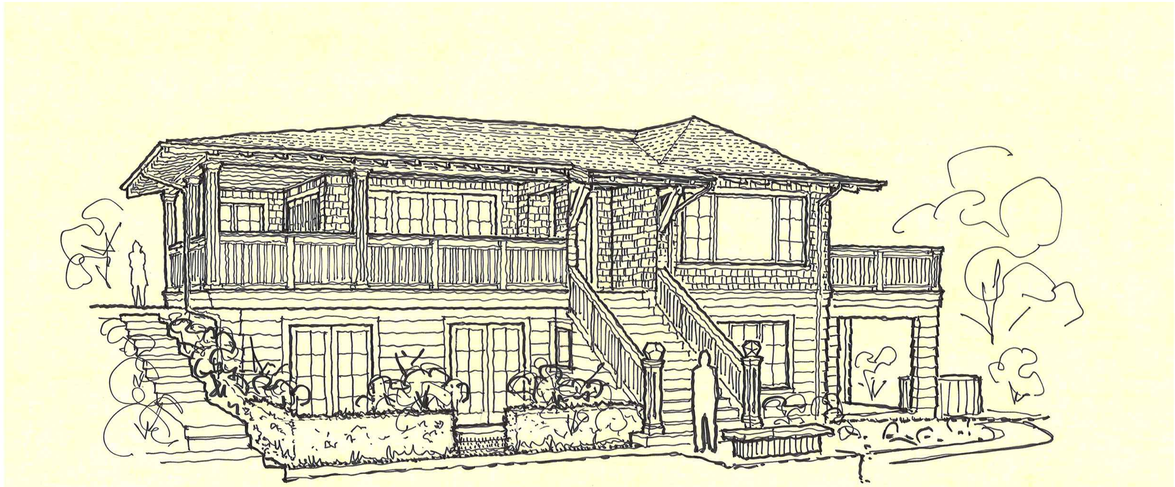
NEW SINGLE FAMILY RESIDENCE

50 LAUREL AVE., STINSON BEACH, CA 94970



GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROJECT. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ISSUANCE OF THE BUILDING PERMIT, POSTING THE PERMIT ON SITE, AND MAINTAINING THE APPROVAL DRAWINGS ON SITE WITH THE JOB CARD.

2. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION FOR USE BY ALL TRADES AND SHALL PROVIDE ALL SUBCONTRACTORS WITH CURRENT DOCUMENTS AS REQUIRED.

3. THE WORK INCLUDED UNDER THIS CONTRACT SHALL CONSIST OF ALL LABOR, MATERIALS, TRANSPORTATION, TOOLS AND EQUIPMENT NECESSARY FOR THE CONSTRUCTION OF THE PROJECT, LEAVING ALL WORK READY FOR USE.

4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND LABOR FOR A COMPLETE JOB, AND FOR ALL SAFETY MEASURES IN COMPLIANCE WITH APPLICABLE GOVERNING AGENCIES AND PROFESSIONAL PRACTICE. ALL WORK CONNECTED WITH THIS PROJECT SHALL BE DONE IN A PROFESSIONAL MANNER IN ACCORDANCE WITH THE TRADITIONALLY AND LEGALLY DEFINED "BEST ACCEPTED PRACTICE" OF THE TRADE INVOLVED.

5. ALL CONSTRUCTION SHALL CONFORM TO LOCAL GOVERNING CODES AND ORDINANCES. IN THE EVENT OF CONFLICT THE MOST STRINGENT SHALL APPLY.

6. THE PLANS INDICATE THE GENERAL EXTENT OF NEW CONSTRUCTION NECESSARY FOR THE WORK, BUT ARE NOT INTENDED TO BE ALL-INCLUSIVE. ALL NEW WORK NECESSARY TO ALLOW FOR A FINISHED JOB IN ACCORDANCE WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS IS INCLUDED, REGARDLESS OF WHETHER SHOWN ON THE DRAWINGS OR MENTIONED IN THE NOTES. FOR ITEMS, METHODS AND/OR MATERIALS NOT SHOWN, THE MINIMUM REQUIREMENTS OF THE APPLICABLE CODES SHALL GOVERN.

7. ANY INCONSISTENCIES, OMISSIONS, OR CONFLICTS FOUND IN VARIOUS PARTS OF THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

8. THE GENERAL CONTRACTOR SHALL VERIFY AND ASSUME FULL RESPONSIBILITY FOR ALL DIMENSIONS AND SITE CONDITIONS. THE GENERAL CONTRACTOR SHALL INSPECT THE EXISTING PREMISES AND STRUCTURES AND TAKE NOTE OF EXISTING CONDITIONS PRIOR TO SUBMITTING PRICES. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION. THE ARCHITECT IS NOT RESPONSIBLE FOR COST IMPLICATIONS ARISING FROM THESE CONDITIONS. THE CONTRACTOR SHALL ADDITIONALLY INFORM THE ARCHITECT OF ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO CODES, RULES AND REGULATIONS.

9. THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS FOR BUILDING AND SITE PRIOR TO PROCEEDING WITH THE WORK. G.C. SHALL PAY ATTENTION TO IMPLIED PLAN AND SECTIONAL SPATIAL RELATIONSHIPS AND VERIFY ALL AXES AND IMPLIED SYMMETRIES BEFORE BEGINNING WORK. ALL DIMENSIONS ARE TO BE CHECKED FOR ACCURACY AS THE WORK PROCEEDS.

10. CASTOR ARCHITECTURE DOES NOT ASSUME RESPONSIBILITY FOR EXISTING CONDITIONS NOR WILL THE ARCHITECT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS OR PROCEDURES OF CONSTRUCTION OR SAFETY, WHICH SHALL REMAIN THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

11. THE DIMENSIONS SHOWN ARE BASED ON THE SURVEY AND MEASUREMENTS AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH THE DRAWINGS BEFORE PREPARING SHOP DRAWINGS, FABRICATION OR CONSTRUCTION.

12. ALL DIMENSIONS WHEN SHOWN IN PLAN ARE TO FACE OF STUD OR CONCRETE UNLESS OTHERWISE NOTED.

13. ALL VERTICAL DIMENSIONS ARE TO TOP OF PLYWOOD OR TOP OF PLATE IN SECTION OR ELEVATIONS UNLESS OTHERWISE NOTED.

14. WRITTEN DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

15. DIMENSIONS NOTED ARE FOR FIXTURES AND ITEMS SPECIFIED. IF SUBSTITUTIONS ARE MADE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL DIMENSIONS AND REQUIRED CLEARANCES ARE MAINTAINED.

16. GENERAL CONTRACTOR SHALL INSTALL ALL EQUIPMENT, FIXTURES AND ACCESSORIES PER MANUFACTURER'S INSTRUCTIONS. CONTRACTOR TO VERIFY COMPATIBILITY WITH EXISTING CONDITIONS PRIOR TO ORDERING MATERIAL.

17. COORDINATE ALL WORK WITH EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO IRRIGATION PIPES, ELECTRICAL CONDUIT, WATER LINES, DRAINAGE LINES, GAS LINES, WASTE AND SEPTIC SYSTEMS, ETC.

18. GENERAL CONTRACTOR TO VERIFY ALL FINISHES, TYPE AND COLOR WITH ARCHITECT.

19. GENERAL CONTRACTOR SHALL SUBMIT TO ARCHITECT FOR REVIEW ALL SHOP DRAWINGS AND SUBMITTALS.

20. PROTECT ALL EXISTING SITE CONDITIONS TO REMAIN INCLUDING TREES AND SHRUBS, PAVING, FENCES, ETC. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN PROTECTING AREAS ADJACENT TO NEW CONSTRUCTION FROM NOISE, DEBRIS AND DUST.

21. ALL DEMOLITION REQUIRED IS NOT NECESSARILY SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY IN THE FIELD AND BE RESPONSIBLE FOR ALL DEMOLITION WORK NECESSARY TO COMPLETE THE PROJECT.

22. THE GENERAL CONTRACTOR SHALL DESIGN AND PROVIDE ADEQUATE SHORING AND BRACING AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION OF THIS STRUCTURE.

23. DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY IN SIMILAR SITUATIONS.

24. VERIFY ALL ARCHITECTURAL DETAILS WITH STRUCTURAL, MECHANICAL OR ELECTRICAL CONDITIONS BEFORE THE ORDERING OR INSTALLATION OF ANY ITEM OF WORK.

25. WHERE LOCATIONS OF WINDOWS AND DOORS ARE NOT DIMENSIONED, THEY SHALL BE CENTERED IN THE WALL OR DIMENSION FROM ADJACENT WALL TO BE VERIFIED BY ARCHITECT.

26. INSTALL AND FLASH ALL WINDOWS, DOORS AND SKYLIGHTS PER MFR.'S REQ'TS. INSTALL ALL SHEET METAL IN ACCORDANCE WITH THE SMACNA SHEET METAL MANUAL.

27. ALL CHANGES OF FLOOR MATERIALS SHALL OCCUR AT CENTERLINE OF DOOR OR FRAMED OPENING UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

28. THE GENERAL CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIALS FROM ALL SUBCONTRACTORS AND TRADES, ON A REGULAR BASIS AND SHALL EXERCISE STRICT CONTROL OVER JOB CLEANING TO PREVENT ANY DIRT FROM AFFECTING IN ANY WAY, FINISHED AREAS IN OR OUTSIDE JOB SITE.

29. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL WORK INSTALLED AND MATERIALS DELIVERED TO THE PROJECT SITE.

30. PROVIDE FIRE BLOCKING AT ALL STUDS OVER 10 FT. IN HEIGHT AND AT CEILING, FLOORS, FURRED DOWN CEILINGS, SHOWERS, SOFFITS, CONCEALED DRAFT OPENINGS AND WHERE REQUIRED BY CODE.

31. SPECIAL INSPECTION OR STRUCTURAL OBSERVATION IS NOT A SUBSTITUTE FOR INSPECTION BY THE BUILDING OFFICIAL OR BUILDING INSPECTOR. SPECIALLY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL **AND** THE SPECIAL INSPECTOR **AND** DESIGN ENGINEER IS SUBJECT TO REMOVAL OR EXPOSURE.

32. STRUCTURAL OBSERVATION SHALL BE REQUIRED FOR STRUCTURAL COMPLIANCE TO THE APPROVED PLANS PER CBC 1709.2.5. ARCHITECT IS NOT RESPONSIBLE FOR STRUCTURAL DESIGN OR MODIFICATIONS TO EXISTING STRUCTURE.

CODES & ORDINANCES

CALIFORNIA BUILDING CODE, 2022
CALIFORNIA RESIDENTIAL CODE, 2022
CALIFORNIA ELECTRICAL CODE, 2022
CALIFORNIA PLUMBING CODE, 2022
CALIFORNIA MECHANICAL CODE, 2022
CALIFORNIA ENERGY CODE, 2022
CALIFORNIA FIRE CODE, 2022
GREEN BUILDING CODE, 2022
APPLICABLE SECTIONS OF THE MARIN COUNTY MUNICIPAL CODE

DEFERRED SUBMITTALS

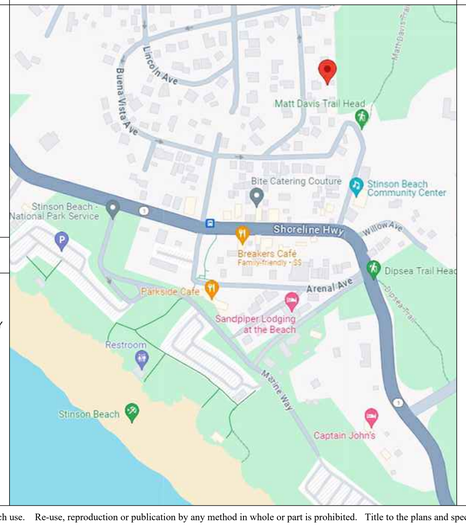
1. FIRE SPRINKLERS SHALL BE A DEFERRED SUBMITTAL:

THE STRUCTURE SHALL HAVE INSTALLED THROUGHOUT AN AUTOMATIC FIRE SPRINKLER SYSTEM. THE SYSTEM DESIGN, INSTALLATION AND FINAL TESTING SHALL BE APPROVED BY THE DISTRICT FIRE PREVENTION OFFICER. CFC 903.2

PLANS FOR FIRE SPRINKLER SYSTEM DESIGN AND HYDRAULIC CALCULATIONS SHALL BE COMPLETED BY A LICENSED C-16 SPRINKLER CONTRACTOR AND SUBMITTED TO THE SOUTHER MARIN FIRE PREVENTION DISTRICT FOR APPROVAL PRIOR TO INSTALLATION. FIRE SPRINKLER SYSTEM DESIGN AND INSTALLATION SHALL CONFORM TO THE PROVISIONS OF N.F.P.A. STANDARD 13D.

2. EQUIPMENT LOCATIONS & DETAILS FOR RADIANT HEATING SYSTEM TO BE A DEFERRED SUBMITTAL. DUCT LAYOUT AND EQUIPMENT LOCATIONS FOR COOLING SYSTEM TO BE A DEFERRED SUBMITTAL.

VICINITY MAP



PROJECT DESCRIPTION

REPLACE EXISTING 998 S.F. SINGLE FAMILY RESIDENCE WITH NEW 2,326 S.F. SINGLE FAMILY RESIDENCE. 323 S.F. STUDIO #1 INCLUDES 1 1/2" X 5'-1" SECTION OF WALL AT NORTHWEST CORNER TO BE REMOVED FROM PUBLIC RIGHT OF WAY. 148 S.F. STUDIO #2 TO REMAIN AS IS, FOR TOTAL COMBINED FLOOR AREA OF 2,797 S.F. 292 S.F. UNFINISHED AND UNCONDITIONED STORAGE SHED TO REMAIN AS IS, FOR TOTAL COMBINED BUILDING AREA OF 3,089 S.F. REMOVE EXISTING CAR PORT, PROPANE TANK AND EXISTING SEPTIC TANK AND SYSTEM. INSTALL NEW (PREVIOUSLY PERMITTED) RAISED SAND BEDS, LEACH FIELD AND SEPTIC TANKS.

SEE SHEET A1.4 FOR BIOLOGICAL SITE ASSESSMENT NOTES AND CONSTRAINTS MAP.

PROJECT INFORMATION

	ALLOWED	EXISTING	PROPOSED
LOT DEVELOPMENT DATA:			
LOT SIZE		9,900 S.F.	9,900 S.F.
ZONING	C-R-1	C-R-1	C-R-1
FLOOR AREA:			
MAIN HOUSE:			
LOWER LEVEL	N/A	0 S.F.	1,194 S.F.
MAIN LEVEL	N/A	998 S.F.	1,132 S.F.
MAIN HOUSE TOTAL FLOOR AREA	2,970 S.F. (30%)	998 S.F.	2,326 S.F.
STUDIO #1	N/A	323 S.F.	323 S.F.
STUDIO #2	N/A	148 S.F.	148 S.F.
TOTAL FLOOR AREA	2,970 S.F. (30%)	1,469 S.F.	2,797 S.F.
SHED - UNFINISHED BUILDING	N/A	292 S.F.	292 S.F.
TOTAL BUILDING AREA	N/A	1,761 S.F.	3,089 S.F.
AREA OF DISTURBANCE	N/A	N/A	2,406 S.F.
LOT COVERAGE - IMPERVIOUS	N/A	2,680 S.F.	4,761 S.F.
LOT COVERAGE - PERVIOUS	N/A	7,220 S.F.	5,139 S.F.
GRADING - CUT	N/A	N/A	146 CU. YD.
GRADING - FILL	N/A	N/A	13 CU. YD.
GRADING - OFF-HAUL	N/A	N/A	133 CU. YD.
NO. OF PARKING SPACES	N/A	2	2
PRIMARY BUILDING DATA:			
MAXIMUM BUILDING HEIGHT	25'-0"	18'-8"	22'-10"
FRONT YARD SETBACK (LAUREL AVE.)	25'-0"	37'-7½"	33'-0"
SIDE YARD SETBACK (LEFT)	6'-0"	6'-0"	6'-0"
SIDE YARD SETBACK (RIGHT)	6'-0"	27'-11"	30'-0"
REAR YARD SETBACK (REAR)	25'-0"	49'-0"	41'-5½"
	100'-0" FROM CREEK		122'-8"
ACCESSORY BUILDING DATA:			
MAXIMUM BUILDING HEIGHT	15'-0"	13'-0"	13'-0"
FRONT YARD SETBACK (LAUREL AVE.)		0'-0"	0'-0"
SIDE YARD SETBACK (LEFT)		0'-0"	0'-0"
SIDE YARD SETBACK (RIGHT)		46'-10½"	46'-10½"
REAR YARD SETBACK (REAR)		2'-1½"	2'-1½"

TYPE OF CONSTRUCTION: V-B
OCCUPANCY CLASSIFICATION: R-3

CONTACT INFORMATION

OWNER:
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SAN FRANCISCO, CA 94107
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EMAIL: THGOETZ@GMAIL.COM

ARCHITECT / APPLICANT:
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CASTOR ARCHITECTURE
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SAN RAFAEL, CA 94901
TEL: (415) 205-3911
EMAIL: DANIEL@CASTORARCHITECTURE.COM

GEOTECHNICAL ENGINEER:
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BAUER ASSOCIATES, INC.
6470 MIRABEL ROAD
FORESTVILLE, CA 95436
TEL: (707) 887-2505
EMAIL: GREG@BAUERGEOTECH.COM

SURVEYOR:
LAWRENCE P. DOYLE
LAND SURVEYOR CIVIL ENGINEER
100 HELENS LANE
MILL VALLEY, CA 94941
TEL: (415) 388-9585
EMAIL: DOYLELPD@AOL.COM

WASTEWATER CONSULTANT:
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ADOBE ASSOCIATES, INC.
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EMAIL: NMAGYARI@ADOBEINC.COM

CIVIL ENGINEER:
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DVC GROUP
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SHEET INDEX

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NEW SINGLE FAMILY RESIDENCE
50 LAUREL AVENUE, STINSON BEACH, CA 94970

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DATE:	ISSUE:
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12/05/24	COASTAL PER.
03/18/25	REVISION 1

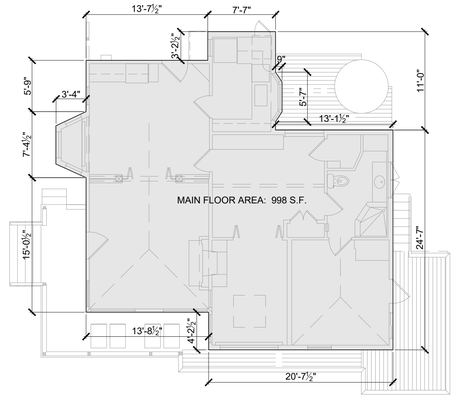
COVER SHEET

A0.0

8 SHED FLOOR AREA MAP

SCALE: 1/8"=1'-0"

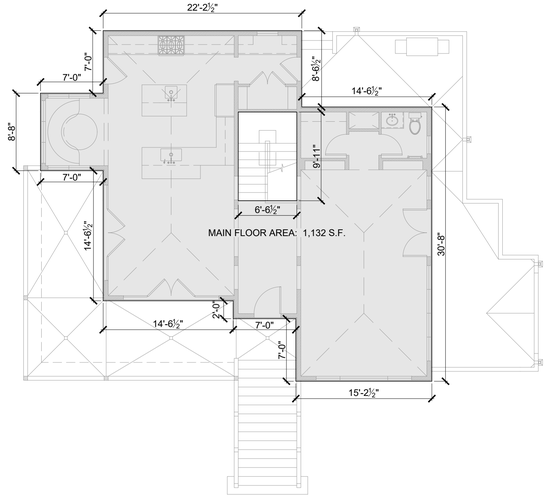
0 2' 4' 8'



4 EXISTING MAIN LEVEL FLOOR AREA MAP

SCALE: 1/8"=1'-0"

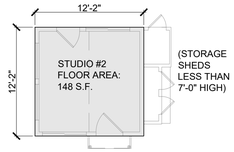
0 2' 4' 8'



2 PROPOSED MAIN LEVEL FLOOR AREA MAP

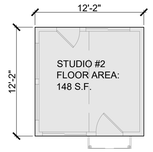
SCALE: 1/8"=1'-0"

0 2' 4' 8'



7 STUDIO #2 FLOOR AREA MAP

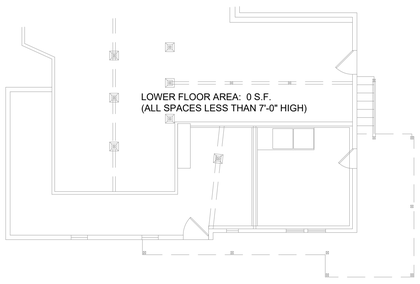
EXISTING SCALE: 1/8"=1'-0"

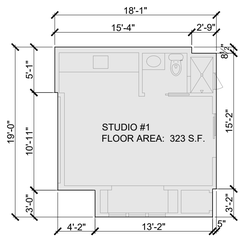


6 STUDIO #2 FLOOR AREA MAP

PROPOSED SCALE: 1/8"=1'-0"

0 2' 4' 8'





5 STUDIO #1 FLOOR AREA MAP

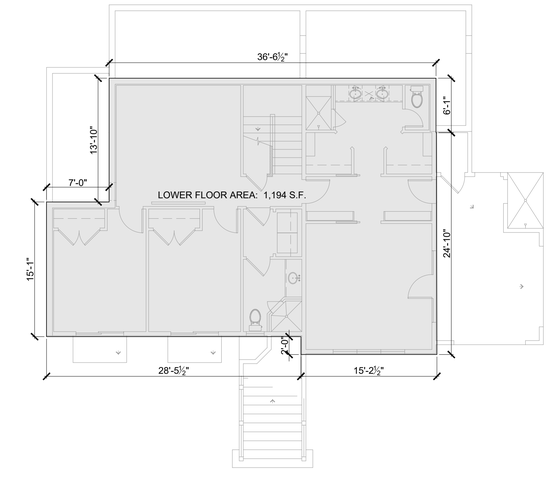
SCALE: 1/8"=1'-0"

0 2' 4' 8'

3 EXISTING LOWER LEVEL FLOOR AREA MAP

SCALE: 1/8"=1'-0"

0 2' 4' 8'



1 PROPOSED LOWER LEVEL FLOOR AREA MAP

SCALE: 1/8"=1'-0"

0 2' 4' 8'

N

FLOOR AREA CALCULATIONS

	EXISTING	PROPOSED
MAIN HOUSE:		
LOWER LEVEL	0 S.F.	1,194 S.F.
MAIN LEVEL	998 S.F.	1,132 S.F.
MAIN HOUSE TOTAL FLOOR AREA	998 S.F.	2,326 S.F.
STUDIO #1 (PROPOSED A.D.U.)	323 S.F.	323 S.F.
STUDIO #2	148 S.F.	148 S.F.
TOTAL FLOOR AREA	1,469 S.F.	2,797 S.F.
SHED - UNFINISHED BUILDING	292 S.F.	292 S.F.
TOTAL BUILDING AREA	1,761 S.F.	3,089 S.F.

ALL DIMENSIONS ARE TO EXTERIOR FACE OF SIDING.

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NEW SINGLE FAMILY RESIDENCE

50 LAUREL AVENUE, STINSON BEACH, CA 94970

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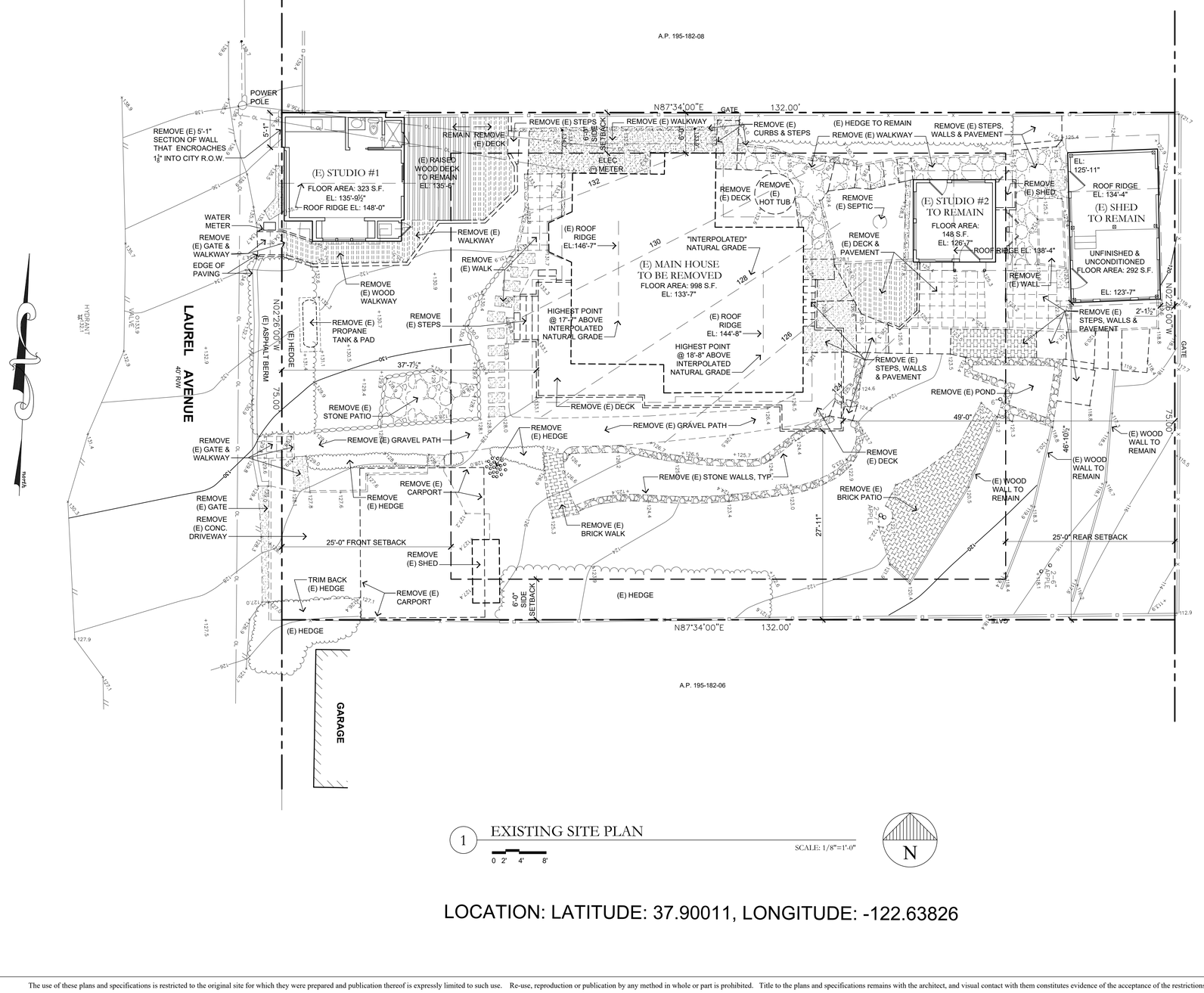
11/22/24	COASTAL PER.

FLOOR AREA MAPS

A0.1



1 EXISTING SITE PLAN

SCALE: 1/8"=1'-0"

0 2' 4' 8'

N

LOCATION: LATITUDE: 37.90011, LONGITUDE: -122.63826

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APN: 195-082-07

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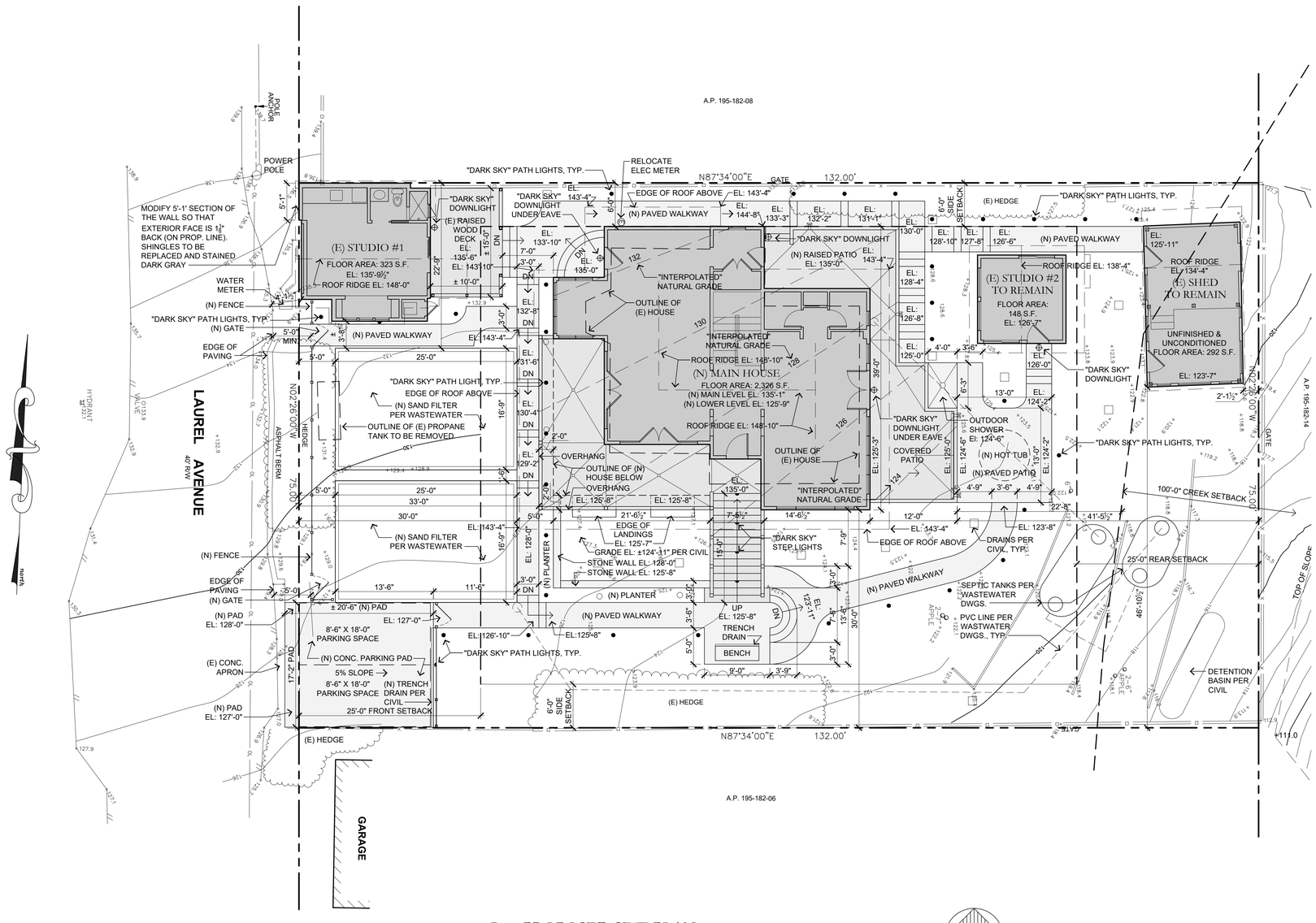
12/05/24	COASTAL PER.

EXISTING
SITE PLAN

A1.0



1 PROPOSED SITE PLAN

SCALE: 1/8"=1'-0"

0 2' 4' 8'

LOCATION: LATITUDE: 37.90011, LONGITUDE: -122.63826

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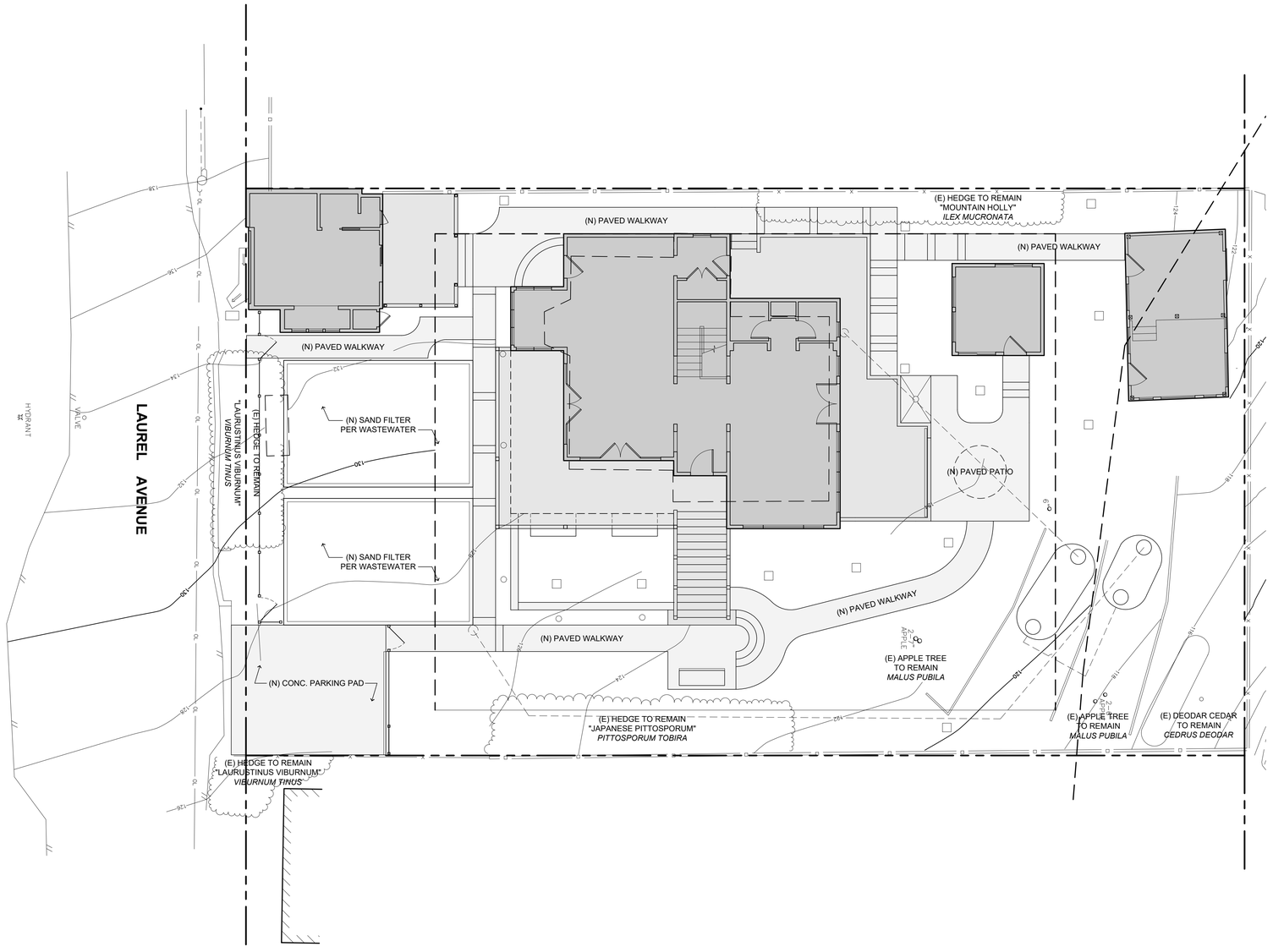
PROPOSED
SITE PLAN

A1.1



1 PROPOSED LANDSCAPE PLAN

SCALE: 1/8"=1'-0"

0 2' 4' 8'

N

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12/05/24	COASTAL PER.

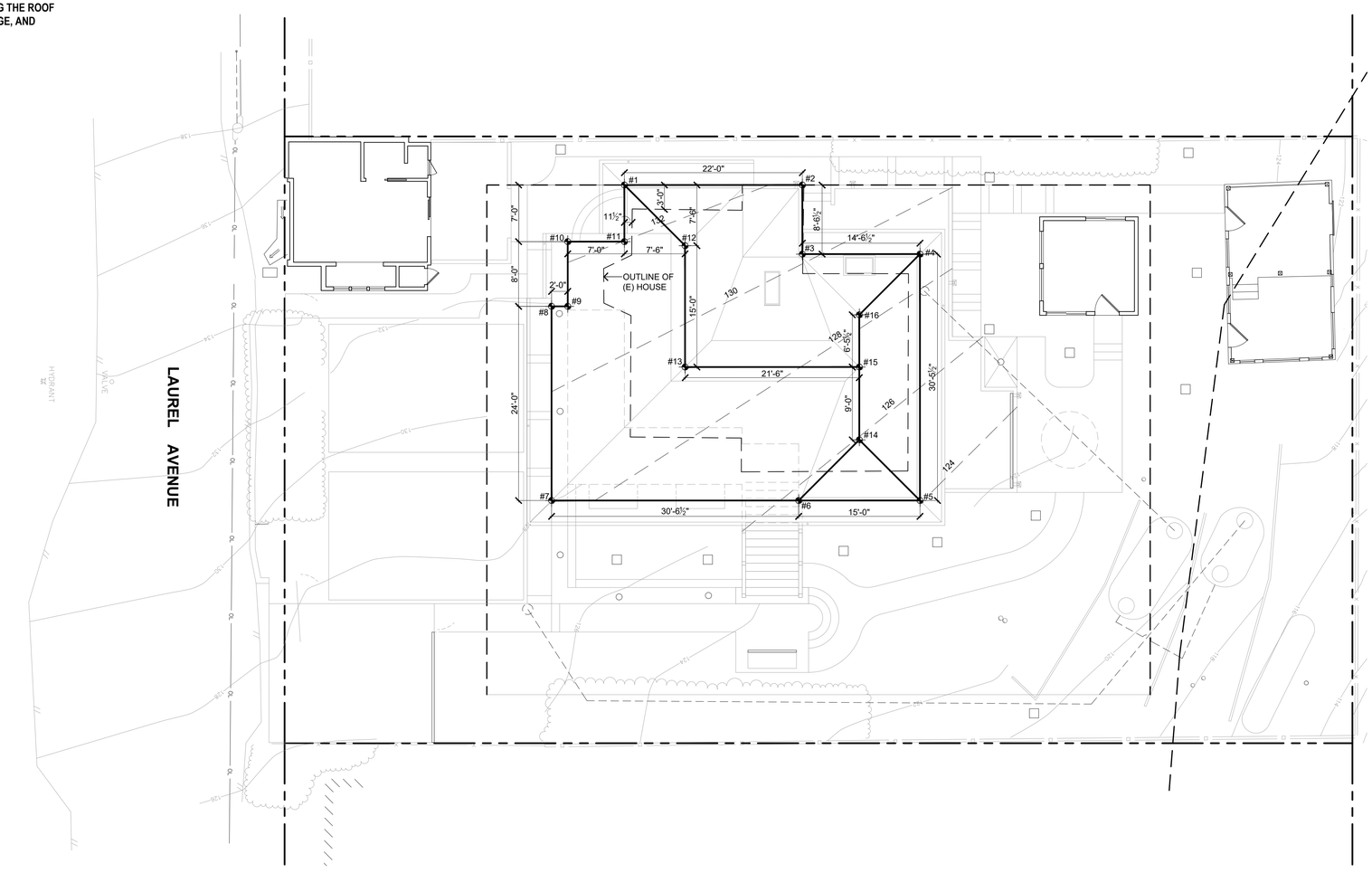
PROPOSED
LANDSCAPE PLAN

A1.2

STORY POLE KEY - MAIN HOUSE

	DESCRIPTION	GROUND ELEV.	BLDG. ELEV.	POLE HEIGHT	MAX HEIGHT
# 1	NW CORNER	133'-10"	143'-11"	10'-1"	25'-0"
# 2	NORTH WALL	131'-9"	144'-8"	12'-11"	25'-0"
# 3	EAST WALL	129'-9"	144'-8"	14'-11"	25'-0"
# 4	NE CORNER	128'-10"	143'-11"	15'-1"	25'-0"
# 5	SE CORNER	124'-1"	143'-11"	19'-10"	25'-0"
# 6	SOUTH WALL	125'-9"	143'-11"	18'-2"	25'-0"
# 7	SW CORNER	128'-0"	143'-11"	15'-11"	25'-0"
# 8	WEST WALL	131'-0"	143'-11"	12'-11"	25'-0"
# 9	WEST WALL	131'-0"	144'-5"	13'-5"	25'-0"
# 10	WEST WALL	133'-0"	144'-5"	11'-5"	25'-0"
# 11	WEST WALL	132'-0"	146'-8"	14'-8"	25'-0"
# 12	RIDGE	131'-6"	148'-10"	17'-4"	25'-0"
# 13	RIDGE	129'-3"	148'-10"	19'-7"	25'-0"
# 14	RIDGE	126'-3"	148'-10"	22'-7"	25'-0"
# 15	RIDGE	127'-3"	148'-10"	21'-7"	25'-0"
# 16	RIDGE	128'-3"	148'-10"	20'-7"	25'-0"

THE STORY POLES MUST BE CONNECTED BY ORANGE CONSTRUCTION NETTING AND SHALL CLEARLY AND ACCURATELY DEMONSTRATE THE MAXIMUM ROOF HEIGHT AND PERIMETER OF THE STRUCTURE. THE CONSTRUCTION NETTING MUST BE AT LEAST 1.5 FEET WIDE. IF HIGH WINDS MAKE IT UNSAFE TO INSTALL CONSTRUCTION NETTING SHOWING THE ROOF RIDGES, THEN THE TOPS OF THE POLES MAY BE PAINTED ORANGE, AND ORANGE TAPE MAY BE SUBSTITUTED FOR THE NETTING.



1 STORY POLE PLAN

SCALE: 1/8"=1'-0"

0 2' 4' 8'

N

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STORY POLE PLAN

A1.3

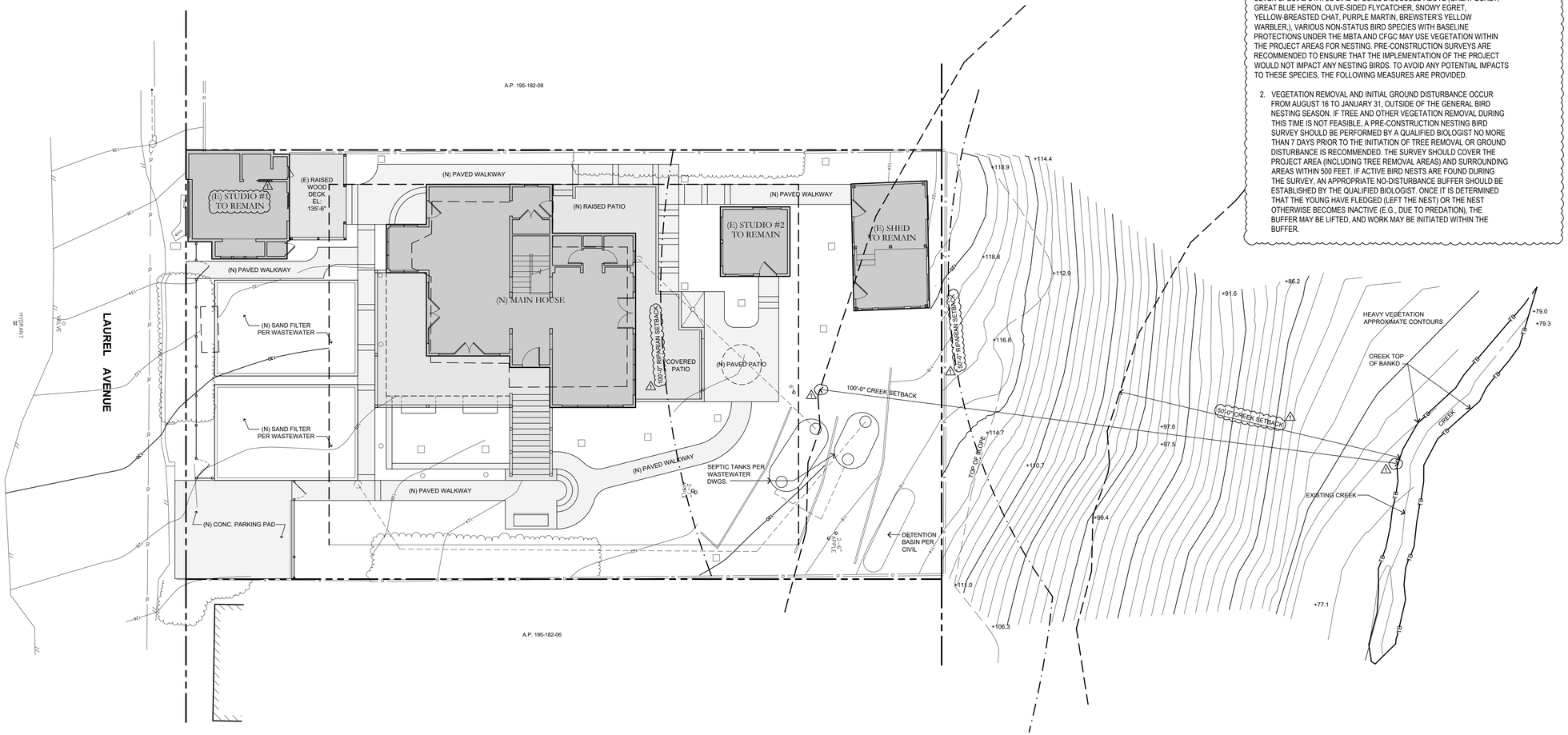
BIOLOGICAL SITE ASSESSMENT RECOMMENDATIONS:

THE FOLLOWING MEASURES WILL ENSURE THAT THE RED ALDER RIPARIAN THICKET AND THE PERENNIAL STREAM (EASTKOOT CREEK) WILL NOT BE IMPACTED BY THE PROPOSED PROJECT:

1. PROJECT ACTIVITIES SHOULD OCCUR DURING THE DRY SEASON (APPROXIMATELY APRIL 1 THROUGH OCTOBER 15). STANDARD EROSION CONTROL MEASURES (E.G., STRAW WADDLES, BALES) SHOULD BE DEPLOYED ALONG THE EASTERN PROPERTY BOUNDARY AT AN EXISTING FENCE PRIOR TO GROUND-BREAKING AND REMAIN IN-PLACE FOR THE DURATION OF THE PROJECT. CONSTRUCTION PERSONNEL SHOULD BE INFORMED OF THE LOCATION OF THE SENSITIVE AQUATIC RESOURCES EAST OF THE SUBJECT PROPERTY LINE WITH HIGH VISIBILITY FLAGGING OR STAKING PRIOR TO CONSTRUCTION. NO MATERIALS OR EQUIPMENT SHALL BE LAID DOWN BEYOND THE PROPERTY LINE/EROSION CONTROL MEASURES, AND SPILL PREVENTION MATERIALS SHALL BE DEPLOYED FOR ALL CONSTRUCTION EQUIPMENT.

ALL BIRD SPECIES (INCLUDING NON-SPECIAL-STATUS): IN ADDITION TO THE SEVEN SPECIAL-STATUS BIRD SPECIES DISCUSSED ABOVE (GREAT EGRET, GREAT BLUE HERON, OLIVE-SIDED FLYCATCHER, SNOWY EGRET, YELLOW-BREASTED CHAT, PURPLE MARTIN, BREWSTER'S YELLOW WARBLER,), VARIOUS NON-STATUS BIRD SPECIES WITH BASELINE PROTECTIONS UNDER THE MBTA AND CFGC MAY USE VEGETATION WITHIN THE PROJECT AREAS FOR NESTING. PRE-CONSTRUCTION SURVEYS ARE RECOMMENDED TO ENSURE THAT THE IMPLEMENTATION OF THE PROJECT WOULD NOT IMPACT ANY NESTING BIRDS. TO AVOID ANY POTENTIAL IMPACTS TO THESE SPECIES, THE FOLLOWING MEASURES ARE PROVIDED.

2. VEGETATION REMOVAL AND INITIAL GROUND DISTURBANCE OCCUR FROM AUGUST 16 TO JANUARY 31, OUTSIDE OF THE GENERAL BIRD NESTING SEASON. IF TREE AND OTHER VEGETATION REMOVAL DURING THIS TIME IS NOT FEASIBLE, A PRE-CONSTRUCTION NESTING BIRD SURVEY SHOULD BE PERFORMED BY A QUALIFIED BIOLOGIST NO MORE THAN 7 DAYS PRIOR TO THE INITIATION OF TREE REMOVAL OR GROUND DISTURBANCE IS RECOMMENDED. THE SURVEY SHOULD COVER THE PROJECT AREA (INCLUDING TREE REMOVAL AREAS) AND SURROUNDING AREAS WITHIN 500 FEET. IF ACTIVE BIRD NESTS ARE FOUND DURING THE SURVEY, AN APPROPRIATE NO-DISTURBANCE BUFFER SHOULD BE ESTABLISHED BY THE QUALIFIED BIOLOGIST. ONCE IT IS DETERMINED THAT THE YOUNG HAVE FLEDGED (LEFT THE NEST) OR THE NEST OTHERWISE BECOMES INACTIVE (E.G., DUE TO PREDATION), THE BUFFER MAY BE LIFTED, AND WORK MAY BE INITIATED WITHIN THE BUFFER.



1 BIOLOGICAL CONSTRAINTS MAP

SCALE: 1/10"=1'-0"

0 5' 10'

N

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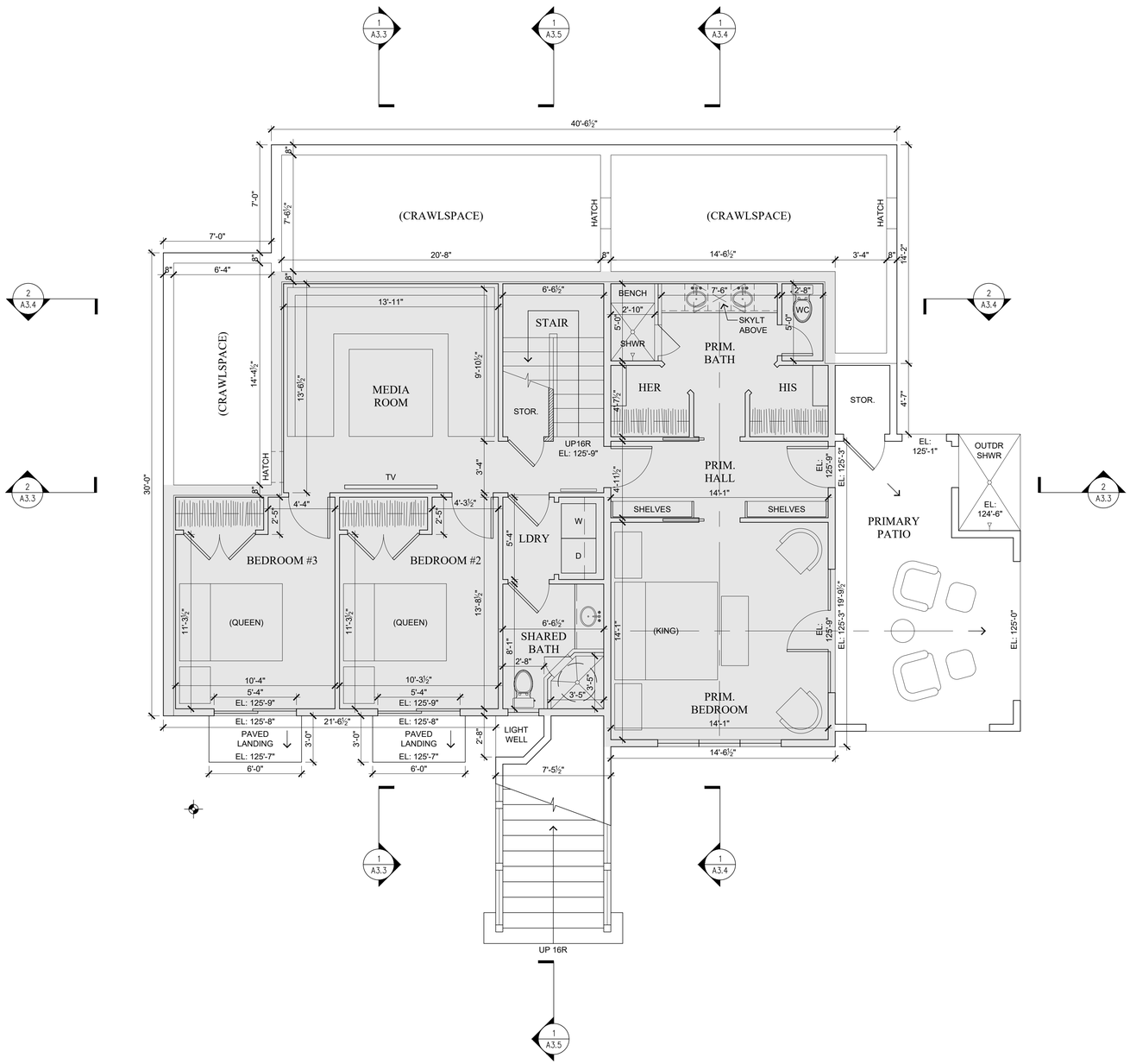
BIOLOGICAL CONSTRAINTS MAP

A1.4



1 PROPOSED LOWER LEVEL FLOOR PLAN

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

0 2' 4' 8'

N

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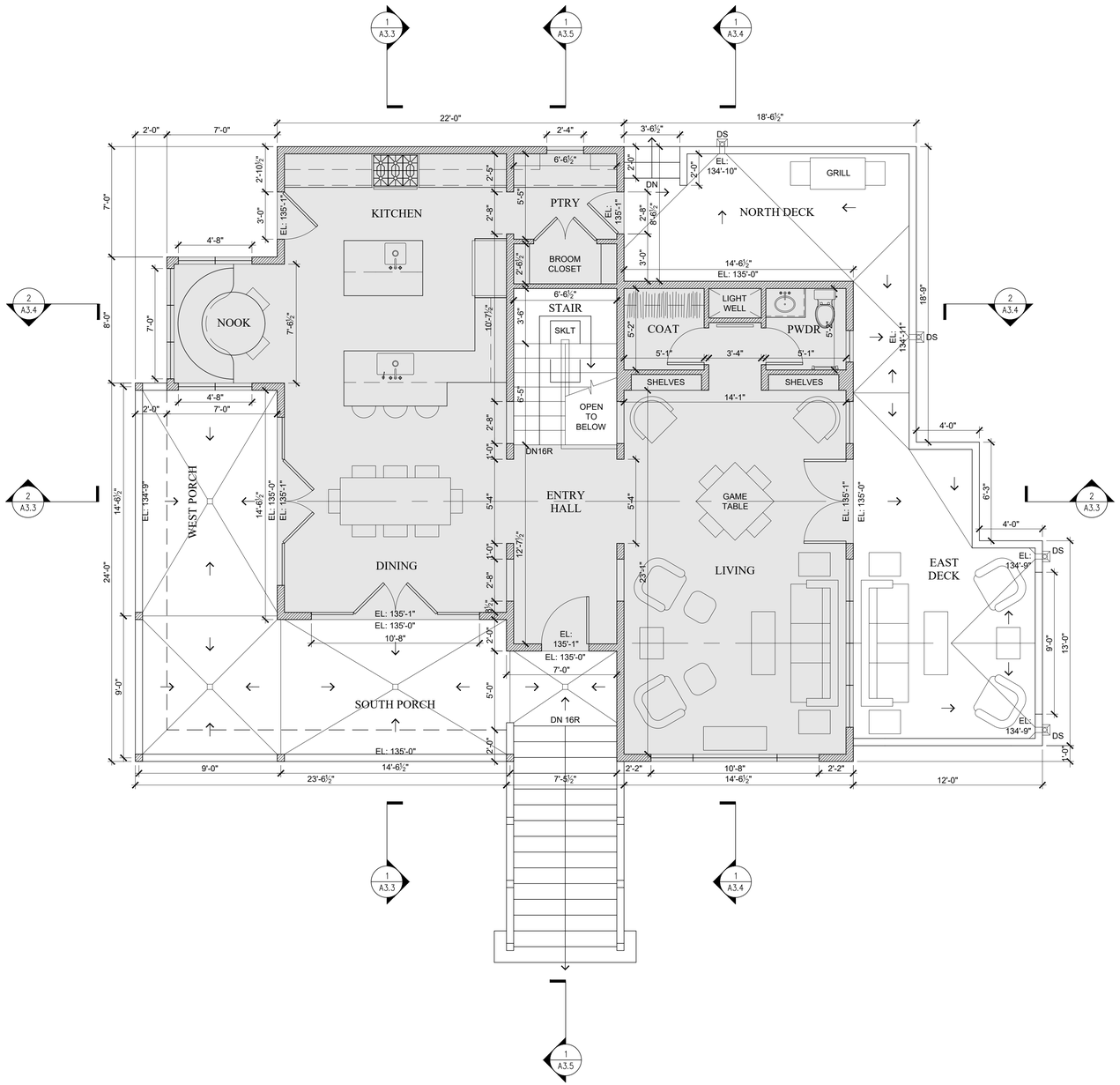
PROPOSED
LOWER LEVEL
FLOOR PLAN

A2.0



1 PROPOSED MAIN LEVEL FLOOR PLAN

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

0 2' 4' 8'

N

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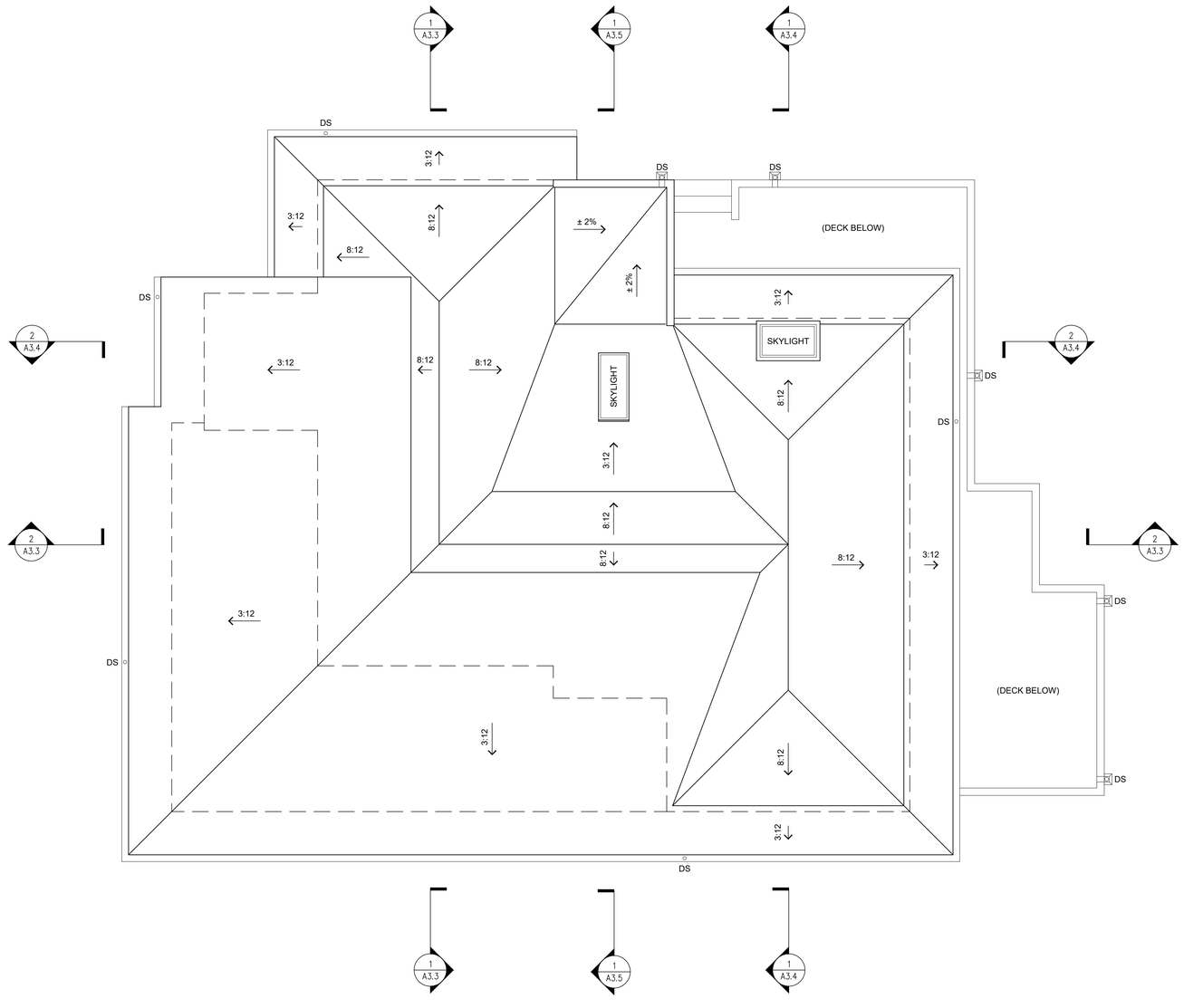
PROPOSED
MAIN LEVEL
FLOOR PLAN

A2.1



1 PROPOSED ROOF PLAN

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

0 2' 4' 8'

N

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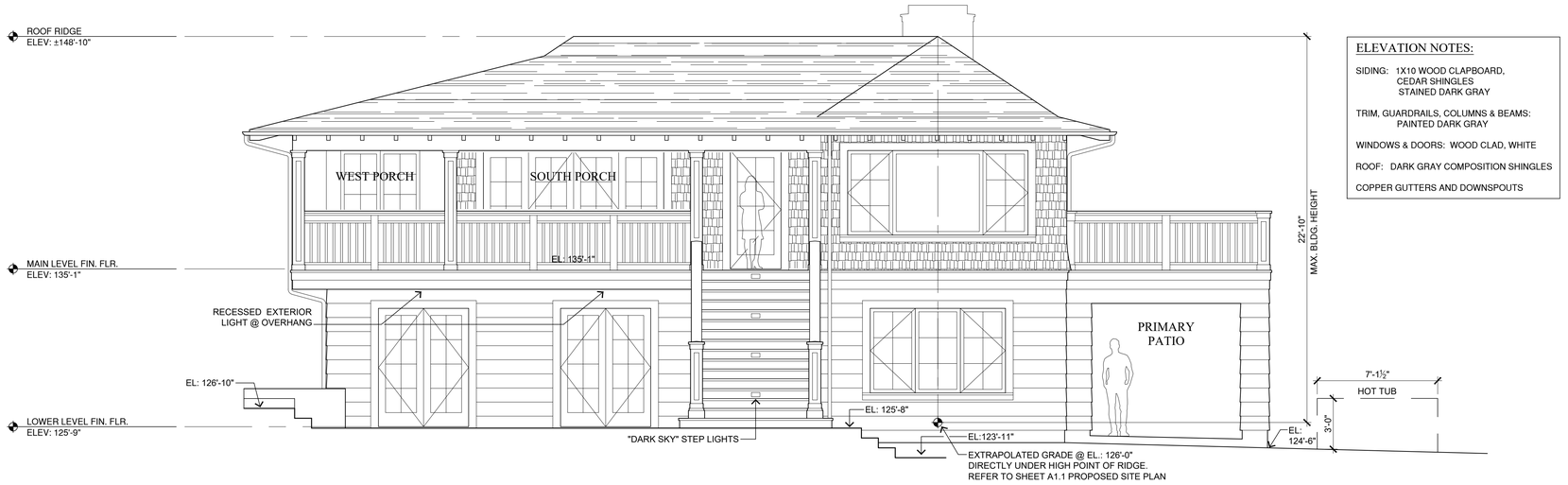
PROPOSED
ROOF PLAN

A2.2



2 PROPOSED SOUTH BUILDING ELEVATION

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

0 2' 4' 8'

ELEVATION NOTES:

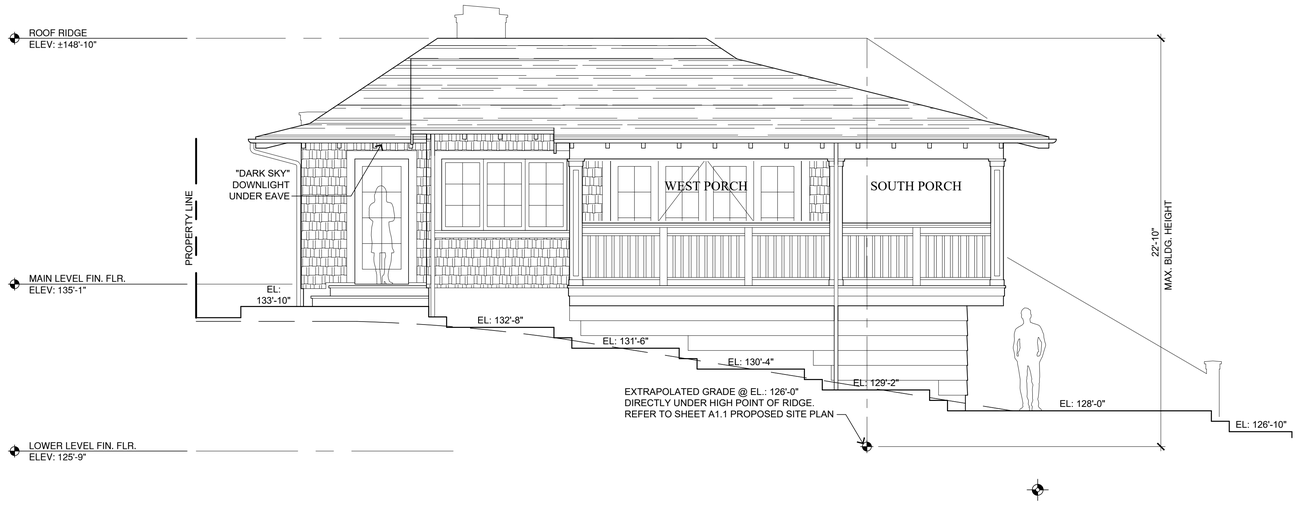
SIDING: 1X10 WOOD CLAPBOARD,
CEDAR SHINGLES
STAINED DARK GRAY

TRIM, GUARDRAILS, COLUMNS & BEAMS:
PAINTED DARK GRAY

WINDOWS & DOORS: WOOD CLAD, WHITE

ROOF: DARK GRAY COMPOSITION SHINGLES

COPPER GUTTERS AND DOWNSPOUTS



1 PROPOSED WEST BUILDING ELEVATION

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

0 2' 4' 8'

COLOR & MATERIAL EXHIBIT

ROOFING:
DARK GRAY COMPOSITION SHINGLES

TRIM, GUARDRAILS, COLUMNS & BEAMS:
PAINTED DARK GRAY

WINDOWS & DOORS:
WOOD CLAD, WHITE

SIDING:
1X10 WOOD CLAPBOARD,
CEDAR SHINGLES
STAINED DARK GRAY

GUTTERS & DOWNSPOUTS:
COPPER

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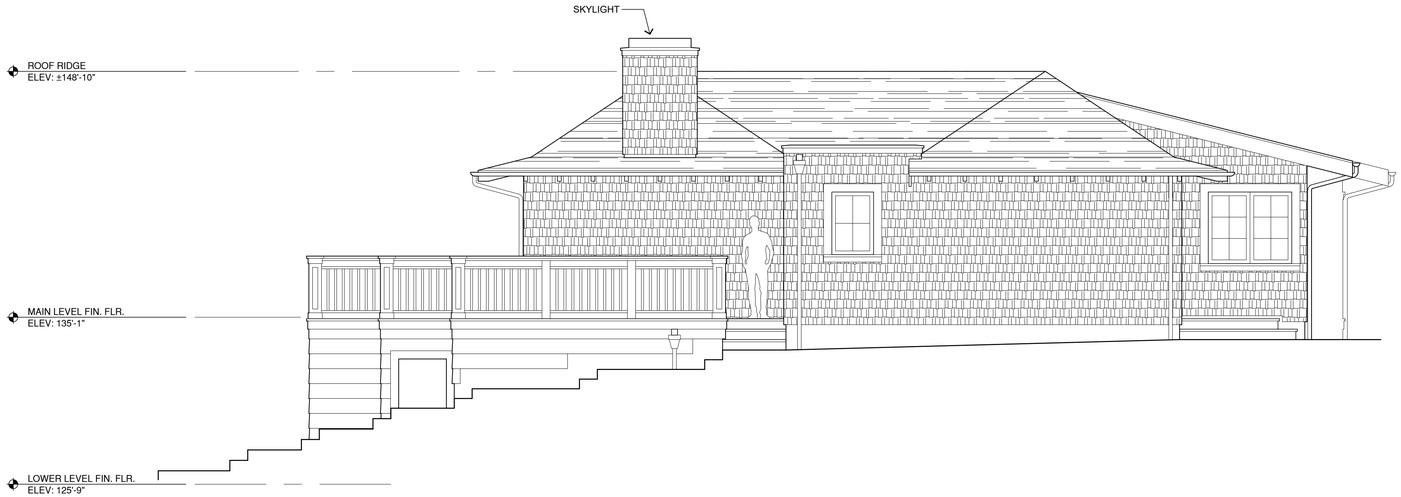
PROPOSED
BUILDING
ELEVATIONS

A3.1



2 PROPOSED NORTH BUILDING ELEVATION

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

0 2' 4' 8'

1 PROPOSED EAST BUILDING ELEVATION

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

0 2' 4' 8'

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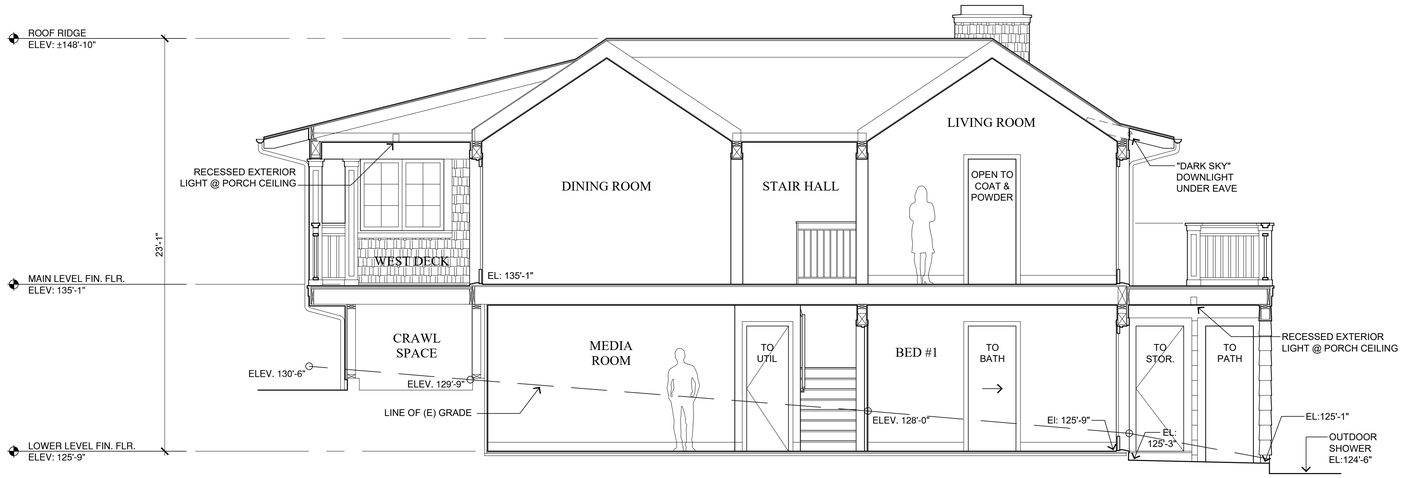
PROPOSED
BUILDING
ELEVATIONS

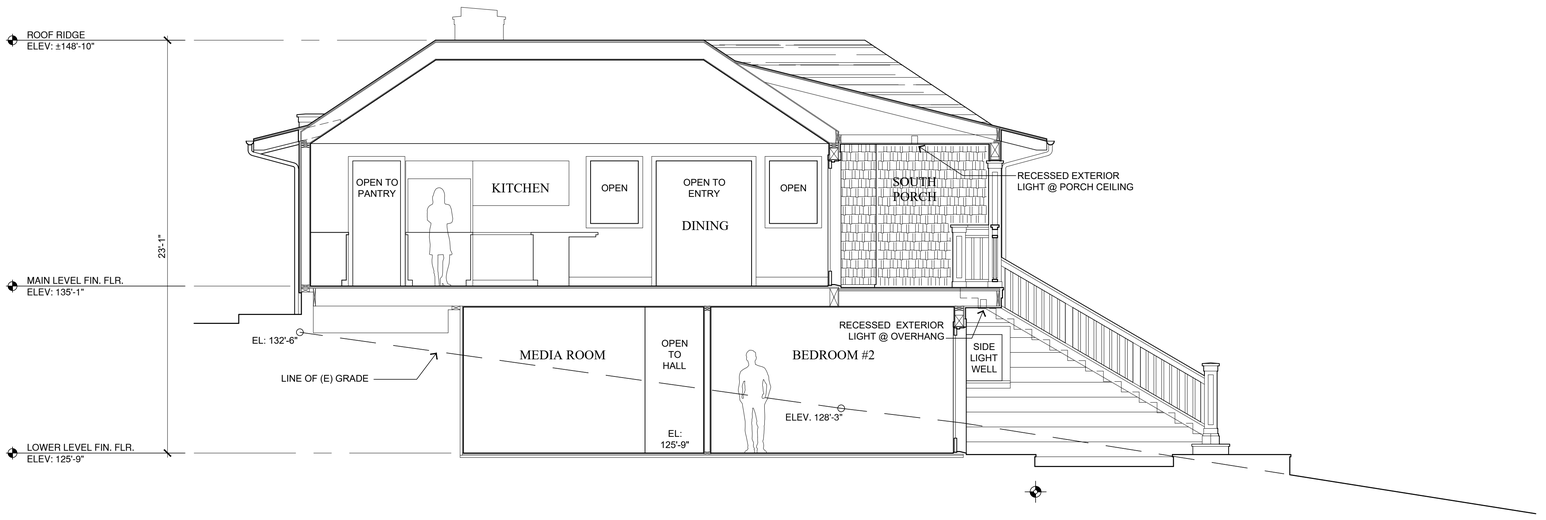
A3.2



2 PROPOSED SOUTH BUILDING SECTION

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

0 2' 4' 8'



1 PROPOSED WEST BUILDING SECTION

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

0 2' 4' 8'

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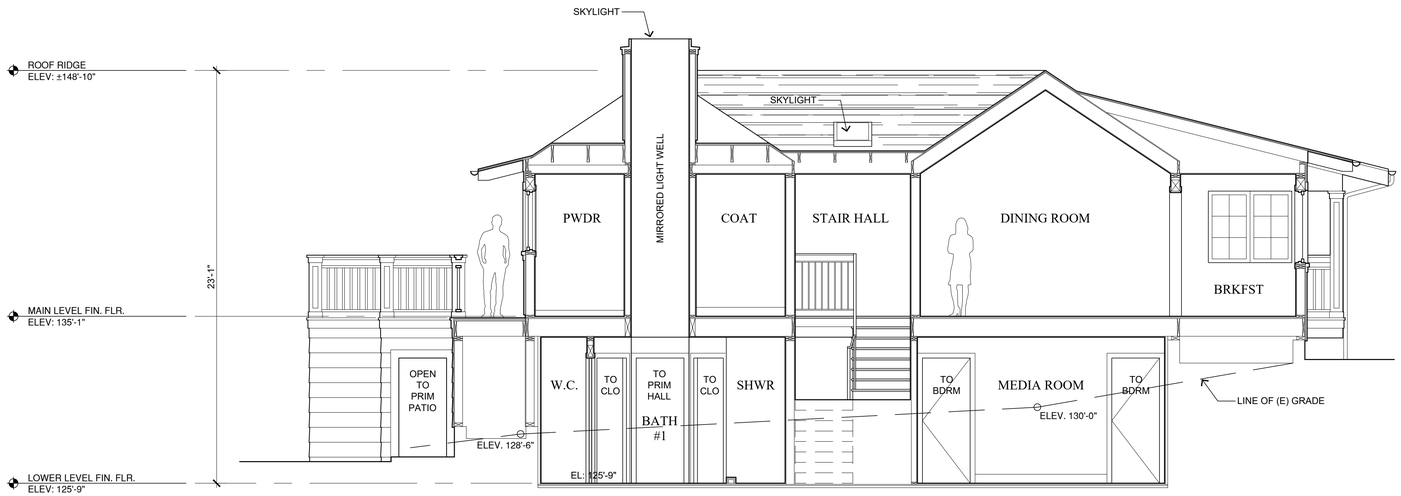
PROPOSED
BUILDING
SECTIONS

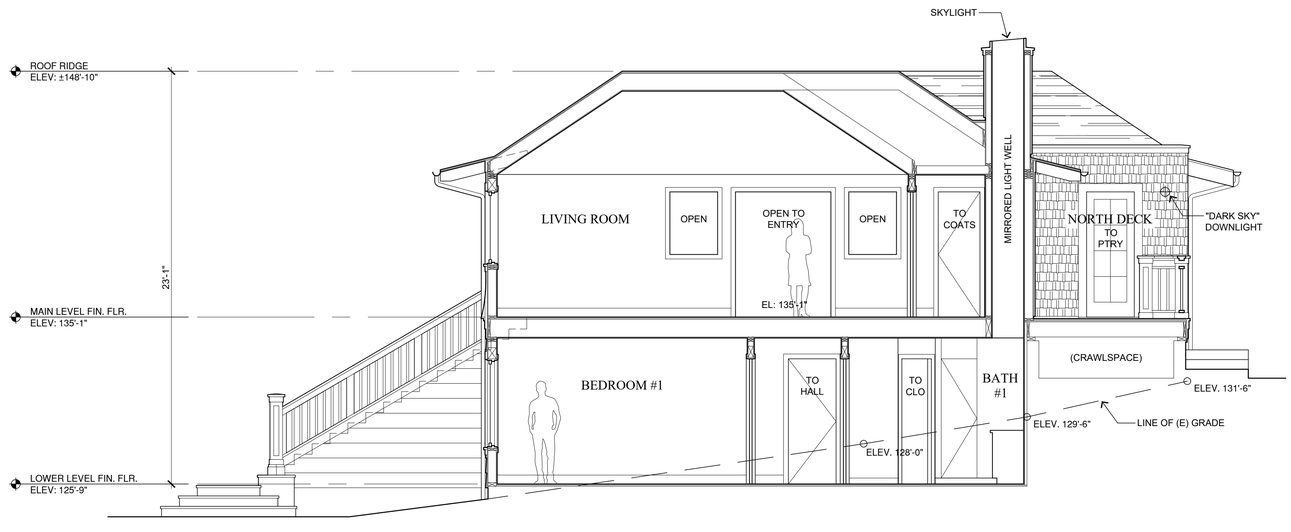
A3.3



2 PROPOSED NORTH BUILDING SECTION

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

0 2' 4' 8'



1 PROPOSED EAST BUILDING SECTION

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

0 2' 4' 8'

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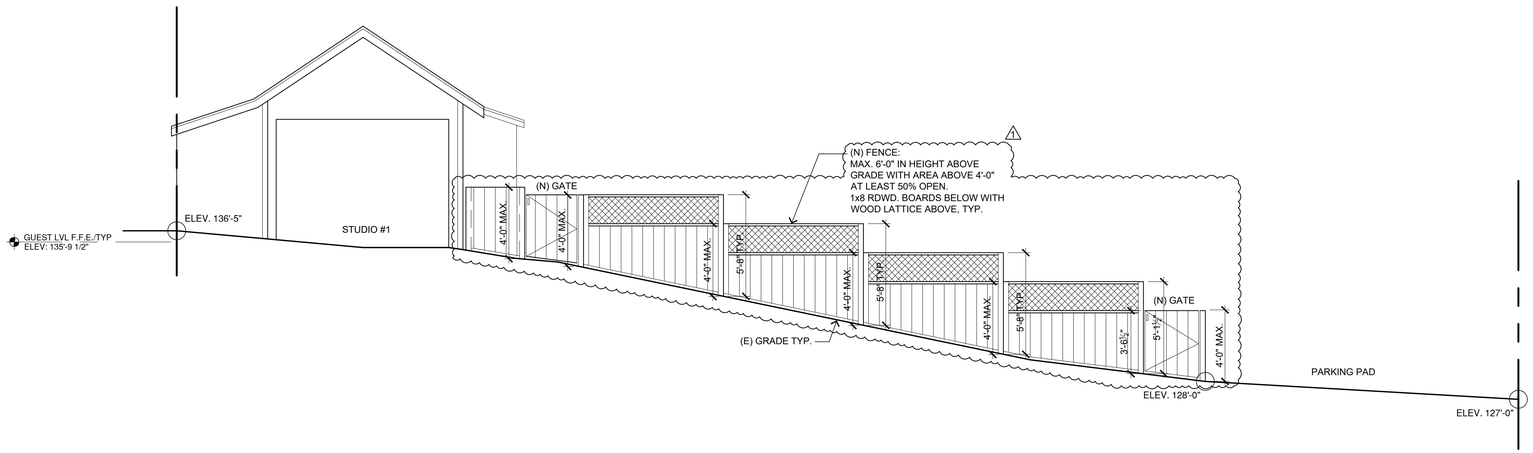
PROPOSED BUILDING SECTIONS

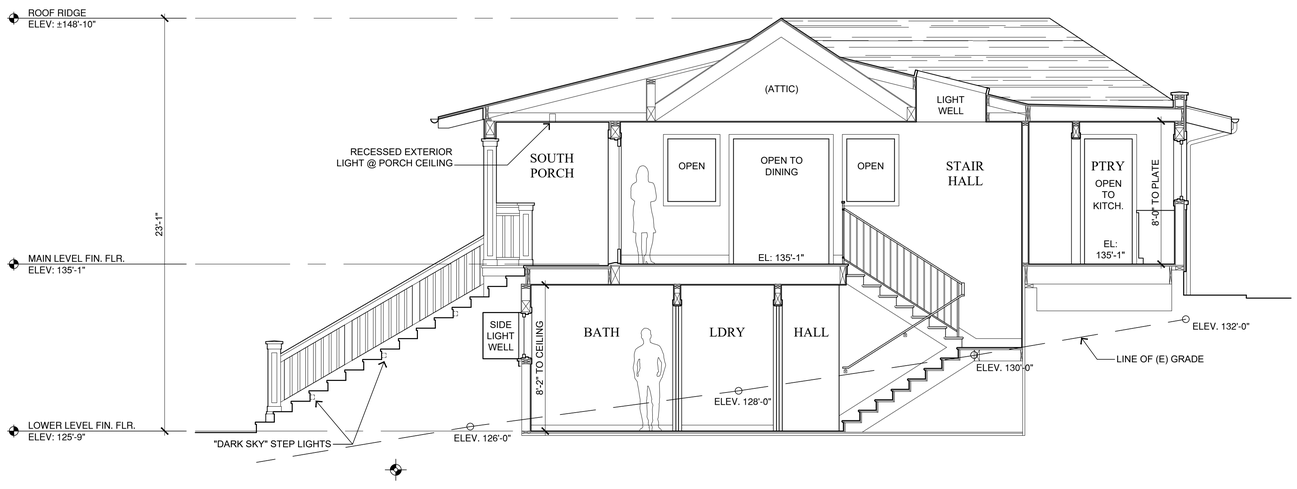
A3.4



2 PROPOSED ELEVATION AT LAUREL AVE. FENCE & GATES

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

0 2' 4' 8'



1 PROPOSED EAST BUILDING SECTION

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

0 2' 4' 8'

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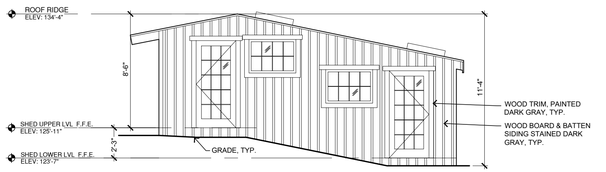
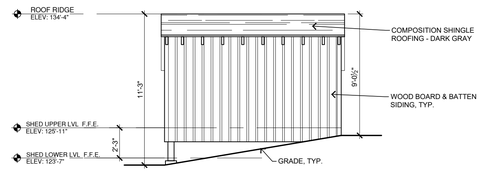
PROPOSED BUILDING SECTION, FENCE ELEVATION

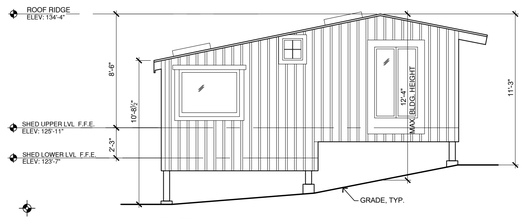
A3.5



WEST



NORTH

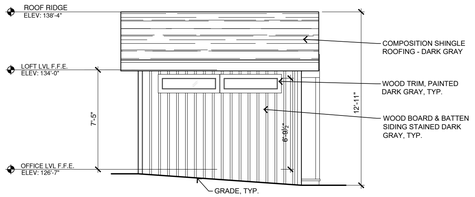


EAST

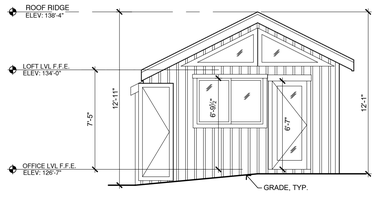
4 SHED - EXISTING ELEVATIONS

SCALE: 3/16"=1'-0"

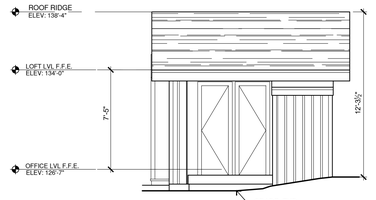
0 2' 4' 8'



WEST



NORTH

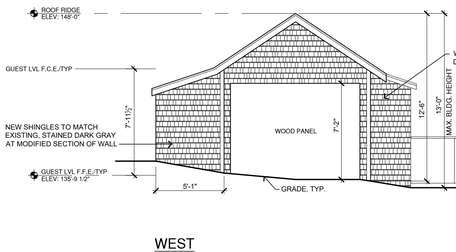


EAST

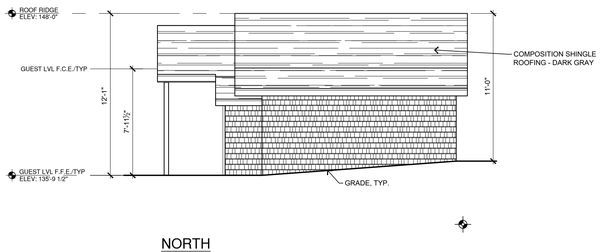
3 STUDIO #2 - EXISTING ELEVATIONS

SCALE: 3/16"=1'-0"

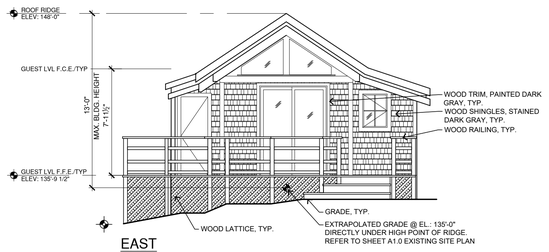
0 2' 4' 8'



WEST



NORTH

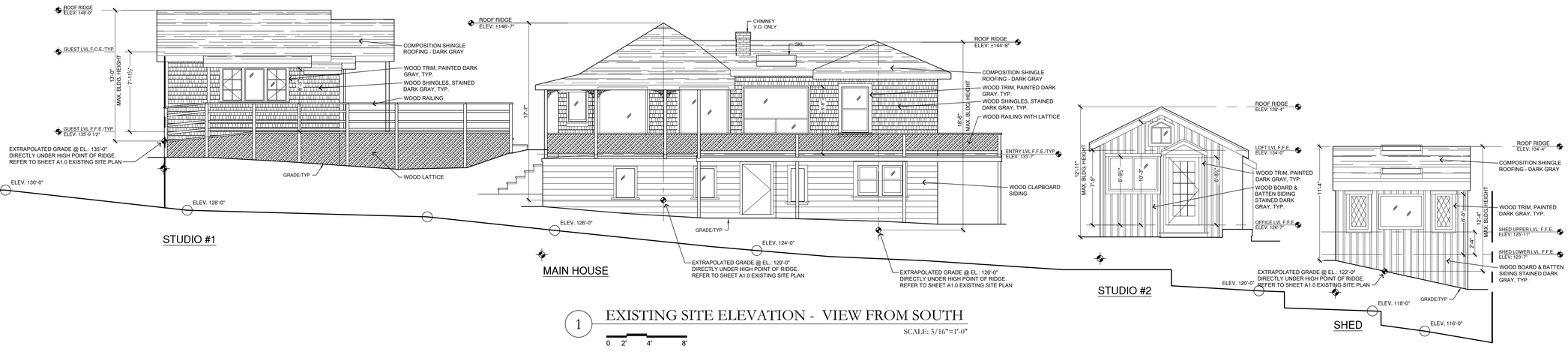


EAST

2 STUDIO #1 - EXISTING ELEVATIONS

SCALE: 3/16"=1'-0"

0 2' 4' 8'



1 EXISTING SITE ELEVATION - VIEW FROM SOUTH

SCALE: 3/16"=1'-0"

0 2' 4' 8'

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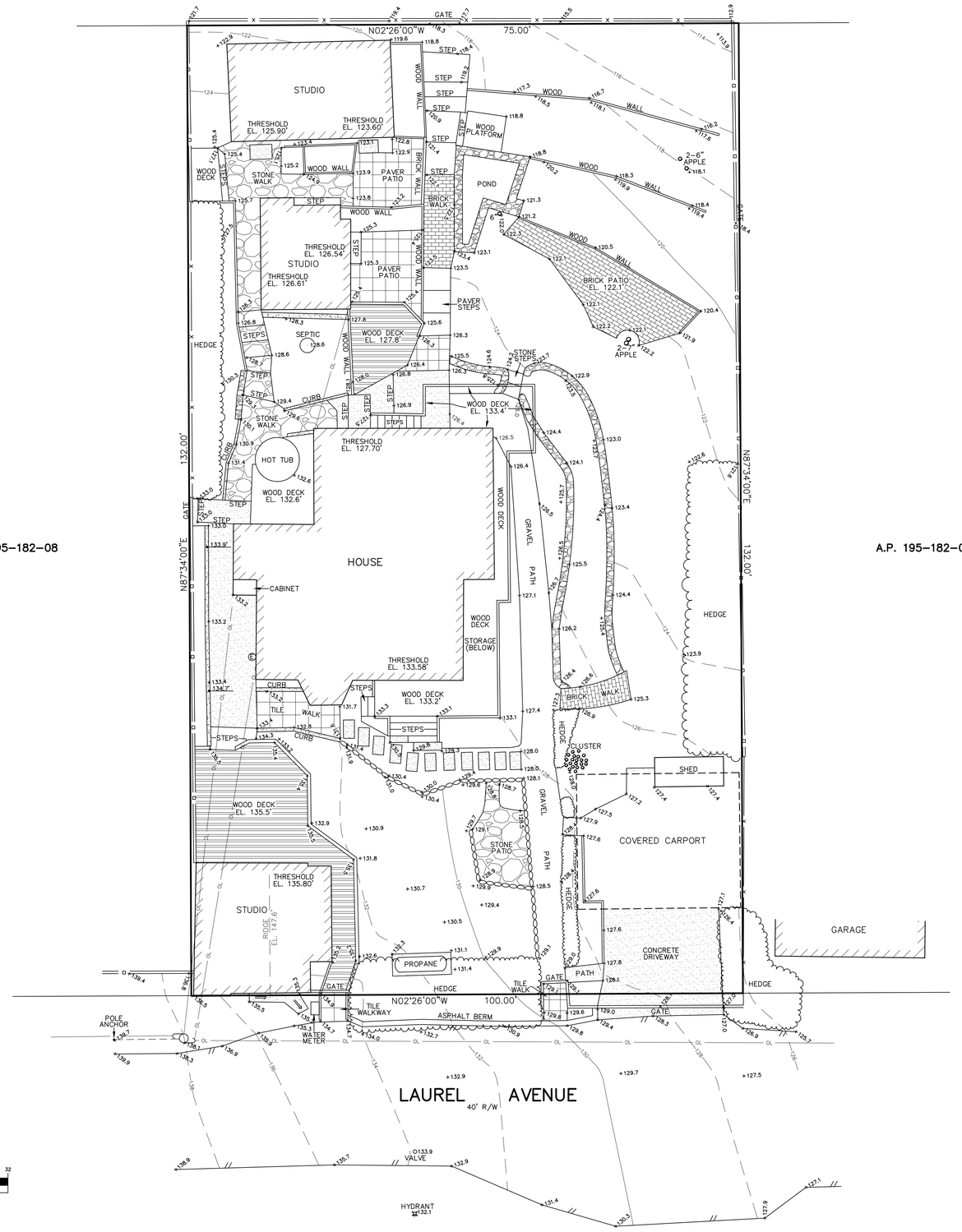
EXISTING BUILDING ELEVATIONS

A3.6

A.P. 195–182–14

A.P. 195–182–08

A.P. 195–182–06



GRAPHIC SCALE

8 0 4 8 16 32

(IN FEET)
1 inch = 8 ft.

north

LEGEND

- TREE (AS INDICATED)
- 104.8' TOP OF WALL ELEVATION
- CONCRETE
- GRADE BREAK
- WIRE FENCE
- WOOD FENCE
- EDGE OF PAVEMENT
- SURVEY CONTROL POINT
- JOINT POLE
- CONCRETE WALL
- ROCK WALL
- ROCK BORDER
- ELECTRIC / GAS METER
- OL OVERHEAD LINES

NOTES

1. ONLY SIGNIFICANT TREES SHOWN
2. LOT MAY BE SUBJECT TO EASEMENTS NOT SHOWN
3. DATUM IS PER MARIN GIS MAPPING
4. A RECORD OF SURVEY WILL BE FILED

LAWRENCE DOYLE
LAND SURVEYOR
CIVIL ENGINEER
100 HELENS LANE
MILL VALLEY, CA 94941
415 388 9585 F 415 388 0412

LICENSED LAND SURVEYOR
LAWRENCE P. DOYLE
No. 4694
STATE OF CALIFORNIA

50 LAUREL AVENUE
STINSON BEACH CALIFORNIA
A.P. 195-082-07

TOPOGRAPHIC SURVEY

DRAWN BY: CPD

DATE:	ISSUE:
7/30/21	

C-1

DRAWING NUMBER: 2943
SHEET 1 OF 1

GRADING AND DRAINAGE NOTES

1. PERFORM GRADING AND DRAINAGE IMPROVEMENTS IN ACCORDANCE WITH CURRENT EDITION OF THE CALIFORNIA BUILDING CODE (CBC), APPENDIX J, APPLICABLE MARIN COUNTY CODES AND REGULATIONS AND TO THE RECOMMENDATIONS OF THE SOILS REPORT PREPARED FOR THE PROJECT.

2. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD UPON DISCOVERING DISCREPANCIES, ERRORS, OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING, THE OWNER SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS, OR OMISSIONS. THE APPROVED PLANS AND SPECIFICATIONS SHALL NOT BE CHANGED WITHOUT THE WRITTEN APPROVAL OF THE MARIN COUNTY PUBLIC WORKS DEPARTMENT. PROPOSED MODIFICATIONS TO THE APPROVED PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE PERMIT AUTHORITY IN WRITING, TOGETHER WITH ALL NECESSARY TECHNICAL INFORMATION AND DESIGN DETAILS.

3. THE GRADING/DRAINAGE PERMIT AND AN APPROVED COPY OF THE GRADING/DRAINAGE PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

4. MARIN COUNTY PUBLIC WORKS MAY ORDER THAT ANY WORK STOP IMMEDIATELY IF IT IS PERFORMED CONTRARY TO MARIN COUNTY CODES AND REGULATIONS, THE APPROVED PLANS AND SPECIFICATIONS, PERMIT CONDITIONS, OR ANY WORK THAT HAS BECOME HAZARDOUS TO PROPERTY OR THE PUBLIC.

5. ISSUANCE OF A GRADING/DRAINAGE PERMIT BY MARIN COUNTY DOES NOT ELIMINATE THE RESPONSIBILITY OF THE OWNER TO SECURE PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK ON THESE PLANS. FAILURE TO OBTAIN ALL REQUIRED PERMITS MAY RESULT IN FINES FROM THE RESPECTIVE AGENCY.

6. ISSUANCE OF A PERMIT BY MARIN COUNTY PUBLIC WORKS TO CONSTRUCT A DAM OR A RESERVOIR DOES NOT ELIMINATE THE RESPONSIBILITY OF THE OWNER TO SECURE PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES INCLUDING THE CALIFORNIA DIVISION OF SAFETY OF DAMS WHEN WORK FALLS UNDER STATE JURISDICTION. FAILURE TO OBTAIN OTHER PERMITS MAY RESULT IN FINES FROM THE RESPECTIVE AGENCY.

7. EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE AND LOCATED THROUGHOUT THIS SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IF EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE ARE LOCATED IN THE COUNTY RIGHT-OF-WAY AND NEED MAINTENANCE, CONTACT MARIN COUNTY PUBLIC WORKS AT (415) 473-6530 FOR FURTHER ASSISTANCE. IN ANY EVENT, THE OWNER AND/OR CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UNDERGROUND SERVICE ALERT (U.S.A.), TOLL FREE AT 1-800-642-2444, AT LEAST TWO WORKING DAYS BUT NOT MORE THAN 14 CALENDAR DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL UNCOVER RELEVANT UTILITIES TO VERIFY THEIR LOCATION AND ELEVATION. IF UNEXPECTED OR CONFLICTING UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY U.S.A, THE UTILITY OWNER, AND/OR THE ENGINEER OF RECORD IMMEDIATELY. UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER, SEWER, ELECTRICAL, GAS, TELEPHONE, AND CABLE/TV. IF PRACTICAL, THE EXCAVATOR SHALL DELINEATE WITH WHITE PAINT OR OTHER SUITABLE MARKINGS THE AREA TO BE EXCAVATED.

9. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY BE HALTED WITHIN THE VICINITY OF THE FIND. THE NORTHWEST INFORMATION CENTER SHALL BE NOTIFIED AT (707) 588-8455. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE CITY PER THE ARCHEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER AT (415) 473-6043.

10. SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS, OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IMMEDIATELY IN THE AFFECTED AREA AND CONTACT 911 OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.

11. RETAINING WALLS, UNLESS EXEMPTED, ARE NOT APPROVED UNDER A GRADING PERMIT. A SEPARATE BUILDING PERMIT IS REQUIRED.

12. EQUIPMENT SHALL NOT CROSS OR DISTURB CHANNELS OF ACTIVELY FLOWING STREAMS WITHOUT MARIN COUNTY APPROVED PERMIT AND BEST MANAGEMENT PRACTICES.

13. GRADING AND DRAINAGE IMPROVEMENTS SHALL BE SET BACK FROM STREAMS, LAKES, PONDS, AND WETLANDS IN COMPLIANCE WITH COUNTY REQUIREMENTS. EXISTING VEGETATION SHALL BE RETAINED IN STREAM SETBACK AREAS TO FILTER SOIL AND OTHER POLLUTANTS CARRIED IN STORMWATER.

14. EXCESS SOIL SHALL BE REMOVED FROM THE SITE UNLESS DEPICTED TO REMAIN ON SITE PER THE APPROVED PLAN. THE SITE RECEIVING SOIL MAY REQUIRE A GRADING PERMIT UNLESS EXEMPTED.

15. CONTOURS, ELEVATIONS, AND SHAPES OF FINISHED SURFACES SHALL BE BLENDED WITH ADJACENT NATURAL TERRAIN TO ACHIEVE A CONSISTENT GRADE AND NATURAL APPEARANCE. THE TOP OF CUT SLOPES SHALL BE ROUNDED OFF TO BLEND WITH THE NATURAL TERRAIN. BORDERS OF CUT SLOPES AND FILLS SHALL BE ROUNDED OFF TO A MINIMUM RADIUS OF 5-FEET TO BLEND WITH THE NATURAL TERRAIN.

16. FILL MATERIAL SHALL NOT INCLUDE ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIALS. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL GREATER THAN 6 INCHES IN ANY DIMENSION SHALL BE INCLUDED IN FILLS EXCEPT WHERE APPROVED BY THE SOILS ENGINEER. FILLS SHALL BE CONSTRUCTED IN LIFTS NOT EXCEEDING 8 INCHES IN DEPTH. COMPLETED FILLS SHALL BE STABLE, WELL-INTEGRATED, AND BONDED TO ADJACENT MATERIALS AND THE MATERIALS ON WHICH THEY REST. FILLS SHALL BE COMPETENT TO SUPPORT ANTICIPATED LOADS AND BE STABLE AT THE DESIGN SLOPES SHOWN ON THE APPROVED PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE SOILS ENGINEER.

17. GROUND SURFACES SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIALS, AND SCARIFYING THE GROUND TO PROVIDE A BOND WITH THE FILL MATERIAL.

18. FILL SHALL NOT BE PLACED ON NATURAL SLOPES STEEPER THAN 2H:1(50%).

19. FILLS INTENDED TO SUPPORT STRUCTURES OR SURCHARGES SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D 1557, MODIFIED PROCTOR. A HIGHER COMPACTION PERCENTAGE MAY BE REQUIRED BY THE SOILS ENGINEER.

20. FILLS NOT INTENDED TO SUPPORT STRUCTURES OR SURCHARGES SHALL BE COMPACTED AS FOLLOWS: (1) FILL GREATER THAN 3 FEET IN DEPTH SHALL BE COMPACTED TO THE DENSITY SPECIFIED BY THE SOILS ENGINEER. (2) FILLS NO GREATER THAN 3 FEET IN DEPTH SHALL BE COMPACTED TO THE DENSITY NECESSARY FOR THE INTENDED USE OR AS DIRECTED BY THE SOILS ENGINEER.

21. ANY DISCREPANCY DISCOVERED BY CONTRACTOR IN THESE PLANS OR ANYFIELD CONDITIONS DISCOVERED BY CONTRACTOR THAT MAY DELAY ORDOBSTRUCT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE CIVIL ENGINEER AND OWNERIMMEDIATELY UPON DISCOVERY. NOTIFICATION SHALL BE IN WRITING.

EROSION AND SEDIMENT CONTROL NOTES

1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH CBC, APPENDIX J (CURRENT EDITION) AND MARIN COUNTY REGULATIONS.

2. THE APPROVED PLANS SHALL CONFORM WITH CASQA STORMWATER BMP (BEST MANAGEMENT PRACTICE) HANDBOOKS.

3. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. WORK SITES WITH INADEQUATE EROSION AND SEDIMENT CONTROL MAY BE SUBJECT TO A STOP WORK ORDER.

4. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.

5. AT ALL TIMES THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE STATE OF CALIFORNIA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.

RAINY SEASON OPERATIONS

1. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS PRIOR TO ANY WORK OR STOCKPILING ON-SITE, AND SUCH SHALL REMAIN IN PLACE UNTIL THE SITE IS STABILIZED. GRADING AND DRAINAGE IMPROVEMENTS SHALL BE PERMITTED DURING THE RAINY SEASON ONLY WHEN ON-SITE SOIL CONDITIONS PERMIT THE WORK TO BE PERFORMED IN COMPLIANCE WITH CITY OF SAN RAFAEL MUNICIPAL CODE CHAPTER 9.30. STORM WATER BMPS REFERENCED OR DETAILED IN THE PERMIT AUTHORITY'S BEST MANAGEMENT PRACTICES GUIDE SHALL BE IMPLEMENTED AND FUNCTIONAL ON THE SITE AT ALL TIMES

2. THE AREA OF ERODIBLE LAND EXPOSED AT ANY ONE TIME DURING THE WORK SHALL NOT EXCEED 1 ACRE OR 20% OF THE PERMITTED WORK AREA, WHICHEVER IS GREATER, AND THE TIME OF EXPOSURE SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.

3. AGRICULTURAL GRADING AND DRAINAGE IMPROVEMENTS, AND INITIAL LAND PREPARATION WORK FOR VINEYARD AND ORCHARD PLANTING, SHALL BE PERMITTED DURING THE RAINY SEASON ONLY FROM APRIL 1 TO APRIL 15, AND ONLY WHEN ON-SITE SOIL CONDITIONS PERMIT THE WORK TO BE PERFORMED IN COMPLIANCE WITH MARIN COUNTY CODE AND REGULATIONS.

YEAR ROUND REQUIREMENTS

1. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.

2. THE LIMITS OF GRADING SHALL BE DEFINED AND MARKED ON SITE TO PREVENT DAMAGE TO SURROUNDING VEGETATION. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE. ANY EXISTING VEGETATION WITHIN THE LIMITS OF GRADING THAT IS TO REMAIN UNDISTURBED BY THE WORK SHALL BE IDENTIFIED AND PROTECTED FROM DAMAGE BY MARKING, FENCING, OR OTHER MEASURES.

3. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS AND SHALL BE NOTED ON THE PLAN.

4. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO SEDIMENT, TRASH, NUTRIENTS, PATHOGENS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASH WATER, AND CHLORINATED WATER.

5. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY RIGHT-OF-WAY, SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING CONSTRUCTION VEHICLES LEAVING THE SITE ON A DAILY BASIS TO PREVENT DUST, SILT, AND DIRT FROM BEING RELEASED OR TRACKED OFFSITE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AT THE END OF EACH WORKING DAY OR MORE OFTEN AS NECESSARY.

6. ALL DISTURBED AREAS SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS. TEMPORARY OR PERMANENT REVEGETATION SHALL BE INSTALLED AS SOON AS PRACTICAL AFTER VEGETATION REMOVAL BUT IN ALL CASES PRIOR TO OCTOBER 15. PRIOR TO FINAL INSPECTION, ALL DISTURBED AREAS SHALL BE REVEGETATED OR LANDSCAPING SHALL BE INSTALLED.

7. WHENEVER IT IS NOT POSSIBLE TO USE EROSION PREVENTION MEASURES ON EXPOSED SLOPES, SEDIMENT CONTROL DEVICES SUCH AS FIBER ROLLS AND SILT FENCES SHALL BE INSTALLED TO PREVENT SEDIMENT MIGRATION. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM TOE OF SLOPE.

8. DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR DURING ALL PHASES OF CONSTRUCTION.

9. STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.

10. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY ERDSIVE STORM WATER FLOW.

11. SOIL, MATERIAL STOCKPILES, AND FERTILIZING MATERIAL SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.

12. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY OR AS NECESSARY. REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE COORDINATED BY THE CONTRACTOR.

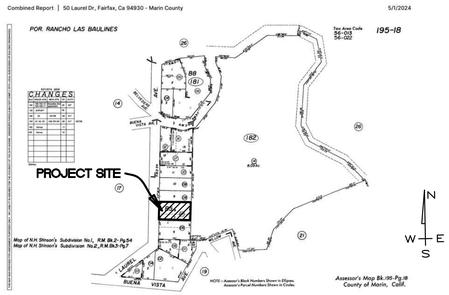
13. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS. NO WASHOUT OF CONCRETE, MORTAR MIXERS, OR TRUCKS SHALL BE ALLOWED ON SOIL.

14. PROPER APPLICATION, CLEANING, AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.

15. TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED DURING CONSTRUCTION ACTIVITIES TO PREVENT THE DISCHARGE OF POLLUTANTS.

16. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE, AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

GRADING AND DRAINAGE PLAN
FOR
50 LAUREL AVENUE
STINSON BEACH, CA
APN 195-182-07



AP MAP

NO SCALE

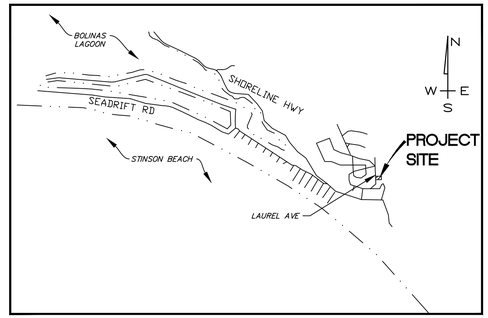
PROJECT DESCRIPTION

PROPOSED SINGLE FAMILY RESIDENCE, NEW DRIVEWAY, RETAINING WALLS, GRADING AND DRAINAGE ASSOCIATED TO IMPROVEMENTS.

SURVEY NOTES

TOPOGRAPHIC INFORMATION SHOWN HEREON IS FROM A TOPOGRAPHICAL SURVEY BY LAWRANCE DOYLE LAND SURVEYOR CIVIL ENGINEER. DATED JULY 30, 2021.

1. THE LOCATION OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE AND/OR FROM INFORMATION OBTAINED FROM PUBLIC AND/OR UTILITY AGENCIES. THE SURVEYOR ACCEPTS NO LIABILITY FOR THE LOCATION, EXISTENCE OR NON-EXISTENCE OF THOSE UNDERGROUND STRUCTURES, UTILITY LINES AND RELATED APPURTENANCES, ANY INDIVIDUAL, COMPANY OR AGENCY USING THIS MAP MUST CONFIRM THE LOCATION OF ALL UNDERGROUND LINES OR STRUCTURES PRIOR TO COMMENCING ANY EXCAVATION.
2. THE PROPERTY MAY BE SUBJECT TO EASEMENTS NOT SHOWN.
3. A RECORD OF SURVEY WILL BE FILED.
4. BENCHMARK: DATUM PER MARIN COUNTY GIS MAPPING



LOCATION MAP

NO SCALE

OWNER

THOMAS GOETZ
962 CAROLINA STREET,
SAN FRANCISCO, CA 94107
(415) 272-9192

CONTACT

MUNSELLE CIVIL ENGINEERING
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

EARTHWORK:

	CUT	FILL	NET
HOUSE	75 CY	0 CY	75 CY CUT
SITE	71 CY	13 CY	58 CY CUT
TOTAL	146 CY	13 CY	133 CY CUT<OFFHAUL>

NOTES:
1. THE QUANTITIES LISTED ARE THE ENGINEER'S ESTIMATE OF SURFACE GRADING ONLY. ADDITIONAL SUBSURFACE GRADING WILL BE REQUIRED FOR BENCHING, KEYWAYS, ETC.

2. CONTRACTOR IS RESPONSIBLE FOR THEIR OWN EARTHWORK QUANTITIES.

3. NO EXPANSION/CONTRACTION FACTORS HAVE BEEN APPLIED. EXPANSION AND/OR CONTRACTION MAY BE EXPERIENCED DUE TO ACTUAL FIELD CONDITIONS.

4. ANY EXCESS MATERIAL SHALL BE DISPOSED OF ONSITE UNDER THE DIRECTION OF THE PROJECT SOILS ENGINEER AND COORDINATED WITH THE PROJECT CIVIL ENGINEER.

5. APPROX. DISTURBED AREA OF SITE 0.2 AC. (9,062 SF±)

ABBREVIATIONS/LEGEND

AB	AGGREGATE BASE	PDE	PRIVATE STORM DRAIN EASEMENT
AC	ASPHALT CONCRETE	PIV	POST INDICATOR VALVE
ANG	ANGLE	POC	POINT OF CONNECTION
BC	BEGIN CURVE	PSE	PRIVATE SEWER EASEMENT
BD	BELOW DECK	PT	POINT OF TANGENCY
BO	BLOW-OFF	PUE	PUBLIC UTILITY EASEMENT
BSL	BUILDING SETBACK LINE	PVC	POLYVINYLCHLORIDE PIPE
BSW	BACK OF SIDEWALK	PVT	PRIVATE
BVC	BEGIN VERTICAL CURVE	R=	RADIUS
BW	BOTTOM OF RETAINING WALL	R/W	RIGHT OF WAY
CB	CATCH BASIN	RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE	RTG	RETAINING WALL
CPP	CORRUGATED PLASTIC PIPE	S.A.D.	SEE ARCHITECTURAL DESIGN
CR	CURB RETURN	S=	SLOPE
DI	DROP INLET	SD	STORM DRAIN
DIP	DUCTILE IRON PIPE	SDCO	STORM DRAIN CLEANOUT
DWY	DRIVEWAY	SDDI	STORM DRAIN DROP INLET
EC	END CURVE	SDE	PUBLIC STORM DRAIN EASEMENT
EG	EXISTING GROUND	SDMH	STORM DRAIN MANHOLE
ELEV	ELEVATION	S.L.D	SEE LANDSCAPE DESIGN
EP	EDGE OF PAVEMENT	SO	SIDE OPENING
ESMT	EASEMENT	S.S.D.	SEE STRUCTURAL DESIGN
EVC	END VERTICAL CURVE	SS	SANITARY SEWER
(E),EX.	EXISTING	SSCO	SANITARY SEWER CLEANOUT
FC	FACE OF CURB	SSMH	SANITARY SEWER MANHOLE
FG	FINISH GRADE	STA	STATION
FS	FINISH SURFACE	STD	STANDARD
GB	GRADE BREAK	SW	SIDEWALK
HDPE	HIGH DENSITY POLYETHYLENE	SWE	SIDEWALK EASEMENT
HT	HEIGHT	TC	TOP OF CURB
MCSD	MARIN CO. SEWER DISTRICT	TG	TOP OF GRATE
MMWD	MARIN MUNICIPAL WATER DISTRICT	TW	TOP OF RETAINING WALL
		TYP	TYPICAL
MON	STANDARD CITY MONUMENT	UNO	UNLESS NOTED OTHERWISE
PAE	PRIVATE ACCESS, MAINTENANCE, DRAINAGE, SIDEWALK, AND UTILITY EASEMENT	W	WATER
		WL	WATER LINE
		WM	WATER METER
		WS	WATER SERVICE
PC	POINT OF CURVATURE		
PCC	PORTLAND CEMENT CONCRETE		

PROPERTY LINE
NEIGHBORING PROPERTY LINE
CENTERLINE
BUILDING LINE
GRAVEL DRIVEWAY
EDGE OF PAVING
CONCRETE CURB & GUTTER
STRAW WATTLE
SURFACE FLOW DIRECTION
PROPOSED STORM DRAIN
PROPOSED ROOF DRAIN

INDEX OF DRAWINGS

REVISION	DESCRIPTION	BY	DATE

MUNSELLE CIVIL ENGINEERING
◆ CIVIL ENGINEERING ◆ SURVEYING ◆
◆ PLANNING ◆ CONST. MANAGEMENT ◆
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

REGISTERED PROFESSIONAL ENGINEER ★ DANIEL JOHN HUGHES ★ No. 60225 ★ CIVIL ★ STATE OF CALIFORNIA

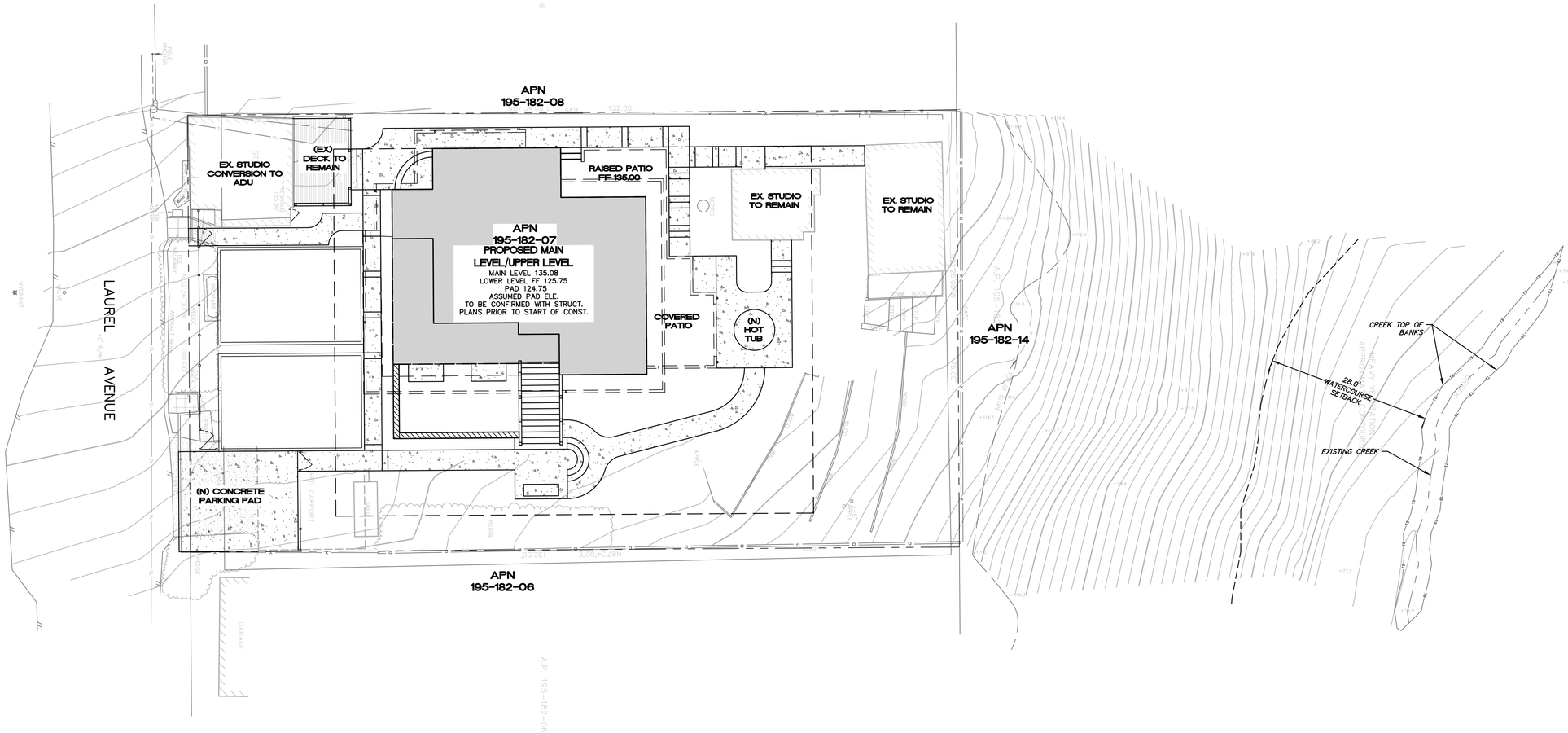
DANIEL JOHN HUGHES DATE
RCE 60225

50 LAUREL AVENUE
COVER SHEET, LOCATION MAP, NOTES
APN 195-182-07
50 LAUREL AVENUE
STINSON BEACH, CA

OCTOBER 29, 2024

JOB NO.
47-24

SHEET NO.
C1.1
OF 5 SHEETS



GRADING AND DRAINAGE NOTES

1. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR STRUCTURAL SECTION OF CONCRETE SLABS, WALLS AND FOUNDATION DETAILS.
2. DOWNSPOUT LOCATIONS SHOWN ARE APPROXIMATE ONLY AND SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS.
3. INSTALL RETAINING WALL AND FOUNDATION BACKDRAINS AS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL PLANS AND AS REQUIRED BY THE GEOTECHNICAL ENGINEER. DO NOT CONNECT BACKDRAINS TO THE STORM DRAIN OR ROOF LEADER DRAINAGE SYSTEMS. BACKDRAINS SHALL DRAIN THROUGH 3"ø WEEP HOLES AT 5' O.C. MIN.
4. DRAINAGE STRUCTURES, CLEANOUTS OR "Y" CONNECTIONS SHALL BE USED AS APPROPRIATE AT STORM DRAIN ALIGNMENT DEFLECTIONS OR JUNCTIONS OF INTERSECTING DRAIN LINES TO FACILITATE MAINTENANCE.
5. ALL PAVED AND UNPAVED FINISHED SURFACES SHALL HAVE POSITIVE DRAINAGE.
6. ALL WORK SHALL COMPLY WITH BEST MANAGEMENT PRACTICES TO PREVENT STORM WATER CONTAMINATION.

LEGEND

PROPOSED BUILDING
SEE ARCH. PLAN

PROPOSED CONCRETE
SEE ARCH. PLAN

PROPOSED RETAINING WALL
SEE DESIGN BY OTHERS

N
W E
S

OVERALL SITE PLAN

SCALE: 1" = 10'

0 10 20 30

(GRAPHIC SCALE IN FEET)

REVISION	DESCRIPTION	BY	DATE

MUNSELLE CIVIL ENGINEERING
CIVIL ENGINEERING ◆ SURVEYING ◆
PLANNING ◆ CONST. MANAGEMENT
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

PROFESSIONAL ENGINEER ★ REGISTERED ★ STATE OF CALIFORNIA
DANIEL JOHN HUGHES
No. 60225
CIVIL

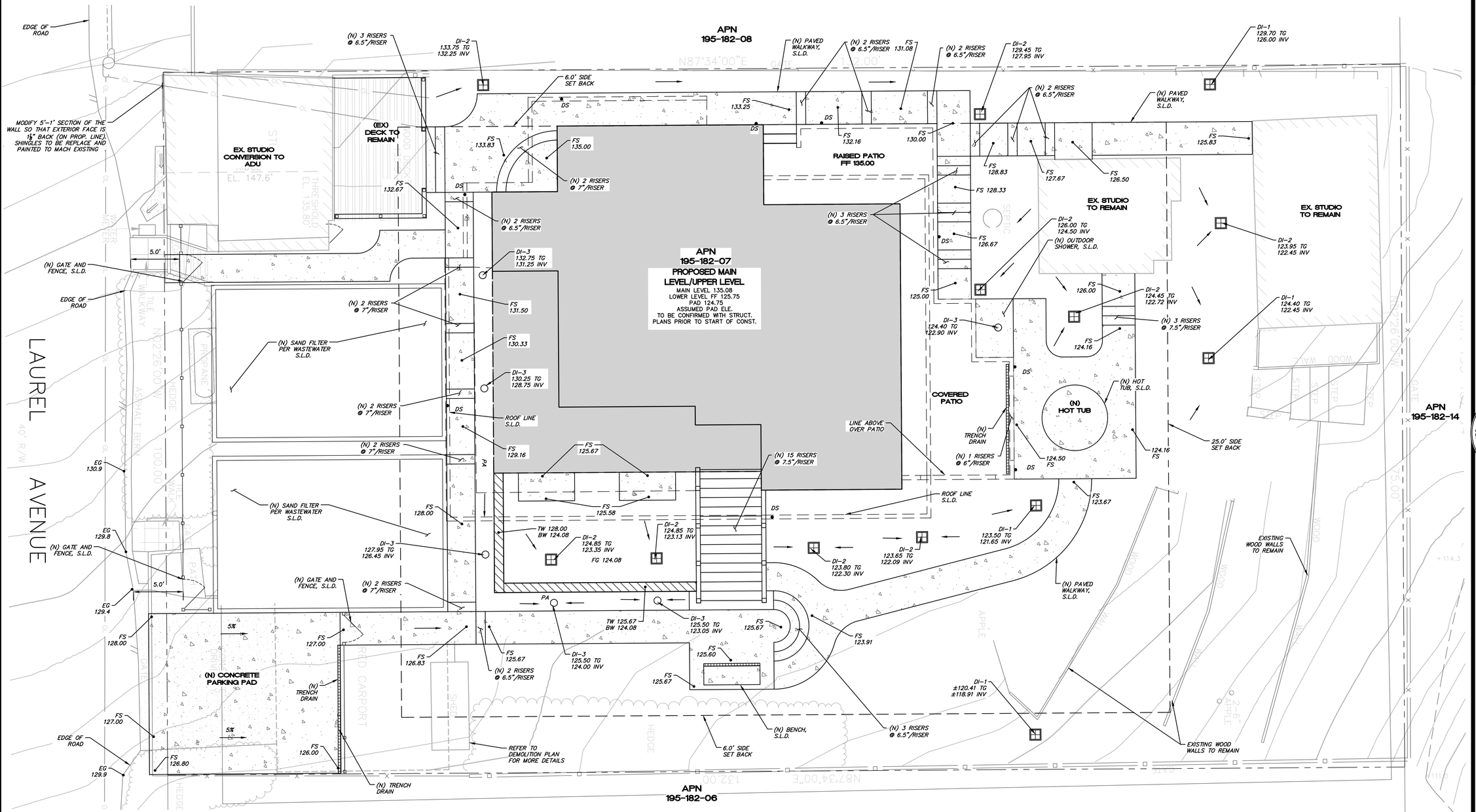
DANIEL JOHN HUGHES DATE
RCE 60225

50 LAUREL AVENUE
OVERALL SITE PLAN
APN 195-182-07
50 LAUREL AVENUE
STINSON BEACH, CA

OCTOBER 29, 2024

JOB NO.
47-24

SHEET NO.
C2
OF 5 SHEETS



LEGEND

- PROPOSED BUILDING SEE ARCH. PLAN
- PROPOSED CONCRETE SEE ARCH. PLAN
- PROPOSED RETAINING WALL SEE DESIGN BY OTHERS

GRADING AND DRAINAGE NOTES

1. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR STRUCTURAL SECTION OF CONCRETE SLABS, WALLS AND FOUNDATION DETAILS.
2. DOWNSPOUT LOCATIONS SHOWN ARE APPROXIMATE ONLY AND SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS.
3. INSTALL RETAINING WALL AND FOUNDATION BACKDRAINS AS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL PLANS AND AS REQUIRED BY THE GEOTECHNICAL ENGINEER. DO NOT CONNECT BACKDRAINS TO THE STORM DRAIN OR ROOF LEADER DRAINAGE SYSTEMS. BACKDRAINS SHALL DRAIN THROUGH 3"ø WEEP HOLES AT 5' O.C. MIN.
4. DRAINAGE STRUCTURES, CLEANOUTS OR "Y" CONNECTIONS SHALL BE USED AS APPROPRIATE AT STORM DRAIN ALIGNMENT DEFLECTIONS OR JUNCTIONS OF INTERSECTING DRAIN LINES TO FACILITATE MAINTENANCE.
5. ALL PAVED AND UNPAVED FINISHED SURFACES SHALL HAVE POSITIVE DRAINAGE.
6. ALL WORK SHALL COMPLY WITH BEST MANAGEMENT PRACTICES TO PREVENT STORM WATER CONTAMINATION.

DRAINAGE SCHEDULE

DI-1 ▣	12"x12" OLDCASTLE PRECAST CONCRETE INLET WITH ATRIUM GRATE (OR APPROVED EQUAL)
DI-2 ▣	6" DECORATIVE AREA DRAIN WITH PEDESTRIAN RATED GRATE, (OR APPROVED EQUAL)
DI-3 ◉	6" NDS SPEE-D BASIN WITH ATRIUM GRATE (OR APPROVED EQUAL)
TD-1: ▭	ACO BRICKSLOT K100 TRENCH DRAIN (OR APPROVED EQUIVALENT)
TD-2: ▭	ACO K100 TRENCH DRAIN (OR APPROVED EQUIVALENT)

ALL 6" STORM DRAIN PIPE TO BE HDPE DUAL WALL.
ALL 4" STORM DRAIN AND ROOF LEADER DRAIN PIPE TO BE PVC SCHEDULE 40.

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GRADING PLAN

SCALE: 1" = 5'

0 5 10 15

(GRAPHIC SCALE IN FEET)

REVISION	DESCRIPTION	BY	DATE

MUNSELLE CIVIL ENGINEERING
◆ CIVIL ENGINEERING ◆ SURVEYING ◆
◆ PLANNING ◆ CONST. MANAGEMENT ◆
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

PROFESSIONAL ENGINEER ★ REGISTERED ★ STATE OF CALIFORNIA
DANIEL JOHN HUGHES No. 60225 CIVIL

DANIEL JOHN HUGHES DATE
RCE 60225

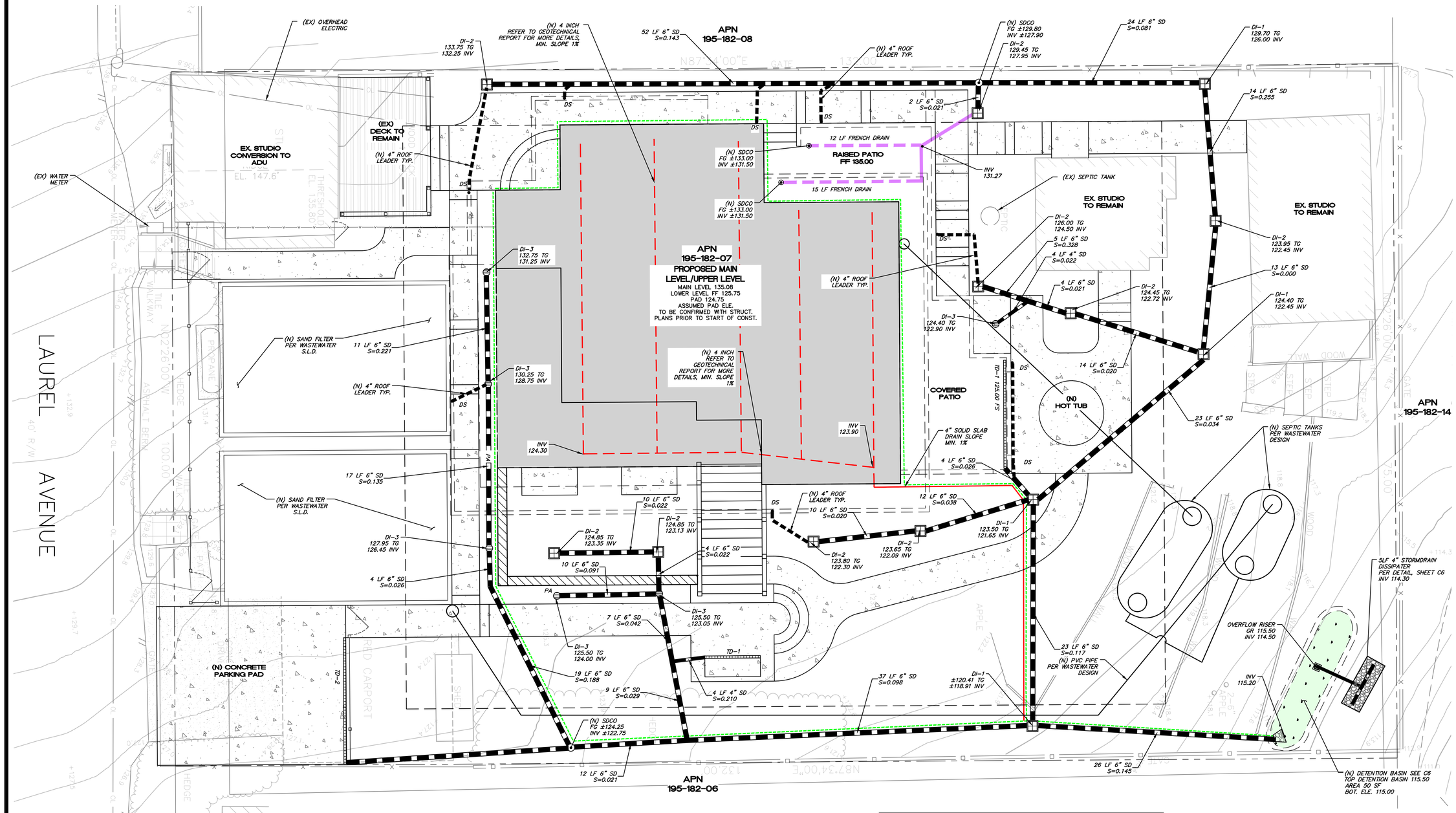
50 LAUREL AVENUE
GRADING PLAN
APN 195-182-07
50 LAUREL AVENUE
STINSON BEACH, CA

OCTOBER 29, 2024

JOB NO.
47-24

SHEET NO.
C3
OF 5 SHEETS

C:\USERS\ANGEL\MUNSELLE CIVIL DROPBOX\ANGEL DANOUS\COMPANY-DATA\MCE JOBS\2024\47-24 50 LAUREL AVE\DWGS\47-24 IP.DWG 11/6/2024 5:58 PM AN



PERMEABILITY CALCULATIONS

PRE-AND POST-CONSTRUCTION PERVIOUS/IMPERVIOUS AREAS (WITHIN LOT LIMITS)				
NOTE: TOTAL PARCEL AREA: 9,900 SF (0.22 AC)	IMPERVIOUS AREA (SF)	% OF LOT	PERVIOUS AREA (SF)	% OF LOT
PRE-CONSTRUCTION	2,680 SF	27.0%	7,220 SF	73.0%
POST CONSTRUCTION	4,761 SF	48.0%	6,375 SF	52.0%
POST CONSTRUCTION INCREASED IMPERVIOUS AREA	2,081 SF			

PROJECT BASMAA

TOTAL NEW AND REPLACED IMPERVIOUS AREA (SF)	2,406 SF

STORM WATER TREATMENT (BASMAA) NOTES:

1. PER COUNTY OF MARIN REQUIREMENTS, THE PROJECT IS REQUIRED TO COMPLY WITH THE BASMAA POST-CONSTRUCTION MANUAL. THE MANUAL DOES NOT REQUIRE ANY SPECIAL MEASURES OR THE INSTALLATION OF ANY STORM WATER TREATMENT FACILITIES (SUCH AS BIORETENTION) BECAUSE TOTAL PROPOSED NEW/REPLACED IMPERVIOUS AREA IS UNDER THE MINIMUM THRESHOLD OF 2,500 SQ FT.
2. ALTHOUGH NOT SPECIFICALLY REQUIRED BY BASMAA, THE PROJECT DESIGN DOES INCORPORATE THE FOLLOWING BASMAA MEASURES:
   - MINIMIZE IMPERVIOUS SURFACES (PERVIOUS LANDSCAPE MATERIALS INSTEAD OF IMPERVIOUS HARDSCAPE)
   - REDUCE RUNOFF (DRY WELLS)
   - CONSERVE NATURAL AREAS OF THE SITE (PRESERVE EXISTING TREES)
   - PROTECT SLOPES AGAINST EROSION (EROSION CONTROL AND DRY WELLS)

LEGEND

- PROPOSED BUILDING SEE ARCH. PLAN
- PROPOSED CONCRETE SEE ARCH. PLAN
- PROPOSED RETAINING WALL SEE DESIGN BY OTHERS
- PROPOSED PERIMETER GRAVEL DRAIN, 4" PERFORATED PIPE, S=0.01 MIN.
- PROPOSED FRENCH DRAIN, SEE DETAIL ON SHEET C5

DRAINAGE SCHEDULE

DI-1	12"x12" OLDCASTLE PRECAST CONCRETE INLET WITH ATRIUM GRATE (OR APPROVED EQUAL)
DI-2	6" DECORATIVE AREA DRAIN WITH PEDESTRIAN RATED GRATE, (OR APPROVED EQUAL)
DI-3	6" NDS SPEE-D BASIN WITH ATRIUM GRATE (OR APPROVED EQUAL)
TD-1:	ACO BRICKSLOT K100 TRENCH DRAIN (OR APPROVED EQUIVALENT)
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ALL 6" STORM DRAIN PIPE TO BE HDPE DUAL WALL.
ALL 4" STORM DRAIN AND ROOF LEADER DRAIN PIPE TO BE PVC SCHEDULE 40.

N
W E
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DRAINAGE AND UTILITY PLAN

SCALE: 1" = 5'

0 5 10 15

(GRAPHIC SCALE IN FEET)

REVISION	DESCRIPTION	BY	DATE

MUNSELLE CIVIL ENGINEERING
◆ CIVIL ENGINEERING ◆ SURVEYING ◆
◆ PLANNING ◆ CONST. MANAGEMENT ◆
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

PROFESSIONAL ENGINEER ★ REGISTERED ★ STATE OF CALIFORNIA
DANIEL JOHN HUGHES No. 60225 CIVIL

DANIEL JOHN HUGHES DATE
RCE 60225

50 LAUREL AVENUE
DRAINAGE AND UTILITY PLAN

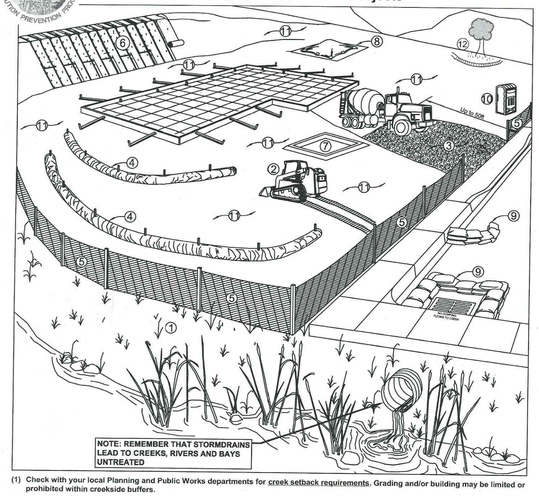
APN 195-182-07
50 LAUREL AVENUE
STINSON BEACH, CA

OCTOBER 29, 2024

JOB NO. 47-24

SHEET NO. C4 OF 5 SHEETS

Marin County Stormwater Pollution Prevention Program
Minimum Erosion/Sediment Control Measures
For Small Construction Projects



(1) Check with your local Planning and Public Works departments for creek setback requirements. Grading and/or building may be limited or prohibited within creekside buffers.

(2) During grading phase, track-walk up and down slopes (not parallel to them).

(3) *Stabilize site entrance and temporary driveway - use 3" crushed rock up to 50' (or as far as possible) to prevent tracking soil offsite.

(4) *Use straw wattles along contours with 2:1 slopes or steeper, keyed into ground at least 3" deep (typically 25' to 50' apart).

(5) *Install silt fence along contours as secondary measure to keep sediment onsite and to minimize vehicle and foot traffic beyond limits of site disturbance.

(6) *Install erosion control blankets (or equivalent) on any disturbed site with 2:1 slopes or greater.

(7) *Construct a concrete washout site adjacent to stabilized entrance. Clean as needed and remove at end of project.

(8) Cover all stockpiles and landscape material and berm properly with straw wattles or sand bags. Keep behind silt fence, away from water bodies.

(9) *Use pea-gravel bags (or similar product) around drain inlets located both onsite and in gutter as a last line of defense.

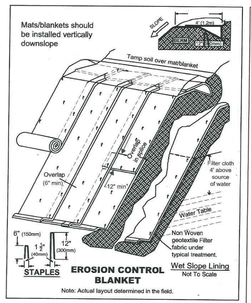
(10) Place port-a-potty near stabilized site entrance, behind the curb and away from storm drain inlets and water bodies.

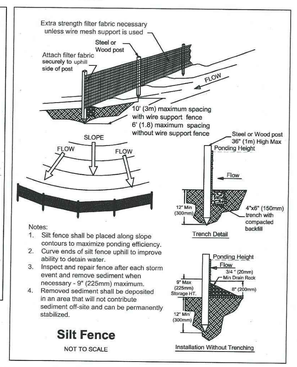
(11) Cover all exposed soil with straw mulch and tackifier (or equivalent).

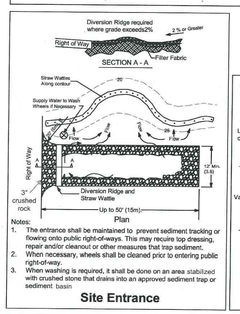
(12) Existing vegetation should be preserved as much as possible. Revegetate areas of disturbed soil/vegetation as soon as practical.

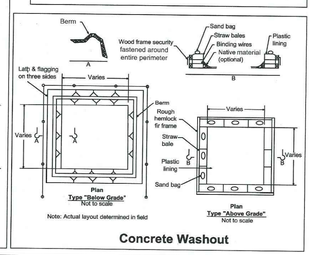
Note: Schedule construction activities to reduce erosion potential. Sediment and erosion control shall be continually maintained throughout the rainy season (October 1st - April 30th) and must remain effective through the construction and landscape phases. Inspect and maintain BMPs before and after rain events. *See reverse for detail drawings. Visit www.mcstoppp.org for more information on construction site management.

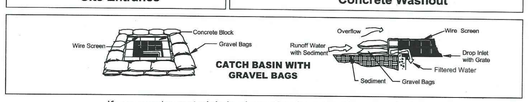
TYPICAL DETAILS



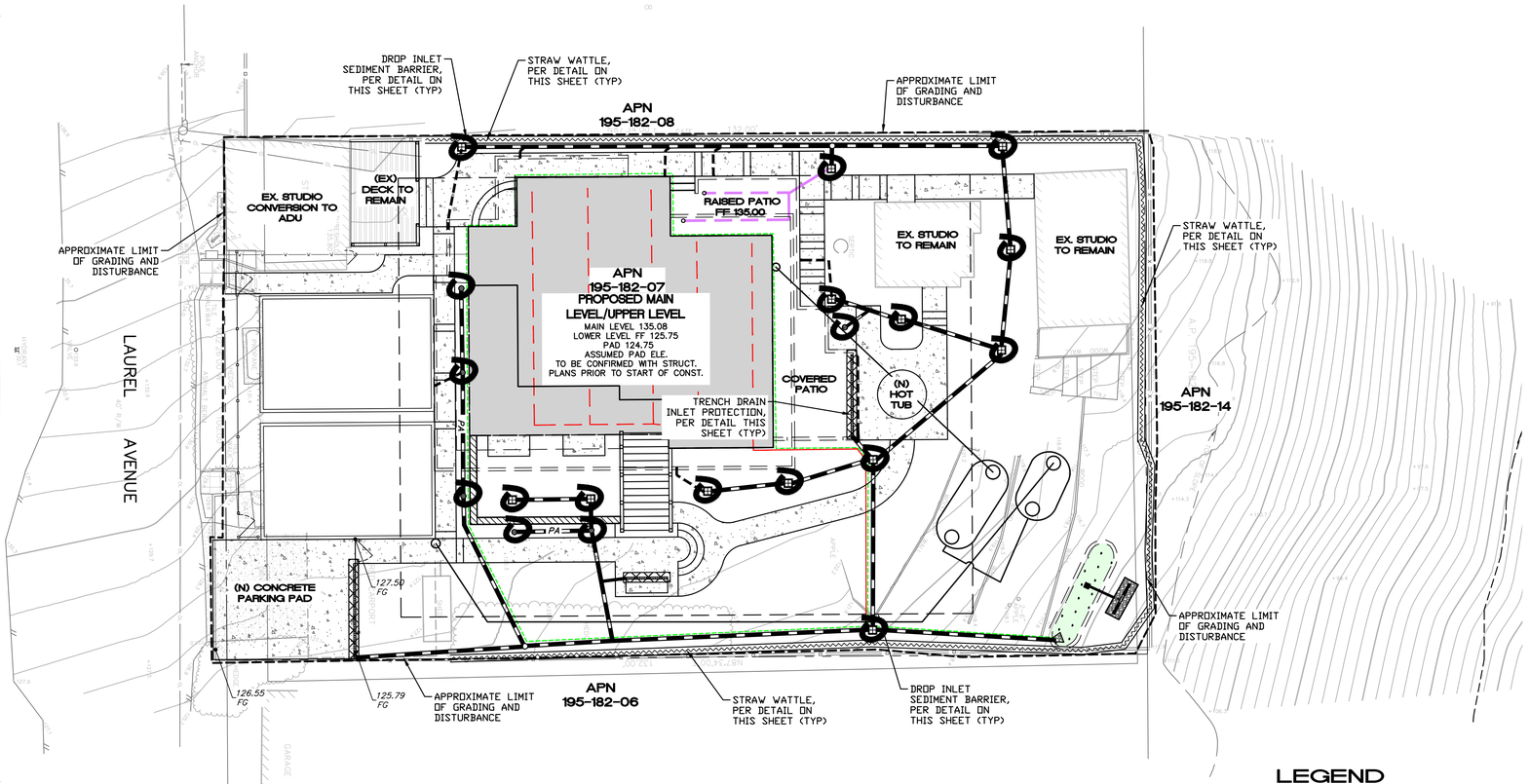


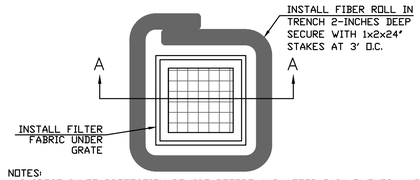




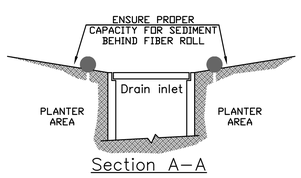


If you require materials in alternative formats, please contact:
415-473-4381 voice/TTY or disabilityaccess@co.marin.ca.us.

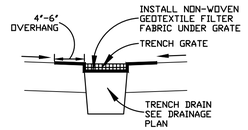




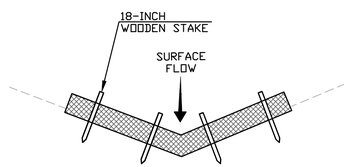
NOTES:
1. INSPECT INLET PROTECTION DEVICE BEFORE AND AFTER RAIN EVENTS, AND WEEKLY THROUGH THE RAINY SEASON. DURING EXTENDED RAIN EVENTS, INSPECT AT LEAST ONCE EVERY 24 HOURS.
2. REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SILT AND DEBRIS TO ALLOW FOR PROPER FUNCTION OF DEVICE



DROP INLET SEDIMENT BARRIER
NOT TO SCALE



TRENCH DRAIN INLET PROTECTION
NO SCALE



STRAW WATTLE CHECK DAM DETAIL
NOT TO SCALE

LEGEND

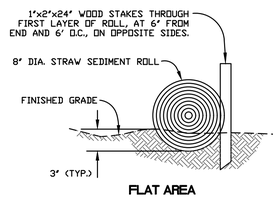
STRAW WATTLE PER DETAIL ON THIS SHEET

APPROXIMATE LIMITS OF LAND DISTURBANCE

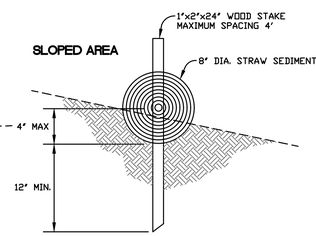
DROP INLET SEDIMENT BARRIER PER DETAIL ON THIS SHEET

SLOT DRAIN INLET PROTECTION PER DETAIL ON THIS SHEET

EROSION CONTROL PLAN
SCALE: 1" = 10'
0 10 20 30
(GRAPHIC SCALE IN FEET)



STRAW WATTLE DETAIL
NOT TO SCALE



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◆ PLANNING ◆ CONST. MANAGEMENT ◆
513 CENTER STREET
HEALDSBURG, CA 95448
(707) 395-0968

REGISTERED PROFESSIONAL ENGINEER ★ DANIEL JOHN HUGHES ★ No. 60225 ★ CIVIL ★ STATE OF CALIFORNIA

DANIEL JOHN HUGHES DATE
RCE 60225

50 LAUREL AVENUE
EROSION CONTROL PLAN AND DETAILS
APN 195-182-07
50 LAUREL AVENUE
STINSON BEACH, CA

OCTOBER 29, 2024

JOB NO.
47-24

SHEET NO.
C5
OF 5 SHEETS

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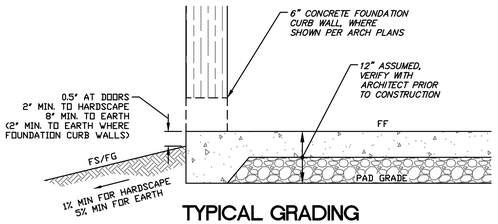
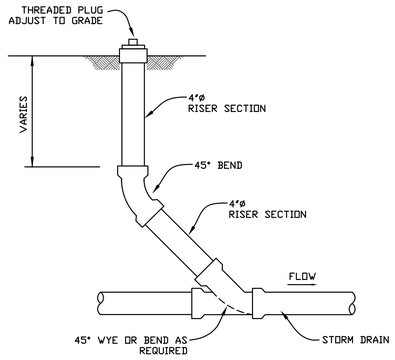


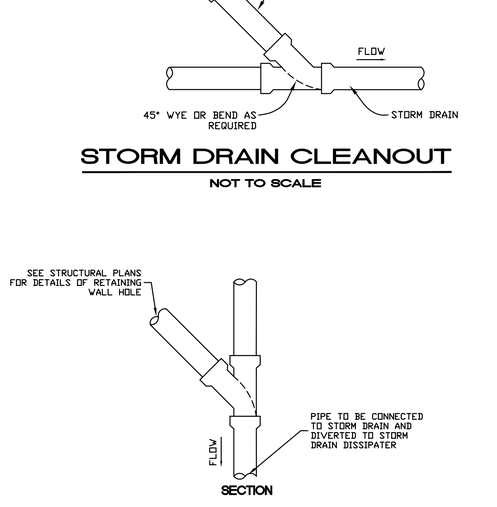
TYPICAL GRADING BUILDING EXTERIOR

NO SCALE



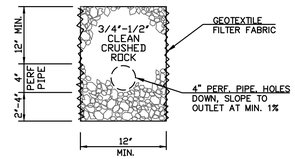
STORM DRAIN CLEANOUT

NOT TO SCALE



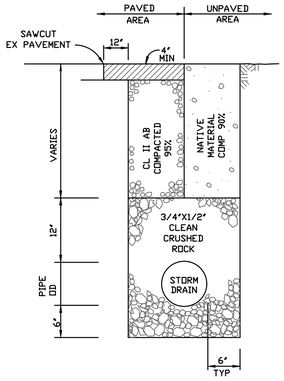
INLET AT RETAINING WALL

NOT TO SCALE



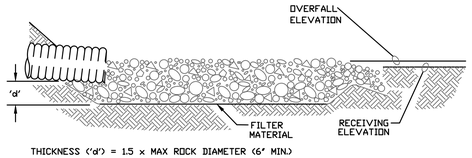
FRENCH DRAIN DETAIL

NOT TO SCALE



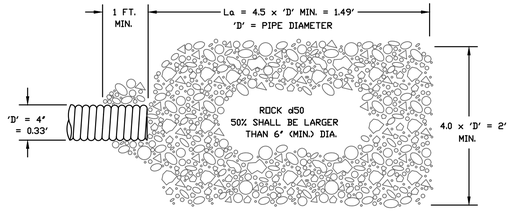
STORM DRAIN TRENCH DETAIL

NOT TO SCALE



THICKNESS ('d') = 1.5 x MAX ROCK DIAMETER (6" MIN.)

SECTION



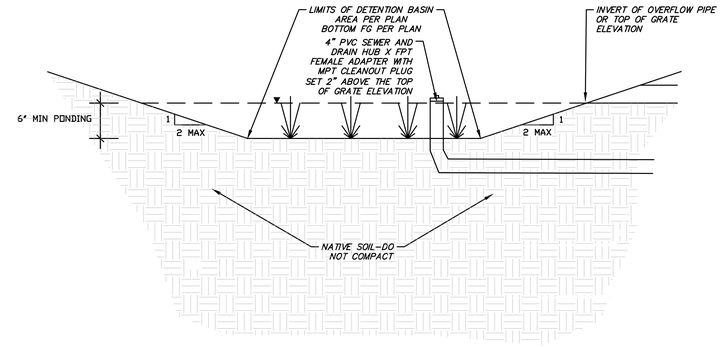
PLAN

NOTES:

1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE FILTER FABRIC OR 6" THICK (MIN.) GRADED GRAVEL LAYER.

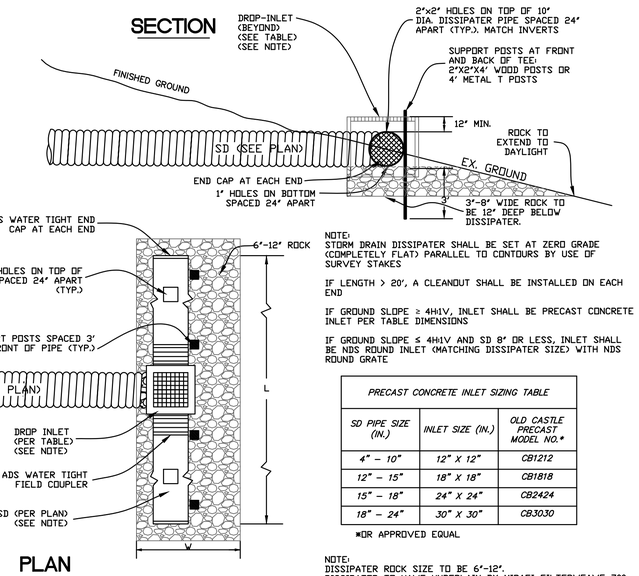
ROCK OUTLET FOR OVERFLOW

NOT TO SCALE



DETENTION BASIN DETAIL

NO SCALE



PLAN

NOTE:
STORM DRAIN DISSIPATER SHALL BE SET AT ZERO GRADE (COMPLETELY FLAT) PARALLEL TO CONTOURS BY USE OF SURVEY STAKES

IF LENGTH > 20', A CLEANOUT SHALL BE INSTALLED ON EACH END

IF GROUND SLOPE ≥ 4H:1V, INLET SHALL BE PRECAST CONCRETE INLET PER TABLE DIMENSIONS

IF GROUND SLOPE ≤ 4H:1V AND SD 8" OR LESS, INLET SHALL BE NDS ROUND INLET (MATCHING DISSIPATER SIZE) WITH NDS ROUND GRATE

PRECAST CONCRETE INLET SIZING TABLE

SD PIPE SIZE (IN.)	*INLET SIZE (IN.)*	*OLD CASTLE PRECAST MODEL NO.**
4" – 10"	*12" X 12"*	*CB1212*
12" – 15"	*18" X 18"*	*CB1818*
15" – 18"	*24" X 24"*	*CB2424*
18" – 24"	*30" X 30"*	*CB3030*

*OR APPROVED EQUAL

NOTE:
DISSIPATER ROCK SIZE TO BE 6"-12".
DISSIPATER TO HAVE UNDERLAIN BY MIRAFI FILTERWEAVE 700 OR 180N FILTER FABRIC, OR EQUIVALENT.

STORM DRAIN DISSIPATER

NOT TO SCALE

REVISION	DESCRIPTION	BY	DATE

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◆ PLANNING ◆ CONST. MANAGEMENT ◆
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HEALDSBURG, CA 95448
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DANIEL JOHN HUGHES
No. 60225
CIVIL

DANIEL JOHN HUGHES DATE
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50 LAUREL AVENUE
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SHEET NO.
C6
OF 5 SHEETS

C:\USERS\ANGEL\MUNSELLE CIVIL DROPBOX\ANGEL DANOUS\COMPANY-DATA\MCE JOBS\2024\47-24 50 LAUREL AVE\DWGS\47-24 IP.DWG 11/6/2024 5:58 PM AN

BOTTOMLESS SAND FILTER TYPE DOMESTIC WASTEWATER SYSTEM

50 Laurel Avenue

Stinson Beach, California

195-182-07

ENGINEERING NOTES:

1. THE DESIGNING ENGINEER SHALL INSPECT 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 CONDITIONS ARE SUITABLE TO BEGIN CONSTRUCTION.
2. THE DESIGNING ENGINEER 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 DESIGNING ENGINEER OR CONTRACTOR SHALL NOTIFY THE STINSON BEACH COUNTY WATER DISTRICT A MINIMUM OF 48 HOURS IN ADVANCE WHEN CONSTRUCTION IS TO TAKE PLACE AND CERTIFY THAT THE SOIL CONDITIONS ARE ACCEPTABLE FOR CONSTRUCTION PURPOSES AND THAT THE STAKING OF THE SYSTEM HAS BEEN ACCOMPLISHED AND CERTIFIED.
4. ALL MEETINGS AND INSPECTIONS SHALL BE SCHEDULED WITH THE DESIGNING ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE. THESE SHALL INCLUDE AS A MINIMUM:
   A. PRE-CONSTRUCTION CONFERENCE
   B. INSPECTION OF FILL SOIL.
   C. INTERIM INSPECTION, PERFORMED PRIOR TO COVERING ANY ELEMENTS OF THE SYSTEM. SEE "CONSTRUCTION NOTES".
   D. FINAL INSPECTION OF THE COMPLETED SYSTEM AND ALL RELATED ITEMS PER THE CONSTRUCTION DOCUMENTS.
5. AT THE PRE-CONSTRUCTION CONFERENCE, THE FOLLOWING ITEMS SHALL BE REVIEWED. CONSTRUCTION MAY PROCEED IF THE DESIGNING ENGINEER NOTIFIES THE STINSON BEACH COUNTY WATER DISTRICT ENGINEER VERBALLY THAT ALL ELEMENTS APPEAR TO CONFORM TO THE FOLLOWING REQUIREMENTS:
   A. SOIL MOISTURE AT THE APPROPRIATE DEPTHS ARE NOT SO HIGH AS TO HAVE THE SOIL SMEAR OR COMPACT DUE TO CONSTRUCTION ACTIVITIES.
   B. IMMINENT WEATHER CONDITIONS APPEAR THAT THEY WILL NOT CREATE UNSUITABLE SOIL MOISTURE CONDITIONS DURING THE COURSE OF CONSTRUCTION.
   C. THE SOURCE OF THE SOIL COVER MATERIAL SHALL BE DESIGNATED, AND A SAMPLE SHALL BE MADE AVAILABLE AND APPROVED BY THE DESIGN CONSULTANT PRIOR TO PLACEMENT.
6. AT THE INTERIM INSPECTION, THE FOLLOWING ELEMENTS, (WHEN REQUIRED), SHALL BE VERIFIED.
   A. INSPECT FILL SOIL FOR QUALITY AND PROPER PLACEMENT.
   B. LAYOUT AND STAKING OF THE PRIMARY LEACH FIELD AREA AND THE RESERVE BOUNDARY(IES) SUBSTANTIALLY CONFORM TO THE APPROVED CONSTRUCTION DOCUMENTS.
7. AT THE INTERIM INSPECTION, THE FOLLOWING ELEMENTS, (WHEN REQUIRED), SHALL BE VERIFIED BY THE DESIGNING ENGINEER AND STINSON BEACH COUNTY WATER DISTRICT BY VISUAL INSPECTION AND OPERATION OF THE SYSTEM. WHEN ALL REQUIRED ITEMS ARE COMPLETED AND APPROVED, THE DISPOSAL FIELD, AND TANKS MAY BE COVERED OR BACKFILLED.
   A. LINE AND GRADE OF ALL EXCAVATIONS AND FILLS AS APPLICABLE.
   B. FUNCTION AND SETTING OF THE CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO VALVES, SWITCHES, AND ALARMS.
   C. HYDRAULIC TESTING OF ANY PUMP AND DISTRIBUTION SYSTEM TO ASSURE THAT THE PUMP IS ADEQUATE FOR DESIGN FLOW.
   D. ALL THE REMAINING ELEMENTS REQUIRED TO COMPLETE THE SYSTEM SHALL BE ON SITE AT THE TIME FOR VERIFICATION AND APPROVAL BY THE DESIGNER FOR CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.
8. AT THE FINAL INSPECTION, THE DESIGNING ENGINEER SHALL VERIFY THAT ALL CONSTRUCTION IS IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE SEPTIC TANK SHALL BE IAPMO APPROVED. THE SEPTIC TANK AND PUMP SUMP MAY BE SUBJECTED TO A WATER TIGHTNESS TEST BY THE STINSON BEACH COUNTY WATER DISTRICT. THE WATER TEST SHALL BE PERFORMED BY THE CONTRACTOR AND CONSISTS OF FILLING THE TANKS 2" INTO THE RISERS WITH CLEAR WATER. THE TANKS MAY BE TESTED SEPARATELY AND SHALL BE CONSIDERED ADEQUATELY WATER TIGHT IF THERE IS NO MEASURABLE DROP IN WATER LEVEL IN 1/2 HOUR.
9. A FINAL LETTER FROM THE DESIGNING ENGINEER TO THE STINSON BEACH COUNTY WATER DISTRICT SHALL STATE THAT ALL CONSTRUCTION HAS BEEN COMPLETED, APPROVED, AND IS IN CONFORMANCE WITH ALL SPECIFICATIONS.
10. THE STINSON BEACH COUNTY WATER DISTRICT ENVIRONMENTAL HEALTH SPECIALIST WILL PERFORM A FINAL INSPECTION OF THE SYSTEM FOLLOWING RECEIPT OF THE DESIGNING ENGINEER'S APPROVAL LETTER. THE P.R.M.D. WILL NOT SIGN OFF THE PERMIT OR JOB CARD UNTIL THE HOUSE OR STRUCTURE IS READY FOR OCCUPANCY, AT THIS TIME THE OPERATIONAL PERMIT WILL BE ISSUED AND THE ANNIVERSARY DATE ESTABLISHED.
11. AT THE START-UP OF THE SYSTEM, AFTER THE #189 ELECTRICAL INSPECTION, THE INSTALLER, ENGINEER, SERVICE PROVIDER, AND STINSON BEACH COUNTY WATER DISTRICT SANITARIAN SHALL BE PRESENT TO VERIFY PROPER OPERATION AND SETTINGS OF ALL CONTROLS. A COPY OF THE CONTRACT WITH THE SERVICE PROVIDER SHALL BE GIVEN TO THE COUNTY AT THIS TIME.

CONCRETE TANK DEMOLITION NOTES:

1. THE TANK SHALL BE PUMPED BY A LICENSED SEPTIC TANK PUMPER.
2. THE ENTIRE LID IS TO BE BROKEN IN AND DISPOSED OF INSIDE THE TANK.
3. BREAK A HOLE INTO THE BOTTOM OF EACH SECTION OF THE TANK TO PROVIDE FOR DRAINAGE.
4. BACKFILL THE TANK WITH A SAND/PEA GRAVEL MIX OR RIVER RUN MATERIAL TO A DEPTH OF APPROXIMATELY ONE FOOT BELOW FINISH GRADE. BACKFILL WITH NATIVE SOIL COMPACTED TO NATIVE DENSITY.

SAND FILTER SYSTEM GENERAL NOTES:

1. AT THE TIME OF INSPECTION OF THE SAND FILTER SYSTEM THE CONTRACTOR SHALL PERFORM AN HYDRAULIC PUMP TEST. THE TEST SHALL BE PERFORMED WITH THE DISTRIBUTION LINES SET WITH THE HOLES IN AN UPWARD POSITION AND ALL PUMP AND SUMP EQUIPMENT INSTALLED PER PLAN. MINIMUM ACCEPTABLE HEAD IN ALL LINES, AS MEASURED BY THE HEIGHT OF THE WATER COLUMN ABOVE THE PIPE, SHALL BE 5 FEET.
2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE STINSON BEACH COUNTY WATER DISTRICT. ALL MECHANICAL, PLUMBING AND ELECTRICAL WORK SHALL CONFORM TO THE APPROPRIATE CODES ADOPTED BY THE COUNTY OF STINSON BEACH.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND AVOIDING UTILITY LINES IN THE WORK AREA.
4. THE INSTALLATION OF THIS SAND FILTER SYSTEM MAY BE RESTRICTED TO CERTAIN TIMES OF THE YEAR BASED ON SEASONAL GROUNDWATER AND WEATHER CONDITIONS. CONTRACTOR TO VERIFY STARTING TIME WITH THE STINSON BEACH COUNTY WATER DISTRICT.
5. THE CONTRACTOR SHALL GIVE THE ENGINEER (1-707-541-2300) 48 HOURS MINIMUM NOTICE OF COMMENCEMENT OF CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS. THE CONTRACTOR SHALL GIVE 48 HOURS MINIMUM NOTICE TO THE STINSON BEACH COUNTY WATER DISTRICT PRIOR TO COMMENCEMENT OF WORK (1-415-868-1333).
6. DISTRIBUTION LINES AND/OR TRENCHES SHALL BE LAID LEVEL.
7. QUESTIONS REGARDING THE SUITABILITY OF ANY MATERIALS OR CONSTRUCTION PROCEDURES USED IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS SHALL BE DIRECTED TO THE DESIGNING ENGINEER PRIOR TO INSTALLATION OR USE.
8. GRAVEL TO BE DOUBLE-WASHED PEA GRAVEL FROM A STINSON BEACH COUNTY WATER DISTRICT APPROVED QUARRY.
9. SEAL INTERIOR OF THE SUMP WITH THOROSEAL OR EQUAL. SEAL ALL EXTERIOR JOINTS WITH MASTIC. SEAL PRECAST CONCRETE JOINTS WITH RAMNEK OR EQUAL.
10. THE PUMP CONTROL SHALL HAVE AN AUTOMATIC ON-OFF AND MANUAL MOMENTARY CONTACT SWITCH.
11. INSTALL HIGH WATER ALARM AND LIGHT (FUSED SEPARATE FROM PUMP) IN A CONSPICUOUS LOCATION AT THE HOUSE OR GARAGE. THE ALARM LOCATION MAY BE CHANGED WITH THE APPROVAL OF A STINSON BEACH COUNTY WATER DISTRICT ENVIRONMENTAL HEALTH SPECIALIST.
12. ALL SUMP JOINTS TO BE WATER TIGHT: SEAL WITH RAMNEK JOINT COMPOUND OR EQUAL. SEAL PIPES EXTENDING THROUGH TANK WALLS WITH NON-SHRINK GROUT OVERLAID WITH XYPEX OR THOROSEAL OR PRECAST INTO SUMP. TANK AND RISER JOINT SHALL BE SEALED AND MADE WATER TIGHT WITH NON-SHRINK GROUT OVERLAID WITH XYPEX OR THOROSEAL.
13. SECURE AN ELECTRICAL PERMIT FROM THE STINSON BEACH COUNTY BUILDING DEPARTMENT FOR SUMP PUMP INSTALLATION.
14. THIS SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED TO ACCOMMODATE A PEAK DAILY FLOW OF 120 GALLONS PER BEDROOM, AND A LOG TERM AVERAGE DAILY FLOW OF 60 GALLONS PER BEDROOM. WATER CONSERVATION MEASURES MAY BE NECESSARY TO MAINTAIN THESE WATER USAGE LIMITS.
15. MEDIUM SAND FILL: TOTAL SIEVE ANALYSIS CONTAINS 20% OR LESS MATERIAL LARGER THAN 2.0 MM AND CONTAINS 5% OR LESS MATERIAL FINER THAN 0.053MM PLUS ONE OF THE THREE ADDITIONAL SPECIFICATIONS LISTED IN THE SAND SPECIFICATIONS CHART IN THE STINSON BEACH COUNTY REGULATIONS.

SAND FILTER CONSTRUCTION NOTES:

USE OF WHEEL TYPE VEHICLES IN ANY PHASE OF SAND FILTER CONSTRUCTION IS PROHIBITED!

1. ADOBE ASSOCIATES, INC. WILL STAKE OUT THE FILTER IN THE CONTRACTOR'S PRESENCE, VERIFYING FILTER DETAILS, NATURAL CONTOURS AND FILTER LOCATION.
2. MEASURE THE AVERAGE FILTER ELEVATION ALONG THE UPSLOPE EDGE OF THE SAND BED. THIS IS NECESSARY TO DETERMINE THE BOTTOM ELEVATION OF THE BED.
3. DETERMINE WHERE THE PIPE FROM THE PUMPING CHAMBER CONNECTS TO THE DISTRIBUTION SYSTEM IN THE FILTER.
4. TRENCH AND LAY THE EFFLUENT PRESSURE LINE WITH 24" MINIMUM COVER FROM THE PUMP SUMP TO THE SAND FILTER. CUT AND CAP THE PIPE ONE-FOOT BENEATH THE EXISTING SURFACE. BACKFILL AND COMPACT SOIL AROUND THE PIPE TO PREVENT BACK SEEPAGE OF EFFLUENT ALONG PRESSURE PIPE. THIS STEP MUST BE DONE BEFORE PLOWING TO AVOID COMPACTION AND DISTURBANCE OF THE SURFACE.
5. CHECK THE MOISTURE CONTENT OF THE SOIL AT 7"-8" DEEP. IF IT IS TOO WET, SMEARING AND COMPACTION WILL RESULT, THUS REDUCING THE INFILTRATION CAPACITY OF THE SOIL. SOIL MOISTURE CAN BE DETERMINED BY ROLLING A SOIL SAMPLE BETWEEN THE HANDS. IF IT ROLLS INTO A RIBBON, THE SITE IS TOO WET TO PREPARE. IF IT CRUMBLES, SOIL PREPARATION CAN PROCEED.
6. REMOVE SMALL DIAMETER TREES, BRUSH AND VEGETATION BY CUTTING AT THE LOWEST POSSIBLE ELEVATION. NATIVE GRASSES, ETC. SHALL BE MOWED AND THE CLIPPINGS ONLY SHALL BE REMOVED. DO NOT REMOVE THE TOP TWO INCHES OF NATIVE SOIL.
7. RIP OR PLOW THE SOIL TO A DEPTH OF 12" WITH THE RIPPERS SET 8"- 10" APART. INITIAL RIPPING SHALL BE LIMITED TO THE AREA OF THE SAND BASE AND SHALL BE PARALLEL TO NATURAL CONTOURS. IMMEDIATE CONSTRUCTION AFTER PLOWING IS DESIRABLE. NO TRAFFIC IS PERMITTED ON ANY PLOWED SURFACE.
8. EXTEND THE EFFLUENT PIPE TO SEVERAL FEET ABOVE GROUND SURFACE.
9. CONSTRUCT THE FRAME OF THE SAND FILTER. START BY INSTALLING THE 4X4 POSTS. NOTE: ONE OF THE WALLS TO THE FRAME SHOULD BE LEFT OFF TO ALLOW TRACK EQUIPMENT TO BRING IN MATERIALS. BE SURE TO CONSTRUCT TEMPORARY SUPPORTS FOR THE FILTER WHILE THE FOURTH WALL OF THE FILTER IS OFF.
10. PLACE THE 18" OR 24" (DEPTH SPECIFIED BY THE DESIGN ENGINEER) OF SAND FILL MATERIAL (SEE SAND FILTER SYSTEM GENERAL NOTES #15)
11. PLACE THE 9" UPPER LAYER OF GRAVEL. THE GRAVEL SHALL BE 3/8" TO 2" DOUBLE RUN, DOUBLE WASHED NON-DETERIORATING AGGREGATE ROCK. LEVEL AGGREGATE ROCK TO THE DESIGN DEPTH.
12. PLACE THE DISTRIBUTION SYSTEM ON THE GRAVEL BED WITHOUT GLUING JOINTS, WITH THE ORIFICE HOLES OF THE DISTRIBUTION LINES FACING UPWARD. CONNECT THE MANIFOLD TO THE PRESSURE PIPE FROM THE PUMP SUMP. SLOPE MANIFOLD TO THE EFFLUENT PIPE. LAY LATERALS LEVEL, REMOVING ALL RISES AND DIPS.
13. CALL THE STINSON BEACH COUNTY WATER DISTRICT AT (1-415-868-1333) AND ADOBE ASSOCIATES, INC. AT (1-707-541-2300) A MINIMUM OF 48 HOURS PRIOR TO HYDRAULIC TESTING. WHEN PUMPING CLEAR WATER THROUGH THE DISTRIBUTION LATERALS, THE JETS OF WATER SHOULD ADJUSTED TO BE THE SAME HEIGHT (60" MINIMUM). AFTER STINSON BEACH COUNTY WATER DISTRICT APPROVAL, GLUE ON PURGE VALVES. PLACE 2" OF AGGREGATE ROCK OVER THE DISTRIBUTION LATERALS.
14. PLACE NON-BIODEGRADABLE GEOTEXTILE SYNTHETIC FABRIC (UNWOVEN FILTER FABRIC, NOT BUILDING PAPER, BURLAP, HAY, OR STRAW) OVER AGGREGATE ROCK, OVERLAPPING SECTIONS 9" MINIMUM.
15. PLACE THE SOIL COVER (SEE DETAIL SHEET 3). SOIL CAP SHALL BE USDA ZONE 2 TOPSOIL. SOIL COVER MATERIAL SHALL BE PROPERLY MOISTURE CONDITIONED.
16. THE MONITORING WELLS SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAILS.
17. LANDSCAPING THE SAND FILTER BY PLANTING GRASS, USING THE BEST VEGETATION ADAPTABLE TO THE AREA. A MIXTURE OF 90% BIRDSFOOT TREEFOIL AND 10% TIMOTHY MAY BE USED AS THE VEGETATIVE COVER. A COMBINATION OF 60% BLUEGRASS, 30% CREEPING RED FESCUE AND 10% ANNUAL RYE GRASS MAY BE DESIRED. SHRUBS CAN BE PLANTED AROUND THE BASE. THEY SHOULD BE MOISTURE TOLERANT, SINCE THE TOE OF THE FILTER MAY BE MOIST DURING VARIOUS TIMES OF THE YEAR. PROTECT THE FILTER BY COVERING WITH STRAW PRIOR TO THE RAINY SEASON.
18. SAND FILTER MAINTENANCE INVOLVES PUMPING THE SEPTIC TANK EVERY 3 TO 5 YEARS TO AVOID CARRY-OVER OF SOLIDS INTO THE FILTER. A GOOD WATER CONSERVATION PLAN WITHIN THE HOUSE PROLONGS THE LIFE OF THE FILTER SYSTEM. THE FILTER SHALL BE PURGED PERIODICALLY. AVOID EXCESS TRAFFIC IN SAND FILTER AREA, ESPECIALLY WHEN WET. COMPACTION OF THE SOIL NEAR AND AROUND THE FILTER MUST BE MINIMIZED. ANIMAL CONFINEMENT OR GRAZING SHOULD NOT BE PERMITTED IN THE FILTER AREA.

FIBERGLASS SEPTIC TANK NOTES

1. PROVIDE A 4" MINIMUM BED OF SAND OR PEA GRAVEL AND COMPACT THE MATERIAL TO CREATE AN EVEN SMOOTH SURFACE.
2. TANKS ARE PRE-WATERTIGHT TESTED FROM FACTORY.
3. PIPES THROUGH HOLES IN THE SEPTIC TANK OR RISER MUST BE SEALED WITH GAS-TIGHT COMPRESSION CONNECTORS OR WATERPROOF SEALANT SUCH AS IPS810 OR ORENCO MA320.
4. THE SEPTIC TANK SHALL BE IAPMO LISTED. WATER TIGHTNESS TEST IS REQUIRED BY STINSON BEACH COUNTY WATER DISTRICT. THE WATER TIGHTNESS TEST CONSISTS OF FILLING THE TANK 2 INCHES INTO THE RISERS WITH CLEAR WATER.
5. THE TANK SHALL BE CONSIDERED ADEQUATELY WATER TIGHT IF THERE IS NO MEASURABLE FALL OF WATER IN THE TANK IN 1/2 HOUR.

FIBERGLASS PUMP SUMP NOTES

1. PENETRATIONS IN THE PUMP SUMP OR RISER MUST BE SEALED WITH GAS-TIGHT COMPRESSION CONNECTORS OR WATERPROOF SEALANT OR PRECAST INTO PUMP SUMP.
2. TANK AND RISER JOINT SHALL BE SEALED AND MADE WATER TIGHT WITH MANUFACTURER APPROVED NON-SHRINK EPOXY.
3. THE PUMP SUMP SHALL BE IAPMO LISTED. WATER TIGHTNESS TEST MAY BE REQUIRED BY STINSON BEACH COUNTY WATER DISTRICT. THE WATER TIGHTNESS TEST CONSISTS OF FILLING THE TANK FULL TO 2 INCHES INTO THE RISERS WITH CLEAR WATER.
4. THE TANK SHALL BE CONSIDERED ADEQUATELY WATER TIGHT IF THERE IS NO MEASURABLE FALL OF WATER IN THE TANK IN 1/2 HOUR.

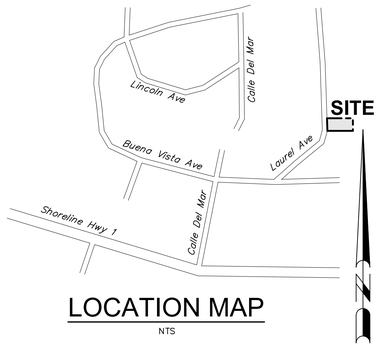
GENERAL NOTES:

1. LOW FLOW TOILETS (1.6 GAL. MAX.) ARE REQUIRED IN ALL BATHROOMS AND LAVATORIES.
2. WATER SERVICE LINES TO OBSERVE ALL SETBACKS REQUIRED BY THE STINSON BEACH COUNTY WATER DISTRICT.
3. CONTOURS SHOWN ARE BASED ON FIELD WORK PERFORMED BY LAWRENCE DOYLE ON JULY 30, 2021. CONTOUR INTERVAL IS TWO (2) FOOT, DATUM ASSUMED.
4. NO FOUNDATION AND/OR DRIVEWAY CUTS, AND NO SURFACE OR SUB-SURFACE DRAINS ARE TO BE LOCATED WITHIN 50 FEET DOWNSLOPE OR LATERALLY OF THE PRIMARY OR EXPANSION/REPAIR AREA OF ANY LEACHFIELD. DIRECT DOWNSPOUTS AWAY FROM LEACH FIELD.
5. THE BOUNDARY INFORMATION SHOWN IS PER RECORD INFORMATION AND IS NOT THE RESULT OF A SURVEY BY ADOBE ASSOCIATES, INC.
6. ANY PROPOSED CHANGE TO HOUSE DESIGN OR LOCATION IS TO BE APPROVED BY ADOBE ASSOCIATES, INC. AND THE STINSON BEACH COUNTY WATER DISTRICT ENVIRONMENTAL HEALTH SPECIALIST FOR COMPATIBILITY WITH THE SEPTIC SYSTEM.
7. REMOVAL OF TREES WITHIN ANY PROPOSED FILL AREA IS REQUIRED. TREES ALLOWED TO REMAIN IN THE FILL AREA MAY BE DAMAGED OR DESTROYED BY THE DELETERIOUS EFFECTS OF THE FILL SOIL.

OWNER INFO

THOMAS GOETZ & WHITNEY WRIGHT
962 CAROLINA STREET,
SAN FRANCISCO, CA 94107
THGOETZ@GMAIL.COM

SHEET INDEX



LOCATION MAP

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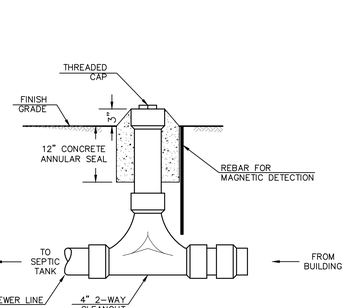
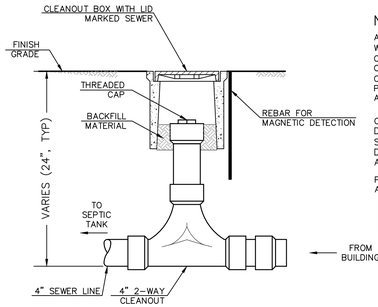


FOR USE IN NATURAL AREAS



FOR USE IN MOWED & GROOMED AREAS

TWO-WAY GRAVITY CLEANOUT DETAIL

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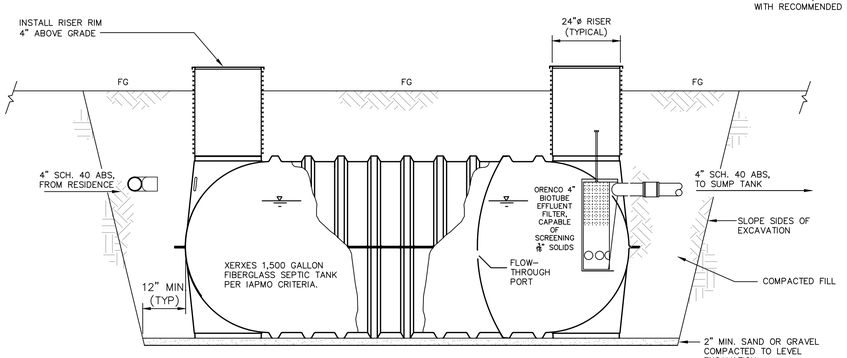

1,500 GALLON FIBERGLASS SEPTIC TANK

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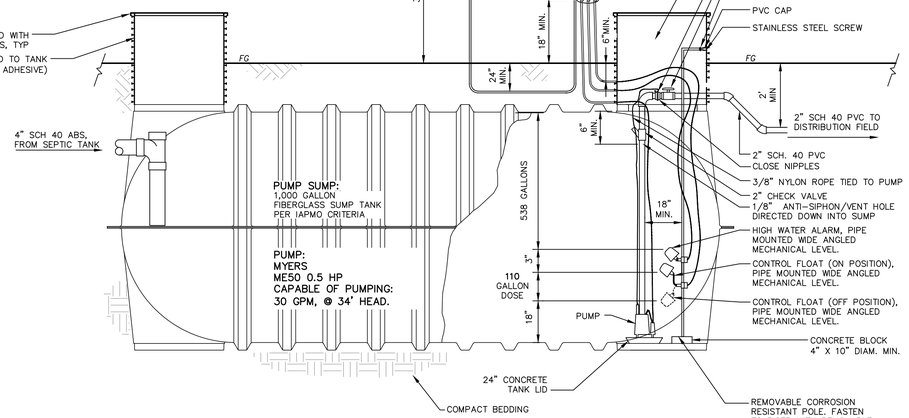

1,000 GALLON PUMP SUMP DETAIL

NTS

NOTES:

A MANUAL SWITCH FOR THE PUMP SHALL BE LOCATED WITHIN 25' AND IN CLEAR VIEW OF THE SUMP. MOUNT CONTROL PANEL ON HOUSE OR ON A POST WITHIN 25' OF THE SUMP AND IN CLEAR VIEW OF THE SUMP. IF CONTROL PANEL IS MORE THAN 75' FROM HOUSE, PROVIDE A REMOTE ALARM WITH AN ADDITIONAL LIGHT AND HORN AT THE HOUSE.

CONTROL/ALARM BOX – NEMA TYPE 4X WITH FUSED DISCONNECT & MOTOR PROTECTION SWITCH, HOA SWITCH, ALARM, ALARM ON/OFF TEST SWITCH, DISPLAY LIGHT, NON-RESETTABLE DOSE COUNTER, AND SONOMA COUNTY PLEXIGLASS SHIELD.

PROVIDE SEPARATE ELEC. CIRCUITS FOR PUMP AND ALARM.

NOTE: A PHONE LINE IS REQUIRED TO THE CONTROL PANEL AND WILL BE ACTIVATED PRIOR TO THE FINAL/STARTUP INSPECTION.

ALL HIGH VOLTAGE WIRES SHOULD BE IN A SEPARATE CONDUIT FROM LOW VOLTAGE WIRES.

IF THE CONTROL PANEL IS LOWER IN ELEVATION THAN THE POWER SUPPLY, A CONDUIT SEAL SHALL BE INSTALLED ON THE CONDUIT TO PROTECT THE CONTROL PANEL FROM CONDENSATION.

SEPTIC ELECTRICAL (#189) TO BE INSPECTED UNDER SEPARATE BLD PERMIT.

ALARM BOX TO BE POSTED WITH THE FOLLOWING NOTES:

- "CAUTION ELECTRICAL HAZARD" ON THE EXTERIOR
- FLOAT SWITCH SETTINGS & DOSE VOLUME ON THE INTERIOR
- DOSE SETTINGS

Revisions			
No.	Date	Description	Approved

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"A Service You Can Count On!"

Gregory M. Schram, RCE 73540
My License Expires 12/31/2024

REGISTERED PROFESSIONAL ENGINEER * GREGORY M. SCHRAM * No. 73540 * Exp.12/31/2024 * CIVIL * STATE OF CALIFORNIA

BOTTOMLESS SAND FILTER TYPE
PRELIMINARY SEPTIC LAYOUT
COVER SHEET
50 Laurel Avenue
Stinson Beach, California
APN 195-182-07

Scale:	AS SHOWN		
Date:	October 19, 2023		
Design by:	NDM	Drawn by:	NDM
Checked by:	GMS		

Sheet W1 of 3 Sheets
Job No. 21322

DESIGN CRITERIA

SITE REVIEW:
A SITE REVIEW WAS CONDUCTED BY ADOBE ASSOCIATES INC. WITH A REPRESENTATIVE FROM THE STINSON BEACH COUNTY WATER DISTRICT ON OCTOBER 18, 2021.

PERCOLATION TEST:
A PERCOLATION TEST WAS CONDUCTED BY ADOBE ASSOCIATES INC ON OCTOBER 19, 2021.
TEST AREA 1– PROFILES A & B
PERCOLATION TEST RATE: = 5.3 (MPI) MINUTES PER INCH @ 12" & 24"
HYDRAULIC LOADING RATE (HLR): = 1.086 GAL/SF/DAY
TEST AREA 2– PROFILES C, D & E
PERCOLATION TEST RATE: = 16.3 (MPI) MINUTES PER INCH @ 12", 24" & 48"
HYDRAULIC LOADING RATE (HLR): = 0.714 GAL/SF/DAY

GROUNDWATER TEST:
WET WEATHER GROUNDWATER TESTS WERE CONDUCTED BY ADOBE ASSOCIATES INC. ON APRIL 18, 2022. ONE DRY GROUNDWATER TEST TO 48" WAS OBSERVED IN TEST AREA 1

AVERAGE GROUND SLOPE: = 2–12%

450 GPD DESIGN

PRIMARY SYSTEM DESIGN CALCULATIONS/FLOWS:
(450 TOTAL GALLONS/DAY)/(1.086 (HLR) GAL/SF/DAY) = 415 TOTAL SQUARE FEET (100%)

BOTTOMLESS SAND FILTER PRIMARY SEPTIC SYSTEM DESIGN: ((2) 100% BEDS TO BE INSTALLED)
830 SQUARE FEET (200%) PRIMARY SYSTEM AREA REQUIRED.
838 SQUARE FEET PRIMARY SYSTEM AREA SHOWN.
(TO BE CONSTRUCTED)

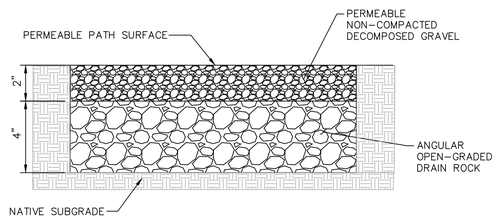
NOTES

1. NO FOUNDATION AND/OR DRIVEWAY CUTS, AND NO SURFACE OR SUB–SURFACE DRAINS ARE TO BE LOCATED WITHIN 50 FEET DOWNSLOPE OR LATERALLY OF THE PRIMARY OR EXPANSION/REPAIR AREA OF ANY LEACH FIELD. DIRECT DOWNSPOUTS AWAY FROM LEACH FIELD.
2. ALL UNDERGROUND BOXES REQUIRE INSTALLATION OF GOPHER–RESISTANT BARRIERS.
3. THE ENGINEER, INSTALLER, AND SERVICE PROVIDER WILL BE PRESENT WITH WELL AND SEPTIC STAFF AT THE START UP INSPECTION AFTER THE #189 ELECTRICAL INSPECTION.

LEGEND

1. 1,500 GALLON (IAPMO APPROVED) XERXES FIBERGLASS SEPTIC TANK WITH 24"ø RISERS OVER BOTH PORTS; EFFLUENT FILTER AT OUTLET (SEE DETAIL, SHEET W1)
2. 1,000 GALLON (IAPMO LISTED) FIBERGLASS PUMP SUMP AND SUMP PUMP (SEE DETAIL, SHEET W1)
3. PRIMARY BOTTOMLESS SAND FILTER (SEE DETAILS, SHEET W3)
4. (5 LATERALS PER BED) 21 LF 1–1/4"ø SCH 40 PVC DISTRIBUTION LATERAL SECTION WITH (7) 1/8"ø ORIFICE HOLES SPACED 36" O.C.; STAGGER ORIFICE HOLES WITH ADJACENT LATERALS TO MAXIMIZE EFFLUENT DISTRIBUTION. HOLES TO BE POINTED UP & COVERED WITH ORIFICE SHIELDS. (SEE DETAIL, SHEET W3)
5. MONITORING WELL, TYP ⊙ (7 MINIMUM) (SEE DETAIL, THIS SHEET)
6. STRAW WATTLE CHECK DAM (SEE DETAIL, THIS SHEET)
7. TWO–WAY GRAVITY TYPE CLEANOUT; INSTALL 2' MAX FROM RESIDENCE EXTERIOR WALL (SEE DETAIL, SHEET W1)
8. DISTRIBUTION MANIFOLD (SEE DETAIL, SHEET W3)
9. PURGE VALVE (SEE DETAIL, SHEET W3)
10. DIVERSION VALVE IN VALVE BOX

SOIL PROFILE HOLE
PERCOLATION TEST
EXPLORATION PIT
GROUNDWATER TEST



PERMEABLE PATH DETAIL
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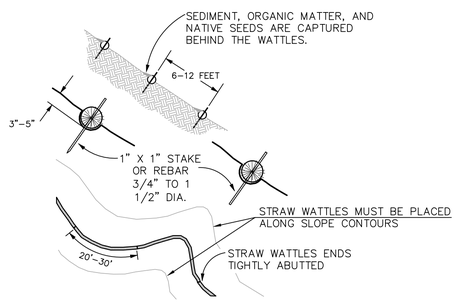


NOTES:
1. STRAW WATTLES ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 – 30 FT. LONG.
2. STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET & RILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.
3. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH, 3" – 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

STRAW WATTLE CHECK DAM
NTS

NOTE:
MONITORING WELLS ARE TO BE INSTALLED TO THE FOLLOWING DEPTHS:

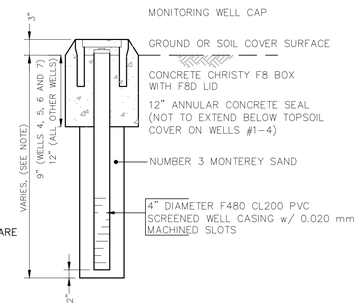
#1 TO A DEPTH OF 36" BELOW EXISTING GRADE. LOCATED 4' UPSLOPE OF THE FOOTPRINT, TYP.

#2 AND #3 TO A DEPTH OF 36" BELOW EXISTING GRADE. LOCATED 4' LATERALLY OF THE FOOTPRINT, TYP.

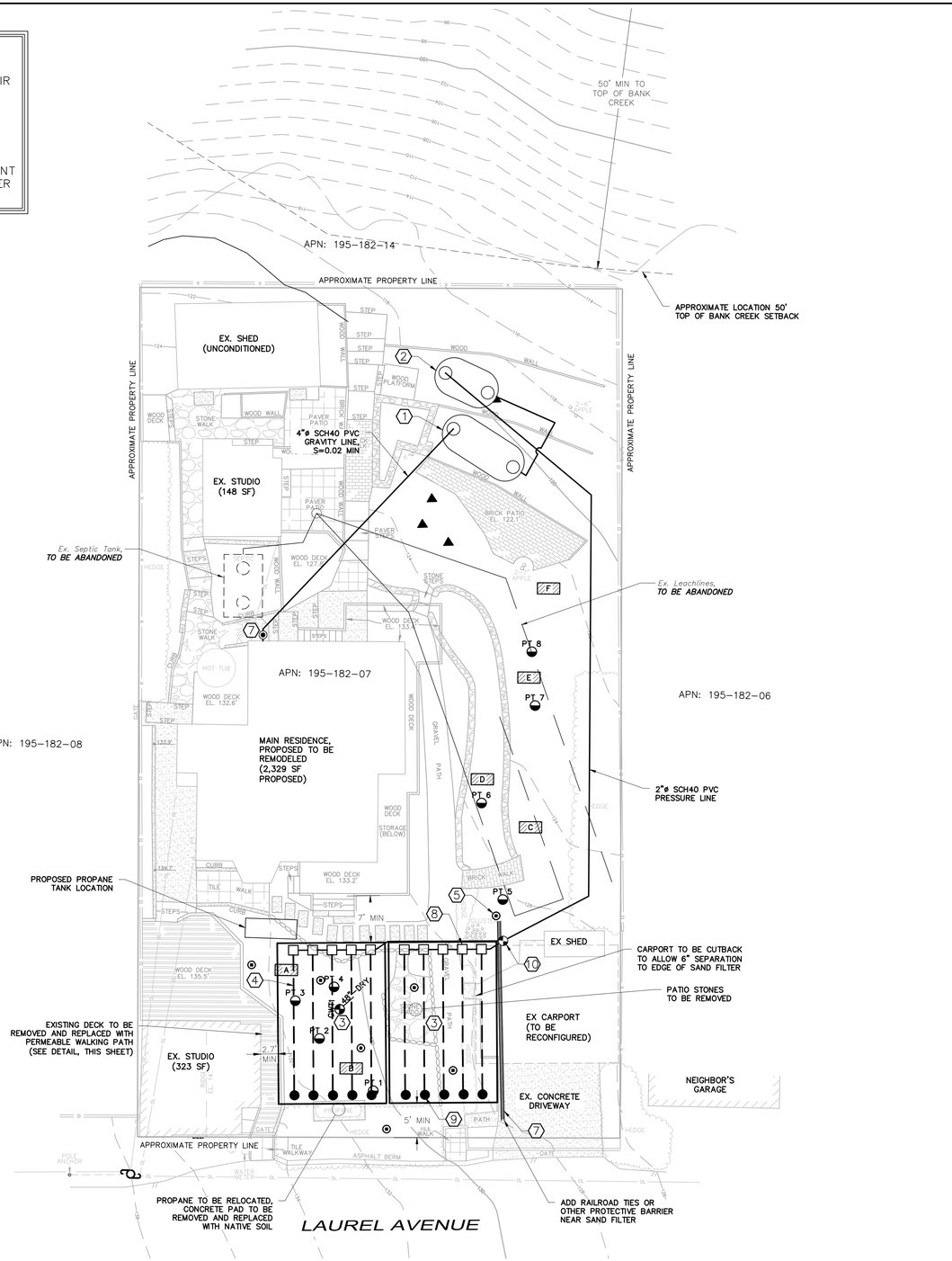
#4 AND #5 TO A DEPTH OF 2" BELOW THE SAND SOIL INTERFACE. LOCATED WITHIN THE FOOTPRINT, TYP.

#6 AND #7 TO BE PLACED AT THE DEPTH OF THE GRAVEL SOIL INTERFACE. LOCATED WITHIN THE FOOTPRINT, TYP.

NOTE: MONITORING WELLS 4, 5, 6 AND 7 ARE TO BE INSTALLED AS THE FILTER IS BEING CONSTRUCTED



MONITORING WELL
NTS



SEPTIC SYSTEM PLAN
10' 5' 0 5' 10' 20' 30'
Graphic Scale: 1" = 10'

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Revisions

No.	Date	Description	Approved

Gregory M. Schram, RCE 73540
My License Expires 12/31/2024

REGISTERED PROFESSIONAL ENGINEER * VIRGINIA * GREGORY M. SCHRAM No. 73540 Exp.12/31/2024 * STATE OF CALIFORNIA * CIVIL

BOTTOMLESS SAND FILTER TYPE PRELIMINARY SEPTIC LAYOUT SEPTIC SYSTEM PLAN

50 Laurel Avenue
Stinson Beach, California
APN 195-182-07

Scale:	AS SHOWN	
Date:	October 19, 2023	NDM
Design by:		NDM
Drawn by:		GMS
Checked by:		

Sheet
W2
of 3 Sheets
Job No. 21322

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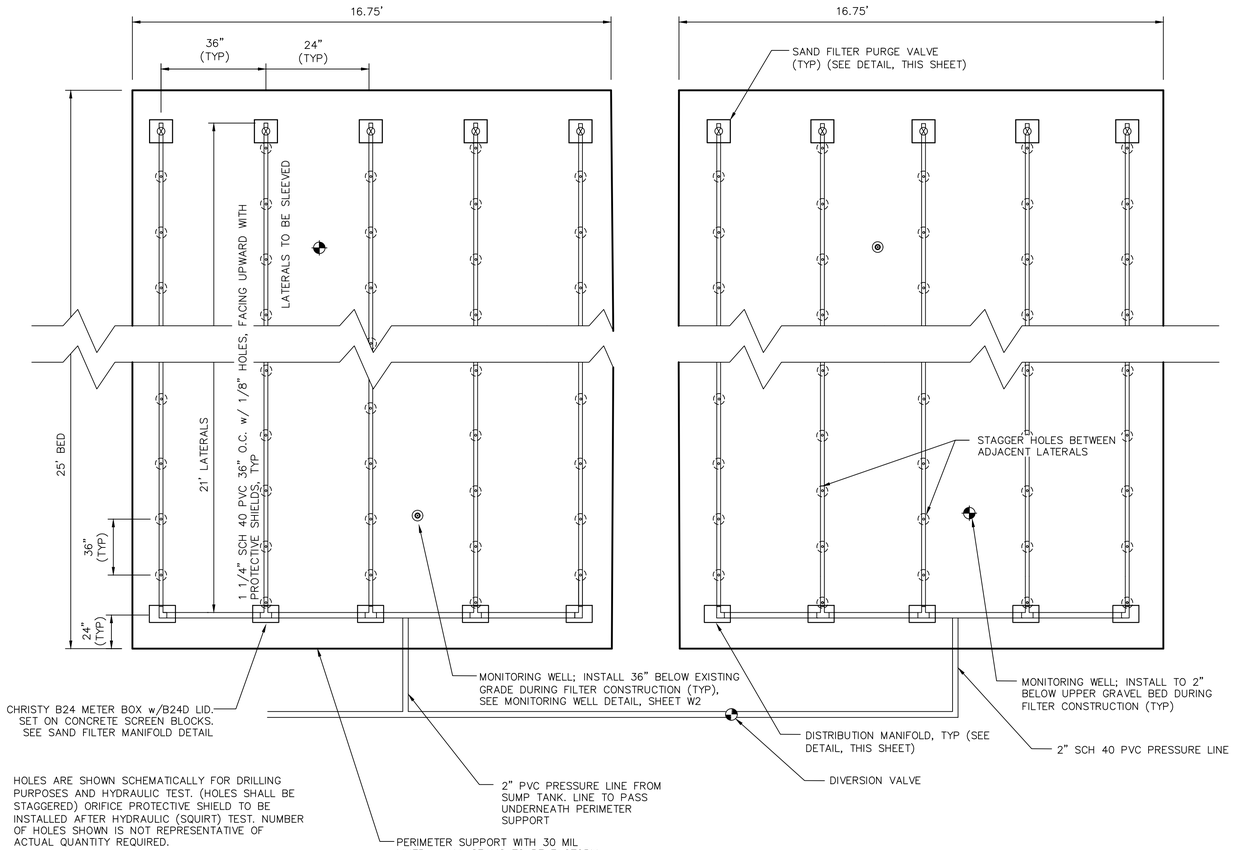


PLAN VIEW

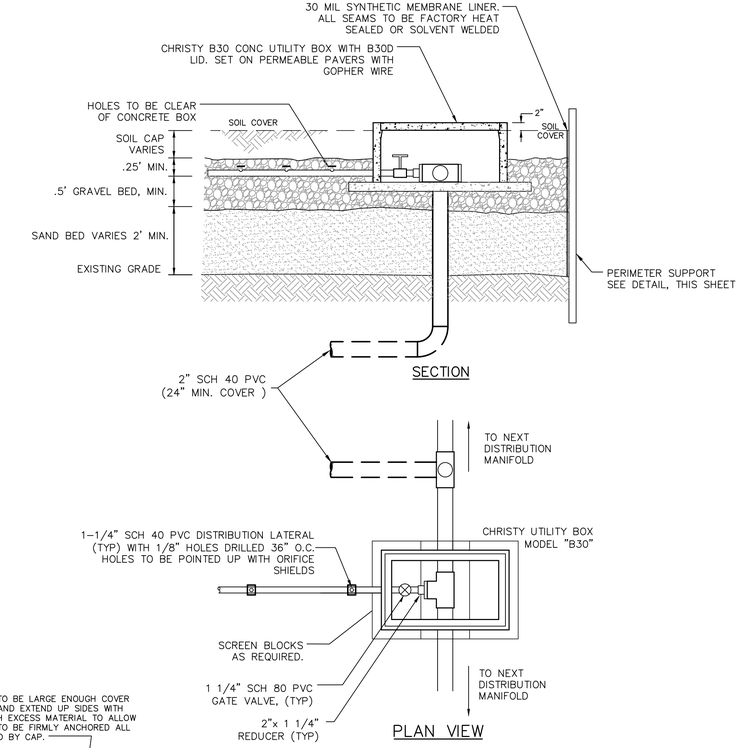
HOLES ARE SHOWN SCHEMATICALLY FOR DRILLING PURPOSES AND HYDRAULIC TEST. (HOLES SHALL BE STAGGERED) ORIFICE PROTECTIVE SHIELD TO BE INSTALLED AFTER HYDRAULIC (SQUIRT) TEST. NUMBER OF HOLES SHOWN IS NOT REPRESENTATIVE OF ACTUAL QUANTITY REQUIRED.

SOIL PREPARATION NOTE:
AFTER THE SAND FILTER WOOD SIDES HAVE BEEN CONSTRUCTED, HAND PREPARE (RIP) THE EXISTING SOIL 6" TO 8" DEEP, 8" TO 12" ON CENTER INSIDE THE PERIMETER OF THE SAND FILTER. ALTERNATE RIPPING METHODS MAY BE CONSIDERED WITH APPROVAL OF DESIGN ENGINEER.

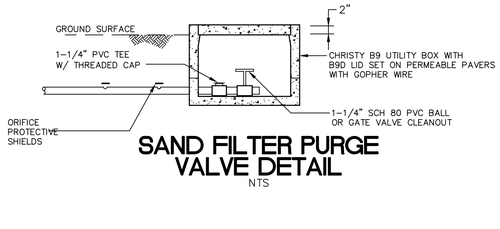
BOTTOMLESS SAND FILTER SPECIFICATIONS:
THE FILTER BED SAND SHALL BE A MINIMUM OF TWO FEET DEEP AND THE SAND SHALL MEET THE FOLLOWING CRITERIA:

SIEVE SIZE	PERCENT PASSING
#4	100
#8	70–90
#16	40–60
#30	25–35
#50	2–5
#60	0

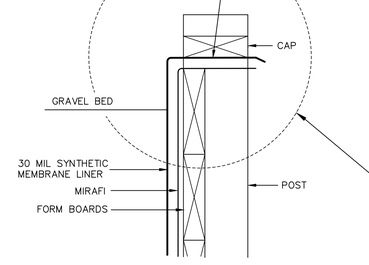
D10>0.400mm
D60=1.4mm
UC =3.0–4.0



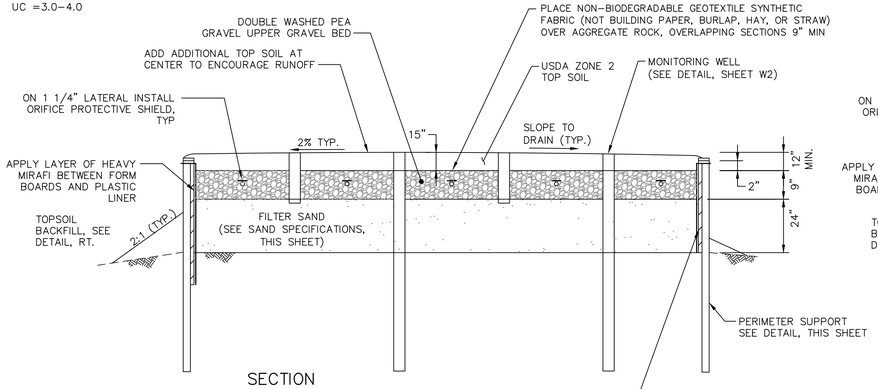
DISTRIBUTION MANIFOLD DETAIL
NTS



SAND FILTER PURGE VALVE DETAIL
NTS

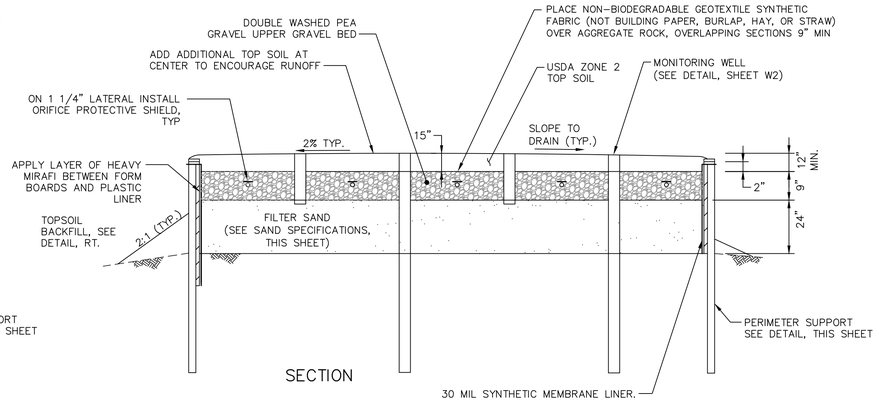


NOTE: ALL BOARDS & POSTS ARE TO BE OF CONHEART REDWOOD OR PRESSURE TREATED FIR



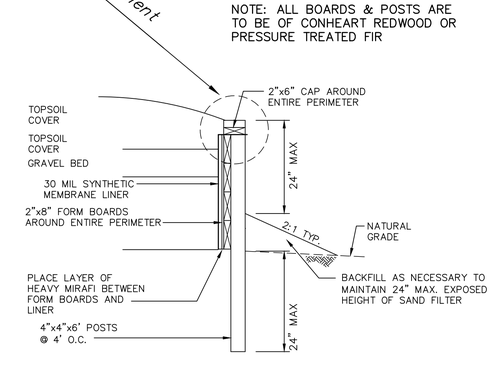
SAND FILTER DETAIL
NTS

30 MIL SYNTHETIC MEMBRANE LINER. ALL SEAMS TO BE FACTORY HEAT SEALED OR SOLVENT WELDED



SAND FILTER DETAIL
NTS

30 MIL SYNTHETIC MEMBRANE LINER. ALL SEAMS TO BE FACTORY HEAT SEALED OR SOLVENT WELDED



PERIMETER SUPPORT DETAIL
NTS

No.	Date	Revisions Description	Approved

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"A Service You Can Count On!"

Gregory M. Schram, RCE 73540
My License Expires 12/31/2024

PROFESSIONAL ENGINEER * REGISTERED * GREGORY M. SCHRAM * No. 73540 * Exp.12/31/2024 * CIVIL * STATE OF CALIFORNIA

BOTTOMLESS SAND FILTER TYPE PRELIMINARY SEPTIC LAYOUT DETAILS

50 Laurel Avenue **California**
Stinson Beach, APN 195-182-07

Scale:	AS SHOWN
Date:	October 19, 2023
Design by:	NDM
Drawn by:	NDM
Checked by:	GMS

Sheet
W3
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