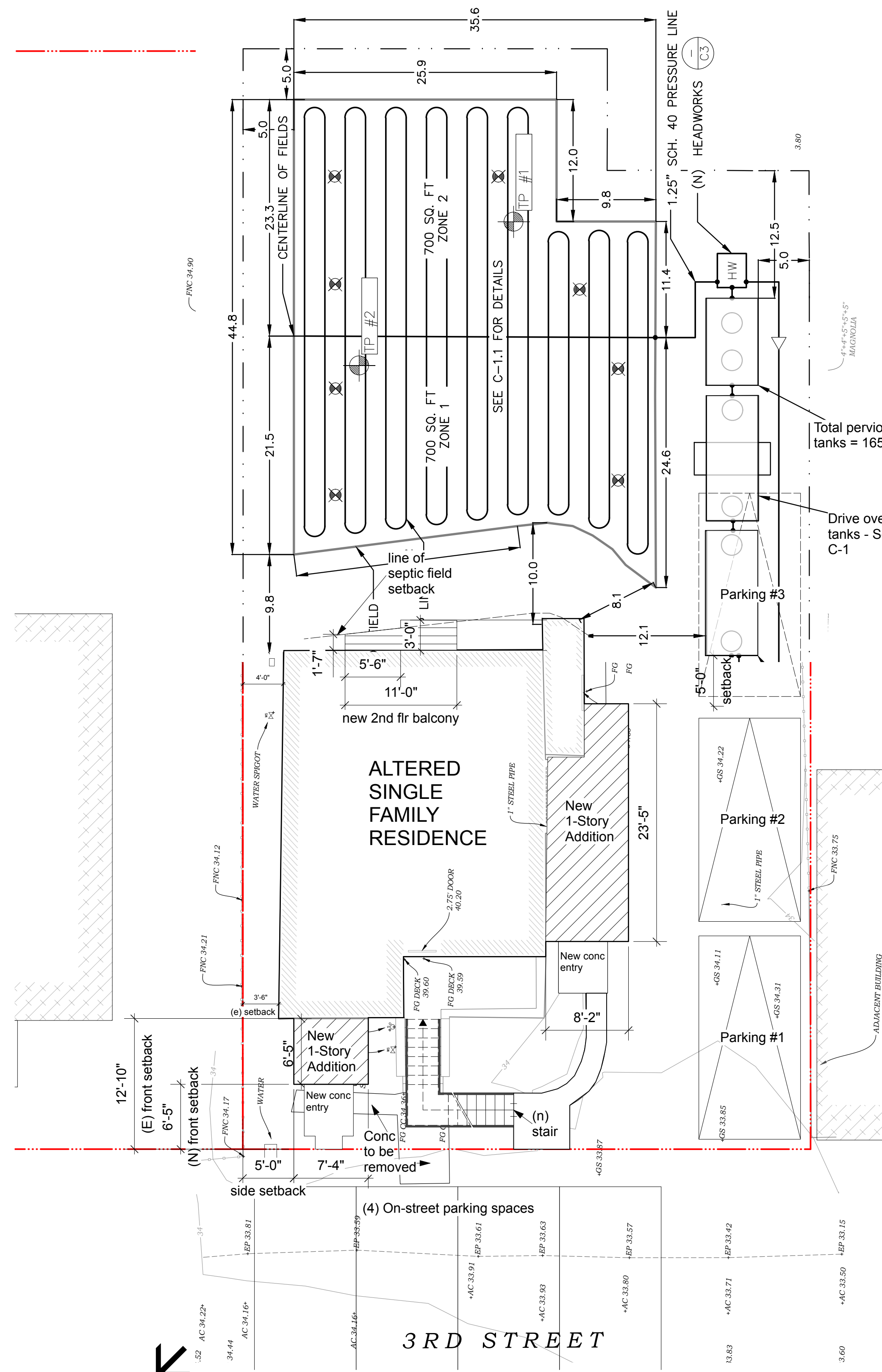


2 EXISTING SITE PLAN
Scale: 1/8" = 1'-0"



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: 1133 sq ft | New Unit #1 size (rear porch removed) : 896 sq ft |
| Existing 1st floor area: 1021 sq ft | NEW ground floor (New Bedrooms/Baths) 1209 sq ft |
| Remove rear porch - 153 sq ft New 2nd Unit: 1 bed, den, 1 bath + 594 sq ft New 3rd Unit: 1 bed, den, 1 bath + 615 sq ft | SCOPE of WORK Raise building 2'-7" to max. 25' from grade; New 1-story Additions to front and side; add two new bedrooms to existing single family dwelling; Install New septic system. No change in Occupancy. |
| Total new building floor area: 2079 sq ft | |

| 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 |
|--|--|
| A0.1 Existing & New Site Plans - Bldg Info | <p>The project involves alterations and additions to the existing single family house. The house will be lifted approximately 36", the lower floor will be expanded with additions at the front and side of the existing building outline. The new first floor will be level with the adjacent grade and the existing house will be largely unchanged at the interior. The resulting house will have 4 bedrooms and 3 baths.</p> <p>CLAM commits to ensuring the perpetual affordability of its housing units, catering specifically to households earning less than 80% of the area median income</p> |
| A0.2 Existing Building Floor plans | |
| A1.1 New Building Floor plans | |
| A1.2 Existing & New Building Sections | |
| C-0 COVER SHEET (Septic Design) | |
| C-1 OTWS Site Plan | |
| C-1.1 Drip Field Schematic | |
| C-2 Tank & Pre-Treatment Details | |
| C-3 Assorted Details | |
| C-4 OTWS Notes | |
| C-5 Construction BMPs | |
| ROS Record of Survey | |
| 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 Construction BMPs | |

| PROPERTY OWNER & Applicant | |
|--|---|
| Owner: CLAM Community Land Trust Association of West Main PO Box 273, Point Reyes Station, CA 94956 415-663-1005 | Existing lot area = 5792 sq ft |
| Applicant: CLAM Project Manager Tom McCafferty 314-570-8722 | Existing Building Area = 1135 sq ft Proposed Building Area = 1224 sq ft Existing Floor Area = 2061 sq ft Proposed Floor Area = 2120 sq ft Proposed building area to be removed = 153 sq ft Proposed Area of New Addition / Disturbance = 216 sq ft FAR = 2079/5792 = .36 (proposed) 2154/5792 = .37 (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 = 3 Minimum Setbacks = Front: 25 ft Sides: 10 ft Rear: 20% of lot depth(max) or 25 ft max Height Limit: 35 feet |

Alterations & Additions to existing single family dwelling
 60 3rd Street, Point Reyes Station, CA 94956

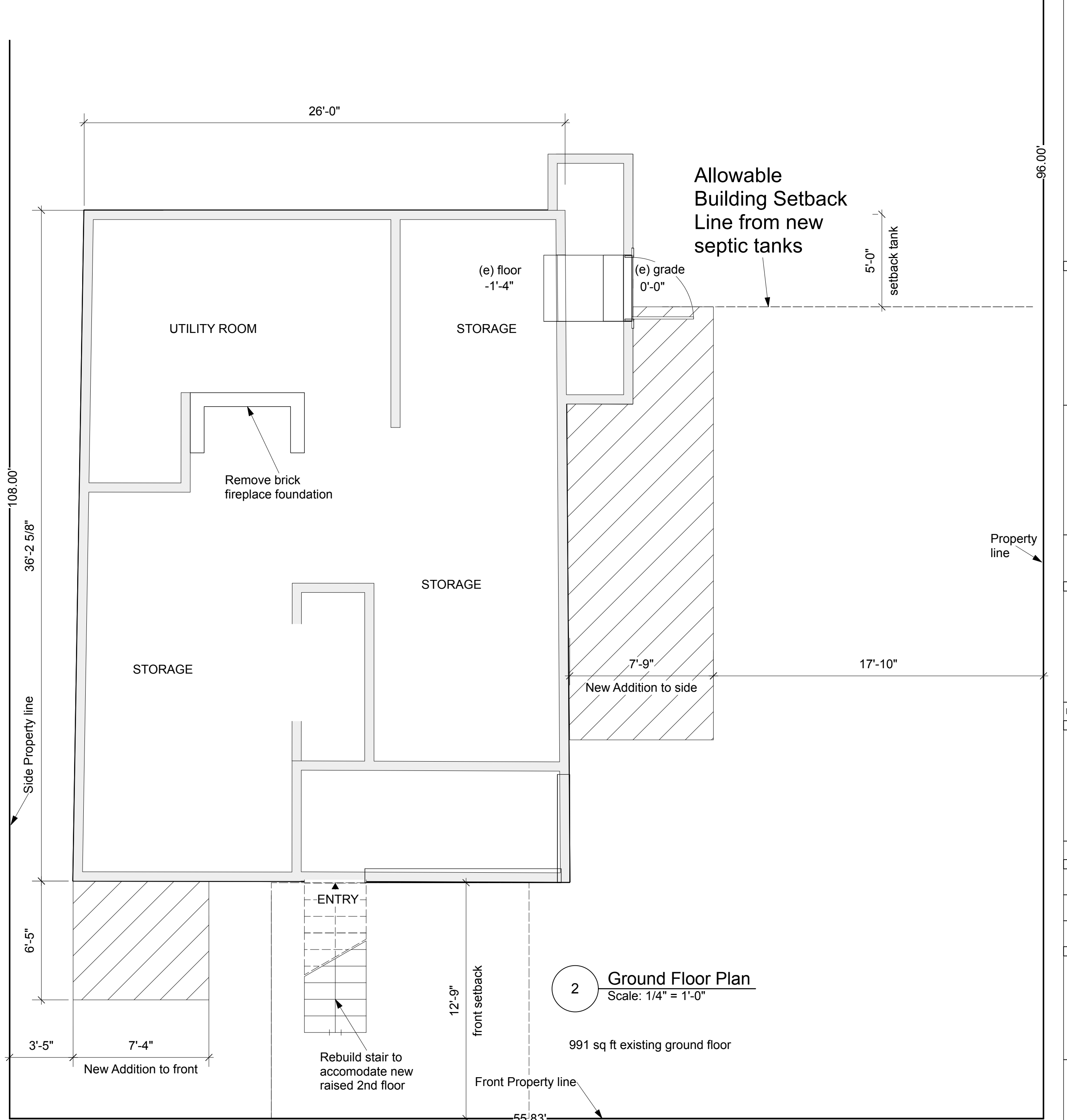
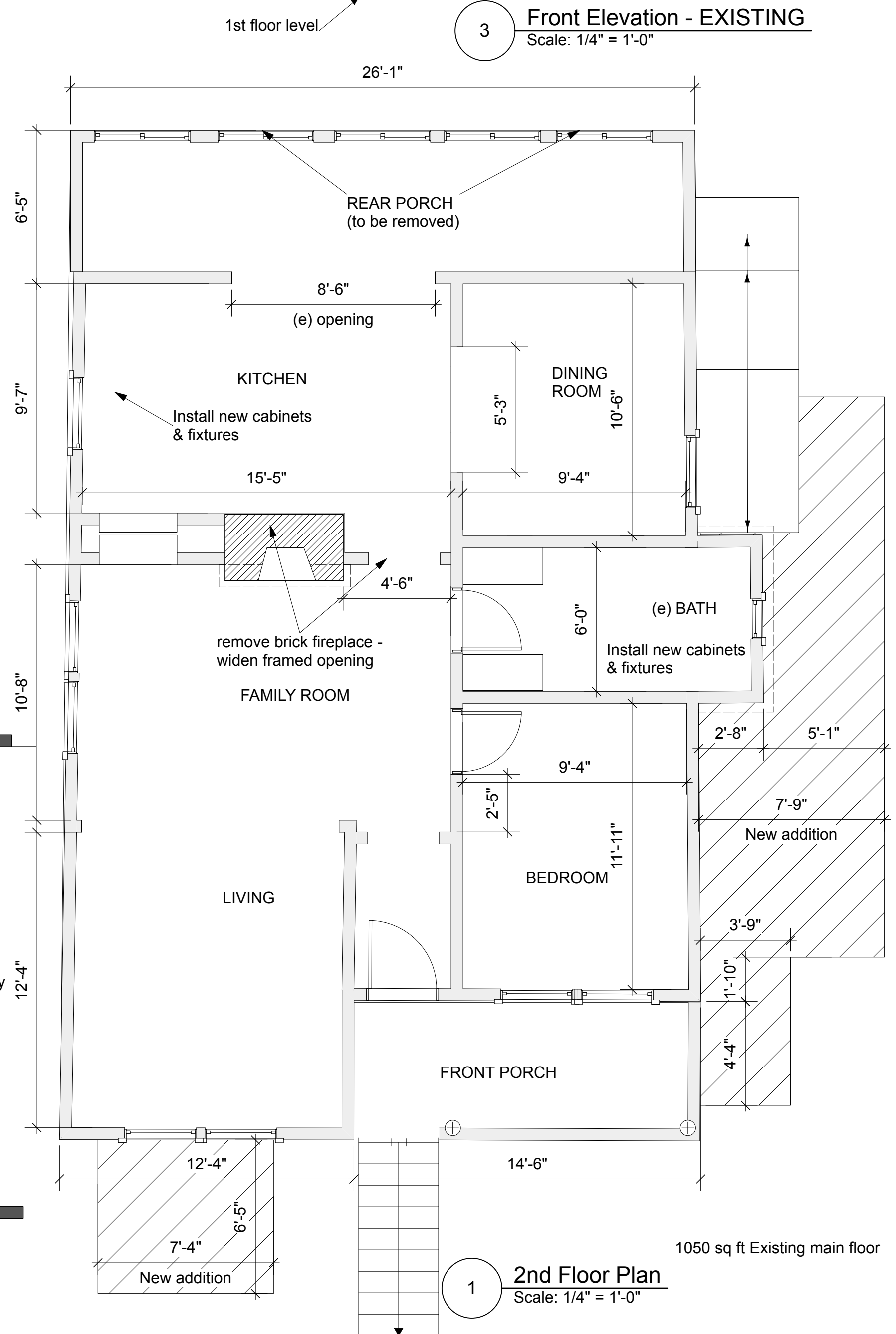
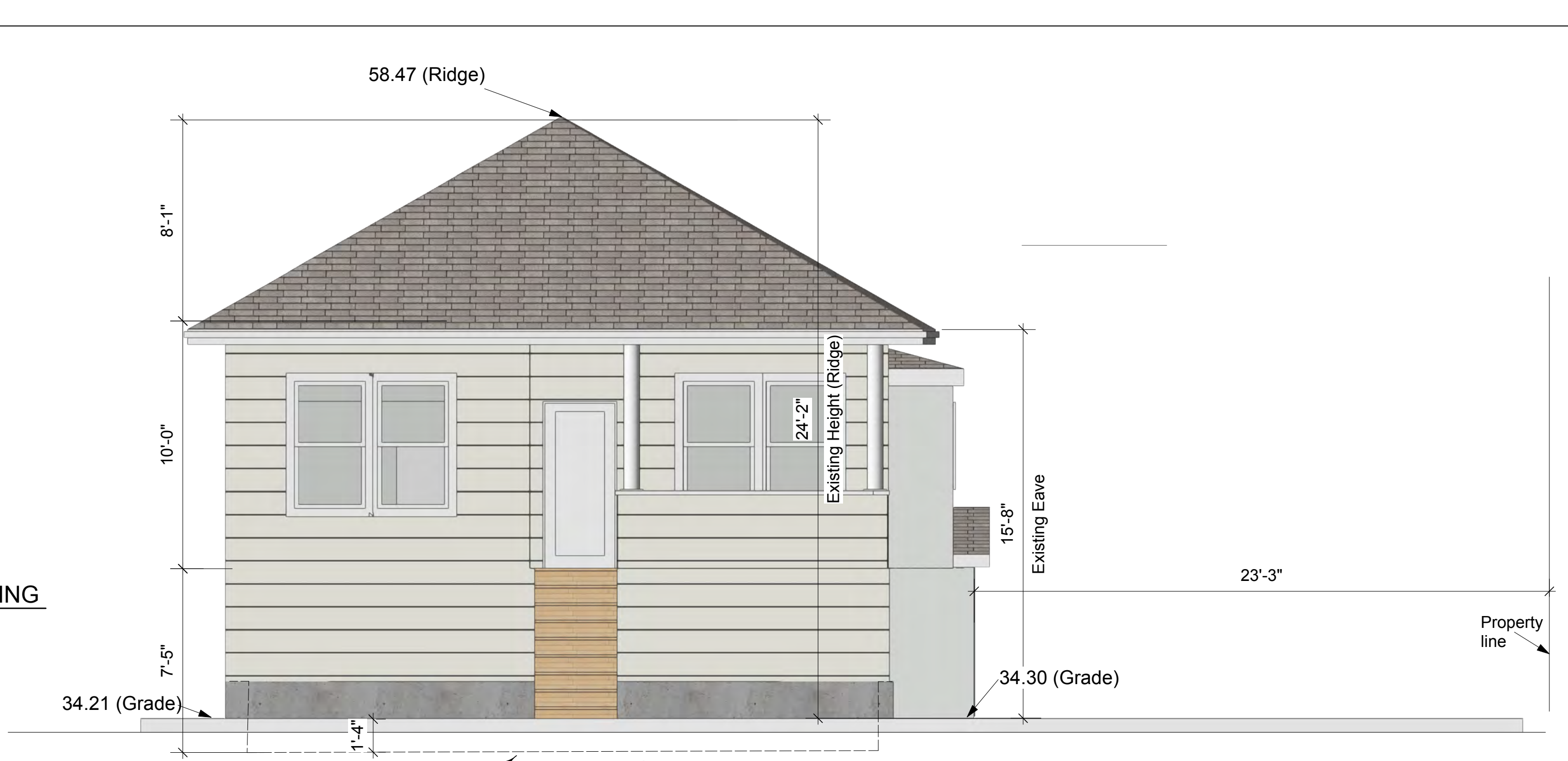
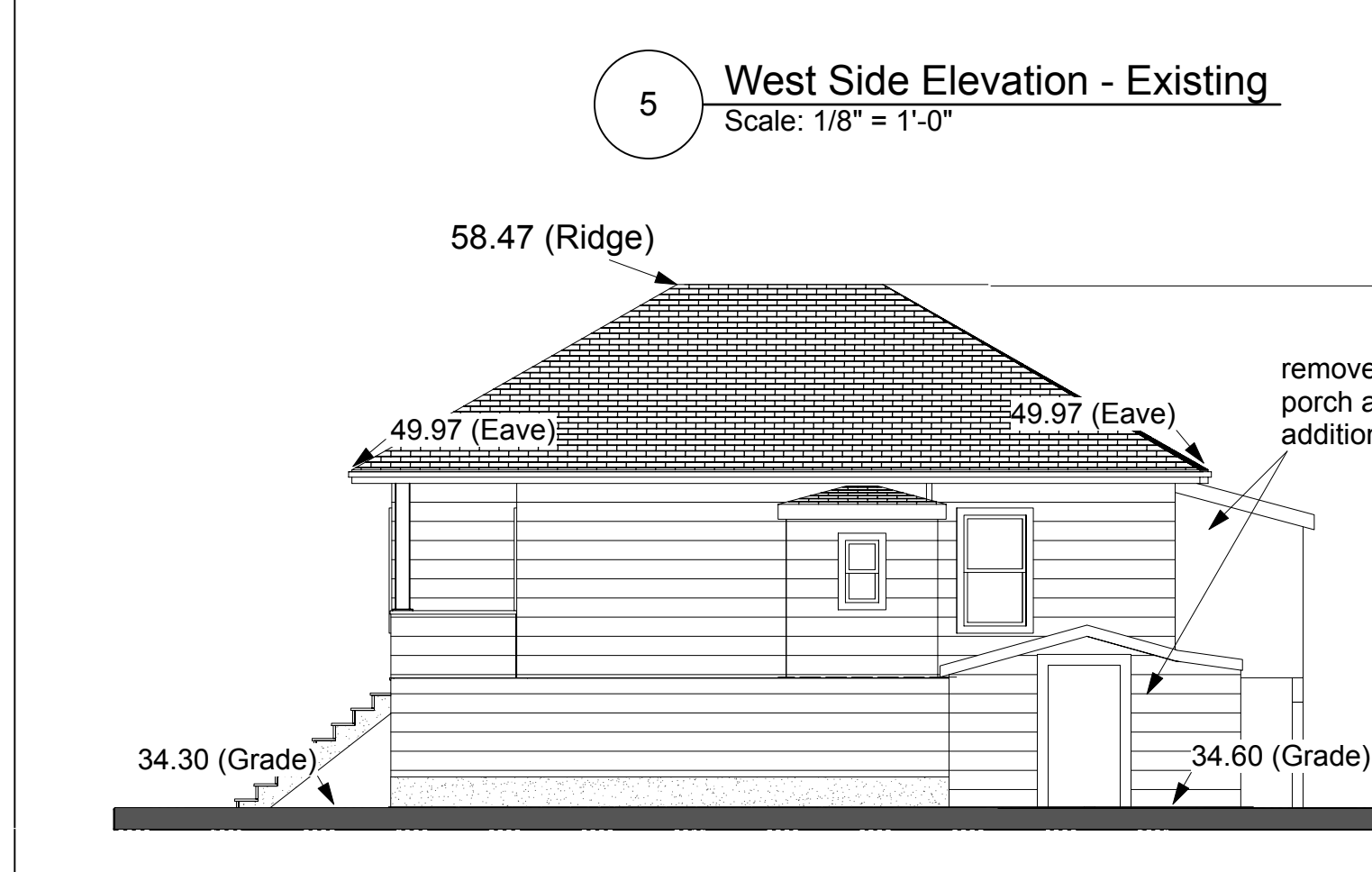
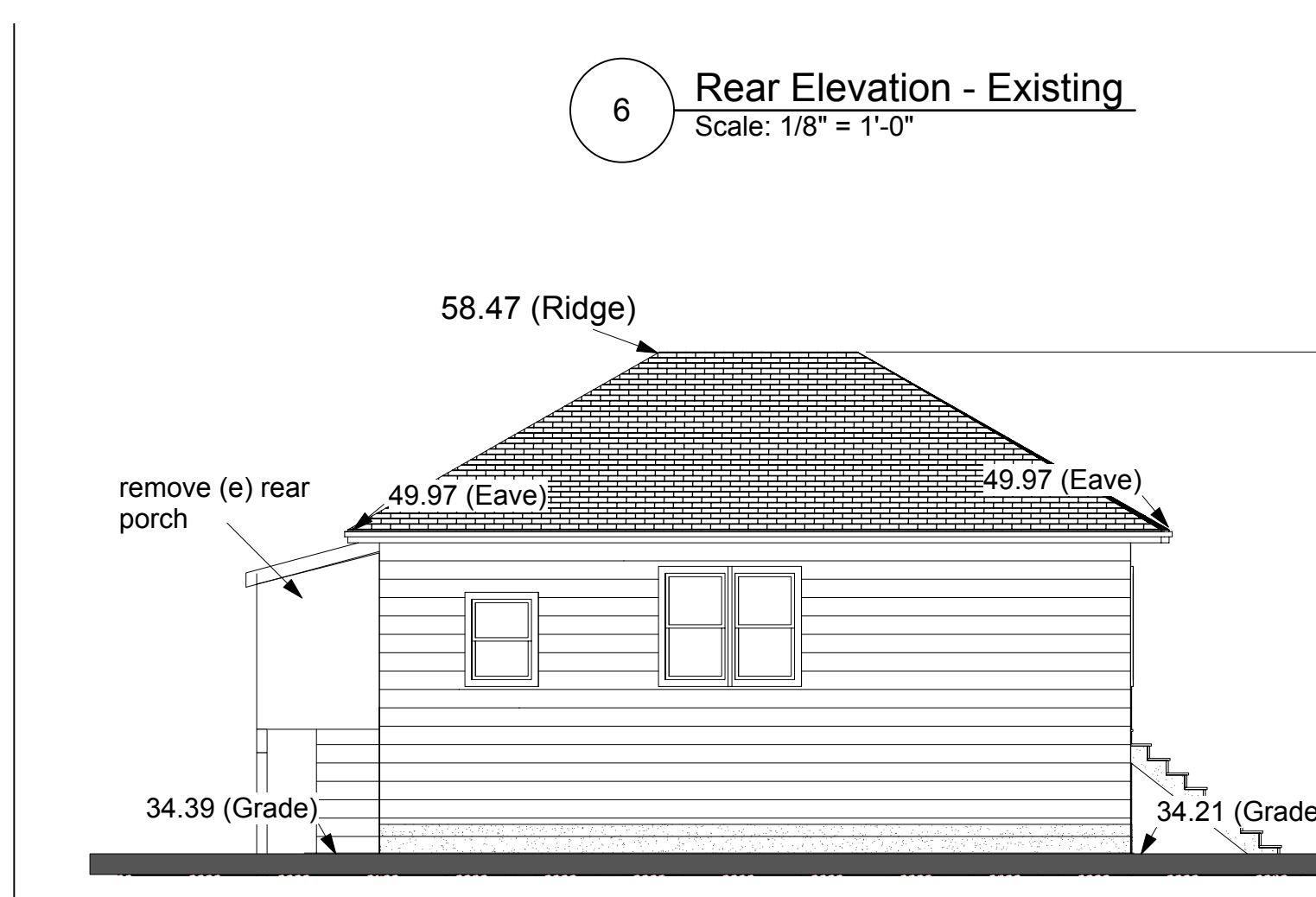
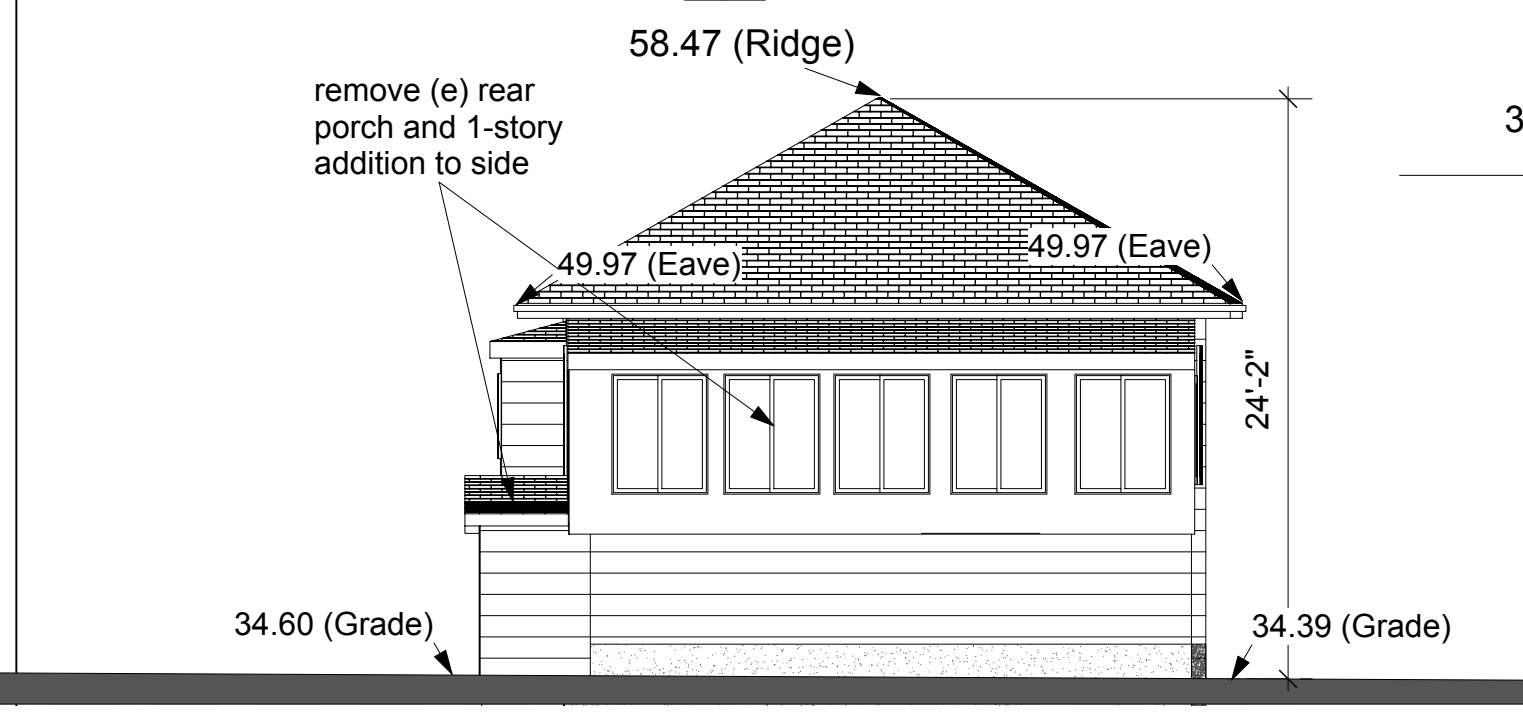
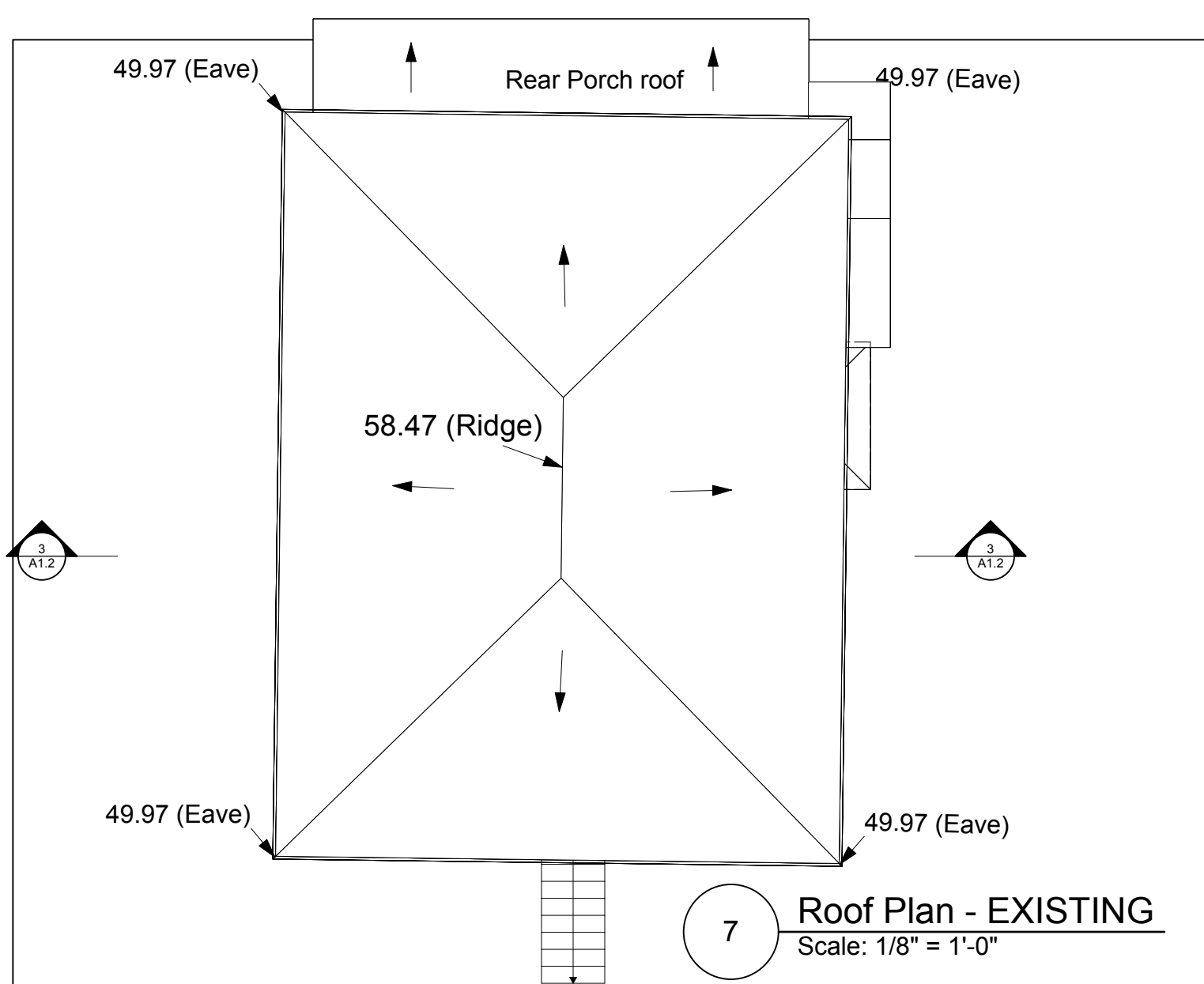
Architect: **Stephen Antonaros**
 (415) 864-2261
 santonaros@gmail.com
 Point Reyes Station
 California 94956

| REV. | DATE | DESCRIPTION |
|------|------|-------------|
| | | |

| NO. | DATE | ISSUE NOTE |
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| | | |

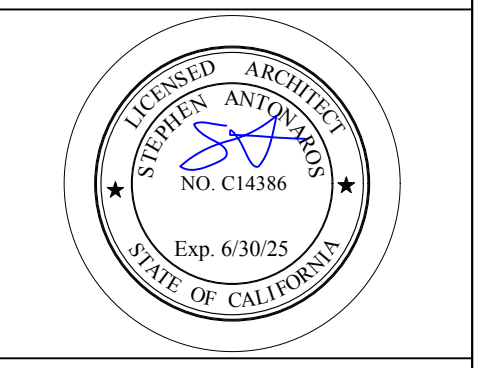
Project Manager: _____
 Date: **March 2024**
 Project ID: **LFT35**

Sheet Title: **Existing+New Site Plans**
 Sheet No.: **A0.1**



**Alterations & Additions
to existing single family dwelling**

60 3rd Street, Point Reyes Station, CA 94956



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

Consultant

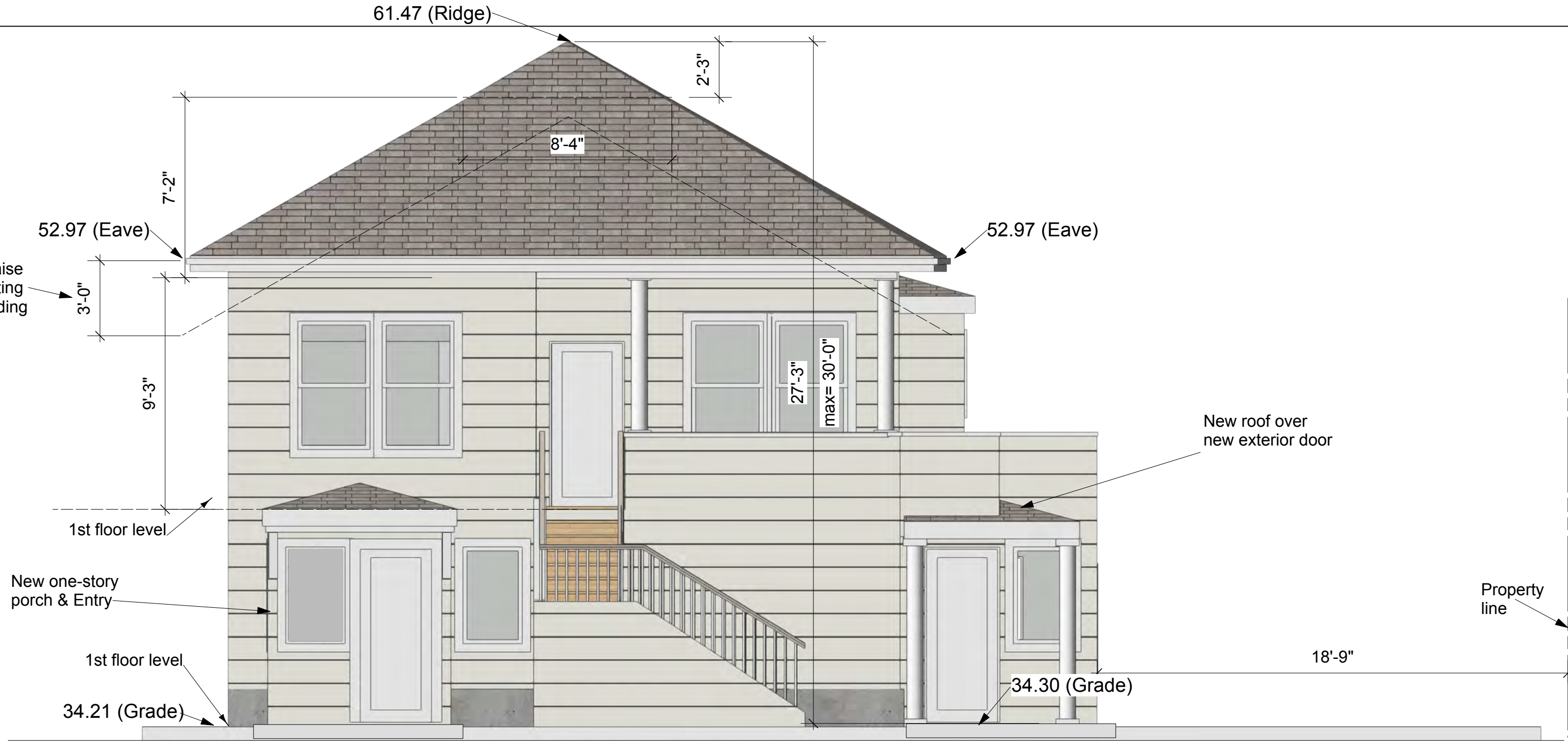
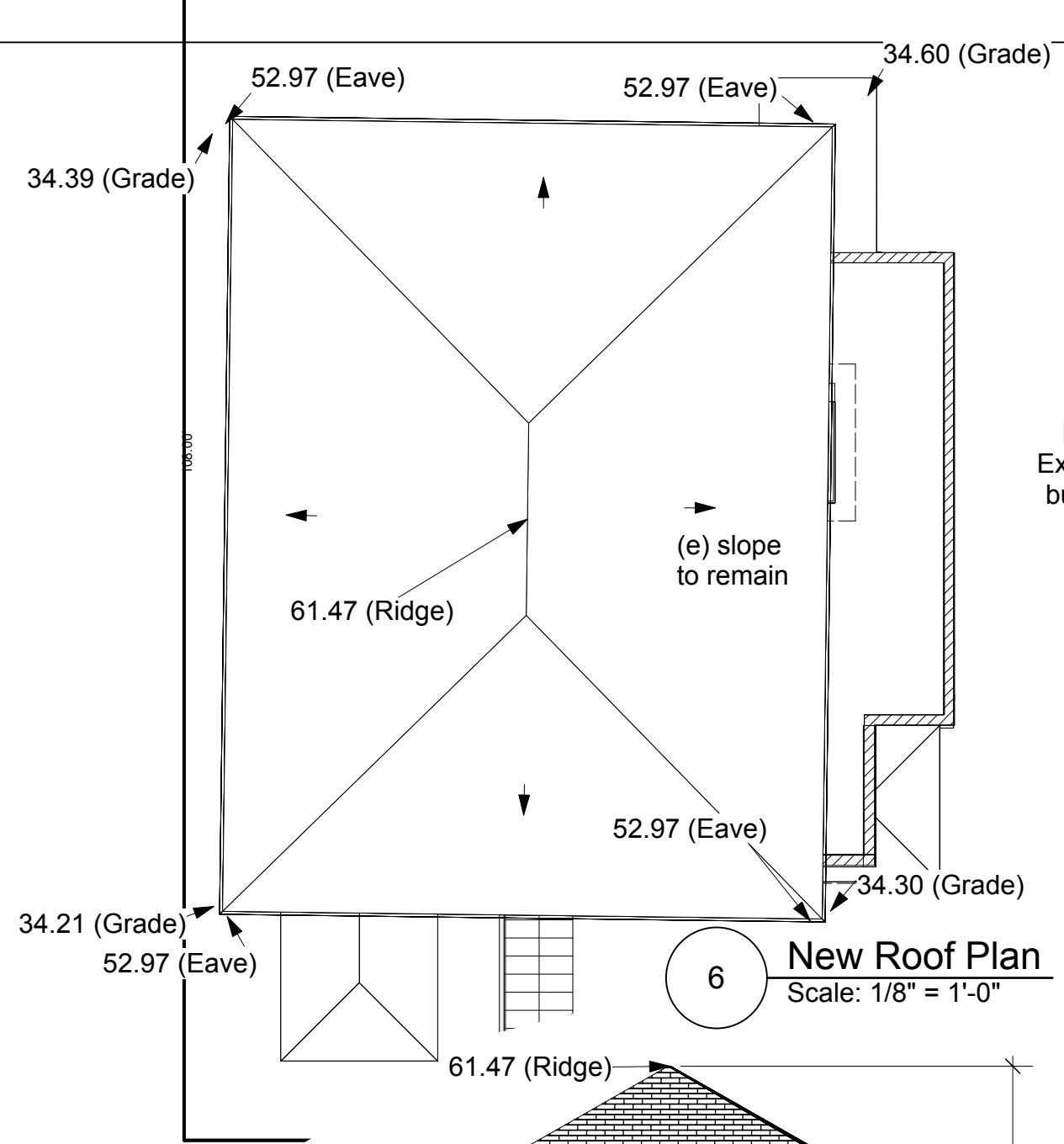
| REV. | DATE | DESCRIPTION |
|------|------|-------------|
| | | |

| NO. | DATE | ISSUE NOTE |
|-----|------|------------|
| | | |

Project Manager: _____
Date: March 2024
Project ID: LFT35

Existing Building Floor plans & Elevations

Sheet No. **A0.2**



COLOR & MATERIALS

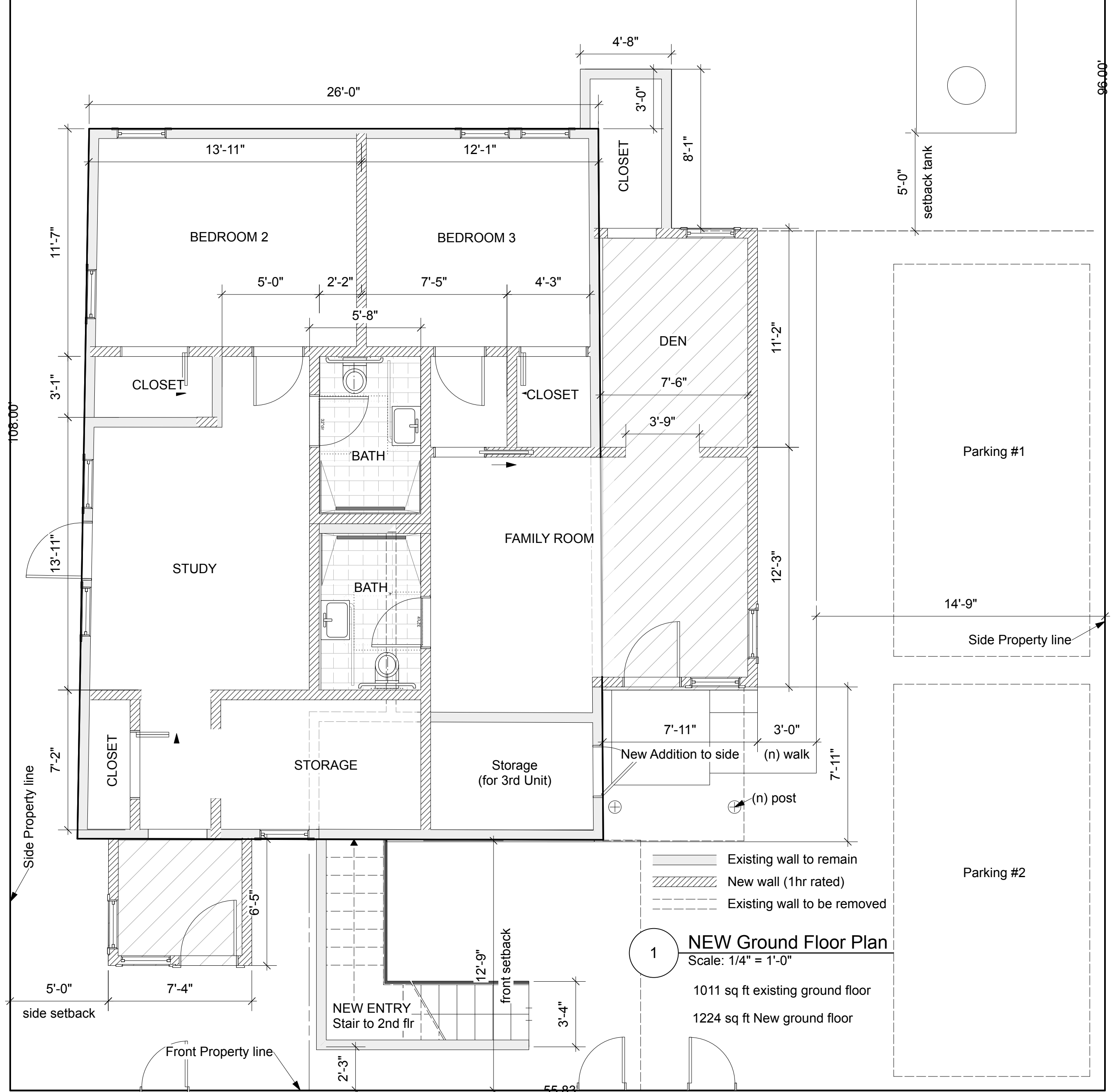
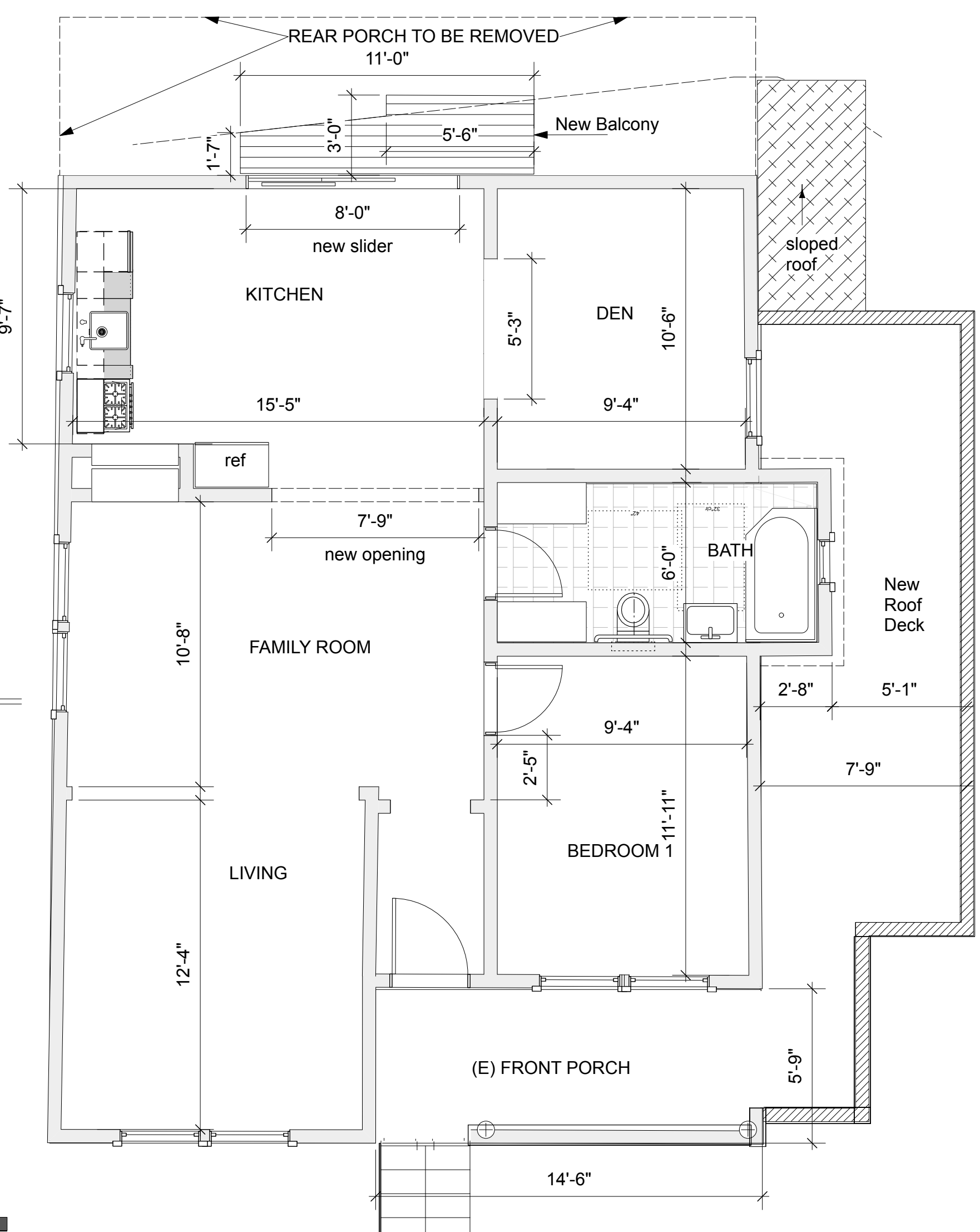
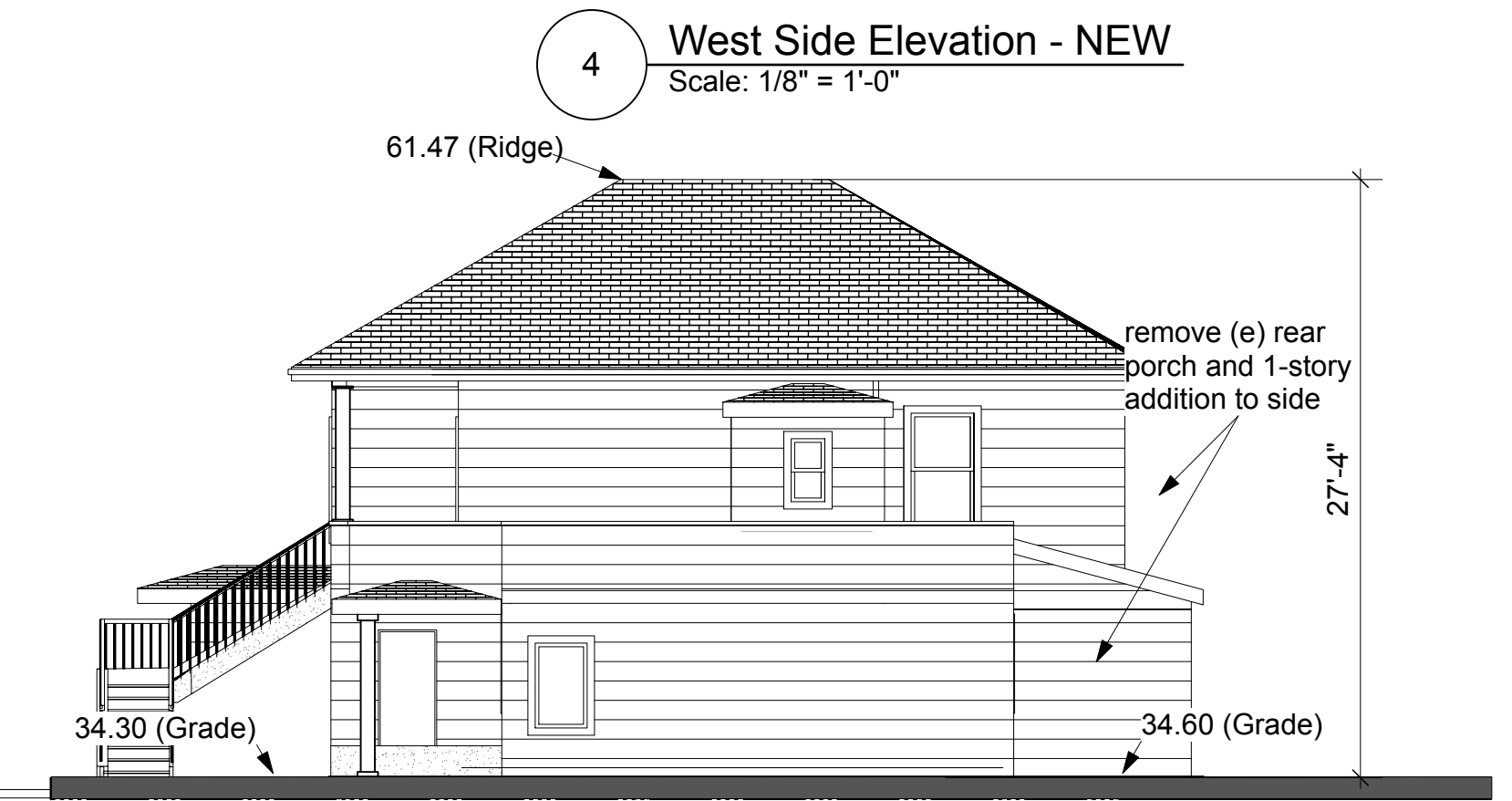
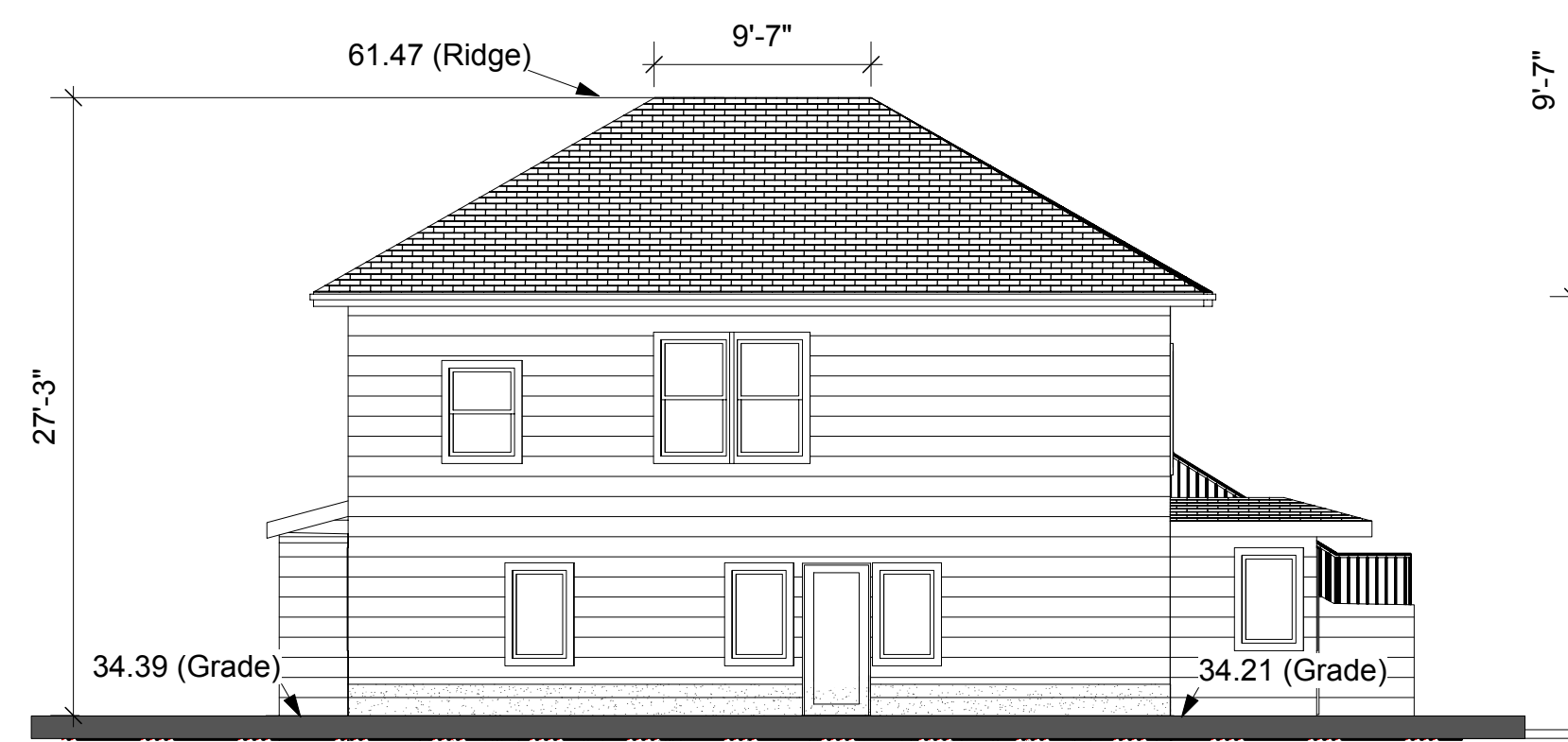
Roof to be Composition Shingles

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

Trim and Doors to be wood, painted

Benjamin-Moore Historic Color for Siding, Doors & Trim

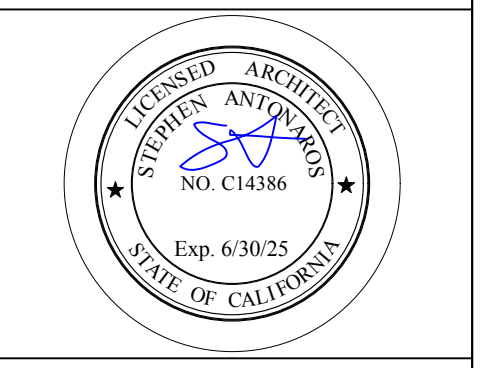
- Salamander 2050-10 SIDING
- Rustique AF-275 DOORS
- Sycamore 1137 TRIM



1050 sq ft Existing main floor
896 sq ft Proposed main floor

Alterations & Additions to existing single family dwelling

60 3rd Street, Point Reyes Station, CA 94956

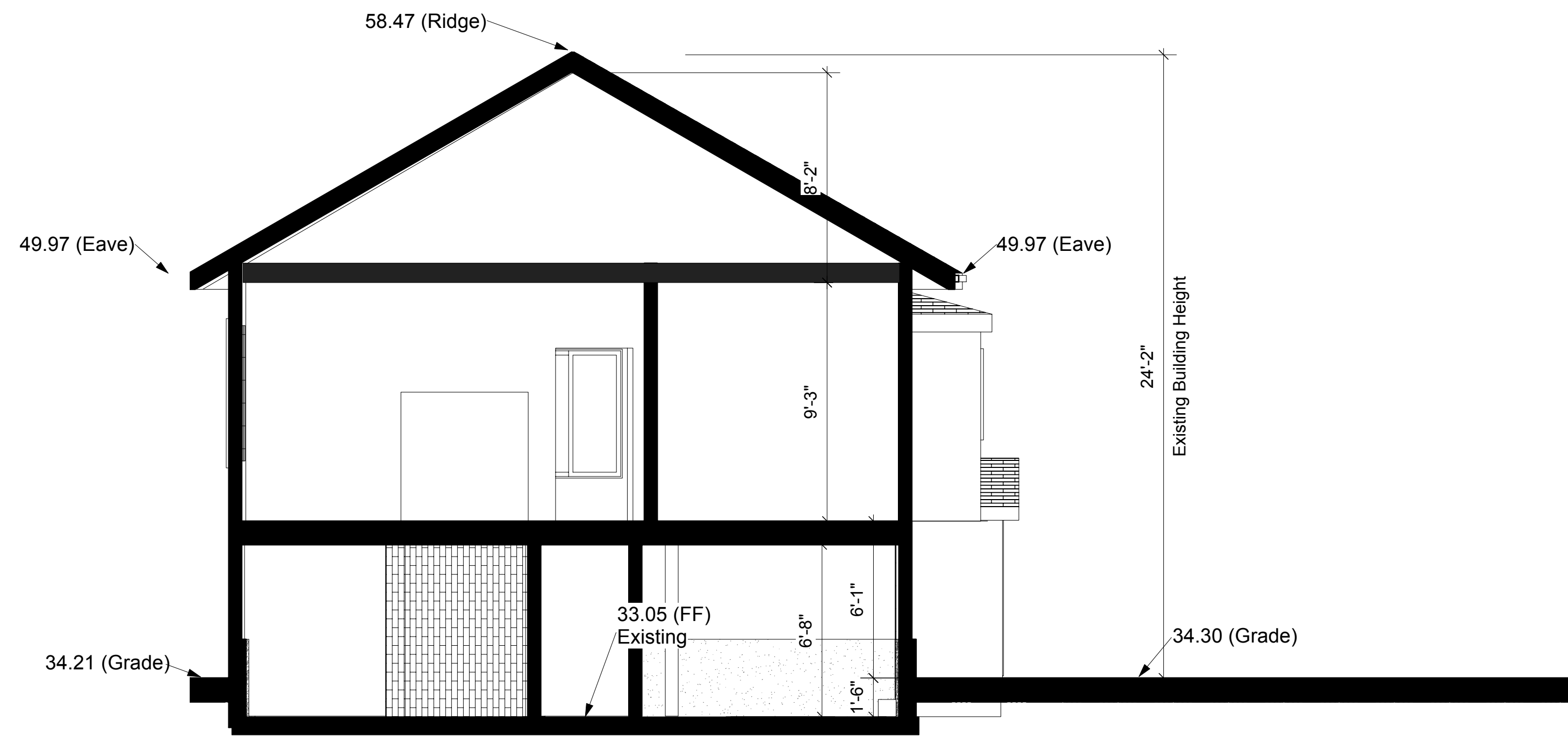


Architect **Stephen Antonaros**
(415) 864-2261
santonaros@gmail.com
Point Reyes Station
California 94956

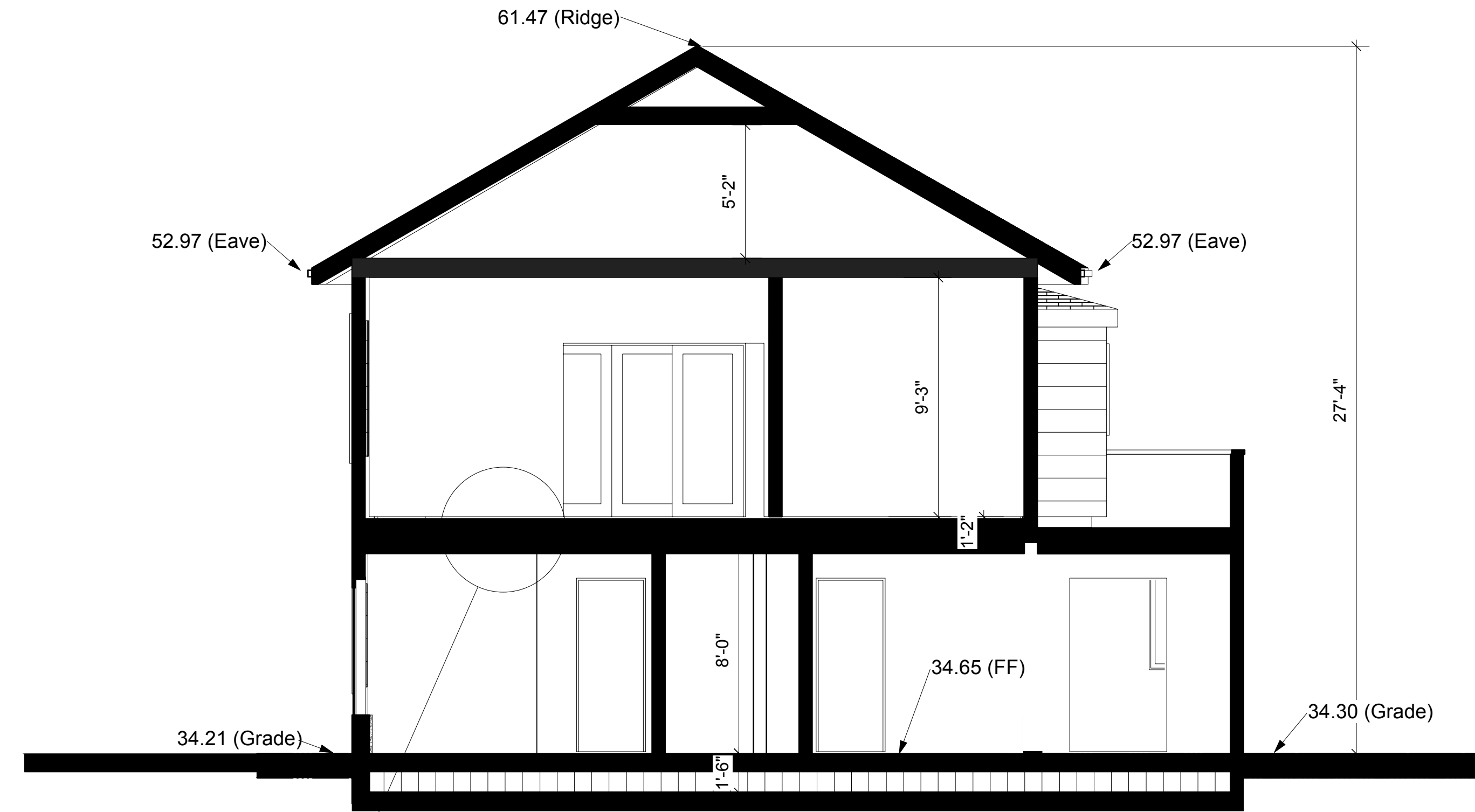
| NO. | DATE | ISSUE NOTE |
|------|---------|---------------|
| A | 6/27/24 | Revise to SFD |
| REV. | DATE | DESCRIPTION |

| | |
|-----------------|-------------|
| Project Manager | Drawn By |
| Date | Reviewed By |
| Project ID | LFT35 |

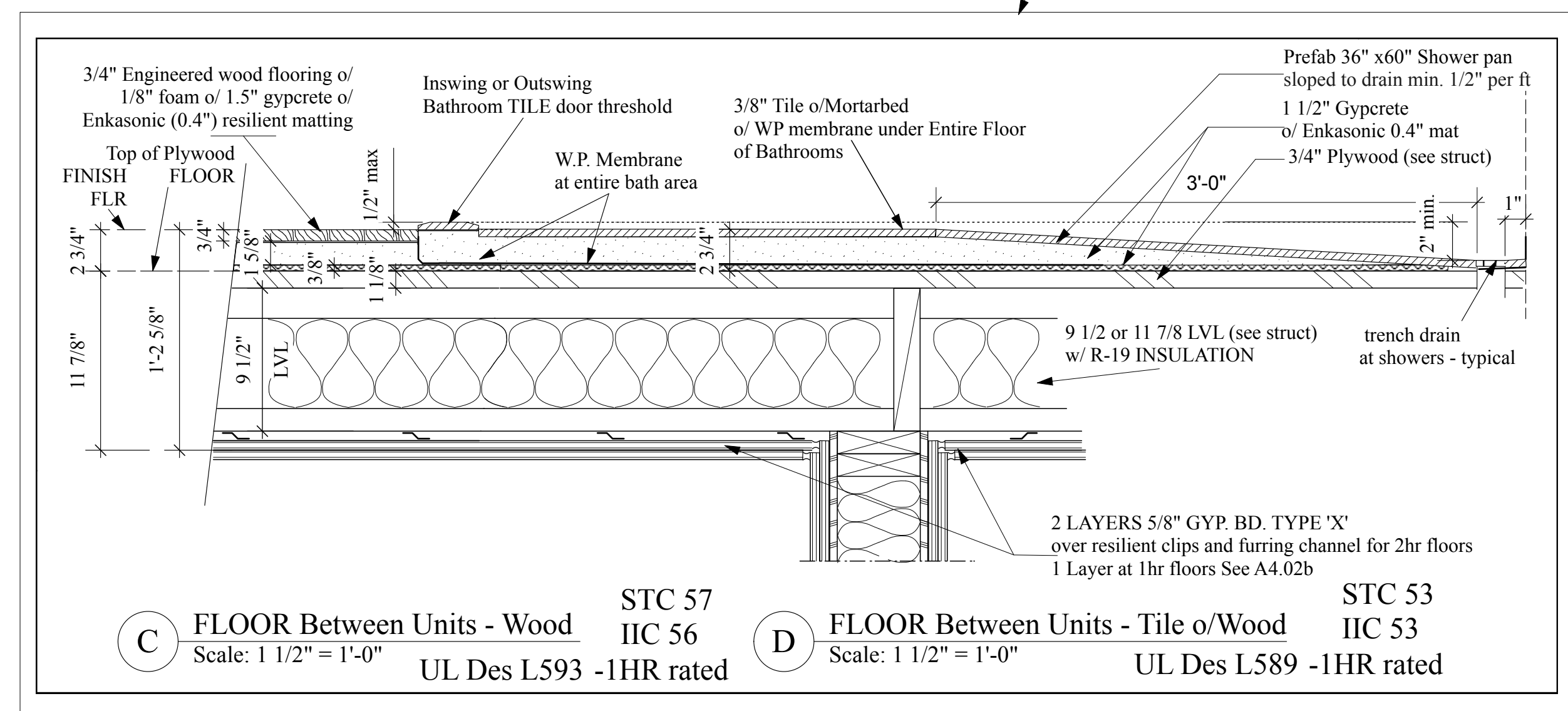
New Building Floor plans



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



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

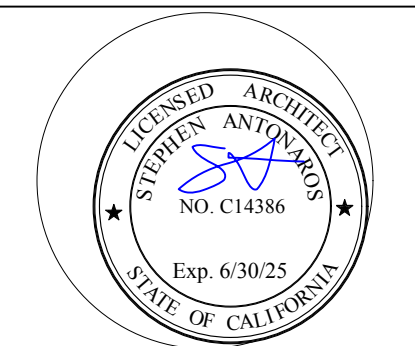


C FLOOR Between Units - Wood STC 57 IIC 56 UL Des L593 -1HR rated
Scale: 1 1/2" = 1'-0"

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

Alterations & Additions
to existing single family dwelling

60 3rd Street, Point Reyes Station, CA 94956



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

Consultant

| REV | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |

| NO. | DATE | ISSUE NOTE |
|-----|------|------------|
| | | |

| | |
|----------------------|-------------|
| Project Manager | Drawn By |
| Date March 2024 | Reviewed By |
| Project ID LFT.35 | |

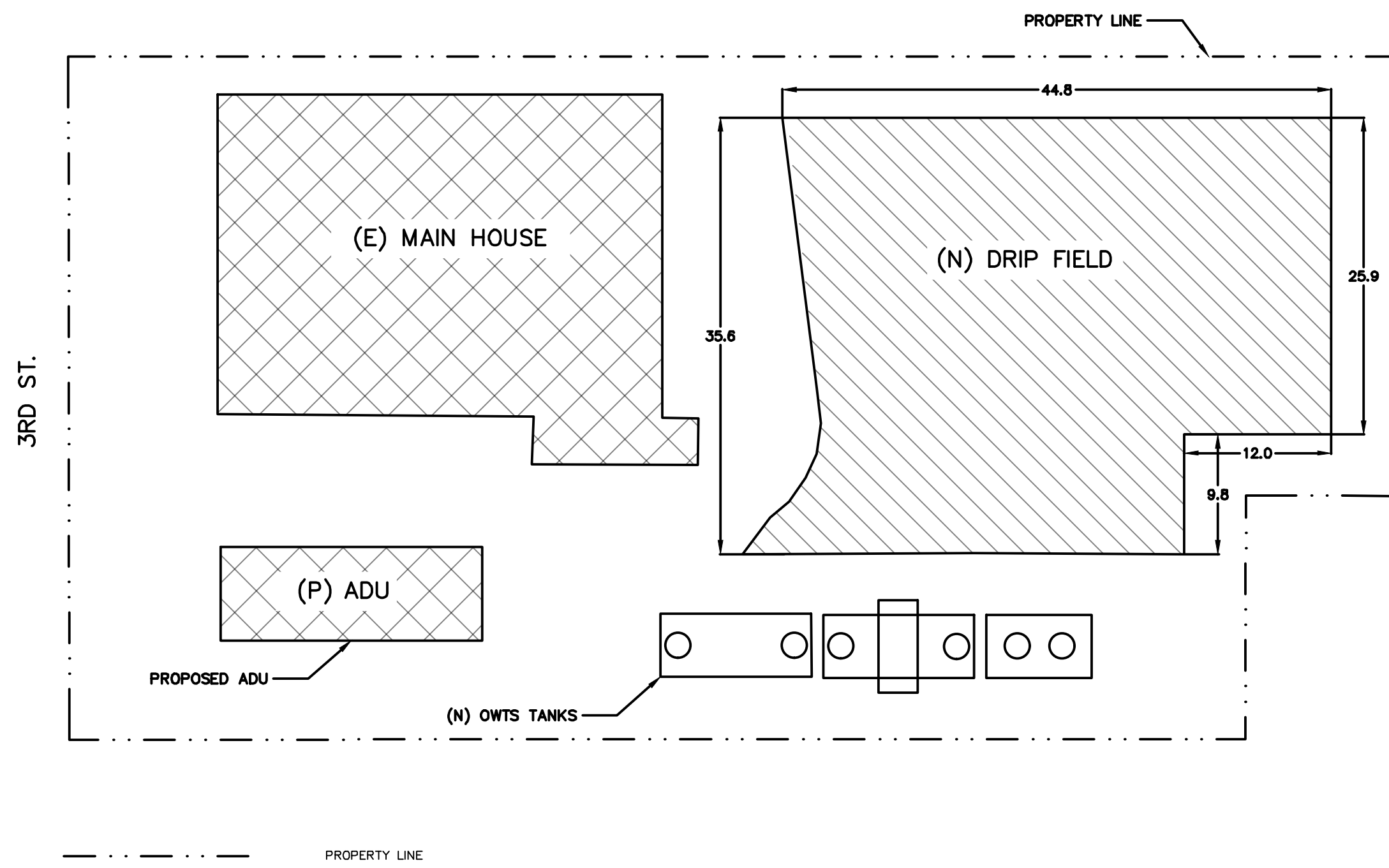
Sheet Title
Existing & New
Sections

Sheet No.
A1.2

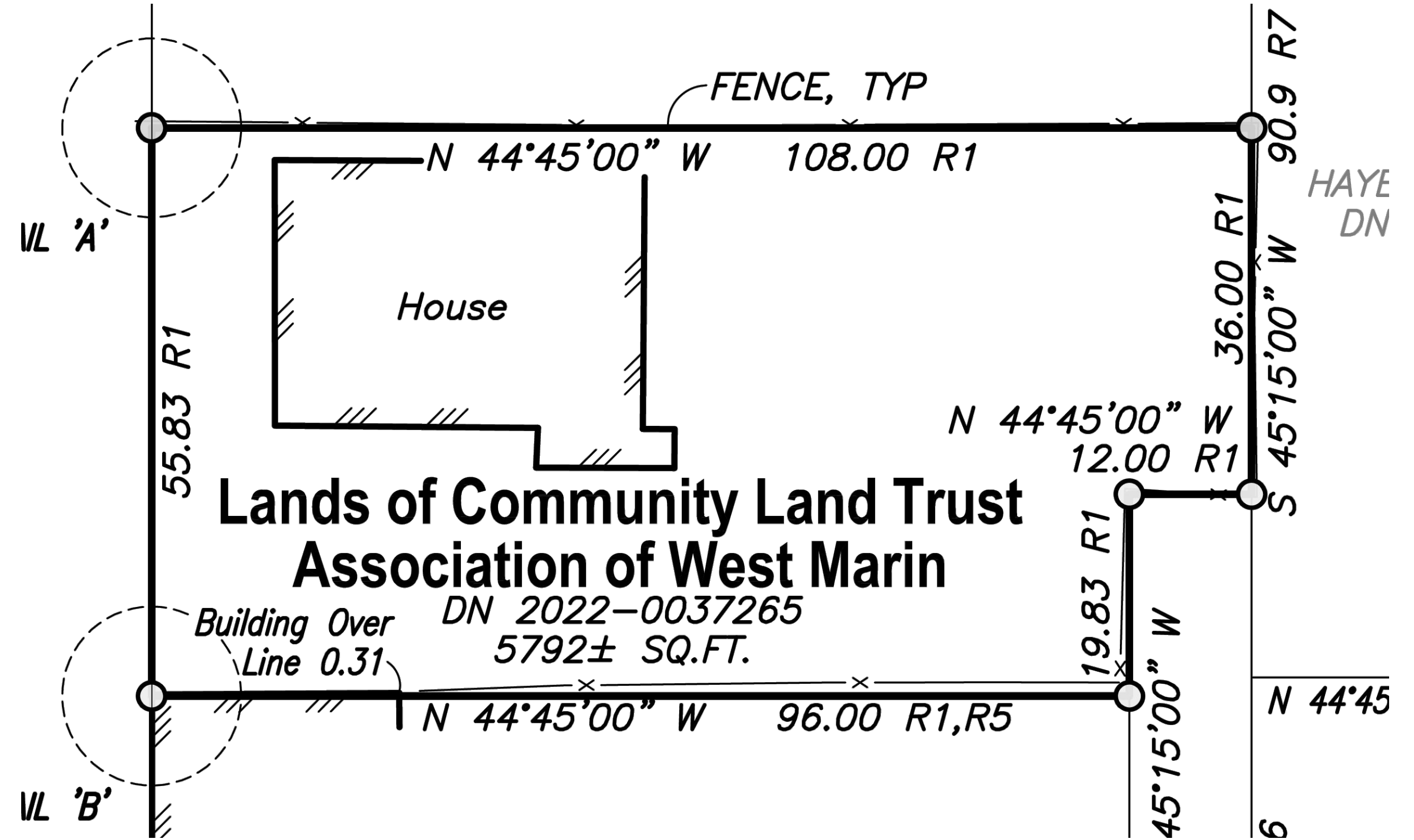
NOTFORCONSTRUCTION - 9/10/2019

ONSITE WASTEWATER TREATMENT SYSTEM DESIGN

60 3RD ST, POINT REYES STATION, CA 94956



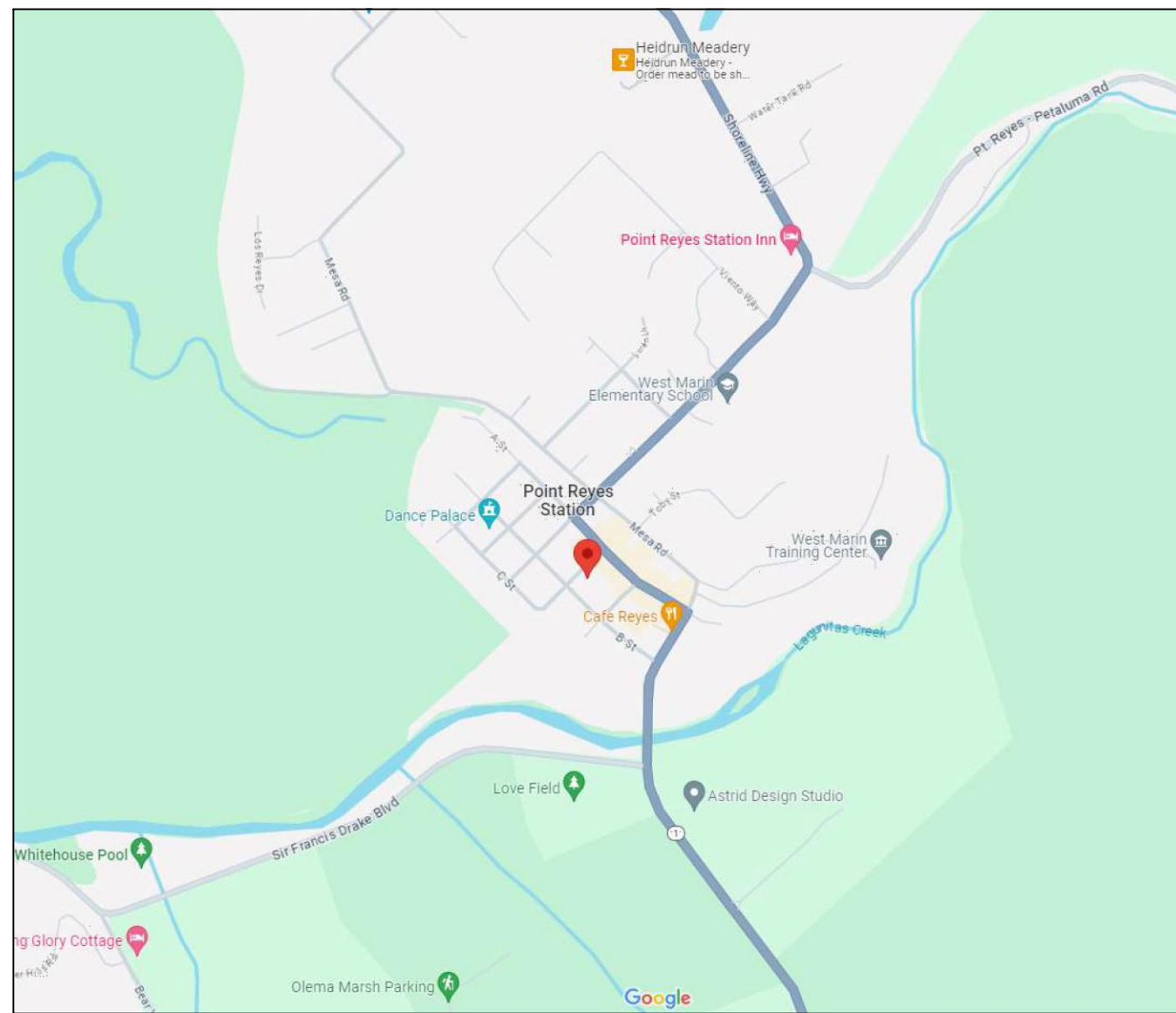
SITE OVERVIEW MAP
SCALE: 1"=10'



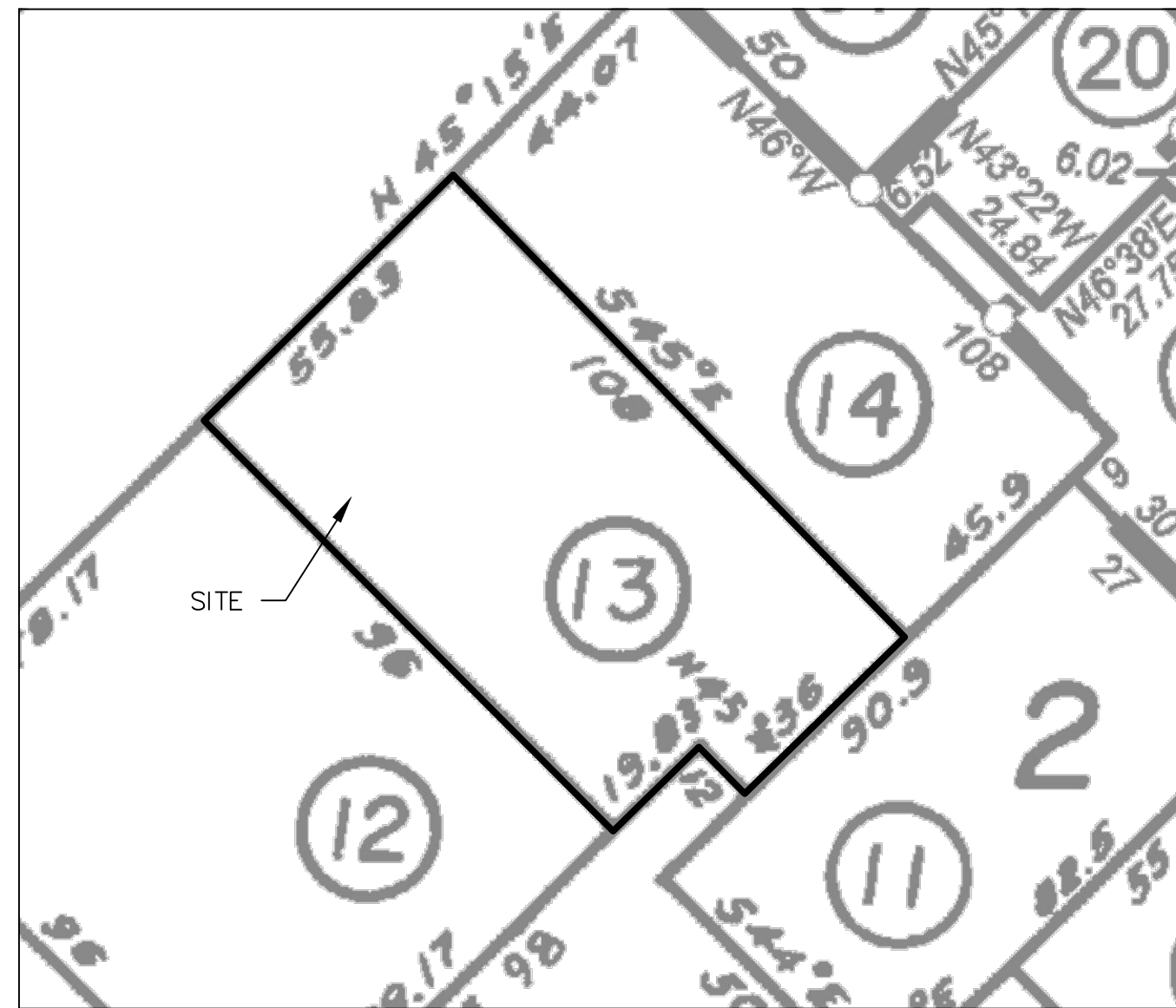
Lands of Community Land Trust
Association of West Marin

Building Over DN 2022-0037265
Line 0.31 5792± SQ.FT.

PARTIAL TOPO
SCALE: 1"=10'



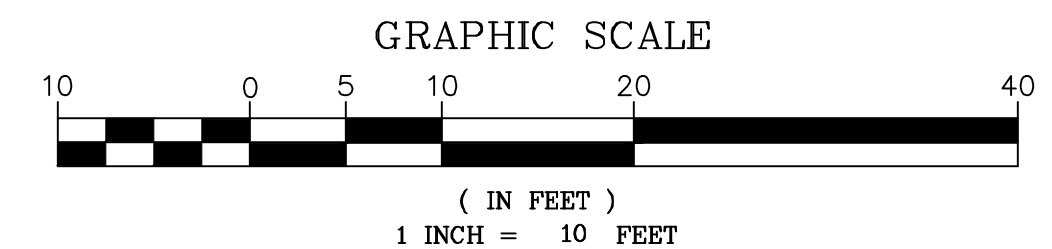
PARCEL LOCATION
SCALE: NA



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 |



ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL USA AT (800-227-2600) 48 HOURS BEFORE DIGGING AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 45161 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



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CIVIL & GEOTECHNICAL CONSULTANTS

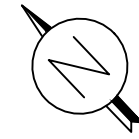
454 LAS GALLINAS AVE. SUITE 1047.
SAN RAFAEL, CA 94903
PH: 415-868-5532
FAX: 415-472-0603
ADMIN@AGNEVCIVIL.COM

COVER SHEET

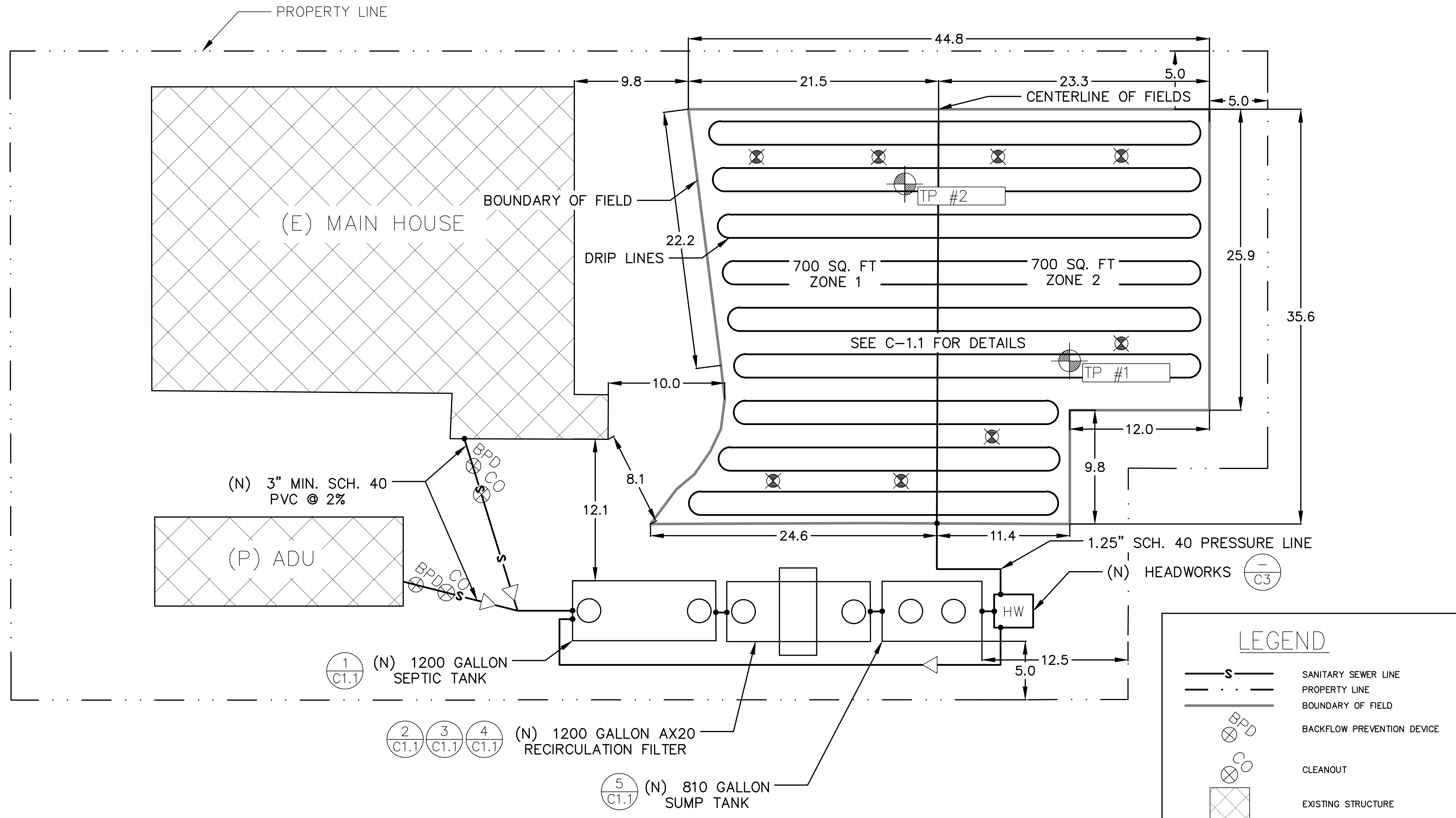
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

C-0



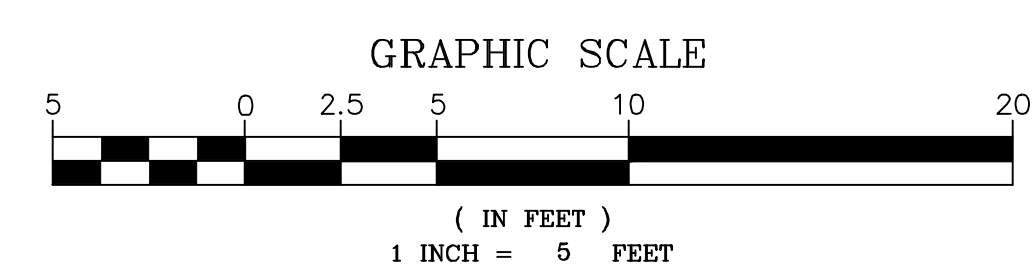
3RD ST.



OWTS SITE PLAN
SCALE: 1"=5'

LEGEND

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



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 42161 OF THE GOVERNMENT CODE).

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| REV. | DATE | BY |
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| 0 | 12/13/23 | INITIAL RELEASE |

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| REV. | DATE | DESC. |
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ISSUES

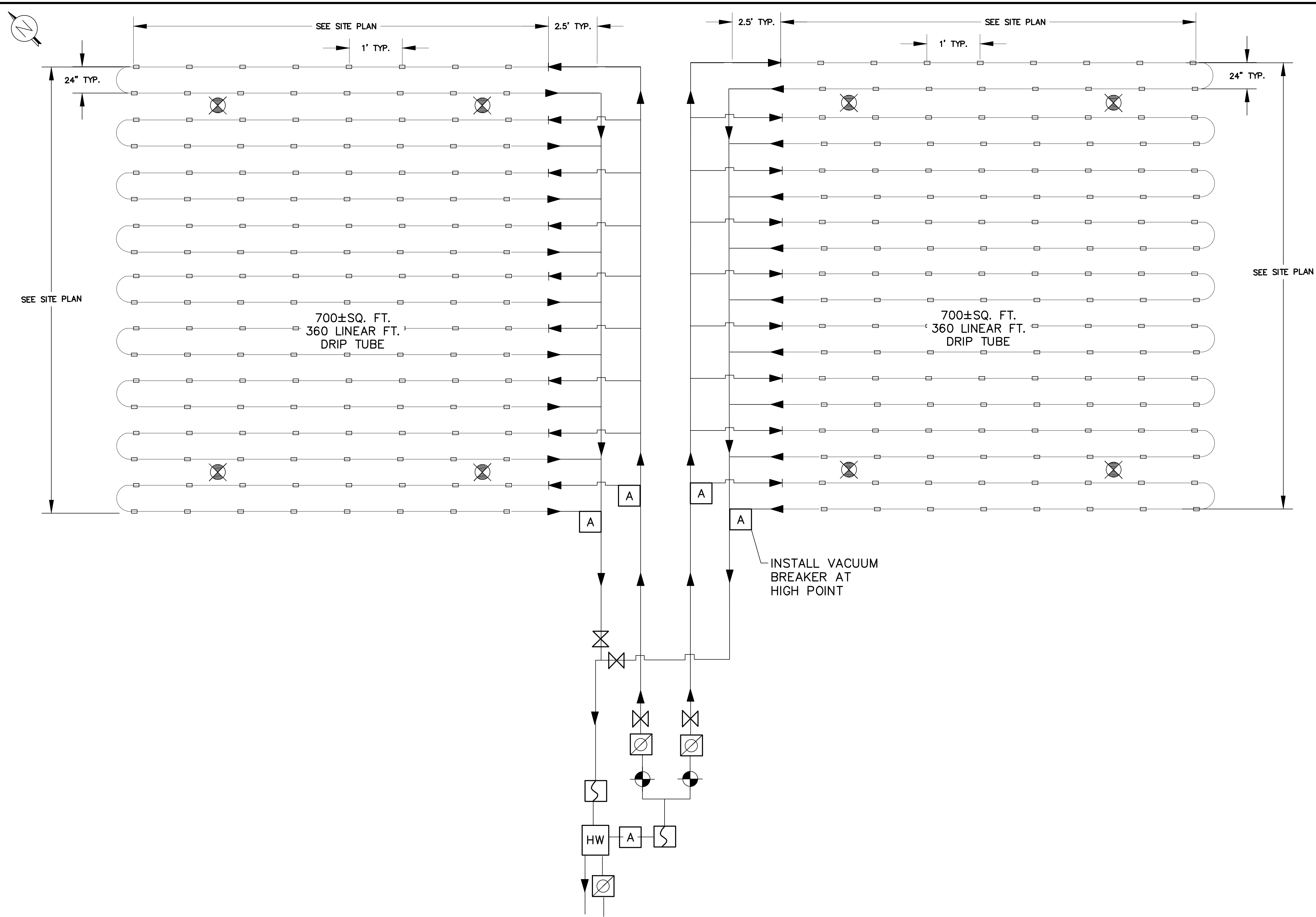


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OWTS SITE PLAN
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

C-1



DRIP FIELD SCHEMATIC
SCALE: N/A

LEGEND

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

| | | |
|------|------|----|
| REV. | DATE | BY |
| | | |

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PH: 415-868-5532
FAX: 415-472-0603
ADMIN@AGNEWCVIL.COM

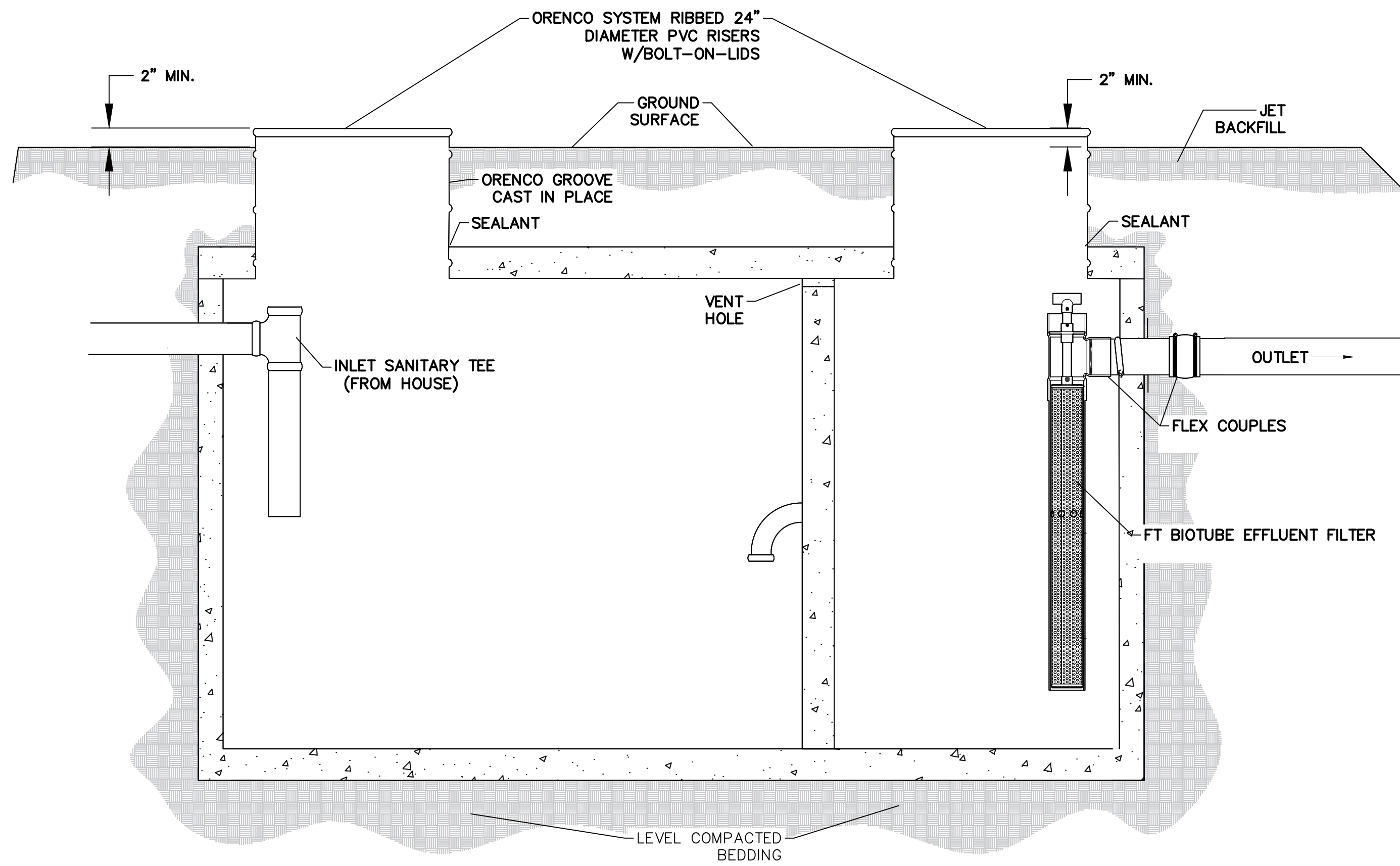
DRIP FIELD SCHEMATIC
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

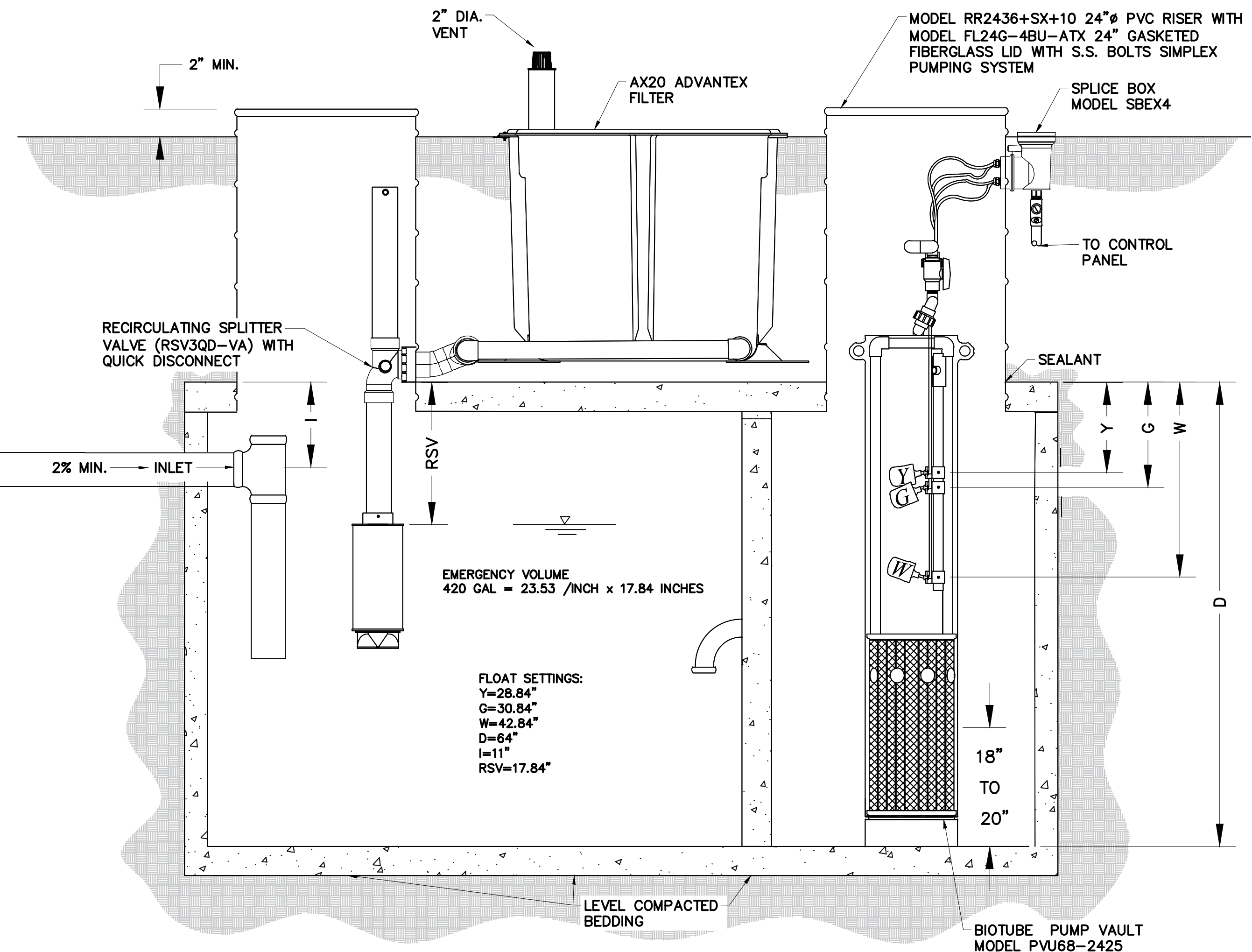
C-1.1

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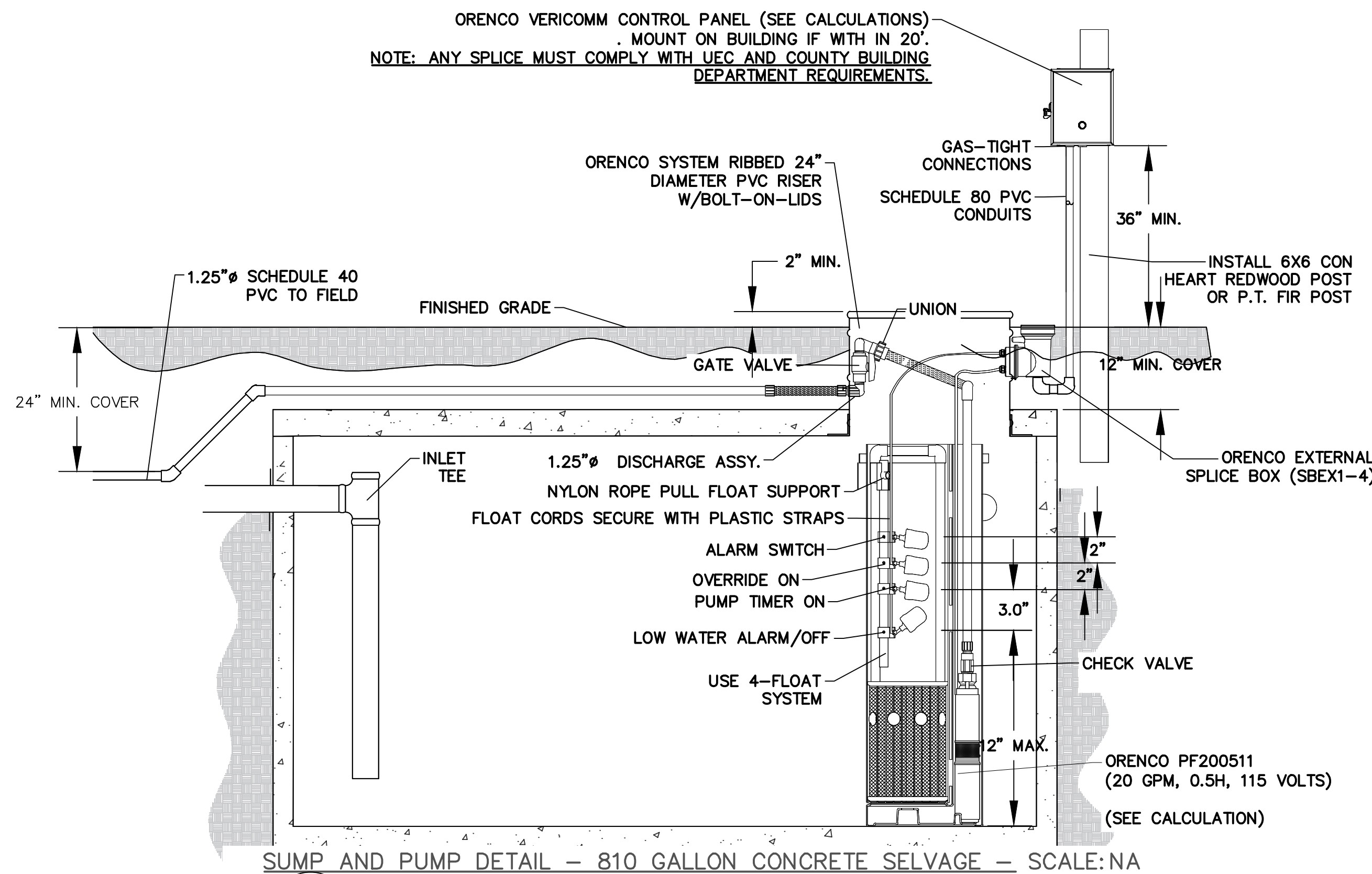


1
 (N) SEPTIC TANK DETAIL
 1200 GALLON CONCRETE SELVAGE
 SCALE: N/A



2
 (N) ADVANTEX/TANK 1200 GALLON CONCRETE SELVAGE
 SIDE VIEW
 SCALE: NA

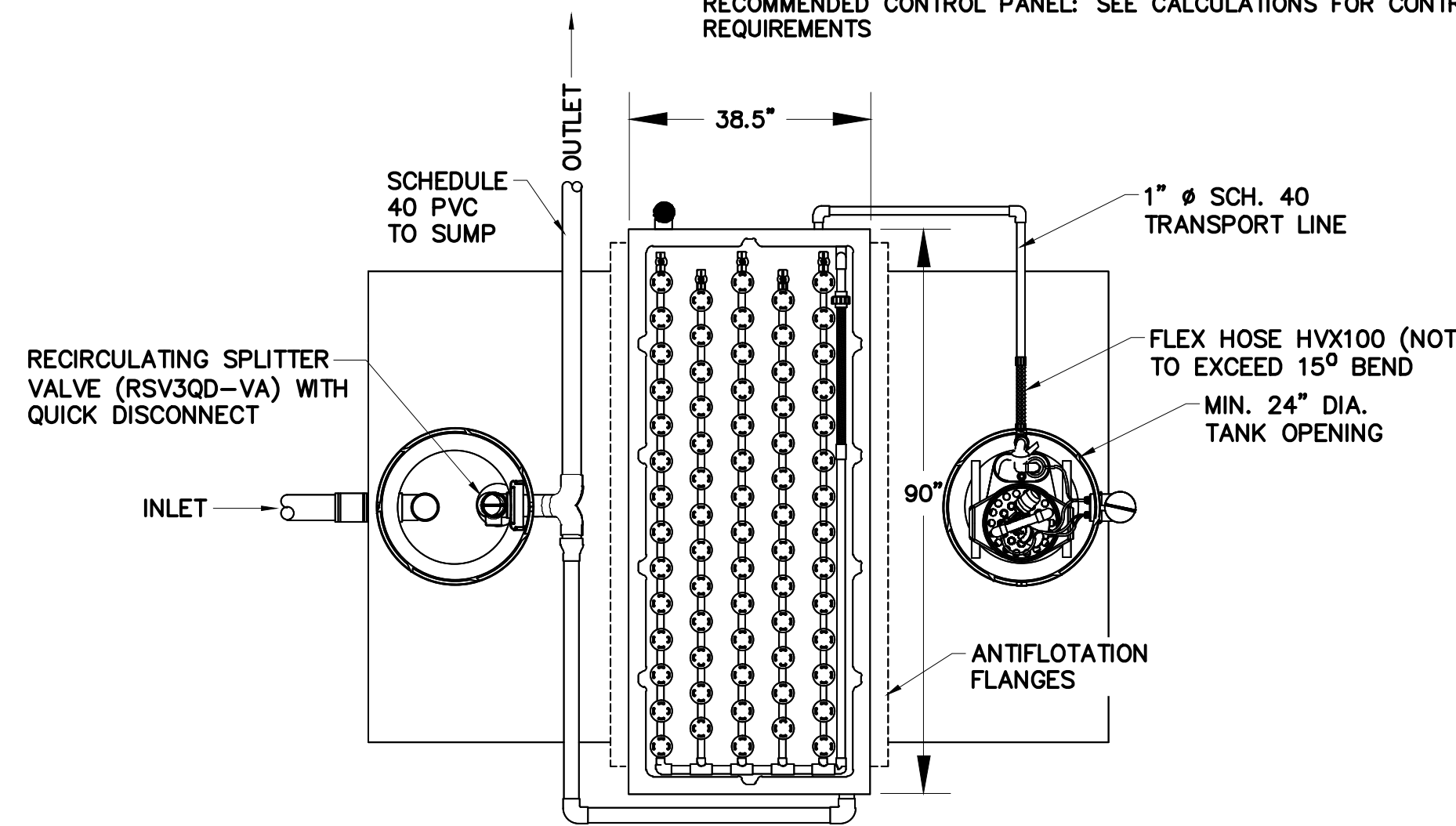
ORENCO VERICOMM CONTROL PANEL (SEE CALCULATIONS)
 MOUNT ON BUILDING IF WITH IN 20'
 NOTE: ANY SPLICE MUST COMPLY WITH UEC AND COUNTY BUILDING DEPARTMENT REQUIREMENTS.



3
 (N) ADVANTEX/TANK 1200 GALLON CONCRETE SELVAGE
 TOP VIEW
 SCALE: NA

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



4
 (N) ADVANTEX/TANK 1,200 GALLON CONCRETE SELVAGE
 END VIEW
 SCALE: NA

| REV. | DATE | BY |
|------|----------|-----------------|
| 0 | 12/13/23 | INITIAL RELEASE |

| REV. | DATE | DESC. |
|------|------|-------|
|------|------|-------|

ISSUES



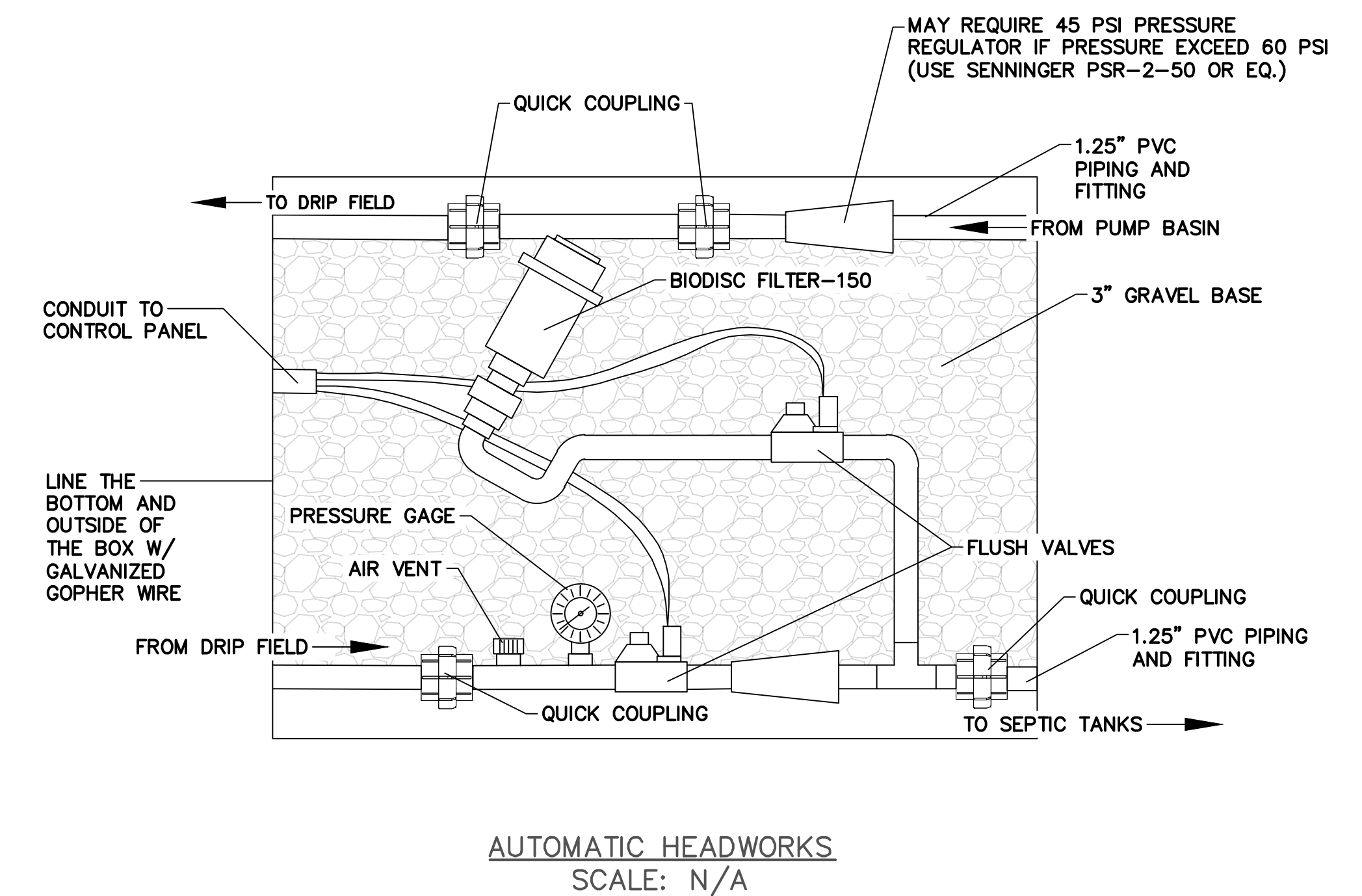
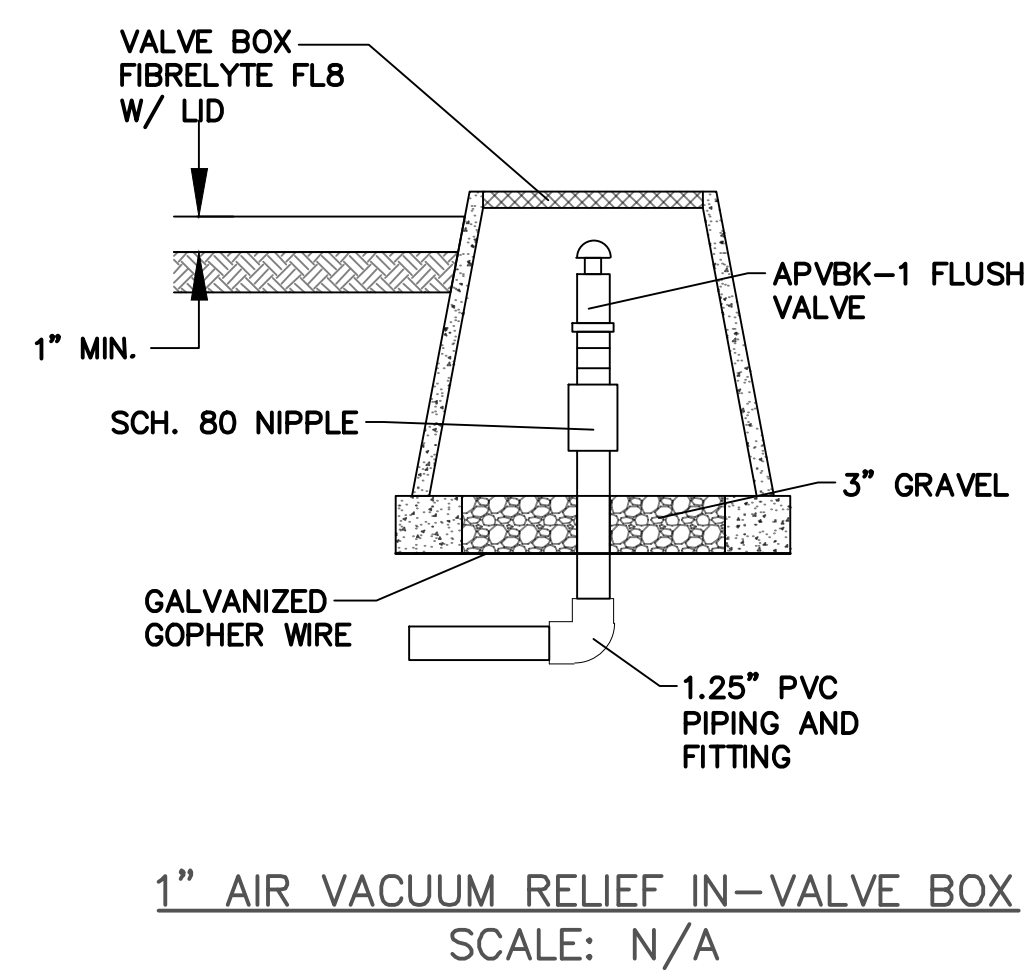
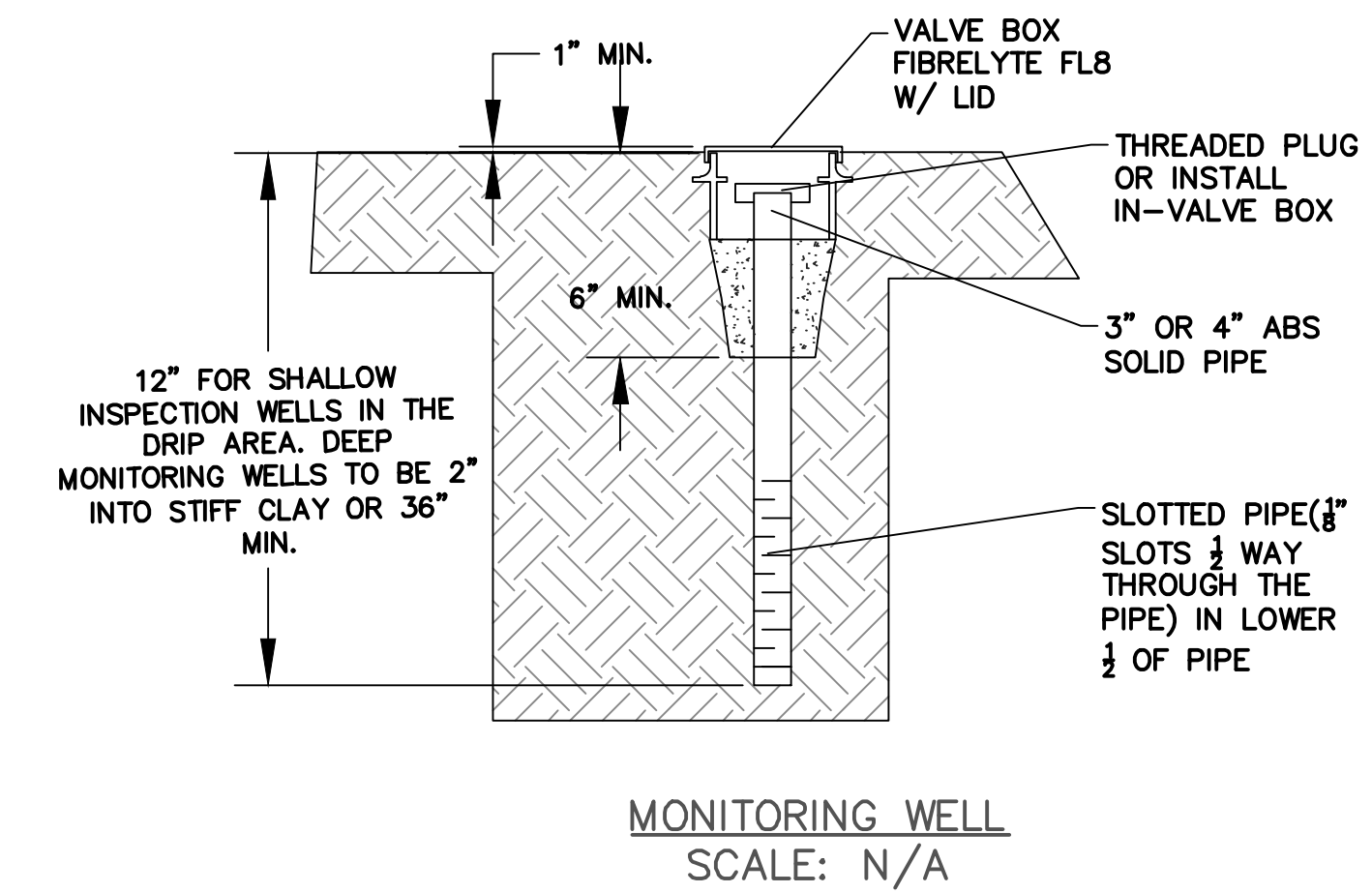
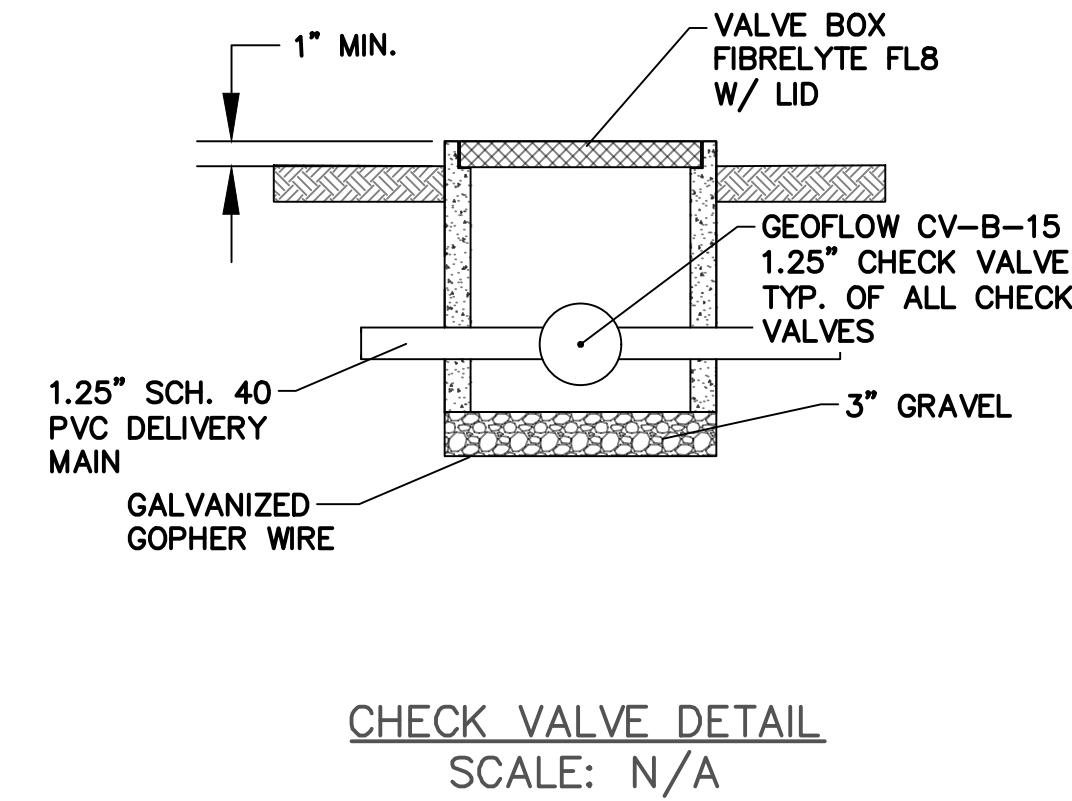
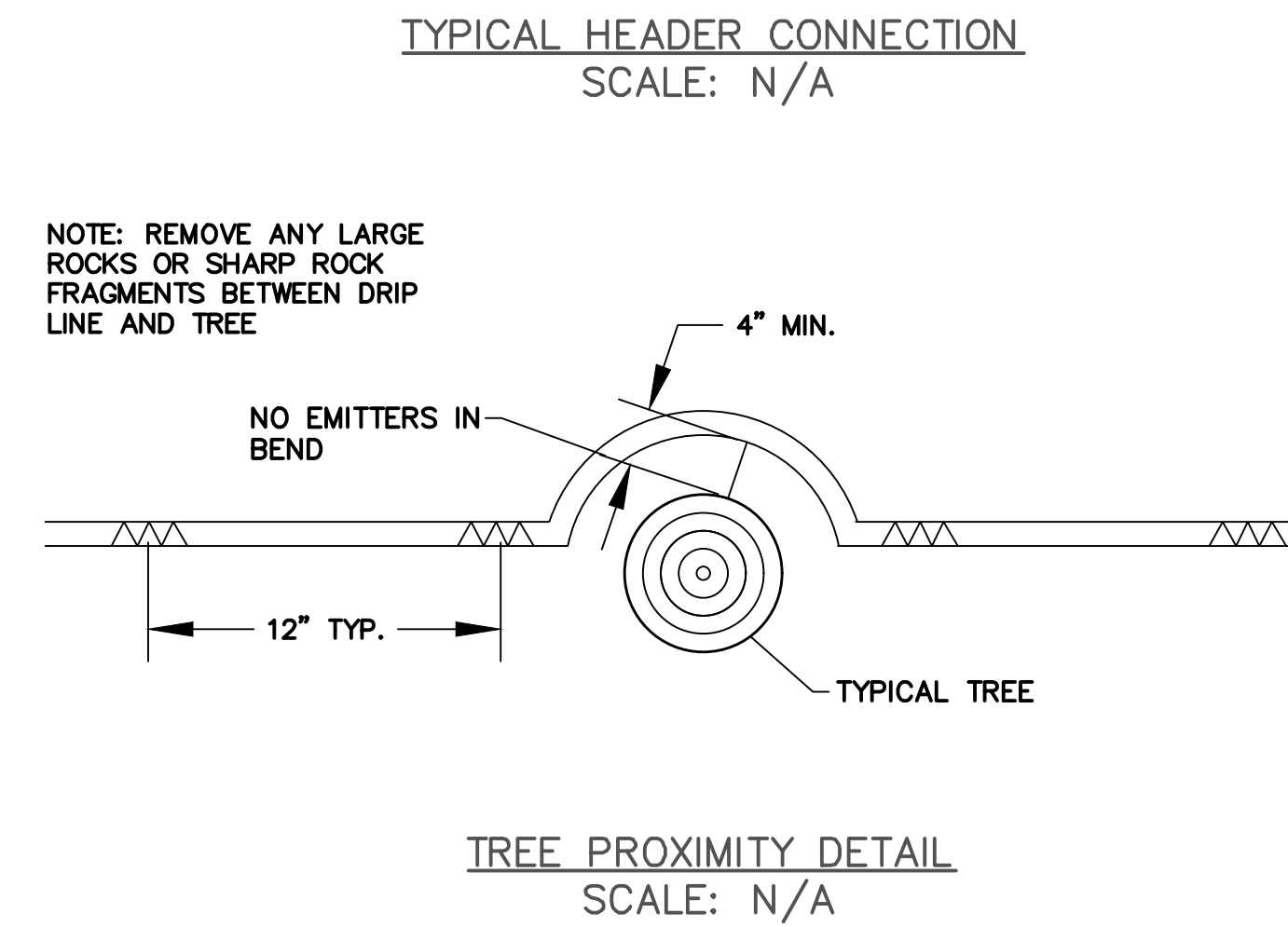
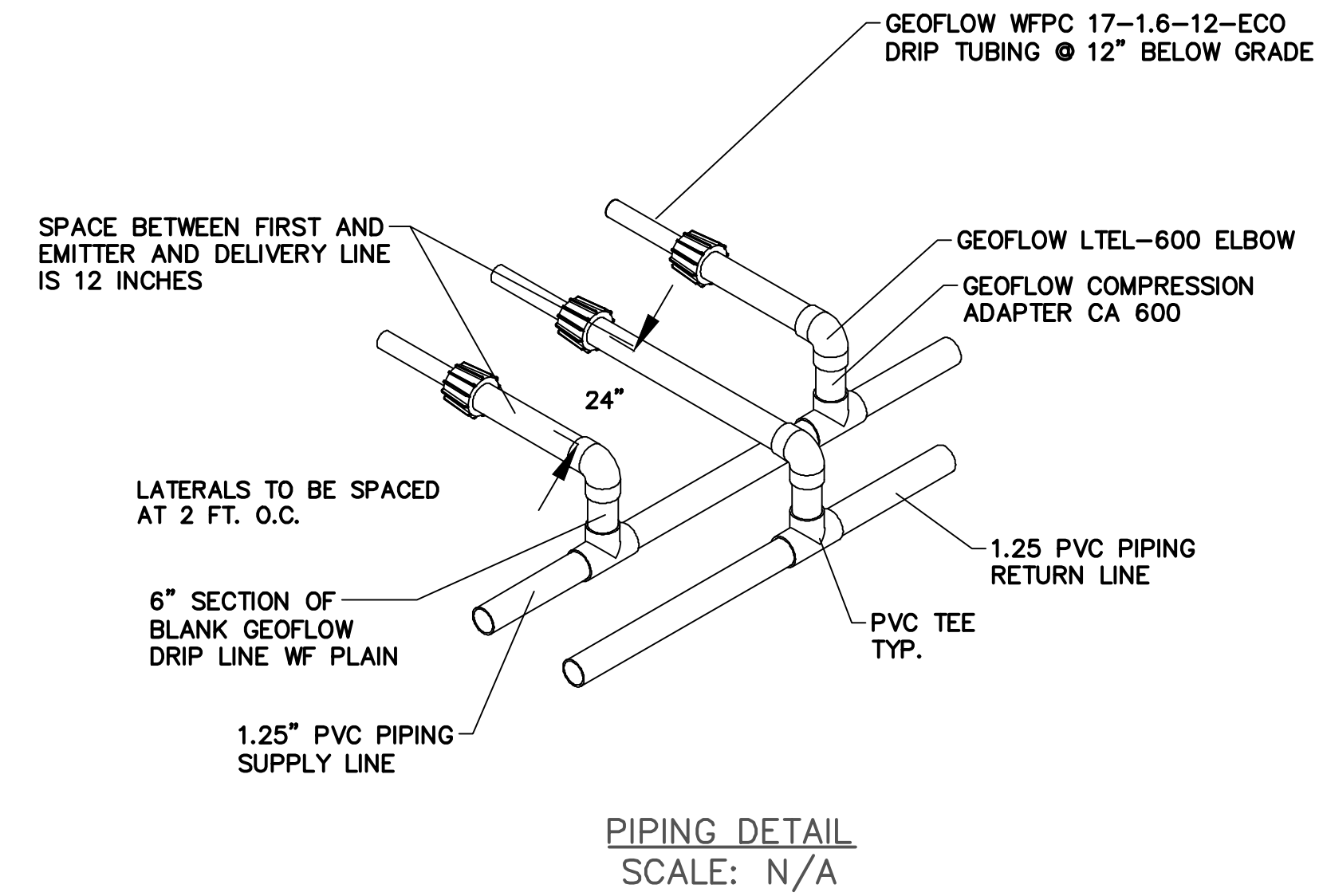
AC ENGINEERING INC.
 CIVIL & GEOTECHNICAL CONSULTANTS
 454 LAS GALLINAS AVE. SUITE 1047.
 SAN RAFAEL, CA 94903
 PH: 415-868-5532
 FAX: 415-472-0603
 ADMIN@AGNEVCIVIL.COM

TANK & PRE-TREATMENT DETAILS

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

276-1

C-2



| | | |
|------|------|----|
| REV. | DATE | BY |
|------|------|----|

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



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@AGNEVCIVIL.COM

ASSORTED DETAILS

CLAM

60 3rd St, Point Reyes Station, CA 94956

119-226-13

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 SBOWD 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 SBOWD 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, DISING, 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 TAKEOUT 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 SBOWD 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 FOLLOWING 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 SBOWD SERVICES SHALL STATE THAT ALL CONSTRUCTION HAS BEEN COMPLETED, APPROVED, AND IS IN CONFORMANCE WITH ALL SPECIFICATIONS.

NOTE: SBOWD 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 SEEDDED 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 SEEDDED WITH A BLEND OF ANNUAL GRASSES AND CLOVERS. ALL SEEDDED 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 PUMP 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 BDX 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 DR 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 DR PYREX SAFETY SHIELD INSIDE THE CONTROL BDX. THE CONTROL BDX 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 AUDI/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 DRP 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 ODOORS.

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 & SOLID 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 COLOURFORM, NITRATE, BIOCHEMICAL OXYGEN DEMAND (BOD), AND SUSPENDED SOLIDS.

- 4. INSPECTION AND OBSERVATION OF PUMP OPERATION OR OTHER MECHANICAL EQUIPMENT; AND,
5. GENERAL INSPELION 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 SBOWD 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.: TOY 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 SCRAPPED 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.

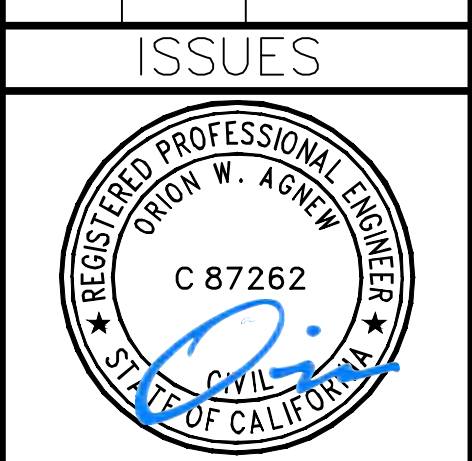
FOLLOW-UP ON UNUSUAL OBSERVATIONS OR OCCURRENCES TO FIND OUT THE CAUSE AND A PROPER SOLUTION.

Table with 3 columns: REV., DATE, BY. Contains empty rows for recording revisions.

REVISIONS

Table with 3 columns: REV., DATE, DESC. Contains one row with values: 0, 12/13/23, INITIAL RELEASE.

ISSUES



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@AGNEVCIVIL.COM

OWTS NOTES
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

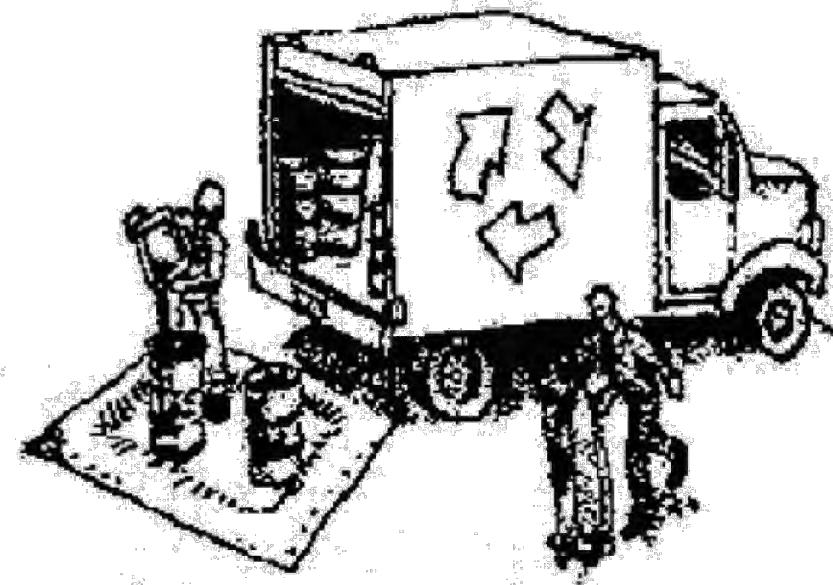
276-1

C-4

Construction Best Management Practices (BMPs)

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

Materials & Waste Management



Non-Hazardous Materials

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

Hazardous Materials

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

Waste Management

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

Construction Entrances and Perimeter

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

Equipment Management & Spill Control



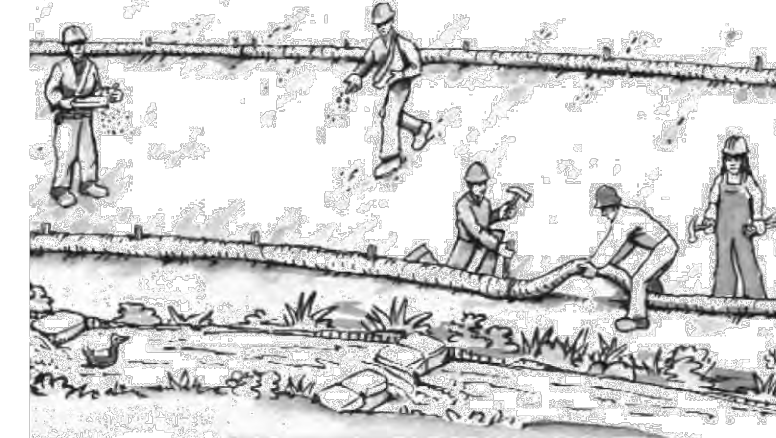
Maintenance and Parking

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

Spill Prevention and Control

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

Earthmoving



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

Contaminated Soils

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

Paving/Asphalt Work



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

Sawcutting & Asphalt/Concrete Removal

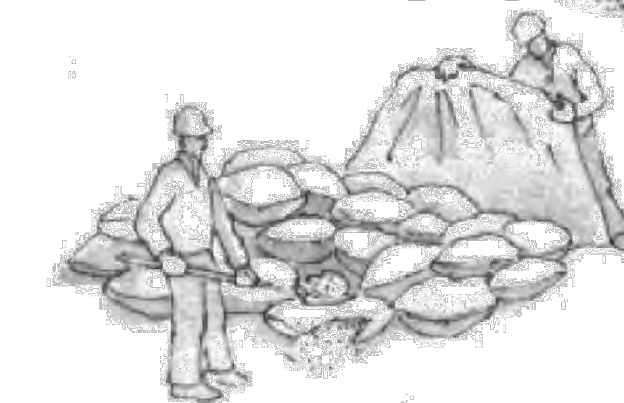
- Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day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

Concrete, Grout & Mortar Application



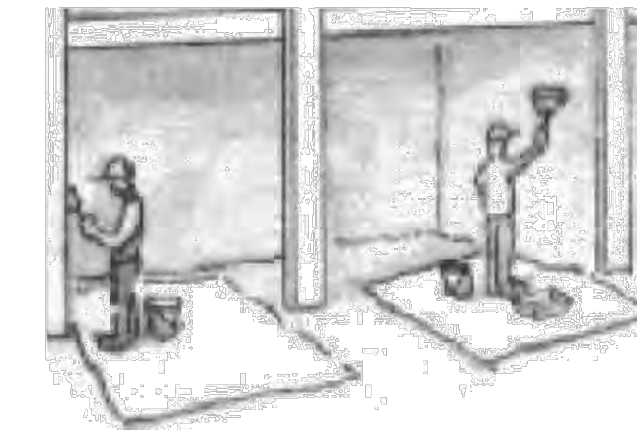
- Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will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

Landscaping



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

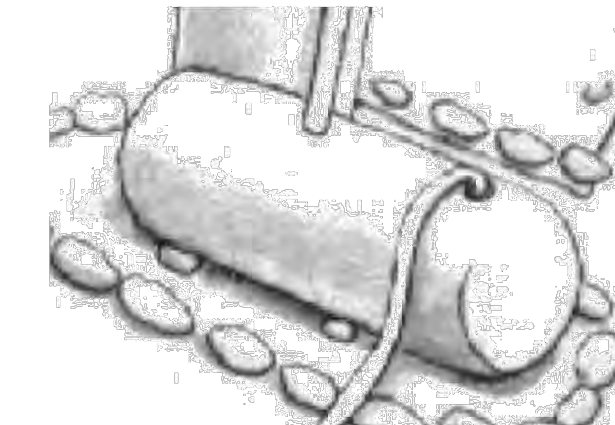
Painting & Paint Removal



Painting Cleanup and Removal

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



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

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

REV. DATE BY

REVISIONS

0 12/13/23 INITIAL RELEASE

REV. DATE DESC.

ISSUES



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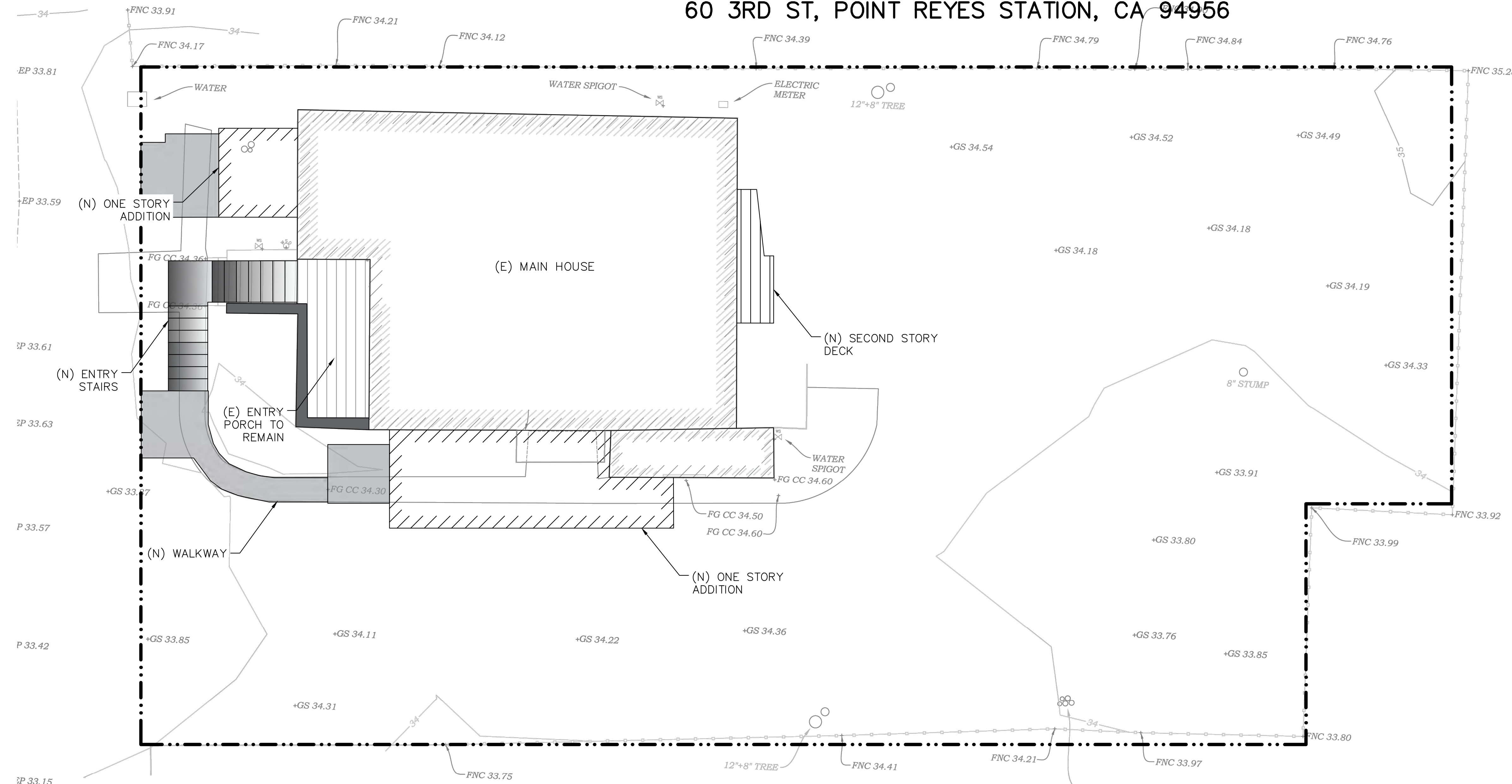
CONSTRUCTION BEST
MANAGEMENT PRACTICES
CLAM
60 3rd St, Point Reyes Station, CA 94956
119-226-13

276-1

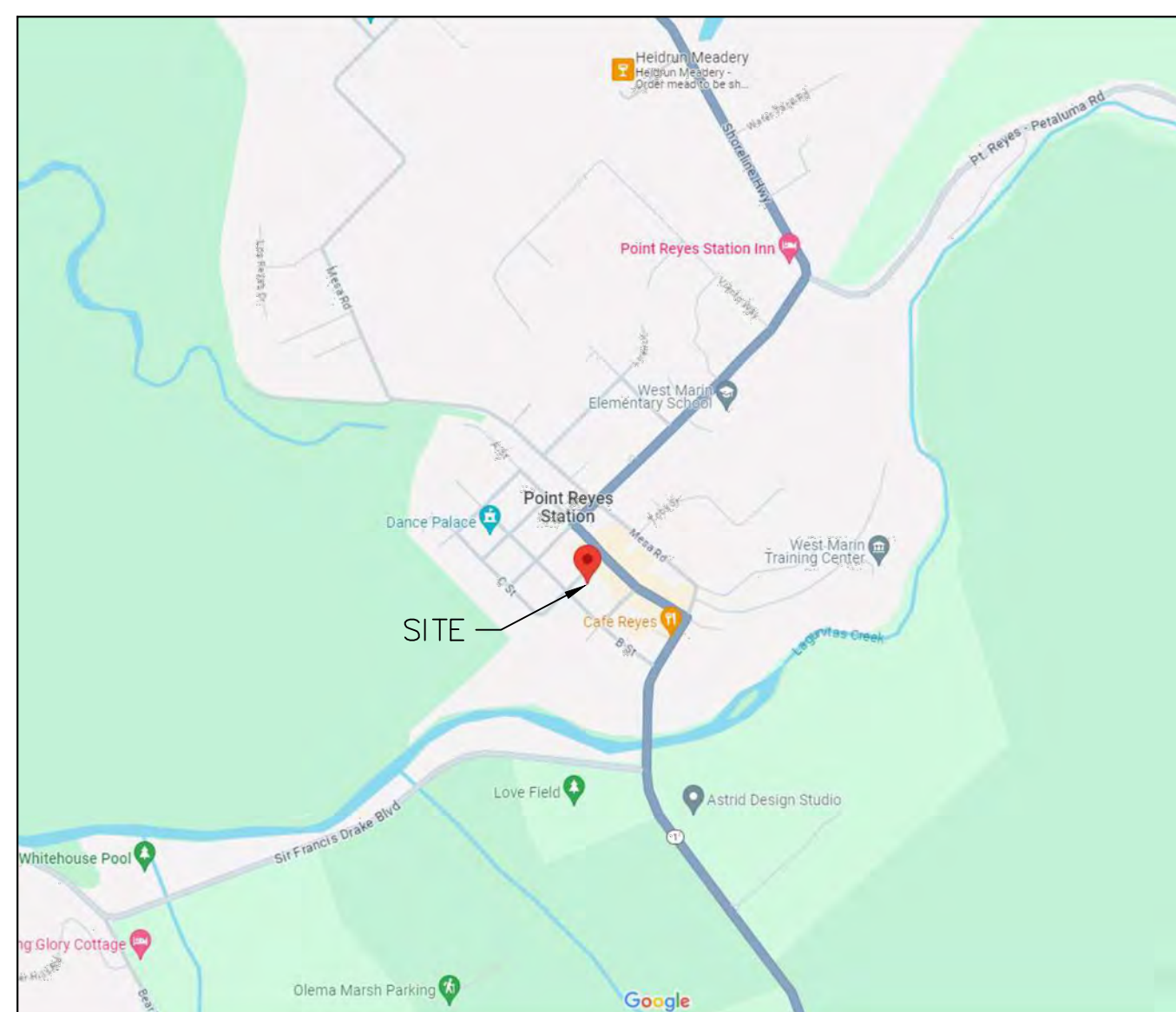
C-5

CIVIL DESIGN

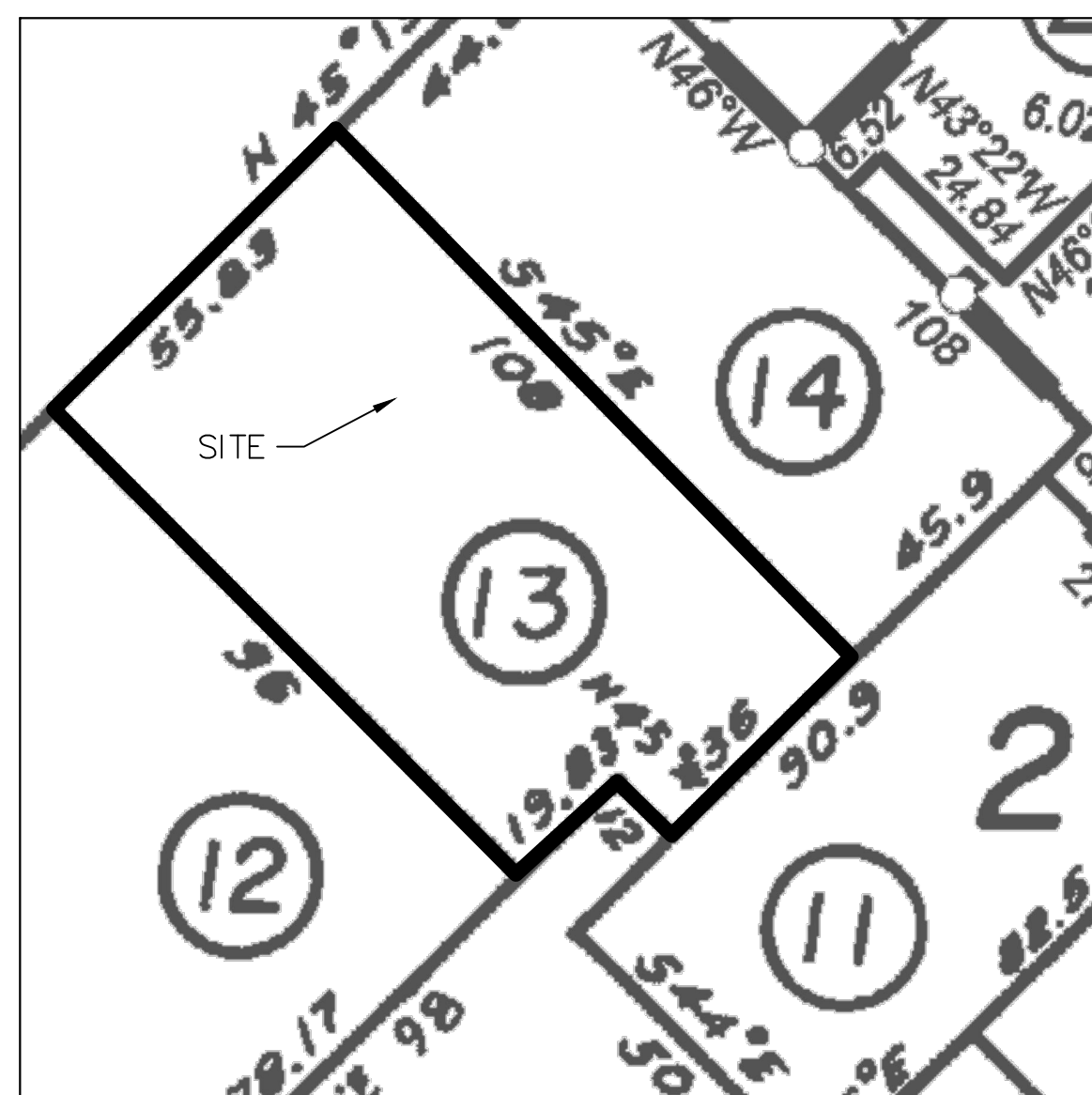
60 3RD ST, POINT REYES STATION, CA 94956



SITE OVERVIEW PLAN
SCALE: 1" = 5'



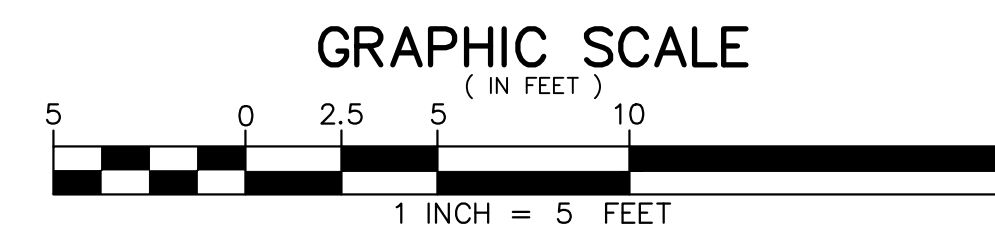
PARCEL LOCATION MAP
N.T.S.



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. DEMOLITION 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 |
| | | |



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. UT (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 | | |
|--------|---------|-------------|
| NO. | DATE | DESCRIPTION |
| 0 | 6/17/24 | PLANNING |

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

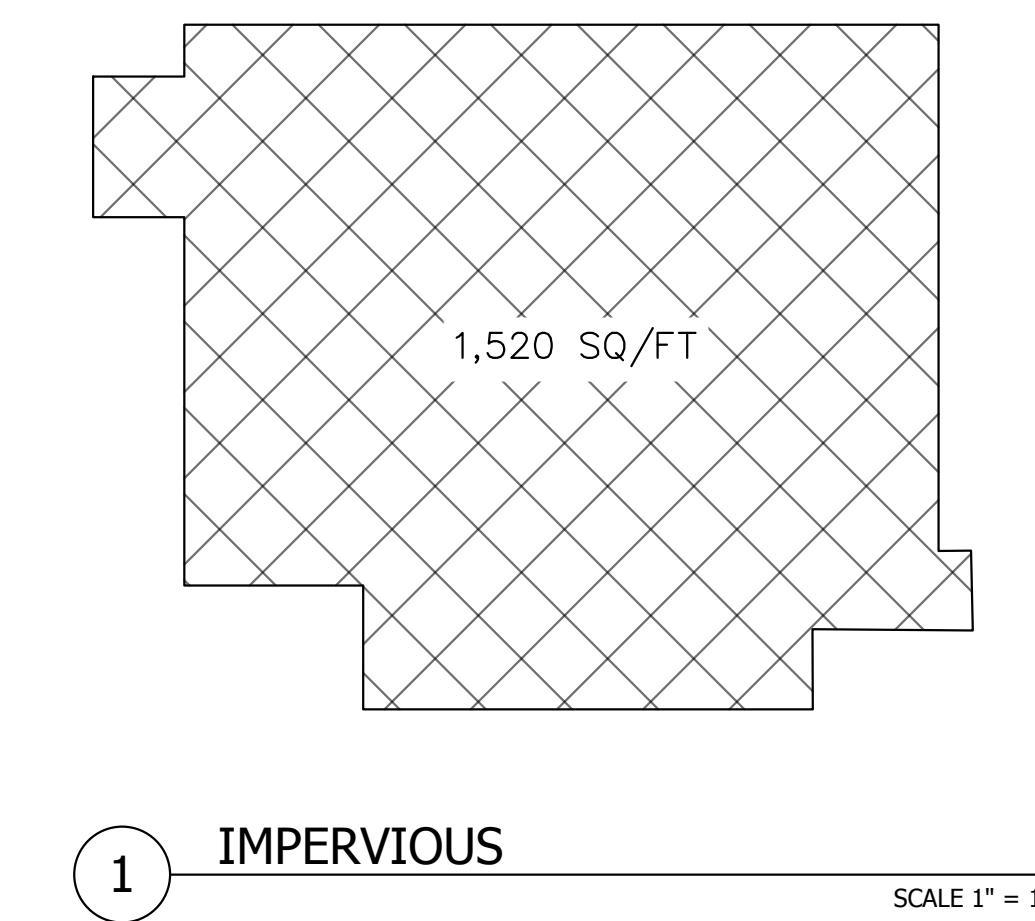
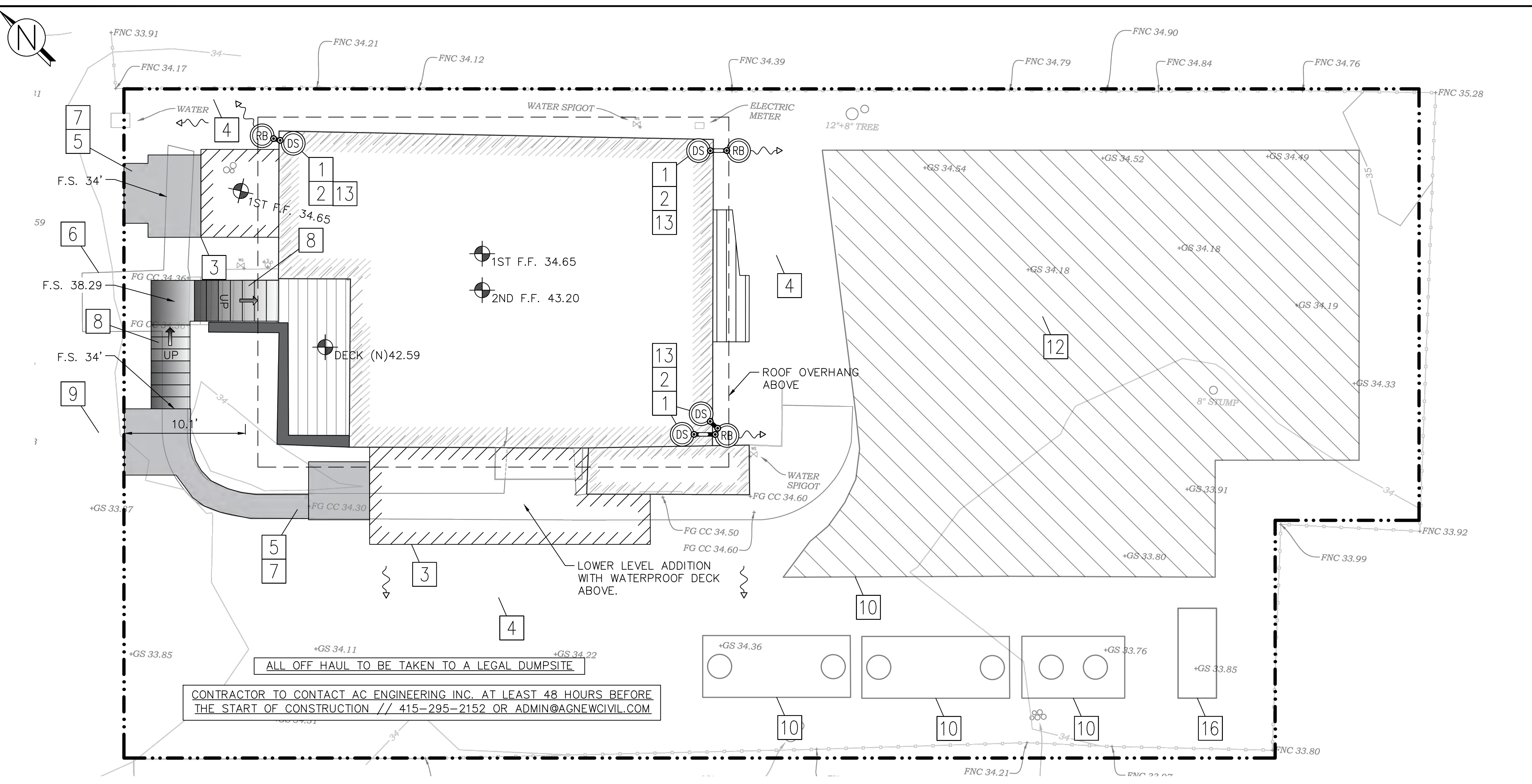


SITE OVERVIEW PLAN
CLAM
60 3RD ST, POINT REYES STATION, CA 94956
APN: 119-226-13

270-1

C-1.0

SHEET SIZE: Arch. D (18" x 24")



ALL OFF HAUL TO BE TAKEN TO A LEGAL DUMPSITE.

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

1 GRADING AND DRAINAGE PLAN
SCALE 1" = 5'

GRADING AND DRAINAGE NOTES

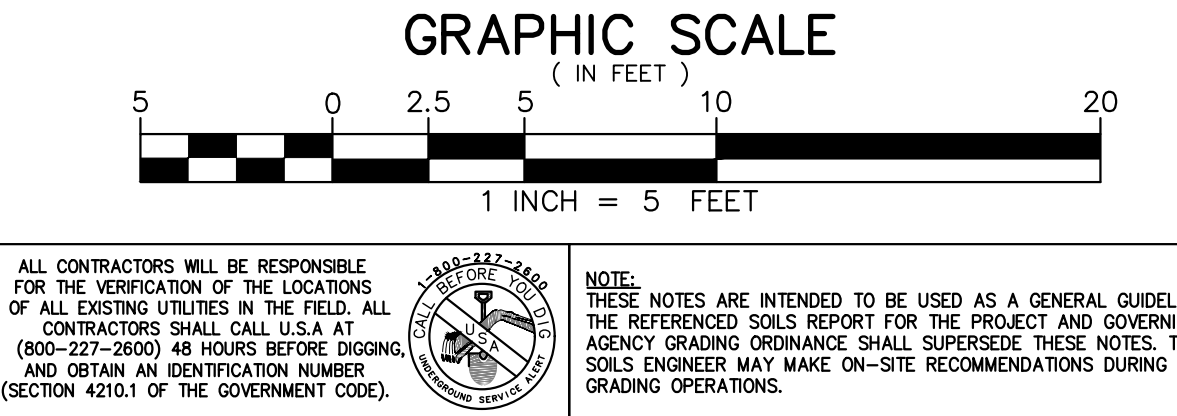
- 1-2.1 1 CONNECT DOWNSPOUT TO (N) RAIN BARREL. CARYCOMPANY #56 WRBA 55 GALLON RAIN BARREL W. SPIGOT AND OVERFLOW OR EQ. INSTALL AND SPECIFICATIONS TO COMPLY WITH BASMAA OPTION 3 / APPENDIX C
- 1-2.1 2 OVERFLOW FROM RAIN BARREL TO DISSIPATE TO VEGETATION
- 3 MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN 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
- 3-2.1 7 (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
 - DS DOWNSPOUTS
 - RB RAIN BARRELS
 - Direction of surface flow symbol
- PROPOSED
 - Property line symbol
 - DS DOWNSPOUTS
 - RB RAIN BARRELS
 - Direction of surface flow symbol
 - Steps symbol
 - Walkway / Concrete symbol
 - NAME XXX SPOT ELEVATION
 - 1-2.1 DETAIL NUMBER
 - 1-2.1 SHEET NUMBER
 - 1#10 DELTA w/COMMENT #
 - ELEV. NEW ELEVATION BENCHMARK



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| ISSUES | | |
|-----------|-------------|--------|
| DATE | DESCRIPTION | STATUS |
| 0 6/17/24 | PLANNING | |

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admin@agnewcivil.com



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"x48")

| ISSUES | | |
|--------|---------|-------------|
| NO. | DATE | DESCRIPTION |
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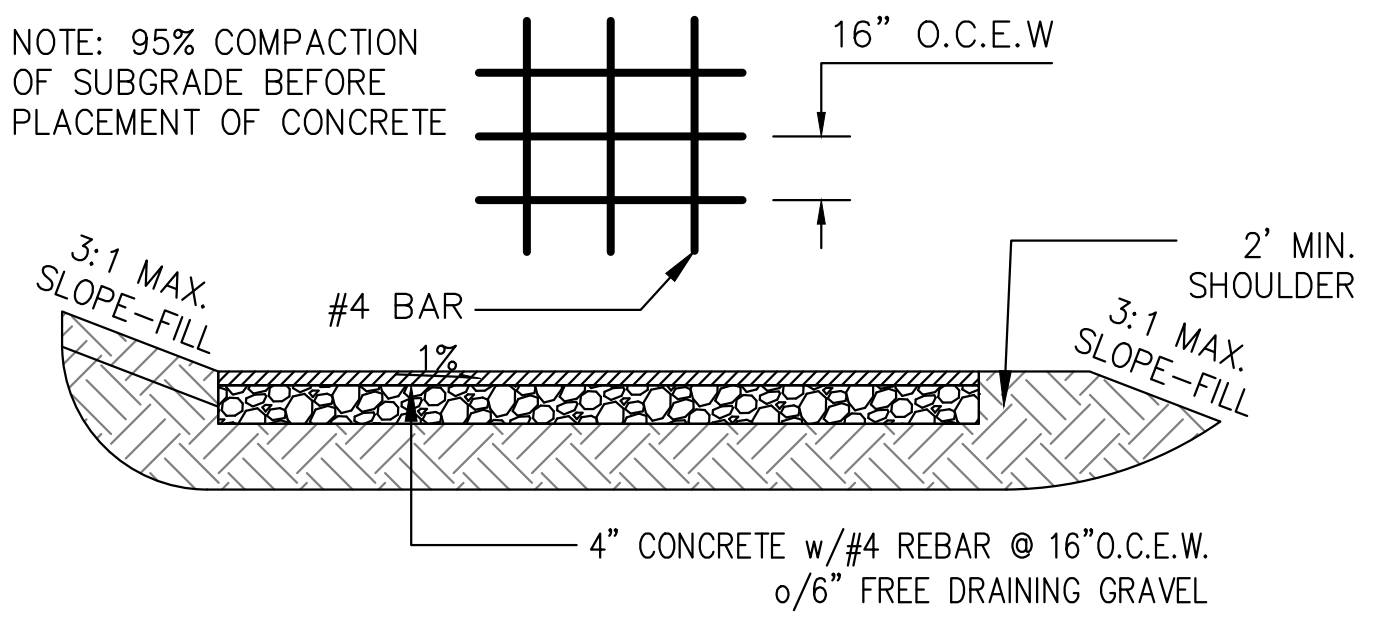
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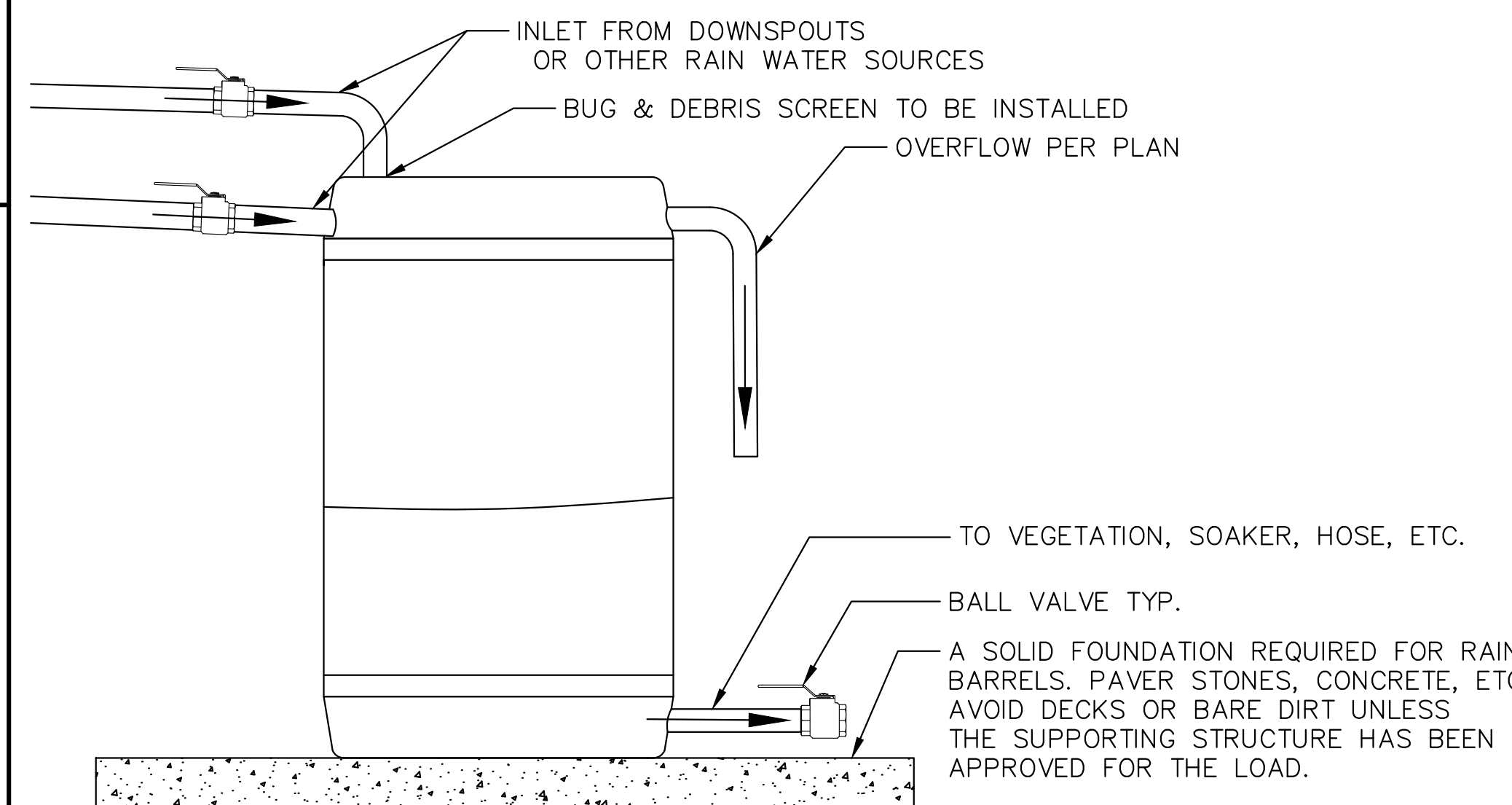
GRADING AND DRAINAGE PLAN DETAILS
 CLAM
 60 3RD ST, POINT REYES STATION, CA 94956
 APN: 119-226-13

270-1
C-2.1

- 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 1/2" TO 3/4" 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 (1/8" 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.



3 CONCRETE SLABS NTS



1 RAIN BARREL NTS

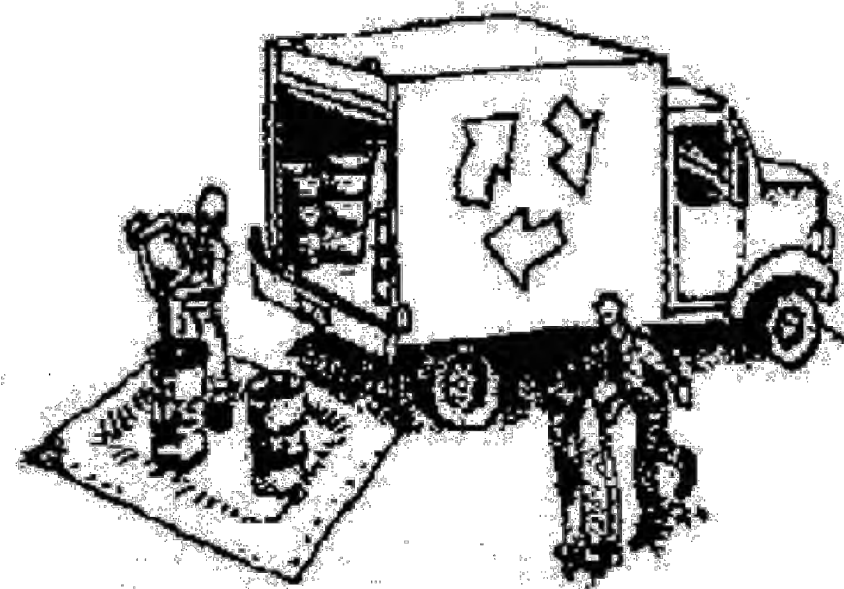
Operation and Maintenance
 After installing your rain barrel or cistern, follow these tips for long-term safety and functionality.

- 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.

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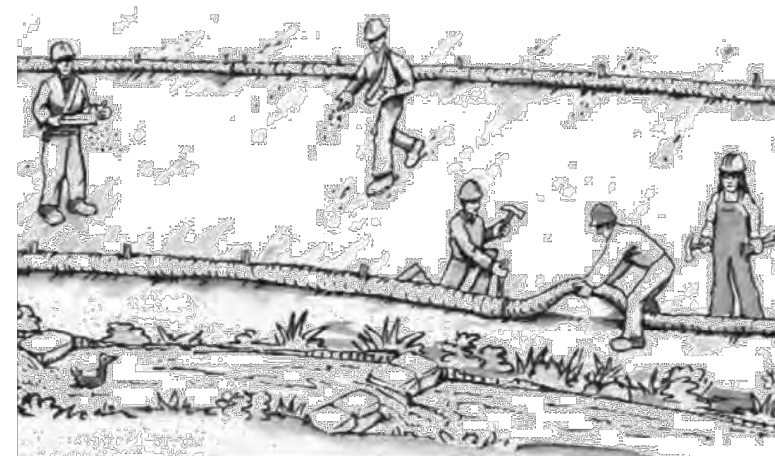
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 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



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

Sawcutting & Asphalt/Concrete Removal

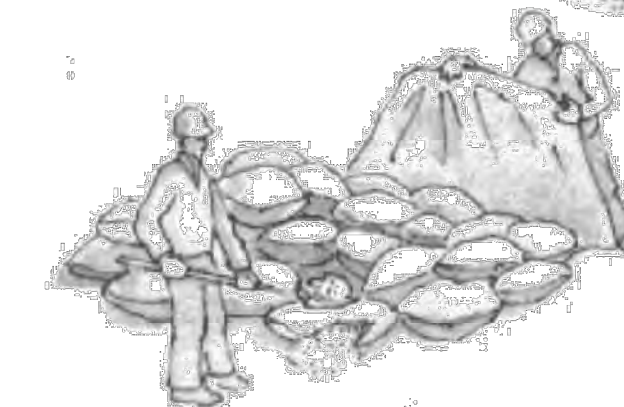
- Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day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

Concrete, Grout & Mortar Application



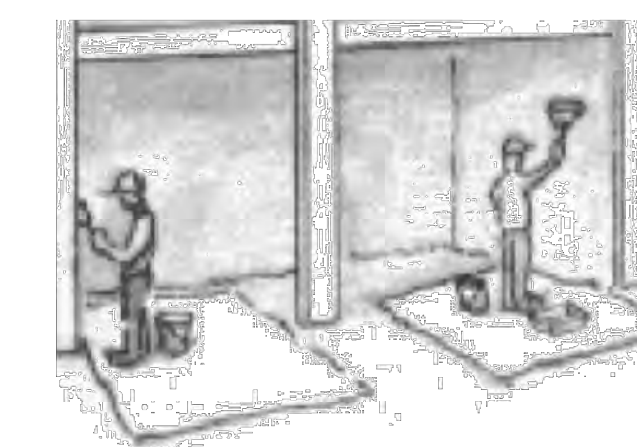
- Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will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

Landscaping



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

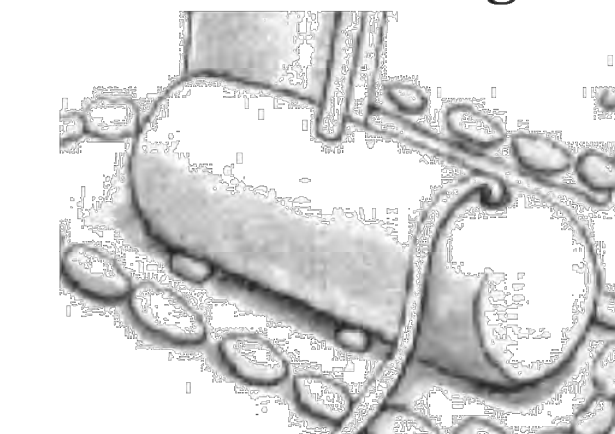
Painting & Paint Removal



Painting Cleanup and Removal

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



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

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

| ISSUES | | |
|--------|---------|-------------|
| NO. | DATE | DESCRIPTION |
| 0 | 6/17/24 | PLANNING |

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