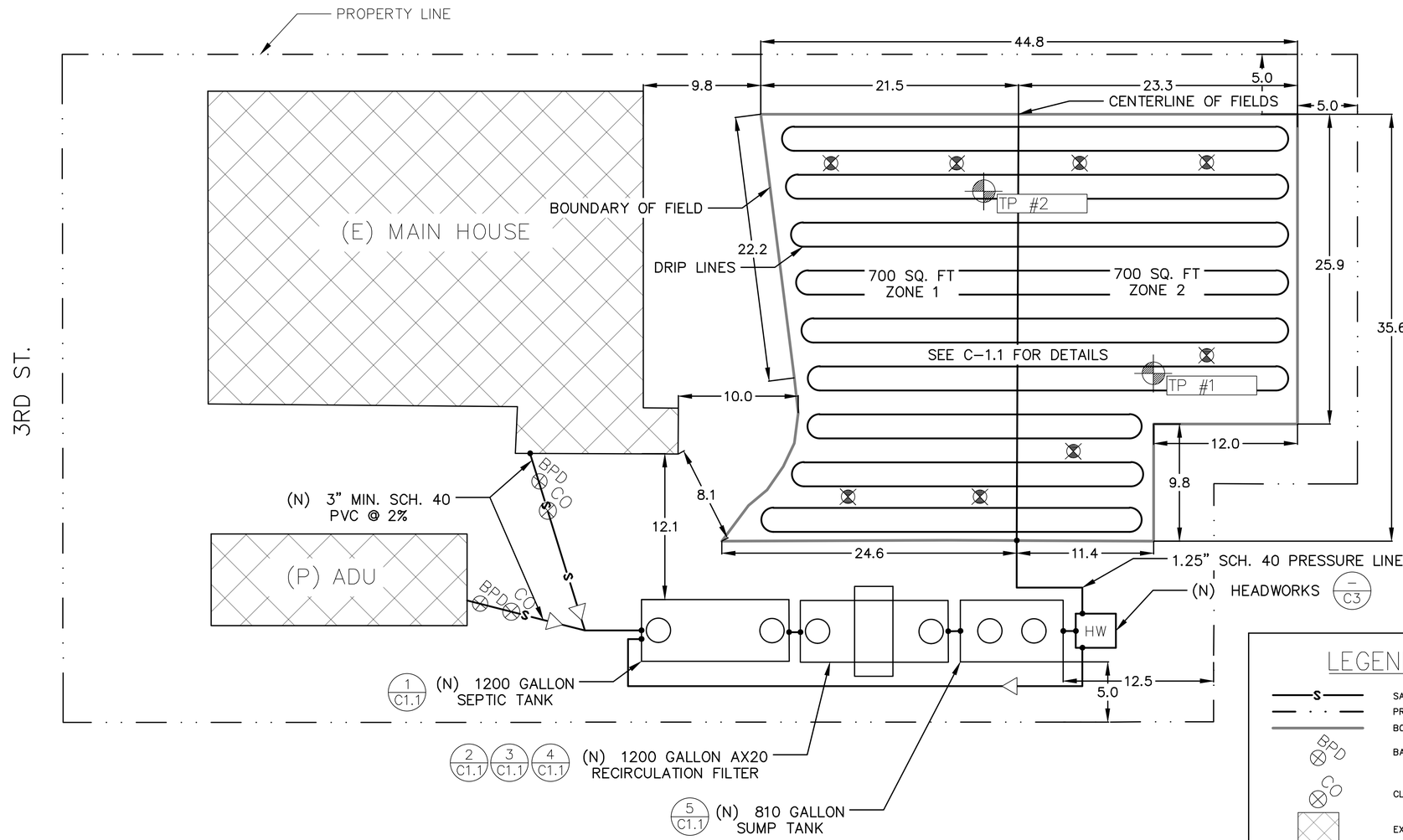
REGISTERED PROFESSIONAL ENGINEER
ORION W. AGNEW
C 87262
CIVIL
STATE OF CALIFORNIA

AC ENGINEERING INC.
CIVIL & GEOTECHNICAL CONSULTANTS
454 LAS GALLINAS AVE. SUITE 1047.
SAN RAFAEL, CA 94903
PH: 415-868-5532
FAX: 415-472-0603
ADMIN@AGNEWCIVIL.COM

COVER SHEET
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

C-0



OWTS SITE PLAN

SCALE: 1"=5'

TP #1

LEGEND

- S — SANITARY SEWER LINE
- PROPERTY LINE
- BOUNDARY OF FIELD
- BPD — BACKFLOW PREVENTION DEVICE
- CO — CLEANOUT
- EXISTING STRUCTURE
- MONITORING WELL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)

1 INCH = 5 FEET

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REV.	DATE	BY
REVISIONS		
0	12/13/23	INITIAL RELEASE
REV.	DATE	DESC.

ISSUES

REGISTERED PROFESSIONAL ENGINEER ORION W. AGNEW C 87262 CIVIL STATE OF CALIFORNIA

AC ENGINEERING INC.
CIVIL & GEOTECHNICAL CONSULTANTS
454 LAS GALLINAS AVE. SUITE 1047.
SAN RAFAEL, CA 94903
PH: 415-888-5532
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ADMIN@AGNEWCIVIL.COM

OWTS SITE PLAN

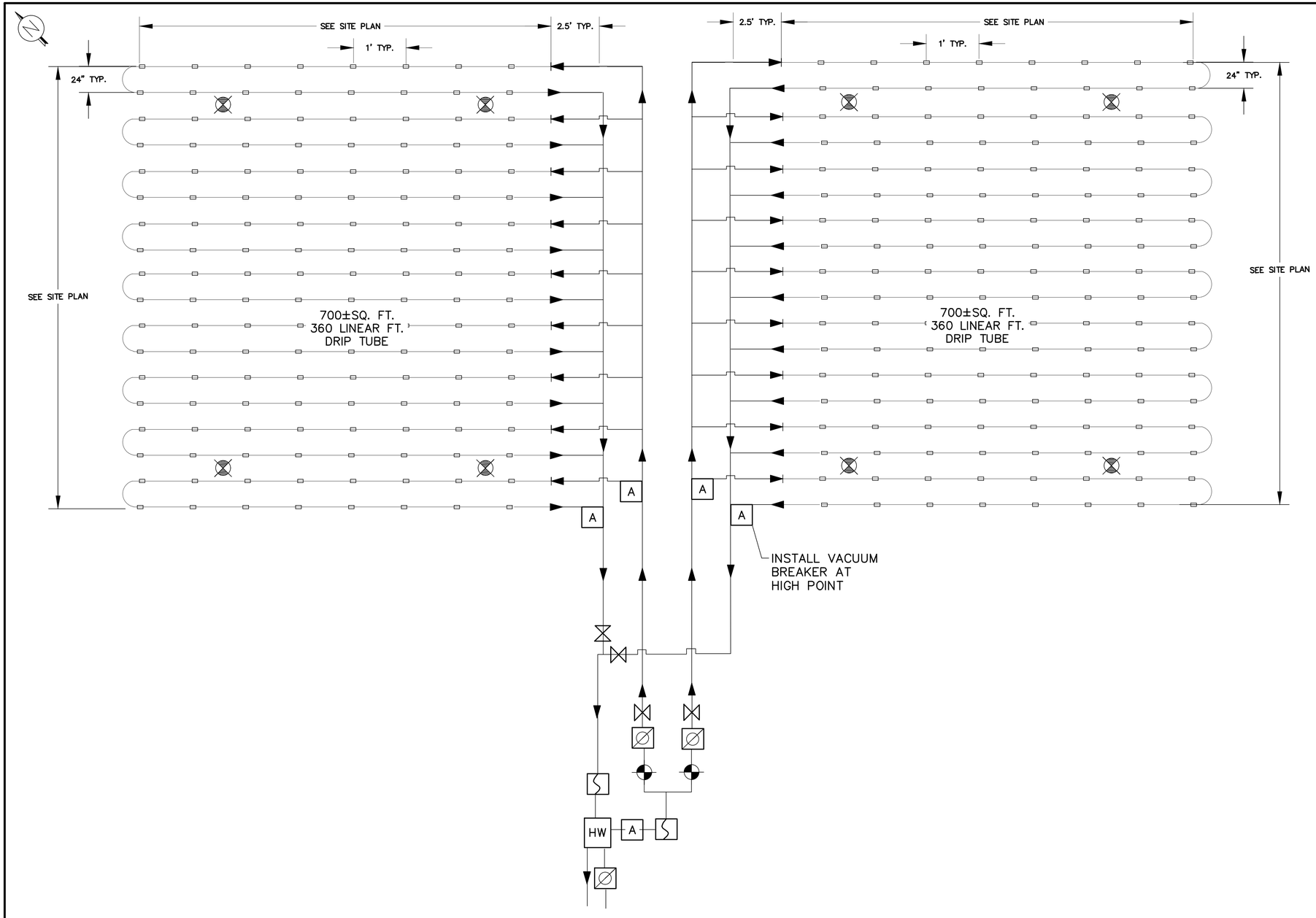
CLAM

60 3rd St, Point Reyes Station, CA 94956

119-226-13

276-1

C-1



DRIP FIELD SCHEMATIC
SCALE: N/A

LEGEND

- HW — HEADWORKS
- FLOW METER
- A — VACUUM BREAKER
- PRESSURE REGULATOR
- CHECK VALVE
- SOLENOID VALVE
- MONITORING WELL

REV.	DATE	BY
REVISIONS		

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DRIP FIELD SCHEMATIC

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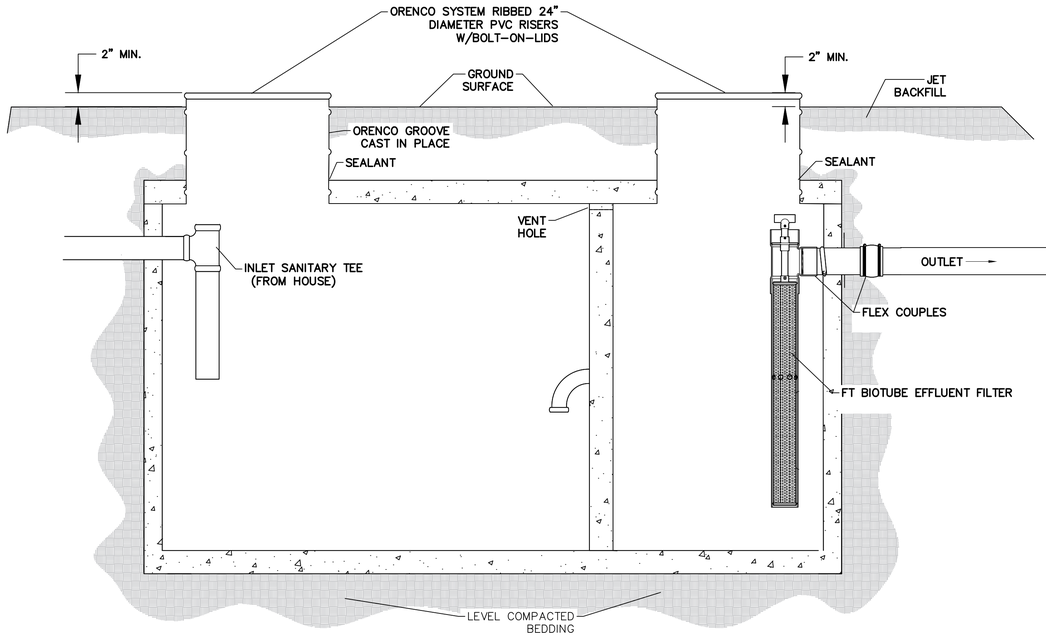
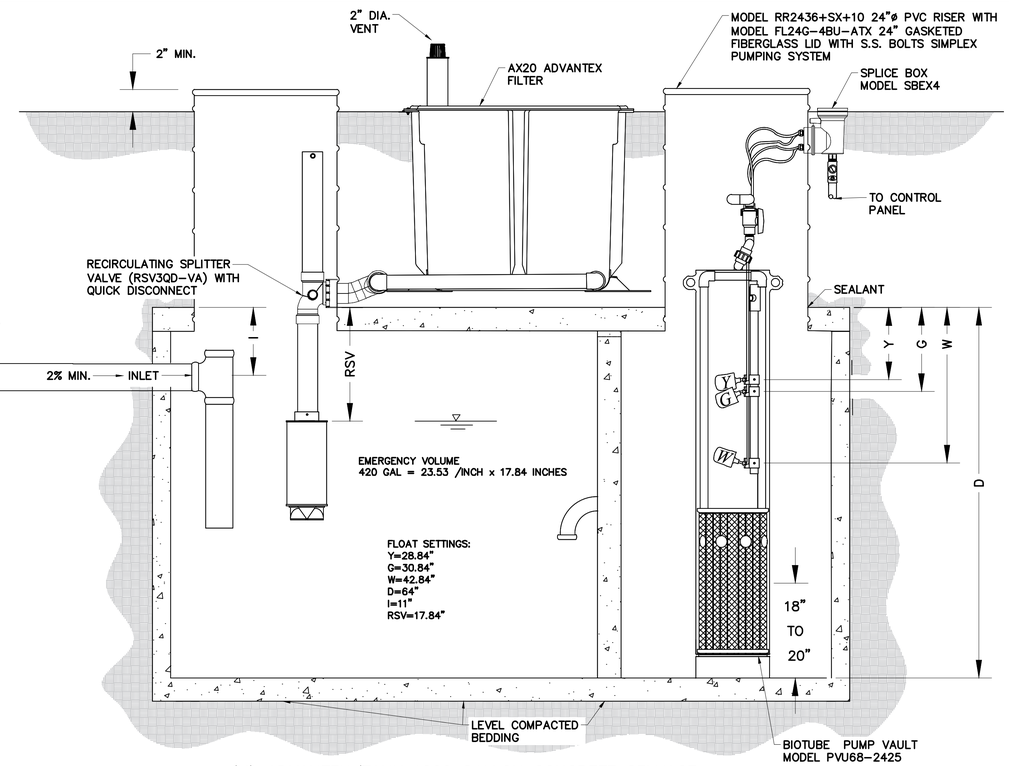
ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A AT (800-227-2600) 48 HOURS BEFORE DIGGING, AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).

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



(N) SEPTIC TANK DETAIL
1200 GALLON CONCRETE SELVAGE
SCALE: N/A

1



(N) ADVANTEX/TANK 1200 GALLON CONCRETE SELVAGE
SIDE VIEW
SCALE: NA

2

ADVANTEX RECIRCULATION

TOTAL DYNAMIC HEAD = 23 FT.
GALLONS PER MINUTE (GPM) = 32 GPM
DOSE = 13 GALLONS
RECOMMENDED PUMP TYPE: OSI
PF300512 (0.5 HP, 115 VOLTS, SINGLE PHASE, 6.3 AMPS)

TIMER CONTROLLED:
OFF 30 MIN
ON 24 SEC

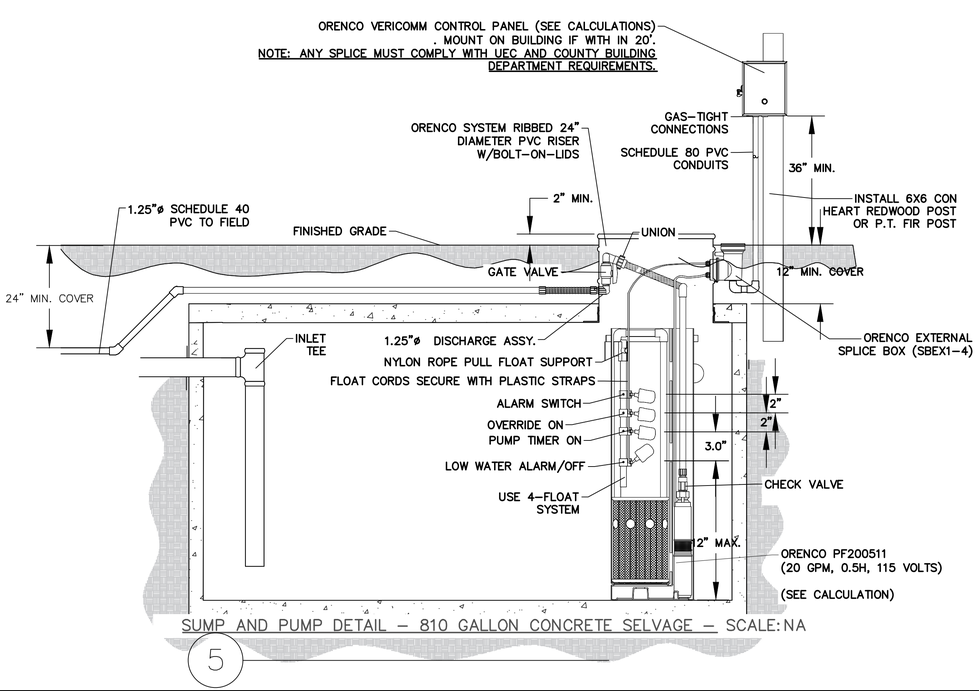
T OVERRIDE OFF 15 MIN
T OVERRIDE ON 24 SEC
RECOMMENDED CONTROL PANEL: SEE CALCULATIONS FOR CONTROL PANEL REQUIREMENTS

FROM SUMP TANK TO DRIP FIELD (SEE CALCULATIONS)

TOTAL DYNAMIC HEAD = 110 FT
GALLONS PER MINUTE (GPM) = 16.5 GPM
DOSE = 35 GALLONS
RECOMMENDED PUMP TYPE: ORENCO PF200511
(20 GPM, 0.5H, 115 VOLTS)

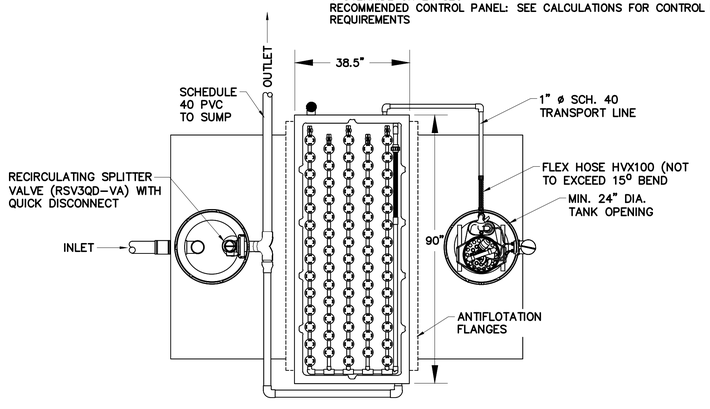
TIMER CONTROLLED:
OFF 1 HR 57 MIN 53 SEC
ON 2 MIN 7 SEC

T OVERRIDE OFF 60 MIN
T OVERRIDE ON 3.0 MIN
RECOMMENDED CONTROL PANEL: SEE CALCULATIONS FOR CONTROL PANEL REQUIREMENTS



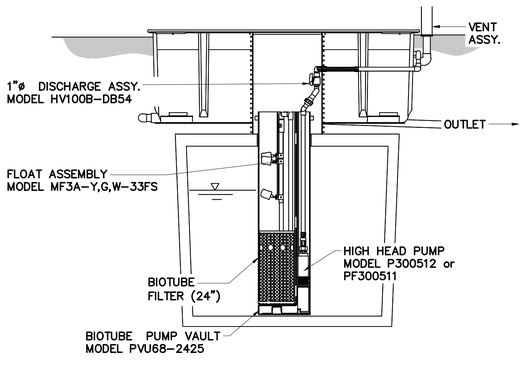
SUMP AND PUMP DETAIL – 810 GALLON CONCRETE SELVAGE – SCALE:NA

5



(N) ADVANTEX/TANK 1200 GALLON CONCRETE SELVAGE
TOP VIEW
SCALE: NA

3



(N) ADVANTEX/TANK 1,200 GALLON CONCRETE SELVAGE
END VIEW
SCALE: NA

4

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TANK & PRE-TREATMENT DETAILS
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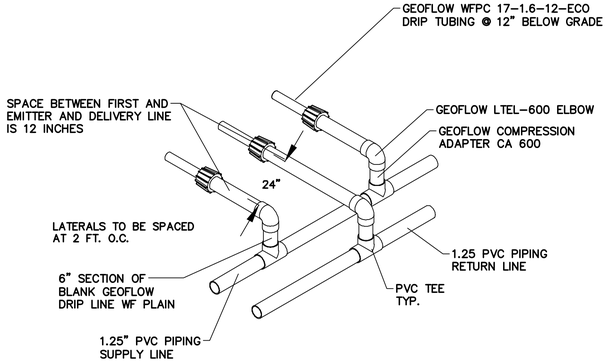
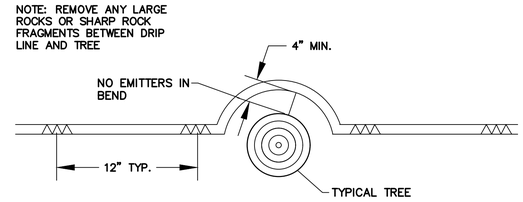
C-2

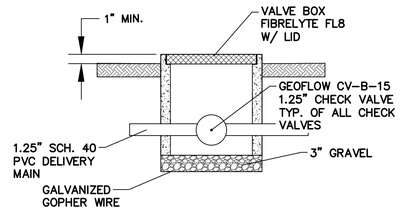


PIPING DETAIL
SCALE: N/A

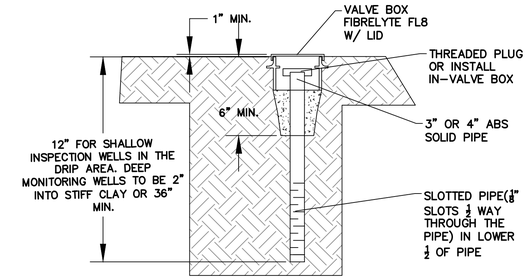
TYPICAL HEADER CONNECTION
SCALE: N/A



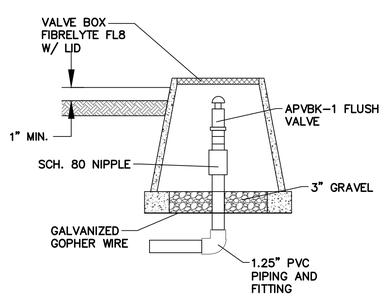
TREE PROXIMITY DETAIL
SCALE: N/A



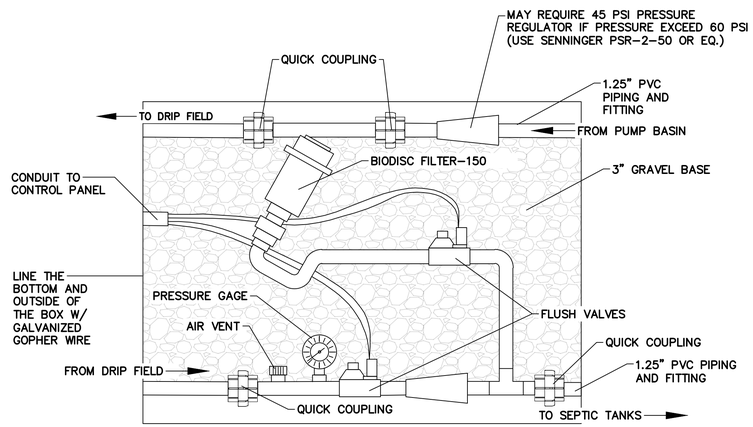
CHECK VALVE DETAIL
SCALE: N/A



MONITORING WELL
SCALE: N/A



1" AIR VACUUM RELIEF IN-VALVE BOX
SCALE: N/A



AUTOMATIC HEADWORKS
SCALE: N/A

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REVISIONS		
0	12/13/23	INITIAL RELEASE
REV.	DATE	DESC.

ISSUES

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ASSORTED DETAILS

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60 3rd St, Point Reyes Station, CA 94956
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276-1

C-3

GENERAL CONSTRUCTION NOTES

1. THE DESIGNING ENGINEER/SANITARIAN SHALL OBSERVE THE SITE AND WEATHER CONDITIONS PRIOR TO CONSTRUCTION OF THE SYSTEM. HE/SHE MUST VERIFY DRY AND ACCEPTABLE SOIL AND WEATHER CONDITIONS FOR CONSTRUCTION, AND DECIDE IF THE CONDITIONS ARE SUITABLE TO BEGIN CONSTRUCTION.
2. THE DESIGNING ENGINEER/SANITARIAN SHALL VERIFY (WITH THE CONTRACTOR) THE PROPER STAKING OF THE SYSTEM PRIOR TO ANY CONSTRUCTION. THE SYSTEM DETAILS, CONFIGURATION, LOCATION, CONTOUR, PERCOLATION AREA, EXPANSION AREA, ETC. SHALL BE VERIFIED.
3. THE CONTRACTOR SHALL NOTIFY THE SBCWD SERVICES ( ) A MINIMUM OF 24 HOURS IN ADVANCE OF WHEN CONSTRUCTION IS TO TAKE PLACE AND VERIFY THAT THE DESIGNING ENGINEER/SANITARIAN HAS STATED THAT SOIL CONDITIONS ARE ACCEPTABLE FOR CONSTRUCTION PURPOSES AND THAT THE STAKING OF THE SYSTEM HAS BEEN ACCOMPLISHED AND VERIFIED.
4. ALL CONSTRUCTION SHALL BE IN ACCORD WITH CURRENT SBCWD SERVICES GUIDELINES AND THE CURRENTLY ADOPTED EDITION OF THE UPC. ANY DISCREPANCIES BETWEEN THOSE CODES AND THESE PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.
5. ONLY THE PRIMARY SYSTEM IS TO BE CONSTRUCTED AT THIS TIME. THE RESERVE AREAS ARE TO BE HELD FOR FUTURE REPAIRS AND POTENTIAL REPLACEMENT OF THE PRIMARY SYSTEM.
6. THE PRIMARY, RESERVE AND AREAS WITHIN 50 FEET SHALL NOT BE ENCUMBERED BY PERMANENT STRUCTURES, OR DISTURBED BY GRADING, DISCING, TILLING OR EXCAVATION PRIOR TO CONSTRUCTION OF THE SYSTEM AND SHALL BE PROTECTED FROM SUCH DISTURBANCE FOLLOWING CONSTRUCTION OF THE SYSTEM, EXCEPT AS INDICATED ON THIS PLAN.
7. CONSTRUCTION OF THE SYSTEM IS TO MINIMIZE GROUNDWATER INTRUSION INTO TANKS, RISERS AND VALVE BOXES. FINISH GRADING SHALL DIRECT SURFACE WATER AWAY FROM THE SYSTEM AND MINIMIZE PONDING WITHIN 50 FEET OF THE SYSTEM.

INSPECTION SCHEDULE

A. PRE-CONSTRUCTION CONFERENCE TO REVIEW THE PLANS AND SYSTEM STAKEOUT PRIOR TO CONSTRUCTION.
B. INTERIM OBSERVATION(S), PERFORMED PRIOR TO COVERING ANY ELEMENTS OF THE SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE COUNTY ENVIRONMENTAL HEALTH SPECIALIST A MINIMUM OF 48 HOURS IN ADVANCE.
C. A START-UP INSPECTION SHALL BE CONDUCTED AFTER THE SEPTIC ELECTRICAL INSPECTION HAS BEEN SIGNED OFF. CONTRACTOR, ENGINEER, SYSTEM OPERATOR AND SBCWD COUNTY REP.
D. FINAL OBSERVATION OF COMPLETED SYSTEM AND ALL RELATED ITEMS PER THE CONSTRUCTION DOCUMENTS.

(A). AT THE PRE-CONSTRUCTION CONFERENCE, THE FOLLOWING ITEMS SHALL BE REVIEWED. CONSTRUCTION MAY PROCEED IF THE CONTRACTOR NOTIFIES THE COUNTY ENVIRONMENTAL HEALTH SPECIALIST VERBALLY THAT ALL ELEMENTS APPEAR TO CONFORM TO THE FOLLOWING REQUIREMENTS:

1. SOIL MOISTURE AT THE APPROPRIATE DEPTHS ARE NOT SO HIGH AS TO HAVE THE SOIL SMEAR OR COMPACT DUE TO CONSTRUCTION ACTIVITIES.
2. IMMINENT WEATHER CONDITIONS APPEAR THAT THEY WILL NOT CREATE UNSUITABLE SOIL MOISTURE CONDITIONS DURING THE COURSE OF CONSTRUCTION.
3. LAYOUT AND STAKING OF THE PRIMARY SYSTEM AND THE EXPANSION / RESERVE AREAS SUBSTANTIALLY CONFORMS TO THE APPROVED CONSTRUCTION DOCUMENTS.
4. FOR MOUNDS: THE SOURCE OF THE COVER SOIL AND MOUND SAND SHALL BE DESIGNATED AND REPRESENTATIVE SAMPLES PROVIDED FOR THE DESIGN ENGINEER'S APPROVAL

(B) AT THE INTERIM OBSERVATION(S), THE FOLLOWNG ELEMENTS SHALL BE VERIFIED BY VISUAL OBSERVATION AND OPERATION OF THE SYSTEM. NO ELEMENTS OF THE SYSTEM SHALL BE BACKFILLED OR COVERED UNTIL THE COUNTY ENVIRONMENTAL HEALTH SPECIALIST AND DESIGN ENGINEER'S APPROVAL IS GIVEN WHEN ALL REQUIRED ITEMS ARE COMPLETED AND APPROVED, THE DISPOSAL FIELD, PRETREATMENT UNITS, PIPELINE TRENCHES AND TANKS MAY BE COVERED OR BACKFILLED.

1. LINE AND GRADE OF ALL EXCAVATIONS AND FILLS AS APPLICABLE.
2. FUNCTION AND SETTING OF ANY CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO VALVES, SWITCHES AND ALARMS.
3. HYDRAULIC TESTING OF ANY PUMP AND DISTRIBUTION SYSTEM TO ASSURE THAT THE PUMP IS ADEQUATE FOR DESIGN FLOWS.
4. THE SEPTIC AND SUMP TANKS SHALL BE TESTED FOR WATER TIGHTNESS. THERE SHALL BE NO DETECTABLE DROP IN WATER LEVEL WITHIN THE RISERS DURING A 30 MINUTE TEST.
5. ALL THE REMAINING ELEMENTS REQUIRED TO COMPLETE THE SYSTEM SHALL BE ON SITE AT THIS TIME FOR VERIFICATION AND APPROVAL BY THE DESIGN ENGINEER FOR CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.

(A) A START-UP INSPECTION SHALL BE CONDUCTED AFTER THE SEPTIC ELECTRICAL INSPECTION HAS BEEN SIGNED OFF. CONTRACTOR, ENGINEER, SYSTEM OPERATOR AND COUNTY REP. SHALL BE PRESENT.

(B) AT THE FINAL OBSERVATION, THE DESIGN ENGINEER SHALL VERIFY THAT ALL CONSTRUCTION IS IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. A FINAL LETTER FROM THE DESIGNER TO THE SBCWD SERVICES SHALL STATE THAT ALL CONSTRUCTION HAS BEEN COMPLETED, APPROVED, AND IS IN CONFORMANCE WITH ALL SPECIFICATIONS.

NOTE: SBCWD SERVICES WILL NOT SIGN OFF THE PERMIT OR JOB CARD UNTIL THE DESIGN ENGINEER HAS SUBMITTED A CONSTRUCTION OBSERVATION LETTER AND THE BUILDING IS READY FOR OCCUPANCY.

8. ADVANTEX FILTER CONSTRUCTION – CONSTRUCTION OF THE ADVANTEX AX20-RT TREATMENT SYSTEM SHALL BE BY AN ORENCO SYSTEMS AUTHORIZED INSTALLER PER INSTALLATION MANUAL ADVANTEX AX-RT TREATMENT SYSTEMS – RESIDENTIAL APPLICATIONS REV 3.0 OR MOST CURRENT.

9. DISPOSAL FIELD CONSTRUCTION
INSTALLATION GUIDELINES

A. EXCAVATION, FILLING AND GRADING SHOULD HAVE BEEN FINISHED BEFORE INSTALLATION OF THE SUBSURFACE DRIP SYSTEM.
B. BE SURE YOU HAVE EVERYTHING REQUIRED FOR THE INSTALLATION BEFORE OPENING TRENCHES. PREASSEMBLE AS MANY SETS OF COMPONENTS AS PRACTICAL ABOVE GROUND AND IN A COMFORTABLE PLACE. COMPRESSION ADAPTERS SHOULD BE GLUED TO PVC TEES, RISER UNITS SHOULD BE PREASSEMBLED, THE SUB MAIN MANIFOLD WITH TEES CAN BE PRE ASSEMBLED AND USED TO MARK THE BEGINNING AND END OF WASTEFLOW ETC. DO NOT START OPENING TRENCHES UNTIL YOU ARE SURE YOU HAVE ALL THE MATERIALS REQUIRED.
C .CONDITION SOIL MOISTURE THE DAY BEFORE OPENING TRENCHES OR INSTALLING WASTEFLOW. REMEMBER, IT IS MUCH EASIER TO INSTALL THE SYSTEM IN MOIST SOIL. THE SOIL SHOULD BE MOIST BUT STILL SHOULD ALLOW THE PROPER OPERATION OF THE INSTALLATION EQUIPMENT. THE BEST PREPARATION IS TO MOISTEN THE SOIL SEVERAL DAYS BEFORE THE INSTALLATION OF THE WASTEFLOW, SO THE SOIL HAS TIME TO DRAIN AND WILL NOT SMEAR WHEN EXCAVATED. THE SOIL SURFACE SHOULD BE DRY.
D. INSTALL THE SYSTEM HEAD FIRST: TANKS, RECIRCULATING TEXTILE FILTER, PUMPS, CONTROL VALVES, DISC FILTERS, CHEMICAL INJECTOR, PRESSURE REGULATORS, PRESSURE GAGES AND WATER METER (AS APPLICABLE). THEN INSTALL THE PRESSURE MAIN AND BACKFLUSH RETURN LINES. THESE SHOULD BE BURIED AT A DEPTH OF 18 INCHES, WELL BELOW THE DEPTH OF THE WASTEFLOW LINES (12 INCHES). AT ALL TIMES, AVOID GETTING DEBRIS INTO THE SYSTEM. FLUSH MAIN LINES, TEST FOR LEAKS (HYDROSTATICALLY FOR 2 HRS @ 150 PSI) AND LEAVE THEM FULL OF WATER.
E. OPEN TRENCHES FOR THE FEEDER AND BACKFLUSH MANIFOLDS. THESE TRENCHES SHOULD BE 18 INCHES INTO NATIVE SOIL.
F. CLEAN FEEDER AND BACKFLUSH MANIFOLD TRENCHES, MOISTEN AND COMPACT THE BOTTOM OF THE TRENCH. (IF THIS IS NOT DONE, THE MANIFOLDS MAY "SETTLE DOWN" AND SLOWLY PULL OUT THE COMPRESSION COUPLINGS). ASSEMBLE THE FEEDER MANIFOLD OUTSIDE THE TRENCH IF PRACTICAL. CONNECT TO PRESSURE MAIN LINES AND TO THE SYSTEM HEAD. FLUSH THESE LINES. A HIGH WATER VELOCITY IS REQUIRED TO CARRY AWAY DEBRIS WHICH MAY HAVE ENTERED THE PIPES BEFORE OR DURING INSTALLATION. PLACE THE FEEDER AND BACKFLUSH MANIFOLDS INTO THE TRENCHES.
G. THE PRIMARY DISPOSAL FIELD AND ALL AREAS OF DISTURBED SOILS SHALL BE SEEDED WITH A BLEND OF ANNUAL & PERENNIAL GRASSES AND ROSE CLOVER. IRRIGATION SHALL BE PROVIDED TO GERMINATE THE SEED AND ESTABLISH A WELL DEVELOPED VEGETATIVE STAND.

INSTALLATION METHOD

A. TRENCHING BY HAND OR WITH A CHAIN TRENCHER MOST SUITABLE FOR THIS INSTALLATION.
B. COVER ALL OPEN ENDS INCLUDING DRIP LINES TO AVOID GETTING DEBRIS INTO THE SYSTEM.
C. LEAVE ENOUGH LENGTH AT THE BEGINNING AND END FOR CONNECTIONS. IT IS CONVENIENT TO FINISH THE LAST FOOT OF THE TRENCH BY HAND. THIS GIVES MORE ROOM FOR CONNECTIONS. BEWARE OF BENDING THE DRIP TUBING TOO TIGHT DURING INSTALLATION.
D. DO NOT BEND TUBING. USE PVC IPS TUBING AND PVC FITTINGS TO CONFIGURE LOOPS.
E. THE PIPE PULLER TYPE MACHINE SHOULD NOT BE USED IN CLAY SOILS, AS IT FORMS AN UNDERGROUND "PIPE" AND THE WATER APPLIED BY THE SYSTEM TENDS TO RUN IN THE DOWNHILL DIRECTION.

10. CONCRETE SEPTIC TANK, HOLDING TANK, SEEPAGE PIT ABANDONMENT NOTES:

A. THE EXISTING SEPTIC TANK SHALL BE ABANDONED AS FOLLOWS:
* THE TANKS SHALL BE PUMPED BY A LICENSED SEPTIC TANK PUMPER.
* THE TANK LIDS SHALL BE REMOVED, AND DISPOSED OF IN A SANITARY LANDFILL.
* THE FLOOR OF THE TANKS SHALL BE RUPTURED IN BOTH TANK CHAMBERS.
* THE TANKS SHALL BE COLLAPSED, AND THE REMAINING VOID FILLED WITH RIVER RUN MATERIAL TO WITHIN 12 INCHES OF FINISH GRADE.
* THE REMAINING VOID SHALL BE FILLED WITH COMPACTED NATIVE SOIL MATERIAL.

B. ALTERNATELY THE TANK MAY BE RUPTURED AND FILLED COMPLETELY WITH CONTROLLED DENSITY CONCRETE FILL.
C. ALL AT BOTH ENDS BURIED SEWER PIPES AND LEACH LINES, TO OR FROM THE OLD SEPTIC TANK SHALL BE CUT AND PLUGGED.

EROSION CONTROL NOTES:

1. ALL AREAS OF DISTURBED OR BARE SOIL SHALL BE SEEDED WITH A BLEND OF ANNUAL GRASSES AND CLOVERS. ALL SEEDED AREAS SHALL BE MULCHED WITH A GENEROUS LAYER OF WEED FREE STRAW. SEED AND MULCH SHALL BE AVAILABLE ONSITE BY OCTOBER 15 FOR APPLICATION PRIOR TO RAIN EVENT.
2. ANY RAIN CAUSED EROSION OCCURRING OVER THE COURSE OF THE FIRST RAINY SEASON, SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.

OPERATING PERMITS: (EXCERPTED FROM MARIN COUNTY)

A. IN ADDITION TO A CONSTRUCTION PERMIT, AN OPERATING PERMIT IS REQUIRED FOR ALL ALTERNATIVE SYSTEMS, WITH THE EXCEPTION OF THOSE INSTALLED SOLELY FOR THE REPAIR OF EXISTING SYSTEMS FOR SINGLE FAMILY RESIDENCES. THE HEALTH OFFICER RESERVES THE RIGHT TO REQUIRE AN OPERATING PERMIT FOR REPAIR SYSTEMS WHERE, IN HIS/HER JUDGMENT, SUCH A PERMIT IS NECESSARY TO ASSURE PROTECTION OF WATER QUALITY AND PUBLIC HEALTH. ALSO, AN OPERATING PERMIT WILL BE REQUIRED FOR ANY REPAIR UTILIZING A NEW ALTERNATIVE SYSTEM WHICH IS NOT CLASSIFIED AS A CATEGORY 2 OR 3 SYSTEM; THESE CASES WILL REQUIRE REGIONAL BOARD REVIEW. THE OPERATING PERMIT PROVISIONS OUTLINED IN THIS SECTION ALSO APPLY TO ANY STANDARD SYSTEMS REQUIRING OPERATING PERMITS, AS DETERMINED BY THE HEALTH OFFICER.
B. OPERATING PERMITS SHALL BE ISSUED BY THE HEALTH OFFICER AT THE TIME OF INITIAL CONSTRUCTION OF THE SYSTEM; AND THEY ARE REQUIRED TO BE RENEWED AT LEAST EVERY TWO YEARS OR AS OTHERWISE SPECIFIED BY THE HEALTH OFFICER ON A CASE-BY-CASE BASIS. THE HEALTH OFFICER MAY REDUCE THE RENEWAL FREQUENCY TO ONCE EVERY THREE OR FOUR YEARS AFTER SUCCESSFUL PERFORMANCE IS DEMONSTRATED; ALSO, ANNUAL RENEWAL MAY BE REQUIRED FOR CERTAIN TYPES OF SYSTEMS OR SITUATIONS AS DEEMED NECESSARY BY THE HEALTH OFFICER. OPERATING PERMITS MUST ALSO BE RENEWED AT THE TIME OF SALE OR, IN THE CASE OF COMMERCIAL PROPERTIES, UPON CHANGE OF OCCUPANTS.
C. OPERATING PERMITS ARE INTENDED TO SERVE AS THE BASIS FOR VERIFYING THE ADEQUACY OF ALTERNATIVE SYSTEM PERFORMANCE AND MAINTENANCE. PERMIT CONDITIONS SHALL INCLUDE MONITORING AND INSPECTION REQUIREMENTS, PERMIT DURATION, AND OTHER PROVISIONS DEEMED APPROPRIATE BY THE HEALTH OFFICER.
D. RENEWAL OF AN OPERATING PERMIT REQUIRES THE SUBMISSION OF AN APPLICATION, A FEE, AND THE RESULTS OF REQUIRED SYSTEM INSPECTION AND MONITORING (PER SECTION 804 BELOW).
E. FAILURE TO SUBMIT A RENEWAL APPLICATION, THE REQUIRED FEE OR SPECIFIED MONITORING AND INSPECTION DATA, OR FAILURE TO UNDERTAKE ANY REQUIRED CORRECTIVE WORK SPECIFIED BY THE HEALTH OFFICER MAY BE CAUSE FOR NON-RENEWAL OR REVOCATION OF THE OPERATING PERMIT BY THE HEALTH OFFICER
F. CERTIFIED COPIES OF OPERATING PERMITS AND NOTICES OF WITHDRAWAL OF OPERATING PERMITS, WHEN ISSUED, WILL BE RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF MARIN COUNTY.

REQUIRED ELECTRICAL FEATURES

A. ALL MATERIALS, CONNECTIONS, AND SPECIFICATIONS SHALL MEET THE MARIN COUNTY/NATIONAL ELECTRICAL CODE/
1. 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 THE MARIN COUNTY BLDG. DEPT.
2. THE BUILDING OFFICIAL SHALL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL ELECTRICAL FEATURES OF ALL PUMP AND ELECTRICAL PARTS.
3. A DISCONNECTING MEANS SHALL BE LOCATED IN SIGHT FROM THE PUMP LOCATION PER THE COUNTY ADOPTED ELECTRICAL CODE.

B. A "WIDE ANGLE" MERCURY/MECHANICAL. C.S.H. INC., OR S.J ELECTRO SYSTEMS SUPER SINGLE OR EQUAL, FLOAT SWITCH SHALL BE USED TO ACTIVATE THE PUMP. THE ALARM/CONTROL BOX SHALL BE EQUIPPED WITH A MOTOR CONTRACTOR FOR THE PUMP AND A MOMENTARY CONTACT "PUMP TEST" SWITCH TO MANUALLY RUN THE PUMP BYPASSING THE CONTROL PANEL AUTOMATIC MODE

C. ELECTRICAL SERVICE TO THE ALARM/CONTROL PANEL SHALL BE EQUIPPED WITH A BREAKER OR FUSE AT THE POWER SOURCE WHICH IS LARGER THAN THE CIRCUIT BREAKER FOR THE PUMP IN THE ALARM/CONTROL PANEL.
1. THE ALARM/CONTROL PANEL SHALL BE EQUIPPED INTERNALLY WITH SEPARATE CIRCUIT PROTECTION FOR THE CONTROL AND PUMP CIRCUITRY.
2. PUMP PROTECTION SHALL BE PROVIDED BY A THERMAL MAGNETIC CIRCUIT BREAKER FOR OVERLOAD AND SHORT CIRCUIT PROTECTION.
3. THE PUMP POWER LEAD AND THE FLOAT SWITCH CONTROL WIRES SHALL NOT BE RUN IN A COMMON CONDUIT.
4. ALL WIRES GOING INTO THE SUMP SHALL BE INDIVIDUALLY SEALED WITH PVC GAS TIGHT FITTINGS IN EITHER THE JUNCTION BOX OR ALARM/CONTROL PANEL AS APPROPRIATE.
5. METALLIC GAS TIGHT FITTINGS ARE NOT ALLOWED.

D. A NON-RE-SETTABLE DOSE COUNTER SHALL BE INSTALLED IN CONTROL BOXES UTILIZED FOR MOUND, SHALLOW TRENCH PRESSURE DISTRIBUTION, AND OTHER NON-STANDARD, SYSTEMS.
NOTE: 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 HAVE A LABEL PLACED ON IT STATING "CAUTION – ELECTRICAL HAZARD".

E. ALARM/CONTROL. PANEL ENCLOSURE SHALL BE NEMA TYPE 4. A REMOTE ALARM WITH AN ADDITIONAL LIGHT AND HORN SHALL BE PROVIDED WITHIN THE STRUCTURE SERVED.
1. ENCLOSURE FOR THE REMOTE AND AUDIO/VISUAL ALARM SHALL BE NEMA TYPE 1, IF MOUNTED INDOORS.
2. EMERGENCY DISCONNECT FOR THE ALARM/CONTROL PANEL IS PROVIDED FOR BY THE INTERNAL FUSED DISCONNECT AND PUMP CIRCUIT BREAKER.

SYSTEM OPERATION AND MAINTENANCE

GENERAL SYSTEM DESCRIPTION:

THIS SEWAGE TREATMENT AND DISPOSAL SYSTEM CONSISTS OF A GRAVITY FLOW SEWER THAT TERMINATES AT A SEPTIC TANK. THE SEWAGE RECEIVES PRIMARY TREATMENT IN THE SEPTIC TANK. SEPTIC TANK EFFLUENT RECEIVES ADDITIONAL TREATMENT IN A SECOND TANK AS IT IS RE-CIRCULATED THROUGH THE ADVANTEX FILTER VIA A PUMP IN THE SECOND SEPTIC TANK. THE FILTERED EFFLUENT FLOWS TO AN ADJACENT SUMP TANK WHICH HOUSES A PUMP THAT DELIVERS THE EFFLUENT TO THE DRIP DISPERSAL FIELD. ADDITIONAL TREATMENT (PHYSICAL FILTRATION AND BIOLOGICAL REDUCTION OF THE WASTE LOAD) IS ACCOMPLISHED IN THE SOIL SYSTEM.

THE PUMP AND ALARM FUNCTIONS ARE CONTROLLED BY A CONTROL PANEL LOCATED NEAR THE SUMP TANK. NORMAL OPERATIONS ARE AUTOMATIC. THE OWNER OR OPERATOR NEED ONLY RESPOND TO ROUTINE MAINTENANCE ITEMS AND ALARM EVENTS AS INDICATED BY THE AUDIBLE AND VISUAL INDICATORS IN THE CONTROL PANEL.

SAFETY:
EXPOSURE TO WASTEWATER IS A BIOLOGICAL HAZARD. SYSTEM OPERATORS AND OTHERS EXPOSED TO WASTEWATER SHALL WEAR APPROPRIATE PROTECTIVE GEAR, RUBBER GLOVES, COVERALLS, EYE PROTECTION AND A PARTICULATE MASK. FOLLOWING EXPOSURE TO WASTEWATER, WASH THOROUGHLY AND CLEAN ALL PROTECTIVE GEAR WITH DISINFECTANT.

WORKING IN SEPTIC AND SUMP TANKS CONSTITUTES A CONFINED SPACE HAZARD. PROPER SUPERVISION AND VENTILATION EQUIPMENT SHALL BE PROVIDED TO COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY GUIDELINES.

ALL ELECTRICAL COMPONENTS POSE AN ELECTRICAL HAZARD. EXERCISE CAUTION TO AVOID ELECTRICAL SHOCK.

SYSTEM DESIGN FLOW:
DESIGN FLOW: THE DISPOSAL FIELD IS DESIGNED TO ACCOMMODATE A PEAK DAILY FLOW OF 420 GALLONS PER DAY (GPD). AVERAGE DAILY FLOW AT FULL OCCUPANCY SHOULD BE LESS THAN 65% OF THE PEAK DAILY FLOW. THE HOMEOWNER OR DESIGNATED OPERATOR SHALL MONITOR THE QUANTITY OF WATER PROCESSED THROUGH THE SYSTEM. IF ACTUAL FLOW RATES EXCEED THESE VALUES A FLOW AUDIT SHALL BE CONDUCTED.

ROUTINE OPERATION AND MAINTENANCE TASKS:

QUARTERLY:
GENERALLY OBSERVE CONDITIONS OF SEWAGE DISPERSAL FIELD: LOOK FOR EVIDENCE OF PONDING OR SURFACING EFFLUENT, AREAS OF LUSH VEGETATIVE GROWTH AND OFFENSIVE ODORS.

SEMI ANNUAL:
CHECK AVERAGE DISPOSAL FIELD LOADING RATE USING THE DOSE COUNTER IN THE PUMP CONTROL PANEL. TEST AUDIBLE & VISUAL ALARM USING A TEST SWITCH IN THE CONTROL PANEL.
MEASURE WATER LEVELS IN DISPERSAL FIELD MONITORING WELLS.

ANNUALLY:
OWNER OR DESIGNATED OPERATOR SHALL REVIEW THE PLAN AND OPERATION AND MAINTENANCE REQUIREMENTS. CHECK SLUDGE & SCUM ACCUMULATION IN SEPTIC TANKS, CLEANOUT IF NECESSARY.
RINSE SEPTIC TANK EFFLUENT FILTER INTO THE FIRST CHAMBER OF THE TANK WITH FRESHWATER.

PERFORMANCE MONITORING AND REPORTING: (EXCERPTED FROM MARIN COUNTY)

A. A MONITORING PROGRAM WILL BE ESTABLISHED INDIVIDUALLY FOR EACH ALTERNATIVE SYSTEM AT THE TIME OF ISSUANCE OF THE OPERATING PERMIT; IT MAY BE AMENDED AT THE TIME OF PERMIT RENEWAL. SAID MONITORING SHALL BE PERFORMED TO ENSURE THAT THE ALTERNATIVE SYSTEM IS FUNCTIONING SATISFACTORILY TO PROTECT PUBLIC HEALTH AND SAFETY. THE SPECIFIC REQUIREMENTS WILL INCORPORATE RECOMMENDATIONS OF THE SYSTEM DESIGNER ALONG WITH GENERAL MONITORING CRITERIA DEVELOPED BY THE HEALTH OFFICER.

B. MONITORING REQUIREMENTS WILL VARY DEPENDING UPON THE SPECIFIC TYPE OF ALTERNATIVE SYSTEM; BUT, IN GENERAL, THEY WILL INCLUDE THE FOLLOWING:
1. RECORDING OF WASTEWATER FLOW BASED ON WATER METER READINGS, PUMP EVENT COUNTERS, ELAPSED TIME METERS OR OTHER APPROVED METHODS;
2. INSPECTION AND RECORDING OF WATER LEVELS IN MONITORING WELLS IN THE DISPOSAL FIELD;
3. WATER QUALITY TASTING OF SELECTED WATER SAMPLES TAKEN FROM POINTS IN THE TREATMENT PROCESS, FROM MONITORING WELLS, OR FROM SURFACE STREAMS OR DRAINAGE; ATYPICAL WATER QUALITY PARAMETERS TO BE ANALYZED FOR MAY INCLUDE TOTAL AND FECAL COLIFORM, NITRATE, BIOCHEMICAL OXYGEN DEMAND (BOD), AND SUSPENDED SOLIDS;
4. INSPECTION AND OBSERVATION OF PUMP OPERATION OR OTHER MECHANICAL EQUIPMENT; AND,
5. GENERAL INSPELLION OF TREATMENT AND DISPOSAL AREA FOR EVIDENCE OF SEEPAGE, EFFLUENT SURFACING, EROSION OR OTHER INDICATORS OF SYSTEM MALFUNCTION.

C. THE REQUIRED FREQUENCY OF MONITORING FOR EACH INSTALLATION WILL GENERALLY BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, ASSUMING A RECORD OF SUITABLE PERFORMANCES ESTABLISHED:

–YEARS 1 AND 2 OPERATION – QUARTERLY MONITORING
–YEARS 3 AND 4 OPERATION – SEMIANNUAL MONITORING
–YEARS 5 AND BEYOND – ANNUAL MONITORING

MONITORING FREQUENCY MAY BE INCREASED IF SYSTEM PROBLEMS ARE EXPERIENCED. MONITORING FREQUENCY FOR EACH SYSTEM OR TYPE OF SYSTEM WILL BE ESTABLISHED BY THE HEALTH OFFICER

D. MONITORING OF ALTERNATIVE SYSTEMS SHALL BE CONDUCTED BY OR UNDER THE SUPERVISION OF ONE OF THE FOLLOWING: 1) REGISTERED CIVIL ENGINEER OR 2) REGISTERED ENVIRONMENTAL HEALTH SPECIALIST.

THE COUNTY SHALL CONDUCT SPOT-CHECK INSPECTIONS OF ALTERNATIVE SYSTEMS ON THEIR OWN AND MAY ALSO BE PRESENT TO OBSERVE THE PERFORMANCE OF MONITORING ACTIVITIES BY OTHERS. THE COUNTY WILL ORDINARILY INSPECT ABOUT 20 PERCENT OF THE ALTERNATIVE SYSTEMS IN A GIVEN YEAR. COUNTY INSPECTIONS WILL BE MADE AS A QUALITY CONTROL CHECK AND TO ASSURE COUNTY STAFF MAINTAIN PERSONAL FAMILIARITY WITH THE OPERATION OF VARIOUS TYPES OF ALTERNATIVE SYSTEMS.APPROVED FOR USE IN THE COUNTY. ADDITIONALLY, THE HEALTH OFFICER RESERVES THE RIGHT TO REQUIRE, ON A CASE-BY-CASE BASIS, "THIRD PARTY" OR COUNTY INSPECTION AND MONITORING OF ANY ALTERNATIVE SYSTEM WHERE DEEMED NECESSARY BECAUSE OF THE COMPLEXITY OF THE SYSTEM OR THE SENSITIVE NATURE OF THE SITE.

CONTINGENCY PLAN:

1. SYSTEM REPAIRS GENERALLY REQUIRE A PERMIT FROM SBCWD SERVICES. AN EXPERIENCED SEWAGE DISPOSAL CONTRACTOR WILL BE ABLE TO PROVIDE ASSISTANCE WITH BASIC SYSTEM REPAIRS AND MAINTENANCE. IF SUBSTANTIAL REPAIRS ARE NECESSARY, THE DESIGN ENGINEER SHALL BE CONTACTED.
2. IF THE HOMEOWNER NOTICES ANYTHING UNUSUAL IN HOW THE SYSTEM OPERATES (HIGH LIQUID LEVELS IN THE MONITORING WELLS, SPONGY EARTH AT THE TOE OF THE FIELD, ALARM EVENTS OR UNPLEASANT ODORS) THE OWNER SHOULD KEEP A LOG OF OCCURRENCES AND OBSERVATIONS. THE LOG SHOULD ALSO INCLUDE A RECORD OF FREQUENT DO& COUNTER READINGS. EVEN IF THE PROBLEM CORRECTS ITSELF, THESE RECORDS SHOULD BE KEPT ON FILE IN THE EVENT THAT THE PROBLEM RETURNS.
3. IF PROBLEMS PERSIST MORE THAN TWO WEEKS, OR IF THE OWNER BELIEVES THE SYSTEM IS IN FAILURE, THE OWNER SHOULD CONTACT THE DESIGNING ENGINEER OR OTHER QUALIFIED CONSULTANT TO ASSIST IN DIAGNOSING THE PROBLEM.
4. IN THE EVENT THAT A REPAIR OR REPLACEMENT OF THE DISPOSAL FIELD IS NECESSARY, WATER USE WITHIN THE STRUCTURES SERVED SHOULD BE REDUCED IMMEDIATELY. LAUNDRY SHOULD BE DONE OFF SITE. PUMPING AND HAULING OF SEWAGE MAY BE NECESSARY TO DRY OUT THE DISPOSAL FIELD FOR REPAIRS.
5. IN THE EVENT OF SYSTEM FAILURE, IT MAY BE NECESSARY TO REPLACE OR EXPAND THE SYSTEM. THE OWNER SHALL INVOLVE A QUALIFIED DESIGN ENGINEER IN THE REPAIR, REPLACEMENT EXPANSION PROCESS. THE OWNER IS RESPONSIBLE FOR NOTIFYING THE COUNTY HEALTH SPECIALIST OF NECESSARY REPAIRS, REPLACEMENT OR EXPANSION, AND FOR OBTAINING ALL NECESSARY PERMITS.

USE AND CARE OF YOUR SEPTIC SYSTEM – A GUIDE FOR USERS:

ONSITE SEWAGE TREATMENT AND DISPERSAL SYSTEMS INVOLVE BIOLOGICAL PROCESSES THAT ARE SUBJECT TO UPSET UNDER CERTAIN CONDITIONS. THIS GUIDE PROVIDED GUIDELINES FOR MAINTAINING PROPER BALANCE IN THE SYSTEM.

PRODUCTS THAT SHALL BE AVOIDED OR USED SPARINGLY INCLUDE: ANTIBACTERIAL SOAPS, LAUNDRY DETERGENTS WITH BLEACH, TOILET TISSUE THAT DISSOLVES READILY, GARBAGE DISPOSAL, AUTO DISPENSING TOILET CLEANERS, CHEMICAL DRAIN CLEANERS, MOISTURIZING SOAPS / CLEANSING CREAMS.

FLUSH ONLY: HUMAN WASTE & TOILET PAPER

DON'T FLUSH THESE ITEMS OR DUMP THEM DOWN THE DRAIN: TAMPONS OR SANITARY NAPKINS, PAPER TOWELS, CONDOMS, FATS, OILS & GREASE.

SUGGESTED ALTERNATIVES:
REDUCE USE OF ANTIBACTERIAL SOAPS OR CLEANERS. THESE PRODUCTS DO LITTLE TO PROTECT YOUR HEALTH. YOUR SEPTIC SYSTEM WILL BE MUCH HAPPIER IF YOU SIMPLY WASH THOROUGHLY WITH A REGULAR SOAP AND THOROUGHLY RINSE WITH AMPLE RUNNING WATER.

AVOID LAUNDRY DETERGENTS WITH BLEACH; USE A NON-BLEACH DETERGENT AND ADD BLEACH ONLY WHEN NECESSARY.

AVOID MOISTURIZING SOAPS. AND CLEANSING CREAMS (E.G.: DOVE) FOR REGULAR USE. THE SOFTENING AGENTS ARE OILS, MOST OF WHICH END UP DOWN THE DRAIN. YOUR SEPTIC SYSTEM WILL BE MUCH HAPPIER IF YOU USE A SEPARATE AFTER SHOWER MOISTURIZER.

DON'T USE TOILET TISSUE THAT DISSOLVES READILY. TO TEST IF YOUR BRAND IS APPROPRIATE FOR SEPTIC SYSTEMS, PLACE A FEW SHEETS IN A JAR OF WATER & SHAKE. AFTER A FEW MINUTES SHAKE AGAIN. IF THE TISSUE BREAKS UP INTO SMALL PIECES, TRY ANOTHER BRAND. A GOOD TISSUE FOR SEPTIC SYSTEMS WILL STAY TOGETHER.

DON'T USE AUTOMATIC DISPENSING TYPE TOILET BOWL CLEANERS (I.E.: TIDY BOWL, 2000 FLUSHES). THESE CONTAIN BLEACH, WHICH INTERRUPTS DIGESTION IN THE INTERCEPTOR TANKS.

DON'T DUMP FATS, OILS & GREASE DOWN THE DRAIN, DISPOSE OF THEM IN THE GARBAGE.

DON'T USE DRANO OR SIMILAR DRAIN CLEANING CHEMICALS. CALL THE PARK MANAGER OR A PLUMBER FOR DRAIN CLEANING SERVICE.

USE GARBAGE DISPOSAL SPARINGLY. MUCH OF WHAT YOU COULD PUT DOWN THE SINK SHALL GO IN THE GARBAGE. RESERVE THE GARBAGE DISPOSAL FOR FOOD SCRAPS THAT CANNOT BE SCRAPED FROM DISHES, POTS AND PANS.

DON'T FLUSH OR DUMP ANY SOLVENTS, CHEMICALS OR HIGH STRENGTH WASTES DOWN THE DRAINS. DISPOSE OF THESE PROPERLY AS ADVISED BY YOUR GARBAGE COMPANY.

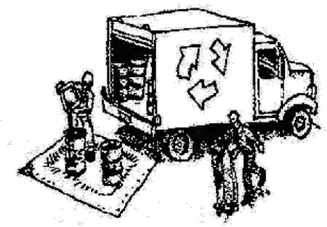
DON'T LEAVE INSIDE FIXTURES RUNNING DURING FREEZING WEATHER, IF NECESSARY CRACK HOSE BIB OUTSIDE.

FOLLOW-UP ON UNU

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

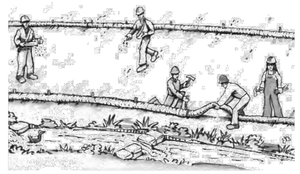
Maintenance and Parking

- ❑ 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

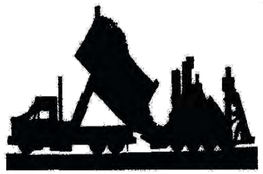


- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed 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, abosorb, 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.

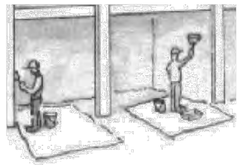
Concrete, Grout & Mortar Application

- ❑ 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!

REV.	DATE	BY
REVISIONS		
0	12/13/23	INITIAL RELEASE
REV.	DATE	DESC.
ISSUES		

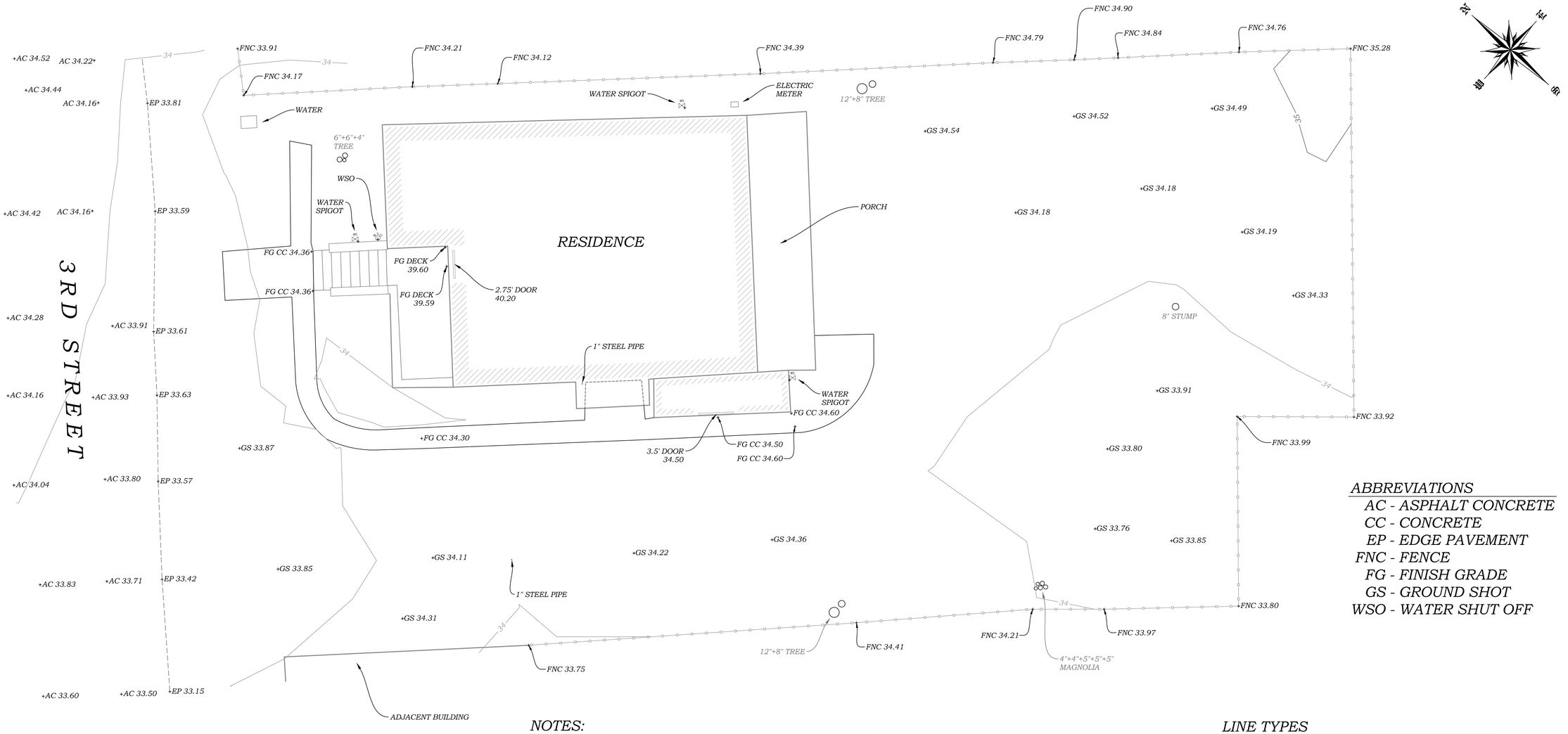
REGISTERED PROFESSIONAL ENGINEER ORION W. AGNEW C 87262 CIVIL STATE OF CALIFORNIA

AC ENGINEERING INC.
CIVIL & GEOTECHNICAL CONSULTANTS
454 LAS GALLINAS AVE. SUITE 1047.
SAN RAFAEL, CA 94903
PH: 415-888-5532
FAX: 415-472-0603
ADMIN@AGNEWCIVIL.COM

CONSTRUCTION BEST MANAGEMENT PRACTICES
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

C-5



ABBREVIATIONS

- AC - ASPHALT CONCRETE
- CC - CONCRETE
- EP - EDGE PAVEMENT
- FNC - FENCE
- FG - FINISH GRADE
- GS - GROUND SHOT
- WSO - WATER SHUT OFF

NOTES:

1) The Basis of Bearing for this map is N44°28'50"W between the found monuments on B Street Per 25 PM 99
2) Underground Improvements and Installations have not been located unless otherwise shown.
3) Any Discrepancy between the Electronic File and the Signed Sealed Paper Copy or PDF File, the Signed Sealed Paper Copy or Stamped PDF will prevail.
4) Vertical Datum: NAVD 88 Per BM Q 209, Reset 1982, Taken at 35.23 Feet.

LINE TYPES

- EDGE PAVEMENT
- FENCE
- HIDDEN
- PIPE

REV	DATE	DESCRIPTION	DRAWN	CHECKED
01	2/29/24	Removed trees and shed	dld	rwd
XXXXXX	XXXXXX	XXXXXXXXXX	dld	rwd

R.W. DAVIS & ASSOCIATES, INC.
LAND SURVEYORS
45 Leveroni Court
Novato CA 94949
L.S. 6330
Tel. (415) 883-9099
Email: rwdavis@rwdavis-survey.com

CITY: POINT REYES STATION
COUNTY: MARIN
STATE: CALIFORNIA

60 3RD STREET

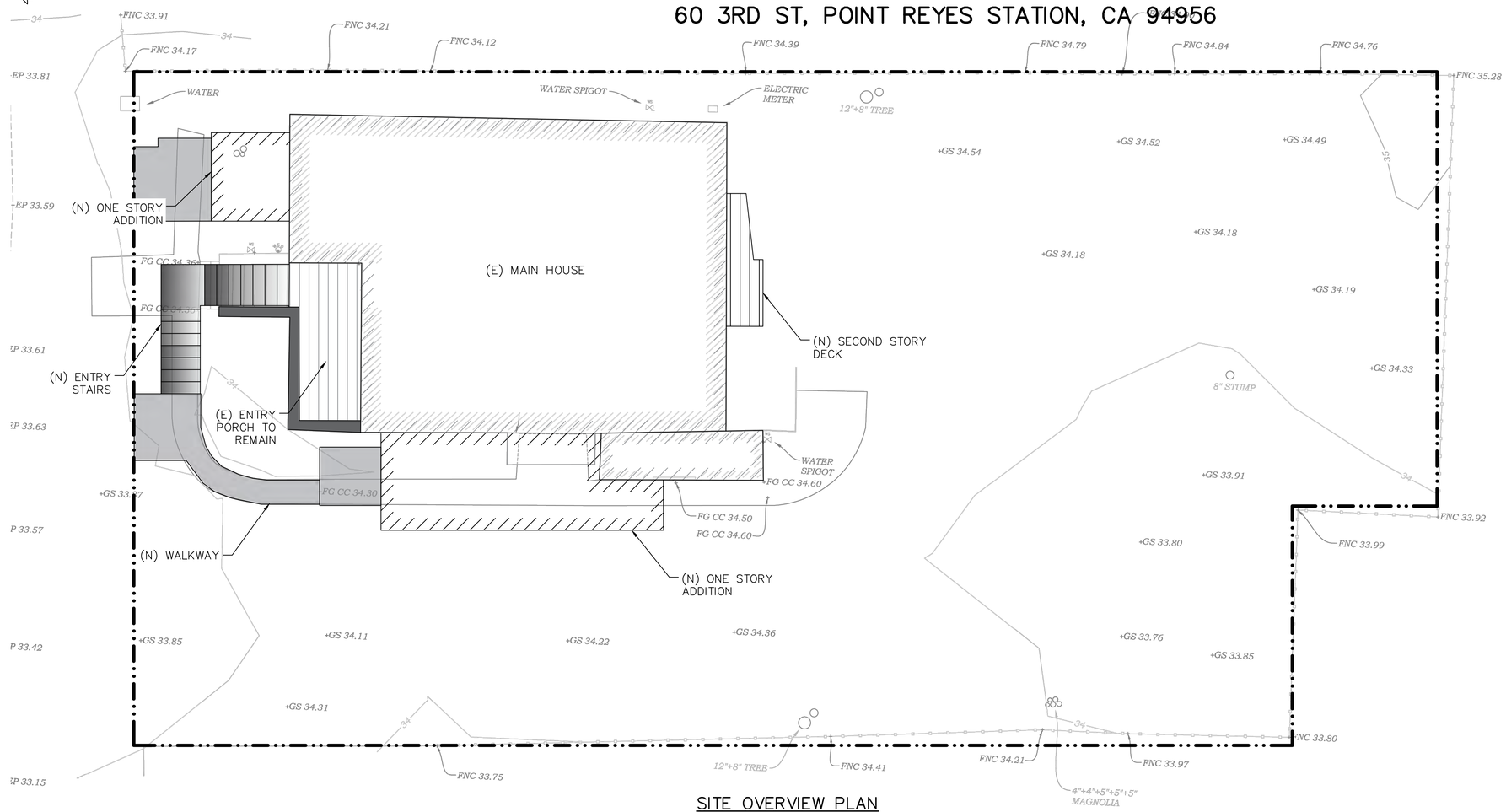
TOPOGRAPHICAL EXHIBIT

Prepared Under The Direction Of:
LICENSED LAND SURVEYOR R. WAYNE DAVIS LICENSE # 6330 STATE OF CALIFORNIA

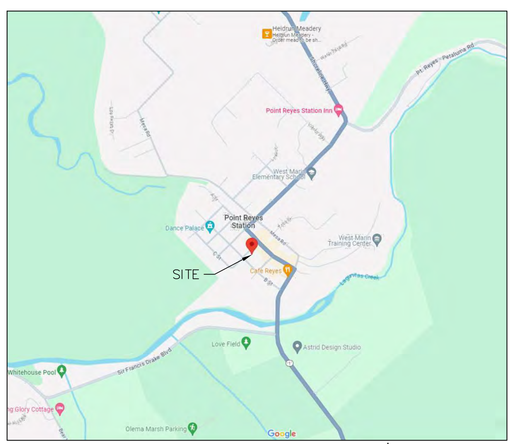
SHEET V-1
SCALE: 1" = 5'
DATE: 02-12-2023
PROJECT NUMBER: 636-002

CIVIL DESIGN

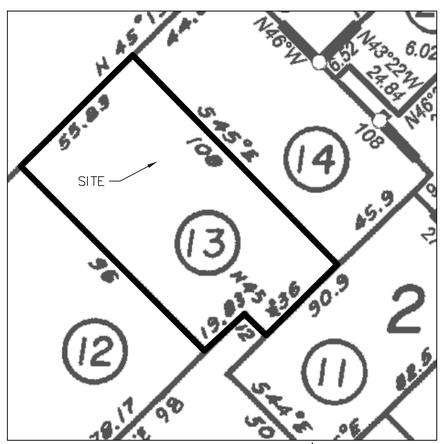
60 3RD ST, POINT REYES STATION, CA 94956



SITE OVERVIEW PLAN
SCALE: 1" = 5'



PARCEL LOCATION MAP
N.T.S.



VICINITY MAP
N.T.S.

SHEET INDEX	
C-1.0	SITE OVERVIEW PLAN
C-1.1	PROJECT NOTES
C-2.0	GRADING & DRAINAGE PLAN
C-2.1	GRADING & DRAINAGE DETAIL PLANS
C-3.0	UTILITY PLAN
C-4.0	BMP'S

DEVELOPER / APPLICANT
CLAM 60 3RD ST POINT REYES STATION, CA 94956
SITE INFORMATION
60 3RD ST, POINT REYES STATION, CA 94956 119-226-13 5,940
SCOPE OF WORK
CONVERSION OF A SFR INTO MULTIPLE UNITS FOR AFFORDABLE HOUSING. DEMOLTION OF EXISTING WALK WAY. RAISING SECOND FLOOR 3FT AND RAISING FLOOR OF LOWER LEVEL.
REFERENCES THIS PLAN IS SUPPLEMENTAL TO:
ARCH. PLANS: "ALTERATION TO EXISTING SINGLE FAMILY DWELLING", BY: STEPHEN ANTONAROS DATED: 03/24
TOPOGRAPHY & BOUNDARY : "TOPOGRAPHICAL EXHIBIT", BY: R.W. DAVIS & ASSOCIATES, INC., DATED: 2/29/24
"RECORD OF SURVEY", BY: 1031SURVEY, INC., DATED: 2023/09/13
BENCHMARK
VERTICAL DATUM: NAVD 88 PER BM Q 209, RESET 1982, TAKEN AT 35.23 FEET.
BASIS OF BEARINGS
THE BASIS OF BEARING FOR THIS MAP IS N44°28'50"W BETWEEN THE FOUND MONUMENTS ON B STREET PER 25 PM 99

REVISION TABLE		
DELTA	DATE	COMMENTS

GRAPHIC SCALE
(IN FEET)
5 0 2.5 5 10 20
1 INCH = 5 FEET

CONTRACTOR TO CONTACT AC ENGINEERING INC. AT LEAST 48 HOURS BEFORE THE START OF CONSTRUCTION
415-295-2152 OR ADMIN@AGNEWCIVIL.COM

ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A AT (800-227-2600) 48 HOURS BEFORE DIGGING, AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).

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

ISSUES

ISSUE	DATE	DESCRIPTION
0	6/17/24	PLANNING

AC ENGINEERING, INC.
CIVIL & GEOTECHNICAL CONSULTANTS
454 LAS GALLINAS AVE., SUITE 1047
SAN RAFAEL, CA 94903
P: 415-295-2152
F: 415-472-0603
admin@agnewcivil.com

STAMP
REGISTERED PROFESSIONAL ENGINEER
ORION W. AGNEW
C-87262
CIVIL
STATE OF CALIFORNIA

94956

SITE OVERVIEW PLAN

CLAM
60 3RD ST, POINT REYES STATION, CA 94956
APN: 119-226-13

JOB #
270-1

C-1.0

GENERAL NOTES

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

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

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

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

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS. COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

1. WORK SEQUENCE

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

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EX1RA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

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

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

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

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

2. SITE PROTECTION

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

GENERAL GRADING NOTES

CONTRACTOR SHALL OBTAIN THE PROPER PERMITS PRIOR TO ANY GRADING.

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

CONTRACTOR SHALL PROVIDE AND MAINTAIN APPROVED EROSION AND SEDIMENTATION CONTROL MEASURES DURING RAINY SEASON PER CITY AND CALIFORNIA REGIONAL STANDARDS – REFER TO EROSION AND SEDIMENTATION CONTROL PLAN.

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

SLOPE FINISHED GRADES A MINIMUM OF 5%, FOR AT LEAST THE 5 FEET TO 10 FEET FROM BUILDING PERIMETER WHERE EVER IT IS PHYSICALLY POSSIBLE. DIRECT SURFACE DRAINAGE RUNOFF TO DISPERSE ON–SITE.

PROVIDE 2% SLOPE ACROSS FLATWORK AND/OR PAVING AND SLOPE TO DAYLIGHT. REFER TO ARCHITECTS PLANS FOR PAVEMENT TYPE, LAYOUT, AND FINISH –TYP.

CONSTRUCT EARTHEN SWALES AT 2% – TYP. (1% MIN.) & BERMS AS REQUIRED TO DIRECT FLOWS TO DAYLIGHT. SLOPE FINISHED GRADES TO DAYLIGHT, TO ACCOMMODATE POSITIVE DRAINAGE AND AVOID PONDING. FOR FLOWLINES GREATER THAN 5%, PROVIDE LINED DITCH –TYP.

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

PROVIDE TREE PROTECTION AS REQUIRED FOR TREES TO REMAIN.

THE CONTRACTOR SHALL OBTAIN THE PROPER TREE REMOVAL PERMIT AS REQUIRED.

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

DEMOLISH (E) STRUCTURE(S) AS REQUIRED. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED CITY DEMOLITION PERMIT.

FINISHED GRADE ELEVATIONS NOTED AS [FG (MAX.)] ARE THE MAXIMUM ALLOWABLE GRADE AT THE BUILDING PERIMETER PER C.B.C. SECTION 2304.11.2.2 TO PROVIDE 8" MIN. CLEARANCE. THESE GRADES MAY BE LOWER PROVIDED THAT PROPER FLOW AWAY FROM THE FOUNDATION IS ACHIEVED. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPECIAL DETAILS AS REQUIRED.

DIRECT ROOF DOWNSPOUT (DS) LEADERS TO SPLASH BLOCKS, PROVIDE 2' LONG SPLASH BLOCKS TO BE USED BELOW RAIN WATER LEADERS IN PERVIOUS AREAS.

STORMWATER POLLUTION PREVENTION NOTES

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

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

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

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

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

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

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

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

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

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

SUPPLEMENTAL MEASURES

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

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

C. STABILIZING ALL DEMUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 1 TO APRIL 30.

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

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

GRADING AND DRAINAGE NOTES

1. SCOPE OF WORK

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

2. GENERAL

A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS AND SOILS REPORT AND THE MARIN COUNTY GRADING ORDINANCE.

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

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

3. CLEARING AND GRUBBING

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

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

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

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

(1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.
(2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.
(3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE COUNTY OF MARIN ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

4. SITE PREPARATION AND STRIPPING

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

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

5. EXCAVATION

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

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

6. PLACING, SPREADING AND COMPACTING FILL MATERIAL

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

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

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

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

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

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

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

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

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

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

11. SAFETY
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE UNITED TO NORMAL WORKING HOURS.
THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE

12. GUARANTEE
NEITHER THE FINAL PAYMENT, NOR THE PROVISIONS IN THE CONTRACT, NOR PARTIAL, NOR ENTIRE USE OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.
THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THERE FROM WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

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

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

B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON ME HAUL ROUTE.
C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, OCTOBER FIRST TO APRIL THIRTIETH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIRST UNLESS AUTHORIZED BY THE COUNTY ENGINEER.

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

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

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

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

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

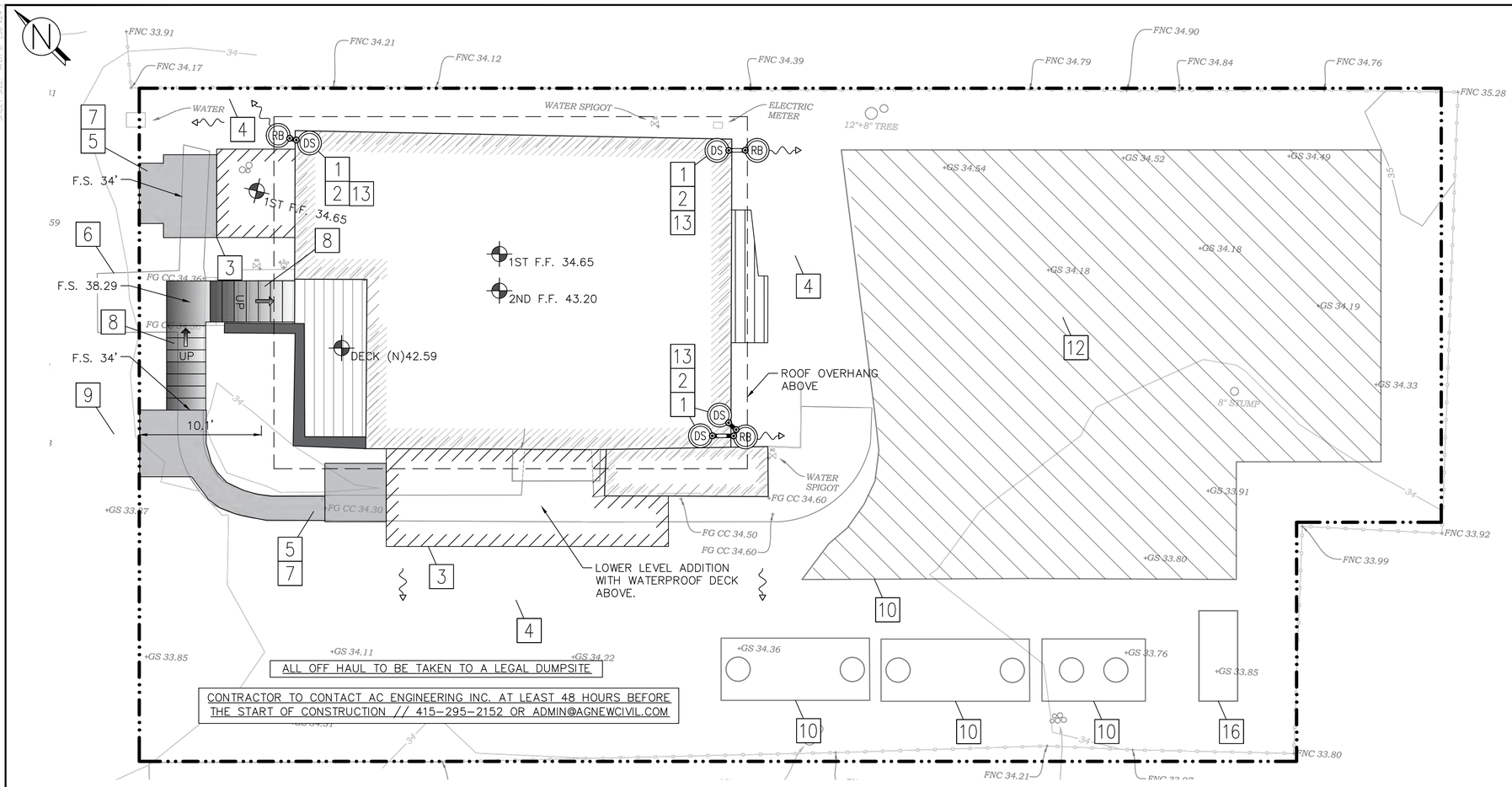
L. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING PROPORTIONS:
FIBER, 2000 LBS/ACRE SEED, 200 LBS/ACRE (SEE NOTE J, BELOW) FERTILIZER (11–8–4), 500 LBS/ACRE WATER, AS REQUIRED FOR APPLICATION

J. SEED MIX SHALL BE PER CALTRANS STANDARDS.

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

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

M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL, PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL N



1 GRADING AND DRAINAGE PLAN

SCALE 1" = 5'

1 IMPERVIOUS

SCALE 1" = 10'

GRADING AND DRAINAGE NOTES

1. (1 C-2.1) CONNECT DOWNSPOUT TO (N) RAIN BARREL. CARYCOMPANY #56 WRBA 55 GALLON RAIN BARREL W. SPIGOT AND OVERFLOW OR EQ. INSTALL AND SPECIFICATIONS TO COMPLY WITH BASMAA OPTION 3 / APPENDIX C
2. (1 C-2.1) OVERFLOW FROM RAIN BARREL TO DISSIPATE TO VEGETATION
3. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES
4. FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MIN. OF 5% FOR THE FIRST 10 FT. AWAY FROM THE BUILDING AND THEN SHALL CONTINUE TO SLOPE TO TOWARDS POSITIVE OUTFALL. 6" OVER 10'
5. SLOPE ALL FLATWORK 1% MINIMUM TO DRAIN
6. DEMO AND OFFHAUL EXISTING CONCRETE. S.A.D
7. (3 C-2.1) (N) CONCRETE SLAB / WALKWAY
8. (N) STAIRCASE- 8.59' TOTAL RISE. 16 RISERS @ 6.44" W. 12" RUN. EXISTING DECK TO REMAIN. S.A.D FOR FINAL LAYOUT
9. ANY WORK IN THE PUBLIC RIGHT OF WAY WILL REQUIRE AN ENCROACHMENT PERMIT FROM MARIN COUNTY PUBLIC WORKS
10. (N) OWTS ON DIFFERENT PERMIT AND DRAWING.
11.
12. NO EXCAVATION, DIGGING, OR PLANTING WITHOUT APPROVAL FROM THE OWTS ENGINEER
13. THE FINAL LOCATION OF ALL RAIN BARRELS TO BE MADE AT THE TIME OF CONSTRUCTION IN COORDINATION WITH THIS OFFICE

ELEVATIONS				
DESCRIPTION	EXISTING ELEVATION	NEW ELEVATION	HEIGHT DIFFERENCE	NOTES
1ST FLOOR	33.05	34.65	+1.60	SLAB TO RAISED FLOOR CONVERSION
2ND FLOOR	40.20	43.20	+3.00	
FRONT ENTRY DECK	39.59	42.59	+3.00	

CUT / FILL		
DESCRIPTION	AMOUNT IN YD	NOTES
CUT	0.00	
FILL	10.00	SLOPING GRADES AWAY FROM STRUCTURE
EXPORT	0.00	

LEGEND

EXISTING

PROPOSED

- PROPERTY LINE
- DS — DOWNSPOUTS
- RB — RAIN BARRELS
- DIRECTION OF SURFACE FLOW
- STEPS
- WALKWAY / CONCRETE
- NAME XXX — SPOT ELEVATION
- 1 / C-2 — DETAIL NUMBER / SHEET NUMBER
- 1 #10 — DELTA w/COMMENT #
- ELEV. — NEW ELEVATION BENCHMARK

GRAPHIC SCALE (IN FEET)

5 0 2.5 5 10 20

1 INCH = 5 FEET

ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A AT (800-227-2600) 48 HOURS BEFORE DIGGING, AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).

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

ISSUES

ISSUE	DATE	DESCRIPTION
0	6/17/24	PLANNING

AC ENGINEERING, INC.
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STAMP

REGISTERED PROFESSIONAL ENGINEER
GREGORY W. AGNEW
C 87162
CIVIL
STATE OF CALIFORNIA

GRADING AND DRAINAGE PLAN

CLAM
60 3RD ST, POINT REYES STATION, CA 94956
APN: 119-226-13

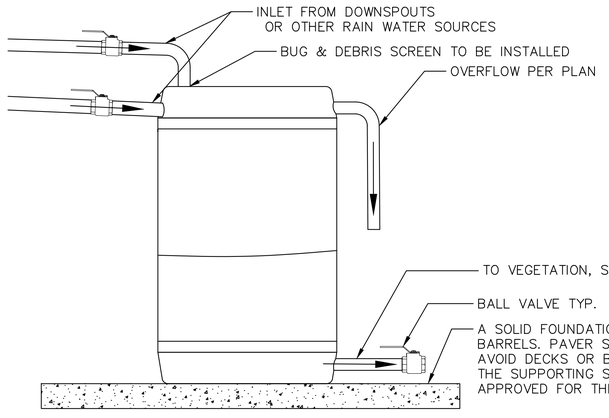
270-1

C-2.0

SHEET SIZE: Arch D (36"x24")

NOTES:

- DO NOT USE FLEXIBLE PIPING, TO PREVENT MOSQUITO BREEDING IN WATER THAT MAY POOL IN FLEXIBLE. IF IRRIGATING EDIBLE LANDSCAPES, CONSIDER PIPES THAT MEET FDA FOOD GRADE STANDARDS.
- THERE SHALL BE NO DIRECT CONNECTION OF ANY RAIN BARREL OR CISTERN AND/OR RAINWATER COLLECTION PIPING TO ANY POTABLE WATER PIPE SYSTEM. RAINWATER SYSTEMS SHALL BE COMPLETELY SEPARATE FROM POTABLE WATER PIPING SYSTEMS.
- ALL RAIN BARRELS AND CISTERNS SHOULD HAVE A SCREEN TO ENSURE MOSQUITOES CANNOT ENTER.
- SCREEN WITH LEAF GUARD OR MAXIMUM $\frac{1}{2}$" TO $\frac{1}{4}$": MINIMUM CORROSION-RESISTANT METALLIC HARDWARE FABRIC
- WATER COLLECTED WILL BE USED FOR IRRIGATION ONLY
- ALL OPENINGS TO BE SCREENED WITH A CORROSION-RESISTANT METALLIC FINE MESH ($\frac{1}{16}$": OR SMALLER) TO PREVENT MOSQUITO HARBORAGE
- LARGE OPENINGS TO BE SECURED AGAINST ACCESS BY CHILDREN
- RAIN BARRELS AND GUTTERS TO BE CLEANED ANNUALLY
- LOCAL MOSQUITO AND VECTOR CONTROL DISTRICT SHALL BE INFORMED OF THE INSTALL. THE LOCAL DISTRICT SHALL BE GIVEN INFORMATION AND RIGHTS OF ENTRY IF REQUESTED.

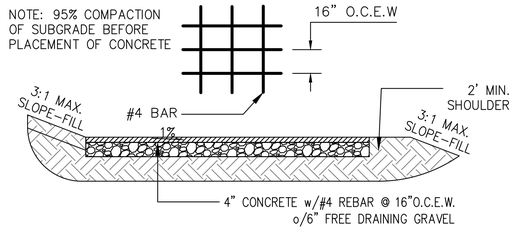


Operation and Maintenance

After installing your rain barrel or cistern, follow these tips for long-term safety and functionality.

- ❑ Regularly check the gutters and gutter guards to make sure debris is not entering the rainwater harvesting system.
- ❑ Inspect the screens on the rain barrel or cistern prior to the wet season to make sure debris is not collecting on the surface and that there are not holes allowing mosquitoes to enter the rain barrel. Inspect screens more frequently if there are trees that drop debris on the roof.
- ❑ Clean the inside of the rain barrel once a year (preferably at the end of the dry season when the rain barrel has been fully drained) to prevent buildup of debris. If debris cannot be removed by rinsing, use vinegar or another non-toxic cleaner. Use a large scrub brush on a long stick, and avoid actually entering the rain barrel. Drain washwater to landscaping.
- ❑ Clean out debris from cisterns once a year, preferably at the end of the dry season.

1 RAIN BARREL
NTS



3 CONCRETE SLABS
NTS

ISSUES

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ORION W. AGNEW
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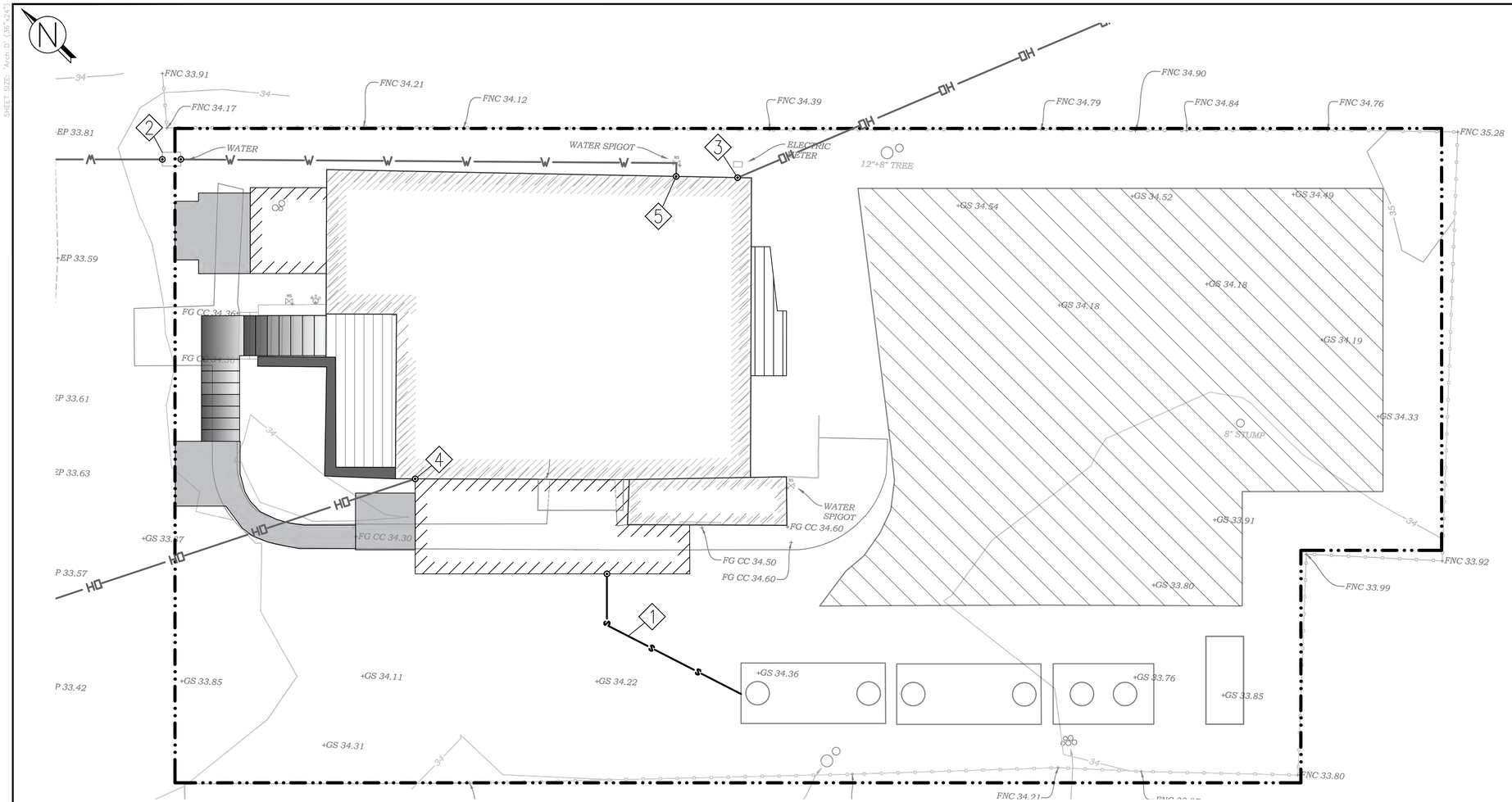
STATE OF CALIFORNIA

GRADING AND DRAINAGE PLAN DETAILS

CLAM
60 3RD ST, POINT REYES STATION, CA 94956
APN: 119-226-13

270-1

C-2.1



1 UTILITY PLAN

SCALE 1" = 5'

UTILITY NOTES

1. (N) SEWER LINE FROM (E) MAIN HOUSE TO (N) OWTS. SEE C-1 FROM AC. ENGINEERING "ONSITE WASTEWATER TREATMENT SYSTEM DESIGN" DATED: 4/9/24
2. (E) NMWD WATER METER AND SHUTOFF. CONTRACTOR TO VERIFY FINAL LOCATION AND CURRENT WATER LATERALS ABILITY TO HANDLE NEW LOADING NEEDS
3. (E) PG&E ELECTRIC METER AND ENTRY TO MAIN HOUSE
4. (E) OVERHEAD TELECOM LINE AND ENTRY TO MAIN HOUSE.
5. (E) WATER LINE AND ENTRY TO MAIN HOUSE

LEGEND

EXISTING	PROPOSED	
OH	OH	OVERHEAD LINE
S	S	SEWER LINE
W	W	WATER LINE

GRAPHIC SCALE (IN FEET)

5 0 2.5 5 10 20

1 INCH = 5 FEET

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ISSUES

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STATE OF CALIFORNIA

94956

UTILITY PLAN

CLAM
60 3RD ST, POINT REYES STATION, CA 94956
APN: 119-226-13

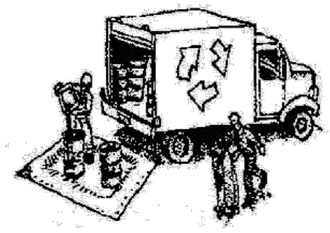
JOB # 270-1

C-3.0

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

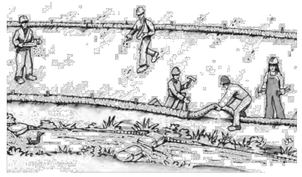
Maintenance and Parking

- ❑ 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, abosorb, 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.

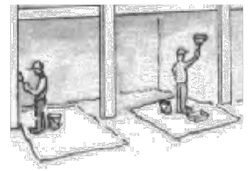
Concrete, Grout & Mortar Application

- ❑ 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!

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ISSUES

ISSUE	DATE	DESCRIPTION
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REGISTERED PROFESSIONAL ENGINEER
ORION W. AGNEW
C 87362
CIVIL
STATE OF CALIFORNIA

BMPS

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JOB #
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